

How to navigate the cash management landscape

Monitoring quickly evolving cash markets

Ron Akke, Dan Golosovker, Mark Salzman, John Verberkmoes

1. Takeaways

- As with any investment strategy, managing cash well requires an understanding
 of how to best trade-off expected return, risk, liquidity, operational ease and tail
 scenarios.
- As interest rates have risen, the difference in expected return between the best and worst cash management strategies has grown substantially.
- In particular, bank deposits generally offer a far worse value proposition than market instruments.
- Top cash managers regularly refresh their cash management strategies to current market conditions by explicitly trading off expected returns of the different risk premia in cash instruments against their illiquidity.

2. Introduction

Cash management is a topic of increasing importance to investment managers. Across the Addepar client base, approximately 9% of holdings are in cash instruments. Because interest rates are now substantially above zero, the impact on portfolio performance between a competitive cash management strategy and a poor one can be significant. In this piece, we introduce a framework for evaluating the range of options an investment manager has for deploying their cash and provide a brief overview of recent trends in the cash market.



As with any investment, managers who want to invest their cash should weigh the expected return and risk. Cash investments are special because cash is also a frictional asset used to fund other investments, so there are special considerations regarding liquidity and operational ease. We believe that managers should ask themselves five questions about any cash management strategy:

- 1. Expected return: What would a reasonable investor expect to earn from a given cash management strategy over time?
- 2. **Risk:** In the normal course of events, what's the variation in return that a reasonable investor should expect?
- 3. **Liquidity:** How quickly can an investor access their cash without incurring a significant cost?
- 4. **Operational ease:** What's the operational difficulty involved in executing and overseeing a given cash management strategy?
- 5. **Stress:** In periods of significant stress, outside the normal course of events, how bad might things get in terms of return, risk, liquidity and operations?

3. Potential cash investments

While the range of potential cash investments is vast, the common cash management strategies can be broken down into a few general categories:

- 1. Bank deposits: Many investors default to managing their cash with bank deposits, either through overnight instruments or by using term CDs. This provides a certain form of operational ease (e.g., the same institution that manages operational cash flows also invests the cash). In general, banks offer interest rates below (sometimes substantially below) the prevailing market instruments, but under some conditions certain banks offer compelling rates on term CDs. Above a modest size, investors who keep their cash at banks are exposed to bank default risk.
- 2. **Treasury bills:** Short term Treasury bills are an appropriate reference rate for cash. They are extremely liquid and generally thought of as riskless. They typically offer a yield above bank deposits but below riskier cash products.



- 3. Spread instruments: A variety of cash instruments contain some credit spread (agency debt, commercial paper, collateralized repurchase agreements). These vary in terms of liquidity and also have credit risk, but they offer a higher yield. In general, these instruments provide a higher return than Treasury bills, but in periods of stress they can result in significant losses.
- **4. Duration instruments**: Many cash strategies involve taking some duration risk. For bank deposits, investors can select overnight deposits, which have no duration risk, or term deposits, which have this risk. Treasury securities can be very short-term or contain months or years of duration. Spread instruments vary in their duration risk.

The comparative yield of cash instruments of different durations tracks the shape of the yield curve. When curves are steep, as they have been for much of 2022, longer duration instruments tend to have a higher yield. When curves are inverted, they tend to have a lower yield. The difference in expected return, taking into account the reinvestment of the shorter duration instruments, is more ambiguous and depends on the future path of interest rates. It's generally much smaller than the difference in yield (possibly zero).

5. Money market funds/ETFs: Investors can choose from many funds that hold combinations of government, spread and duration instruments. In addition to providing some asset allocation and security benefits, these funds also offer some liquidity transformation, often providing better liquidity terms than investors would have if they held the same proportion of instruments directly. They also charge a management fee (10–30 basis points is typical), which causes them to underperform direct holding.

Here's how the categories of cash management strategies score on the key questions we outlined above:

	Expected return	Normal environment risk	Liquidity	Operational ease	Stress
Bank deposits	Usually below market rate	Low	Varies	Easy	Bank credit risk
Treasury bills	Market rate	Low	Excellent	Easy	Unimpaired



Spread instruments	Usually above market rate	Moderate	Varies	Varies	Significant potential impairment
Duration Instruments	Near market rate	Moderate	Varies	Varies	Moderate potential impairment
Money market funds/ETFs	Varies, but below the underlying assets due to fees	Varies	Excellent	Easy	Depends on the underlying assets, but the liquidity advantages may disappear under stress.

From this framework, it's clear that investors need to be thoughtful about how they evaluate taking on spread and duration risk in their cash management. Evaluating funds adds another layer of complexity, as investors need to assess whether the potential alpha of the fund and implications in terms of liquidity warrant the additional layer of fees. However, bank deposits are rarely the best choice for investors with substantial cash holdings, as they tend to offer a lower yield than government deposits, combined with worse risk characteristics in a stress environment.

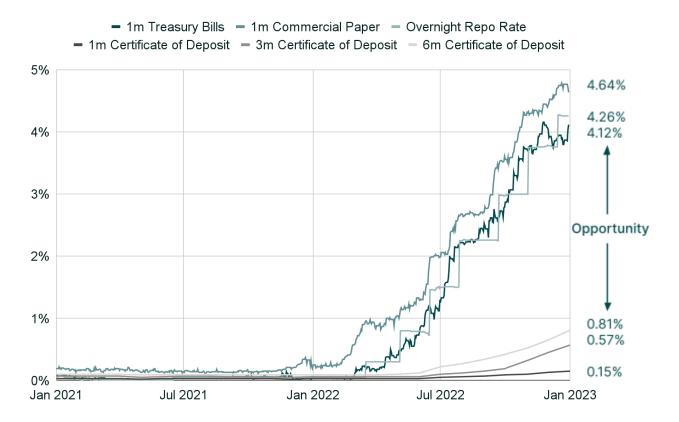
4. Cash yields

Exhibit 1 below provides insight into how yields/rates on various cash management strategies evolved throughout 2022, which helps to illustrate some of the tradeoffs discussed above. In particular, it shows how deposits at national banks remained near 0% despite hundreds of basis points of tightening and now yield grossly less than market-rate instruments.



Exhibit 1

Yields on depository instruments have barely moved despite the Fed raising interest rates in 2022 Daily yields of cash instruments during 2022



Source: Thomson Reuters, Federal Reserve Bank of New York

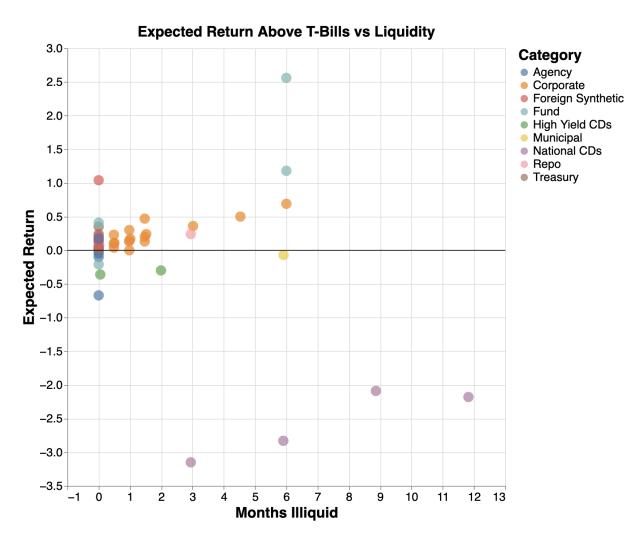
5. Expected returns vs. illiquidity

Our observation is that the best cash managers regularly assess the tradeoff between expected return and illiquidity in cash instruments. This best practice provides a lens into cash instruments/strategies based on risk assumptions and considerations. Exhibit 2 presents a prototype of a dashboard that compares expected return versus illiquidity for a typical U.S.-based taxable client.



Exhibit 2

Competitive cash instruments offer attractive expected returns that increase with time to maturity Cash instruments' expected returns above Treasury bills by time to maturity



Source: Eikon, FRED, Addepar Analysis

Note: Expected returns were calculated using a combination of current market conditions and historical data. Importantly, expected returns do not equal realized future yields. Keep tuned in the coming weeks for additional Addepar research notes that decompose these expected returns into their constituent components of credit, duration and illiquidity risk premiums.



This chart shows the expected return relative to short-term Treasury bills for a range of cash securities.¹ Commercial paper offers a forecast return of 25 to 100 bps higher than Treasury bills, but incurs greater credit and liquidity risk. Repurchase agreements (repos) generally offer a higher rate than Treasury bills. Certificates of deposit, averaged across all U.S. banks, provide a rate of return just above zero. The highest yielding banks do better than the average, but they still offer meaningfully lower rates than Treasury bills right now despite exposing large investors (those who exceed the \$250,000 FDIC limits) to credit risk. Funds that take more substantial credit and duration risk than commercial paper have commensurately higher expected returns.

6. Conclusion

Cash markets are an increasingly important consideration for managers. Balancing risk and return characteristics against liquidity and operational concerns is a challenge. Addepar is actively developing solutions to help investors adapt their portfolios in a tailored way in response to the market dynamics outlined in this paper. Please contact research@addepar.com if you are interested in participating in the design and development of these solutions.

¹ See our companion pieces on cash expected returns for more details on this methodology.



Authors

Ron Akke, Research Analyst (ron.akke@addepar.com)

Dan Golosovker, Deputy Head of Addepar Research (dan.golosovker@addepar.com)

Mark Salzman, Advisor (mark.salzman@addepar.com)

John Verberkmoes, Advisor (john.verberkmoes@addepar.com)



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