

Comparison of Short-Term Cash Management Alternatives

We have prepared the below reference in response to recent client questions regarding the various considerations and options for holding short-term funds. This reference is for informational purposes only and not for the purpose of providing legal or investment advice. Please contact an attorney and financial advisor to obtain advice with respect to any particular issue or problem.

Quick Reference

The below chart compares the characteristics of demand deposits with government securities and various money market funds as cash management alternatives.

KEY

Provider:	Financial intermediary that issues, enters into, or maintains accounts holding the investment alternative.
Liquidity:	How and when the investment may be converted into cash. “Market” means that conversion relies on sales in the secondary market. “ACH” means via Automated Clearing House.
Credit Risk:	The risk that the issuer (which may be different from the provider) may fail to repay amounts when due. In the case of a money market fund, the risk of a default on a portfolio investment.
Market Risk:	For alternatives that rely on market liquidity, the risk that the investment may be sold for less than its amortized cost. ¹ In the case of a money market fund, the risk that sales from the portfolio will cause the redemption price of its shares to fall below \$1.00, i.e., cause the fund to “break a dollar.”
Liquidity Risk:	The risk of delay in converting the investment into cash.
1940 Act Classification:	A company that does not engage primarily in the business of investing, reinvesting, or trading in securities, may nevertheless become subject to the Investment Company Act of 1940 (the 1940 Act) due to the acquisition of “investment securities” in excess of thresholds established by Section 3(a)(1)(C) of the 1940 Act and Rule 3a-1 thereunder. Government securities and cash items are excluded when calculating these thresholds.
Indicative Yield:	A publicly quoted yield from a randomly selected example of the alternative. A company may only qualify for a lower yielding version of the alternative, and some alternatives (such as repo) may not be available to all companies from all providers.

¹ “Amortized cost” is the amount of the original investment, reduced by the amortization of any premium over, and increased by the accretion of any discount from, the investment’s par amount.

Note that references to “full faith and credit” of U.S. government assume that the debt ceiling is lifted to provide the federal government the ability to pay expenses previously authorized by president and Congress.

Alternative	Provider	Liquidity	Credit Risk	Market Risk	Liquidity Risk	1940 Act Classification	Indicative Yield @ 3/15/23
Demand Deposit	Bank	Same day via Fedwire Next day via ACH Checks and debit cards	FDIC insured up to \$250,000 per depositor. Above this, risk of bank insolvency.	Liquidity does not depend on market trades.	May lose access to non-insured amounts upon Federal Deposit Insurance Corporation (FDIC) receivership.	Cash Item	Varies
Broker Cash Balances	Broker/Dealers	Varies by account offering, may include same day, transfer to a bank account, or physical check.	Included in investments insured by Securities Investor Protection Corporation (SIPC) up to \$500,000, but cash only insured up to \$250,000. Above this, risk of broker/dealer insolvency.	Liquidity does not depend on market trades.	May lose access to non-insured amounts upon SIPC liquidation.	Cash Item	Varies
Treasury Bill	Bank or Broker/Dealers	Market trades for next-day settlement via Fedwire, although cash settlement is supported.	Full faith and credit of U.S. government.	Market price may deviate from amortized cost.	Highly liquid market.	Government Security	Three-month bill 4.693%

Alternative	Provider	Liquidity	Credit Risk	Market Risk	Liquidity Risk	1940 Act Classification	Indicative Yield @ 3/15/23
Agency Notes (e.g., notes issued by federal home loan banks (FHLBs) or other government-sponsored entities)	Bank or Broker/Dealers	Market trades for next day settlement via Fedwire, although cash settlement is supported.	Access to certain Federal Reserve facilities and support appropriated by Congress, but not full faith and credit.	Market price may deviate from amortized cost.	Market is less liquid than Treasury bills but more liquid than commercial paper.	Government Security	Three-month FHLB note 4.854%
Treasury Reverse Repurchase Agreement (repo)	Select Banks or Broker/Dealers	Depends on the term of the repo, which may range from overnight to one year.	Counterparty may fail to repurchase securities, in which case repayment depends on market sales of underlying Treasury securities.	Only upon default. Underlying Treasury securities may have longer terms and greater market volatility than Treasury bills. This risk is mitigated through overcollateralization.	<p>If the counterparty continues to hold the underlying securities, then permission from the court or receiver would be required to liquidate.</p> <p>If an independent custodian holds the underlying securities:</p> <p>If the FDIC becomes receiver for a bank, liquidation is delayed until 5:00 p.m. ET on the day after the receivership is imposed; or</p> <p>If SIPC becomes trustee for a broker/dealer, must obtain permission from SIPC before liquidation.</p>	Investment Security	Overnight 4.53%

Alternative	Provider	Liquidity	Credit Risk	Market Risk	Liquidity Risk	1940 Act Classification	Indicative Yield @ 3/15/23
Agency Reverse Repurchase Agreement	Select Banks or Broker/ Dealers	Depends on the term of the repo, which may range from overnight to one year.	Counterparty may fail to repurchase securities, in which case repayment depends on market sales of underlying agency mortgage-backed securities.	Only upon default. Underlying agency mortgage-backed securities are more volatile than Treasury securities. This risk is mitigated through overcollateralization.	<p>If the counterparty continues to hold the underlying securities, then permission from the court or receiver would be required to liquidate.</p> <p>If an independent custodian holds the underlying securities:</p> <p>If the FDIC becomes receiver for a bank, liquidation is delayed until 5:00 p.m. ET on the day after the receivership is imposed; or</p> <p>If SIPC becomes trustee for a broker/dealer, must obtain permission from SIPC before liquidation.</p>	Investment Security	Overnight 4.55%
Non-Repo Treasury Money Market Fund	Banks, Broker/ Dealers or directly from Fund	<p>Same day via Fed-wire</p> <p>Next day via ACH</p> <p>Checks and debit cards</p>	Fund is not federally insured or government sponsored, and does not have access to the Federal Reserve, however, at least 99.5% of the fund's net assets consist of Treasury securities maturing in 397 days or less.	Seeks to maintain a stable redemption price of \$1.0000 per share. But may "break a dollar" if forced to sell portfolio securities at a discount to their amortized cost due to excessive redemptions.	Redemptions may be suspended while fund is liquidated.	Cash Item	Seven-day yield 4.47%
Repo Treasury Money Market Fund	Banks, Broker/ Dealers or directly from Fund	<p>Same day via Fed-wire</p> <p>Next day via ACH</p>	In addition to the risk of a non-repo Treasury money market fund, risk of repo counterparty's default.	In addition to the risk of a non-repo Treasury money market fund, selling long-term Treasury securities due to a repo counterparty's	Redemptions may be suspended while fund is liquidated.	Cash Item	Seven-day yield 4.48%

Alternative	Provider	Liquidity	Credit Risk	Market Risk	Liquidity Risk	1940 Act Classification	Indicative Yield @ 3/15/23
		Checks and debit cards		default increases risk of breaking a dollar.			
Non-Repo Government Money Market Fund	Banks, Broker/ Dealers or directly from Fund	Same day via Fed-wire Next day via ACH checks and debit cards	Fund is not federally insured or government-sponsored, and does not have access to the Federal Reserve, however, at least 99.5% of the fund's net assets consist of Treasury and other federal agency securities maturing in 397 days or less.	Seeks to maintain a stable redemption price of \$1.0000 per share. But may "break a dollar" if forced to sell portfolio securities at a discount to their amortized cost due to excessive redemptions.	Redemptions may be suspended while fund is liquidated.	Cash Item	Seven-day yield 4.53%
Repo Government Money Market Fund	Banks, Broker/ Dealers or directly from Fund	Same day via Fed-wire Next day via ACH Checks and debit cards	In addition to the risk of a non-repo government money market fund, risk of repo counterparty's default.	In addition to the risk of a non-repo government money market fund, selling long-term agency mortgage-backed and other securities due to a repo counterparty's default increases risk of breaking a dollar.	Redemptions may be suspended while fund is liquidated.	Cash Item	Seven-day yield 4.45%
Prime Institutional Money Market Fund	Banks, Broker/ Dealers or directly from Fund	Same day via Fed-wire Next day via ACH Checks and debit cards	In addition to the risk of a repo government fund, exposure to high quality certificates of deposit and commercial paper.	Redemption price is based on current market value of the portfolio. Fluctuations are small during normal market conditions (e.g., the price for one fund @ 3/15/23 was \$1.0006). Greater fluctuations will be experienced in adverse market conditions.	Excessive redemptions may lead to additional liquidity fees or temporary (up to 10 days) suspension of redemptions. Redemptions may be suspended while fund is liquidated.	Cash Item	Seven-day yield 4.76%