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Performance of Select Money Market Mutual Funds in India

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Abstract

The mutual fund industry in India are classified into various sub categories according to their objectives such as equity fund, debt fund, balanced fund, money market fund, guilt fund, funds of fund etc. The present paper focuses exclusively on some select money market mutual funds in India and an effort is made to indentify how far the financial performance of these select funds is affected by the US recession.

Key Words: Financial performance; Mutual fund; NAV; Risk-Return.

Introduction

The objective of mutual funds is to stabilize the market and manage large inflows and outflows of the foreign investment. Thus mutual fund acts as a participant in the capital market of any economy. In particular, Money market mutual funds (MMMF) generate the investments of the retail investors in money market. Money market mutual funds surfaced out in 1970 as a vehicle for retail investors to arbitrage between the low bank deposits rate and high money markets rate. Money market mutual funds which opened a new short term asset to retail investors, originated in the US in 1971. Reduction of price in equity market together with rising interest rates made money market mutual funds very popular in early 70's.

According to RBI (Reserve Bank of India) regulation in 1996 money market mutual fund is defined as 'a scheme of mutual fund which has been set up with the objective of investing exclusively on money market instrument'. So these types of mutual funds invest in money market instruments such as Treasury bill, certificate of deposits, commercial papers, bill discounting etc. These instruments are maintained through specified guidelines of RBI. Retail investors earn relatively higher yields offered by the money market by investing in money market mutual funds. In India in April 1991, a broad framework was drawn by RBI to set up money market mutual fund with the objective of "providing an additional short term avenue to investors and to bring money market instruments within the reach of individuals". Finally in April 1992, detailed scheme for money market mutual funds was introduced based on the recommendation of RBI. In 1992, RBI acknowledges only banks, financial institution and their subsidiaries to prepare money market mutual funds. Private sector got the right to prepare money market mutual funds in 1995. In March 2000, all money market mutual funds came under the regulatory supervision of SEBI and were controlled by SEBI regulation in 1996. Return on these fund schemes do not fluctuate very much compared to other funds. These funds are suitable for corporate and individual investors as a means of bringing their surplus funds for short periods.

The starting point of the recession was on the subprime segment of the US housing market. The widely known truth is that when the US economy faced recession these also reflected in the rest of the world. The crises arrive as a surprise to the policy makers, multilateral agencies, academics and investors due to its complex roots. The historical perspective in this period leads to financial crisis. It affects at first in banks and companies and then economics across the world. Briefly subprime crisis is an injection to the world economy. Indian capital market is also badly affected by this crisis. The article examines the relation between money market mutual fund performance in the pre and post recession period.

Literature Review

The variety has been picked up relating to mutual fund performance in Indian context including those by Madhu S. Panigrahi (1996), S. Manjesh Roy (2005), Sathya Swaroop Debasish (2009), Sarika Keswani (2011), Vikas Kumar (2011), Bhaskar Goswami and Sharmistha Acharyya (2012) and Bhaskar Goswami (2012). Madhu S. Panigrahi (1996) analyses the reason behind the attractiveness of mutual funds in last few years and attributed it to its fastest growth, good performance, skilled manpower and its quicker spreadness to the relatively wider area than equity in the recent year. Sathya Swaroop debasish (2009) analyses the performance based on mean return, beta, Sharpe ratio, Treynor ratio, Jenson's alpha of 23 equity mutual funds offered by six private sectors and three public sectors companies. Sarika Keswani (2011) empirically examined the effect of fund size on the performance of open ended balanced mutual funds in India. Vikas Kumar (2011) studied the performance of 20 open ended schemes

which are launched by five private mutual fund companies. Bhaskar Goswami (2012) presented the financial performance of selected schemes of mutual funds in India. In contrast to the existing literature, our objective here is to build on such a result to provide some additional pertinent evidence.

Data and Methodology

The annually adjusted net asset value (NAV) of 78 schemes of top 10 money market mutual funds namely Birla Sun Life, DSP BR, HDFC, ICICI, LIC, Reliance, SBI, TATA, Franklin Temptation and UTI are collected from the period 2005 – 2011. The year 2008 is considered to be structural break related to recession in the US. BSE Sensex is taken as market index and 10 years Treasury Gold Bond rate (0.095) is considered as risk free rate of return. The source of data is capitaline database.

The methodologies of this study are as follows -

Return

The return of individual mutual fund scheme (Rpt) at time t is expressed as -

$$R_{pt} = \frac{NAV_{t} - NAV_{t-1}}{NAV_{t-1}}...(1)$$

Here NAV_t and NAV_{t-1} are the net asset value for the time period t and t-1 respectively. The mean return (R_p^*) for two sub period (2005- 2007 and 2009-2011) is calculated by the following formula -

$$R_p^* = \frac{1}{n} \sum_{i=1}^n R_{pt}...(2)$$

Here R_{pt} is the return of mutual fund scheme at time t and n is the length of the study period.

Risk

Standard deviation is taken as a measure of the fluctuation of average expected return over a certain period. Larger the value of standard deviation, the greater is the fluctuation in expected return. It is given by –

$$\sigma_p = \sqrt{\frac{1}{n-1}(R_{pt} - R_p^*)^2}...(3)$$

where $R_p = Return$ on fund portfolio

 $R_p = Average return on fund portfolio$

The mean return and risk or fluctuation of mean return of market index or BSE sensex is also calculated by the above statistical tools.

Regression Model

To analyse the effect of recession on these selected mutual funds the following regression model is used –

$$R_{jt} - R_{ft} = \beta_j (R_{mt} - R_{ft}) + \Delta \alpha_j D_t + \Delta \beta_j S_t + U_{jt} ...(4)$$

j=1,2...78

 D_t is the binary dummy variable (0 for 2005 - 2007 and 1 for 2009 - 2011)

$$S_t = D_t * (R_{mt} - R_{ft})$$

R_{it,} R_{mt,} R_{ft} are the return on mutual fund j, market return and Treasury gold bond rate respectively.

 $\Delta \alpha_j$ estimates the difference in mean return between 2 sub-periods.

 $\Delta \beta_j$ measures the change in risk between 2 sub-periods.

Here each fund scheme mean return is regressed on market return

Observations and Results

Table No. 1 gives a recapitulation of the mean return and risk characteristics of 78 schemes of 10 mutual fund companies namely Birla Sun life, HDFC, ICICI prudential, DSP BR,LIC, Reliance, SBI, TATA, Franklin Templeton and UTI for the two sub periods. Here the years 2005-2007 is considered as pre crisis period & 2009-2011 as post crisis period. It is noted from the table that mean returns of money market mutual fund schemes are higher in the pre recession period and declines significantly in the post recession period. HDFC Cash Management Call (Div-D) fund have experienced highest decline of mean return from 6% to -4.9% followed by HDFC liquid fund premium plus (Div-W) 6.7% to -4.1%, ICICI prudential liquid retail (Div-M) 6.5% to -0.2%, TATA liquid fund plan A(Div-W) 6.1% to 1.2%, ICICI prudential liquid plan regular (Div-Q)8.7% to 5.7%. Out of 78 mutual fund schemes only 9 schemes have greater return in the post recession period. They are LIC NOMURA MF liquid fund (Div-D), Reliance liquid fund treasury plan (Div-D), Reliance liquid fund treasury retail (Div-D), Reliance liquid fund treasury retail (Div-D), Reliance liquid fund treasury retail (Div-D), Templeton India cash management account (Div-D), Templeton India TMA inst (Div-D) and UTI Liquid

cash plan inst (Div-M). The mean return of the market also falls from 44% to 24% in the post crisis period. The volatility of fund return increases in the post recession period. The highest volatility is shown by ICICI prudential liquid retail (Div-M) from 0.014 to 0.11 followed by UTI cash plan inst (Div-W) 0.0053 to 0.0210, SBI premier liquid fund inst (Div- D) 0.0034 to 0.0215, Reliance liquid fund Cash plan (Div- W) 0.0075 to 0.0317.Only one scheme namely Templeton India cash management account (Div-D) have experienced decrease in risk in the post recession period. The volatility of market return also increases from 2% to 52% in the post crisis period.

The result of time series regression of the selected money market mutual fund schemes are shown in Table No. 2. In case of Birla Sun life mutual fund schemes, returns are negatively co-related and significant with market return except Birla Sun Life cash plus (Div-D). The co-efficient of Dt is negative and significant at 10% or 5% level which implies that return of these schemes decreases in the post crisis situation. The value of R^2 lies between 0.33 to 0.44. The return of DSP BR mutual fund schemes and the return of market are negatively related at 1% level of significance. These schemes' return significantly fell and with a rise in risk in the post recession. The return of HDFC mutual fund schemes fall (by 2% or 3%) significantly after recession period. In case of ICICI mutual funds the co-efficient of Dt is negative and significant at 5% level except ICICI prudential plan regular (Div-Q). ICICI prudential liquid return (Div-M) experienced highest fall in return by 6% in the post recession period which support the value in Table No.1. Reliance liquid fund treasury plan (Div-D), Reliance liquid fund treasury plan (G), Reliance liquid fund treasury retail (Div-D), Reliance liquid fund treasury retail (Div-W), Reliance liquid fund treasury retail (G), SBI magnum instacash liquid floater plan (D) and UTI Liquid cash plan inst (Div-M) have lower return in post crisis period because for these schemes co-efficient of Dt is negative and significant which contradict with that of the result obtained Table No. 1. It is seen from Table No. 1 that all these schemes have experienced an increase in their return in the post crisis period. The co-efficient of St is positive and significant in case of Templeton India cash management account (Div-D) that is volatility of fund return increases after recession period but Table No.1 shows that volatility of this schemes decreases from 0.0386 to 0.0163.

Conclusion

This paper is an attempt to explore the impact of US recession on the performance of mutual funds. The selected money market mutual funds have faced a fall in mean return in the post recession period except LIC NOMURA MF liquid fund (Div-D), Reliance liquid fund treasury plan (Div-D), Reliance liquid fund treasury retail (G), SBI magnum instacash liquid floater plan (D), Templeton India cash management account (Div-D), Templeton India TMA inst (Div-D) and UTI Liquid cash plan inst (Div-M). These 9 schemes have experienced increase in mean return in the post recession period. But from regression analysis we get the opposite result. From regression analyses we get that for have each and every scheme's excess return decline but the co-efficient of volatility are more or less insignificant. The co-efficient of volatility of return is positive and significant in case of Templeton India cash management account (Div-D) that is volatility of fund return increases after recession period but table 1shows that volatility of this schemes decreases from .0386 to .0163. ICICI prudential liquid return (Div-M) experienced highest fall in return by 6% in the post recession period which support the risk return analysis. So the paper underscore that there is some spill over effect of US recession on the financial performance of selected money market mutual funds.

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Annexure

TABLES
Table no.1: Mean return and Risk Characteristics of selected mutual fund scheme

Table no.1: Mean return and Risk C				
	Mean Return (2005- 07)	Mean Return (2009-11)	S. D (2005-07)	S. D (2009-11)
Birla Sun Life Cash Plus - (Div- D)	0.0706	0.0686	0.0128	0.0179
Birla Sun Life Cash Plus - (Div- W)	0.0719	0.0648	0.0094	0.0162
Birla Sun Life Cash Plus - (G)	0.0687	0.0667	0.0135	0.0203
Birla Sun Life Cash Plus - Inst	0.0671	0.0634	0.0120	0.0196
(Div-D)	0.0071	0.0054	0.0120	0.0170
Birla Sun Life Cash Plus - Inst (Div-W)	0.0666	0.0623	0.0134	0.0200
Birla Sun Life Cash Plus - Inst (G)	0.0665	0.0624	0.0134	0.0204
Birla Sun Life Cash Plus - Retail (Div-D)	0.0652	0.0590	0.0124	0.0219
Birla Sun Life Cash Plus - Retail (G)	0.0654	0.0592	0.0134	0.0215
DSP BR Liquidity Fund (D)	0.0622	0.0605	0.0069	0.0240
DSP BR Liquidity Fund (Div-D)	0.0628	0.0589	0.0019	0.0255
DSP BR Liquidity Fund (G)	0.0625	0.0602	0.0070	0.0241
HDFC Cash Mgmt - Call (Div-D)	0.0606	0.0499	0.0164	0.0214
HDFC Cash Mgmt - Call (G)	0.0621	0.0518	0.0152	0.0208
HDFC Cash Mgmt - Savings (Div-D)	0.0688	0.0650	0.0125	0.0189
HDFC Cash Mgmt - Savings (Div-W)	0.0677	0.0659	0.0143	0.0198
HDFC Cash Mgmt - Savings (G)	0.0676	0.0658	0.0140	0.0193
HDFC Liquid Fund (Div-W)	0.0668	0.0636	0.0125	0.0198
HDFC Liquid Fund (G)	0.0663	0.0643	0.0140	0.0209
HDFC Liquid Fund - Premium (G)	0.0677	0.0661	0.0141	0.0196
HDFC Liquid Fund - Premium Plus (Div-W)	0.0677	-0.0414	0.0135	0.0977
HDFC Liquid Fund - Premium Plus (G)	0.0678	0.0662	0.0140	0.0199
ICICI Pru Liquid - Inst (Div-D)	0.0699	0.0592	0.0106	0.0199
ICICI Pru Liquid - Inst (Div-W)	0.0673	0.0606	0.0141	0.0197
ICICI Pru Liquid - Inst (G)	0.0676	0.0608	0.0138	0.0193
ICICI Pru Liquid - Inst Plus (Div-D)	0.0699	0.0600	0.0094	0.0224
ICICI Pru Liquid - Inst Plus (Div-W)	0.0685	0.0622	0.0140	0.0203
ICICI Pru Liquid - Inst Plus (G)	0.0684	0.0622	0.0140	0.0205
ICICI Pru Liquid - Retail (Div-D)	0.0644	0.0576	0.0145	0.0183
ICICI Pru Liquid - Retail (Div- M)	0.0650	-0.0021	0.0144	0.1163
ICICI Pru Liquid - Retail (Div- W)	0.0650	0.0597	0.0143	0.0176
ICICI Pru Liquid - Retail (G)	0.0650	0.0581	0.0143	0.0200
ICICI Pru Liquid Plan - Regular (Div-Q)	0.0870	0.0572	0.0509	0.0182
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ICICI Pru Money Market Fund - Retail (G)	0.0627	0.0484	0.0200	0.0224
LIC NOMURA MF Liquid Fund (Div-D)	0.0657	0.0658	0.0145	0.0163
LIC NOMURA MF Liquid Fund - (G)	0.0692	0.0655	0.0117	0.0163
Reliance Liquid Fund - Cash Plan (Div-D)	0.0538	0.0537	0.0098	0.0322
Reliance Liquid Fund - Cash Plan (Div-W)	0.0548	0.0522	0.0075	0.0317
Reliance Liquid Fund - Cash Plan (G)	0.0552	0.0530	0.0077	0.0334
Reliance Liquid Fund - Treasury Plan (Div-D)	0.0674	0.0675	0.0108	0.0196
Reliance Liquid Fund - Treasury Plan (Div-W)	0.0649	0.0644	0.0133	0.0219
Reliance Liquid Fund - Treasury Plan (G)	0.0656	0.0657	0.0128	0.0206
Reliance Liquid Fund - Treasury Retail (Div-D)	0.0613	0.0648	0.0144	0.0199
Reliance Liquid Fund - Treasury Retail (Div-W)	0.0621	0.0635	0.0131	0.0201
Reliance Liquid Fund - Treasury Retail (G)	0.0623	0.0634	0.0127	0.0201
SBI Magnum Instacash - (Div-W)	0.0641	0.0626	0.0127	0.0222
SBI Magnum InstaCash - Cash Plan	0.0647	0.0633	0.0117	0.0210
SBI Magnum Instacash - Liquid Floater Plan (D)	0.0646	0.0661	0.0160	0.0204
SBI Magnum InstaCash - Liquid Floater Plan (G)	0.0665	0.0659	0.0132	0.0201
SBI Premier Liquid Fund - Inst (Div-D)	0.0681	0.0633	0.0034	0.0215
SBI Premier Liquid Fund - Inst (Div-W)	0.0648	0.0639	0.0095	0.0221
SBI Premier Liquid Fund - Inst (G)	0.0653	0.0639	0.0097	0.0220
Tata Liquid Fund - Plan A (Div- D)	0.0726	0.0674	0.0110	0.0190
Tata Liquid Fund - Plan A (Div- W)	0.0674	0.0124	0.0131	0.0700
Tata Liquid Fund - Plan A (G)	0.0685	0.0656	0.0130	0.0211
Tata Liquid High Invest Plan - (AO)	0.0665	0.0621	0.0137	0.0207
Tata Liquid High Invest Plan - (Div-D)	0.0687	0.0634	0.0131	0.0211
Tata Liquid High Invest Plan - (Div-M)	0.0642	0.0628	0.0175	0.0206
Tata Liquid High Invest Plan - (Div-W)	0.0666	0.0622	0.0137	0.0207
Tata Liquid Retail Invest Plan - (Div-D)	0.0678	0.0620	0.0138	0.0222
Tata Liquid Retail Invest Plan - (Div-Frnt)	0.0651	0.0588	0.0141	0.0220
Tata Liquid Retail Invest Plan - (G)	0.0653	0.0607	0.0138	0.0201

Templeton India Cash Management Account (G)	0.0557	0.0453	0.0115	0.0190
Templeton India Cash Management Account - (Div-D)	0.0233	0.0483	0.0386	0.0163
Templeton India TMA - Inst (Div-D)	0.0659	0.0705	0.0130	0.0232
Templeton India TMA - Inst (Div-W)	0.0661	0.0640	0.0137	0.0200
Templeton India TMA - Inst (G)	0.0660	0.0638	0.0136	0.0199
Templeton India TMA - Reg (Div-D)	0.0627	0.0621	0.0135	0.0193
Templeton India TMA - Reg (Div-W)	0.0634	0.0620	0.0135	0.0212
Templeton India TMA - Reg (G)	0.0635	0.0612	0.0132	0.0199
UTI-Liquid - Cash Plan (Div-D)	0.0645	0.0606	0.0118	0.0202
UTI-Liquid - Cash Plan (Div-M)	0.0664	0.0573	0.0089	0.0187
UTI-Liquid - Cash Plan (G)	0.0650	0.0609	0.0104	0.0197
UTI-Liquid - Cash Plan - Inst (Div-D)	0.0675	0.0673	0.0139	0.0196
UTI-Liquid - Cash Plan - Inst (Div-M)	0.0611	0.0763	0.0050	0.0194
UTI-Liquid - Cash Plan - Inst (Div-W)	0.0705	0.0651	0.0053	0.0210
UTI-Liquid - Cash Plan - Inst (G)	0.0674	0.0657	0.0112	0.0204
UTI-Money Market Fund (Div- W)	0.0652	0.0630	0.0114	0.0187
UTI-Money Market Fund (G)	0.0662	0.0626	0.0119	0.0193
MARKET INDEX	0.4495	0.24	0.0272	0.5268

S.D: Standard Deviation

Table No. 2: Regression Result

	MARKET RETURN	$\mathbf{D_t}$	$\mathbf{S_t}$	\mathbb{R}^2
Birla Sun Life Cash Plus - (Div-	-0.066982***	-0.022681***	0.041257	.30
D)	(-2.735365)	(-2.470948)	(1.299071)	.30
Birla Sun Life Cash Plus - (Div-	-0.063895**	-0.026670**	0.039619	.44
W)	(-3.298394)	(-3.672859)	(1.576922)	.44
	-0.072209**	-0.023788***	0.041275	.36
Birla Sun Life Cash Plus - (G)	(-2.788573)	(-2.450760)	(1.228991)	.30
Birla Sun Life Cash Plus - Inst	-0.076993**	-0.027193**	0.046896	.39
(Div-D)	(-3.206166)	(-3.020965)	(1.505738)	.39
Birla Sun Life Cash Plus - Inst	-0.078005**	-0.028488**	0.048654	.33
(Div-W)	(-2.956029)	(-2.880031)	(1.421604)	.55
Birla Sun Life Cash Plus - Inst	-0.078290**	-0.028255**	0.048369	.33
(G)	(-2.938344)	(-2.829056)	(1.399718)	.33
Birla Sun Life Cash Plus - Retail	-0.082216**	-0.031095**	0.048130	4.4
(Div-D)	(-3.244447)	(-3.273600)	(1.464452)	.44
Birla Sun Life Cash Plus - Retail	-0.081337**	-0.030985**	0.048316	.40
(G)	(-3.079057)	(-3.129215)	(1.410255)	.40
	-0.091109*	-0.028438**	0.048990***	.72
DSP BR Liquidity Fund (D)	(-5.247332)	(-4.369522)	(2.175494)	.12
	-0.090265*	-0.029526*	0.044930***	.86
DSP BR Liquidity Fund (Div-D)	(-7.082628)	(-6.180706)	(2.718253)	.86
	-0.090442*	-0.028654*	0.048026	.72
DSP BR Liquidity Fund (G)	(-5.185619)	(-4.382873)	(2.123143)	.72
HDFC Cash Mgmt - Call (Div-D)	-0.094460**	-0.039528**	0.056001	.50

]	(-3.540467)	(-3.952442)	(1.618375)	
		, ,	, , ,	
	-0.090477**	-0.037707**	0.052594	.53
HDFC Cash Mgmt - Call (G)	(-3.672514)	(-4.083192)	(1.646026)	.55
HDFC Cash Mgmt - Savings	-0.072448**	-0.025961**	0.044878	.35
(Div-D)	(-2.971287)	(-2.840495)	(1.419148)	.55
HDFC Cash Mgmt - Savings	-0.074910**	-0.024715***	0.044985	.32
(Div-W)	(-2.813592)	(-2.476539)	(1.302749)	.32
	-0.075193**	-0.024991***	0.046419	.30
HDFC Cash Mgmt - Savings (G)	(-2.851059)	(-2.527942)	(1.357069)	.50
	-0.077609**	-0.027055**	0.047824	.36
HDFC Liquid Fund (Div-W)	(-3.118818)	(-2.900479)	(1.481810)	.50
	-0.078800**	-0.026187***	0.047705	.33
HDFC Liquid Fund (G)	(-2.895027)	(-2.566588)	(1.351334)	.55
HDFC Liquid Fund - Premium	-0.075051**	-0.024646***	0.045758	.31
(G)	(-2.829934)	(-2.479238)	(1.330340)	.31
HDFC Liquid Fund - Premium	-0.074994	-0.110430*	-0.103889	05
Plus (Div-W)	(-1.890676)	(-7.427324)	(-2.019470)	.95
HDFC Liquid Fund - Premium	-0.074675**	-0.024520***	0.044961	
Plus (G)	(-2.808599)	(-2.460259)	(1.303829)	.32
1100 (3)	-0.069232**	-0.030857**	0.035051	_
ICICI Pru Liquid - Inst (Div-D)	(-3.518763)	(-4.183991)	(1.373594)	.63
	-0.076051**	-0.029774**	0.044344	
ICICI Pru Liquid - Inst (Div-W)	(-2.997918)	(-3.131149)	(1.347792)	.41
10101114 214444 1110 (211 11)	-0.075397**	-0.029778**	0.045122	
ICICI Pru Liquid - Inst (G)	(-2.981617)	(-3.141544)	(1.375795)	.39
ICICI Pru Liquid - Inst Plus	-0.069538**	-0.029421**	0.031100	
(Div-D)	(-3.581409)	(-4.042373)	(1.234989)	.67
ICICI Pru Liquid - Inst Plus	-0.072736**	-0.028182**	0.040743	
(Div-W)	(-2.822745)	(-2.917796)	(1.219140)	.40
(==:)	-0.073141**	-0.028202**	0.041230	40
ICICI Pru Liquid - Inst Plus (G)	(-2.809778)	(-2.890335)	(1.221231)	.40
ICICI Pru Liquid - Retail (Div-	-0.084203**	-0.033314**	0.056335	22
D)	(-3.192885)	(-3.370081)	(1.647064)	.32
ICICI Pru Liquid - Retail (Div-	-0.082497	-0.066201**	-0.130482	0.5
M)	(-1.788201)	(-3.828229)	(-2.180740)	.92
ICICI Pru Liquid - Retail (Div-	-0.082513**	-0.031814**	0.058421	
W)	(-3.057839)	(-3.145292)	(1.669319)	.22
,	-0.082527**	-0.032353**	0.051328	20
ICICI Pru Liquid - Retail (G)	(-3.126163)	(-3.269479)	(1.499147)	.38
ICICI Pru Liquid Plan - Regular	-0.016600	-0.033732	-0.011788	
(Div-Q)	(-0.238815)	(-1.294659)	(-0.130760)	.23
` •	-0.088092***	-0.041182**	0.050552	
ICICI Pru Money Market Fund -	(-2.691792)	(-3.357155)	(1.191009)	.42
Retail (G)			, ,	
LIC NOMURA MF Liquid Fund	-0.080418**	-0.025852***	0.057582	.16
(Div-D)	(-3.036697)	(-2.604329) -0.026376**	(1.676526)	
LIC NOMURA MF Liquid Fund	-0.070948**		0.049067	.23
- (G)	(-3.013368)	(-2.988596)	(1.606851)	
Reliance Liquid Fund - Cash	-0.114394*	-0.032950**	0.056967	.74
Plan (Div-D)	(-5.103803)	(-3.921874)	(1.959676)	
Reliance Liquid Fund - Cash	-0.111787*	-0.034488*	0.054456***	.81
Plan (Div-W)	(-5.931282)	(-4.881821)	(2.227806)	.01
Reliance Liquid Fund - Cash	-0.110718*	-0.033340**	0.050674	90
Plan (G)	(-5.491354)	(-4.411402)	(1.937865)	.80
Reliance Liquid Fund - Treasury	-0.076350**	-0.023361***	0.047669	27
Plan (Div-D)	(-3.253204)	(-2.655530)	(1.566096)	.37
, , ,	-0.082776**	-0.025540***	0.048176	
Reliance Liquid Fund - Treasury	(-3.181556)	(-2.618874)	(1.427699)	.41
Plan (Div-W)	(-3.101330)	(-2.0100/4)	(1.44/077)	

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Reliance Liquid Fund - Treasury	-0.081195**	-0.024948***	0.051068	.33
Plan (G)	(-3.093236)	(-2.535524)	(1.500050)	.55
Reliance Liquid Fund - Treasury	-0.092878**	-0.026189***	0.065355	.23
Retail (Div-D)	(-3.226247)	(-2.426957)	(1.750402)	.23
Reliance Liquid Fund - Treasury	-0.090720**	-0.027305***	0.062048	
Retail (Div-W)	(-3.377405)	(-2.711919)	(1.781075)	.29
` '	-0.090313**	-0.027486***	0.061728	
Reliance Liquid Fund - Treasury	(-3.401429)	(-2.761637)	(1.792535)	.29
Retail (G) SBI Magnum Instacash - (Div-	-0.085148**	-0.026839**	0.046950	
SBI Wagnum Instacash - (Div- W)	(-3.663748)	(-3.080817)	(1.557631)	.53
SBI Magnum InstaCash - Cash	-0.083741**	-0.026634**	0.048461	
Plan	(-3.728271)	(-3.163447)	(1.663555)	.50
	-0.083336**	-0.023986***	·	
SBI Magnum Instacash - Liquid			0.049751	.35
Floater Plan (D)	(-3.010089)	(-2.311262)	(1.385539)	
SBI Magnum InstaCash - Liquid	-0.078339**	-0.024307***	0.045291	.42
Floater Plan (G)	(-3.240770)	(-2.682615)	(1.444616)	
SBI Premier Liquid Fund - Inst	-0.075421*	-0.026545*	0.039805	.72
(Div-D)	(-4.911791)	(-4.611897)	(1.998752)	.12
SBI Premier Liquid Fund - Inst	-0.083595**	-0.025689**	0.046545	.57
(Div-W)	(-4.026415)	(-3.300871)	(1.728551)	,
SBI Premier Liquid Fund - Inst	-0.082292**	-0.025752**	0.045442	.57
(G)	(-3.948194)	(-3.296147)	(1.681019)	.57
Tata Liquid Fund - Plan A (Div-	-0.062205**	-0.023539**	0.034126	.43
D)	(-2.773697)	(-2.800158)	(1.173274)	.+3
Tata Liquid Fund - Plan A (Div-	-0.075935	-0.097703**	0.180109***	.71
W)	(-1.243355)	(-4.267898)	(2.273852)	./1
	-0.072698**	-0.024492***	0.038594	.44
Tata Liquid Fund - Plan A (G)	(-2.957411)	(-2.658040)	(1.210562)	.44
Tata Liquid High Invest Plan -	-0.078188**	-0.028067**	0.045079	.41
(AO)	(-3.053479)	(-2.924169)	(1.357392)	.41
Tata Liquid High Invest Plan -	-0.072486**	-0.026817**	0.039215	.44
(Div-D)	(-2.912620)	(-2.874644)	(1.214950)	.44
Tata Liquid High Invest Plan -	-0.084121**	-0.027341***	0.050433	.31
(Div-M)	(-2.835432)	(-2.458598)	(1.310686)	.51
Tata Liquid High Invest Plan -	-0.078151**	-0.027985**	0.044900	.41
(Div-W)	(-3.076268)	(-2.938820)	(1.362726)	.41
Tata Liquid Retail Invest Plan -	-0.074817**	-0.027749**	0.038361	.48
(Div-D)	(-2.937223)	(-2.906336)	(1.161177)	.40
Tata Liquid Retail Invest Plan -	-0.082315**	-0.031584**	0.050492	2.4
(Div-Frnt)	(-2.879538)	(-2.947580)	(1.361887)	.34
Tata Liquid Retail Invest Plan -	-0.081683**	-0.029670**	0.049649	20
(G)	(-3.208833)	(-3.109462)	(1.503841)	.39
Templeton India Cash	-0.109025*	-0.045263*	0.078146***	
Management Account (G)	(-4.738933)	(-5.248708)	(2.618993)	.47
	-0.198264**	-0.042831	0.171782***	
Templeton India Cash	-0.198264** (-3.485422)	(-2.008744)		.17
Management Account - (Div-D)	-0.079998***	` '	(2.328428)	
Templeton India TMA - Inst		-0.020561	0.052856	.22
(Div-D)	(-2.549571)	(-1.748209)	(1.298844)	
Templeton India TMA - Inst	-0.079608**	-0.026600***	0.049286	.33
(Div-W)	(-3.028667)	(-2.699804)	(1.445762)	
Tompleton India TMA Ind (C)	-0.079657**	-0.026802***	0.049482	.34
Templeton India TMA - Inst (G)	(-3.057854)	(-2.744766)	(1.464578)	
Templeton India TMA - Reg	-0.088957**	-0.028757**	0.060696	.28
(Div-D)	(-3.357836)	(-2.895857)	(1.766504)	
Templeton India TMA - Reg	-0.087007**	-0.028306**	0.054905	.35
(Div-W)	(-3.250270)	(-2.820988)	(1.581428)	
Townslaton I. II. IDAKA D. (C)	-0.086785**	-0.029464**	0.056678	.33
Templeton India TMA - Reg (G)	(-3.355767)	(-3.039440)	(1.689804)	

	-0.083951**	-0.029408**	0.049371	50
UTI-Liquid - Cash Plan (Div-D)	(-3.827464)	(-3.576887)	(1.735524)	.50
	-0.079257**	-0.034265**	0.055234	.38
UTI-Liquid - Cash Plan (Div-M)	(-3.418247)	(-3.942489)	(1.836749)	.36
	-0.082913**	-0.029918**	0.053736	.39
UTI-Liquid - Cash Plan (G)	(-3.562674)	(-3.429568)	(1.780289)	.39
UTI-Liquid - Cash Plan - Inst	-0.075321**	-0.023447***	0.046225	.30
(Div-D)	(-2.836067)	(-2.355285)	(1.341984)	.30
UTI-Liquid - Cash Plan - Inst	-0.094687*	-0.013595**	0.059592**	.84
(Div-M)	(-7.523277)	(-2.881696)	(3.650692)	.04
UTI-Liquid - Cash Plan - Inst	-0.068302**	-0.025086***	0.034827	.64
(Div-W)	(-3.903498)	(-3.824758)	(1.534645)	.04
UTI-Liquid - Cash Plan - Inst	-0.076136**	-0.024796**	0.044899	.41
(G)	(-3.227982)	(-2.804666)	(1.467753)	.41
UTI-Money Market Fund (Div-	-0.082302**	-0.028171**	0.056162	.29
W)	(-3.345428)	(-3.054934)	(1.760179)	.29
	-0.079439**	-0.028505**	0.052709	.29
UTI-Money Market Fund (G)	(-3.118245)	(-2.985067)	(1.595274)	.29

^{*1%} level of significance, ***5% level of significance, *** 10% level of significance