

A Study on Analysis of Selected Equity Mutual Funds

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ABSTRACT

This project is based on the analysis of the Indian mutual fund companies ICICI Prudential funds and Aditya Birla SunLife respectively. There are a lot of investment avenues available today in the financial market for an investor with an investable surplus. One who can invest in Bank deposits, corporate debentures and bonds where there is low risk but it gives low returns. One may invest in stock companies where risk is high and returns are also high. The recent trends in the stock market have shown that an average retail investor always lost with periodic bearish trends. People began opting portfolio managers with expertise in stock markets who would invest on their behalf. Thus, we had wealth management services provided by many institutions. However, they proved too costly for a small investor. These investors have found good shelter with mutual funds.

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INTRODUCTION

A mutual fund is a financial intermediary in capital market that pools collective investments in form of units from retail and corporate investors and maintain a portfolio of various schemes which invest that collective investments in equity and debt instruments on behalf of these investors. Mutual fund is expert entity which helps an investor invest in equity and debt instruments indirectly rather than taking risk of investing money directly in these instruments. An ordinary investor has no expertise or knowledge to invest money directly into equity market in India and most of the times investors lose their money due to wrong selection of equity shares, or bonds. Hence, mutual funds as intermediary provide expertise of portfolio management actively and diversify risk by spreading investments from all investors in various equity shares and debt instruments. This helps investors earn good returns at low risk compared to returns at high risk if investors invest on their own directly in capital market.

A mutual fund is a collective reservoir or pool of funds which is managed by a qualified and expert Fund Manager. It is a trust that takes funds from a

number of investors who have a common investment goal and invests those funds in equities, bonds, money market instruments and other securities. The income generated from this combined portfolio is distributed proportionately amongst the investors after subtracting relevant expenses and levies, by calculating a scheme's 'Net Asset Value' or NAV. Simply placed, the money pooled in by a large number of investors are allotted in units by a mutual fund scheme. This pooled money invested in equity or bonds or short term securities shall grow or go down depending upon the performance of these investments. This shall get reflected in the value of NAV.

NEED OF THE STUDY

This study aims to evaluate the performance of selected equity mutual funds of Shriram Mutual Funds.

SCOPE OF THE STUDY

This study covers the performance of selected Equity Mutual Funds of Shriram Mutual Funds for a period of five years i.e., from 2017- 2021.

OBJECTIVES OF THE STUDY

- To study the performance of ICICI Prudential equity mutual funds.
- To evaluate the risk and returns of ICICI Prudential equity mutual funds.
- To rank the equity mutual funds according to its performance.

SOURCE OF DATA:

The source of data is secondary and it is collected through various website, journals, newspapers.

TOOLS AND TECHNIQUES

TECHNIQUES:

- Standard deviation
- Mean
- Sharpe Ratio
- Tables
- Bar graphs
- ANOVA

SOFTWARE PACKAGES

- MS-excel

LIMITATIONS

- The study is confined to equity mutual funds of Shriram Mutual Funds company limited only.

The study covers 5 years performance i.e., from (2017 – 2021)

DATA ANALYSIS

To find the performance of in ICICI prudential equity Mutual funds

- ICICI prudential blue chip fund
- ICICI prudential large and mid cap fund
- ICICI prudential value discovery fund
- ICICI prudential small cap fund

TABLE 4.1 RETURNS OF ICICI PRUDENTIAL BLUE CHIP FUND

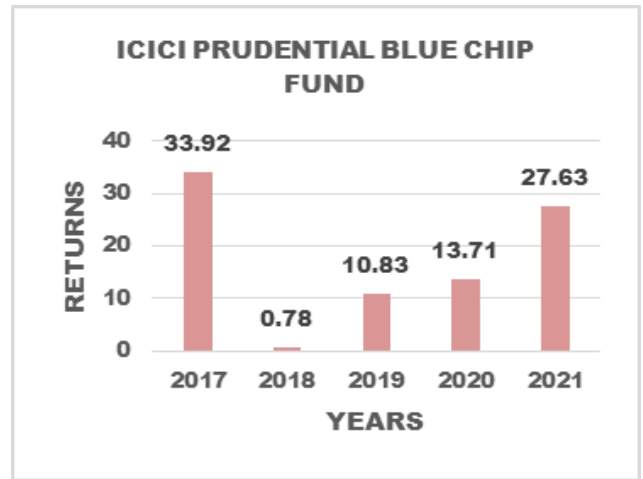
YEARS	RETURNS	$x-\bar{x}$	$(x-\bar{x})^2$
2017	33.92	16.546	273.7701
2018	0.78	-16.594	275.3608
2019	10.83	-6.544	42.82394
2020	13.71	-3.664	13.4249
2021	27.63	10.256	105.1855
TOTAL	86.87		710.5653

Mean(\bar{x}) = $86.87/5$
=17.3

Standard Deviation = $\sqrt{\sum(x-\bar{x})^2/5}$
= $\sqrt{710.5/5}$
=142.1

Sharpe Ratio = Average Return of Port folio – Rf/Standard Deviation
= $17.3-6.26/11.9= 0.92$

Chart 4.1 RETURNS OF ICICI PRUDENTIAL BLUE CHIP FUND



PERFORMANCE OF ICICI PRUDENTIAL BLUE CHIP FUND

Fund Schemes	Mean	Standard Deviation	Sharpe ratio
ICICI Prudential Blue Chip Fund	➤ 17.3	➤ 11.04	➤ 0.92

INTERPRETATION: ICICI prudential blue chip fund has generated average returns of 17.3 with risk 142.1 and the Sharpe ratio is 0.07. According to the Sharpe ratio it stood in second place.

TABLE 4.2 RETURNS OF ICICI PRUDENTIAL LARGE AND MID CAP FUND

YEARS	RETURNS	$x-\bar{x}$	$(x-\bar{x})^2$
2017	31.56	19.724	389.0362
2018	-4.89	-16.726	279.7591
2019	6.79	-5.046	25.46212
2020	12.09	0.254	0.064516
2021	40.3	28.464	810.1993
TOTAL	59.18		835.7259

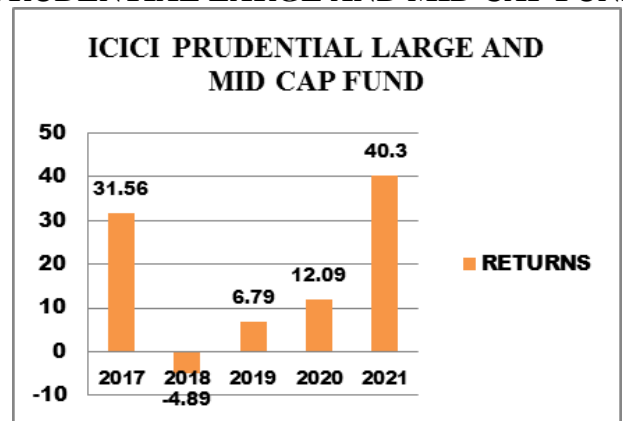
Mean(\bar{x}) = $59.18/5= 11.83$

Standard Deviation = $\sqrt{\sum(x-\bar{x})^2/5} = \sqrt{835.7/5}=12.9$

Sharpe Ratio = Average Return of portfolio – Rf / standard deviation

$11.83-6.26/12.9= 0.43$

CHART 4.2 RETURNS OF ICICI PRUDENTIAL LARGE AND MID CAP FUND



PERFORMANCE OF ICICI PRUDENTIAL LARGE AND MID CAP FUND

Fund Scheme	Mean	Standard Deviation	Sharpe ratio
ICICI Prudential Large And Mid-Cap Fund	11.83	12.9	0.43

INTERPRETATION

ICICI prudential large and mid-cap fund has generated average returns of 11.83 with risk 12.9 and the Sharpe ratio is 0.43. According to the Sharpe ratio it stood in second place.

TABLE 4.3 RETURNS ICICI PRUDENTIAL VALUE DISCOVER FUND

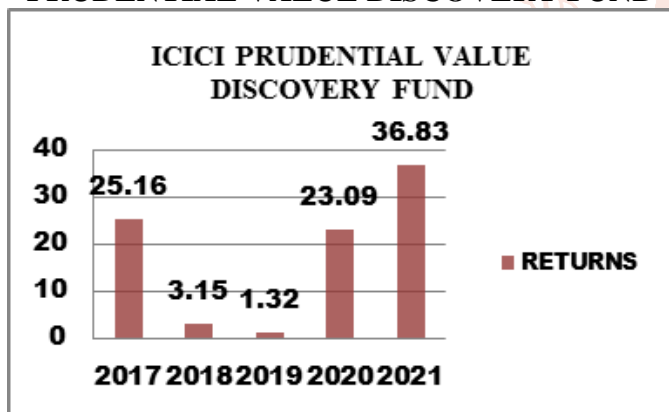
YEARS	RETURNS	$x-\bar{x}$	$(x-\bar{x})^2$
2017	25.16	12.912	166.7197
2018	3.15	-9.098	82.7736
2019	1.32	-10.928	119.4212
2020	23.09	10.842	117.549
2021	36.83	24.582	604.2747
TOTAL	61.24		841.2449

Mean (\bar{x}) = $61.24/5 = 12.2$

Standard Deviation = $\sqrt{\sum(x-\bar{x})^2 / 5} = \sqrt{841.2/5} = 12.9$

Sharpe Ratio = $\text{Average Return of portfolio} - R_f / \text{Standard Deviation}$
 $= 12.2 - 6.26 / 12.9 = 0.46$

CHART 4.3: RETURNS OF ICICI PRUDENTIAL VALUE DISCOVERY FUND



PERFORMANCE OF FUND ICICI PRUDENTIAL VALUE DISCOVERY FUND

Fund Schemes	Mean	Standard Deviation	Sharpe ratio
ICICI Prudential Value Discovery Fund	12.2	12.9	0.46

INTERPRETATION

ICICI prudential value discovery fund has generated average returns of 12.2 with risk 12.9 and

the Sharpe ratio is 0.46. According to the Sharpe ratio it stood in second place.

TABLE 4.4 RETURNS OF ICICI PRUDENTIAL SMALL CAP FUND

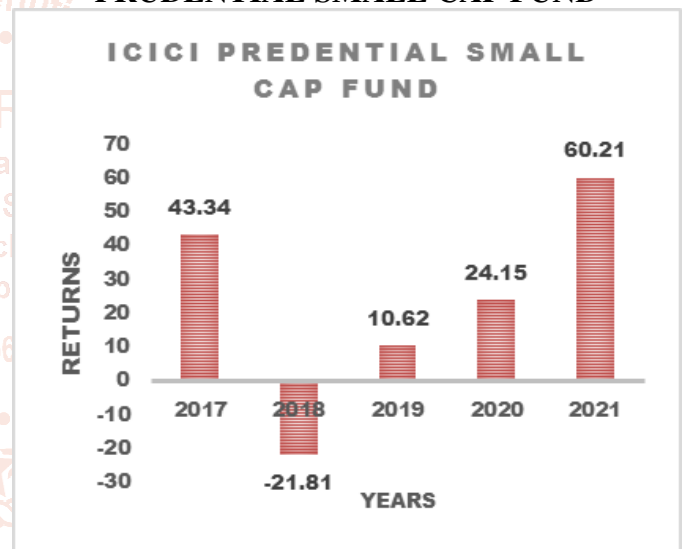
YEARS	RETURNS	$x-\bar{x}$	$(x-\bar{x})^2$
2017	43.34	24.344	592.6303
2018	-21.81	-40.806	1665.13
2019	10.62	-8.376	70.15738
2020	24.15	5.154	26.56372
2021	60.21	41.214	1698.594
TOTAL	94.98		4053.075

Mean (\bar{x}) = $94.98/5 = 18.9$

Standard Deviation = $\sqrt{\sum(x-\bar{x})^2 / 5} = \sqrt{4053.0/5} = 28.4$

Sharpe Ratio = $\text{Average return of portfolio} - R_f / \text{Standard Deviation}$
 $= 18.9 - 6.26 / 28.4 = 0.44$

CHART 4.4 RETURNS OF ICICI PRUDENTIAL SMALL CAP FUND



PERFORMANCE OF ICICI PRUDENTIAL SMALL CAP FUND

Fund Schemes	Mean	Standard Deviation	Sharpe ratio
ICICI Prudential SCF	18.9	28.4	0.44

INTERPRETATION: ICICI prudential small cap fund has generated average returns of 18.9 with risk 28.4 and the Sharpe ratio is 0.44. According to the Sharpe ratio it stood in second place.

DATA ANALYSIS

To find the performance of various equity mutual funds schemes in Aditya Birla Sunlife.

- Aditya Birla Sun life small cap fund
- Aditya Birla Sunlife balance advantage fund
- Aditya Birla Sun life equity savings fund
- Aditya Birla Sunlife equity hybrid fund

TABLE 4.5 RETURNS OF ADITYA BIRLA SUNLIFE SMALL CAP FUND

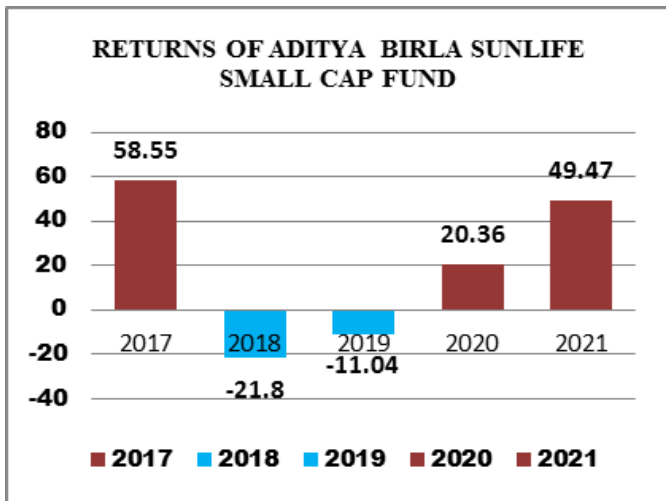
YEARS	RETURNS	$x-\bar{x}$	$(x-\bar{x})^2$
2017	58.55	39.442	1555.671
2018	-21.8	-21.8	475.24
2019	-11.04	-11.04	121.8816
2020	20.36	20.36	414.5296
2021	49.47	49.47	2447.281
TOTAL	95.54		5014.603

MEAN (\bar{x}) = 95.54/5 = 19.1

STANDARD DEVIATION = $\sqrt{\sum(x-\bar{x})^2 / 5} = \sqrt{5014.6 / 5} = 31.6$

SHARPE RATIO = Average return of portfolio - Rf / Standard Deviation
 = 19.1 - 6.26 / 31.6 = 0.40

CHART 4.5 RETURNS OF ADITYA BIRLA SUNLIFE SMALL CAP FUND



PERFORMANCE OF ADITYA BIRLA SUNLIFE SMALL CAP FUND

Fund Schemes	Mean	Standard Deviation	Sharpe ratio
Aditya Birla Sunlife Small Cap Fund	19.1	31.6	0.40

INTERPRETATION: Aditya birla sunlife small cap fund has generated average returns of 19.1 with risk 31.6 and the Sharpe ratio is 0.40. According to the Sharpe ratio it stood in second place.

TABLE 4.6 RETURNS OF ADITYA BIRLA SUNLIFE BALANCED ADVANTAGE FUND

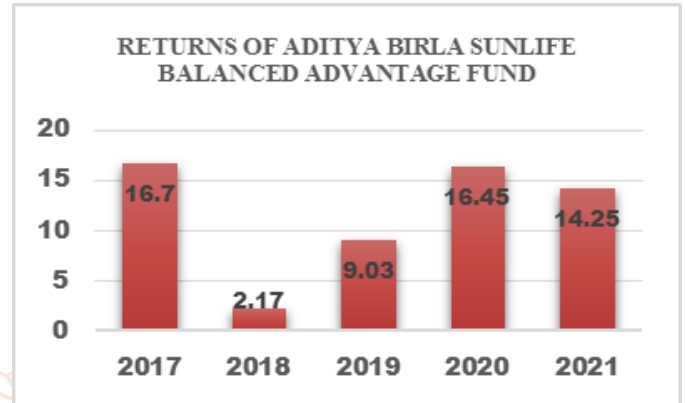
YEARS	RETURNS	$x-\bar{x}$	$(x-\bar{x})^2$
2017	16.7	4.98	24.8004
2018	2.17	-9.55	91.2025
2019	9.03	-2.69	7.2361
2020	16.45	4.73	22.3729
2021	14.25	2.53	6.4009
TOTAL	58.6		152.0128

MEAN (\bar{x}) = 58.6/5 = 11.7

STANDARD DEVIATION = $\sqrt{\sum(x-\bar{x})^2 / 5} = \sqrt{152.0/5} = 5.5$

SHARPE RATIO = Average return of portfolio - Rf / standard deviation
 = 11.7 - 6.26 / 5.5 = 0.98

CHART 4.6: RETURNS OF ADITYA BIRLA SUNLIFE BALANCED ADVANTAGE FUND



PERFORMANCE OF ADITYA BIRLA SUNLIFE BALANCED ADVANTAGE FUND

Fund Schemes	Mean	Standard Deviation	Sharpe ratio
Aditya Birla Sunlife Balanced Advantage Fund	11.7	5.5	0.98

INTERPRETATION

Aditya birla sunlife balanced advantage fund has generated average returns of 11.7 with risk 5.5 and the Sharpe ratio is 0.98. According to the Sharpe ratio it stood in second place.

TABLE 4.7 RETURNS OF ADITYA BIRLA SUNLIFE EQUITY SAVINGS FUND

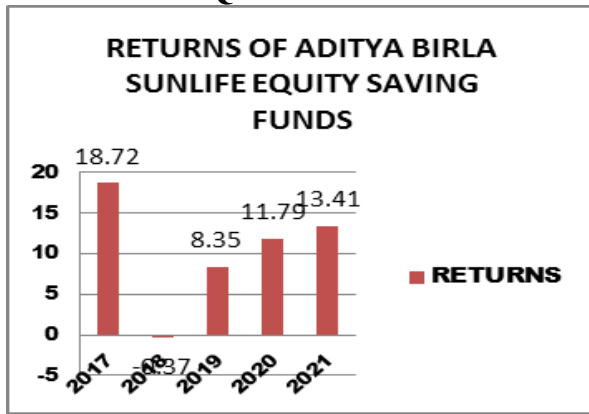
YEARS	RETURNS	$x-\bar{x}$	$(x-\bar{x})^2$
2017	18.72	8.34	69.5556
2018	-0.37	-10.75	115.5625
2019	8.35	-2.03	4.1209
2020	11.79	1.41	1.9881
2021	13.41	3.03	9.1809
TOTAL	51.9		200.408

MEAN($x-\bar{x}$) = 51.9/5 = 10.38

STANDARD DEVIATION = $\sqrt{\sum(x-\bar{x})^2 / 5} = \sqrt{200.4 / 5} = 6.38$

SHARPE RATIO = Average returns of portfolio - Rf / Standard deviation
 = 10.38 - 6.26 / 6.38 = 0.64

CHART 4.7 RETURNS OF ADITYA BIRLA SUNLIFE EQUITY SAVING FUNDS



PERFORMANCE OF ADITYA BIRLA SUNLIFE EQUITY HYBRID FUND

Fund Schemes	Mean	Standard Deviation	Sharpe ratio
Aditya Birla Sunlife Equity Hybrid Fund	13.04	11.42	0.59

INTERPRETATION

Aditya birla sunlife equity hybrid fund has generated average returns of 13.04 with risk 11.42 and the Sharpe ratio is 0.59. According to the Sharpe ratio it stood in second place.

PERFORMANCE OF ADITYA BIRLA SUNLIFE EQUITY SAVINGS FUND

Fund Schemes	Mean	Standard Deviation	Sharpe ratio
Aditya Birla Sunlife Equity Savings Fund	10.38	6.38	0.64

INTERPRETATION

Aditya birla sunlife equity savings fund has generated average returns of 10.38 with risk 6.38 and the Sharpe ratio is 0.64. According to the Sharpe ratio it stood in second place.

TABLE 4.11 SHOWING RETURNS, RISK AND SHARPE RATIO OF ICICI PRUDENTIAL EQUITY MUTUAL FUNDS

Fund Schemes	Average Returns	Risk	Sharpe Ratio
ICICI Prudential blue chip fund	17.3	11.04	0.92
ICICI Prudential large and midcap fund	11.83	12.9	0.43
ICICI Prudential value discovery fund	12.2	12.9	0.46
ICICI Prudential small cap fund	18.9	28.4	0.44

TABLE 4.8 ADITYA BIRLA SUNLIFE EQUITY HYBRID FUND

YEARS	RETURNS	$x - \bar{x}$	$(x - \bar{x})^2$
2017	27.55	14.51	210.5401
2018	-3.54	-16.58	274.8964
2019	5.49	-7.55	57.0025
2020	12.18	-0.86	0.7396
2021	23.52	10.48	109.8304
TOTAL	65.2		653.009

MEAN (\bar{x}) = $65.2/5 = 13.04$

STANDARD DEVIATION = $\sqrt{\sum(x - \bar{x})^2 / 5} = \sqrt{653.0 / 5} = 11.42$

SHARPE RATIO = Average returns of portfolio - R_f / standard deviation

= $13.04 - 6.26 / 11.42 = 0.59$

CHART 4.8: RETURNS OF ADITYA BIRLA SUNLIFE EQUITY HYBRID FUND

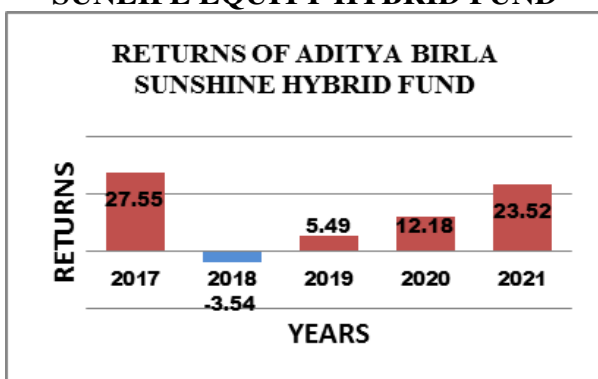
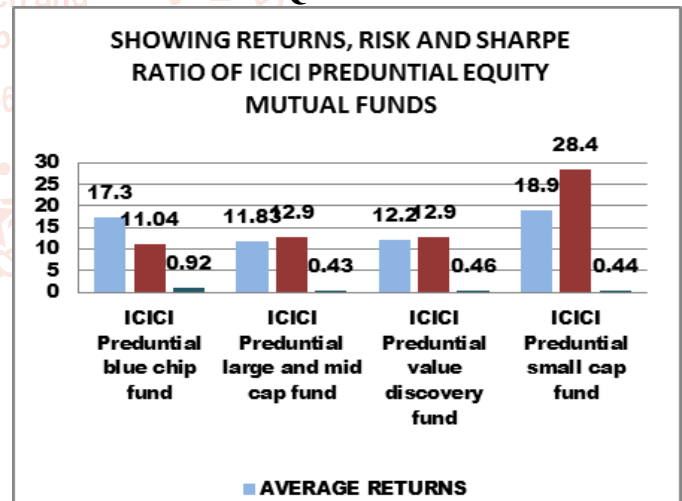


CHART 4.11. SHOWING RETURNS, RISKS AND SHARPE RATIO OF ICICI PRUDENTIAL EQUITY MUTUAL FUNDS



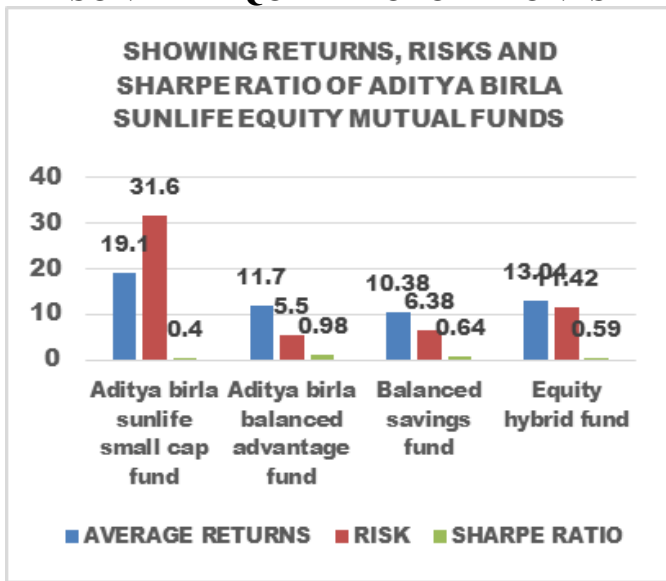
INTERPRETATION

In the above graph shows ICICI Prudential blue chip equity fund performing better as per the returns (17.3) with the low risk (11.04) and the sharpe ratio (0.92) compare to other equity mutual funds.

TABLE 4.12. SHOWING RETURNS, RISKS AND SHARPE RATIO OF ADITYA BIRLA SUNLIFE EQUITY MUTUAL FUNDS

Fund Schemes	Average Returns	Risk	Sharpe Ratio
Aditya birla sunlife small cap fund	19.1	31.6	0.40
Aditya birla balanced advantage fund	11.7	5.5	0.98
Balanced savings fund	10.38	6.38	0.64
Equity hybrid fund	13.04	11.42	0.59

CHART 4.12 SHOWING RETURNS, RISKS AND SHARPE RATIO OF ADITYA BIRLA SUNLIFE EQUITY MUTUAL FUNDS



INTERPRETATION:

In the above graph Aditya Birla Sunlife balanced advantage fund is providing better returns (11.7) with the low risk (5.5) and the Sharpe ratio (0.98) of this fund is better than the remaining funds. So, Aditya Birla Sunlife balanced advantage equity fund is performing better than the remaining funds.

TESTING OF HYPOTHESIS

H0: There is no significance difference in returns of ICICI Preduntial equity mutual funds.

H1: There is significance difference in returns of ICICI Preduntial equity mutual funds.

H0: There is no significance difference in returns of Aditya Birla Sunlife equity mutual funds.

H1: There is no significance difference in returns of Aditya Birla Sunlife equity mutual funds.

TABLE 4.13 RETURNS OF ICICI PREDUNTIAL EQUITY MUTUAL FUNDS

YEAR	ICICI Preduntial blue chip fund	ICICI Preduntial blue chip fund	ICICI Preduntial blue chip fund	ICICI Preduntial blue chip fund
2017	33.92	31.56	25.16	43.34
2018	0.78	-4.89	3.15	-21.81
2019	10.83	6.79	1.32	10.62
2020	13.71	12.09	23.09	24.15
2020	27.63	40.30	36.83	60.21

Groups	Count	Sum	Average	Variance
Column 1	5	86.87	17.374	177.64133
Column 2	5	85.85	17.17	340.56585
Column 3	5	89.55	17.91	232.61175
Column 4	5	116.51	23.302	990.09167

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	128.36598	3	42.78866	0.098313285	0.959813383	3.238871517
Within Groups	6963.6424	16	435.22765			
Total	7092.00838	19				

INTERPRETATION

F value is = 0.0983

F table is =3.2388

H₀: (null hypothesis) is accepted then F value is 0.098313 > F table is 3.238871**H₁**: (Alternative hypothesis) is rejected then F value is 0.098313 > F table is 3.238871**TABLE 4.14 RETURNS OF ADITYA BIRLA SUNLIFE EQUITY MUTUAL FUNDS**

Year	Aditya Birla Sunlife Small Cap Fund	Aditya Birla Sunlife Balanced Advantage Fund	Aditya Birla Sunlife Balanced Advantage Fund	Aditya Birla Sunlife Equity Hybrid Fund
2017	58.55	16.70	18.72	27.55
2018	-21.80	2.17	-0.37	-3.54
2019	-11.04	9.03	8.35	5.49
2020	20.36	16.45	11.79	12.18
2020	49.47	14.25	13.41	23.52

Anova: Single Factor						
SUMMARY						
Groups	Count	Sum	Average	Variance		
Column 1	5	95.54	19.108	1265.36407		
Column 2	5	58.6	11.72	38.0032		
Column 3	5	51.9	10.38	50.102		
Column 4	5	65.2	13.04	163.25225		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	222.74344	3	74.24781333	0.195811327	0.897707136	3.238872
Within Groups	6066.88608	16	379.18038			
Total	6289.62952	19				

INTERPRETATION:

F value is = 0.1958113

F table is =3.238872

H₀: (null hypothesis) is accepted then F value is 0.1958113 > F table is 3.238872**H₁**: (Alternative hypothesis) is rejected then F value is 0.1958113 > F table is 3.238872**FINDINGS:****ICICI PRUDENTIAL EQUITY MUTUAL FUNDS:**

- ICICI prudential small cap fund has generated average returns of 17.3 with risk 11.04 and the Sharpe ratio is 0.92. According to the Sharpe ratio it stood in second place.
- ICICI prudential small cap fund has generated average returns of 11.83 with risk 12.9 and the Sharpe ratio is 0.43. According to the Sharpe ratio it stood in second place.
- ICICI prudential small cap fund has generated average returns of 12.2 with risk 12.9 and the Sharpe ratio is 0.46. According to the Sharpe ratio it stood in second place.
- ICICI prudential small cap fund has generated average returns of 18.9 with risk 28.4 and the

Sharpe ratio is 0.44. According to the Sharpe ratio it stood in second place.

- In the above graph shows ICICI Prudential blue chip equity fund performing better as per the returns (17.3) with the low risk (11.04) and the Sharpe ratio (0.92) compare to other equity mutual funds.

ADITYA BIRLA SUNLIFE EQUITY MUTUAL FUNDS

- Aditya birla sunlife equity hybrid fund has generated average returns of 19.1 with risk 31.6 and the Sharpe ratio is 0.40. According to the Sharpe ratio it stood in second place.
- Aditya birla sunlife equity hybrid fund has generated average returns of 11.7 with risk 5.5 and the Sharpe ratio is 0.98. According to the Sharpe ratio it stood in second place.

- Aditya birla sunlife equity hybrid fund has generated average returns of 10.38 with risk 6.38 and the Sharpe ratio is 0.64. According to the Sharpe ratio it stood in second place.
- Aditya birla sunlife equity hybrid fund has generated average returns of 13.04 with risk 11.42 and the Sharpe ratio is 0.59. According to the Sharpe ratio it stood in second place.
- In the above graph Aditya Birla Sunlife balanced advantage fund is providing better returns 11.7 with the low risk 5.5 and the Sharpe ratio 0.98 of this fund is better than the remaining funds. So, Aditya Birla Sunlife balanced advantage equity fund is performing better than the remaining funds.

SUGGESTIONS:

- It is suggested high risk takers can go for ICICI prudential blue chip fund which generates more returns 17.3 and with the more risk of 11.04.
- I would like to suggest that ICICI Prudential blue chip fund equity funds has considered as one of the best funds as per shape ratio 0.92, and good returns of 17.3.
- I would like suggest moderate risk takers can go for Aditya Birla Sunlife Banking and Financial Services fund.
- I suggested that Aditya Birla Sunlife balanced advantage fund is considered as one of the best funds as per Sharpe ratio 0.98.

CONCLUSION:

- As per the study it is concluded that Shriram hybrid equity fund having high risk and as well as

giving high returns when compared to other equity funds. This study suggested that investors can go with Shriram long term equity funds it has maximum returns and minimum risk.

- Aditya Birla Sunlife small cap fund if having high risk as well as high returns when compared to other equity funds in Aditya Birla Sunlife. This study suggested that investors can go with Aditya Birla Sunlife India balanced advantage mutual fund has maximum returns and minimum risk.

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