



# PERFORMANCE EFFICIENCY AND BENCHMARK TRACKING OF LIQUID MUTUAL FUND SCHEMES IN INDIA: A DIRECT VS REGULAR PLAN COMPARISON

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## ABSTRACT

This study analyzes the relative performance of Direct and Regular plans of liquid mutual fund schemes in India and assesses their divergence from benchmark returns over various investment horizons. The study utilizes CRISIL Intelligence Fund Performance data from March 2026, employing descriptive statistics and paired sample *t*-tests to evaluate return differentials over short-term, medium-term, and long-term timeframes, spanning from 7 days to since launch. The results indicate that Direct plans continuously surpass Regular plans throughout all timeframes up to 10 years, with statistically significant differences ( $p < .001$ ). Nonetheless, the Since Launch comparison reveals no statistically significant change. Benchmark analysis reveals that Direct plans closely align with their benchmarks, exhibiting very slight variations over time. The findings validate the structural cost benefit of Direct plans and underscore their efficacy in producing enhanced returns without corresponding rises in volatility. This analysis enhances the literature on mutual fund performance by offering empirical information on plan-level return differentials across various horizons within the Indian liquid fund sector.

**KEY WORDS:** Direct Plans, Regular Plans, Liquid Mutual Funds, Benchmark Tracking, Paired Sample *t*-Test, Mutual Fund Performance.

## 1. INTRODUCTION

Mutual funds significantly facilitate the allocation of family savings into financial markets in India. The Securities and Exchange Board of India (SEBI) has implemented regulatory reforms that provide investors with two investing alternatives within the same scheme: Direct plans and Regular plans. Direct plans remove distributor commissions and provide reduced expense ratios, whilst Regular plans incorporate intermediate charges. This structural distinction prompts significant inquiries concerning return differentials and performance efficacy. This study examines whether Direct plans yield considerably higher returns than Regular plans and whether Direct plans accurately track their respective benchmarks across various investment horizons.

## 2. IMPORTANCE OF THE STUDY

The increasing involvement of ordinary investors in mutual funds requires informed decision-making concerning cost structures and performance efficiency. Despite the extensive promotion of Direct plans as economical alternatives, empirical evidence across various timeframes is still scarce, particularly in the liquid fund sector. Liquid funds are significant for their function in the short-term allocation of excess capital and treasury management. This study offers practical insights for investors, fund managers, politicians, and financial advisors through the analysis of horizon-wise performance and benchmark tracking. The results also enhance the wider discourse on cost efficiency and performance sustainability within the Indian mutual fund sector.

## 3. REVIEW OF LITERATURE

Studies on Indian liquid and money-market funds, as well as other short-duration mutual fund schemes, predominantly assess risk-adjusted performance and benchmark-relative behavior through metrics such as Sharpe ratio, Treynor ratio,



Jensen's alpha, volatility, and NAV-based return measures. Preliminary research about the money-market category indicates performance sensitivity to macroeconomic events, such as the US recession, while underscoring the significance of low-volatility structures characteristic of money-market funds (Goswami & Acharyya, 2017). Subsequent Indian studies evaluating liquid and debt schemes typically indicate modest returns accompanied by minimal standard deviation, implying that rankings frequently rely on minor variations in risk-adjusted ratios rather than significant disparities in returns (Bhatia, 2018; Bhalerao & Wagh, 2024). Evaluations of debt categories, including liquid, short-term income, and gilt funds, indicate that scheme-level outcomes significantly fluctuate based on interest-rate conditions and portfolio composition, underscoring the necessity of comparing performance against suitable short-term benchmarks and risk-free proxies (Thomas & Varughese, 2024). Data from ultra-short term debt funds indicates that the most effective schemes often yield marginally superior returns per unit of low volatility, rather than merely high standalone returns (Patel, 2020). Comparative analyses among larger fund families, including liquid funds from bank-sponsored asset management companies, emphasize that liquid schemes aim to preserve capital and align with short-term rates, resulting in conventional "alpha" being approximately zero, with the choice of benchmark significantly influencing conclusions (Koley, 2025).

A second stream analyzes efficiency, consistency, and tracking quality, focusing on the alignment of fund types and portfolios with specified mandates and benchmarks. Research centered on tracking passive products indicates that fund performance can be attributed to replication quality, costs, and rebalancing frictions; empirical analyses of Indian exchange-traded funds reveal significant tracking discrepancies relative to underlying indices (Alamelu & Goyal, 2023), whereas evaluations of index funds stress that tracking performance ought to be assessed via tracking error and return deviation, rather than solely by raw returns (Dhabolkar & Reddy, 2019). Comprehensive analytical methods also evaluate the congruence between declared fund "style" and actual holdings using time-series decomposition and portfolio composition assessments of Indian mutual funds, revealing predominantly consistent alignment with several significant discrepancies (Sen & Datta Chaudhuri, 2017). Efficiency studies utilizing Data Envelopment Analysis (DEA) regard mutual funds as decision-making units that transform inputs (risk, cost, turnover) into outputs (returns), typically indicating that efficiency differs among schemes and is partially elucidated by scale and management decisions (Chopra, 2020; Kaur, 2014). Supplementary performance assessment employing standard deviation, correlation with indices, and hypothesis testing reinforces the notion that the choice of benchmarks and segmentation of market cycles (boom–recession–recovery) can alter interpretations of relative performance (Patil & Prakash Rao, 2011; Samaddar, 2018).

Recent literature increasingly contrasts Direct and Regular plans by correlating outcome disparities with expense ratios and commissions, with the majority of studies concluding that lower-cost structures (Direct) generally produce better net-of-fee returns when the underlying portfolios are comparable. Empirical analyses of direct and regular equity plan variants in India often reveal statistically significant return differentials that favor direct plans over multi-year periods, attributable primarily to fee drag (Purohit & Belavadi, 2025). Evidence from Indian mutual fund return determinants indicates that expense-related factors and scheme attributes (including size and operational structure) correlate with performance, corroborating the theoretical premise that variations in costs should result in enduring net-return disparities (Barik & Viswanath, 2019; Keswani & Varghese, 2019). Research evaluating whether "extra returns" warrant the expenses associated with regular-plan distributions frequently determines that intermediary services do not consistently generate compensating alpha in net terms, especially in categories that are proximate to benchmarks (e.g., large-cap or low-volatility debt) (Kavitha & Raju, 2021; Riyazahmed et al., 2022). Analyses of loan schemes that explicitly incorporate plan labels (direct/regular) indicate that performance variability is mostly due to interest-rate exposure and risk; nevertheless, net results still depend on cost and plan structure (Nithya & Ravidran, 2022). Even when not just presented as a direct-versus-regular test, multi-scheme comparisons utilizing Sharpe, Treynor, and Jensen metrics demonstrate that plan structure and cost factors are pivotal for investors selecting among functionally analogous items (Mishra & Das Mohapatra, 2024; Samaddar, 2018).

#### 4. RESEARCH METHODOLOGY

This study employs a quantitative and empirical research design to analyze the performance disparity between Direct and Regular plans of liquid mutual fund schemes in India and to evaluate the divergence of Direct plan returns from benchmark returns. The analysis relies exclusively on secondary data gathered from the CRISIL Intelligence Fund Performance Report produced on 03 March 2026. The dataset comprises scheme-level return statistics for both Direct and Regular plans across various investment horizons: 7 Days, 15 Days, 1 Month, 3 Months, 6 Months, 1 Year, 3



Years, 5 Years, 10 Years, and Since Launch, along with the associated benchmark returns. The sample consists of liquid mutual fund schemes for which comprehensive paired return data were accessible, with the number of observations differing across time ranges due to variations in scheme inception dates. Data processing and statistical analysis were conducted with Microsoft Excel and SPSS.

Descriptive statistics, including mean, standard deviation, and standard error, were calculated to analyze performance distribution across horizons in order to fulfill the study's objectives. Paired sample t-tests were utilized to determine if the return discrepancies between Direct and Regular plans are statistically significant, given that both plan variations are derived from the same underlying portfolio but differ in their expense structures. Comparable paired tests were performed to evaluate the returns of the Direct plan against benchmark returns to determine tracking efficiency. The hypotheses were evaluated at a 5 percent significance threshold, and null hypotheses were dismissed when the p-value fell below 0.05. A paired sample correlation analysis was used to assess the relationship between Direct and Regular plan returns, hence enhancing the robustness of the comparative approach.

## 5. OBJECTIVES OF THE STUDY

1. To compare the returns of Direct and Regular plans across different investment horizons.
2. To examine whether the return differential between Direct and Regular plans is statistically significant.
3. To evaluate the extent of deviation between Direct plan returns and benchmark returns.
4. To assess the consistency of performance across short-term and long-term periods.

## 6. HYPOTHESES

### Hypothesis 1 (Direct vs Regular)

**H<sub>01</sub>:** There is no significant difference between the returns of Direct and Regular plans.

**H<sub>11</sub>:** There is a significant difference between the returns of Direct and Regular plans.

### Hypothesis 2 (Benchmark vs Direct)

**H<sub>02</sub>:** There is no significant difference between Direct plan returns and benchmark returns.

**H<sub>12</sub>:** There is a significant difference between Direct plan returns and benchmark returns.

## 7. STATISTICAL EXAMINATION OF RETURN DIFFERENCES BETWEEN DIRECT AND REGULAR PLANS OF LIQUID MUTUAL FUNDS

Table 1 displays the outcomes of the paired sample t-test that compares the performance differentials between Direct and Regular plans of liquid mutual fund schemes over various investment horizons. The data demonstrates that Direct plans consistently yield superior returns compared to Regular plans across nearly all timeframes. Over a 7-day period, the average difference between Direct and Regular returns is 0.1297, accompanied by a standard deviation of 0.0911. The difference is statistically significant,  $t(40) = 9.121$ ,  $p < .001$ , with a 95% confidence interval of 0.1010 to 0.1585, indicating that Direct plans greatly surpass Regular plans in the near run.

A comparable trend is noted over the 15-day horizon, with a mean return difference of 0.1297 (SD = 0.0912), and the finding is statistically significant,  $t(40) = 9.099$ ,  $p < .001$ . During the one-month period, the mean difference is 0.1294 (SD = 0.0916), with  $t(40) = 9.040$ ,  $p < .001$ , demonstrating the sustained short-term advantage of Direct plans. Within the three-month period, the mean difference marginally rises to 0.1330 (SD = 0.0916), and the outcome remains highly significant,  $t(39) = 9.179$ ,  $p < .001$ . For the 6-month horizon, the mean difference is 0.1325 (SD = 0.0927), with  $t(37) = 8.816$ ,  $p < .001$ .

The performance advantage is further accentuated over the one-year horizon, with the mean difference increasing to 0.1383 (SD = 0.0946). The test result,  $t(36) = 8.896$ ,  $p < .001$ , demonstrates substantial statistical significance, and the confidence interval (0.1068 to 0.1698) excludes zero, so corroborating the validity of this difference. For extended timeframes, the Direct plans consistently exhibit a statistically significant benefit. At the three-year mark, the mean difference is 0.1342 (SD = 0.0969), with  $t(34) = 8.195$ ,  $p < .001$ . Over a period of 5 years, the mean difference is 0.1311 (SD = 0.0983), with  $t(33) = 7.782$ ,  $p < .001$ . After a decade, despite a little reduction in magnitude to 0.1230 (SD = 0.1099), the finding continues to be statistically significant,  $t(27) = 5.925$ ,  $p < .001$ .



However, the trend alters when analyzing the "Since Launch" timeframe. The average difference for this horizon is 0.0606, accompanied by a very elevated standard deviation of 0.4424. The t-value is 0.856 with 38 degrees of freedom, indicating a lack of statistical significance ( $p = 0.397$ ). The 95% confidence interval spans from  $-0.0828$  to  $0.2040$ , encompassing zero, which signifies that the long-term cumulative return disparity between Direct and Regular plans is not statistically significant.

The findings offer robust empirical evidence that Direct plans substantially exceed Regular plans in performance throughout short-term, medium-term, and long-term periods extending up to 10 years. The persistent positive and statistically significant mean differences indicate that the cost benefits of Direct plans result in quantifiable performance improvements. Nonetheless, over extended periods shown by the Since Launch metric, return variability significantly escalates, diminishing statistical relevance. The findings substantiate the claim that reduced cost structures in Direct plans lead to enhanced risk-adjusted returns across various investment durations.

**Table 1: Paired Sample t-Test Results Comparing Return Differences Between Direct and Regular Plans Across Investment Horizons**

Pair	Horizon	Mean (Direct-Regular)	Std. Deviation	Std. Error Mean	95% CI Lower	95% CI Upper	t	df	Sig. (2-tailed)
Pair 1	7 Days	0.1297	0.0911	0.0142	0.101	0.1585	9.121	40	<.001
Pair 2	15 Days	0.1297	0.0912	0.0142	0.1009	0.1585	9.099	40	<.001
Pair 3	1 Month	0.1294	0.0916	0.0143	0.1004	0.1583	9.04	40	<.001
Pair 4	3 Month	0.133	0.0916	0.0145	0.1037	0.1623	9.179	39	<.001
Pair 5	6 Month	0.1325	0.0927	0.015	0.1021	0.163	8.816	37	<.001
Pair 6	1 Year	0.1383	0.0946	0.0155	0.1068	0.1698	8.896	36	<.001
Pair 7	3 Year	0.1342	0.0969	0.0164	0.1009	0.1675	8.195	34	<.001
Pair 8	5 Year	0.1311	0.0983	0.0168	0.0968	0.1654	7.782	33	<.001
Pair 9	10 Year	0.123	0.1099	0.0208	0.0804	0.1656	5.925	27	<.001
Pair 10	Since Launch	0.0606	0.4424	0.0708	-0.0828	0.204	0.856	38	0.397

Source: <https://www.amfiindia.com/otherdata/fund-performance>

## 8. COMPARATIVE ANALYSIS OF REGULAR AND DIRECT PLAN RETURNS ACROSS INVESTMENT HORIZONS

Table 2 displays the paired descriptive statistics that compare the returns of Regular and Direct plans over various investment horizons. The data consistently indicate that Direct plans yield better average returns than Regular plans across all time frames, while the extent of the difference fluctuates with the duration.

Over a 7-day period, the Regular plan exhibits a mean return of 5.6148 (SD = 0.2304), whereas the Direct plan demonstrates a superior mean return of 5.7445 (SD = 0.2126), derived from 41 observations. The reduced standard deviation in the Direct plan indicates marginally more steady short-term performance. A comparable trend is noted over the 15-day horizon, with the Regular plan exhibiting a mean of 5.6229 (SD = 0.1948), in contrast to 5.7525 (SD = 0.1788) for the Direct plan, further demonstrating a persistent return advantage for Direct plans.

Within the one-month timeframe, the Regular plan exhibits a mean return of 6.3839 (SD = 0.3118), whereas the Direct plan registers 6.5132 (SD = 0.3092). Despite exhibiting comparable volatility, the Direct plan possesses a little performance advantage. During the three-month period, the mean for the Regular plan is 5.8043 (SD = 0.1456), whereas the mean for the Direct plan is 5.9373 (SD = 0.1193). The diminished standard deviation in the Direct plan indicates both superior returns and decreased variability in medium-term performance.

The identical trend persists across extended timeframes. At six months, the Regular plan exhibits a mean return of 5.7641 (SD = 0.1397), whereas the Direct plan indicates a mean return of 5.8967 (SD = 0.1064). At the one-year horizon, the mean for the Regular plan is 6.2086 (SD = 0.1670), whereas the mean for the Direct plan is 6.3469 (SD = 0.1387). For the three-year horizon, the Regular plan registers 6.8240 (SD = 0.1556), whereas the Direct plan indicates 6.9582 (SD = 0.1269), demonstrating enhanced performance and comparatively reduced volatility.



Over the five-year period, the mean return for the Regular plan is 5.7891 (SD = 0.1407), while the Direct plan exhibits a mean return of 5.9203 (SD = 0.1125). At the 10-year horizon, the Regular plan indicates a value of 5.9943 (SD = 0.2390), in contrast to 6.1173 (SD = 0.2259) for the Direct plan, derived from 28 observations. Despite increased volatility over extended durations, the Direct plan consistently exhibits superior average returns.

In the Since Launch period, the Regular plan exhibits a mean return of 6.4893 with a standard deviation of 0.6782, while the Direct plan demonstrates a little higher mean of 6.5500 accompanied with a lower standard deviation of 0.4911. The increased variability in the Regular plan indicates a wider dispersion in long-term cumulative returns among schemes.

Table 2 unequivocally illustrates that Direct plans regularly surpass Regular plans throughout all investment durations, ranging from 7 Days to Since Launch. Moreover, Direct plans typically demonstrate comparable or reduced standard deviations, signifying that elevated returns are not attained at the expense of increased risk. These findings offer compelling descriptive evidence that underscores the structural cost benefit of Direct plans, likely due to the elimination of intermediary commission costs. The persistent return divergence across timeframes warrants additional statistical analysis to ascertain the statistical significance of these observed discrepancies.

**Table 2: Paired Sample t-Test Results Comparing Benchmark and Direct Plan Returns across Investment Horizons**

Pair	Variable	Horizon	Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Regular	7 Days	5.6148	41	0.2304	0.036
Pair 1	Direct	7 Days	5.7445	41	0.2126	0.0332
Pair 2	Regular	15 Days	5.6229	41	0.1948	0.0304
Pair 2	Direct	15 Days	5.7525	41	0.1788	0.0279
Pair 3	Regular	1 Month	6.3839	41	0.3118	0.0487
Pair 3	Direct	1 Month	6.5132	41	0.3092	0.0483
Pair 4	Regular	3 Month	5.8043	40	0.1456	0.023
Pair 4	Direct	3 Month	5.9373	40	0.1193	0.0189
Pair 5	Regular	6 Month	5.7641	38	0.1397	0.0227
Pair 5	Direct	6 Month	5.8967	38	0.1064	0.0173
Pair 6	Regular	1 Year	6.2086	37	0.167	0.0275
Pair 6	Direct	1 Year	6.3469	37	0.1387	0.0228
Pair 7	Regular	3 Year	6.824	35	0.1556	0.0263
Pair 7	Direct	3 Year	6.9582	35	0.1269	0.0214
Pair 8	Regular	5 Year	5.7891	34	0.1407	0.0241
Pair 8	Direct	5 Year	5.9203	34	0.1125	0.0193
Pair 9	Regular	10 Year	5.9943	28	0.239	0.0452
Pair 9	Direct	10 Year	6.1173	28	0.2259	0.0427
Pair 10	Regular	Since Launch	6.4893	39	0.6782	0.1086
Pair 10	Direct	Since Launch	6.55	39	0.4911	0.0786

Source: <https://www.amfiindia.com/otherdata/fund-performance>

## 9. STATISTICAL COMPARISON OF DIRECT PLAN RETURNS WITH BENCHMARK PERFORMANCE

Table 3 illustrates the paired descriptive statistics that compare Direct plan returns with their corresponding benchmark returns over various investment horizons. The findings demonstrate that the relative performance of Direct plans in comparison to benchmarks fluctuates over different time frames, exhibiting little overperformance in certain intervals and slight underperformance in others.

Over a 7-day period, the Direct plan exhibits a mean return of 5.7485 (SD = 0.2116), but the benchmark demonstrates a marginally superior mean of 5.8005 (SD = 0.2425), derived from 42 observations. While the benchmark somewhat surpasses the Direct plan in the short run, the standard deviations of both series indicate similar variability. A same



trend is noted for the 1 Month horizon, wherein the Direct plan exhibits a mean of 6.5180 (SD = 0.3070), in contrast to 6.5644 (SD = 0.1487) for the benchmark, signifying a minor negative divergence from benchmark performance.

Nonetheless, over various medium-term horizons, the Direct plan exhibits marginal outperformance. Over a 15-day period, the Direct plan demonstrates a mean return of 5.7574 (SD = 0.1794), surpassing the benchmark norm of 5.7160 (SD = 0.0757). During the three-month period, the mean for the Direct plan is 5.9400 (SD = 0.1191), but the benchmark is 5.8626 (SD = 0.0248). At the 6-month horizon, the Direct plan achieves a return of 5.8988 (SD = 0.1058), surpassing the benchmark mean of 5.8208 (SD = 0.0216). These findings indicate moderate excess returns over medium-term periods.

At the one-year horizon, the Direct plan exhibits a mean return of 6.3469 (SD = 0.1387), surpassing the benchmark value of 6.2478 (SD = 0.0496). During the three-year period, the mean of the Direct plan is 6.9582 (SD = 0.1269), which is marginally higher than the benchmark mean of 6.9232 (SD = 0.0415), suggesting small long-term outperformance. At the 5-year horizon, the benchmark marginally surpasses the Direct plan, with means of 5.9420 and 5.9203, respectively, although the disparity is minimal.

Over a 10-year horizon, the Direct plan has a mean of 6.1028 (SD = 0.2351), slightly above the benchmark mean of 6.0853 (SD = 0.0018). Conversely, over the Since Launch period, the benchmark mean of 6.6224 (SD = 0.4862) surpasses the Direct plan mean of 6.5275 (SD = 0.5050), indicating marginal cumulative underperformance over the extended duration.

The comparative statistics demonstrate that Direct plans closely align with their benchmarks across all investment horizons, with just slight variances. Although short-term performance may occasionally underperform the benchmark, medium-term and certain long-term periods exhibit modest excess returns. The minor variations in average returns over time horizons indicate effective benchmark monitoring by Direct plans, aligning with the attributes of low-cost mutual fund frameworks. These findings necessitate additional paired t-test analysis to ascertain if the observed variations from benchmark performance are statistically significant.

**Table 3: Paired Sample t-Test Results Comparing Benchmark and Direct Plan Returns across Investment Horizons**

Pair	Variable	Horizon	Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Direct	7 Days	5.7485	42	0.2116	0.0326
Pair 1	Benchmark	7 Days	5.8005	42	0.2425	0.0374
Pair 2	Direct	15 Days	5.7574	42	0.1794	0.0277
Pair 2	Benchmark	15 Days	5.716	42	0.0757	0.0117
Pair 3	Direct	1 Month	6.518	42	0.307	0.0474
Pair 3	Benchmark	1 Month	6.5644	42	0.1487	0.0229
Pair 4	Direct	3 Month	5.94	41	0.1191	0.0186
Pair 4	Benchmark	3 Month	5.8626	41	0.0248	0.0039
Pair 5	Direct	6 Month	5.8988	39	0.1058	0.0169
Pair 5	Benchmark	6 Month	5.8208	39	0.0216	0.0035
Pair 6	Direct	1 Year	6.3469	37	0.1387	0.0228
Pair 6	Benchmark	1 Year	6.2478	37	0.0496	0.0081
Pair 7	Direct	3 Year	6.9582	35	0.1269	0.0214
Pair 7	Benchmark	3 Year	6.9232	35	0.0415	0.007
Pair 8	Direct	5 Year	5.9203	34	0.1125	0.0193
Pair 8	Benchmark	5 Year	5.942	34	0.0099	0.0017
Pair 9	Direct	10 Year	6.1028	29	0.2351	0.0437
Pair 9	Benchmark	10 Year	6.0853	29	0.0018	0.0003
Pair 10	Direct	Since Launch	6.5275	36	0.505	0.0842
Pair 10	Benchmark	Since Launch	6.6224	36	0.4862	0.081

Source: <https://www.amfiindia.com/otherdata/fund-performance>



## 10. FINDINGS

The results of the paired sample t-test demonstrate that Direct plans considerably surpass Regular plans across all timeframes from 7 Days to 10 Years ( $p < .001$ ). The most significant return discrepancy occurs in the 1-Year horizon (Mean difference = 0.1383). The advantage stays statistically significant over extended periods, including 5 and 10 years. Nonetheless, the Since Launch comparison reveals no statistical significance ( $p = 0.397$ ), suggesting convergence over extended periods.

Benchmark comparison results indicate that Direct plans closely align with their benchmarks throughout the majority of timeframes. Although minor underperformance is evident in short-term intervals like 7 Days and 1 Month, significant outperformance is recorded in longer durations such as 3 Months, 6 Months, and 1 Year. The discrepancies are rather minor, signifying effective tracking behavior.

## 11. SUGGESTIONS

Investors aiming for cost efficiency should favor Direct plans, especially for short- and medium-term investment periods where statistically significant return benefits are apparent. Financial advisors must to elevate investor understanding concerning the influence of expenditure ratios on long-term asset growth. Investment firms must uphold transparency over fee structures and performance tracking. Regulators may promote more clarity in disclosures to facilitate improved comparability among plan types. Moreover, investors want to evaluate performance consistency and volatility in conjunction with return differentials prior to making allocation decisions.

## 12. CONCLUSION

The paper offers robust empirical evidence that Direct plans yield substantially higher returns than Regular plans over the majority of investment horizons within the liquid mutual fund sector. The persistent positive return difference underscores the economic importance of reduced expense structures. Moreover, Direct plans exhibit effective benchmark tracking with negligible variance, underscoring their structural efficiency. Despite the lack of statistical significance in the Since Launch comparison, the overall data affirm the superiority of Direct plans regarding return performance. The study highlights the significance of cost awareness in mutual fund investments and adds to the expanding literature on plan-level performance differentiation within the Indian mutual fund sector.

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