"Comparative Performance Analysis Of P/E And Peg Ratio In Selected Stocks"

[1]Dr.G.Y.Vishwanath, [2]Ms.Rinu Thomas, [3]Ms.Shanan Joyline Dias

1.Professor Alva's Institute of Engineering & Technology
2.&3. MBA Students Alva's Institute of Engineering & Technology
Corresponding auther: 1Dr.G.Y.Vishwanath

Abstact: *Investments in capital market is very confusing. It involves the decision making as to which stock to buy and which one to hold or sell. Time is an important factor that affects the investment decisions in the capital market. Analysing the stocks as well as the price movements is very much essential to make appropriate investments and to reap profits from the investments. Analysis of stocks can be done with the help of financial ratios like PE and PEG Ratios. These ratios indicates how expensive or cheap it is to buy or sell a stock. The primary objective of this study was to compare PE ratio and PEG ratio returns for the period 2013 to 2017 with reference to high market capitalization stocks. In this study it is proved that when compared among companies with high PE and low PE, high PE is good for investments. When compared to the PE and PEG, PEG is good for investments. And also it is proved that by use of paired t-test that the returns of PE and PEG ratio are statistically similar.*

I.   Introduction

Financial goals and understanding of the investments in capital market are quite confusing. The decision involves which stock to buy and which stock to hold and sell.

Time plays an important role in investment decisions. At what price to enter and at what price to exit from company stock is important to take the decisions as which stock is to buy and sell. Analyzing stocks can be with any financial ratio like PE ratio, PEG ratio etc. There is some assumption like high PE is good or low PE is good etc which are used by different types of investors.

 PE is the basic price to earnings ratio while PEG is the price earnings with growth incorporated (P Sareewiwatthana, 2014). PE ratio is most commonly used tool for valuation of stocks and is widely used in evaluating the stock returns in stock market (Liem and Sautma, 2012). Company's share price need to be connected its EPS. Price earnings ratio indicates how cheap and expensive stock is. There is also a relationship between PE Ratio and the Corporate growth and PE Ratio is a valid predictor of growth(Joseph E. Murphy, 1966). Ross & etal (2011) further observed that P/E Ratio of a firm's fund is the weighted average of all held stocks PE ratios in the firm's fund portfolio. A high PE usually indicates that the market will pay more to obtain the company's earnings because it believes in the firm's ability to increase its earnings. Similarly a low PE ratio indicates the market has less confidence that the company's earnings will increase (Estrada, 2003). High PE stocks were volatile compared to low PE stocks concluding that low PE stocks are more stable (Mary Auxilia & Vishwanath, 2013)

PEG ratio tells that, if the price of a share is to be fair, its PE ratio should be equal to dividend growth rate. If the PEG ratio is equal to one it shows that the market is realistic in pricing stock considering the growth rate of earning per share. If the PEG is greater than one it shows that the prices of stock has been over estimated and if its lesser than one it indicates that the prices are lower than the intrinsic value in the market (Easton, 2004).

Investing is an interesting action that draws in the general population regardless of their occupation, monetary status, training and family foundation. The financial specialists who having additional trade could contribute it out securities.

II. Research Methedology

Data Collection
Research is done with the help of data collected from both primary as well as secondary sources. Primary data is collected through the discussions done with the employees of Consortium securities. Secondary data is mainly collected from websites, books, journals, magazines etc. Period of study is from 2/1/2017 to 10/3/2017.
Population

All fifty Companies trading on NSE and all the thirty Companies which are traded on the Bombay Stock Exchange are taken as population under study.

Sampling Framework

In this research work the entire population is taken as the sample. All 80 Companies are considered for the research work.

Technique of analysis

PE ratio = market price/Earnings per share

PEG ratio = PE ratio/Growth rate

Capital = 1,00,00,000 assumed as the beginning value as on 1/4/2013.

CAGR=(ending value/ beginning value)^(1/n)-1

Number of share = share capital / share price for the beginning of the year. Portfolio = No. of share * share price for the ending of the year

Hypothesis

Ho = the returns of PE ratio and PEG ratio are statistically similar.

H1 = the returns of PE ratio and PEG ratio are statistically not similar

Financial Analysis

Table 1 : PE Ratios of 80 Companies for period from 2013-2016

Companies	2016			2015			2014			2013		
	share price	EPS	PE ratio	share price	EPS	PE ratio	shar e price	EPS	PE ratio	share price	EPS	PE ratio
Ashok Leyland	80.1	2.54	31.54	87.9	1.2	73.25	51.4	0.1	467	17.25	1.6	10.6
Exide Ind	180.1	7.33	24.57	146.45	6.42	22.81	178	5.7	31	123.1	6.2	20
manindra and Mahindra	1184.7	53.51	22.14	1272.4	56.2	22.62	1234	64	19.4	944.2	57	16.6
Maruti Suzuki	5319.6	151.3	35.15	4622	123	37.57	3330	92	36.1	1763.9	79	22.3
Tata motors	472	0.68	694.1	391.3	-15	-26.08	490	1	476	372.41	0.9	400
Axis bank	449.95	34.59	13.01	449.1	31.2	14.40	502	133	3.79	259.91	120	2.17
Bajaj holding	1819.4	114.2	15.93	1659.2	78	21.27	1404	66	21.3	888.1	60	14.9
Bank of India	107.25	-83	-1.29	114.95	26.6	4.32	302	45	6.75	237.95	48	4.98
Canara Bank	262.9	-53.6	-4.9	232.95	58.6	3.97	449	54	8.24	282.25	65	4.35
Federal bank	66.85	2.77	24.13	56	11.8	4.76	75.9	9.8	7.73	42.03	49	0.86
HDFC Bank	1206.2	48.84	24.7	1082.2	42.2	25.67	952	35	26.8	665.85	28	23.4
HDFC	1262.6	44.43	28.42	1263.8	38.1	33.14	1136	35	32.6	794.65	32	25
ICICI Bank	255.3	16.75	15.24	261.35	19.3	13.52	353	85	4.15	219.75	72	3.04
IDBI Bank	69.4	-21.8	-3.19	88.85	5.45	16.30	73.2	8	9.14	66.45	15	4.52
Kotak Mahindra	719.7	11.42	63.02	720.05	24.2	29.75	632	20	32.2	364.13	18	19.9
LTC Housing Finance	559.7	32.91	17.01	510.05	27.5	18.56	436	26	16.7	219.25	20	10.8
Power finance	121.95	46.31	2.633	100.7	45.2	2.23	151	41	3.67	83.48	33	2.49
Punjab Bank	115.4	-20.8	-5.55	115.7	16.9	6.84	219	94	2.33	125.29	140	0.9
Reliance capital	431.1	38.67	11.15	438.3	30.8	14.24	495	17	29.7	361.45	27	13.4
REC	124.8	56.99	2.191	113.28	53.3	2.12	168	47	3.53	110.3	39	2.85
ShrirTrans	853.4	51.93	16.43	858.7	54.6	15.73	1108	56	19.9	672.6	60	11.2
SBI	250.2	12.98	19.28	224.45	17.6	12.78	312	157	1.99	176.65	210	0.84
Union Bank	123.1	20.42	6.028	148.65	28.1	5.299	239	28	8.55	130.4	39	3.35
Grasim	862.75	102.1	8.448	750.97	57.7	13.01	677	98	6.94	542.92	134	4.06
Ultra tech cement	3250.2	79.25	41.01	2780.6	73	38.08	2676	78	34.2	1764.1	97	18.2
Tata chemical	503	23.34	21.55	401.45	25	16.03	436	17	25.4	274.9	25	10.9

HCL Tech	827.95	33.62	24.63	855.1	45	19.00	798	86	9.32	631.28	53	11.8
Infosys	1010.6	68.73	14.7	1105.4	106	10.43	986	178	5.53	871.42	159	5.49
Mphasis	565.25	21.81	25.92	497.55	26.3	18.90	385	11	36.3	440	11	41.4
Oracle Fin service	3125.8	109.6	28.51	3732.6	125	29.77	3363	137	24.6	3298.2	123	26.9
TCS	2365.6	116.1	20.37	2436.9	98.3	24.78	2558	94	27.2	2172.1	65	33.3
Tech Mahindra	488.9	33.4	14.64	521.65	23.6	22.12	648	115	5.61	459.46	51	8.99
Wipro	474.45	32.97	14.39	559.9	33	16.96	555	30	18.5	559.2	23	24.3
DLF	111.4	5.47	20.37	116	5.28	21.96	137	3	46.1	166.7	3	56.5
GMR Infra	11.85	-2.68	-4.42	16.4	-0.8	-19.75	16.8	0.4	39.1	24.3	0.1	174
Jaiprakash association	8.05	-13.3	-0.6	11.9	-5.4	-2.20	25.1	1.9	13.4	54.45	2.3	23.3
united spirits	1942.8	67.51	28.78	2991.5	-135	-22.2	2784	- 357	-7.8	2608.6	25	106
Aditya Birla Nuvo	1281.2	27.66	46.32	2167.2	40.6	53.43	1689	54	31.1	1242.7	37	33.4
BHEL	121.2	-3.73	-32.5	169.15	5.8	29.16	265	2	133	176.9	27	6.54
Crompton Greave	59.3	-17.4	-3.4	192.25	11.7	16.47	188	8.2	22.8	128.7	7	18.5
Adani powers	30.05	0.02	1503	32.25	-0.2	-134.3	44.3	2.1	20.8	38.95	-8	-4.8
BPCL	635.5	102.8	6.183	446.15	70.3	6.34	323	56	5.75	173.95	37	4.76
Cairn India	242.15	4.55	53.22	138.1	7.03	19.64	241	39	6.16	323.75	77	4.19
GAIL	439.2	18.12	24.24	375.1	24	15.65	445	34	12.9	342.3	32	10.8
HPCL	441.3	114.1	3.869	278.71	80.7	3.45	182	51	3.56	79.09	27	2.96
NHPC	26.45	2.2	12.02	21.05	1.92	10.96	18.9	0.8	23	19.55	1.9	10.2
ONGC	191.35	18.71	10.23	161.17	21	7.67	228	26	8.81	192.61	24	7.87
Petrronet LNG	367.45	12.19	30.14	255.95	11.8	21.74	209	9.5	22	122.05	15	7.97
Power Grid Crop	183.5	11.52	15.93	141.15	10	14.11	138	9.4	14.7	99.9	9.2	10.9
Reliance Industries	1082.4	84.66	12.79	1014.6	70.3	14.44	891	68	13.1	895.2	65	13.8
Reliance Infra	467.2	75.51	6.187	543.95	58.3	9.32	512	60	8.48	425.75	76	5.6

Reliance Power	41.2	1.44	28.61	56.8	0.09	631.1	61.8	0.2	309	73.2	1.8	40
Tata power	75.9	2.36	32.16	67.9	3.3	20.57	82.2	3.5	23.5	88.15	3.4	25.6
Torrent Power	179	16.98	10.54	173.55	15.7	11.04	159	2	79	119.95	8.2	14.7
Adani enterprise	76.55	4.51	16.97	83.4	3.7	22.54	486	-1.6	-300	262.5	4.7	55.5
Cummins	818.75	27.12	30.19	1030.3	28.4	36.34	874	22	40.4	479.15	28	17.4
Suzlon Energy	13.8	0.1	138	20.85	-20	-1.03	14.7	-4.1	-3.6	10.3	-17	-0.6
Colgate	904.6	21.2	42.67	972.85	41.1	23.67	893	40	22.5	676.68	37	18.5
Godrej Consumer Product	1510	21.72	69.52	1319.4	19.2	68.64	973	17	58.6	857.8	15	57.1

HUL	826.35	18.87	43.79	862.75	20	43.24	760	18	42.5	570.65	18	32.5
ITC	241.65	12.26	19.71	218.51	12	18.20	246	11	22.2	214.55	9.5	22.7
Apollo Hospital Enterprise	1179.9	26.55	44.44	1466.5	24.9	58.86	1130	24	47.5	946.4	22	42.2
Biocon	949.85	40.44	23.49	518.1	18.1	28.68	426	17	25.3	462.75	14	32.9
Cipla	568.8	17.41	32.67	649.75	14.7	44.17	626	17	36.2	400.8	19	21.4
Lupin	1487	64.1	23.2	1837.3	53	34.66	1428	52	27.5	908.15	28	32.2
Sun Pharma	630	-4.5	-140	820.15	-6	-136.6	827	-14	-60	567.45	5	113
Indian Hotels	98.55	2.44	40.39	116.75	-1	-114.4	125	-7.3	-17	61.75	-3	-18
Zee entertainme nt	453.05	7.43	60.98	437.25	7.15	61.15	381	7.9	48	276.6	6.7	41.2
Coal India	300	25.87	11.6	329.8	21.2	15.56	384	24	16.2	290	16	18.5
Hindalco Industries	155.05	2.94	52.74	84.75	4.48	18.91	158	7.1	22.2	122.6	8.9	13.8
Jindal steel and Power	69.2	-11.1	-6.21	96.25	-3.4	-28.30	152	14	10.9	261	17	15.3
JSW Steel	162.75	-146	-1.11	103.22	88.2	1.169	105	54	1.95	101.72	79	1.28
NMDC	123.4	7.64	16.15	89.85	16.2	5.546	145	16	8.96	141.9	16	8.87
Steel Authority of India	49.3	-10	-4.92	48.35	5.07	9.53	82.6	6.3	13	72.45	5.3	13.8
Tata steel	391.25	48.67	8.039	259.8	64.5	4.02	399	64	6.22	424.2	50	8.44
Asian paints	891.05	16.65	53.52	883.55	13.8	63.84	752	12	61.7	490	109	4.48
Ideacellur	74.15	7.27	10.2	143.65	7.94	18.09	154	5.1	30.2	166.9	2.5	67.6
Reliance Communic ation	34.05	-6.52	-5.22	88.25	-0.7	-133.7	80.1	3.5	22.6	130	3	43
Adani Ports and Special Economic zone	268.45	13.72	19.57	260.9	10.6	24.72	319	9.8	32.6	155.4	8.8	17.7
Container corp	1110.1	40.36	27.5	1313	53.7	24.43	1353	51	26.8	729.95	72	10.1

Source: Compiled from http://www.moneycontrol.com/stocks/histstock.php
INTERPRETATION: Table 1 shows the different PE ratio during the period 2013 to
2016. We can observe the PE and EPS changing every year for most of the companies.

PEG RATIO
        The PEG proportion is estimation metric for deciding the comparative exchange between the cost of a stock, the winning formed per share (EPS), and the organization's regular development.
One of the important indicators employed to find out the investment value of a stock is PEG ratio. Like PE ratios lower PEG means the stock is undervalued but it preferable to use PEG ratio. As it is accounting for growth also PEG value 0 and 1 provides good returns a negative PEG ratio means companies returns negative or the future growth expected to be reduced. But it is expected that negative PEG ratio means the stock has high investment risk.
PEG ratio=PE ratio/annual EPS growth

Table 2 :showing PEG ratio

Companies	PE ratio 2013	Growth rate (%)	PEG Ratio

Ashok Leyland	10.58282209	0.78	13.567721
Exide Ind	20.01626016	-0.9	-22.24029
manindra and Mahindra	16.60861917	17.11	0.9706966
Maruti Suzuki	22.27427706	-1.43	-15.57642
Tata motors	400.4408602	-48.73	-8.217543
Axis bank	2.171889362	23.63	0.0919124
Bajaj holdings	14.90100671	-4.69	-3.177187
Bank of India	4.97907512	5.11	0.9743787
Canara Bank	4.353694277	-15.54	-0.280161
Federal bank	0.857755102	19.49	0.04401
HDFC Bank	23.37135837	30.89	0.7565995
HDFC	24.9576005	19.5	1.2798769
ICICI Bank	3.043628809	27.13	0.1121868
IDBI Bank	4.520408163	6.79	0.6657449
Kotak Mahindra	19.88694702	28.96	0.686704
LTC Housing Finance	10.81114398	15.61	0.6925781
Power finance	2.493428913	23.31	0.1069682
Punjab National Bank	0.898007454	3.48	0.2580481
Reliance capital	13.41187384	24.94	0.5377656
REC	2.853078117	17.94	0.1590345
Shriram Transport	11.21373791	15.94	0.7034967
SBI	0.840950205	30.64	0.0274462
Union Bank	3.349601849	1.81	1.8506088
Grasim	4.063164197	-16.32	-0.248968
Ultra tech cement	18.21100444	34.42	0.5290821
Tata chemicals	10.88712871	13.95	0.7804393
HCL Tech	11.83945986	51.94	0.2279449
Infosys	5.488914084	16.25	0.3377793
Mphasis	41.43126177	-18.51	-2.238318

Oracle Fin service	26.91927849	15.92	1.6909095
TCS	33.30343453	31.54	1.0559111
Tech Mahindra	8.991389432	-4.23	-2.125624
Wipro	24.28137212	4.88	4.975691
DLF	56.50847458	-13.13	-4.303768
GMR Infra	173.5714286	58.4	2.9721135
Jaiprakash association	23.26923077	-33.81	-0.688235
united spirits	106.3412148	-5.16	-20.60876
Aditya Birla Nuvo	33.37899543	43.29	0.7710556

BHEL	6.544580096	15.34	0.4266349
Crompton Greave	18.51798561	-10.28	-1.80136
Adani powers	-4.773284314	-325.25	0.0146757
BPCL	4.759233926	19.79	0.2404868
Cairn India	4.190938511	-698.02	-0.006004
GAIL	10.79470199	8.61	1.2537401
HPCL	2.95995509	-11.41	-0.259418
NHPC	10.23560209	3.89	2.6312602
ONGC	7.874488962	7.66	1.0280012
Petrronet LNG	7.966710183	41.63	0.1913694
Power Grid Crop	10.91803279	27.54	0.3964427
Reliance Industries	13.8105523	8.96	1.5413563
Reliance Infra	5.599763251	20.19	0.2773533
Reliance Power	40	23.44	1.7064846
Tata power	25.625	2.97	8.6279461
Torrent Power	14.71779141	-22.8	-0.645517
Adani enterprise	55.49682875	26.9	2.0630791
Cummins	17.3793979	19.85	0.8755364
Suzlon Energy	-0.612366231	28.34	-0.021608
Colgate	18.52395292	5.48	3.3802834
Godrej Consumer Product	57.14856762	27.22	2.0995065
HUL	32.49715262	19.91	1.6322025
ITC	22.7037037	22.24	1.02085
Apollo Hospital Enterprise	42.19349086	26.71	1.5796889
Biocon	32.86576705	3.54	9.284115
Cipla	21.35322323	11.7	1.8250618
Lupin	32.21532458	24.84	1.2969132
Sun Pharma	113.49	-16.85	-6.735312
Indian Hotels	-17.79538905	-221.79	0.0802353
Zee entertainment	41.22205663	4.66	8.8459349
Coal India	18.53035144	37.35	0.4961272
Hindalco Industries	13.80630631	-3.92	-3.522017
Jindal steel and Power	15.31690141	2.48	6.1761699
JSW Steel	1.283047427	-3.79	-0.338535
NMDC	8.86875	22.53	0.3936418
Steel Authority of India	13.8	-31.51	-0.437956
Tata steel	8.436754177	0.11	76.697765
Asian paints	4.476112177	10.68	0.4191116
Ideacellur	67.5708502	-8.58	-7.87539
Reliance Communication	43.04635762	9.22	4.6688023

Adani Ports and Special Economic zone	17.73972603	35.77	0.4959387
Container corp	10.09333518	6.12	1.6492378

INTERPRETATION: Table 4.7 showing PEG ratio is calculated by PE ratio/ growth rate. There is positive PEG ratio and negative PEG ratios, from the positive and negative PEG ratios. Less than 1 PEG is better for the investment.21 companies (i.e. 26.25%) shows negative PEG. 32 companies has the PEG range between 0.01-0.10 (40%), and 27 companies (i.e.33.75%) having more than one PEG ratio.

Table 3 : showing the PEG ratios of 13 companies having PEG ratio less than 1

Companies	PE ratio 2013	Growth rate (%)	PEG Ratio	Sector
Federal bank	0.857755	19.49	0.04401	Banking
Power finance	2.493429	23.31	0.106968	Finance
Adani powers	-4.7733	-325.25	0.01468	Energy and Power
HCL Tech	11.83946	51.94	0.227945	Computer Softwer
NMDC	8.86875	22.53	0.393642	Metal, Metal Product and mining
Asian paints	4.476112	10.68	0.419112	Paints
BHEL	6.54458	15.34	0.426635	Electrical Equipments
Adani Ports and Special Economic zone	17.73973	35.77	0.495939	Travel and transport
Ultra tech cement	18.211	34.42	0.529082	Cement and cement products
Aditya Birla Nuvo	33.379	43.29	0.771056	Divercified
Tata chemicals	10.88713	13.95	0.780439	Chemicals
Cummins	17.3794	19.85	0.875536	Engineering
manindra and mahindra	16.60862	17.11	0.970697	Automobile

INTERPRETATION: This table shows, out off 32 companies having low PEG Ratios, 13 Companies having least ratios from 13 different sectors are taken for analysis.

Table 4 showing portfolio selected using PEG Ratio

	share price (1/4/2013)	Capital	no of shares	Share price (2/1/2017)	Share price (2/1/2017)	Portfolio	CAGR
Federal bank	484.5	769230.8	1587.68	66.05	**330.25**	524331.2	-9.13
Power finance	183.2	769230.8	4198.858	124	124	520658.4	-9.29
Adani powers	42.2	769230.8	18228.22	30.6	30.6	557783.4	-7.72
HCL Tech	788.5	769230.8	975.5622	828.5	828.5	808253.3	1.24
NMDC	135.15	769230.8	5691.682	128.2	128.2	729673.6	-1.31
Asian paints	4,954.95	769230.8	155.2449	904.65	9046.5	1404423	16.24
BHEL	182.5	769230.8	4214.963	122.5	122.5	516333	-9.48
Adani Ports and Special Economic zone	42.2	769230.8	18228.22	273.8	273.8	4990886	59.59
Ultra tech cement	1,865.15	769230.8	412.423	3,371.35	3,371.35	1390422	15.95
Aditya Birla Nuvo	984.55	769230.8	781.3019	1,290.10	1,290.10	1007958	6.99
Tata chemicals	323.6	769230.8	2377.104	506.95	506.95	1205073	11.87
Cummins	501.1	769230.8	1535.084	826.15	826.15	1268210	13.31

manindra and mahindra	857.1	769230.8	897.4808	1,229.80	1,229.80	1103722	9.44
		10000000				16027726	17.02

INTERPRETATION: This table showing companies were listed with a notional investment of Rs 1, 00, 00,000. Each stock was incurred with 769230 values. Beginning value at the end value is shown in the table with rate of returns. Total portfolio is 16027726 and total CAGR value is 17.02%.5 companies having negative CAGR i.e.38%. 3 companies having range between 0-10 (23%) and 5 companies having CAGR above 10 (38%) .

Table 5 : showing PEG ratios of 10 companies

	PE ratio 2013	Growth rate (%)	PEG Ratio	Sector
Federal bank	0.857755	19.49	0.04401	Banking
Power finance	2.493429	23.31	0.106968	Finance
Adani powers	-4.7733	-325.25	0.01468	Energy and Power
HCL Tech	11.83946	51.94	0.227945	Computer Softwer
NMDC	8.86875	22.53	0.393642	Metal, Metal Product and mining
Asian paints	4.476112	10.68	0.419112	Paints
BHEL	6.54458	15.34	0.426635	Electrical Equipments
Adani Ports and Special Economic zone	17.73973	35.77	0.495939	Travel and transport
Ultra tech cement	18.211	34.42	0.529082	Cement and cement products
Aditya Birla Nuvo	33.379	43.29	0.771056	Divercified

INTERPRETATION: This table showing PEG ratios of 10 companies chosen from 10 different sectors. For the selecting of the companies below 1 PEG ratio is selected.

Table 6 : showing Portfolio selected using PEG ratio

Companies	share price(1/4/2013)	capital	no of shares	Share price (2/1/2017)	Share price (2/1/2017)	Portfolio	CAGR
Federal bank	484.5	1000000	2063.983	66.05	330.25	681630.5	-9.13696
Power finance	183.2	1000000	5458.515	124	124	676855.9	-9.2965
Adani powers	42.2	1000000	23696.68	30.6	30.6	725118.5	-7.72114
HCL Tech	788.5	1000000	1268.231	828.5	828.5	1050729	1.244795
NMDC	135.15	1000000	7399.186	128.2	128.2	948575.7	-1.31117
Asian paints	4,954.95	1000000	201.8184	904.65	9046.5	1825750	16.24127
BHEL	182.5	1000000	5479.452	122.5	122.5	671232.9	-9.48547
Adani Ports and Special Economic zone	42.2	1000000	23696.68	273.8	273.8	6488152	59.59903
Ultra tech cement	1,865.15	1000000	536.1499	3,371.35	3,371.35	1807549	15.95047
Aditya Birla Nuvo	984.55	1000000	1015.692	1,290.10	1,290.10	1310345	6.990791
		10000000				16185938	17.41204

Table 7 : showing Portfolio values between 2013- 2017

	Ending value (2/1/2017)	Beginning value(1/4/2013)	CAGR

High P/E	12956615	10000000	9.017743
Low P/E	10804773	10000000	2.613669
PEG- 13 stocks	16027726.2	10000000	17.02823
10 stocks	16185938.18	10000000	17.41204

INTERPRETATION: This table showing the portfolio values between 2013-2017. The high PE stock has gone CAGR of 9.01. Low PE 2.61 and PEG is 17% of CAGR return.

Table 8 : showing Nifty CAGR for the period 2013-2017

Nifty index on		
1/4/2013	1/2/2017	CAGR
5704.4	8179.5	12.7644645

INTERPRETATION: This table shows the contrast Nifty value of CAGR is 12.76% and its beginning value on 1/4/2013 Nifty is 5704.4 and ending value on 1/2/2017 is 8179.5

Table 9 showing hypothesist-Test: Paired Two Sample for Means

	Variable 1	*Variable 2*	
Mean	-1.809194166	7.361749102	
Variance	174.0397884	335.1315141	
Observations	50		50
Pearson Correlation	0.19121066		
Hypothesized Mean Difference	0		
Df	49		
t Stat	-3.17634865		
P(T<=t) one-tail	0.001290345		
t Critical one-tail	1.676550893		
P(T<=t) two-tail	0.00258069		
t Critical two-tail	2.009575199		

This test related to the Low PE and PEG where Ho is the mean return of low PE stocks and PEG stocks are statistically similar.
H1 is the mean return of low PE stocks and PEG stocks are statistically dissimilar.
As the P value is 0.001 which is less than 0.05 we reject the Null hypothesis and conclude that the returns of low PE stocks and PEG stocks are different.

t-Test: Paired Two Sample for Means

	Variable 1	*Variable 2*	
Mean	-2.521339682	7.361749102	
Variance	279.2060713	335.1315141	
Observations	50		50
Pearson Correlation	-0.379020795		
Hypothesized Mean Difference	0		
Df	49		
t Stat	-2.402352335		
P(T<=t) one-tail	0.010062129		
t Critical one-tail	1.676550893		
P(T<=t) two-tail	0.020124258		

t Critical two-tail	2.009575199

This test related to the High PE and PEG where Ho is the mean return of low PE stocks and PEG stocks are statistically similar.

H1 is the mean return of High PE stocks and PEG stocks are statistically dissimilar. As the P value is 0.01 which is less than 0.05 we reject the Null hypothesis and conclude that the returns of high PE stocks and PEG stocks are different.

III. Findings

- Out of 80 companies, taken for the study 28 companies were having P/E ratio between 0-10 (35%). 24 companies were having P/E ratio between 10-20 (30%).10 companies were having P/E ratio between 30-40 (17.5) . 14 companies were having P/E ratio above 30 and 4 companies having P/E ratio above 100(5%)
- From 80 companies 40 companies having growth rate range between 0-10 (50%). 15 companies having growth rate range between 10-20 (18.75). 15 companies having the growth rate between 20-30 (18.75). 8 companies having the growth rate range between 30 and above (10%). 2 companies having growth rate of 50 and above is 2.5%.
- Out of 80 companies 21 (26.25%) companies were having the PEG ratios is negative. 32 companies were having PEG range from 0.01-0.10 (40%). and 27 companies having PEG ratio above 1(33.75%).
- In High P/E 15 companies which are chosen as better for investment from that 7 companies which having negative CAGR (46.67%) which gives loss. 3 companies which having positive CAGR between 0-10 range (20%). And 5 companies having CAGR range above 10 (33.33%).
- In low P/E 15 companies having low P/E, which can taken as good for investment out of 15, 8 companies having negative CAGR (53.33%). 3 companies having CAGR range between 0-10 (20%). And 4 companies having CAGR range above 10 (26.67%).
- Among high P/E stocks, 3 companies were having the CAGR above 20%.
- Among low P/E stocks only one company having the CAGR above 20%.
- In PEG, among 80 companies from different 13 different sectors out of this 38% of companies having the negative CAGR. 3 companies were having the CAGR between 0-10 (23%). And 5 companies were having the CAGR above 10 (38%).
- In hypothesis of two paired t-test Ho is accepted and H1 is rejected

IV. Conclusion

Low PE Portfolio which was created on 1-4-2013 with one crore corpus had a value of 1,08,04,773 on 2-1-2017. The CAGR for the participate is 2.16%. High PE Portfolio which was created on 1-4-2013 with one crore corpus had a value of 1, 29,56,615 on 2-1-2017. The CAGR for the Portfolio is 9.0177%. PEG Portfolio with 10 stock on 1-4-2-013 with one crore corpus had a value of 1,61,85,938 on 2-1-2017. The CAGR for the portfolio is 17.41% In contrast Nifty has given a CAGR of 12.76%. It can be observed that PEGR has performed well. The return (abnormal return) is17.0412.76=4.28 where an both High PE and Low PE stocks, have given negative abnormal returns. When compared to High PE and Low PE, High PE is good for investment and compared to the PE and PEG, PEG are good for the investment.

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