# RELEVANCE OF BENJAMIN GRAHAM'S INVESTMENT POLICY IN INDIA

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## ABSTRACT

Benjamin Graham is considered as the father of Value Investing which essence that any investment should be worth substantially more than what an investor has to pay for it. This paper aims to find out to what extent Benjamin Graham's investment policy is relevant in Indian scenario.

**Key words:** Financial products, technical analysis, capital appreciation, stock return, market return

## I. INTRODUCTION

Indian Capital Market has witnessed a transformation over the last decade. With over 20 million shareholders, India has the third largest investor base in the world after USA and Japan. Improving macroeconomic fundamentals, a sizeable skilled labour force and greater integration with the world economy have increased India's global competitiveness, placing the country on the radar screens of investors the world over. These positive dynamics have led to a sustained surge in India's equity market since 2003. As a result of falling interest rates, bank deposits and other traditional investment opportunities are losing their attraction. Thus Indian investors are getting attracted towards alternate investments such as the equity markets and are looking for newer financial products. As a result of this there was a growth in financial service sectors. Benjamin Graham is considered as the father of Value Investing which essence that any investment should be worth substantially more than what an investor has to pay for it.

### *A. Graham's Principles*

Graham suggested that investors first determine an "intrinsic" value for a stock that is independent of the market. Graham never fully explained how to determine the "intrinsic" value and admitted that it requires considerable investment judgment. However, he felt that a firm's tangible assets were a particularly important competent; other factors included earnings, dividends, financial strength and stability. Graham felt investors should limit their purchases to stocks selling not far above this value, while stocks selling below their intrinsic value would offer an even better margin of safety to investors. Graham felt investors view themselves as the owners of a business, with the goal of buying a sound and expanding business at a rational price, regardless of what the stock market might say. And a successful investment, he said, is a result of the dividends produced and the long-range trend of the average market value of the stock.

## II. NEED FOR THE STUDY

This study is conducted mainly keeping in view that this principle has not been used in the Indian context yet and also rural investors do not have a proper base or a foundation as to whom and where they can rely on to invest. The researcher feels that if Graham's policy is found relevant, it can be used as an investment strategy without involving too much time for investment and doing cumbersome technical analysis and market watching.

## III. OBJECTIVE OF THE STUDY

This study is conducted, to analyse and see if the principles proposed by Graham are relevant in Indian context and to see whether it helps the investor in making reasonable return from his investment.

## IV. POPULATION AND SAMPLE

Population of this study consists of all listed Indian companies in any stock exchange which approximately is around 10060 firms. Latest reports of SEBI and stock exchanges reveal that many companies' shares are delisted due to corporate restructures, takeovers and mergers and winding up of some companies, and finally the number is around 5000. This considered all these companies as our primary samples for avoiding any type of bases. The study leads a ten year period starting from 1998-1999 to 2008-2009.

## V. VARIABLES

Variables considered for the study are the ones proposed by Benjamin Graham which are seven in all. These variables included are adequate size of the enterprise, strong financial condition, earnings stability, strong dividend ratio and earnings growth, moderate price to earnings ratio and moderate price to book value ratio.

## VI. DATA SOURCES

Mainly the corporate database of Centre for Monitoring Indian Economy has been used as a data source supported by annual reports and websites of the firms, sites of Bombay Stock Exchange, National Stock Exchange, money control, angel broking and SEBI.

## VII. METHODOLOGY USED

This study was conducted in two phases. Phase one being done for the period 1998-1999 to 2003-20004 and phase two being carried out for the period 2004-2005 to 2008-2009.

### *A. Phase one*

In ***Phase one***, the financial statements of all listed Indian companies have been gathered from the database, from which variables like net profit, dividend, debt equity ratio, current ratio, P/E ratio, P/B ratio and sales have been considered as they are the different measures for the variables so proposed by Benjamin Graham.

The data have been collected for the period 1998-1999 to 2003-2004.Then each of the companies was compared with each of the variables and their respective measures as stated by Graham. At first the ratios like the sales, debt equity ratio, current ratio, P/E ratio and P/B ratio were considered for the filtration process with the help of MS excel, using the option auto filter for the measures so stated. From this, we derived around 54 companies out of the total 5000. Then these 54 were compared with the other variables like the dividend and earnings using the same filtration process. After the final filtration, it was found out that none of the companies fulfilled al the conditions. Hence, it has to be lenient on the conditions and so the researcher diluted the measures of the conditions as follows:

Adequate size of the enterprise: Minimum annual sales 100 crores

Strong financial condition: Current Ratio of 1.5 or more and debt-equity ratio not more than 1

Earning Stability: EPS greater than zero for the past 10 years

Strong Dividend Record: At least some dividend is paid for every year.

Earning Growth: A minimum increase of at least one-third in per share earnings in the past 10 years

P/E Ratio: Not more than 15

P/B Ratio: A measure less than 2

Taking into consideration the new measures the filtration process was started again considering the 5000 companies. In the second filtration process, again, the ratios were considered first, i.e. the fixed ones, out of which 84 companies were filtered from the total 5000. After the second filter, the lost of companies satisfying all the mentioned conditions came down to 14, which were again cross checked for the match. Hence, the phase one of the study was completed, wherein it was found out that after the dilution of the measures, a total of 14 companies satisfied the entire seven conditions.

### *B. Phase Two*

The **Second Phase** is carried out for the period starting from 2004-2005 to 2008-2009, where share prices and dividend issued of the short listed companies are collected. Returns are computed for 5 year periods, assuming these shares are held for different time periods ranging from 1 year to 5 years. Analysis is done company wise and all samples by computing total return year wise assuming, that year's portfolio consist of investment in all selected securities. It is also assumed that the investor holds 100 shares of each selected securities.

## VIII. RETURN WITHOUT CONSIDERING DIVIDEND

In this study, in order to analyse the portfolio, the most appropriate method is to calculate the return. It helps an investor to analyse how much percentage of return per share he gets back at the end of a year from each company.

Return for each company in each year is calculated as:

$(P_1 - P_0/P_0 * 100) / N$ where,

$P_0$ denotes opening share price for a year

$P_1$ denotes closing share price for a year

$N$ denotes number of years of investment

## IX. RETURN CONSIDERING CAPITAL APPRECIATION AND DIVIDEND

In this study in order to analyse the actual return from a portfolio it is better to consider dividend also rather than going for only capital appreciation. This helps the investor to analyse the actual return he gets year wise after investing in a portfolio. Return or each company in each year is calculated as:

$\{ ((P_1 - P_0) + \Sigma Di))/P_O * 100 \}/N$ where,

$P_0$ denotes opening share price for a year

$P_1$ denotes closing share price for a year

$Di$ denotes the dividend amount received during the years where

$I = 1 \ldots$ to 5

$N$ denotes number of years of investment

In this study the return from market i.e. here BSE SENSEX and NSE NIFTY is taken into consideration in order to analyse the return which an investor gets by investing in securities. Market return helps the investor to analyse to what extent the volatility of the market effects his investment in the portfolio of selected securities for a particular period. Market return is calculated as follows:

$((M_1 - M_0)/M_0 * 100/N,$ where,

$M_0$ denotes the opening sensex points for a year

$M_1$ denotes the closing sensex points for a year

$N$ denotes number of years of investment

## X. LIMITATIONS OF THE STUDY

Non-availability of data of different company

Only secondary data are taken into account.

## XI. DURATION OF THE STUDY

The duration of the study is for 10 years from the period 1998-1999 to 2008-2009, which is dividend into two phase namely phase one (1998-1999 to 2003-2004) and phase two (2004 -2005 to 2008-2009).

## XII. DATA ANALYSIS AND INTERPRETATIONS

The purpose of this study is to verify whether Graham's investment policy is relevant in India or not. For this, this study assume hypothetical investment in selected companies, which follows, Graham's criteria, in year 2004-2005 and computed the return in different time period to see that, the investor's wealth is maximized or not. Here the average share price of a year is taken as the base price for buying and selling.

The investments are tested for profitability in three different ways. Firstly, capital appreciation is only considered where as return on investment is calculated considering that the shares are bought in 2004-2005, and assumed to be sold in the subsequent years, i.e. 2004-2005, 2005-2006, 2006-2007 and 2007-2008, 2008-2009, for the average price in that year. The calculation is done by taking the base price, i.e. 2004-2005, as buying price and the subsequent year price as the selling price.

Actual return of an investor is capital appreciation and part of profit (dividend) which he receives till end of the investment. So in the second analysis, the dividend paid by the companies for every year has been considered by including dividend of the current year as well as the previous year(s) of a particular firm.

In this study when the return is calculated only based on capital appreciation, all the firms gave positive returns and the total return earned in one year is 1715% and an average total return of 122.48%, if a portfolio is made by comprising all selected firms in equal weight. None of the companies showed negative returns even though there was a downward trend in returns after third year for some firms. Even though all the firms showed positive returns throughout the 5 years, there was a downward trend in each year for every firm. This was due to the bonus issue and stock split declared by some companies during some periods.

**Table 1. Returns without Considering Dividend (in %)**

| Company Name | 2004-2005 | 2005-2006 | 2006-2007 | 2007-2008 | 2008-2009 | Average Return |
|---|---|---|---|---|---|---|
| Berger Paints India Ltd. | 50.26 | 149.34 | 263.41 | 70.33 | 55.32 | 117.73 |
| D I C India Ltd | 20.25 | 22.074 | 49.992 | 13.56 | 10.57 | 19.69 |
| Deepak Fertilizers & Petrochemicals Corpn. Ltd. | 59.66 | 101.33 | 126.49 | 77.54 | 75.07 | 88.02 |
| Elgi Equipments Ltd. | 161.9 | 60.025 | 92.815 | 39.16 | 28.02 | 76.39 |
| Finolex Cables Ltd. | 50.71 | 524.68 | 714.96 | 113.5 | 71.41 | 295.06 |
| Garware – Wall Ropes Ltd. | 21.43 | 43.571 | 42.619 | 69.88 | 80 | 51.5 |
| Graphite India Ltd. | 221.5 | 1564.8 | 1605.5 | 189.3 | 48.85 | 726 |
| Ipca Laboratories Ltd. | 265.2 | 117.67 | 96.306 | 143 | 47.8 | 134 |
| Kalyani Steels Ltd. | 261.4 | 576.97 | 792.11 | 745.8 | 371.1 | 549.47 |
| Kansai Nerolac Paints Ltd. | 175.7 | 224.77 | 284.06 | 152.4 | 134.7 | 194.32 |
| Madhusudan Industries Ltd. | 74.52 | 75.968 | 74.301 | 35.4 | 43.87 | 60.81 |
| Panasonic Home Appliances India Co. Ltd. | 70.29 | 98.551 | 130.62 | 90.04 | 105.9 | 93.69 |
| Patel Integrated Logistics Ltd. | 56.19 | 259.52 | 635.71 | 667.3 | 491 | 421.923 |
| Sintex Industries Ltd. | 243.6 | 3277.3 | 1136.2 | 795.5 | 1088 | 1308.22 |
| **Total Return** | 1714.7 | 7096.6 | 6018.1 | 3202.7 | 2652 | 4136.8 |
| **Average Total Return** | 122.48 | 506.9 | 429.86 | 228.77 | 189.43 | 295.49 |
| **Total no: of Firms** | 14 | 14 | 14 | 14 | 14 | 14 |

**Table 2. Returns considering both Capital Appreciation and Dividend (%)**

| Company Name | 2004-2005 | 2005-2006 | 2006-2007 | 2007-2008 | 2008-2009 | Average Return |
|---|---|---|---|---|---|---|
| Berger Paints India Ltd. | 64.2 | 212.29 | 315.16 | 113.3 | 90.54 | 159.1 |
| D I C India Ltd | 2.246 | 23.746 | 52.222 | 16.07 | 13.24 | 21.51 |
| Deepak Fertilizers & Petrochemicals Corpn. Ltd. | 70.29 | 111.96 | 138.41 | 90.1 | 88.02 | 99.75 |
| Elgi Equipments Ltd. | 166.9 | 65.038 | 97.828 | 44.3 | 33.23 | 81.46 |
| Finolex Cables Ltd. | 54.55 | 547.12 | 739.53 | 141.6 | 95.64 | 315.68 |
| Garware – Wall Ropes Ltd. | 31.9 | 54.048 | 53.571 | 80.71 | 91.05 | 62.26 |
| Graphite India Ltd. | 229.9 | 1619 | 1675.1 | 274.9 | 223.9 | 804.55 |
| Ipca Laboratories Ltd. | 273 | 131.59 | 107.63 | 153.3 | 125.5 | 158.22 |
| Kalyani Steels Ltd. | 261.4 | 579.17 | 797.95 | 756.8 | 386.8 | 556.43 |
| Kansai Nerolac Paints Ltd | 274.2 | 236.13 | 298.68 | 169.4 | 148.4 | 225.36 |
| Madhusudan Industries Ltd. | 86.77 | 86.129 | 81.075 | 32.39 | 43.87 | 66.05 |
| Panasonic Home Appliances India Co. Ltd. | 70.99 | 105.8 | 113.29 | 77.83 | 108.8 | 95.21 |
| Patel Integrated Logistics Ltd. | 56.19 | 259.52 | 643.65 | 673.2 | 505.2 | 427.56 |
| Sintex Industries Ltd. | 64.2 | 249.8 | 3316.4 | 1183.1 | 834.1 | 1122 |
| **Average Total Return** | 1892 | 7348 | 6297.1 | 3458 | 3077 | 4414.3 |
| **Average Total Return** | 135.1 | 524.86 | 449.8 | 247 | 219.8 | 325.31 |
| **Total no: of Firms** | 14 | 14 | 14 | 14 | 14 | 14 |

In the second analysis when both capital appreciation and dividend was considered, all the 14 companies gave positive returns also better return when compared to return considering only capital appreciation. In the first year a total return of 1892% and an average total return of 135% is earned by the investor. The second analysis too reveals that all the returns are positive even though there was a downward trend Graham's policy is relevant in India.

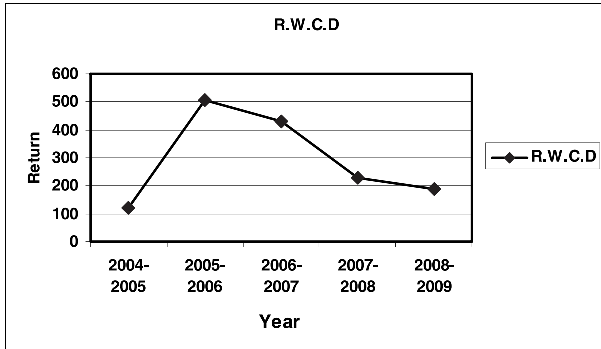


Fig. 1. Return without Considering Dividend

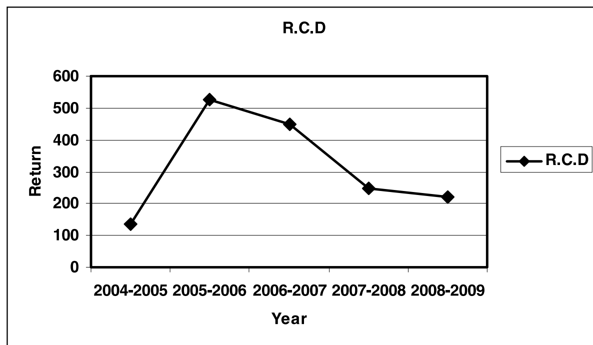


Fig. 2. Return Considering Dividend

**Table 3. Return made by Index-BSE SENSEX**

| YEAR | RETURN (%) |
|---|---|
| 2004-2005 | 88.89 |
| 2005-2006 | 59.68 |
| 2006-2007 | 93.7 |
| 2007-2008 | 85.41 |
| 2008-2009 | 85.71 |
| **Average Return** | **82.68** |

**Table 4. Return made by Index-NSE NIFTY**

| YEAR | RETURN (%) |
|---|---|
| 2004-2005 | 80.02 |
| 2005-2006 | 53.41 |
| 2006-2007 | 81.89 |
| 2007-2008 | 72.06 |
| 2008-2009 | 76.20 |
| **Average Return** | **72.72** |

**Table 5. Comparison of Selected Stock Return with Market Return**

| YEAR | RETURN | | |
|---|---|---|---|
| | Selected Stock | BSE SENSEX | NSE NIFTY |
| 2004-2005 | 135.1 | 88.89 | 80.02 |
| 2005-2006 | 524.86 | 59.68 | 53.41 |
| 2006-2007 | 449.86 | 93.70 | 81.89 |
| 2007-2008 | 247 | 85.41 | 72.06 |
| 2008-2009 | 219.8 | 85.71 | 76.20 |

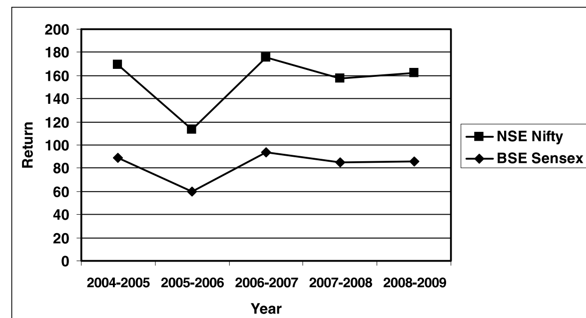


Fig. 3. Return based on Dividend and BSE & NSE Index

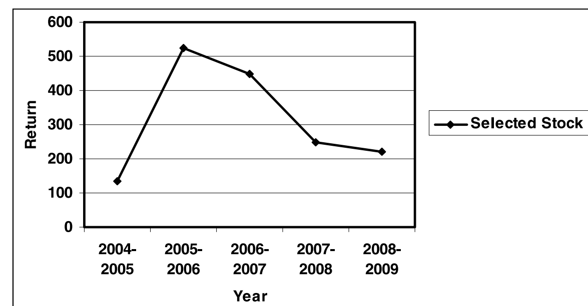


Fig. 4. Return based on Dividend and Index (Selected Stock)

Table 3 and Table 4 give an idea on the return made by BSE SENSEX and NSE NIFTY during the analyzing period. Table 5 and graph provides a comparison of selected stocks return with BSE SENSEX and NSE NIFTY return. It is found that selected stocks returns are much better than BSE SENSEX and NSE NIFTY return. So it is evident that Benjamin Graham's investment policy is highly relevant in India.

## XIII. FINDINGS

In the first analysis, by considering only capital appreciation, all the 14 firms gave positive returns in all the 5 years. The returns for the 5 years as follows:

| Year Return | (in %) |
|---|---|
| 2004-2005 | 122.48 |
| 2005-2006 | 506.90 |
| 2006-2007 | 429.86 |
| 2007-2008 | 228.77 |
| 2008-2009 | 189.43 |

In the second analysis, by considering both capital appreciation and dividend, all the 14 firms gave positive returns even through percentage of return showed downward trend. The returns are as follows:

| Year Return | (in %) |
|---|---|
| 2004-2005 | 135.10 |
| 2005-2006 | 524.86 |
| 2006-2007 | 449.80 |
| 2007-2008 | 247.00 |
| 2008-2009 | 219.80 |

- In the third analysis when the index is considered, both the sensex and nifty gave the following average returns to the investor.

  BSE Sensex 82.68%

  NSE Nifty 72.72%

- When we consider all the three analysis, investor gets better return when he invests in the companies according to the performance rather than based on market conditions.
- This it proves that Benjamin Graham's investment policy is relevant in India.

## XIV. SUGGESTIONS

Based on the findings, this study would like to give the following suggestions:

- It is suggested that the investor has to analyse the past performance of the firm for a considerable time period so as to ensure that the firms follows Benjamin Graham's investment policy.
- This Graham's policy highly recommended to investors who do not have much time to spend for daily trading activities.
- It is also recommended for new investors and investors who do not sufficient knowledge on technical analysis.
- It is suggested that an investor who is not ready to like high risk can follow the policy of Graham for investment.
- It is suggested that an investor who knows the performance of each company in each year and they can invest accordingly.
- Those who are in senior citizen and have moderate income can follow this policy.
- Those who are concern about market condition can follow this policy and invest in those companies purely based on the performance of the companies.

## XV. CONCLUSION

As a conclusion it is proved that the sample firms gives moderate and long term returns during the period and thus Graham's investment policy is relevant in Indian context. Hence, this model is proposed to Indian investors and capital market.

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