

ART AS AN ALTERNATE INVESTMENT VIS-A-VIS STOCKS: A STUDY

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Abstract: *This paper will examine the return and probability for mixed portfolio among major art works and financial markets. We have carried the search for higher returns via alternative asset avenues due to the comparatively poor performance of traditional assets. The determination to earn maximum returns from transformation into various assets, that offer less and negative correlation when compared with equities and bonds. We have analyzed the results through secondary data i.e. from research papers and also we have collected the auctions results of various paintings from auction houses to find the returns while diversifying in portfolio. In this research we have studied in depth about art as an alternative asset class, and has examine clearly that how this new alternative asset is expected to perform in bear markets, when the advantages of diversification are most required. To find the result that whether art is an alternate investment or not we have analyzed the data of Top 15 artists for the last 5 years i.e. from 2010-2015. We have compared the data of these artists with the Top 15 companies trading under Bombay Stock Exchange, we have collected the market capitalization of the companies and then we will find the correlations between the results between the two. Also, we have applied a trend analysis to find the results that how art has been emerged as an alternative asset. From these results we found that how art can be used as an investment option to diversify the portfolio.*

Key Words: Art, Alternate Assets, Stocks

INTRODUCTION

Meaning

Art, which is a soulful expression of an artist, is considered as a financial value not only because it has a combination of creative ideas, but also because of its relevance in the time frame. This paper tries to conceive the Indian art as an alternate asset class and its impact on diversification of investment portfolio. Art is considered as a various range of human activities and the products of those activities, normally involve imaginative or technical skill. It is no longer just praised for its artistic value and the expression of its sub-lime ideals rather as an investment. Performance, of art is doing well in the economic depression as auction houses are reporting record prices from past few years.

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Art has been argumentative for some time and an investigation has been done to know the reason that why art funds that have been increasing from last 4 years and is being successful in building a successful image. The reason is that due to uncertain stock market returns, anxious investors are considering alternative assets as an investment. Art is considered as one single class all of its own. Art, being as a single class, is considered as an alternative and attractive investment which is independent of changes in market conditions.

As an industry art has been underrated and undervalued. However, the Indian art market witnessed an unequalled increase in prices between 2000 and 2007 due to which, it has become a fashion to further invest in art and art galleries. Every auction set some benchmark record and people started believing that anyone could start its own Indian art fund. By having so much, gains while investing in art, collectors are still asking: "Is art a good investment?"

Indian art is slowly being recognised as an asset class. According to Deloitte Luxembourg, in 2013 auction sales of Indian modern and contemporary art were up by 32% from 2002 at \$49.5 million. Deloitte study shows that in 2014, 76% of art buyers acquired art and collectibles as investments, compared to 53% in 2012. However, there are several potential Indian investors who are yet to discover the magic of art and collectibles.

From 2000 to 2007, there is a boom in Indian art market, due to a great extent by Non Resident Indians and foreign direct investment, including the auction part of the market which has grown from Rs 11 Crore in 2001 to Rs 648 Crore in 2006, but there is a slight decline in 2007 which reach to 475 Crore. In 2006 September, the auction houses for Indian art shows the benchmark sales, with 7 auction houses, including both domestic and international, earning close to 220 Crore in a single month. In 2008, after recession Indian Art market slowly picking up the momentum. The Christie's auction in Mumbai, Dec 2014 inspired new confidence in the market; it fetched Rs. 75,27,45,000 and \$12,092,289 by selling 90% by lot 97% by value. This show the confidence indicator and, art tactics Indian art market rose 42% in the first half of the last year.

The least Common alternative Investment Art i.e. Paintings, Sculptures, Architectures etc. is now becoming a higher investment opportunity for investors in world and is considered as a new alternative asset class to be gathered in alternative portfolio management.

OBJECTIVES OF THE STUDY

The study is conducted with the following objectives:

1. To analyse the trends of returns from investment in art.
2. To study the comparisons between returns yielded by art as an alternative form of investment with regular investment instrument i.e. Stocks.

REVIEW OF LITERATURE

Over the past years Indian art market shows a multiple range of imaginative responses to reality. But in the past years Indian painters appear to affect themselves essentially with the society, but with the coming of the modern artists and the peers i.e. a younger group of artists who were born after independence their concern is totally different from the earlier artists. Raya Mamarbachi, Marc Day and Giampierofavato in (2008) pointed that the role of art has been changed and it is no longer praised for its creative importance and the appearance of its sublime ideals. It is now also observed as an investment. The records at the Frick Art in New York reveal that, "The art market is cyclical". Rachel Campbell (2005) studies reveal that in international market \$30 billion of investment for Art is recorded and it is considered as a huge new lines for investment flows, and in the future with an increase in globalization and the reduction in the benefits from expansion of assets across borders there has been a rush into various alternative investment vehicles.

Jiangping Mei and Michael Moseshas (2002) studied that art exceed fixed income securities as an investment, although it under-performs stocks in the US. Financial planners are keen to control the investors from the investment in alternative assets. Rachel Campbell (2005) found the poor performance of old asset classes in the recent years, when compared with for high investment into alternative asset classes. In 2015 Veena (2015) observed that as stock market is declining then investors may have to search elsewhere in the coming days for the maximum return. For the investors, who have been tired of the stock markets wrench and their volatility and who have been looking out for innovative investment options, alternative investments come in a very handy way. Campbell R.A.J. (2007) expected that there is a sunken correlation of art as compared to different asset classes, the option for mixed portfolio across art markets and across asset classes are more. Roman Kraeussl and Robin Logher (2008) found that the Russian art market present a favorable correlations with the most ordinal financial assets and a positive market beta, whereas in the Chinese art market the correlation is negative overall and also has a negative market beta, and the Indian art index shows a negative market beta and variations in correlation results. So, investing in art may give the higher return.

Campbell R.A.J. (2006) has noted that how the upcoming alternative asset is expected to perform, in bear markets, when the advantages of diversification are mostly needed. Arie L. Melnik and Steven E. Plaut (2008) found out that for the 1976-2003 period, when other assets were present in a portfolio, the excellent holdings for art assets were zero. However, when some of the assets classes were removed from the portfolio, large-cap US stocks and particular Treasury bills, the optimal proportion of holdings of art assets was positive and even fairly large. Seema (2015) found that low correlation is an important factor for considering assets in a portfolio. Also if there is a standalone alternative for traditional asset

classes than the investment-grade art shows a sunken correlation with other asset classes i.e. shares and bonds. This makes art the best option for diversifying an investment portfolio, and also to act as a hedge against inflation. Roman Kraeussl and Jonathaon lee (2010) found that most of the investors prefer to invest in various assets and they consider investment in art as an interesting alternative investment. However, art must be considered in an optimal portfolio and findings indicate that the artworks of the top 500 artists in the world do play an important role in creating well-diversified portfolios.

Roman Kraeussl and Robin Logher (2008) observed that many investors during the gloomy economic days searched for different investment avenues to safeguard their interest against diminishing returns from the stock markets. And shockingly, most of these investors shift to the art market – that seems to be an untapped market, yet in contrast a market for luxury and valuable goods that are purchased when chances of welfare are ample and economic situations are giving positive outcomes. These two scenarios portray the art market as a fascinating motif for investment and portfolio research. Consumers of all socioeconomic strata have found a place in both the public auction market as well as the private dealer market, and generally accepted rules of this course and ethical dealings have come at a slow, but steady pace. Using the data given by the Art Market Research associated with European and American paintings, Worthington and Higgs (2004) found that no diversification benefit is found if they include art in an upgraded portfolio. Similarly, Renneboog and van Houtte (2002) found limited possibilities in Belgian and German art. A “Conventional” portfolio which includes stocks and bonds tends to dominate that portfolio which includes art as an alternative option, with a few deviations such as a less range of standard deviation as found by Renneboog and van Houtte (2002) and a maximum weight limit for some asset classes as found by Kraeussl and van Esland (2008). It seems though the stability that has been achieved since the last art market crash in 2008, may soon stop. According to an article mentioning the art market, by famous London writer Mark Collett White suggest that, many market leaders believe that the recovery from the 2009 slowdown may be short-lived, on the contrary other analysts claim that it is likely that the influx of money from the Chinese investors will enhance the risk of a rapid increase of money in the art market followed by a swift market plummet. The market regulators have noticed the growth in all these emerging economies that directly affect national art markets of these countries. As per the latest reports by Art price, which states the growing art, market for Russia, also since 2001 780% growth in the Chinese (contemporary) art, and 830% increased growth in the Indian (contemporary) art market since the last decade. As the result of their economic growth it can be observed that their own national art markets are growing into very profitable businesses, not only for the artist’s in fact for the potential investors too.

According to Art net report (2014) from 2011 to 2013, there is an increase in the number of prospected customers who got themselves registered for sale at the largest auction house of the world by 23 percent. This huge increase in the number of buyers is the reason that gives Pyikkanen the confidence in the future of art market. Other analysts says "as long as prices remain high, experts argue, the top quality works will continue to come in the market, creating a cycle that is important for the market's expansion in future." The interesting fact is that, both Sotheby's and Christie's have witnessed a boom in their sales in auctions, with Christie's stating record sales of \$5 billion annually in 2010, up with 53% as compared 2009. Sotheby's boasted an auction of total \$4.3 billion in 2010 that is an increase from the auction of total \$2.3 billion in 2009.

According to Ajit Mookerjee (1954) the earliest art forms found in India, though less, throw considerable light on the early history of mankind. Numerous rock paintings those were discovered in central and northern India are markedly similar to the prehistoric wall paintings of Spain. Although many of these rock paintings are now unintelligible, and superimposed by later drawings but enough is preserved to testify to their power of dynamic vision. Since then the concept of Indian art market changed drastically. Saffron art's progressing confident steps towards maintaining its place in the Indian auction scene is stupendous, and the Indian Art Summit that is now called as the Indian Art Fair was also taken positively in February 2012. A major number of Indian artists now exhibit their arts on a international level, including Rashid Rana, Bharti Kher and Jitish Kallat.

Andrew c. Worthington and Helen Higgs (2004) founded that if art as an investment is to be taken as valid investment tool like other such as bonds and stocks among others then proper examining of prospect for such diversification in portfolio should be made. Earlier European families followed the trend of capital formation so they invest one-third of investment in stock, bond and other securities and one-third in art as investment tool. Raya Mamarbachi, Marc Day, Giampiero in one of research paper of Peppiat (2007) in 2008 that in comparison to stocks, shares and bond "art funds are dangerous, and it is unsafe for the market as they have not been set up for the right reasons and it is destroying the notion of what art stands for, aesthetic beauty and to be admired in one's private collection or in a museum". Prediction in financial market is quite difficult to make by the investors, as there is fluctuation the market in every minute due to various external factors. In stock market the predictions are made possible as there is availability of various models and theories developed by the various researchers, Analyst etc., so the prediction in share market or in mutual fund is possible but on the other side the if we look on the art as investment tool then the prediction in this area is not possible because it is purely on the taste and preference of the buyer as if the buyer is ready to buy the particular painting then he/ she will decide the price of that painting. Roman Kraeussl & Christian Wiehenkamp (2011) taken out from

the research paper Channel et.al (1994) that returns from the stock are driven through fundamentals where the predictability increases with the horizons, where as the art market is all about taste whose predictability can be increases for short term but not for the future generation.

Beta is used to measure the sensitivity of the funds to market movements. "It is important to note that a low beta for a fund does not necessarily imply that the fund has a low level of volatility. A low beta signifies only that the fund's market-related risk is low" William N. Goetzmann (1993) viewed that "Art has a positive beta with respect to stock market over the long run". Asset class is a group of securities, which have same characteristic, and they act similarly in the market place and which is required to follow certain rules. Earlier people were not having that much interest in "ART" for the investment purpose but with the passage of time taste and preferences of the customer also gets changed they started taking art as their investment asset. The art market is heterogeneous in nature as no secondary market exists for it due to which resale of art is not frequent. Frey and Pommerehne (1989) noticed that buying art has become more popular since the end of World War II. Over the period 1635 1987 they concluded that the monetary rate of return of art is lower compared to that of financial assets". After the concern of return from the asset class the next thing that came is the risk associated with the traditional asset class. In the Era of 1635 1987 the monetary return rate is related to art was lower as compared to that of other financial assets. In addition to this, Goetzmann (1993) found that the risk return associated with the art; i.e. it implies that art is not seen as an interesting investment for the investors who were afraid to take the risk during the period of 1715 1986. Renneboog and van Houtte (2002) state that investment in paintings does not give a higher financial return as compared to investing in stocks, bonds, mutual funds etc.; i.e. the combination of both high risks and high additional costs will make art not a rewarding alternative. Furthermore, Worthington and Higgs (2004) viewed that art provides lower returns and is more risky than the other traditional investments when comparing major happenings in the art market with the financial markets. After the risk return study of these traditional asset and art the next thing that came is diversification of the assets. In earlier times the diversification was not given much importance but with the passage of time the investment in art is increasing and diversification in investment is also increasing to have better return.

RESEARCH METHODOLOGY

Data Collection

The present study is mainly based on the secondary data. The required data is collected from the results of three main auction houses i.e. Saffron Art, Sotheby's and Christies.

Sources of Data

The data is collected from the following sources such as Reports, Journals, Articles, Printed Literatures, Online Database and Auction Houses Websites

Tools of Analysis

Correlation analysis and trend analysis were used.

Hypothesis of the Study

- H0: That investing in art yields a competitive return in comparison to other traditional asset class i.e. stocks.

ANALYSIS AND INTERPRETATION

Since art is not a homogeneous commodity traded in highly organised markets like stocks and bonds, due to which the art market has been characterized as hierarchy of submarkets. The primary market includes artist and sellers selling their work at galleries, local exhibitions and consumers. The top of the hierarchy is an international market dominated by few auction houses owned and operated by individual wealthy collectors, museums and art foundations. Auctions are certainly the most visible market segment and their traded volume has expanded over the last decade.

To analyse the returns and risk associated with the purchase of art as an alternative asset class in the portfolio we have selected top three auction houses currently having their operations in India i.e. Christie's, Sotheby's and Saffronart. Due to its strong online presence Saffron art is the best performing domestic auction house. The records of the auction houses generally provide reliable public information on painting transactions, and are easily accessible. The auction results of the top 15 artist whose paintings command high prices and their works were repeatedly being traded in these auction houses have been chosen from January 2010 to December 2015. For list of those selected artists check annexure 1.

The union of the paintings of the mentioned artist provides the bulk of sample used in the study. However some well known artists were excluded whose works rarely appear in any of the auctions of the selected houses. They were not included because they would have added little to our sample. Further the sample was broadly classified into two categories according to the medium of the paintings i.e.

- i) Canvas
- ii) Paper

The square inch rate on selling price was calculated for each medium for the 15 artists and to make the comparison between art and stocks, similarly top 15

companies of the Bombay stock exchange as per their market capitalization were selected. The average of the prices from year 2010 to 2015 has been recorded for computation of results. List of the selected 15 companies such as Tata Consultancy Service, Reliance, HDFC Bank, Infosys, ITC, Sun Pharmaceuticals Ltd, Coal India, ONGC, HUL, WIPRO, SBI, Bharti Airtel, Kotak Mahindra, ICICI Bank and Maruti Suzuki.

For list of selected companies and their average share prices taken check annexure 2.

For analysing the trend of art market and the selected companies, we have taken 2010 as the base year and accordingly using the averages of paper, canvas and companies the following table has been made.

$$\text{Trend} = (\text{Base year trend} / \text{base year value}) * \text{Current year value}$$

Table 2
Computation of trend

<i>Year</i>	<i>Trend analysis of paper</i>	<i>Trend analysis of canvas</i>	<i>Trend analysis of 15 companies</i>
2010	100	100	100
2011	48.83	122.7135555	83.51174631
2012	81.28	91.69853185	79.30754429
2013	72.64	139.0735199	88.88547254
2014	198.93	204.5449387	110.0045709
2015	185.96	240.1519452	102.573668

From the above table we could determine that there were variations in the trend of paintings on paper. From year 2011-12 it increased by 64.5% but faced decline in the next year. Then again in the year 2013-14 there was more than two fold increase which again declined in year 2015.

The Trend of Canvas had been increasing. The growth of canvas paintings was doubled in 2015 as compared to 2010. Though there was a decline in trend for canvas in year 2011-2012 but since then the trend had been increasing from 2013 to 2015.

The trend for companies that were selected shows that there had been a declining trend from 2010-2012 due to certain market conditions but again there was an increase in the trend of the selected companies in the next year i.e. 2012-2014. There is a slight decline in the returns of the companies in the year 2015.

Following graph shows the movement in the trends of returns of companies and art market (paper and canvas)

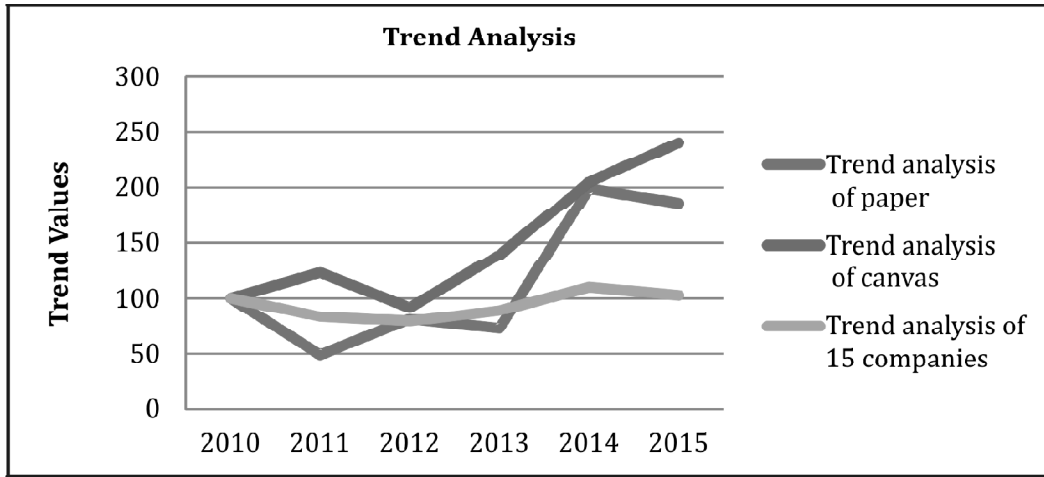


Figure 1: Trend analysis

Thus the above calculations and graph indicates that the art market shows positive and continuously increasing trend in canvas paintings, but in case of paper medium there was a slight decline. But in comparison the companies had sluggish growth. There were many variations in their returns and it can be concluded that market conditions impact the company's returns but it does not affect the art market.

Seeing the trend we can say that there are good future prospects for the art market and it will flourish many times.

Also to represent the increase in growth of art market and selected companies, Compound Annual Growth Rate (CAGR) was calculated. It indicates that how both components have grown after the end of year 2015.

Formula for calculating CAGR is

$$\text{CAGR} = (\text{Ending Value} / \text{Beginning Value})^{1/n} - 1$$

Table 3
Calculations of CAGR

Investment Avenues	Growth Rate
15 Companies	8%
Canvas paintings	16%
Paper paintings	11%

Thus from the above table it is clear that the art market had been increasing when compounded annually. However considering the growth in the returns of the companies, they experience very slight growth of only 8%. So, the observations suggest that there are growth opportunities in the art market. Investors can

maximise their returns if they partly invest in this asset class as compared to stock market.

Next step was to find that whether art can be used as an alternate asset class to diversify the investment portfolio. For that objective the extent of degree of correlation between these two investment avenues was found.

1. Firstly the yearly average prices of the selected companies were calculated. Similarly the average square inch rate of the chosen artist for canvas was also taken. We had chosen only canvas paintings to establish relationship because
 - i) Investors are interested in canvas paintings more because large volume of canvas paintings is traded at auctions as they yield higher returns as compared to paintings on paper.
 - ii) Low maintenance cost of canvas paintings as compared to paper one.
2. Coefficient of correlation of each year was calculated separately from 2010 to 2015.

The table 3 in annexure summarizes the calculations of coefficient of correlation (r)

3. Next step is to check the significance of the Hypothesis established.

H0: That investing in art yields a competitive return in comparison to other traditional asset class i.e. stocks.

H1: That investing in art does not yield a competitive return in comparison to other traditional asset class i.e. stocks.

Table 4
Coefficients of correlation and their t-values

<i>Years</i>	<i>Coefficient of correlation</i>	<i>t-Value</i>
2010	0.03632942**	0.13105944
2011	0.497**	2.068
2012	-0.025**	-0.090
2013	-0.005**	-0.018
2014	-0.064**	-0.234
2015	0.502**	2.096
Average of 5 years	0.158**	0.577

** . Correlation is significant at the 0.05 level

- There has been found very low degree of positive correlation between art prices and stock prices in year 2010. The relationship is significant at 5 per cent level of probability. Thus null hypothesis is accepted.
- The degree of correlation for the year 2011 is positive. Also the relationship is insignificant at 5 percent level of probability thus rejecting the null

hypothesis. But if we decrease the level of probability to 2.5% the relationship between art prices and stock market becomes significant.

- The degree of correlation is negative in year 2012. The relationship is significant at 5 per cent level of probability. Thus null hypothesis is accepted.
- The degree of correlation is negative in year 2013. The relationship is significant at 5 per cent level of probability. Thus null hypothesis is accepted.
- The degree of correlation is negative in year 2013. The relationship is significant at 5 per cent level of probability. Thus null hypothesis is accepted.
- The degree of correlation for the year 2015 is positive. Also the relationship is insignificant at 5 percent level of probability thus rejecting the null hypothesis. But if we decrease the level of probability to 2.5% the relationship between art prices and stock market becomes significant.
- There has been found very low degree of positive correlation between art prices and stock prices when the average prices of both stock and art prices were taken. The relationship is significant at 5 per cent level of probability. Thus null hypothesis is accepted.

Hypothesis was that investing in art yields a competitive return in comparison to other traditional asset class i.e. stocks. From 2010-2015 the degree of correlation is negative in most of the years even if positive, degree of correlation is very low making the art as a suitable option to be included in the investment portfolio with stocks. Therefore if due to certain market conditions the stocks are experiencing downturn then investors can partly invest in art as an alternate option to reduce their risk and maximise their returns.

FINDINGS AND RECOMMENDATION

Findings

1. We have found that the returns of art market are growing as compared to the Stock market. Moreover the CAGR of art market is more as compared to the stock market. The CAGR of stock market is 8% whereas that of the art market in Canvas is 16% and in Paper it is 11%.
2. The art markets are highly integrated and there is a negative correlation between the art market and stock market.
3. The art market is having higher returns and lower volatility, which helps in diversifying the portfolio and gives the benefits of reduced risk to an investor.

4. There is negative correlation between selected stocks and art market and its significance has been proved by using t-test at 5 per cent level of probability.

RECOMMENDATIONS

1. Investors can diversify their portfolio while investing in art to minimize their risk as there is a negative correlation between art market and stock market.
2. Since art market is growing, so it offers attractive opportunities for the investors who wish to invest in this avenue for a longer period.
3. In comparison between paintings on paper with the paintings on canvas, later gives more returns and are more actively traded in the auction houses.

CONCLUSION

In this paper we highlight the importance of art as an additional alternative asset class. How and where the people invest their hard-earned money is an important decision. The study basically focuses on how investors view Indian art as an alternate investment option. The main objective of the research was to find out the relationship between existing traditional asset class and investing in Indian art. On the basis of the outcome we have recommended investors for diversification of their portfolio. Investors cannot avoid the risk but they can minimize it by investing in different avenues so that they can get a moderate profit. The stock prices have an extremely low correlation with other asset classes. This Previously non-transparent market is becoming more accessible due to increase availability of index and data on the art market.

LIMITATIONS OF THE STUDY

1. The study is limited to the extent of the availability of data.
2. Time constraints were considered to be one of the limitations of the study.
3. Paintings of only those artists are considered that have been traded online through auctions. All intermediary transactions are not included.

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ANNEXURE

Table 1
List of 15 top artists included in the sample

S.No	Artist Name	Year Born	Year Died
1.	AtulDodiya	1959	—
2.	B. Prabha	1933	2001
3.	BhupenKhakhar	1934	2003
4.	Francis Newton Souza	1924	2002
5.	JagdishSwaminathan	1928	1994
6.	K H Ara	1914	1985
7.	K. LaxmaGoud	1940	—
8.	MaqboolFidaHussain	1913	2011
9.	Ram Kumar	1924	—
10.	ManjitBawa	1941	—
11.	S H Raza	1922	—
12.	Tyeb Mehta	1925	2009
13.	ThotaVaikuntam	1942	—
14.	Subodh Gupta	1964	—
15.	V. S. Gaitonde	1924	2001

Table 2
List of 15 selected companies and their average share prices

S.No	Company's name	Average Price					
		2010	2011	2012	2013	2014	2015
1	Tata Consultancy Service	870.02	1129.70	1255.03	1735.74	2845.92	3632.33
2	Reliance	1027.09	884.06	778.34	846.16	953.66	920.92
3	HDFC Bank	2012.97	1362.13	581.47	650.27	811.59	1059.90
4	Infosys	2822.14	2821.04	2506.40	2907.41	3247.53	1520.86
5	ITC	230.66	193.65	253.78	324.54	349.15	335.78
6	Sun Pharmaceutical Ltd.	1533.97	478.99	634.10	734.57	728.12	882.95
7	Coal India	314.75	350.74	347.68	298.62	332.31	364.68
8	ONGC	610.29	301.41	272.83	302.45	322.40	283.46
9	HUL	266.17	326.04	465.83	568.08	664.30	864.18
10	Wipro	528.55	406.79	396.14	432.00	559.13	580.06
11	SBI	2539.89	480.65	2120.86	1921.71	1908.84	261.83
12	Bharti Airtel	313.37	2149.18	307.95	320.08	350.99	373.72
13	Kotak Mahindra	669.00	445.60	583.22	702.65	937.72	1016.85
14	ICICI Bank	980.78	959.08	968.14	1049.61	1180.27	302.43
15	Maruti Suzuki	1371.31	1148.78	1289.57	1508.63	2508.88	4105.12

Table 3
Average Prices of Stocks of 15 companies and art prices

2010		2011		2012		2013		2014		2015	
Average stock Price	Average Art Prices	Average stock Price2	Average Art Prices3	Average stock Price3	Average Art Prices4	Average stock Price4	Average Art Prices5	Average stock Price5	Average Art Prices6	Average stock Price6	Average Art Prices7
870.02	1,004.33	1,129.70	3,154.09	1,255.03	634.32	1,735.74	973.09	2,845.92	673.79	3,632.33	653.70
1,027.09	1,754.52	884.06	1,773.49	778.34	1,605.27	846.16	2,419.25	953.66	2,981.94	920.92	1,496.22
2,012.97	6,838.24	1,362.13	6,492.00	581.47	0.00	650.27	10,122.19	811.59	8,810.19	1,059.90	10,620.00
2,822.14	5,889.61	2,821.04	6,466.85	2,506.40	4,081.70	2,907.41	7,524.97	3,247.53	9,723.52	1,520.86	9,677.06
230.66	4,603.14	193.65	3,844.16	253.78	1,843.35	324.54	8,188.13	349.15	3,950.46	335.78	5,808.85
1,533.97	690.00	478.99	1,070.00	634.10	1,314.83	734.57	1,151.00	728.12	3,464.89	882.95	3,052.00
314.75	2,207.22	350.74	3,622.26	347.68	1,197.00	298.62	1,713.50	332.31	1,894.29	364.68	1,522.58
610.29	6,453.41	301.41	5,735.52	272.83	6,696.96	302.45	8,607.18	322.40	6,441.85	283.46	6,307.87
266.17	2,941.45	326.04	3,937.55	465.83	2,724.02	568.08	4,941.45	664.30	7,729.57	864.18	7,077.01
528.55	5,081.52	406.79	7,126.17	396.14	4,448.01	432.00	6,211.79	559.13	0.00	580.06	10,444.19
2,539.89	8,383.49	480.65	8,979.12	2,120.86	7,074.82	1,921.71	9,850.22	1,908.84	13,455.68	261.83	11,568.95
313.37	21,104.08	2,149.18	30,830.01	307.95	24,997.78	320.08	27,577.04	350.99	72,878.55	373.72	48,853.75
669.00	1,945.30	445.60	1,506.84	583.22	1,348.59	702.65	2,279.87	937.72	1,315.61	1,016.85	1,208.31
980.78	2,104.79	959.08	1,397.42	968.14	1,964.00	1,049.61	1,601.00	1,180.27	1,735.31	302.43	1,257.42
1,371.31	12,941.41	1,148.78	16,992.00	1,289.57	11,869.00	1,508.63	23,511.60	2,508.88	25,102.35	4,105.12	81,921.54