NORTHERN TRUST
ASSET MANAGEMENT

MARKETING COMMUNICATION

CASE STUDY

HOW A UK MULTINATIONAL'S PENSION RAISED YIELD WITH CASH SEGMENTATION

"Looking beyond money market funds to achieve yield and diversification in a challenging rate environment."

The Client

U.K. multinational company.

The Company has a £24 billion pension fund portfolio.

The Challenge

Optimizing yield for short-term investments while maintaining portfolio liquidity and preserving principal.

Maximizing yield while protecting principal

The pension fund was expecting a sizable liquidity inflow after the sale of one of the multinational's business lines. That would result in a considerable cash pool, with £500m allocated to short-term investments. With a considerable allocation, in what was then a low interest rate environment, the UK pension fund team posed the question: how can we maintain our liquid cash pool whilst achieving a yield with an acceptable risk/return profile? More generally, the team wanted to introduce a strategic approach to their cash management, which would be equally efficient in all market conditions. A journey of discovery followed to see what potential solutions would be available.

Our Approach

Tailoring a cash segmentation strategy, specific to the pension's funding requirements.

Cash segmentation

For more than 40 years, NTAM has worked with some of the world's largest institutions and corporate treasurers on cash segmentation strategies to fit the nuances of their different cash flows and needs. Leveraging on this experience, we analyzed the UK pension's short, medium and long-term funding needs, and modeled a portfolio demonstrating how segmenting the cash into different buckets would deliver its objectives and crucially getting paid for the risks they take.

We recommended that the portfolio should be split into three buckets, mirroring the pension's specific funding requirements (see cash segmentation illustration). The first bucket is considered operational, for day-to-day cash requirements. Second is a reserve bucket for intermediate needs over a medium-time horizon, before finally defining their strategic bucket for longer-term uses. Segmenting the cash in this way would allow the reserve and strategic buckets to target higher potential returns with only an incremental increase in risk. This would be done with no sacrifice in terms of liquidity.

CASH SEGMENTED ACROSS THREE BUCKETS TO MAXIMIZE YIELD

Segment cash based on what you need and when you need it.

Operational (1-day to 3-month horizon)	Reserve (3- to 9-month horizon)	Strategic (9- to 18-month horizon)
Day-to-day spending needs	Intermediate or uncertain spending needs	Long-term spending needs
Highly liquid, invested conservatively	Slightly reduced liquidity	Reduced liquidity
30–60 day (Wtd. Avg. Mat.)	0.5 year (target duration)	Seeks highest possible yield while preserving principal
Minimum credit rating: A	Minimum credit rating: BBB	One year (target duration)
		Minimum credit rating: BBB
STRATEGY TYPE: Money market	**STRATEGY TYPE:** Conservative Ultra Short	**STRATEGY TYPE:** Ultra Short

While the operational bucket would continue to hold short-term money market funds, the other two buckets would invest in slightly longer-term ultra-short strategies. These strategies can invest as far as three to five years along the yield curve in an effort to increase returns through actively managing duration and credit selection. Yet they achieve these returns with only an incremental increase in risk using cash that is not needed for day-to-day needs (see standard deviation illustration).

Ultra-short strategies have a broader credit investment universe than money market funds, which are heavily skewed to financials due to restrictive regulatory guidelines and the lack of corporate issuance in money market securities. Ultra-short strategies can invest in traditional corporate bonds, governments, agencies, asset-backed securities, consumer cyclicals, communications, financials, non-cyclicals, and utilities, ultimately delivering a more diversified portfolio (see risk diversified across sectors illustration).

CONSERVATIVE ULTRA SHORT AND ULTRA SHORT STANDARD DEVIATION

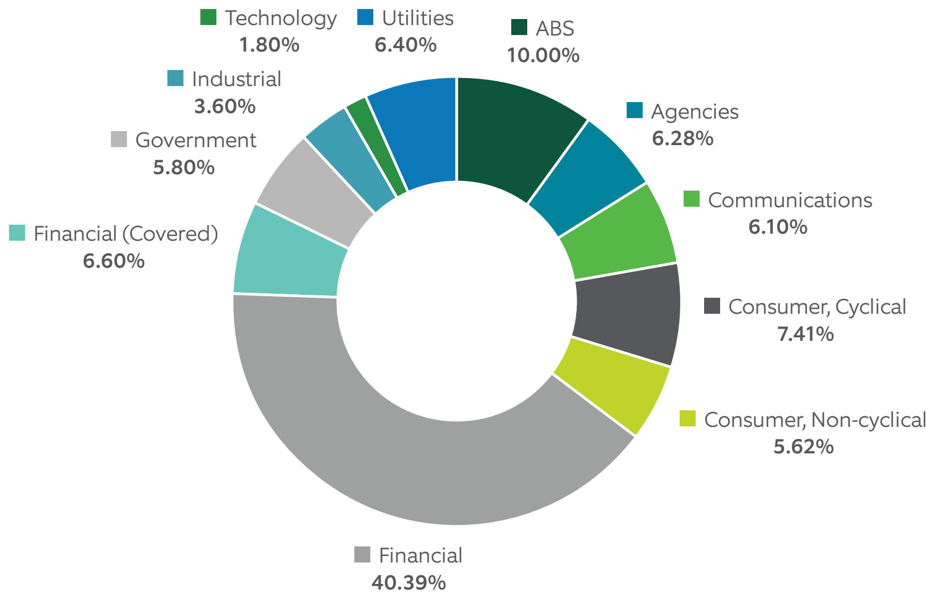
GBP	Conservative Ultra Short	Ultra Short	1–3 Year UK Gilts
2-Year Standard Deviation	0.66	1.32	0.65
5-Year Standard Deviation	0.46	0.91	0.76
10-Year Standard Deviation	0.46	0.92	0.83

EUR	Conservative Ultra Short	Ultra Short	1–3 Year EUR Treasury
2-Year Standard Deviation	0.62	1.22	0.74
5-Year Standard Deviation	0.40	0.79	0.72
10-Year Standard Deviation	0.40	0.75	0.78

USD	Conservative Ultra Short	Ultra Short	1–3 Year US Treasury
2-Year Standard Deviation	0.74	1.40	1.06
5-Year Standard Deviation	0.52	0.96	0.92
10-Year Standard Deviation	0.36	0.64	1.10

Source: iMoneyNet and Barclays Live as of March 31, 2021 — Conservative Ultra Short EUR = 75% IMMFA MMI EUR Prime Stable Avg./25% Bloomberg Barclays EUR 1–3 Year Corporate Index. Conservative Ultra Short GBP = 75% IMMFA MMI GBP Prime Stable Avg./25% Bloomberg Barclays GBP 1–3 Year Corporate Index. Conservative Ultra Short USD = 75% IMMFA MMI USD Prime Stable Avg./25% Bloomberg Barclays USD 1–3 Year Corporate Index. Ultra Short EUR = 50% IMMFA MMI EUR Prime Stable Avg./50% Bloomberg Barclays EUR 1–3 Year Corporate Index. Ultra Short GBP = 50% IMMFA MMI GBP Prime Stable Avg./50% Bloomberg Barclays GBP 1–3 Year Corporate Index. Ultra Short USD = 50% IMMFA MMI USD Prime Stable Avg./50% Bloomberg Barclays USD 1–3 Year Corporate Index. For illustrative purposes only. Past performance is not indicative or a guarantee of future results. Index performance returns do not reflect any management fees, transaction costs or expenses. It is not possible to invest directly in any index.

RISK DIVERSIFIED ACROSS SECTORS — ULTRA SHORT MODEL ALLOCATION



For illustrative purposes only. Information is provided to illustrate typical sectors and securities in which the portfolio may invest. It should not be considered investment advice or a recommendation to buy or sell any security. There is no guarantee that securities remain in the portfolio or that securities sold have not been repurchased. It should not be assumed that any investments were profitable or will prove to be profitable, and past performance does not guarantee future results.

Our Solution

A dynamic, liquid and diversified allocation, blending cash and ultra-short, according to the client's needs.

Raising yield with ultra-short ESG funds

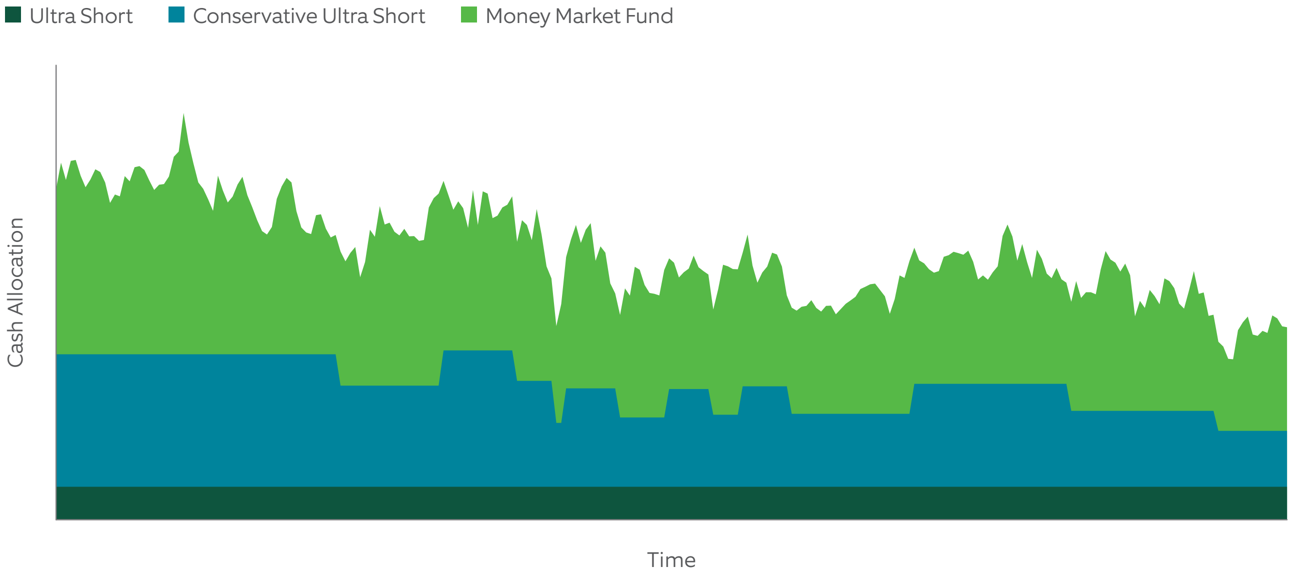
Having completed the exploratory phase, the pension fund agreed with NTAM's proposal for a cash segmentation model. It made separate allocations to a combination of a sterling money market fund (operational bucket), conservative ultra-short fund (reserve), and an ultra-short fund (strategic), with the ability to adjust the composition as cash demands evolve.

At the beginning of 2021, the pension invested a total of £500m across the NTAM Sterling Global Cash Fund (£300m) for its operational cash needs; the NTAM Sterling Conservative Ultra Short ESG Fund (£100m) for reserve cash; and NTAM Sterling Ultra Short ESG Fund (£100m) for strategic cash. This resulted in an optimized approach to managing its cash position.

The ultra-short funds have greater flexibility than money market funds, as they can invest further out along the yield curve and across a wider range of sectors. The Conservative Ultra Short ESG Fund has a maturity limit of three years and can invest across the investment grade universe, giving a greater opportunity to maximize returns through credit selection. Meanwhile, the NTAM Sterling Ultra Short ESG Fund also invests across investment grade securities, with a maturity limit of five years.

In addition to financial goals, both these funds include environmental, social and governance (ESG) screens. They exclude companies that breach pre-defined thresholds based on exposure to weapons producers, tobacco producers, violators of the U.N. Global Compact, companies involved in notable ESG controversies, and companies with ESG ratings of CCC. Secondly, it prioritizes companies where fundamental analysis identifies strong ESG metrics, aiming to foster better governance and less risk.

THE SEGMENTATION MODEL AND CASHFLOWS



Source: Northern Trust Asset Management. For illustrative purposes only. The segmentation model and cashflows will vary for each client and is based on the liqudity needs and risk tolerance of a client.

The Benefits

A strategy for reducing cash drag and matching liquidity needs across market conditions.

The Result

Optimizing the outcome in any rate environment.

A balance of return, risk and diversification while matching liquidity needs

By segmenting the portfolio three ways, with each bucket targeting a different level of return and risk, the overall yield has been raised and is more responsive to changes in interest rates, something that is compromised when locking cash away, for example, in a term deposit. This has been achieved with only an incremental increase in duration and credit risk, while benefiting the pension fund with issuer diversification.

An increase in yield and adaptability to rate changes

For this pension fund, the benefits of cash segmentation to provide an uplift in yield will likely be proven over time. However, the strategic cash segmentation approach puts it in a strong position to respond to a changing rate environment. In fact, money market funds and ultra-short funds are far more sensitive to rate increases than the bank deposits that treasurers often use.

	Rewards	Risks
The Sterling Fund	• The objective of the Fund is to preserve capital, maintain liquidity and generate current income by investing in high quality short-term fixed income or adjustable rate securities denominated in the base currency of the Fund. • The Fund is a Short Term Low-Volatility Net Asset Value (LVNAV) Money Market Fund as defined by the EU Money Market Funds Regulations. LVNAV funds are valued using a mixture of the amortised cost and market pricing to facilitate a stable NAV. However in certain circumstances LVNAV funds may be priced with a variable NAV. • The Fund invests in high quality short-term government and corporate bonds as well as cash deposits and debt instruments issued by financial institutions. • All securities in which the Fund invests will be denominated in Sterling and at the time of purchase have a minimum credit rating of A2/P1 by Moody's credit rating agency or an equivalent rating from another agency and will have a maximum maturity of 397 days. • The Fund may use derivatives and other financially linked instruments (such as currency forwards) and may also enter into repurchase and reverse repurchase agreements to achieve its objective and to reduce risk, minimise costs or generate additional capital or income. A derivative is a financial contract whose value is derived from other assets.	• Credit Risk – A borrower or a counterparty may fail to repay or otherwise fail to meet contractual obligations to the Fund. • Liquidity Risk – The inability to sell investments quickly may result in failure to return funds to investors on a timely basis. • Investment Risk - The Fund may not achieve its investment objective. An investment in the Fund involves investment risks including possible loss of the amount invested. • Issuer Risk – The issuer of a bond held within the Fund may not be able to meet its obligations to the Fund. • Counterparty Risk - In case of bankruptcy of the broker, there is no guarantee collateral held by the broker will be returned to the Fund. In the event of bankruptcy of the counterparty, the premium and any unrealised gains may be lost. • Derivative Risk - Derivatives may result in gains or losses that are greater than the original amount invested. • Valuation Risk - A position in the Fund may be valued incorrectly, as some prices may be uncertain at a point in time. • Currency Risk - Where a class of shares are in a currency other than the base currency of the Fund, the non-base share classes of the Fund may be affected unfavourably by fluctuations in currency rates.
The Sterling Conservative Ultra Short ESG Fund	• The objective of the Fund is to provide moderate liquidity and maximise income consistent with a high degree of capital preservation by investing in investment grade fixed income securities. • The Fund seeks to achieve its investment objective through investment primarily in investment grade fixed income securities subject to certain environmental, social and governance criteria (ESG). • All securities in which the Fund invests will be denominated in Sterling. • The Investment Manager will determine the portfolio duration with a neutral target of 12 months. In normal market conditions, the Fund will invest a minimum of 20% of its Net Asset Value in securities, instruments and obligations with a maturity over two years. • The fixed income securities the Fund may invest in can be corporate and government issued, fixed, floating or adjustable rate. The Fund may also enter into repurchase and reverse repurchase agreements to achieve its objective and generate additional revenue for the Fund. • The Fund may use derivatives and other financially linked instruments (such as currency forwards) and may also enter into repurchase and reverse repurchase agreements to achieve its objective and to reduce risk, minimise costs or generate additional capital or income. A derivative is a financial contract whose value is derived from other assets.	• Credit Risk – A borrower or a counterparty may fail to repay or otherwise fail to meet contractual obligations to the Fund. • Liquidity Risk – Some recognised exchanges are less liquid or more volatile which may affect the price received and time taken when selling investments. Small capitalisation companies are also less liquid and this may result in fluctuations in the price of shares • Investment Risk - The Fund may not achieve its investment objective. An investment in the Fund involves investment risks including possible loss of the amount invested. • Issuer Risk – The issuer of a bond held within the Fund may not be able to meet its obligations to the Fund. • Counterparty Risk - In case of bankruptcy of the broker, there is no guarantee collateral held by the broker will be returned to the Fund. In the event of bankruptcy of the counterparty, the option premium and any unrealised gains may be lost. • Derivative Risk - Derivatives may result in gains or losses that are greater than the original amount invested. • Valuation Risk - A position in the Fund may be valued incorrectly, as some prices may be uncertain at a point in time. • Currency Risk - Where a class of shares are in a currency other than the base currency of the Fund, the non-base share classes of the Fund may be affected unfavourably by fluctuations in currency rates.
The Sterling Ultra Short ESG Fund	• The objective of the Fund is to provide moderate liquidity and maximise income consistent with a high degree of capital preservation by investing in investment grade fixed income securities. • The Fund seeks to achieve its investment objective through investment primarily in investment grade fixed income securities subject to certain environmental, social and governance criteria (ESG). • All securities in which the Fund invests will be denominated in Sterling. • The Investment Manager will determine the portfolio duration with a neutral target of 12 months. In normal market conditions, the Fund will invest a minimum of 20% of its Net Asset Value in securities, instruments and obligations with a maturity over two years. • The fixed income securities the Fund may invest in can be corporate and government issued, fixed, floating or adjustable rate. The Fund may also enter into repurchase and reverse repurchase agreements to achieve its objective and generate additional revenue for the Fund. • The Fund may use derivatives and other financially linked instruments (such as currency forwards) and may also enter into repurchase and reverse repurchase agreements to achieve its objective and to reduce risk, minimise costs or generate additional capital or income. A derivative is a financial contract whose value is derived from other assets.	• Credit Risk – A borrower or a counterparty may fail to repay or otherwise fail to meet contractual obligations to the Fund. • Liquidity Risk – Some recognised exchanges are less liquid or more volatile which may affect the price received and time taken when selling investments. Small capitalisation companies are also less liquid and this may result in fluctuations in the price of shares. • Investment Risk - The Fund may not achieve its investment objective. An investment in the Fund involves investment risks including possible loss of the amount invested. • Issuer Risk – The issuer of a bond held within the Fund may not be able to meet its obligations to the Fund. • Derivative Risk - Derivatives may result in gains or losses that are greater than the original amount invested. • Valuation Risk - A position in the Fund may be valued incorrectly, as some prices may be uncertain at a point in time. • Currency Risk - Where a class of shares are in a currency other than the base currency of the Fund, the non-base share classes of the Fund may be affected unfavourably by fluctuations in currency rates.

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