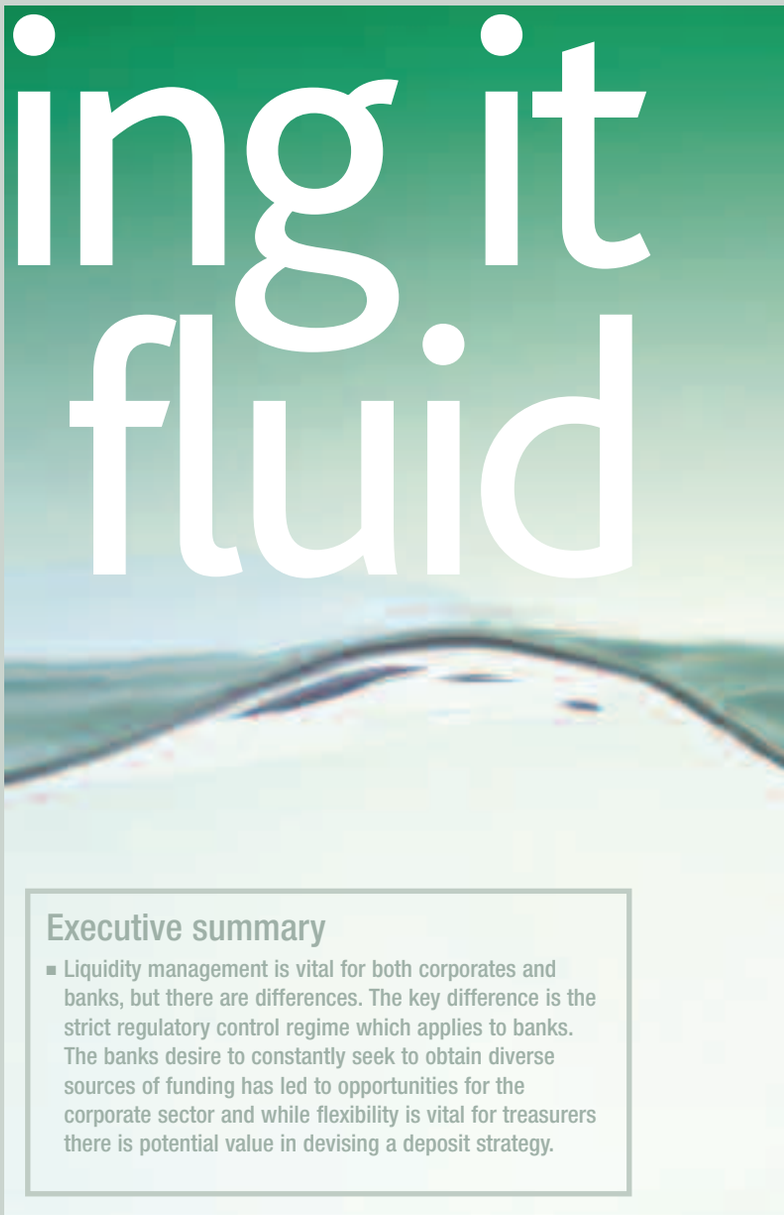
Keeping it fluid



Executive summary

- Liquidity management is vital for both corporates and banks, but there are differences. The key difference is the strict regulatory control regime which applies to banks. The banks desire to constantly seek to obtain diverse sources of funding has led to opportunities for the corporate sector and while flexibility is vital for treasurers there is potential value in devising a deposit strategy.

Whilst liquidity management is vital for corporates, it is paramount for banks. From a liquidity perspective, banks differ from corporates in three important respects:

Bank leverage is much higher Bank equity is typically only 10% of debt (defined as customer deposits and wholesale borrowings). The equity component of corporates is much higher. In addition, bank reliance on wholesale funding is increasing.

Liquidity risk is systemic A default in one bank can result in a domino effect that also brings down other banks. Continuing industry consolidation can only serve to increase this systemic impact.

Regulatory controls The other major distinguishing feature between liquidity management in banks and corporates is the role of the regulator. The objectives of the Financial Services Authority (FSA), as set out in the Financial Services and Markets Act 2000, include consumer protection and market confidence.Both are directly relevant in the case of liquidity risk.

The FSA requires banks to ensure that they have sufficient financial resources, usually through holding a stock of high-quality liquid assets.

Corporates are not obliged to hold such a portfolio and may instead rely on committed bank facilities.

WHAT CAUSES LIQUIDITY STRESSES? Liquidity problems in banks are typically triggered by concerns arising from credit, market or operational risks.

This is illustrated in *Table 1* below, which sets out a summary of banks that have suffered a liquidity stress.

It is important to recognise that a bank may suffer a liquidity stress through no fault of its own. Such systemic liquidity crises can be analysed in two separate dimensions[1]:

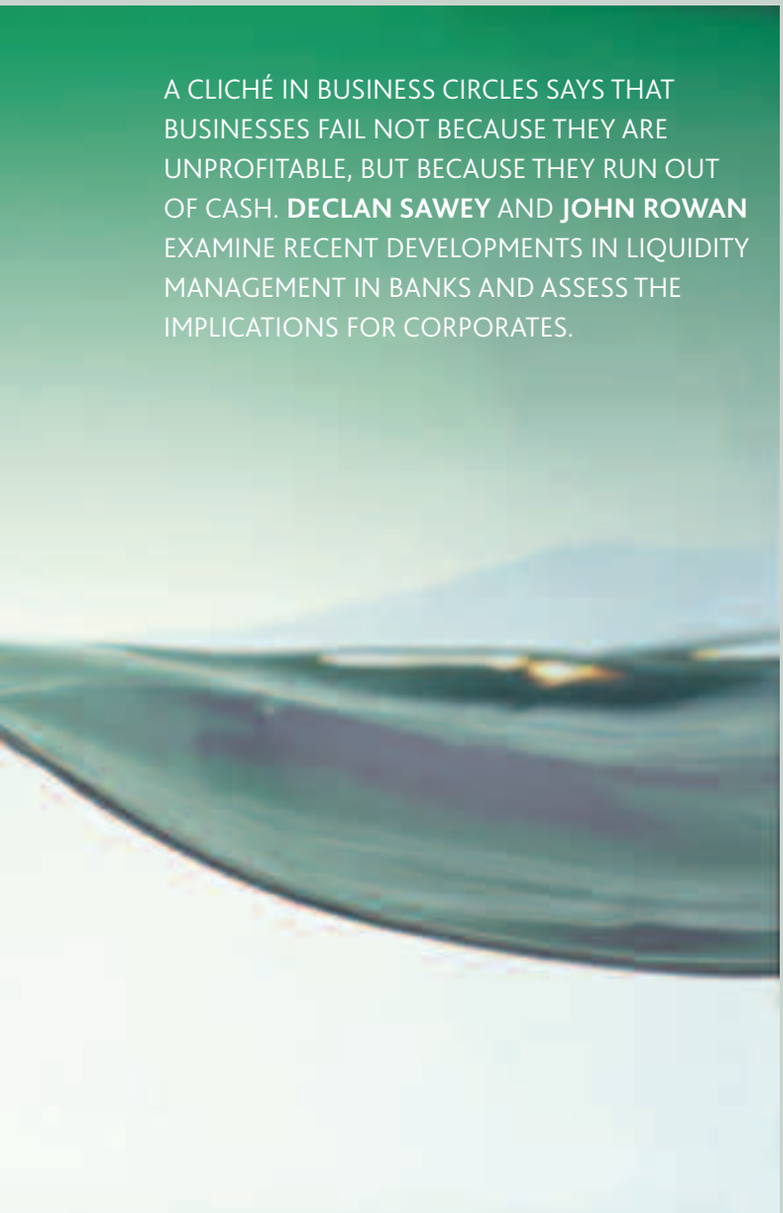
- the breadth of the shock (see *Figure 1*) that hits the financial system (i.e. whether the impact of the shock is confined to one bank or does it affect many); and
- the extent to which the initial bank failure(s) affects the rest of the financial system (i.e. the extent of contagion). An example would be a bank failure triggering a withdrawal of deposits from other banks thought to face problems similar to the failed bank.

Table 1. Banks that have suffered liquidity stress

Date	Bank	Primary Cause
1984	Continental Illinois	Lending losses and rumours of bankruptcy.
1985	Bank of New York	Software error.
1990	British & Commonwealth	Poor asset quality.
1991	BCCI	Poor asset quality.
1995	Barings	Trading fraud.

DEVELOPMENTS IN LIQUIDITY MANAGEMENT Regulatory liquidity requirements for UK banks[2] have been enshrined in the Sterling Stock Liquidity Regime.

STERLING STOCK LIQUIDITY Sterling stock banks are required to hold a pool of high-quality sterling liquid assets large enough to survive for at least five working days, without renewal of its maturing wholesale funding (on a net basis) and after the leakage of a small proportion (5%) of its gross retail deposits. The rationale for five



A CLICHÉ IN BUSINESS CIRCLES SAYS THAT BUSINESSES FAIL NOT BECAUSE THEY ARE UNPROFITABLE, BUT BECAUSE THEY RUN OUT OF CASH. **DECLAN SAWEY** AND **JOHN ROWAN** EXAMINE RECENT DEVELOPMENTS IN LIQUIDITY MANAGEMENT IN BANKS AND ASSESS THE IMPLICATIONS FOR CORPORATES.

working days is based on the previous Bank of England regime, to allow the bank to survive at least until the weekend so that a rescue package can be arranged.

For example, if a bank has £1bn of wholesale deposits and £10bn of retail deposits contractually maturing in the next five days, the required pool of sterling liquid assets would need to be at least £1.5bn[3]. In practice, most banks will operate with a prudential cushion in excess of the statutory minimum.

The International Monetary Fund has highlighted inadequacies of the Sterling Stock Liquidity Regime and these include:

- it focuses solely on the immediate, first week period;
- it ignores foreign currency cashflows and funding; and
- it does not consider contingent liabilities.

The issue of foreign currency funding is an important one. Banks source an ever increasing amount of their wholesale funding requirement via foreign currency medium-term notes, certificates of deposit, commercial paper and interbank deposits[4].

The increased activity in both corporate and retail lending has created a greater need for the UK banking sector to seek funding outside UK plc.

FSA'S SYSTEMS AND CONTROLS (CP 128) AND QUANTITATIVE FRAMEWORK (DP 24) In order to address the perceived weaknesses of the Sterling Stock Liquidity regime the FSA has published consultative and discussion papers (CP 128 and DP 24) covering both qualitative and quantitative standards for liquidity risk management.

CP 128 consists of guidance on systems and controls requirements in relation to liquidity risk. The systems and controls requirements cover areas such as:

- governance;
- liquidity modelling;
- monitoring and control;
- stress testing and scenario analysis; and
- contingency funding plans.

CP 128 was well received among UK banks, in that it codified existing best practice for many of these institutions and it now forms part of the Prudential Sourcebook for Banks.

The proposals for a new quantitative framework (DP 24) have resulted in a widespread debate across the banking industry. There have been questions over the appropriateness of the 'one size fits all' approach and its impact on the competitiveness of the City of London as a financial centre. The FSA explained in its discussion paper that it was not proposing that the overall level of liquidity held by UK banks should be increased materially, although individual banks may see their required holding of liquidity change.

In spite of the delay in implementing a new quantitative framework, banks have increasingly been developing and improving their own internal measures of liquidity risk, for example:

- liquidity analysis covering one month as well as one week;
- the use of behavioural cashflow modelling, starting with contractual cashflows and adjusting them by stress factors to reflect the likely behavioural pattern of flows in a serious temporary stress;
- taking a more comprehensive account of off balance sheet items including committed but undrawn facilities; and
- increasing the number of alternative stress scenarios (up to 10).

WHAT ARE THE ECONOMICS OF LIQUIDITY FOR A BANK? Banks incur a cost when they hold either cash or high-quality liquid assets to cover potential cash outflows.

The cost incurred will depend on the amount of potential outflow. If the mix of maturing liabilities is altered or the time period extends for which cover is required, then the amount of cover and the cost is impacted.

Banks need to manage this cost by weighing up the prudential level of liquidity cover against the loss of earnings.

Internally, the bank's transfer pricing system will be attuned to recover the costs incurred by the treasury area from the customer facing banking divisions. A change to the liquidity regime, prudential (internal target) or regulatory, is likely to feed through to the financial returns, which current product offerings generate.

WHAT ARE THE IMPLICATIONS FOR CORPORATES? Banks are constantly seeking to diversify their sources of funding and are placing less reliance on interbank funding where possible. This has led

to the development of product offerings and pricing strategies to attract corporate deposits.

In the past, certain corporate deposits, which were classified as 'retail' based on the FSA's Sterling Stock definition, did not suffer an onerous liquidity charge. Using behavioural modelling, this definition is less relevant. What matters is the extent to which deposits are 'sticky', i.e. the expected maturity of the deposit is more important than the contractual maturity.

Under normal market conditions, corporates are less likely to roll over their deposits than retail customers, as they are unlikely to retain significant amounts of surplus funds for an extended period of time. They are also likely to shop around for the most attractive rate offered for their preferred term.

The overall liquidity required under a behavioural regime is based on the likely outflow of the deposit base under predetermined stress scenarios. The following are the key determinants:

The size of deposit The larger the deposit placed, the greater focus it is likely to receive from the counterpart and therefore the greater likelihood of a quick and significant withdrawal in a stress situation.

The nature of the relationship between the bank and the depositor Some depositors rely on an infrastructure built with a particular bank that could not be quickly replicated elsewhere. Other customers may deposit money with a bank as part of a larger overall relationship that might temper their actions.

The type of counterpart Clearly, any institution that is involved in financial services is likely to be aware of factors contributing to a stress situation for each banking counterpart. However, the same is likely to be true of any large depositor given the plethora of information sources available.

Banks are finding that retail deposits have been cross-subsidising certain corporate deposits, which are potentially highly volatile but often large in quantum and therefore attract the finest pricing.

The possible change in the liquidity regime could alter the pricing dynamics for corporate deposits. That said, different banks will be willing to push for balance sheet growth at different times.

Dependent upon their assessment of the credit cycle, this will create short-term funding requirements. In order to meet these requirements corporate deposits may be 'chased' by certain banks before longer dated funding programmes are arranged.

Figure 1. Breadth of shock

	Idiosyncratic	Common
No Widespread Contagion	Small or medium bank Examples: Barings BCCI	Sectoral or regional banks Examples: US Savings & Loan
Potential Widespread Contagion	Isolated, large, complex financial institution Examples: Continental Illinois	Small banks in system-wide crisis Examples: Nordic countries (early 90s) Japan (early 90s) East Asia (late 90s)

An additional implication is the impact on product development. There may be premiums paid on longer-term notice accounts. This would move the maturity of the deposit beyond the measurement period, be that one week or one month.

In addition, products may be developed which give corporates a bonus based on the term of their deposit to reward 'stickiness'.

DP 24 also highlighted the issue of liquidity cost on committed but undrawn facilities.

It may strike the reader as odd that these contingent liabilities have not already fallen into a regulated definition of liquidity, but a review of most of the reports and accounts of UK banks will reveal that a significant proportion of facilities granted are undrawn. Behavioural modelling will also be applied to these facilities.

POTENTIAL OPPORTUNITIES These developments may give treasurers cause to look at their own cash management and cashflow forecasting approach.

Treasurers will continue to prefer maximum flexibility, but may find that there is value in devising a deposit strategy with their relationship banks, i.e. to look at things differently and arrive at arrangements which work for both parties.

1. Reproduced from "Resolution of banking crises: a review", Bank of England Financial Stability Review, December 2003
2. LS Chapter, Interim Prudential Sourcebook for Banks applies to UK Banks with a large retail deposit base
3. 100% of £1 billion maturing in five working days plus 5% of £10 billion
4. Large UK Owned banks' funding patterns, recent changes and implications, Bank of England Financial Stability Review, December 2003

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