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Enhanced

CASH INVESTING:

an alternative to money market funds

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Although money market funds have traditionally been the short-term product of choice for institutional investors, enhanced cash products are an attractive alternative. Investors willing to moderately increase risk exposure and extend the investment horizon to 12 months or more (foregoing daily liquidity) can realise higher total returns with enhanced cash products.

WHAT IS ENHANCED CASH?

Typically, the primary investment objectives for short-term cash are capital preservation, liquidity and periodic income. As such, 2a-7 or AAA rated offshore money funds offering a stable US\$1 net asset value (NAV) and daily liquidity have appealed to cash investors. However, as money-market fund yields plummeted in 2003, enhanced cash investments began to gain popularity. When average net yields fell below 1%, investors began looking for short-term investment products that could provide better incremental returns.

To put these products in perspective, think of enhanced cash as an ultra-short-term bond product that is one step away from money market funds. The key difference is that enhanced cash portfolios are actively managed products with the goal of generating higher total returns.

While enhanced cash products vary somewhat by investment manager, the investment objectives are similar: outperform money funds on a total return basis by taking modest interest-rate risk, credit risk and liquidity risk. Whereas money funds operate with interest rate duration of up to three months, enhanced cash products, as shown in Exhibit 1, tend to have a duration of six months to one year. Enhanced cash products also invest in securities outside the traditional money fund opportunity set. Securities include longer-term fixed- and floating-rate agencies, corporates and asset-backed securities. Managers limit holdings to securities rated A or better, and the average portfolio quality has tended to be AA.

By constructing high-quality portfolios through an investment process that emphasises thorough credit research, managers of enhanced cash products have generated total returns of 50 to 100 basis points (bps) over money market funds.

Enhanced cash products are positioned along the risk/return spectrum between money market funds and total return short duration portfolios

Exhibit 1

RISK	Money market	Enhanced cash	Short duration bond
Target portfolio duration	90-day max	Six months to one year	1.75 to two years
Average portfolio quality	AAA	AA	AA
Eligible investments	2(a)7	A or better	BBB or better
Maximum maturity per issue	13 months	Two to three years	N/A
Benchmark	Three-month T-bill	One-year index	One to three government/credit

Note: Illustration based on US\$ denominated securities.

Source: Northern Trust

Index return and risk analysis (as of September 30, 2005)

Exhibit 2

	Three-month T-Bill	Six-month T-Bill	Custom one-year index (50% three-month T-Bill and 50% one to three year gov/corp)
Duration	0.25 years	0.50 years	1.00 year
Standard deviation⁽¹⁾ Three year	0.23	0.21	0.78
Frequency of a loss	Rolling 12-month periods (143 observations)		
# of negative periods	0	0	0
Maximum return	6.43%	7.09%	8.50%
Minimum return	0.97%	1.03%	0.80%

(1) Standard deviation is an annualised figure based on monthly total return.

Note: Illustration based on US\$ denominated securities.

Source: Lehman Brothers and Northern Trust

RISK PROFILE OF ENHANCED CASH

Using total return data from various indices provides a reasonable proxy of the return and risk associated with enhanced cash products. The three-month T-Bill approximates money funds while the six-month T-Bill and one-year index captures the added risk & return of enhanced cash products.

Employing an enhanced cash strategy does not require a significant adjustment to a client's risk tolerance. As Exhibit 2 shows, closer inspection of rolling 12-month time periods over the past 10 years reveals that enhanced cash strategies have delivered positive total returns without a single period with of a loss. For shorter investment horizons (e.g., rolling three-month performance), negative returns occurred four times during that same 10-year period.

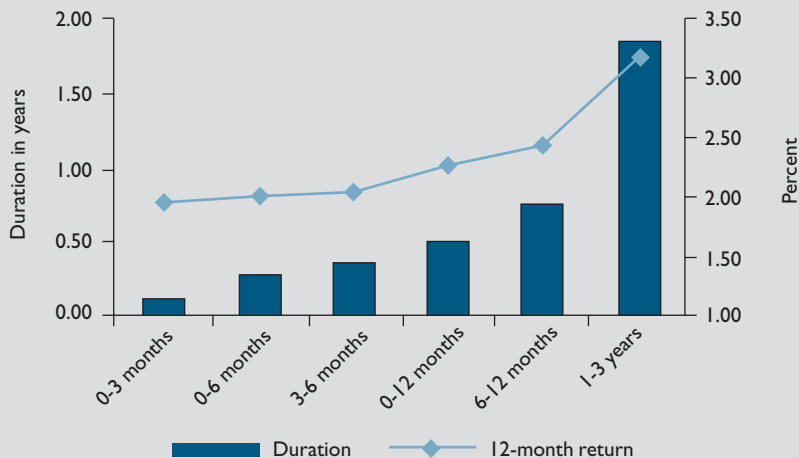
One of the reasons for the moderate risk profile of enhanced cash versus money funds is the active nature

of the product. Most enhanced cash managers actively manage their duration position based on the prevailing interest rate environment. Also, many managers use a barbell approach to construct portfolios; holding a sizable allocation to securities maturing within 30 days as well as longer dated bond maturing up to two to three years.

Exhibit 3 illustrates the risk and return profile of the short-term European markets. It is plotting duration and return over a one year period for short-term maturity structures starting at euro treasury zero to three months and moving out to euro aggregate one to three years. Over 2005 it can be seen that investors would have been rewarded for extending duration by receiving additional return i.e. rewarded for the additional risk undertaken. This contrasts with the US where over the same one year period, investors would have been better placed to keep assets at the shorter end of the yield curve. This is largely a result of the rate hikes occurring in the US versus no rate hikes made by the European Central Bank

Euro risk and return (as at September 30, 2005)

Exhibit 3



Source: Lehman Brothers and Northern Trust

(the first hike made by the ECB was in December 2005). However, over longer periods of time and during rising interest rate environments, enhanced cash strategies still perform well.

environment should look at the data. In all rising-rate periods mentioned above, enhanced cash products never once generated a negative return.

RISING RATE ENVIRONMENT ANALYSIS

Several recent periods offer meaningful insight into the performance impact of rising interest rates to an enhanced cash portfolio. US rate increases came as a surprise in 1994 as the Federal Reserve hiked rates six times, including an unprecedented 75 bps move in November 1994. In total, rates increased by 250 basis points to end the year at 5.5%. 1999 and 2000 saw rates increase by 175 bps. Finally, investors experienced 325 bps of rate increase since June 2004.

Investors who are concerned about this risk and think it safer to stick to money market funds in a rising-rate

IMPLEMENTING AN EFFECTIVE CASH STRATEGY

Combining money funds, enhanced cash and other short-duration products can lead to an overall portfolio design that meets liquidity needs but also captures meaningful return without undue risk. Investors should examine and segregate those balances that require immediate liquidity versus those that are available for a longer investment horizon. Enhanced cash strategies typically require horizons of at least 12 months to fully generate the benefits that justify the additional risk.

Investors must realise that daily liquidity comes with an opportunity cost even in today's rate environment. Of the more than US\$2 trillion currently invested in

Enhanced cash total return across US interest rate cycles

Exhibit 4

	Change in Fed funds target rate %	Total return	
		Top quartile enhanced cash manager ⁽¹⁾	Median enhanced cash manager ⁽¹⁾
1994	+2.50	4.04	3.64
1995	+0.00	7.87	6.81
1996	-0.25	5.71	5.59
1997	+0.25	6.01	5.85
1998	-0.75	6.16	5.95
1999	+0.75	5.33	4.99
2000	+1.00	7.41	6.98
2001	-4.75	6.73	5.84
2002	-0.50	4.22	3.47
2003	-0.25	2.12	1.83
2004	+1.25	1.52	1.39
2005 ⁽²⁾	+1.50	2.23	2.16

(1) Callan PEP Active Cash Style (enhanced cash) Universe

(2) Through September 30, 2005

Source: Northern Trust

money market funds (source: iMoneyNet), a good portion of those investments would offer better returns in an enhanced cash product. Although many investors are happy to accept a lower return for the peace of mind of knowing they can pull their money out at any time, for balances with a longer investment time horizon, modest exposure to interest-rate risk and credit risk can offer significant incremental returns over what investors can get from a money market fund.

SINGLE AND MULTICURRENCY SHORT-TERM STRATEGIES

Once the step has been taken to adopt an enhanced cash strategy over a money market strategy the next progression is to consider short-term global markets, both from a single currency and multicurrency perspective. On the surface taking this step appears to increase the level of risk undertaken; however this approach provides additional sources of alpha and brings diversification benefits that actually dampen down volatility. This approach is well suited to multinational companies that naturally generate cash-flows in currencies other than their domestic currency. The option facing them is whether to fully hedge, partially hedge, or leave these flows unhedged versus their domestic currency. In either of these circumstances is it important to understand the market dynamics you are investing in and the economic cycle that region is currently experiencing now and expecting for the future. For example, the lack of a securitised market in Europe versus the US has implications for constructing investment guidelines, portfolio composition, and return expectations. To give an example of a guideline consideration; it is important to look at the constituent members of the Eurozone for individual issuer limits as opposed to treating the Eurozone as one issuer. Avoiding credit arbitrage is another consideration as you tend to find the same issuer issuing at varying spreads depending on currency of

issue. The credit spread should be same due to underlying credit risk, not currency risk, but you may find local investor preference causing some drift.

Investing in the global short-term market can reduce the risk of your portfolio, obtain additional alpha, and align investments in the currency where the cash is generated, with or without currency exposure.

ENHANCED CASH TRENDS FOR 2006 AND BEYOND

Not only are enhanced cash strategies being used to generate additional alpha over and above money market funds, they are increasingly coming under the spotlight for use within overlay structures, collateral management, and liability driven investment.

Focusing on liability-driven investment; Liability Driven Investment Solutions cover a multitude of sins but the key to success lies in getting basics right and following the founding principals of asset liability management which is to match your liabilities. Once the basics have been mastered, pension funds are in a stronger position to include higher alpha strategies as part of their overall strategy. Enhanced cash structures have a crucial and central role to play. The reason lies with how interest rate swaps are structured. Using the example of a pension fund; interest rate swaps are essentially the exchange of fixed for floating interest rate payments. Under this arrangement a pension fund would receive a fixed interest payment to neutralise their cash outflow liability in return for making a floating interest payment. The floating interest payment is typically a money market rate such as three-month Libor. Simplistically, a pension fund could therefore match their liabilities using interest rate swaps if their assets produced a return of three-month Libor. As such, the neutralisation of liability risk via interest rate swaps is straightforward enough to implement and so is the investment of cash to meet the floating leg obligation of the interest rate swaps.

Therefore, the type of investment strategy linked with a three-month or six-month Libor benchmark (the floating leg of the swap) is an enhanced cash strategy. It should be stressed that there are significant advantages to using an enhanced cash strategy as part of an Liability-Driven Solution:

- it is cost efficient;
- it is easier to understand;
- it requires less governance; and
- it has a lower risk profile, and may result in less volatility on a plan sponsor's balance sheet.

The temptation of moving away from a solution including enhanced cash lies within solutions offering excess returns over and above the liability match, for example liabilities plus 2% or 3% where a multitude of high-risk high-alpha strategies are adopted, most of which are generally uncorrelated with the liabilities. Pension funds should weigh up whether they are aiming to match or reduce the mismatch between their assets and liabilities, whether they are aiming to generate excess returns via absolute strategies, or whether they are aiming to achieve a combination of both approaches. Given the potential impact on the balance sheet we expect corporates to be taking a closer look at how their pension funds implement these strategies.

INVESTMENT OUTLOOK FOR 2006

It is imperative to understand the different economic cycles occurring if you want to take advantage of the best alpha opportunities in the global short-term markets.

The performance of the global economy and international financial markets continues to be favourable and in some ways defies conventional wisdom. Despite higher energy costs and unprecedented current account imbalances, global economic growth remains above trend and again appears to be strengthening. This expansion is being accompanied by modest core inflation, long-term interest rates and a surprisingly strong dollar. The linchpin

of this phenomenon is the performance of the US economy. Undeterred by headwinds such as a doubling of oil prices and 325 basis points of Federal Reserve tightening, gross domestic product (GDP) growth has averaged 4% during the past 10 quarters. Remarkably, no quarter has fallen below an annual growth rate of 3%. A critical issue for financial markets is whether this favourable fundamental performance by the US will persist. Unquestionably, there are risks associated with the unfolding housing slowdown and the need to finance the persistently large current account deficit.

But the US economy is far from being cyclically fragile, and adjustment to these imbalances can occur gradually. Growth in 2006, for example, will be underpinned by higher household and corporate incomes, record levels of net worth, and supportive financial conditions. This environment will allow mechanisms – such as global expansion and rising real US interest rates – for adjusting imbalances to proceed evenly and not disrupt the US business cycle. The ongoing strength of this cycle will be apparent in the first half of 2006. Growth of the US economy will reflect:

- Steady consumer spending, supported by gains in labour income and job growth, stable energy prices, and modest home equity extraction.
- Strong business spending, reflecting investing for growth and the need to replenish inventories – which were at an all-time low of 1.25 months of sales in October 2005.
- Higher government spending, as efforts to rebuild the Gulf Coast gain momentum and the new federal prescription drug benefit programme begins.
- Improved exports, reflecting demand from more rapidly growing foreign economies.

The European Central Bank raised interest rates to 2.25%, the first increase in more than five years in December 2005, with potential for the beginnings of a slow, steady interest rate hiking cycle. Inflation has been stubbornly above the ECB's target of 2% for several years, whereas the various measures employed by the Bank of England have

been below their target in recent months. Growth in Europe may exceed growth in the UK if the 2006 New Year business service and manufacturing confidence surveys lead to better hard economic data. The Bank of England and European Central Bank both experienced more transparency with new governors recently, which is always welcomed by market participants. The question is whether we should expect the same with the US Federal Reserve and Fed Chairman Bernanke, or will the market continue to rely on written texts and the varying interpretations. Both inflation forecasts and growth indicators for the UK and Europe are interpreted differently by market participants. An example would be an oil induced price shock which could be interpreted as a potential drag on growth by one central bank, and as potential inflation pressure by another central bank - again depending on the current stage of economic cycle and monetary policy accommodation. The Bank of Japan indicated it may end its quantitative easing in the first half of 2006, and Japan's Tankan survey offers additional confirmation that the increasingly strong pace of business expansion is likely to continue. However, they will be cautious in guarding against preemptive action that may stifle the recovering that is underway.

2006 is expected to be another exciting year in the short-term debt markets with many global opportunities to take advantage of if investors are willing to expand their investible universe from that of their domestic market.



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