# Sterling money market funds

By Adrian Hilton of the Bank's Sterling Markets Division.

*Sterling institutional money market funds have, over the past five years, become an important feature of the sterling money market. This article looks at the characteristics of such funds and the instruments they invest in. It recognises that the growth of sterling institutional money market funds has the potential to change the flow of funds in the sterling money markets and to alter the composition of banks' balance sheets, but has no material implication for the implementation of monetary policy.*

Sterling money market funds (MMFs) have grown, in terms of net asset value (NAV), from around £1.5 billion to over £40 billion in the past five years (Chart 1), and as a proportion of the sterling money market from less than 0.5% to around 6% over the same period.(1) Through collective investment in short-term, highly rated money market instruments, these funds offer an investment product that has portfolio diversification and liquidity, and that is used by institutional investors to manage short-term cash positions.

**Chart 1**
**Sterling money market funds**


Source: iMoneyNet.

This article describes the market for sterling money market funds, and considers the reasons behind its growth and the possible implications of that growth.

## What is a money market fund?

MMFs are pooled investment funds that issue shares that are similar, in terms of liquidity, to call deposits. They do not provide guaranteed security of principal, however, and it is possible for the value of a fund's assets to fall to such an extent that the fund is unable to meet the maximum possible redemptions (known as 'breaking the buck'). MMFs invest in money market instruments or in interbank deposits with a residual maturity of up to one year and distribute income, less fees, to shareholders (see below). In sterling, MMFs are typically institutional: they are used chiefly by financial and non-financial corporates, investment institutions, charities and local authorities as a means of short-term cash and liquidity management. Retail sterling MMFs do exist but their market size is small (the Investment Management Association estimates somewhere in the region of £2.5 billion) and they are not considered here.

Though managed from London, sterling MMFs are usually based in offshore centres,(2) primarily in Luxembourg and Dublin, both of which offer a 'tax-neutral' environment in which investment income earned by non-resident investors is neither taxed at source nor subject to a withholding tax. Fund providers establishing their funds in these centres have historically enjoyed low levels of corporation tax and a flexible approach from the regulatory authorities under which the industry has been encouraged to develop. For example, the Central Bank of Ireland (which authorised money market funds in Dublin until the formation of the Irish Financial Services Regulatory Authority in 2003)

(1) Data on sterling money market funds are taken from iMoneyNet's *Offshore Money Fund Vision*, which captures the large majority of the sterling institutional money fund market. The sterling money market is defined here as interbank deposits (including deposits between entities in the same group), Treasury bills, certificates of deposit, commercial paper, gilt repo and eligible bills.
(2) Around 40 small (mainly retail) MMFs are based in the United Kingdom.

was the first authority to allow securities that are not listed on exchanges to be held within collective investment schemes (including MMFs) authorised under the European investment funds legislation, UCITS.[1]

Sterling money market funds are provided by financial institutions (Table A). The largest are run by major UK banking groups but insurance groups are also present in the market. The ten largest funds account for over 90% of the total market and the two largest funds represent around 40%. Such concentration is likely to reflect the degree to which MMFs are marketed to the existing depositor base of their parent banks, perhaps aided by a tendency of depositors to maintain existing bank relationships.

### Table A
### Ten largest sterling money market funds (as at 21 May 2004)

| Fund name | Net asset value (£ billions) |
|---|---|
| Barclays (Global Investors) Global Liquidity First Fund | 9.0 |
| Scottish Widows Global Liquidity Fund | 7.3 |
| RBS-Global Treasury Funds | 2.8 |
| JP Morgan Fleming Liquidity Fund | 2.7 |
| Insight Liquidity Funds plc | 2.5 |
| Standard Life Liquidity Fund | 2.3 |
| Henderson Liquid Assets Fund | 1.5 |
| Fidelity Institutional Cash Fund | 1.4 |
| Citi Institutional Liquidity Fund plc | 1.3 |
| Merrill Lynch (Asset Management) Institutional Liquidity Fund | 1.3 |

Source: iMoneyNet.

Table B shows the key differences between an MMF and an overnight call deposit offered by a bank, from the viewpoint of an investor.

### Table B
### Characteristics of money market funds and overnight bank deposits

| | Call deposit | MMF |
|---|---|---|
| **Risk** | Single name. | Credit diversification through broad portfolio mix. |
| | | Possibility of 'breaking the buck' through volatility of asset prices. (a) |
| | Covered by deposit insurance (up to around £30,000). | Not covered by deposit insurance. |
| **Return** | Related to market overnight interest rates. | Depends on returns on portfolios; intended to be stable. |
| **Fees** | None. | 10–20 basis points of return. |
| **Interest** | Paid daily. | Stable or accumulating NAV (see above). |
| **Liquidity** | Later intraday deposit/withdrawal deadlines (often driven by payment system deadlines). | Early cut-off times for purchase/sale of shares. |
| **Minimum investment** | None, but interest rates may vary according to size of investment. | Varies; most around £1 million. |

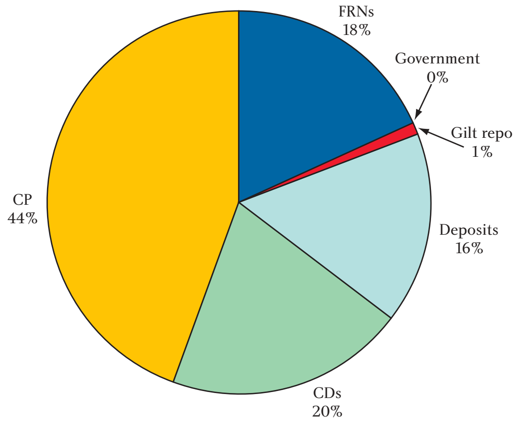
(a) A fund 'breaks the buck' when the value of its assets falls below the book value of the fund, rendering it unable to meet maximum possible redemptions.

Money market fund returns arise in one of two ways. The shares in a 'stable NAV' fund accrue interest daily over each month and this income is either converted into additional shares or paid directly to the shareholder. 'Accumulating NAV' funds reflect investment income in an increased share price each day.

## What do money market funds invest in?

Sterling MMFs invest in bank and corporate sterling debt—commercial paper (CP), certificates of deposits (CDs), floating-rate notes (FRNs) and bank deposits—and (to a much lesser extent) in short-term government securities (mainly UK Treasury bills) and gilt repo (Chart 2).

### Chart 2
### Average portfolio composition of sterling money market funds as at 21 May 2004




Source: iMoneyNet.

Figures do not sum to 100% due to rounding.

The investment strategy of a sterling money market fund is partly governed by European legislation: the UCITS directive, which is not exclusive to money market funds, limits the range of permissible investments for collective investment vehicles and lays down guidelines for the degree of portfolio diversification. By far the most important external influences on the portfolio composition of sterling money market funds, however, are the stipulations of the ratings agencies, which take a view on a fund's overall investment quality (see the box on page 178). In doing so, they impose explicit restrictions on the asset quality and maturity of the portfolio, with further implications for its overall liquidity.

(1) Undertakings for Collective Investment in Transferable Securities. Investment in non exchange-listed securities is essential for MMFs, which invest in large amounts of commercial paper and certificates of deposit.

## Money market fund ratings

Most sterling institutional money market funds carry AAA MMF ratings from one of the major agencies. These ratings are intended to indicate that the rated funds are of a similar (though not directly comparable) investment quality to an AAA-rated long-term fixed-income product. Standard and Poor's (S&P) distinguishes MMF ratings from its long-term asset credit ratings by the addition of a lower-case 'm' as a suffix to the rating. Moody's does the same by adding a measure of market risk to its ratings.

A fund rated AAAm by S&P must invest at least 50% of its portfolio in assets with the top short-term rating of A-1+. The remainder must be rated at least A-1. Moody's, on the other hand, requires that, while a fund may only invest in assets rated at least P1 (the equivalent of A-1), the overall risk of an investment in an Aaa-rated MMF must be no greater than the risk of investing in an Aaa-rated fixed-income obligation for 13 months. It uses an expected loss calculation to decide the extent to which a lower credit rating can be offset by a shorter residual maturity. Both agencies require a weighted asset maturity (WAM) of no more than 60 days. In addition to these rules, the agencies say that they scrutinise liquidity, management philosophy and internal controls to reach a view on a fund's overall investment quality.

Since the funds themselves are situated offshore, local authorities (such as the Irish Financial Services Regulatory Authority or the Commission de Surveillance du Secteur Financier in Luxembourg) are responsible for authorisation of funds under the UCITS directive (see below) and the UK Financial Services Authority (FSA) has a responsibility for regulating asset managers and their promotion activities if they operate from within the United Kingdom. But rating agencies remain the most powerful external control on sterling money market fund activities and investment.

The agencies claim that their own criteria for top-rated funds are more stringent than the requirements of SEC Rule 2a-7, which applies to US funds.(1) For example, the maximum WAM under 2a-7 is 90 days (compared with 60 days under the agencies' AAA requirements). In the European Union, the UCITS directive lays down guidelines for collective investment vehicles that cover portfolio diversity and permissible investments, but these are not specific to money market funds.

(1) A notable exception is the maximum exposure to any one name: Rule 2a-7 puts that limit at 5% while S&P and Moody's allow 10%.

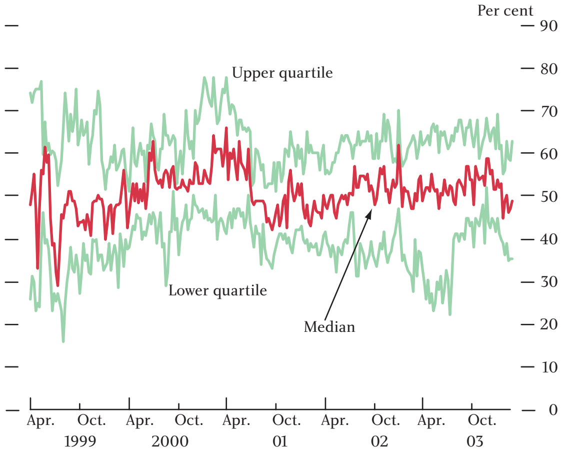
Within these restrictions, investment strategies and portfolio compositions may differ markedly between funds, reflecting both a fund's investment aims (ie the degree to which yield generation is deemed important relative to preservation of principal) and the fund manager's views on the relative value and liquidity of different money market instruments. Fund managers may also seek to increase the investment return on their funds for the purpose of gaining market share. They can do this by altering the precise composition of their portfolios to include higher-yielding products such as asset-backed commercial paper (see below) and FRNs at the cost of lower secondary market liquidity or higher price volatility.

Chart 2 shows that cash deposits with banks form an important component of any money market fund portfolio. For the most part, these are overnight or short-term deposits, which funds place in order to cover potential investor outflows. Funds might also hold sterling CP and CDs with the aim of providing a second tier of liquidity.

More generally, CP and CDs are held for the purpose of generating yield and, as such, constitute a large proportion of most portfolios. Sterling money market funds hold, on average, around 50% of their investment portfolios in the form of CP, although the exact proportion does vary between different funds (Chart 3). CP is issued by a wide range of names, both financial and non-financial (for example manufacturers, retailers and utilities), allowing portfolio diversification. There is also a growing pool (around £9 billion) of asset-backed CP issuance in sterling, much of which is purchased by MMFs.(1) Asset-backed CP typically offers

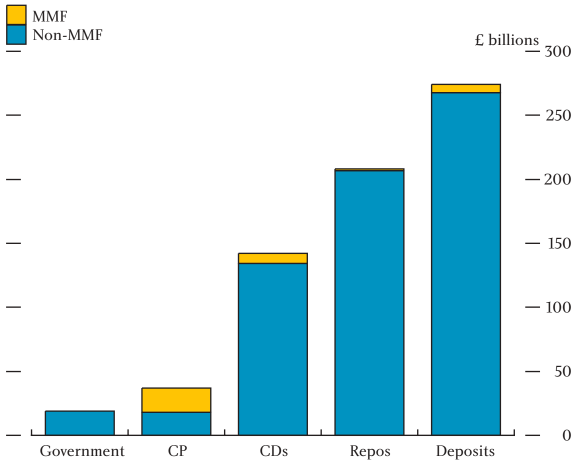
(1) See Rule, D (2001), 'Risk transfer between banks, insurance companies and capital markets: an overview', *Financial Stability Review*, December, pages 137–59, for more on asset-backed CP.

**Chart 3**
**Share of commercial paper in sterling money market funds**



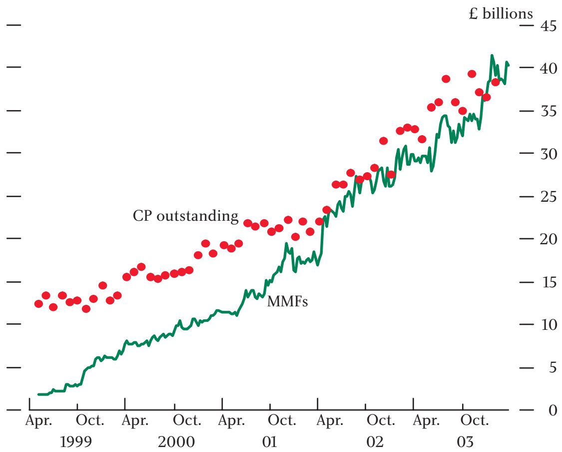

Source: iMoneyNet.

**Chart 4**
**Sterling money market instruments and holdings by money market funds, March 2004**




Sources: Bank of England and iMoneyNet.

**Chart 5**
**Sterling commercial paper outstanding and money market funds**




Sources: Bank of England and iMoneyNet.

higher yields, but can require more onerous credit analysis than conventional CP and be less liquid.

CDs also form an important part of sterling MMF portfolios: market contacts report that there is greater secondary market liquidity in CDs (including repurchases by issuers) than in CP, which makes them more attractive to some funds. Floating-rate notes, which pay coupons linked to market interest rates such as three-month Libor, are frequently held as a minority asset by most funds. But they are usually bought close to final maturity and many funds hold only bank-issued notes to limit their corporate exposure.

Overall, a large part of a fund's assets tends to be concentrated at short maturities, their frequent 'churn' reducing reliance on secondary market liquidity. Under rating agency rules, AAA-rated funds must maintain a weighted asset maturity (WAM) of less than 60 days, but fund managers may reduce their WAM by buying shorter-term assets, depending on their view of the yield curve. At 21 May the average sterling MMF WAM was 43 days, with a standard deviation of 11 days.(1)

Across the various instruments, only money market funds' holdings of CP constitute a significant proportion of any particular market (Chart 4). The growth of outstanding sterling CP and of MMF assets has been roughly the same in recent years (Chart 5) and it is possible that their growth shares some key influences. It is also possible that the growth of MMFs has stimulated issuance of CP by providing a new source of demand for short-term paper.

## Why have sterling money market funds grown?

### Demand

Contacts suggest that the key attraction of money market funds to investors is the ease with which they can diversify risk through such products. For a corporate treasurer to open the number of bank lines required to achieve the same level of diversification would be operationally intensive. In addition, the resources required to perform credit analysis on such a wide range of investments would make it impractical for many treasury operations to monitor the risk of such a broad money market portfolio.

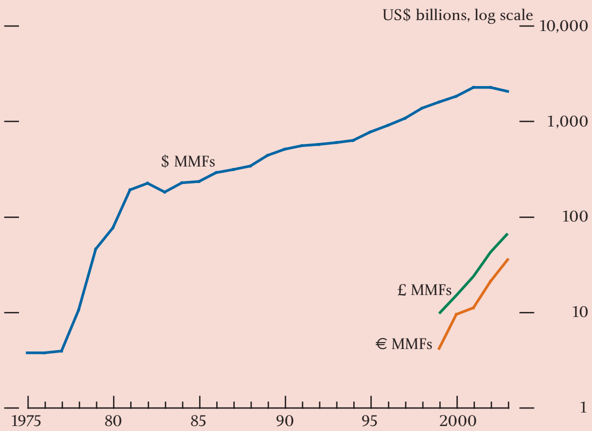
Demand for MMFs has, therefore, sprung at least in part from a move away from in-house cash management towards greater investment diversification, and a

(1) *iMoneyNet Offshore Money Fund Report.*

## A comparison with US money market funds

MMFs have been an important feature of the US dollar money market for almost 30 years. US money market fund assets now total around $2 trillion. In nominal dollar terms, sterling funds are still smaller than US funds were in 1980 (Chart A). Euro funds are also small by comparison. Unlike in the United Kingdom, US money market funds are included in monetary aggregates.(1)

**Chart A**
**Evolution of US dollar, euro and sterling money market funds**



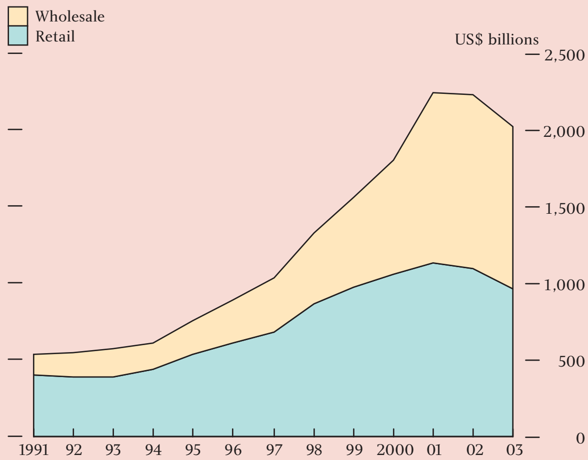

Source: iMoneyNet.

US MMFs emerged primarily as a vehicle for retail investors during the 1970s when falling equity and bond prices following the oil price shocks increased the attractiveness of cash as an asset class. At the same time, and despite rapidly rising interest rates, banks were prohibited by 'Regulation Q' from paying interest on current accounts and were restricted to paying around 5% on time deposits. MMFs were the natural beneficiary, although the growth of inflows eased slightly when Money Market Deposit Accounts (MMDAs) began to be offered by banks in 1982.

Fewer banking regulations and the ability of bank current account rates to track money market rates meant that retail funds in the United Kingdom did not take off at the same time as US funds. Reflecting this, while US money market funds have traditionally been marketed to retail investors—many bear the characteristics of bank accounts (offering chequebooks, for example)—most money market funds in the United Kingdom are wholesale products.

In recent years, US wholesale funds have grown in terms of assets at a faster rate than US retail funds (Chart B). A trend among companies during the 1990s towards 'outsourcing' cash management responsibilities via MMFs (similar to that discussed before in the context of sterling funds) has boosted investment in US institutional funds. Declining relative interest rates in recent years have caused some retail investors to shift short-term assets out of MMFs into bank deposits.

**Chart B**
**US domestic money market funds since 1991**




Source: iMoneyNet.

(1) Retail MMFs are included in M2 and M3; institutional MMFs are included in M3.

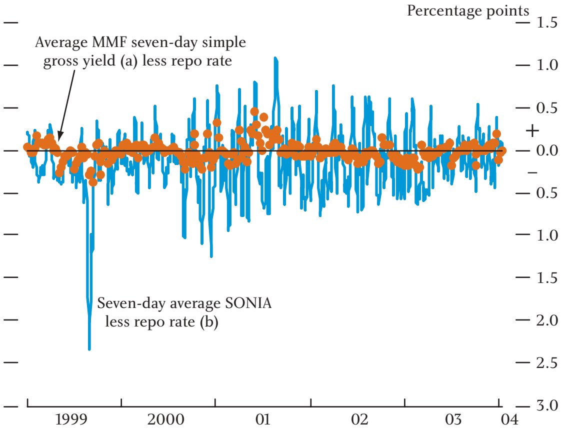
re-evaluation of existing banking relationships. The same has been said of US wholesale investors, who have moved in the past few years towards outsourcing of cash management.(1)

This process has occurred over a period when the number of banks operating in the United Kingdom has fallen (by 20% over the 1990s).(2) Treasurers have been prompted to look to alternative products to retain diversification of their cash portfolios.

Market contacts have noted that, in addition, MMF yields have generally been less volatile in recent years than sterling market overnight interest rates (and bank call deposit rates, which are typically linked to overnight rates) (Chart 6). But it seems unlikely that

(1) Investment Company Institute (2003), *Mutual fund fact book*.
(2) Bank for International Settlements (2001), *Group of Ten—Report on consolidation in the financial sector*.

## Chart 6
## Sterling money market fund yields and overnight interest rates

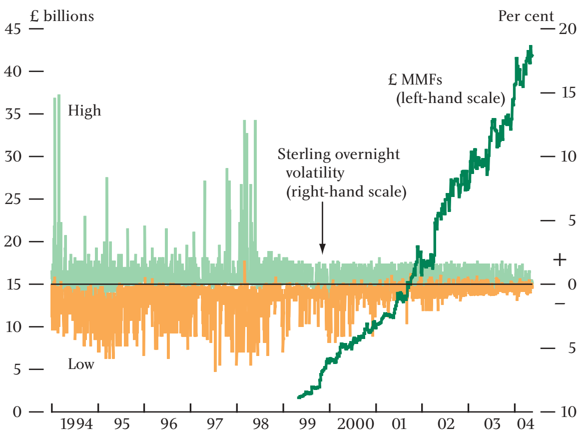



Sources: Bank of England and iMoneyNet.

(a) Average annualised gross yield on sterling MMFs for past seven days.
(b) SONIA is the sterling overnight indexed average.

short-date volatility has been a key driver of MMF growth, since this has occurred over a period in which that volatility has declined (Chart 7). Market rates have stabilised further since the Bank published a consultative paper on money market reform on 7 May 2004.(1)

## Chart 7
## Overnight interest rate volatility and sterling money market funds




Sources: Bank of England and iMoneyNet.

The growth of sterling MMFs also coincided with a period of increasing corporate liquidity and positive cash positions. Chart 8 shows that corporate liquidity has been built up throughout the past five years, during which time the money market fund industry has expanded. The accumulation of cash and liquidity on corporate balance sheets may have led to greater demand for short-term cash management products such as MMFs.

## Chart 8
## UK PNFCs' liquidity(a)


Source: Bank of England.

(a) Defined as all currency deposits, money market instruments (MMIs) (excluding shares in MMFs) and bonds held, divided by all short-term borrowing and MMIs issued.

## Supply

It is possible that another driver of sterling MMF growth was the impetus given to the European fund industry by the arrival in the market of American investment firms with experience of an established money market fund industry in the United States. Many of the first sterling funds were provided by such firms as Fidelity, Northern Trust and Citibank. By 2002, most major UK banks had followed suit, either directly or via their fund management businesses.

There may be some value for major UK banks in setting up funds as an alternative to holding corporate demand deposits on their balance sheet, where they would be subject to the FSA's regulatory regime for major UK banks' liquidity—the stock liquidity regime (SLR). Under the SLR, a bank is obliged to hold a stock of high quality, marketable instruments (chiefly gilts and other EU sovereign bonds held outright or on reverse repo) sufficient to cover net sight deposit and five-day wholesale cash outflows.

## Implications of sterling money market fund growth

Increased use of MMFs changes the flow of funds in the sterling money markets: cash invested in money market funds might previously have been invested in bank deposits or directly in money market instruments. To the extent that it would otherwise have remained in money market instruments, MMFs are intermediating the process by which treasurers run money market books.

(1) See 'Reform of the Bank of England's operations in the sterling money markets', reprinted on pages 217–27 of this *Quarterly Bulletin*.

But to the extent that it would have been deposited with banks, it may be the case that MMFs serve to divert some institutional cash away from banks' balance sheets and into money market instruments. In doing so, they change existing relationships and sources of funds. Holdings of corporate CP by MMFs suggests that at least some of this cash is used to fund corporate borrowers directly, rather than through financial intermediaries. In this case, corporate loans and deposits might form a smaller part of bank balance sheets in future, should MMF growth continue.

Alternatively, by investing in bank paper of up to 13 months' maturity, MMFs provide banks with liabilities of longer maturities than customer call deposits, undertaking some of the maturity transformation that might otherwise have occurred across banks' balance sheets.

One consequence for central banks is the effect on monetary aggregates. Since MMF investments take place offshore, they are not counted as a component of M4 in the United Kingdom, and it is possible that the data do not measure the full size of sterling 'money', ie both deposits and deposit-like shares in MMFs. The extent of this leakage depends on the amount of MMF investment that would otherwise have been deposited with banks, and the level of MMF investment in non-financial corporates (rather than in banks). Currently, MMFs represent only a small proportion of the total market (around 6%).

In summary, while sterling money market funds have experienced rapid growth over recent years, the relatively small size of the market suggests that there is no immediate challenge to the banking system, by contrast with the United States, where a larger proportion of households' liquid assets are held via funds. That would suggest that there are no obvious implications, therefore, for the implementation or transmission mechanism of monetary policy in the United Kingdom. As an innovation in financial markets, however, there is potential for the growth of MMFs to alter the landscape of the sterling money market and the relationships between banks, wholesale borrowers and investors.