## Uncovering hidden risks in cash portfolios: Eight portfolio potholes to avoid

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**Abstract** Over much the last decade, supposedly conservative cash investors steadily increasing their risk appetite was a widespread phenomenon. Recent credit developments in the mortgage and debt markets helped raise risk awareness levels. This paper summarises the risk behaviour of corporate cash and money market fund managers into eight broad categories. Corporate investors are advised to check for these potholes as an ongoing exercise. The eight potholes to avoid are: overconfidence in credit ratings, risks masked by securitisation, hidden financial leverage, exotic repurchase agreements, extendible securities, structured notes, speculative use of credit derivatives, and hedge funds.

KEYWORDS: corporate cash investments, investment risks, credit risk, derivative risk, extension risk, hidden leverage, structure risk

### INTRODUCTION

Financial market disruptions often send investors into shock, denial and anger. They also invoke pain, disorientation, fear and ostracism. Disruptions are the 'centennial' events that in reality seem to happen every decade. The only predictability of these events is their timing — they occur when greed is rampant and fear is in hiding.

Recent press coverage of subprime mortgage problems, leveraged buyouts, hedge funds and credit derivatives may have helped raise risk awareness levels, as demonstrated by the fact that investors have started to pay more attention to the credit worthiness of investments in their accounts. As recently as a few months ago, these same clients were more interested in how to improve yield potential. From the fund manager's perspective, this change in risk appetite is undoubtedly a good thing.

This paper summarises observations of increased risk in the cash and money market fund industries into eight broad categories. With the recent market jitters, it is hoped to remind investors that risk and return are two sides of the same coin. Checking for potholes should not be a one-off event, but rather an ongoing exercise while the vehicle is on the road. As principal preservation remains the cornerstone of cash investing, all treasury professionals should join together in championing risk conservatism, particularly now.

# RATINGS DO NOT TELL THE WHOLE STORY

Credit ratings often are the first line of defence in security selections, but they have always had their drawbacks — corporate management has substantial flexibility in managing its ratings through financial leverage. The recent Home Depot story illustrates that the difference between AA and BBB ratings can be a mere share repurchase programme financed with large debt. Investors should scrutinise an issuer's claim of committing to high credit ratings and the operating environment that makes such a claim plausible.

As bonds supported by collateral assets, known as asset-backed securities (ABS), gained popularity, credit ratings ran into new limitations. ABS ratings are influenced by payment default patterns of the underlying assets. Rating agencies often assign ratings with quantitative methods that make default projections based on the assets' historical behaviour. With limited data, ratings on some of the newer bonds now appear to be inadequate. This so-called model deficiency may be best summarised by Bill Gross, a prominent industry veteran, who jokingly attributed these ratings to major ratings agencies being fooled by the asset collaterals' 'six inch hooker heels'.

### BAD APPLES WON'T MAKE A GOOD PIE

As 'securitisation' of financial assets gained acceptance, some cash investors started to dabble in 'yielder' ABS with concentrated exposure to riskier borrowers and complicated structures. The fastest-growing ABS market in recent years has been home equity loans (HEL) backed by subprime borrowers. In fact, most of the subprime mortgage loans since late 2005 went into the ABS market. Many of the HEL bonds consisted of 100 per cent of second-lien subprime assets.

More recently, a more exotic form of ABS called collateralised debt obligations (CDOs) began buying other ABS bonds as collateral. Several of these issue money market bonds specifically targeted at cash investors. Some CDOs may buy other CDOs as investments similar to funds of funds (CDO<sup>2</sup>) or even funds

of funds of funds (CDO<sup>3</sup>). At each level of rebundling is the arrangement of 'structured subordination', which divides an asset pie into multiple slices and designates certain slices 'subordinate' to, or to act as loss cushions for, the senior slices. Understanding all the pertinent risk exposure requires a lengthy process of peeling back the layers of the structure. The lack of transparency with regard to asset description and performance at each layer also complicates matters.

### HIDDEN LEVERAGE MAY SNEAK UP ON YOU

Leverage in an investment account refers to investing with borrowed funds. While using leverage may help to enhance return potential by the leverage factor, it also magnifies potential losses. One of the two troubled Bear Stearns hedge funds borrowed \$6bn against \$600m of investor funds for a leverage factor of 10 to 1. According to its prospectus, the leverage could have been as high as 15 to 1.

Most cash investors understand the potential risk of leverage, but few realise the hidden leverage in their own portfolios. For example, securities lending, a popular practice among institutional accounts, is a form of leverage an investor buys a security, lends it to someone in exchange for cash, and invests the cash again. Another variation is a reverse repurchase agreement, where an investor sells securities to a broker-dealer, receives cash (and invests it again), and agrees to buy them back at a later date.

Frequently, cash investors are exposed to hidden leverage through money market and other commingled funds. While leverage is often incidental and disclosed in money funds, the use of leverage for return enhancement may be more aggressive and less noticed in cash plus funds, bond funds and exchange traded funds whenever derivatives are used.

## NOT ALL REPOS ARE ALIKE

Repurchase agreements (repos) are no longer what they used to be — overnight financing

contracts entered with securities broker-dealers and fully collateralised by US Government securities. Since a 2005 revision to US bankruptcy laws, repos have undergone major makeovers with some of them carrying substantially higher risks.

For example, bonds in collateral may now include investment-grade (hint: BBB-rated) corporate and mortgage securities. The collateral amount may be less than 100 per cent of the repo contract. The term of the agreement may be as long as a year. Borrowers of investor funds, called repo counterparties, can now include subprime loan originators, asset managers and CDO managers. In short, these 'non-traditional' repos increase investors' risk in three dimensions — term, counterparty credit and collateral.

In addition to direct exposure, investors may be exposed to non-traditional repo risks through buying asset-backed commercial paper (ABCP) programmes or through money funds that invest in ABCPs. According to a January 2007 Moody's study, about 20 per cent of new ABCP programmes and 30 per cent of global issuance between March 2004 and June 2006 were non-traditional repos, most of which were backed by mortgage pools.

### **EXTENSION RISK MAY COST MORE**

For a few extra basis points (100th of 1 per cent) of yield, several types of cash investments carry embedded extension options. Extension risk refers to the risk associated with the lengthening of a bond's maturity date.

Among popular products sold to cash investors, extendible commercial notes and secured liquidity notes — both give issuers the option to push out their final maturities to up to 397 days. Extendible notes, which are floating rate notes with nominal maturities up to five years, have a slightly different twist in that an investor may opt to extend. Auction rate securities also present extension risk, as auction failures may prohibit the sales of the securities through one or more auctions.

Most bonds with extendible features carry a

big carrot in the form of above-market interest rates, sometimes as much as 3 per cent more, if an issuer decides to exercise its option. The investor's concern is that an extension event is often a stress signal of something worse about to happen. For example, a bond issuer who chooses to extend a security may be unable to make full principal payment at the earlier maturity date.

## STRUCTURED NOTES EQUAL SPECULATION

After a decade of hiatus, structured notes have recently returned to favour. At first glance, most of the notes carry high credit ratings (AAA or AA) and promise substantially higher yield potential than other fixed-income investments. Corporations are among the latest group of investors purchasing structured notes in their cash accounts. They sometimes do so unwittingly, as structured notes often look similar to normal corporate or agency notes.

Structured notes are not debt obligations of corporate or asset-backed entities, but rather derivative instruments pegged to certain market conditions. They allow investors to 'bet' on, and potentially profit from, a certain view on the levels of interest rates, inflation, foreign exchange rates, stock and bond indices, and so on. If the view turns out to be true (eg the two-year treasury note yield stays below 6 per cent), then the investor earns a handsome yield (perhaps 7 per cent). If the outcome is different, (eg the 2-year treasury yield goes above 6 per cent), then the investor may get drastically less or no compensation.

A major problem with structured notes is that they are tools of speculation on discrete future events based on sometimes arbitrary rules. As a consequence, there may not be reasonable projection of the timing and amount of future cash flows, as well as associated interest rate and credit risks. In fact, wrong bets on structured notes contributed to the Orange County, CA bankruptcy market disruption in 1994.

## **'BUYING' OR 'SELLING' PROTECTION**

For much of the last decade, derivatives used to be a 'dirty' word for many investors. While they currently are often helpful in offsetting specific risks, the proliferation of credit default swaps (CDS), a form of credit derivatives, also made it possible, and easier, to bet for and against certain credits.

CDS are akin to insurance contracts on bonds. Buying CDS reflects an investor's belief of an issuer's higher default risk and, therefore, is a bet against a credit. CDS terms can be between one and five years. Selling default protection works the opposite way, with the effect similar to buying a bond. The arrival of CDS contracts makes trading of credits no longer limited to physical availability of individual bonds. The more recent introduction of CDX (credit default index), a contract on an index of CDS, took credit speculation to the next level. Many of the losses in the Bear Stearns hedge funds were sustained by the use of a form of CDX contracts on home equity loans.

The use of CDS in cash portfolios may represent a blessing and a curse. It may be a good idea to use derivates as a hedging tool to reduce risk, in an unlevered fashion, but not to create or increase risk. For most accounts with moderate cash balances, an outright reduction of at-risk investments may be preferable to using derivatives altogether.

# HEDGE FUNDS ARE NOT FOR THE FAINT OF HEART

The idea of using hedge funds as cash investment vehicles would have sounded bizarre in the past. Then, two years ago, one of the largest hedge funds in the USA offered a 'LIBOR-plus' cash fund with yield potential substantially higher than the prevailing shortterm interest rates. In the ensuing months, similar sales were offered to corporate clients. A recent proposal analysed by Capital Advisors Group was one of the troubled Bear Stearns hedge funds that promoted itself as a highquality, zero duration (interest rate) risk fund suited for conservative credit investors that included corporate accounts.

Hedge funds are lightly regulated investment pools and their lack of transparency makes thorough due diligence reviews difficult. Fixedincome hedge funds often use many of the aforementioned strategies to achieve higher return potential, such as the use of leverage, derivatives and exotic CDOs.

Incidentally, both hedge funds examined by Capital Advisors Group (the other being a fund managed by Vega Asset Management that lost 16 per cent in a single month in 2006) eventually ran into difficult times. There are likely to be more. We believe strongly that hedge fund strategies are fundamentally inconsistent with the fiduciary responsibilities of those managing cash accounts.

## CONCLUSION

The investment environment is no longer one where an investor's primary concerns are the shape of the yield curve and the credit rating of a corporate issuer. New technologies, Wall Street ingenuity and the steady supply of market liquidity has ushered in an era of new cash investment products not seen in decades. Sorting through the various hidden risks can be intimidating.

The risks discussed here, as well as those stemming from leveraged buyouts and aggressive share buybacks, are related to the relaxed lending standards at lending institutions and lower risk premiums demanded by bond investors in recent years. These are the signs of a more difficult period ahead for risk averse investors. It is hoped that the eight risk potholes in this paper will help readers evaluate their own portfolios and take preventative measures.

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124

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1 Moody's Investors Service (2007) 'Special Report: FAQ on ABCP: Repo Programs', 12 January, available at http:// www.moodys.com/moodys/cust/research/MDCdocs/12/ 2006300000426757.pdf?search = 6&searchQuery = special + report%3a + faq + on + abcp&click = 1 (accessed 21 September 2007).