

# PUT CASH IN ITS PLACE

## Leveraging the power of cash segmentation

---

### Inside Investments for Global Liquidity

#### What does it mean to think holistically about investing your cash?

The most effective strategy incorporates a clear investment policy, well-defined goals and parameters for liquidity, quality and return. An essential element, in our view: cash segmentation.

In following this well-established discipline, organizations distinguish among operating cash (requiring same-day liquidity), reserve cash (with an investment horizon of six to nine months or longer) and strategic, or core cash (with an investment horizon of one year or longer). They can then choose the most appropriate investment solution for each segment.

As markets shift and business needs evolve, cash segmentation has become an especially useful tool for short-term fixed income investors. In the following pages we examine how segmentation should be addressed in an investment policy; how to forecast cash flows and establish the structure of segmentation; and how best to choose an investment solution for each segment of a cash portfolio.

## Investment policy

An organization’s investment policy, which defines the objectives of liquidity investment, should guide the framework around cash segmentation. An investment policy will specify what percentage of an investment portfolio must be in cash, list the investment goals, and identify acceptable levels of risk (defining, for example, maximum portfolio duration and the minimum credit rating for a security in the portfolio).

## Cash forecasting

Cash segmentation begins with a detailed cash forecast. An organization should first determine what percentage of a portfolio needs to be immediately accessible as cash and what percentage can be viewed as surplus cash. The precise detail captured in that forecast will depend on how much visibility a business has on its cash flows. Ideally, the treasury team should try to ascertain when and where surplus cash is held in the organization, how much of it is available and for how long.

Accuracy is important. If the level of surplus cash is underestimated, then it may not be invested optimally and the organization could miss the opportunity to capture valuable investment returns. Conversely, if the level of surplus cash is overestimated, cash may need to be pulled from investments on short notice, which could lead to realized losses. An organization’s treasury team may also run the risk that it cannot liquidate investments in time to meet business needs and may need to find funding from alternate sources.

As part of the investment process, the portfolio management team utilizes scenario analysis tools to evaluate security and portfolio performance in different environments. This helps determine optimal portfolio positioning on the yield curve and across sectors.

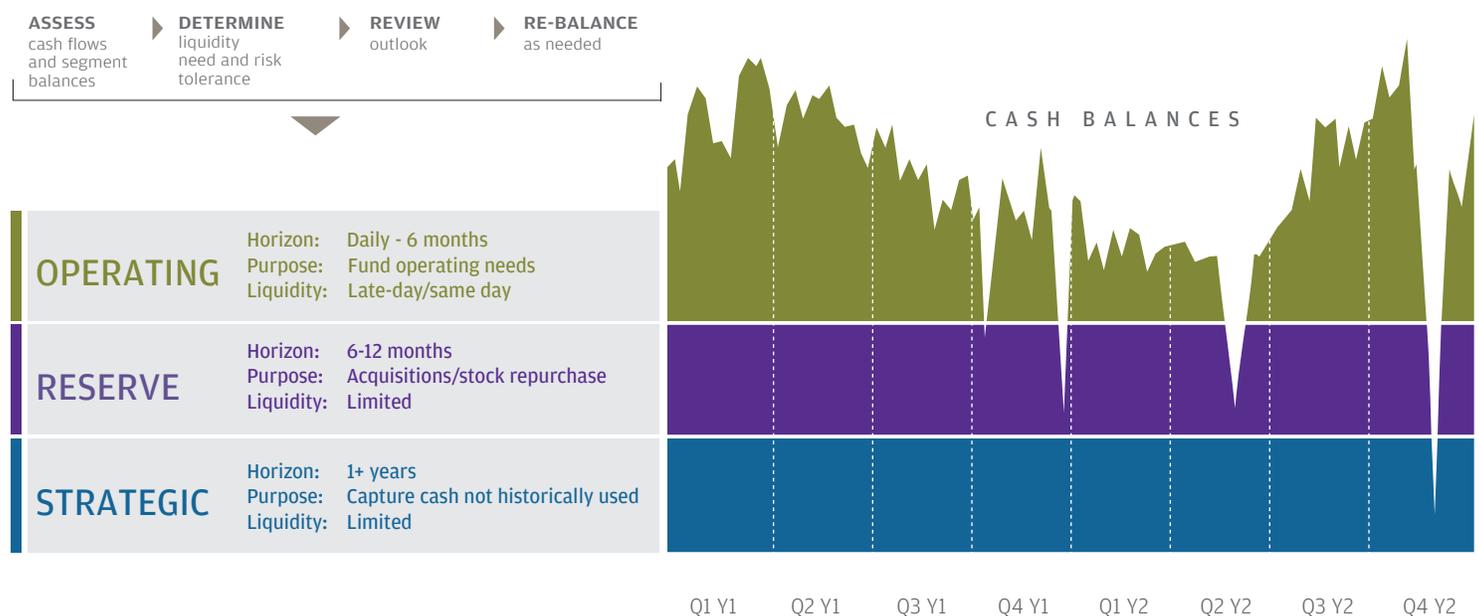
## Cash segmentation

In making a cash forecast, an organization should consider if any event could have an effect on the cash position—and then assess its likelihood and timing. For example, a surplus cash position might be substantially increased by a bond issue or sale of part of the business. Conversely, the cash position may be reduced by an acquisition, share buyback or pension funding.

Once a cash forecast is in place, an organization can segment its liquidity portfolio into three categories, reflecting their different liquidity needs and risk profiles (**EXHIBIT 1**). Operating cash, used to fund an organization’s day-to-day needs, requires late day/same day liquidity. Reserve cash, used for such items as acquisitions, stock repurchase or R&D, does not require same day liquidity. Finally, strategic cash, surplus cash that can accommodate even more limited liquidity, can be invested over a longer-term horizon.

Among the considerations for cash segmentation: What is the purpose of the cash, its time horizon, liquidity requirements and return objectives? Are there any tax or accounting issues to consider? Should segments apply locally, regionally or globally? How, by whom, and how often, will segments be reviewed and rebalanced?

EXHIBIT 1: : UNDERSTANDING YOUR CASH NEEDS



For illustrative purposes only

## Investment solutions

The most effective liquidity strategy will select a specific investment solution for each cash segment (**EXHIBIT 2**).

Operating cash may be invested in money market funds (MMFs), government or prime, with either a stable or floating net asset value (NAV). Bank obligations, treasuries and commercial paper are other solutions for operating cash requiring same-day liquidity.

Because reserve cash requires limited liquidity, it can be invested over a horizon of 6-12 months, thereby capturing incrementally higher yields and returns than money market funds, while taking on only slightly greater risk and keeping a focus on preservation of principal. A strategy for reserve cash could have a portfolio duration of up to one year, investing in commercial paper, asset-backed securities and corporate bonds, among other securities. The maximum maturity for an individual security could be as much as three years.

As surplus cash, with no identified short-term use, strategic cash can be invested over an even longer horizon of one to three years. The portfolio duration for short duration bond funds is 1.5 to 2.5 years; these funds can thus offer still-higher yields and returns than reserve funds, while controlling for risk and maintaining a focus on preservation of principal. Volatility is more noticeable, but while an investor may see deterioration in NAV on a daily or even monthly basis, this would likely not be the case over longer time periods.

## Conclusion

As we have discussed, a detailed cash forecast sets the foundation for effective cash segmentation, which has become an increasingly important tool for short-term fixed income investors. Segmenting a liquidity portfolio into operating cash, reserve cash and strategic cash allows for an optimal outcome: additional return/income within acceptable levels of volatility.

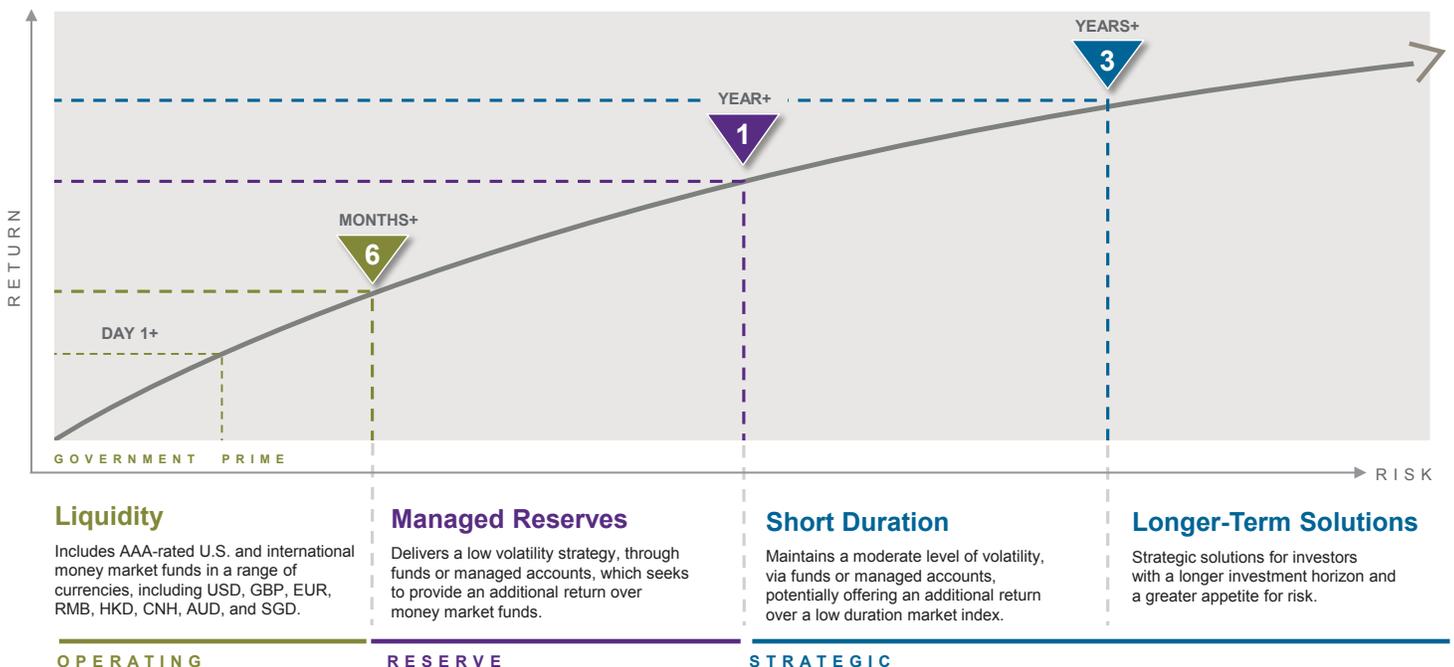
## Build stronger liquidity strategies with J.P. Morgan

Rigorous credit and risk management, combined with access to J.P. Morgan's global resources and expertise, help us to deliver the most effective short-term fixed income solutions for our clients.

Global coordination, lasting partnerships

- Harness the power of our research-driven, globally coordinated investment process, led by our dedicated team of liquidity professionals.
- Make investment decisions based on actionable insights from our senior investors, and build portfolios based on the output of proprietary benchmarking tools.
- Select from a breadth of outcome-oriented solutions designed to help you build the most effective cash strategy.
- Tap into award-winning innovation and success of one of the world's top liquidity fund managers, with over 30 years of demonstrated results across market cycles.

EXHIBIT 2: INVESTMENT STRATEGY PER CASH SEGMENT



For illustrative purposes only

**NOT FOR RETAIL DISTRIBUTION:** This communication has been prepared exclusively for institutional, wholesale, professional clients and qualified investors only, as defined by local laws and regulations.

This is a promotional document and is intended to report solely on investment strategies and opportunities identified by J.P. Morgan Asset Management and as such the views contained herein are not to be taken as advice or a recommendation to buy or sell any investment or interest thereto. This document is confidential and intended only for the person or entity to which it has been provided. Reliance upon information in this material is at the sole discretion of the reader. The material was prepared without regard to specific objectives, financial situation or needs of any particular receiver. Any research in this document has been obtained and may have been acted upon by J.P. Morgan Asset Management for its own purpose. The results of such research are being made available as additional information and do not necessarily reflect the views of J.P. Morgan Asset Management. Any forecasts, figures, opinions, statements of financial market trends or investment techniques and strategies expressed are those of J.P. Morgan Asset Management, unless otherwise stated, as of the date of issuance. They are considered to be reliable at the time of production, but no warranty as to the accuracy and reliability or completeness in respect of any error or omission is accepted, and may be subject to change without reference or notification to you.

Investment involves risks. Any investment decision should be based solely on the basis of any relevant offering documents such as the prospectus, annual report, semi-annual report, private placement or offering memorandum. For further information, any questions and for copies of the offering material you can contact your usual J.P. Morgan Asset Management representative. Both past performance and yield are not a reliable indicator of current and future results. There is no guarantee that any forecast will come to pass.

Any reproduction, retransmission, dissemination or other unauthorized use of this document or the information contained herein by any person or entity without the express prior written consent of J.P. Morgan Asset Management is strictly prohibited.

J.P. Morgan Asset Management and/or any of its affiliates and employees may hold positions or act as a market maker in the financial instruments of any issuer discussed herein or act as the underwriter, placement agent or lender to such issuer. The investments and strategies discussed herein may not be suitable for all investors and may not be authorized or its offering may be restricted in your jurisdiction, it is the responsibility of every reader to satisfy himself as to the full observance of the laws and regulations of the relevant jurisdictions. Prior to any application investors are advised to take all necessary legal, regulatory and tax advice on the consequences of an investment in the products.

Securities products, if presented in the U.S., are offered by J.P. Morgan Institutional Investments, Inc., member FINRA/SIPC.

J.P. Morgan Asset Management is the brand for the asset management business of JPMorgan Chase & Co. and its affiliates worldwide. This communication is issued by the following entities: in the United Kingdom by JPMorgan Asset Management (UK) Limited, which is authorized and regulated by the Financial Conduct Authority; in other European jurisdictions by JPMorgan Asset Management (Europe) S.à r.l.; in Hong Kong by JF Asset Management Limited, or JPMorgan Funds (Asia) Limited, or JPMorgan Asset Management Real Assets (Asia) Limited; in Singapore by JPMorgan Asset Management (Singapore) Limited (Co. Reg. No. 197601586K), or JPMorgan Asset Management Real Assets (Singapore) Pte Ltd (Co. Reg. No. 201120355E); in Taiwan by JPMorgan Asset Management (Taiwan) Limited; in Japan by JPMorgan Asset Management (Japan) Limited which is a member of the Investment Trusts Association, Japan, the Japan Investment Advisers Association, Type II Financial Instruments Firms Association and the Japan Securities Dealers Association and is regulated by the Financial Services Agency (registration number "Kanto Local Finance Bureau (Financial Instruments Firm) No. 330"); in Australia to wholesale clients only as defined in section 761A and 761G of the Corporations Act 2001 (Cth) by JPMorgan Asset Management (Australia) Limited (ABN 55143832080) (AFSL 376919); in Brazil by Banco J.P. Morgan S.A.; in Canada for institutional clients' use only by JPMorgan Asset Management (Canada) Inc., which is a registered Portfolio Manager and Exempt Market Dealer in all Canadian provinces and territories except the Yukon and is also registered as an Investment Fund Manager in British Columbia, Ontario, Quebec and Newfoundland and Labrador. This communication is issued in the United States by J.P. Morgan Investment Management Inc., which is regulated by the Securities and Exchange Commission.

For materials distributed to wholesale clients in Australia, please note the following: Pursuant to ASIC Class Order 03/1102 and ASIC Class Order 03/1103 applicable to JPMorgan Asset Management (Singapore) Limited ("JPMAMSL") and JPMorgan Funds (Asia) Limited ("JPMFAL") respectively, JPMAMSL and JPMFAL are exempt from the requirement to hold an Australian financial services licence under the Corporations Act 2001 (Cth) Corporations Act) in respect of the financial services provided by JPMAMS or JPMFAL in Australia to wholesale clients. A copy of which may be obtained at the website of the Australian Securities and Investments Commission [www.asic.gov.au](http://www.asic.gov.au). The class order exempts JPMAMSL and JPMFAL respectively from the need to hold an AFSL for financial services provided to Australian wholesale clients on certain conditions. Please note that JPMAMS is regulated by the Monetary Authority of Singapore (MAS) under the laws of Singapore, which differ from Australian laws. Similarly, JPMFAL is regulated by the Hong Kong Securities and Futures Commission (SFC) under the laws of Hong Kong, which also differ from Australian laws.

© 2018 JPMorgan Chase & Co. All rights reserved.

0903c02a81ffabae