

GROWTH OF INDIAN MUTUAL FUND INDUSTRY: AN EMPIRICAL ANALYSIS

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ABSTRACT

Mutual funds play a very important role in mobilizing resources of the investors by investing them in productive channels under professional expertise. This paper deals with the growth of Indian mutual fund industry from 2000-01 to 2016-17 in terms of number of fund houses, number of schemes, resource mobilization and assets under management. Statistical tools such as Annual growth rate, percentages and Independent t-test have been used. It has been observed that during the period under study, the industry has grown significantly. The findings of the study reveal that there is an increase in the number of mutual fund houses, number of schemes, gross resource mobilization and assets under management of the industry as a whole. Sector-wise analysis reveals that gross resource mobilization and assets under management of the private sector fund houses is significantly greater than that of public sector fund houses.

Keywords: mutual funds, resource mobilization, assets under management

1. INTRODUCTION

Since its inception in 1964, the mutual fund industry has come a long way. The industry witnessed growth in parameters such as number of fund houses, number of schemes, resource mobilization and assets under management (AUM). With the increase in household savings and the need of adequate allocation in productive channels of investment, the importance of mutual funds has increased tremendously. Mutual funds are one of the most important categories of financial intermediaries that enable savers from all segments of the society to invest and derive benefits from the capital market. Mutual funds are gaining increased importance due to higher investor return at a relatively lower risk and cost. Thus, as a consequence of involvement of mutual funds in transforming the Indian economy, it has become important to view the services of mutual funds not only as a financial intermediary, but also as pace setters as they are playing a crucial role in mobilization of resources and efficient allocation investable funds through market.

After the adoption of the New Economic Policy of LPG in 1991, the Indian financial sector has undergone a huge transformation and as a result the pattern of ownership, structure of organization and the area of operations of the financial institutions have changed drastically with an element of competition being introduced in the financial sector. Mutual funds were an essential part of the financial sector reforms as the then Finance Minister, Dr. Manmohan Singh in his budget speech of 1991-92 said, “for many investors mutual funds are more suitable investment vehicle than direct ownership of shares...the government has now decided to further promote the development of mutual funds by throwing the field open to the private sector and joint sector” (Singh, 1991). As a result of this, the mutual fund industry was opened to private and foreign fund houses and hence, the industry witnessed an increase in the number of fund houses, number of schemes, resource mobilization and AUM.

There are major occurrences that have taken place in the Indian mutual fund industry since its inception till date. Major highlights of the Indian mutual fund industry have been depicted in Table 1.

Table 1: Major Highlights of Indian Mutual Fund Industry

Phase	Period	Milestone	Major Highlights
Phase I	1964-1987	Monopoly of UTI	UTI was set up by an Act of Parliament in 1963. UTI launched its first scheme named US-64 in 1964. UTI was under the administrative control of RBI and later in 1978 it was de-linked from RBI and came under administrative control of IDBI. UTI enjoyed complete monopoly since its inception till 1987.
Phase II	1987-1993	Entry of Public Sector (Banks & FI sponsored funds)	Bank and Financial Institution sponsored mutual funds were allowed entry in the industry in 1987. SBI was the first to set up mutual fund followed by Canara Bank, PNB, etc.
Phase III	1993-2003	Entry of private and foreign sector funds	Private sector funds as well as foreign sector funds were allowed entry in the industry. SEBI Mutual Fund Regulation, 1996 were adopted in place of SEBI Mutual Fund Regulations, 1993.
Phase IV	2003-May 2014	Bifurcation of UTI and Global	UTI was bifurcated into two separate heads, Specified Undertaking of UTI and UTI mutual

		financial crisis	fund, which function under regulations of SEBI. As a consequence of global financial crisis in 2008, securities market around the globe sunk and similar was the case with India also. Entry load was abolished by SEBI and this coupled with the after effects of the crisis even worsened the adverse situation. The industry struggled to recover for two years to maintain its economic viability.
Phase V	May 2014 onwards (Current Phase)	SENSEX rallies to a record high after setting up of new Government at the Centre	Progressive measures adopted by the regulatory authority (SEBI) in 2012 and with the coming of new Government in power at the Center, in May, 2014 the stock market created a history when the BSE Sensex crossed a mark of 25,000 points and NSE Nifty touched a high of 7563.50. Steady inflows were witnessed in the industry, coupled with an increase in the number of investor accounts and also in the AUM.

Source: Compiled by Author from AMFI

The article is divided into 6 parts. Part 1 deals with the introduction to mutual funds and Indian mutual fund industry, while Part 2 deals with the review of the existing literature. Part 3 and 4 focus on the objectives and database and research methodology, respectively. Whereas Part 5 deals with results and discussion of the study and the last part, i.e. Part 6 highlights major conclusions drawn from the study.

2. REVIEW OF LITERATURE

Tripathy (1996) analyzed the growth of mutual fund industry in India by laying special emphasis on the growth trend of the industry in the post reforms period. The study concluded that with the opening of the mutual fund industry to private and foreign players, many developments have taken place in the industry. Mutual funds have gained immense popularity among the small investors. **Singh (2003)** covered theoretical aspects and regulatory framework of mutual funds in India. The study also focused on the mutual funds organized by the banks and private sector alongwith the public sector. A comparative performance analysis was carried out of various mutual funds to provide a better picture about the working of mutual funds in India. **Mohanani (2006)** analyzed the growth and development of mutual funds industry in India. The

study mentions how the Indian mutual fund industry has become one of the fastest growing sectors of the capital market in India. The study makes a noteworthy mention that the AUM grew by 96 percent between 1997 and 2003 thereby increasing the contribution to the country's GDP from 8 percent to 15 percent. It also highlights the fact that the private sector dominates the market by holding account for almost 91 percent of the total resource mobilization. **Bodla and Bishnoi (2007)** studied the growth of mutual fund industry during the post reforms period, in terms of the number of schemes and resource mobilization. The findings of the study show that there is an increase in the number of schemes and also in the resource mobilization during the period of study and that the private sector and joint venture funds had outperformed the public sector in both these aspects. **Lohana (2014)** studied the growth of mutual funds industry in India from 2009-10 to 2013-14. The study reveals that after liberalization of mutual funds industry in 1993, there has been a tremendous increase in AUM and during the last decade there has been an increase of more than 500%. The private sector out-performed the public sector in terms of resource mobilization. The study shows that equity schemes have contributed more as compared to the debt schemes. The trends in transactions on stock exchanges, reveal that debt funds investment were given preference over equity fund investment. The total number of schemes have tremendously increased. **Vijaya and Talwar (2015)** studied the growth of resource mobilization done by the Indian mutual fund industry from 2004-05 to 2013-14. The study concludes that during the period of the study, the resource mobilization in total was Rs.4,64,82,257 crore and AUM was Rs.49,50,335 crore. The sector-wise comparison shows that the UTI had mobilized the lowest resources accounting to around 8.22 per cent, followed by the public sector with around 11.06 per cent and the private sector had the highest share in the total resource mobilization, i.e. 80.72 per cent. The conclusion of the study reveals that post liberalization of the industry; it is the private sector that has emerged as a dominant player, by contributing a larger share in the industry total in comparison to UTI and the public sector. **Rehmani and Khan (2015)** made a comparison between the resource mobilization done by the mutual fund industry in India in the pre and post liberalization period. The pre liberalization period ranges from 1974-75 to 1992-93 while that for the post liberalization period ranges from 1993-94 to 2013-14. The findings of the study reveal that the growth of resource mobilization in the pre liberalization period was insignificant. However, with the initiation of reforms and entry of private and foreign players in the industry, the resource mobilization of the industry as a whole significantly improved.

3. OBJECTIVES OF THE STUDY

- To analyze the growth trend in terms of number of fund houses, number of schemes, gross resource mobilization and AUM.

- To find out whether there is a significant difference in gross resource mobilization of public and private sector mutual funds.
- To find out whether there is a significant difference in AUM of public and private sector mutual funds.

4. DATABASE AND RESEARCH METHODOLOGY

The study is empirical in nature and is based on secondary sources of data. The study period remains confined from 2000-01 to 2016-17. The data for number of fund houses, number of schemes, gross resource mobilization and AUM has been taken from AMFI, RBI and SEBI. Analysis has been done with the help of descriptive statistics, annual growth rate, percentage share and independent t-test.

5. RESULTS AND DISCUSSION

Table 2 depicts the sector-wise growth in number of mutual funds in India from 2000-01 to 2016-17. It is observed that the total number of mutual fund houses varied between 29 to 46 during the study period, while the number of private sector mutual funds were always greater than that of public sector mutual funds during the entire period of study. The period also witnessed a continuous increase in the number of schemes from 393 to as high as 2281 during the period of study. There was a sharp decline in the number of schemes in operation from 1001 in 2008-09 to 882 in 2009-10 as a consequence of the global financial crisis of 2008-09, but started increasing from the very next year. It is further observed that there were total 41 fund houses in the Indian mutual fund industry in 2016-17 with 2281 schemes in operation as compared to only 35 mutual fund houses and 393 schemes in 2000-01.

Table 2: Growth in Number of Mutual Funds (Sector-wise)

Year	Number of Fund House			Number of Schemes
	Public	Private	Total	
2000-01	11	24	35	393
2001-02	10	25	35	417
2002-03	9	24	33	382
2003-04	8	23	31	403
2004-05	6	23	29	451
2005-06	5	24	29	592
2006-07	5	25	30	756
2007-08	5	28	33	956
2008-09	5	30	35	1001

2009-10	5	33	38	882
2010-11	6	35	41	1131
2011-12	7	37	44	1309
2012-13	8	35	43	1294
2013-14	9	37	46	1638
2014-15	9	34	43	1884
2015-16	9	33	42	2420
2016-17	9	32	41	2281

Source: Compiled by Author from AMFI Monthly

Table 3: Gross Resource Mobilization of Mutual Fund Industry

Year	Public Sector (Rs. Crore)	(%) Share in Total	Private Sector (Rs. Crore)	(%) Share in Total	Total (Rs. Crore)	Annual Growth Rate (%)*
2000-01	17948	19.31	75009	80.69	92957	-
2001-02	16725	10.17	147798	89.83	164523	76.99
2002-03	30611	9.73	284096	90.27	314707	91.28
2003-04	55540	9.41	534649	90.59	590189	87.54
2004-05	103245	12.3	736463	87.70	839708	42.28
2005-06	183446	16.71	914703	83.29	1098149	30.78
2006-07	338620	17.47	1599873	82.53	1938493	76.52
2007-08	683624	15.31	3780753	84.69	4464377	130.30
2008-09	1133603	20.89	4292751	79.11	5426354	21.55
2009-10	2320539	23.16	7698483	76.84	10019022	84.64
2010-11	1936591	21.86	6922924	78.14	8859515	-11.57
2011-12	1135935	16.66	5683744	83.34	6819679	-23.02
2012-13	1279996	17.61	5987889	82.39	7267885	6.57
2013-14	1718703	17.6	8049397	82.40	9768100	34.40
2014-15	1942297	17.52	9143962	82.48	11086259	13.49
2015-16	2639279	19.17	11126277	80.83	13765555	24.17
2016-17	3367611	19.12	14247937	80.88	17615549	27.97
Average	1112018.41	-	4778041.65	-	5890060.06	-

Compiled by Author from SEBI

*Annual Growth (%) calculated by Author

Sector-wise gross resource mobilization is depicted in Table 3. It is evident from the table that public sector mutual funds grew from Rs.17948 crore in 2000-01 to Rs.3367611 crore in 2016-17, while that of private sector increased from Rs.92957 crore to Rs.17615549 crore during the same period. It is also observed that the percentage share of public sector in total industry business witnessed few fluctuations during the study period and remained within the range of 9.41 percent (lowest) in 2004-04 and 23.16 percent (highest) in 2009-10 and finally stood at 19.12 percent in 2016-17, whereas the private sector held a larger share of the industry throughout the study period with 76.84 percent (lowest) in 2009-10 and 90.59 percent (highest) in 2003-04 and finally stood at 80.88 percent in 2016-17. The industry witnessed highest annual growth rate of 91.28 percent in 2002-03. Negative annual growth rates were witnessed in two consecutive years, i.e. 2010-11 and 2011-12 as a consequence of the global financial crisis of 2009 and the global stock market crash of 2011 (Wikipedia, n.d.). By the end of study period, the Indian mutual fund industry grew at an annual growth rate of 27.97 percent.

In order to find out whether gross resource mobilization of private sector mutual funds is significantly greater than public sector, independent t-test is used to test the following hypothesis:

H₀: The gross resource mobilization of private sector mutual funds is not significantly greater than public sector.

H₁: The gross resource mobilization of private sector mutual funds is significantly greater than public sector.

Table 4: Test of Normality

	Sectors	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Gross Resource Mobilization	Public Sector	.179	17	.151	.895	17	.057
	Private Sector	.180	17	.144	.908	17	.093

^aLilliefors Significance Correction

Table 4 shows the test of normality of the sample. As it can be seen from the Shapiro-Wilk test that significant p values are .057 and .093 which are more than the critical values at .05 percent significance level in both the cases, therefore, it may be said that the data set is normal.

Figure 1: Normality of Q-Q Plot of Gross Resource Mobilization of Public Sector

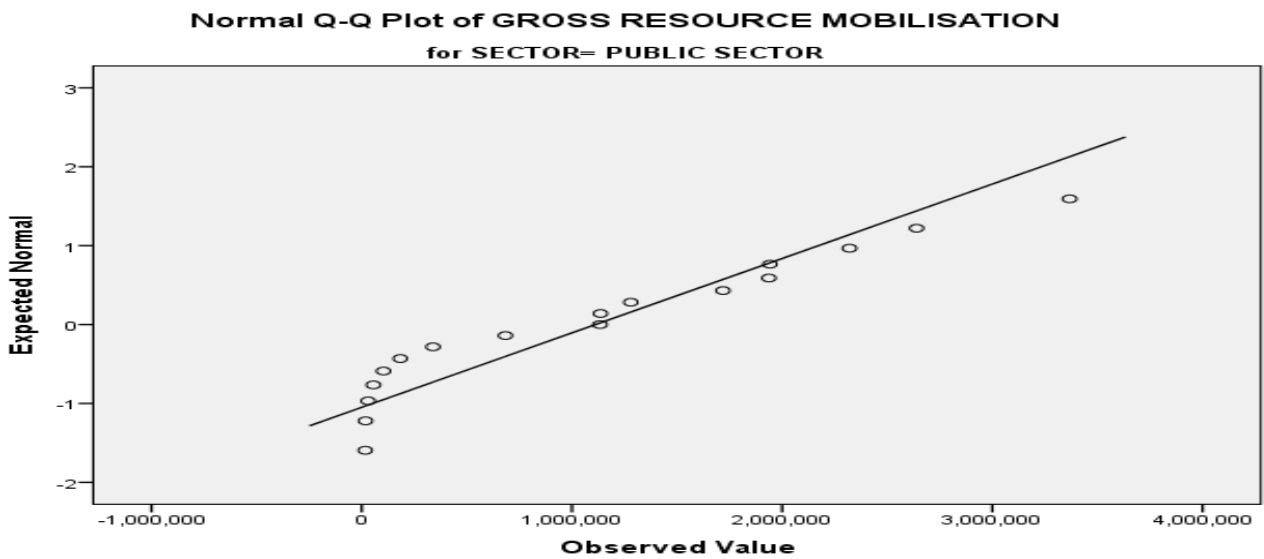
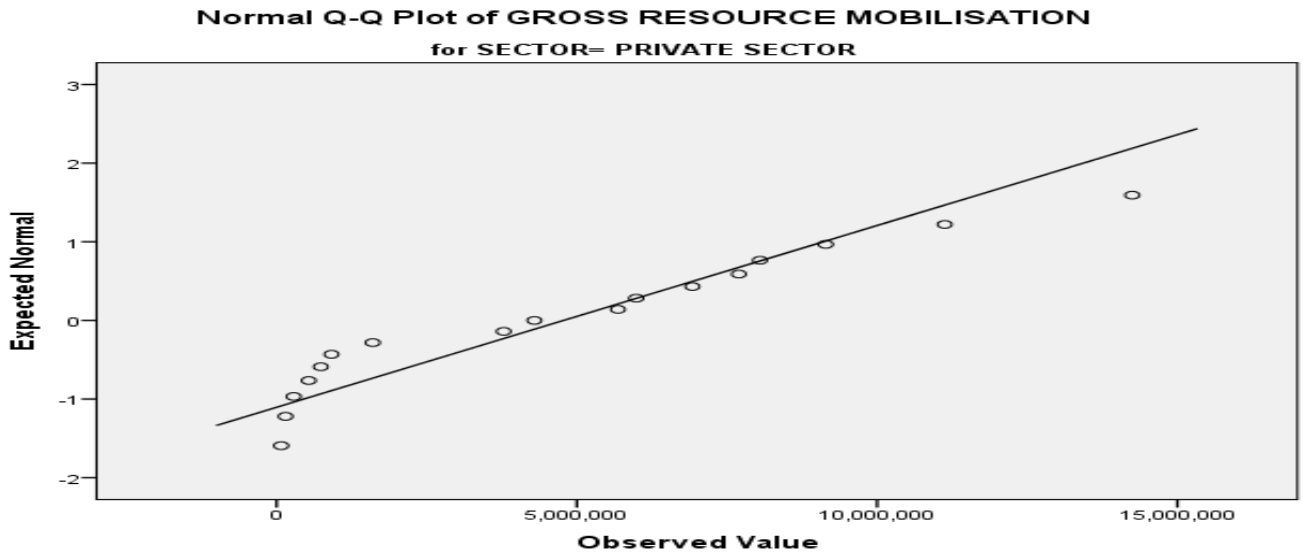


Figure 2: Normality of Q-Q Plot of Gross Resource Mobilization of Private Sector



Likewise, the quantile - quantile Q-Q plots of public sector (Figure 1) and private sector (Figure 2) are plotted to compare the quantile of the first data set with the quantile of the second data set. As the points lie in the region close to the reference line, it indicates that the data for gross resource mobilization of public and private sector is normally distributed.

Table 5: Group Statistics

	Sectors	N	Mean	Std. Deviation	Std. Error Mean
Gross Resource Mobilization	Public Sector	17	1112018.41	1060398.853	257184.499
	Private Sector	17	4778041.65	4326558.634	1049344.603

Table 5 depicts the group statistics of the sample. The period of study is 17 years and the public sector has a mean of 1112018.41 while private sector has a higher mean of 4778041.65, thereby proving to be a better performer in terms of gross resource mobilization.

Table 6: Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Gross Resource Mobilization	Equal variances assumed	24.194	.000	-3.393	32	.002	-3666023.235	1080401.759	-5866729.603	-1465316.868
	Equal variances not assumed			-3.393	17.915	.003	-3666023.235	1080401.759	-5936632.477	-1395413.994

The result of independent t-test is depicted in Table 6. The significant p value of Levene's test suggests the assumption of equal variance for t-test. If the p value is greater than 0.05 then the result for equal variances assumed is considered. On the other hand, if the p value is less than 0.05 result for equal variances not assumed is considered. As in this case the p value is .000 which is less than 0.05, equal variances not assumed is considered. The difference mean (-3666023.23) is placed between the lower and upper limit of confidence interval of difference at 95%. The significant value of p is .003 (two-tailed) which is less than the critical value, which means the rejection of the null hypothesis and acceptance of the alternative hypothesis. The

hypothesis is also tested on one-tailed basis by dividing the p and t values of two-tailed test by 2 so as to find out which sector has performed better. And the result rejects the null hypothesis and accepts the alternative hypothesis. There is a strong evidence ($t = -1.76$, $p=.0015$) that the gross resource mobilization of the private sector is significantly greater than that of public sector mutual funds.

Table 7: Assets Under Management by Mutual Fund Industry (Sector-wise)

Year	Public Sector (Rs. Crore)	% Share in Total	Private Sector (Rs. Crore)	% Share in Total	Total (Rs. Crore)	Annual Growth (%)*
2000-01	64857	71.60	25730	28.40	90587	
2001-02	59638	59.29	40956	40.71	100594	11.05
2002-03	53777	49.20	55522	50.80	109299	8.65
2003-04	34624	24.80	104992	75.20	139616	27.74
2004-05	32113	21.47	117487	78.53	149600	7.15
2005-06	50348	21.71	181514	78.29	231862	54.99
2006-07	64213	19.67	262175	80.33	326388	40.77
2007-08	89531	17.72	415621	82.28	505152	54.77
2008-09	82384	19.74	334916	80.26	417300	-17.39
2009-10	109043	17.76	504936	82.24	613979	47.13
2010-11	113297	19.13	478953	80.87	592250	-3.54
2011-12	117364	19.99	469853	80.01	587217	-0.85
2012-13	139562	19.90	561881	80.10	701443	19.45
2013-14	141281	17.12	683959	82.88	825240	17.65
2014-15	164994	15.24	917762	84.76	1082756	31.20
2015-16	210791	17.10	1022033	82.90	1232824	13.86
2016-17	302496	17.24	1452123	82.76	1754619	42.33
Average	107665.47	-	448847.82	-	556513.29	-

Source: Compiled by Author from RBI Handbook of Statistics on Indian Economy, SEBI Handbook of Statistics and AMFI Monthly

*Annual Growth (%) calculated by Author

Sector-wise growth in Assets Under Management (AUM) of the Indian mutual fund industry is depicted in Table 7. It is observed that AUM of the industry as a whole increased continuously throughout the study period. However, the percentage share of both the sectors changed. It is interesting to note that in the initial year of the study period, public sector had a higher share of

71.60 percent in the industry’s total business while the private sector had a mere share of 28.40 percent but with the passage of time the situation got reversed and the private sector had a higher share of 82.76 percent as compared to 17.24 percent of public sector in industry’s total business in 2016-17. The industry witnessed impressive annual growth rates except in the years 2008-09, 2010-11 and 2011-12 when negative growth rates were observed and this is due to the global financial crisis and the global stock market crash. However, in 2016-17, the industry grew at an annual growth rate of 42.33 percent. Yet another noteworthy point is that during the entire study period the AUM of the private sector was way higher than that of public sector.

In order to find out whether AUM of private sector mutual funds is significantly greater than public sector, independent t-test has been applied in order to test the following hypothesis.

H₀: The AUM of private sector mutual funds is not significantly greater than public sector.

H₁: The AUM of private sector mutual funds is significantly greater than public sector.

Table 8: Tests of Normality

	Sectors	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
AUM	Public Sector	.114	17	.200*	.982	17	.973
	Private Sector	.167	17	.200*	.937	17	.285

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Table 8 shows the test of normality of the sample. Since the sample was not found to be normal, log transformation of the sample was done in order to achieve normality (Field, 2009). As it can be seen from the Shapiro-Wilk test that significant p values are .973 and .285 which are more than the critical values at 0.05 percent significance level in both the cases, therefore, the data set is normal.

Figure 3: Normality of Q-Q Plot of AUM of Public Sector

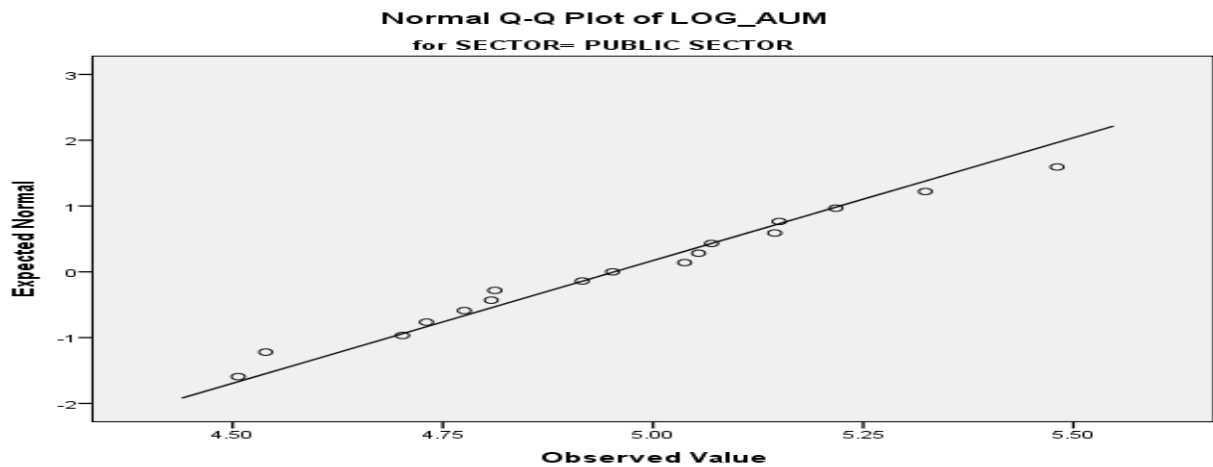
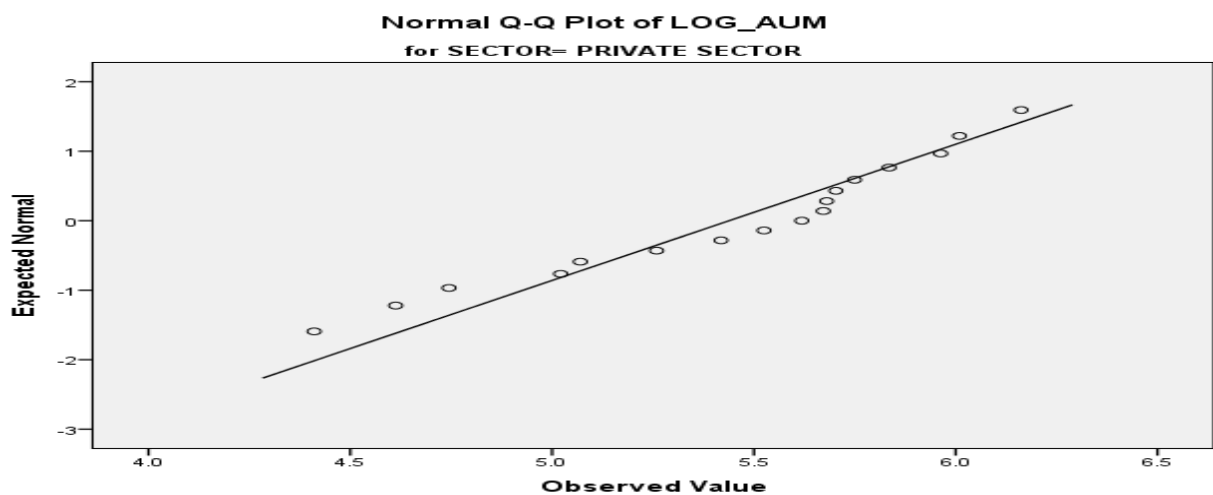


Figure 4: Normality of Q-Q Plot of AUM of Private Sector



Likewise, the quantile - quantile Q-Q plots of public sector (Figure 3) and private sector (Figure 4) are plotted to compare the quantile of the first data set with the quantile of the second data set. Since the points lie in the region close to the reference line, it indicates that the data for AUM of public and private sector is normally distributed.

Table 9: Group Statistics

	Sector	N	Mean	Std. Deviation	Std. Error Mean
AUM	Public Sector	17	4.9541	.26800	.06500
	Private Sector	17	5.4385	.51022	.12375

Table 9 depicts the group statistics of the sample. The period of study is 17 years. The public sector has a mean of 4.9541 while private sector has a higher mean of 5.4385 thereby, proving to be a better performer than the public sector in terms of AUM.

Table 10: Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
AUM	Equal variances assumed	6.809	.014	-3.465	32	.002	-.48436	.13978	-.76908	-.19964
	Equal variances not assumed			-3.465	24.205	.002	-.48436	.13978	-.77272	-.19600

Table 10 shows the result of independent t-test. The significant p value of Levene’s test suggests the assumption of equal variances for t-test. If the p value is greater than 0.05 then the result for equal variances assumed is considered. On the other hand, if the p value is less than 0.05 result for equal variances not assumed is considered. In this case, equal variances not assumed is considered as the p value is .014 which is less than 0.05. The difference mean (-.48436) is placed between the lower and upper limit of confidence interval of difference at 95%. The significant value of p is .002 (two-tailed) which is less than the critical value, which means the rejection of the null hypothesis and acceptance of the alternative hypothesis. The hypothesis is also tested on one-tailed basis by dividing the p and t values of two-tailed test by 2 in order to find out which sector is better. And the result rejects the null hypothesis and accepts the alternative hypothesis. There is a strong evidence (t = -1.73, p=.001) that the AUM of the private sector is significantly greater than that of public sector during the study period.

6. CONCLUSION

Since its inception in 1963, the Indian mutual fund industry has come a long way. The industry has witnessed increase in respect of all the parameters, such as increase in the number of fund houses, number of schemes, gross resource mobilization as well as AUM. Initially there was a monopoly of UTI as it was the sole operator in the industry but now, the industry consists of three sectors, i.e., public, private and foreign sectors (joint ventures). The number of fund houses witnessed some variations and increased from 35 in 2000-01 to 41 in 2016-17, while the number of schemes in operation increased from 393 to 2281 during the same period of time. The AUM of the industry also witnessed a significant growth during the study period and stood at Rs. 1754619 crore in 2016-17 as compared to Rs. 90587 crore in 2000-01. Sector-wise analysis reveals that gross resource mobilization and AUM of the private sector funds is significantly greater than that of public sector funds. The private sector funds had a dominating share by holding around 80 percent in the industry's total business in terms of gross resource mobilization as well as AUM.

Though the industry has witnessed significant growth in respect of all the parameters, yet it has not been able to realise its potential to the fullest. It lags behind the mutual fund industries of the developed countries and some of the developing countries also. The Indian mutual fund industry is confronted with many challenges and obstacles such as low penetration, lack of investor awareness, lack of product differentiation, etc. Hence, the industry is required to meet out these challenges if it wills to realise its full potential. And in order to meet out these the challenges the industry may indulge into mutual fund education drives, investor awareness programmes, etc.

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