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Statistical Evaluation of Hybrid and ELSS Mutual Fund Performance Employing Sharpe, Treynor, & Jensen Models

Neha Dadhich
Research Scholar, School of Management, University of Engineering & Management, Jaipur, India
nehadadhich96@gmail.com

Prof. Dr. Preeti Sharma
Professor & Associate Dean, School of Management, University of Engineering & Management, Jaipur, India
preeti.sharma@uem.edu.in

Abstract:

The research investigates how various risk criteria impact Hybrid and ELSS fund performance metrics through its assessment of annualised returns and Sharpe's Ratio and Treynor's Ratio and Jensen's Alpha. This study evaluates fund performance through assessment of risk characteristics which include correlation and annualised daily variance and downside standard deviation and Risk (Systematic) and Risk (Unsystematic). The results demonstrate that both fund categories experience annualized return and Jensen's Alpha decrease because of downside risk, while Hybrid funds face more extensive Risk (Systematic) challenges. The analysis of Sharpe's Ratio shows that both fund categories depend on downside risk assessment, but ELSS funds demonstrate stronger effects from this risk. The analysis of Treynor's Ratio demonstrates that ELSS funds require both downside risk and variance assessment, as these factors provide better understanding of fund performance. The study shows that investors must examine risk parameters when assessing fund performance because risk parameters influence performance metrics differently across various fund categories.

Keywords: Risk Parameters, Fund Performance Metrics, Hybrid Funds, ELSS Funds, Jensen's Alpha

1. Introduction

Asset Management Companies (AMCs), publicly as well as privately, served an instrumental role in the tremendous growth within the mutual- fund operations in India **(Shekhar, 2024)**. Among of the absolute most appreciated alternatives for investing amongst kind of mutual funds are; Hybrid Mutual Funds & Equity Linked Savings Schemes **(Verma, 2018)**. A harmonious proportion of both debt and equity investments can be obtained by hybrid mutual funds, nevertheless Section 80C of the Income Tax Act enables tax advantages on ELSS funds, that emphasise on investment in equity funds **(Manda et al., 2018)**. This study presents a comparison hybrid and ELSS funds' performance at public & private AMCs by using essential risk & return measurement standards. The study results provide investors with fund performance information to make their selection between public & private sector AMC funds.

The different types of AMCs which operate as private and public institutions were created to serve specific goals which their leaders must manage while attracting investors **(Cerruti & Neyens, 2016).** The research by **Fernandez et al. (2024)** shows that people believe private AMCs use more innovative and riskier investment methods than public AMCs which they consider to be safe and cautious. The mutual fund performance and risk assessment depend on this distinction which requires evaluation **(Chen & Lin, 2006)**. The discrepancy amongst these two fundamentals determines how mutual funds perform and their risk management capabilities. Public AMCs need to maintain an equal distribution of their Hybrid Mutual Funds between equity and debt, but private AMCs will use greater risks to generate higher profits **(VISWAKUMAR et al., 2023)**. The ELSS Funds show equity market fluctuations to investors from both AMC types, but the risk levels differ according to the fund manager's investment method **(Sharma et al., 2016)**.

The complete evaluation of mutual fund performance requires simultaneous assessment of both risk & return metrics. **Nihal & Reddy (2024)** found that return metrics which include Treynor's Ratio and Jensen's Alpha and Sharpe's Ratio provide details about risk-adjusted returns and the success of fund management. Performance

assessment requires an evaluation of risk elements which include beta and correlation together with systematic and Risk (Unsystematic) **(Singh & Bhatia, 2014)**.

The research investigates how ELSS Funds and Hybrid Mutual Funds perform at public & private asset management companies to fill the existing knowledge gap on these two fund types. The research examines various performance metrics to provide investors practical investment recommendations through its assessment of different funds' performance across multiple market scenarios. The results will be helpful in determining which AMCs public or private are best suited to provide higher risk-adjusted returns in the hybrid and ELSS fund categories.

2. Review of Literature

Vyas & Desai (2025) presents an insightful analysis comparing the investment performance of Equity Linked Saving Scheme (ELSS) plans and Diversified Equity Funds (DEF) in the context of Indian mutual funds. The authors conduct a thorough assessment of the investment vehicles through three main criteria which include risk-adjusted returns and growth potential and tax benefits. The researchers use advanced analytical techniques to create a comprehensive assessment which reveals the unique strengths and weaknesses that investors in India can use to choose between two different options. The research shows that ELSS provides tax advantages through Section 80C while DEFs need extended periods for investment to become profitable. The results of this research are beneficial for the prospective investors to select best avenues through which they may match their financial objectives and risk tolerance.

Teixeira et al. (2025) made his claim about the evolution of the Indian stock market which started operation in 1875. The market has expanded its investment options for investors since that initial period. The Unit Trust of India (UTI) which the Reserve Bank of India controls launched mutual funds in 1964 to provide investors with capital growth opportunities and tax benefits as well as financial stability. The new situation created greater trust from investors. This study uses standard deviation and beta measurements plus Sharpe ratio and Treynor ratio and additional metrics to evaluate the risks and returns of eleven tax-saving mutual funds across a 90-month duration from 2016 to 2023. The research found that Quant Tax Direct Plan (Growth Option) achieved top performance according to the indicators which provide investors with essential information to make informed decisions about returns and savings and risk management.

Tiwari (2024) documented that Equity Linked Savings Schemes (ELSS) invest their funds into equity assets which enable them to invest across different market capitalizations and industry sectors with the goal to create long-term asset growth. The introduction of long-term capital gain tax through tax law changes will create a barrier for investors which Section 80C of the Income Tax Act permits to receive tax deductions. The research used CAGR, Sharpe Ratio, Jensen's Alpha and beta as performance measurement tools to evaluate three ELSS funds which included Aditya Birla Sun Life Tax Relief 96 (ABSLTR) and Axis Long Term Equity (ALTE) and Nippon India Tax Saver (NITS) from 2009 to 2019. NITS selected for an even more ambitious strategy for investing, ALTE consistently exceeded the benchmark on risk-adjusted returns, showcasing excellent stock-picking & diversification strategies.

Based on daily returns over the last three years, **(Malhotra & Sinha, 2023)** measures performance of ELSS mutual fund based on three year daily returns by applying five statistical measures that comprise of Standard Deviation and Beta and Sharpe Ratio and Jensen Alpha and Treynors Ratio. The article relied on the NAV statistics of 2017 to 2021 to demonstrate the impact of the COVID-19 pandemic on the investment returns. In 2018-19 and 2019-20, the returns of the funds were negative or low but in 2020-21, the returns improved significantly to above 55%. The paper highlights the importance of considering risk ratios during an investment. All the funds have positive Sharpe ratios that reflect returns on investments that are greater than the risk-free rate. When the performance is analyzed based on all other ratios, the performance was excellent as indicated by performance results.

In India, Equity Linked Savings Schemes (ELSS) are discussed **(Boricha & Alpa, 2024)**, which evaluates the performance of those schemes against the NIFTY 50 index. It looks at 39 open-ended ELSS funds

that were initiated between 2010 and 2020 & looks into how the different fund parameters such as age, type of fund, turnover, and liquidity influence profitability. The persistence of performance in ELSS funds is also significant and the study has highlighted the effect of such characteristics on risk-adjusted returns through pooled time-series and cross-sectional regression. The findings offer insight information to aid the making of better decisions by fund managers and investors with regard to investing.

Panigrahi et al. (2020) discuss the problem of the challenge of choice of ELSS (Equity Linked Savings Scheme) funds by investors to save taxes. Knowing that there are many funds in the market, investors tend to invest without even knowledge of the nature of the fund. The analysis evaluated 35 open-ended ELSS funds, utilizing three parameters that could help investors make adequately informed choices, risk factors (beta, alpha, standard deviation), past returns (lump sum, SIP), and risk-reward ratios (Sharpe, Treynor, Sortino, Information, and capture ratios). The best performing funds according to the data are Quant Tax Plan, Canara Robeco Equity Tax Saver, and Mirae Tax Saver, and the less suitable ones are Indiabulls Tax Saving Fund, HDFC Tax Saver, Nippon India Tax Saver Fund, and Sundaram Diversified Equity fund.

When assessing the performance of hybrid mutual funds in the Indian capital market, **hikha Singla (2024)** has focused on more than 10 funds which have either been classified as aggressive or traditional. To evaluate the performance of funds within a period of three years between July 17, 2017, and 2019, the study used financial ratio analysis as one of the measurement tools, which are NAV, Sharpe ratio, standard deviation, BETA, and Jensen alpha. When aggressive hybrid mutual funds are compared with conservative ones, it is demonstrated that the former are more prone to market hysteria.

Puranik & Dave (2021) claims that performance of ELSS (Equity Linked Savings Scheme) mutual funds is compared against the risk-adjusted performance indicators such as R-squared, Treynor Ratio, and Sharpe Ratio, standard deviation, and beta as a measure of risk and volatility, and contrast performance in India. The analysis suggests that some ELSS funds beat benchmarks in several categories, and they are generating returns in the double digits. Considering the inflation rate in India, which is 20 years average of 7.25, the paper concludes that ELSS funds can be their favourable choice to invest since it not only offers potential tax benefits under Section 80C, but also effectively combats inflation.

Dsouza et al. (2024) also stated that in the modern business environment, investors are seeking hybrid plans with high returns, full security, deductible costs and no lock-in period. Equity Linked Savings Schemes (ELSS) have fulfilled all these and provided a possibility of development and tax incentives. The indicators that were used in this research study to determine the growth trends and performance of ELSS funds of specific institutions include return, beta, R-squared, standard deviation, Sharpe ratio, risk-adjusted CAGR, and expense ratio. The research states that ELSS mutual funds are more popular these days as they yield higher returns as compared to other tax saving strategies.

3. Objectives of The Study

- To statistically evaluate Hybrid and ELSS mutual funds' performance by analyzing their risk-adjusted returns using Sharpe's Ratio, Treynor's Ratio, and Jensen's Alpha.
- To assess the influence of risk characteristics such as Risk (Systematic), Risk (Unsystematic), correlation, and Annual Daily Variance on the performance metrics of Hybrid and ELSS funds.

4. Methods and Analysis

The paper uses major parameters of risk & return to draw a comparison between the performance of Hybrid and ELSS Mutual Funds operated by the public and the private Asset Management Companies (AMCs). The paper makes a comparison between Hybrid and ELSS funds in the public & private sector Asset Management Companies (AMCs) with their allotment dates and benchmark indexes. The assets of the hybrid funds are generally of a conservative mix of debt and equity characterized by Crisil Hybrid 85+15 Conservative Index or Nifty 50 Hybrid Composite Debt 15:85 Index **(Maheswari & Reddy, 2022)**. Other funds such as ICICI and Nippon India follow Crisil Hybrid 50+50 Moderate Index which is a more balanced direction **(SUNIL et al., 2024)**. Tax saving oriented ELSS funds typically follow wide market indices such as the Nifty 500 or BSE 500

TRI which give the equity performance reference point to assess the returns of these funds **(Patel et al., 2024)**. The combination of capital provides better insights for the conservative and balanced investment approach in industries. Parameters of return like Treynor Ratio, Sharpe Ratio, Annualised Daily Return and Jensen Alpha are to understand any fund in relation to its ability to generate risk & returns control **(Leković, 2017)**. These situations are complemented using extra measures such as information, appraisal, and Sortino ratios. Risk parameters such as Beta, Correlation, and Annual Daily Variance, measure fund's volatility along with sensitivity to the market movements **(Cao et al., 2008)**. The systematic and Risk (Unsystematic)s are also considered to comprehend the comparative risk-taking of public AMCs, which tend to be conservative, and the private AMCs which might be taking more risks and their returns **(Pandey, 2022; Kumar, 2016; Subrahmanyam, 2008)**. This end-to-end strategy offers an in-depth study on the performance of funds, which would be valuable to investors.

Return based performance of Hybrid V/S ELSS

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
Annual Daily Return Fund	Equal variances assumed	67.5	0	-2.305	194	0.012	-0.078
	Equal variances not assumed			-2.615	124.6	0.013	-0.078
Jensen's Alpha	Equal variances assumed	11.8	0.001	-1.299	194	0.195	-0.013
	Equal variances not assumed			-1.294	165.2	0.197	-0.013
Sharpe's Ratio	Equal variances assumed	0.02	0.904	0.52	194	0.603	0.129
	Equal variances not assumed			0.52	193.7	0.603	0.129
Treynor's Ratio	Equal variances assumed	0.45	0.503	0.834	194	0.405	0.116
	Equal variances not assumed			0.842	108.2	0.402	0.116

Appraisal Ratio	Equal variances assumed	20.9	0	-1.719	194	0.087	-2.226
	Equal variances not assumed			-1.711	156.3	0.089	-2.226
Information Ratio	Equal variances assumed	2.92	0.089	-3.863	194	0	-0.705
	Equal variances not assumed			-3.855	185.3	0	-0.705
Sortino Ratio	Equal variances assumed	2.58	0.11	1.357	194	0.176	0.713
	Equal variances not assumed			1.363	167	0.175	0.713
Capture Ratio	Equal variances assumed	2.34	0.128	-0.144	194	0.886	-0.004
	Equal variances not assumed			-0.144	185	0.886	-0.004
Modigilani - Modigilani	Equal variances assumed	30.9	0	-1.307	194	0.193	-0.043
	Equal variances not assumed			-1.299	146.9	0.196	-0.043

The aforementioned table compares Hybrid funds and Equity Linked Savings Schemes (ELSS) for different measures of performance. Much lower annualized daily return on Hybrid funds than on ELSS was observed, the mean of which is lower by 0.078 ($p = 0.012$). Their performance is also more disastrous than the industry average as is shown through their considerably lower Information Ratio (mean difference of -0.705; $p = 0.000$). The Alpha of Jensen (mean difference -0.013, $p = 0.195$), Sharpe Ratio (mean difference 0.129, $p = 0.603$), Treynor Ratio (mean difference 0.116, $p = 0.405$), Sortino Ratio (mean difference 0.713, $p = 0.176$) and the Capture Ratio (mean difference -0.004, $p = 0.886$) as well as the Modigliani- Subsequently, hybrid funds perform exceptionally well over ELSS in almost all other performance indicators that are risk-adjusted but lag in the yields as well as benchmark-relative returns.

RISK parameters of Hybrid V/S ELSS: A Comparative View							
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
Annual Daily Variance Fund	Equal variances assumed	33.287	0	-10.909	194	0	**-0.021**
	Equal variances not assumed			-10.846	144.804	0	**-0.021**
Annual Daily Downside S.D. Fund	Equal variances assumed	22.708	0	-13.587	194	0	**-0.07**
	Equal variances not assumed			-13.51	146.431	0	**-0.07**
Correlation	Equal variances assumed	17.183	0	-5.215	194	0	**-0.105**
	Equal variances not assumed			-5.241	159.446	0	**-0.105**
Beta (Fund)	Equal variances assumed	19.587	0	-10.525	194	0	**-0.375**
	Equal variances not assumed			-10.589	146.123	0	**-0.375**
Risk (Systematic)	Equal variances assumed	17.756	0	-16.953	193	0	**-0.099**
	Equal variances not assumed			-16.843	160.644	0	**-0.099**
Risk (Unsystematic)	Equal variances assumed	6.92	0.009	1.462	194	0.145	0.004
	Equal variances not assumed			1.477	101.932	0.143	0.004

The risk parameters comparison of Hybrid funds and Equity Linked Savings Scheme (ELSS) indicates some important insights. The annualised daily variance (mean difference -0.021, p = 0.000) and annualised daily downside standard deviation (mean difference -0.070, p = 0.000) of the hybrid funds is significantly lower in comparison to ELSS, indicating the reduced share of overall and downside risk respectively. Moreover, the hybrid funds displayed an even worse correlation (mean difference -0.105, p = 0.000) than with their benchmark as it indicates a less synchronised portfolio in response to the market. They are less susceptible to Risk (Systematic) (mean difference -0.099, p = 0.000) and market movements, as they are less prone to the Risk (Systematic) due to their lower beta (mean difference -0.375, p = 0.000). The Risk (Unsystematic) variance, nonetheless, cannot be seen (mean difference of 0.004, p = 0.145), implying that the fund-specific risk of these two types of funds is also not the same. All in all, Hybrid funds tend to have less overall, downside and Risk (Systematic) than ELSS, but have the same amount of Risk (Unsystematic).

Impact of Risk Parameters on Annualized Return

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.463[a]	0.215	0.194	0.196252

Coefficients[a]

Model		Coefficients (Unstandardized)		Coefficients (Standardized)	t	Sig.	F	Sig.
		B	Std. Error	Beta				
1	(Constant)	0.174	0.189		0.924	0.357	10.338	.000[b]
	Annual Daily Variance Fund	9.655	3.341	0.754	2.89	0.004		
	Annual Daily Downside S.D. Fund	-8.532	1.41	-1.951	-6.051	0		
	Correlation	0.067	0.208	0.042	0.324	0.746		
	Risk (Systematic)	3.861	0.837	1.136	4.614	0		

	Risk (Unsystematic)	-0.606	1.546	-0.056	-0.392	0.696		
a. Dependent Variable: Annual Daily Return Fund								
b. Predictors: (Constant), Risk (Unsystematic), Annual Daily Downside S.D. Fund, Correlation, Risk (Systematic), Annual Daily Variance Fund								

It is found out that Annual Daily Variance and Risk (Systematic) positively affect annualized daily return, meaning that the more volatile and sensitive to the market is a fund, the higher returns it will provide. Whereas, greater the annualized standard deviation of the downside on a daily basis, the smaller the returns are which indicates the negative influence of the downside risk. There is no significant correlation on returns with both benchmark and Risk (Unsystematic). All in all, more volatile and market-sensitive funds could offer better returns, but those with higher downside risk have lower returns.

Risk Parameters' Impacting Annualized Return: Comparative View

Summary of The Model

Scheme' Type		R	R Square	Adjusted R Square	Std. Error of the Estimate		
Hybrid	1	.715[a]	0.511	0.485	0.08		
ELSS	1	.734[b]	0.539	0.513	0.199		

ANOVA

Scheme' Type			Squares' Sum	Df	Square of Mean	F	Sig.
Hybrid	1	Regression	0.63	5	0.126	19.435	.000[b]
		Residual	0.603	93	0.006		
		Total	1.232	98			
ELSS	1	Regression	4.165	5	0.833	21.053	.000[c]
		Residual	3.561	90	0.04		
		Total	7.726	95			

Coefficients

Scheme' Type			Coefficients (Unstandardized)		Coefficients (Standardized)	t	Sig.
			B	Std. Error	Beta		
Hybrid	1	(Constant)	0.281	0.1		2.812	0.006
		Annual Daily Variance Fund	-7.617	4.509	-0.759	-2.117	0.037
		Annual Daily Downside S.D. Fund	-9.738	1.145	-2.095	-8.503	0
		Correlation	-0.296	0.113	-0.451	-2.626	0.01
		Risk (Systematic)	9.211	1.409	2.564	6.537	0
		Risk (Unsystematic)	3.155	1.369	0.792	2.305	0.023
ELSS	1	(Constant)	3.112	3.133		0.993	0.323
		Annual Daily Variance Fund	47.4	6.485	2.859	7.495	0
		Annual Daily Downside S.D. Fund	-19.674	2.556	-3.336	-8.483	0
		Correlation	-2.005	3.216	-0.197	-0.624	0.535
		Risk (Systematic)	1.041	1.246	0.178	0.835	0.406
		Risk (Unsystematic)	-19.694	20.978	-0.301	-1.008	0.316
a. Dependent Variable: Annual Daily Return Fund							

Analysis of Hybrid funds and ELSS' risk parameters in regard to annualized returns presents some significant variation. On the case of Hybrid funds, 51.1% of the return's variance is explained ($R^2 = 0.511$), and the F-statistic is large ($F = 19.44$, $p < 0.05$). The undesirable effects of annual daily variance and disadvantaged standard deviation reflect negative effect on returns, whereas Risk (Systematic) has a positive effect. In particular, an increased Annual Daily Variance and downside risk are associated with reduced returns, and increased Risk (Systematic) has an association with increased returns. Risk (Unsystematic) also has a positive effect on returns in Hybrid funds.

The ELSS model, conversely, $R^2 = 0.539$ explains 53.9% variance in returns and the F-statistic on the ELSS model is even greater ($F = 21.053$, $p = 0.000$). In this case, Annual Daily Variance has a positive effect on returns, but nevertheless, downside standard deviation continues to have a negative influence on returns. ELSS is not affected significantly by Risk (Systematic) and Risk (Unsystematic). In general, although both funds indicate the significance of downside risk, Hybrid funds focus on Risk (Systematic) more and ELSS are more advantageous to the increase of volatility.

Risk Parameters' Impact on Sharpe's Ratio: A Comparative View

Model Summary

Scheme' Type		R	R^2	R^2 - Adjusted	Standard Error		
Hybrid	1	.450[a]	0.203	0.16	1.5734521		
ELSS	1	.709[b]	0.503	0.475	1.2680578		

ANOVA

Scheme' Type			Squares' Sum	D. F.	Square of Mean	F	Sig.
Hybrid	1	Regression	58.489	5	11.698	4.725	.001[b]
		Residual	230.245	93	2.476		
		Total	288.734	98			
ELSS	1	Regression	146.49	5	29.298	18.221	.000[c]
		Residual	144.717	90	1.608		
		Total	291.208	95			

a. Sharpe's Ratio as dependent variable

b. Predictors: (Constant), Risk (Unsystematic), Risk (Systematic), Annual Daily Variance Fund, Correlation, Annual Daily Downside S.D. Fund

Coefficients

Scheme' Type			Coefficients (Unstandardized)		Coefficients (Standardized)	t	Sig.
			B	Standard Error	Beta		
Hybrid	1	(Constant)	4.436	1.592		2.231	0.022
		Annual Daily Variance Fund	-5.285	88.339	-0.027	-0.06	0.952
		Annual Daily Downside S.D. Fund	-91.524	22.385	-1.286	-4.089	0
		Correlation	-3.611	2.205	-0.359	-1.638	0.105
		Risk (Systematic)	62.776	27.544	1.141	2.279	0.025
		Risk (Unsystematic)	-10.27	26.755	-0.168	-0.384	0.702
ELSS	1	(Constant)	43.454	19.974		2.175	0.032
		Annual Daily Variance Fund	292.756	41.34	2.805	7.082	0
		Annual Daily Downside S.D. Fund	-127.998	16.293	-3.208	-7.856	0
		Correlation	-37.601	20.502	-0.603	-1.834	0.07

		Risk (Systematic)	8.708	7.944	0.243	1.096	0.276
		Risk (Unsystematic)	-301.367	138.959	-0.673	-2.169	0.033

The ELSS model (R2 = 0.503, F = 18.221, p = 0.000) is more successful than the combination of models (R2 = 0.203, F = 4.725, p = 0.001) in explaining the variation in the Ratio of Sharpe when risk variables are analyzed. The Sharpe Ratio of the current ELSS has been positively impacted by annualized daily variance (beta = 292.756, p = 0.000) and negatively impacted by downside standard deviation (beta = -127.998, p = 0.000). Hybrid funds' Sharpe is significantly reduced by downside standard deviation (beta = -91.524, p = 0.000), whereas standard risk positively affects Sharpe (beta = 62.776, p = 0.025). There is no link, risk, or annual daily variation in the Sharpe Ratio of hybrid funds. Sharpe ratio is negatively affected by Hybrid funds' downside standard deviation (beta = -91.524, p = 0.000), and positively affected by Systematic Risk (beta = 62.776, p = 0.025). The Sharpe Ratio of Hybrid funds is unenthusiastic by the combined yearly effects of daily variation, correlation, and Risk (Unsystematic).

Risk Parameters' Impact on Treynor's Ratio: A Comparative View

Model Summary

Scheme' Type		R	R Square	Adjusted R Square	Std. Error of the Estimate		
Hybrid	1	.733[a]	0.538	0.513	0.930992		
ELSS	1	.753[b]	0.567	0.543	0.205125		

ANOVA

Scheme' Type			Squares' Sum	d. f.	Square of Mean	F	Sig.
Hybrid	1	Regression	93.768	5	18.754	21.637	.000[b]
		Residual	80.607	93	0.867		
		Total	174.376	98			
ELSS	1	Regression	4.965	5	0.993	23.598	.000[c]
		Residual	3.787	90	0.042		
		Total	8.752	95			

a. Treynor's Ratio as Dependent Variable

b. Predictors: (Constant), Risk (Unsystematic), Annual Daily Downside S.D. Fund, Correlation, Annual Daily Variance Fund, Risk (Systematic)

Coefficients

Scheme' Type			Coefficients (Unstandardized)		Coefficients (Standardized)	T	Sig.
			B	Std. Error	Beta		
Hybrid	1	(Constant)	0.67	1.155		0.58	0.564

		Annual Daily Variance Fund	-127.187	52.269	-0.849	-2.433	0.017
		Annual Daily Downside S.D. Fund	63.749	13.245	1.153	4.813	0
		Correlation	-1.375	1.304	-0.176	-1.054	0.294
		Risk (Systematic)	-26.148	16.298	-0.612	-1.604	0.112
		Risk (Unsystematic)	36.601	15.83	0.772	2.312	0.023
ELSS	1	(Constant)	5.004	3.231		1.549	0.125
		Annual Daily Variance Fund	47.139	6.687	2.605	7.049	0
		Annual Daily Downside S.D. Fund	-24.542	2.636	-3.549	-9.312	0
		Correlation	-4.166	3.316	-0.385	-1.256	0.212
		Risk (Systematic)	4.734	1.285	0.762	3.684	0
		Risk (Unsystematic)	-35.125	22.478	-0.452	-1.563	0.122

By comparing the influence of risk parameter change on the Treynor Ratio, we find that ELSS models and hybrid funds both contribute to explain a large percentage of the variance. Regarding the shift in Treynor Ratio performance, the Hybrid model is expected to forecast 52.8%, with an F-status of 21.637 and a p-value of 0.000, and the ELSS model is expected to forecast 56.7%, with an F-status of 23.598 and a p-value of 0.000, respectively. Taking the Treynor Ratio into account under ELSS yields positive annualised daily variance (b = 47.139, p = 0.000) and negative standard deviation (b = -24.542, p = 0.000). Treynor Ratio is positively affected by Systematic Risk as well (b = 4.734, p = 0.000). When it comes to hybrid funds, the Treynor Ratio is positively affected by downside standard deviation (b = 63.749, p =0.000), but significantly negatively affected by annual daily variance (b = -127.187, p = 0.017). Hybrid fund Risk (Unsystematic) also has a positive effect on the Treynor Ratio (b = 36.601, p = 0.023). Risk (Systematic) does not show any statistically meaningful relationship in any model. Both models place an emphasis on downside risk and Annual Daily Variance, but their implications on different types of funds are different.

Risk Parameters' Impact on Jensen's Alpha								
Summary of Model								
Scheme' Type		R	R^2	R^2 (Adjusted)	Standard Error			
Hybrid	1	.762[a]	0.58	0.558	0.036			
ELSS	1	.279[b]	0.078	0.026	0.081			
a. Predictors: (Constant), Risk (Unsystematic), Annual Daily Downside S.D. Fund, Correlation, Annual Daily Variance Fund, Risk (Systematic)								
ANOVA								
Scheme' Type			Squares' Sum	Df	Square of Mean	F	Sig.	
Hybrid	1	Regression	0.165	5	0.033	25.706	.000[b]	
		Residual	0.12	93	0.001			
		Total	0.285	98				
ELSS	1	Regression	0.05	5	0.01	1.517	.192[c]	
		Residual	0.597	90	0.007			
		Total	0.647	95				
a. Jensen's Alpha as Dependent Variable								
b. Predictors: (Constant), Risk (Unsystematic), Annual Daily Downside S.D. Fund, Correlation, Annual Daily Variance Fund, Risk (Systematic)								
Coefficients								
Scheme' Type			Coefficients (Unstandardized)		Coefficients (Standardized)	t	Sig.	
			B	Std. Error	Beta			
Hybrid	1	(Constant)	0.018	0.044		0.406	0.686	
		Annual Daily Variance Fund	1.354	2.013	0.224	0.673	0.503	

		Annual Daily Downside S.D. Fund	-2.75	0.51	-1.219	-5.256	0
		Correlation	-0	0.05	-0.007	-0.047	0.963
		Risk (Systematic)	1.685	0.628	0.991	2.727	0.008
		Risk (Unsystematic)	0.958	0.61	0.5	1.572	0.119
ELSS	1	(Constant)	1.477	1.283		1.151	0.253
		Annual Daily Variance Fund	4.081	2.567	0.832	1.541	0.127
		Annual Daily Downside S.D. Fund	-2.13	1.047	-1.131	-2.032	0.045
		Correlation	-1.44	1.317	-0.488	-1.091	0.278
		Risk (Systematic)	0.639	0.51	0.378	1.252	0.214
		Risk (Unsystematic)	-7.77	8.926	-0.368	-0.871	0.386
a. Dependent Variable: Jensen's Alpha							

The impact of the risk criteria on Jensen Addition to the Alpha directly demonstrates the distinction between ELSS and hybrid funds. With an R2 of 0.580, F-value of 25.706, and p-value of 0.000, the model accounts for 58.0% of the variance in Jensen beta for hybrid funds. Reducing alpha is connected with higher downside risk, according to the substantial findings that show that increasing annualized daily downside standard deviation has considerably decreased Jensen Alpha (beta = -2.748, p = 0.000). In addition, Jensen Alpha is positively affected by Systematic

Risk (beta = 1.712, p = 0.008), suggesting that a company's market sensitivity increases as alpha increases. Less well fitted is the ELSS model, which accounts for a mere 7.8% of the Jensen Alpha variance (R2 = 0.078, F = 1.517, p = 0.192). Jensen Alpha is negatively affected by the cumulative negative average daily standard deviation for ELSS over a year (beta = -2.127, p = 0.045). This model's Jensen Alpha is unaffected by the Annual Daily Variance, Risk (Systematic), or Risk (Unsystematic). In both the traditional and hybrid models, downside risk always reduces Jensen's alpha. However, the hybrid model provides additional insight into this relationship, and other significant effects of systematic risk are also present.

Conclusion

To sum it up, the comprehensive investigation indicated that Hybrid funds and ELSS funds with the amounts of risk involved have different consequences towards certain performance measures. When comparing it with the annualized returns, due to ADV, ELSS funds are more influenced than the Hybrid funds which suggest they are more susceptible to downside risk. By Sharpe Ratio analysis, there is substantial downside risk in both kinds of funds, although it has a significantly different effect. Inspection of Treynor Ratio, focusing on explanatory performance with regard to downside risk and annual daily variance in particular, offers the observation that ELSS funds do a better job than their Hybrid counterparts. Finally, Jensen's Alpha analysis reveals that while both traditional and hybrid funds face a downside peril, the first goes further deep because of Risk (Systematic) since Jensen's Alpha is concerned with additional returns associated with residual risk which is risk that remains after diversification. ELSS funds in comparison with hybrid funds generate more return, more effective Annualized return, Jensen alpha and higher capture ratio. In other words, their beta and risk (systematic) are high, and the potential loss is higher capital losses. In comparison with all other alternatives to invest in, hybrid funds are riskier due to their associated risk, which is depicted by the lower downside and Unsystematic Risk. Therefore, those investors who are seeking uniform returns with lesser risks are looking at the wrong one; possibly they require making using such funds as they may be able to absorb more risk and earn more profits. According to the indications obtained investors should be wary of funds where there is a chance of risk, for they influence returns and costs differently.

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