## Performance of Pension Fund of Selected Asset Management Companies in India: A Critical Analysis

Samikshya Mishra\*

Research Scholar, Department of Business Administration Sambalpur University Jyoti Vihar-768019 samikshyamishra2013@gmail.com

#### A.K. Das Mohapatra

Professor Department of Business Administration, Sambalpur University, Jyoti Vihar-768019 and Vice-Chancellor, Odisha State Open University, Sambalpur akdm.2002@gmail.com

DOI: 10.56201/wjfir.v8.no2.2024.pg66.80

#### Abstract

Massive investments through savings in pension funds including other types of deposits in banks, insurance leads to growth the sizable growth of the capital market. The financial strength visualises the growth and development of financial industries, insurance, banks etc. The pension funds, one of the primary segments in the financial growth not only add economic power but also facilitate the pensioners to yield a good revenue. The study accesses and compares the performance of the pension fund of three pension funds taking into account the secondary data from 2016 to 2021. The risk-free rate was converted into a monthly risk-free rate of return. Average return, standard deviation, beta, and three performance analysis measures viz Treynor ratio, Sharpe ratio, and Jensen alpha has been calculated for the selected mutual fund schemes. The study concludes that TATA Mutual Fund's performance was better than other mutual fund companies.

Keywords: Pension funds; Treynor ratio; Sharpe ratio; and Jensen alpha

#### 1. Introduction

Hefty Investment, as well as production, is indispensable for the sustainable growth and development of the financial industry, companies, banks, insurance etc. The economic strength echoes the income, and investments of the financial institution including its capital value. The expansion of a sizable financial strength, savings in the form of investment is one of the recognised productive resources. The role of the financial system is paramount to accomplish the objective as they get associated with public savings through leveraging interest in the form of a return against their investments. In India, the investors are abruptly increasing, and contributing immensely to the sizable growth of the economy and in the process, it leads to enhancing their financial strength.

A scientific and successive financial investment is crucial for the sustainable growth of society as it appends economic strengths and this is extremely essential for all classes of people. This

is no exception for retired employees. Proper and efficient financial planning of the money acquired from different sources such as

Gratuity, Leave salary, General Provident Fund, Contributory Provident Fund, Employees Provident Fund, and Insurance by them. The mutual fund industry is one of the fastest-growing and recognized sectors in the Indian Capital market. The industry entered the Indian Capital Market in 1963 and initiated its operation in 1964. People find mutual fund investment interesting as it is perceived to be a financial instrument of high potential gain. All mutual funds set a higher target for the mobilization of savings from the investors including the superannuated persons by launching new schemes and expanding the investor base. The pension fund is an integral part of the mutual fund. A conceptual framework is required to understand the process of investment which can be exposed through the performance analysis.

#### 2. Review of Literature

Dopierała and Magdalena (2021) in their study evaluated the consequences of the reforms in the operation of the Polish Open Funds and they focussed their study on three aspects i.e, management style, risk exposure, and related investment performance of POF. They examined the herd behaviour consequent upon the implementation of the new regulations in the area. They deduced from the analysis that, the regulated funds exceed marginally slightly inactive compared to the unregulated competitors. To sort out the issue, they proposed a multi-factor market model to evaluate the performance of funds investing in various types of instruments.

Pati (2021) discussed vividly the nomenclature of the pension fund and various pension plans prevailing in India. The pension plan, otherwise known as the benefit plan primarily concentrates on a plan initiated after retirement. He expressed that, the investments lead to financial stability for the senior citizens. In his discussions, he elaborately focussed on the various stages of pension funds, categories of pension funds, and types of pension funds that include Deferred Annuity, Immediate Annuity, Certain Annuity, with cover and without cover pension plans, Life Annuity, life ULIP plan, defined benefit pension plan, National Pension Schemes, etc. He also compared the pension plans and pension funds along with the prominent features of various pension plans in India.

Siva Kumar and Haque (2019) in their study compared the various welfare schemes prevailing in India and Saudi Arabia. They employed descriptive statistics to find the similarities and differences between the schemes. They found that, though both governments outlay their expenditure on various welfare schemes, could not receive the expected target even after 60 years of their implementation. The authors discouraged the subsidy system extended by the governments to lessen the financial burden of the poor and recommended developing a viable strategy within a timescale to drop poverty by opening avenues for the poor classes to alleviate their living standards.

Tyagi and Aggrawal (2018) in their study opined that money is disbursed through pensions to the retired employee by the government regularly. Citing the evidence, the prevailing practice in China, the author pointed out that, the National Social Security Fund was initiated in 2000 while in India the New Pension Scheme supervised by the Pension Fund Regulatory and Development Authority came into existence in 2004. They compared the pension schemes of both countries under three parameters such as retirement age to receive a pension, assets allocation through the pension fund, and tax benefits to the pensioners. While analyzing the data, they deduced that the average retirement age in India is 65 years for both Males and Females, while in China, it is 60 years for males, and for females, it is 50 years working in

blue-collar and 55 years for white-collar. The authors, while analysing the data on the Assets Allocation of Investment in India and China in 2016 found that 15% of India prefer to invest their money in banks and purchase the bonds issued by the government while 50% of pensioners invest their money in banks and Government bonds and thereby, they are more secured compared to Indians. Further, the investment for corporate bonds is 30% in India while it is 10% in China. Discussing the tax benefits of both countries the author deduced that, the pensioners in India get more tax benefits by contributing to pension funds while in China they abstain from such benefits.

Ahmad, Roomi, and Ramzan (2015) in their study focused on income, balance, and equity schemes of open-ended and close-ended mutual funds in Pakistan. Their study consisted of 73 different funds covering a period from 2007 to 2012. They used the Sortino measure, Sharpe measure, Treynor measure, Jensen measure, and information measure for the evaluation. After analyzing the performance of the selected funds, it was revealed that open-ended funds are performing better than the close-ended fund. However, the market portfolio of the Karachi Stock Exchange (KSE) i.e., KSE 100 performance was found to be greater than the performance of the selected samples mutual funds. Most risk-adjusted funds returns were negative, which is probably due to the mutual fund industry being set back by the financial crisis during the study period.

Bahil and Rani (2012) in their study on mutual funds considered 29 open-ended, growthoriented equity schemes for the period from 2005 to 2011. The return of the fund schemes was calculated based on the monthly NAV of different schemes. The authors took the BSE-SENSEX as the market index in their study. The various performance tools such as Treynor measure, Jensen Measure, Sharpe ratio were used by them for the analysis. The findings of the paper showed that 14 out of 29 i.e. (48.2%) of the schemes were outperforming the benchmark return while the rest of the schemes were underperformed and for that diversification was the root cause. Their study concluded that for all the schemes Sharpe ratio was positive otherwise, means that all the schemes have a higher return than the risk-free rate of return.

Vyas (2012), in his study on Mutual Fund Investor's Behaviour and Perception in Indore City, found that 48.2% of investors have their investments in an equity fund, while, 23.7% in a debt fund, 26.4% in a balanced fund, and only 1.7% in other types of funds.

Imam (2011) visualised that, the pension funds prevalent in India contribute immensely not only to the sustainable growth of the economy but also have a dynamic role in the Indian equity markets. The paper primarily concentrates on the factual function of the performance of the investment sector in terms of risk and return. As per the opinion of the author, the pension fund has a low equity share that may get enhanced in the present situation as there is a scope for improvement in the new pension scheme.

Puri (2010) attempted a study on the performance of the selected balanced schemes of mutual funds based on risk-return relationship models and various measures with a sample size of 30 schemes provided by different mutual funds from 2007 to 2010. The various parameters of his analysis include mean return, beta risk, total risk, Sharpe ratio, Treynor ratio, and Jensen alpha. His study deduced that the HDFC (Growth) Mutual fund was considered the best performer while the JM Financial (Dividend) Mutual fund was the least performer based on the risk-return relationship models.

Rao and Mishra (2007) in their research expressed that the Indian Mutual Funds industry has been growing at a healthy pace of 16.68% for the past eight years and the trend will move

further. Based on the study, they deduced that 54% of people invest in security while 46% in current spending. Further, 54% of the people preferred long-term investment while 23% each favoured medium-term and small-term investment respectively.

#### **3. Objectives of the Study**

The present study has the following two objectives.

i. To access and compare the performance of the pension funds of selected Asset Management Companies

ii. To identify the best performing pension fund among the selected AMCs.

#### 4. Research Methodology

For the present study, secondary data has been used.

#### 4.1 Data Source

The secondary data comprises of monthly Net Assets Value (NAV) of the selected pension funds which are collected from the AMFI website, 91 days of treasury bills have been taken as the risk-free rate of return which is collected from the Reserve Bank of India website on weekly basis. Then, the risk-free rate is converted into a monthly risk-free rate of return. NSE Nifty 100 is taken as the market portfolio and the data is collected from the www.nseindia.com website.

#### 4.2 Sample Size

The present study has covered the pension fund of three Asset Management Companies that had a complete set of data for five years in the pension fund, i.e., UTI Mutual fund, Franklin Templeton Mutual fund, and TATA Mutual fund. The present study include a sample size of 3x 12 months x 6 years=216.

#### 4.3 Periodicity

The data for the present study covered from 1<sup>st</sup> April 2016 to 31<sup>st</sup> March 2022.

#### 4.4 Tools and Techniques

Average return, Standard deviation, beta, and three performance analysis measures viz Treynor ratio, Sharpe ratio, and Jensen alpha has been calculated for the selected pension funds.

#### 4.5 Definition of Terms

The formula used for different parameter is as follows:

#### 4.5.1 Return

The daily returns of the schemes are computed as:

$$R_{pt} = \frac{NAV_t - NAV_{t-1}}{NAV_{t-1}} \tag{1}$$

Where  $R_{pt}$  is the return on fund scheme,

 $NAV_t$  is the closing net asset value at 't' day and

 $NAV_{t-1}$  is the closing net asset value at 't-1' day.

The average return of the mutual fund scheme is computed as follows:

$$\bar{R}_p = \sum_{t=1}^n R_{pt} \quad \dots$$

Where,  $\overline{R}_p$  is the average return on a mutual fund scheme.

Similarly, the daily returns of the market index and average return of the market index are computed using the formula as given in (3) and (4) respectively:

(2)

Where  $R_{mt}$  is the daily return on the market index,

 $P_t$  is the closing price of today and

 $P_{t-1}$  is the closing price of the previous trading day.

IIARD – International Institute of Academic Research and Development

$$\overline{R}_m = \sum_{t=1}^n R_{mt} \tag{4}$$

Where,  $\bar{R}_m$  is the average return of the market index. 4.5.2 **Risk** 

The risk of the pension fund and the market index were measured through standard deviation ( $\sigma$ ). The standard deviations are calculated using the formula as given in (5) and (6).

$$\sigma_p = \sqrt{\frac{1}{n-1} \sum (R_{pt} - \bar{R}_p)^2} \quad ..... (5)$$
  
$$\sigma_m = \sqrt{\frac{1}{n-1} \sum (R_{mt} - \bar{R}_m)^2} \quad ..... (6)$$

Where  $\sigma_p$  is the risk of the mutual fund schemes.

Where  $\sigma_m$  is the risk of the market index.

#### 4.5.3 Beta

The Beta ( $\beta$ ) which is the systematic risk is also calculated using the formula given in (7). Beta as a measure of systematic risk determines the volatility of a mutual fund in comparison to that of the benchmark index.

$$\beta_p = \frac{Cov(R_{p,}R_{m,})}{\sigma^2 m} \quad \dots \dots \quad (7)$$

Where,  $\beta_p$  is the systematic risk of the mutual funds concerning the market,

 $Cov(R_p, R_m)$  is the covariance between the return of the mutual fund scheme and market index, and

 $\sigma^2_m$  is the variance of the market index.

#### 4.5.4 Sharpe Ratio

It is a performance measure developed by Sharpe (1966) to measure the risk-adjusted performance of a mutual fund. A higher ratio indicates the better the fund's historical risk-adjusted performance. If a fund's Sharpe ratio is greater than the benchmark, the fund's performance is considered superior to the market. The Sharpe ratio is computed as the formula presented in (8).

$$Sharpe = \frac{R_p - R_f}{\sigma_p} \dots \dots \dots (8)$$

Where  $R_p$ ,  $R_f$ , and  $\sigma_p$  are the return of the mutual fund scheme, risk-free rate of return, and standard deviation of the mutual fund scheme respectively.

#### 4.5.5 Treynor Ratio

It is a performance measure developed by Treynor (1965) based on systematic risk ( $\beta$ ). The only difference between the Sharpe ratio and Treynor ratio is that Sharpe uses standard deviation while Treynor uses beta as the measure of volatility. The formula for the measurement is

$$Treynor = \frac{R_p - R_f}{\beta_p} \dots \dots \dots \dots (9)$$

Where,  $R_p$ ,  $R_f$  and  $\beta_p$  are the return of the mutual fund scheme, risk-free rate of return, and systematic risk ( $\beta$ ) of the mutual fund scheme respectively.

#### 4.5.6 Jensen Alpha

It measures the risk-adjusted performance of a security or portfolio about the expected market return. The formula is

Where  $\alpha_p$  is the Jensen alpha value,  $R_p$  is the return of the mutual fund scheme,  $R_f$  is the risk-free rate of return and  $\beta_p$  is the systematic risk (beta) of the mutual fund scheme respectively. The list of pension funds of the three mutual funds covered under the present study is placed in Table 1.

		t of I clision Funus of Mutual Fu	inus
Sl No.	Name of Mutual Fund	Name of Pension Fund	Commencement
			year of pension fund
1	UTI Mutual Fund	UTI Retirement Benefit	1994
		Pension Fund	
2	Franklin Templeton	Franklin India Pension Plan	1997
	Mutual Fund		
3	TATA Mutual Fund	TATA Retirement Savings	2013
		Fund	

#### Table i: List of Pension Funds of Mutual Funds

Source: https://www.amfiindia.com/

#### 5. Data Analysis

The data analysis of the above pension funds under different parameters are as follows:

#### 5.1 Average Return

The average return of the three pension funds of the selected mutual fund companies has been placed in Table 2 and it is depicted with Figure 1 for clear understanding.

Name of the Pension Fund	Name of Mutual Fund	201 6-17	Rank	201 7-18	Rank	201 8-19	Rank	201 9-20	Rank	202 0-21	Rank	2021- 22	Rank
UTI Retirement Benefit Pension Fund (UTIRBF)	UTI	1.35 13	2	0.71 86	2	0.26 80	3	- 1.23 82	3	2.49 80	2	1.126 4	1
Franklin India Pension Plan (FIPP)	Franklin Templet on	0.65 34	3	0.08 28	3	1.73 75	1	- 0.44 10	1	1.38 22	3	0.235 7	3
TATA Retirement Savings Fund (TATARSF)	ΤΑΤΑ	2.11 61	1	1.11 40	1	0.58 56	2	- 1.12 81	2	3.37 04	1	1.122 9	2

 Table ii: Average Return of selected Pension funds

Source: Calculated from AMFI, NSE, and RBI data from 2016-17 to 2021-22 From Table 2 it can be interpreted that for the years 2016-17 and 2017-18 TATARSF is in the first position based on average return followed by UTIRBF and FIPP. While in 2018-19 and 2019-20 FIPP has the highest return followed by TATARSF and UTIRBF. Again in 2020-21, TATARSF set its higher return than UTIRBF and FIPP. In 2021-22 UTIRBF has the higher return followed by TATARSF and FIPP.



#### 5.2 Standard Deviation

The standard deviation of the three pension funds of the selected mutual fund companies has been shown in Table 3 and it is supplemented with Figure 2 for clear picture.

Name of the Pensio n Fund	Name of Mutu al Fund	201 6- 17	Ra nk	201 7- 18	Ra nk	2018 -19	Ra nk	201 9- 20	Ra nk	202 0- 21	Ra nk	202 1- 22	Ra nk
UTI Retire ment Benefit Pensio n Fund (UTIR BF)	UTI	1.1 899	3	1.2 929	3	2.07 39	3	3.3 131	2	2.0 205	3	1.5 468	3
Frankli n India Pensio n Plan (FIPP)	Frankl in Templ eton	1.9 223	2	2.0 401	2	12.1 499	1	3.0 387	3	2.2 367	2	1.9 386	2
TATA Retire ment Saving s Fund (TATA RSF)	TATA	5.4 417	1	2.3 641	1	4.13 57	2	5.6 207	1	4.6 304	1	5.5 310	1

Table iii: Standard Deviation of selected Pension funds

Source: Calculated from AMFI, NSE, and RBI data from 2016-17 to 2021-22

In Table 3 the standard deviation of the selected pension funds has been presented. On analysis, it could be found that TATARSF has always had a higher standard deviation as compared to FIPP and UTIRBF except for the year 2018-19. In 2016-17 and 2017-18 FIPP has the next higher standard deviation than TATARSF followed by UTIRBF. In 2018-19 FIPP showed more deviation followed by TATARSF and UTIRBF. While in 2019-20 UTIRBF has the higher deviation followed by FIPP. Again in 2020-21 and 2021-22, FIPP crossed UTIRBF with a high standard deviation value.



#### 5.3 Beta

Table 4 depicts the beta value of the selected pension funds for the present study period and it is supplemented with Figure 3.

Name of the Pensio n Fund	Name of Mutu al Fund	201 6- 17	Ra nk	201 7- 18	Ra nk	201 8- 19	Ra nk	201 9- 20	Ra nk	202 0- 21	Ra nk	202 1- 22	Ra nk
UTI Retire ment Benefit Pension Fund (UTIR BF)	UTI	0.3 289	2	0.3 409	2	0.4 238	2	0.3 790	2	0.3 060	2	0.3 578	2
Frankli n India Pension Plan (FIPP)	Frankl in Templ eton	0.2 583	3	0.2 429	3	0.4 025	3	0.3 129	3	0.2 262	3	0.3 062	3

 Table iv: Beta value of selected Pension funds

IIARD - International Institute of Academic Research and Development

Page 73

World Journal of Finance and Investment Research E-ISSN 2550-7125 P-ISSN 2682-5902 Vol 8. No. 2 2024 www.iiardjournals.org Online Version

Table 4 represents the beta value of the selected pension funds under study. It could be found that from 2016-17 to 2021-22 every year TATARSF possessed a high beta value followed by UTIRBF and FIPP. All three pension funds under study are said to be defensive fund as the beta value of all the funds are less than one.





#### 5.4 **Sharpe Ratio**

....

The Sharpe ratio of the pension funds under study has been placed in Table 5 with a picture in Figure 4.

Name of the Pensio n Fund	Name of Mutu al Fund	201 6- 17	Ra nk	201 7- 18	Ra nk	201 8- 19	Ra nk	201 9- 20	Ra nk	202 0- 21	Ra nk	202 1- 22	Ra nk
UTI Retire ment Benefit Pension Fund (UTIR BF)	UTI	- 4.2 816	3	- 4.2 456	3	- 3.0 556	3	- 2.0 107	3	- 0.4 040	2	- 1.5 368	2
Frankli n India Pension	Frankl in Templ eton	- 3.0 406	2	3.3 525	2	- 2.1 944	2	- 1.9 896	2	0.8 713	3	- 1.8 657	3

Table v: Sharpe ratio of selected Pension funds

IIARD - International Institute of Academic Research and Development

World Journal of Finance and Investment Research E-ISSN 2550-7125 P-ISSN 2682-5902 Vol 8. No. 2 2024 <u>www.iiardjournals.org Online Version</u>

Plan (FIPP)													
TATA Retire ment Savings Fund	TATA	- 1.9 143	1	- 2.6 367	1	- 1.8 523	1	- 1.5 796	1	0.3 235	1	- 1.0 701	1
RSF)													

It is clear from Table 5 that among all the selected pension funds TATARSF sets the higher Sharpe ratio during the study period i.e., 2016-17-2021-22. From 2016-17-2019-20 FIPP stood next to TATARSF followed by UTIRBF. While in 2020-21 and 2021-22 UTIRBF became the second highest after TATARSF followed by FIPP. All the schemes are generating low return as it has negative Sharpe value.



### 5.5 Treynor Ratio

The Treynor ratio of the selected pension funds for the study period has been placed in Table 6 with depiction in Figure 5.

	Name of Mutual Fund	2016- 17	Ra nk	2017- 18	Ra nk	2018 -19	Ra nk	2019 -20	Ra nk	2020 -21	R a n k	2021 -22	Ra nk
UTI Retirement	TTT	-	2	-	1	-	2	-	1	-	2	-	2
Pension Fund (UTIRBF)	UII	15.489 5	2	16.10 21	1	14.9 540	3	17.5 790	1	2.66 74	2	6.64 28	2

Table vi: Treynor ratio of selected Pension funds

World Journal of Finance and Investment Research E-ISSN 2550-7125 P-ISSN 2682-590	2
Vol 8. No. 2 2024 www.iiardjournals.org Online Version	

Franklin India Pension Plan (FIPP)	Franklin Templeton	- 30.533 7	3	- 28.68 81	2	- 12.1 754	2	- 19.3 020	2	- 8.74 85	3	- 10.7 455	3
TATA Retirement Savings Fund (TATARSF)	ΤΑΤΑ	-8.7203	1	- 79.64 99	3	- 9.29 18	1	29.8 201	3	- 2.19 94	1	- 3.96 65	1

The Treynor ratio of the schemes under study has been represented in Table 6. On analysis it is found that all the pension funds under study are having poor performance as they are generating negative Treynor ratio values. Among all the pension funds TATARSF has the higher Treynor ratio value followed by UTIRBF and FIPP in 2016-17. While in 2017-18 UTIRBF has the greater value followed by FIPP and TATARSF. Again in 2018-19 TATARSF sets the higher value followed by FIPP and UTIRBF. In 2019-20 UTIRBF proved to be a higher ratio than FIPP and TATARSF. In the years 2020-21 and 2021-22 TATARSF remains the first position followed by UTIRBF and FIPP.





#### 5.6 Jensen Alpha

Table 7 represent the Jensen alpha value of the selected pension funds under study and it is followed by Figure 6.

Name of the Pensio n Fund	Name of Mutu al Fund	201 6- 17	Ra nk	201 7- 18	Ra nk	201 8- 19	Ra nk	201 9- 20	Ra nk	202 0- 21	Ra nk	202 1- 22	Ra nk
UTI Retire ment Benefit Pension Fund	UTI	- 3.5 103	2	- 3.6 450	2	- 3.9 963	3	- 3.6 825	3	- 1.3 318	2	- 1.6 724	2

Table vii: Jensen alpha of selected Pension funds

World Journal of Finance and Investment Research E-ISSN 2550-7125 P-ISSN 2682-5902
Vol 8. No. 2 2024 www.iiardjournals.org Online Version

(UTIK													
BF)													
Frankli	F 11												
n India	Frankl	-		-		-		-		-		_	
Pension	in	45	3	47	3	26	2	35	2	23	3	26	3
Dlop	Templ	182	5	603	5	2.0 115	2	380	2	120	5	2.0 647	5
Flail	eton	402		095		443		309		150		047	
(FIPP)													
TATA													
Retire													
ment		-		-		-		-		-		-	
Savings	TATA	0.9	1	2.9	1	1.3	1	2.6	1	1.0	1	1.6	1
Fund		246		776		341		709		682		014	
(TATA													
RSF)													

Table 7 depicts the Jensen alpha value of the selected pension funds. All the pension funds are said to be bad performers as they are producing negative Jensen alpha values. Despite of that TATARSF has produced a high Jensen alpha value as compared to FIPP and UTIRBF during the study period i.e., 2016-17-2021-22. In the years 2016-17 and 2017-18 UTIRBF was set to be the second-highest Jensen alpha value followed by FIPP. While in 2018-19 and 2019-20 FIPP stood at the second position followed by UTIRBF. Again in 2020-21 and 2021-22 UTIRBF came to the second position after TATARSF followed by FIPP.





# 6. Findings of the Study Objective-i

- Based on average return TATA Retirement Savings Fund provides the high return for the maximum period followed by UTI Retirement Benefit Fund and Franklin India Pension Plan. It can be concluded that TATA Retirement Savings Fund is performing better than UTI Retirement Benefit Fund and Franklin India Pension Plan.
- While taking into account the standard deviation, TATA Retirement Savings Fund has a high deviation value for a maximum period which signifies that it involves high risk which otherwise provides a high return. For some periods, Franklin India Pension Plan provides

high deviation after TATA Retirement Savings Fund followed by UTI Retirement Benefit Fund and vice versa. By considering the Beta value all the pension funds under study are said to be defensive funds as the value of all the schemes is less than one. Among all the schemes TATA Retirement Savings Fund has the higher beta value followed by UTI Retirement Benefit Fund and Franklin India Pension Plan during the whole study period.

- By taking into account the Sharpe ratio, all the schemes provide negative value which indicates that they are a poor performer. After all TATA Retirement Savings Fund proves to be a higher Share ratio value during the whole study period followed by Franklin India Pension Plan and UTI Retirement Benefit Fund except for the years 2020-21 and 2021-22. During that period UTI Retirement Benefit Fund outperformed Franklin India Pension Plan.
- A negative Treynor ratio indicates that the schemes are not performing well. Here all the schemes have negative Treynor ratio value. Out of all the schemes TATA Retirement Savings Fund is set to be a higher Treynor ratio value as compared to Franklin India Pension Plan and UTI Retirement Savings Fund except for the years 2017-18 and 2019-20. In 2017-18 and 2019-20 TATA Retirement Savings Fund has the lowest Treynor ratio value.
- While considering the Jensen Alpha value TATA Retirement Savings Fund proves to be better than Franklin India Pension Plan and UTI Retirement Benefit Fund as it has always had a higher value than the other two during the whole study period.

#### **Objective-ii**

- TATA Retirement Savings Fund which is the pension fund of TATA Mutual Fund was found to be the best performing pension fund among all the three asset management companies selected for study for the study period based on every parameter.
- The next performer after TATA Retirement Savings Fund is the Franklin India Pension Plan which is the pension fund of Franklin Templeton Mutual Fund for the study period.

#### 7. Conclusion

Financial strength is a primary component of the success of the financial industry, banks, insurance, etc. and more so the periodic assessment of its performances concerning pension funds is crucial to know the strength and weaknesses. To strengthen the capital market of the company, bank, etc. the fund managers need to apply strategies planning and motivate the pensioners to investments of their hard-earned money for the later stage benefit. This being one of the crucial issues in the social security system, the mutual funds operating the pension funds need to provide them with incentives, and benefits which in one sense will not only benefit the pensioners but also lead to sustainable growth in the capital market. Further, transparent communication with the investors by the fund managers will also add value to the financial market.

#### References

- Ahmad, W., Roomi, M.S., & Ramzan, M. (2015). A Comparative Study on Performance of Open and Close-ended Mutual Funds in Pakistan. *International Journal of Accounting and Financial Reporting*, 5(1), 300-314. Retrieved from <u>http://www</u>. academic journals. org/article/article 1380555764 \_Nafees%20et%20al.pdf.
- Bahil, S., & Rani, M. (2012). A comparative analysis of mutual fund schemes in India. International Journal of Marketing, Financial Services and Management Research, 1(7), 67-79. Retrieved from http:// Indian research journals. com/pdf/ IJMFSMR/ 2012/July/6.pdf.
- Dopierała, Łukasz, and Magdalena Mosionek-Schweda. 2021. Pension Fund Management, Investment Performance, and Herding in the Context of Regulatory Changes: New Evidence from the Polish Pension System. Risks 9: 6. <u>https://doi.org/10.3390/risks9010006</u>
- Gupta, A. (2001). Mutual Funds in India: A study of Investment management. 15(2), .231.Retrievedfromhttps://books.google.co.in/books/about/Mutual\_\_\_\_\_Funds\_\_\_\_in\_\_\_\_India.html?id=Qm0vbKmvQpoChttps://www.amfiindia.co\_m/Indianmutual-fund
- Imam A. (2011). Pension Fund Management in India: Government Role and Regulatory issues. *International Journal of Multidisciplinary Research*. 1(7), ISSN 2231 5780.
- Khan, M.Y. (2003). Indian Financial System (3rd ed.). New Delhi, India: Tata McGrawHill.
- Pandey, I.M. (2011). Financial Management. New Delhi, India: Himalaya Publishing House
- Pandian, P. (2001). Security Analysis and Portfolio Management. New Delhi, India: Vikas Publishing House Pvt Ltd.
- Pati, S. (2021). Pension Funds in India. Retrieved from <u>https://scripbox.com/saving-schemes/pension-funds/</u>
- Puri, H. (2010). Performance evaluation of balanced mutual fund schemes in Indian Scenario, 14(2). Retrieved from http://www.Freepatentsonline. com/article/ Paradigm/ 297309480 .html
- Rao, H. and Mishra, K.V. (2007). Mutual Fund: A Resource Mobilizer in Financial Market. *Vidyasagar University Journal of Commerce*, 12, 109-115.
- Siva Kumar, N. and Haque, Mohammad I. (2019). A Comparative Review of Indian and Saudi Arabian Social Welfare Schemes. *Humanities & Social Sciences Reviews*, 7 (5), 1200-1209

- Tyagi, A and Aggrawal, M (2018). NPS and NSSF: A Comparative Analysis of Pension Schemes in India & China. International Journal of Creative Research Thoughts, 6 (2), 833-845. Retrieved from <u>https://www.ijcrt.org/ papers/IJCRT1133864.pdf</u>
- Vyas, R. (2012). Mutual Fund Investor's Behaviour and Perception In Indore city. *International Refereed Research Journal*, 3 (3), 67-75. Retrieved from http://www.researchersworld.com/vol3/issue3/vol3\_issue3\_1/Paper\_09.pdf.

www.nseindia.com www.amfiindia.com www.moneycontrol.com www.rbi.org.in