BANK LIQUIDITY IN THE UNITED KINGDOM

In many overseas countries the subject of bank liquidity may immediately suggest regulatory legislation. In the United Kingdom, however, apart from considerations of exchange control, the disposition of commercial bank assets is not governed by legislation.[a] Moreover bank liquidity was not in origin a matter of legislation or regulation; the concept stems from the very essence of banking. This article therefore deals initially with this general concept of bank liquidity; it then goes on to consider the conventional statistical definition of the Liquidity Ratio.

Bank liquidity, as a general concept, means the ability of a bank to meet demands for payment by depositors and note-holders[b] as they arise. It is, therefore, compounded of the bank's likely need for cash and its potential supply of cash; and, because a large part of a bank's liabilities—often the greater part—is repayable on demand, liquidity is largely concerned with expectations about the need for immediate cash and about the terms on which the bank can change its assets into cash quickly enough to meet the need.

A bank's need for cash depends not only on the type of its deposits and other liabilities and the extent to which they are subject to large withdrawals and receipts, but also on the type of business transacted, and on the size of the bank in relation to the banking system of which it is a part. These factors are considered below:

1. *Type of liability* On interest-bearing deposits a bank normally reserves the right to receive notice of withdrawal at an agreed period (seven days at present for deposits with the London clearing banks); such deposits are considered by the banks to be less volatile than deposits on current account.

Contingent liabilities, for example outstanding acceptances and other engagements, may also affect liquidity requirements, though to a lesser degree than liabilities on deposits or notes. Liabilities on unused advance or overdraft facilities may also influence the banker's judgment about his potential need for cash.

2. *Type of customer* The volatility of deposits may vary with the type of customer. The accounts of farmers are subject to seasonal fluctuation, as are also the deposits held by industrial and commercial enterprises: in particular industrial and commercial deposits tend to be drawn down in the first quarter of each year when heavy tax payments are made to the Exchequer. Some of the funds held for overseas residents, and particularly deposits in foreign currency, are often extremely sensitive to changes in interest rates and in sentiment; whereas other overseas residents' funds may represent foreigners' working balances which they need to hold in sterling, and these may fluctuate less widely.

3. *The size of the bank* The size of a bank's deposits relative to the total deposits of the banking system in which it operates will affect the extent to which that bank's payments are replaced without delay by new deposits. The deposits of a large bank will probably fluctuate proportionately much less from day to day than those of a small bank. A smaller bank is also likely to be more affected by the operations of large customers; if a substantial proportion of total deposits is held by a few customers the bank will feel more vulnerable

(a) With the exception of the Acts regulating the backing to the note issues of banks in Scotland and Northern Ireland.

(b) The Scottish and certain Irish banks are now the only banks, other than the Bank of England, with rights of note issue in the United Kingdom: the outstanding notes of the London clearing banks (apart from The National Bank Limited) are negligible, and circulate in the Isle of Man.

to sudden withdrawals of funds than it would if its deposits were more widely held. These factors no doubt partly account for some of the differences observed among the individual London clearing banks, where the assets of some of the smaller clearing banks usually appear to be rather more liquid than those of the ' Big Five '.

In the light of a bank's assessment of its prospective need for cash, it must hold much of its resources in more or less liquid forms, allowing it to get cash when needed on terms that do not involve substantial loss. A liquid asset is one which can be marketed, realised, or otherwise encashed quickly and without penalty. Almost all financial assets possess these qualities in some degree, and, apart from advances, any that the banks hold are likely to be highly liquid. Although most banks, in their published balance sheets, show their assets in roughly descending order of liquidity, this arrangement in practice gives very little indication as to how liquid the assets are, taken as a whole. For example, the banker's call money will include some that is repayable overnight and some lent for a longer, but specific, period; while his holdings of Treasury Bills and commercial bills will usually be arranged to include bills maturing in a matter of days as well as those of a longer maturity. Holdings of British government and government guaranteed securities usually appear as one total in the balance sheet, but some of these securities may be repayable very shortly at par and could in this respect be regarded as more liquid than, for example, some discounted bills, which might have a longer period to run to maturity; moreover, in practice, all British government and government guaranteed securities are readily marketable at or near current prices for settlement on the following business day. In the latter part of the nineteenth century Consols were generally regarded as eligible for inclusion among those assets which constituted a bank's ' reserve ', and some bankers in fact ranked them before money at short notice with the London discount houses: and up to as late as 1951 short bonds maturing within twelve months were included among bills discounted by some of the London clearing banks. Similarly, advances to customers can have a wide range of liquidity. Some—though very few—overdrafts, technically repayable on demand, could in practice as well as in principle be repaid immediately on call, whereas certain other loans have agreed terms of repayment extending over periods of several years.

Because it is only possible to assess the adequacy of a bank's liquidity in the light of the most detailed information about its liabilities and assets, together with an intimate knowledge of the bank's normal pattern of business, only the bank itself is able to judge whether its position is such as to give the most profitable use of its resources while providing ample means to meet all foreseeable demands for cash.

Origin of liquidity conventions Already the emphasis in this article has shifted from the general concept of bank liquidity towards the more specific liquidity of a bank's quickest or most easily realisable assets which form the first reserve against the estimated cash demands of depositors and against contingent liabilities; and it is on this narrower concept of liquid assets as a bank's initial reserve of quick assets, and the conventions that have been built upon it, that the remainder of this article will concentrate.

With the spate of bank failures in the nineteenth century some conventions about bank liquidity were bound to emerge from the experience of prudent bankers. Thus in 1885 George Rae, then chairman of The North and South Wales Bank, wrote:

> " To guard against all probable demands, therefore, I have put your immediately available resources—your financial reserve—at one third the amount of your liabilities to the public . . . This provision will appear to some to be excessive . . . The range of usage in this matter is very great, and is governed, in some measure, by the character of the deposits held . . . Moreover, in fixing the amount of your reserve, you have to take into account, not only that your deposits are subject, at uncertain times, to serious depletion: but that the demand upon you for discounts and advances is also subject to constant variation. Your reserve, therefore, should always be sufficient to meet every description of demand upon it . . ."[a]

In many countries, conventions on bank liquidity were later embodied in legislation in attempts to protect depositors. By the time legislation of this sort became fashionable, deposit banking in England had, however,

[a] *The Country Banker*, Letter XXIX (1885).

recovered from its unfortunate start—a start which may not unjustifiably be attributed to the Bank of England's earlier monopoly of joint-stock banking—and was developing a vigorous joint-stock branch system on the lines of that in Scotland, where the Bank of Scotland's monopoly had lapsed much earlier. This development was reinforced by the amalgamations between banks in the early part of this century, as a result of which deposit banking business in the United Kingdom became concentrated in the hands of a few large banks with widespread branch systems. As their business became more comprehensive, their assets structures became more comparable. The trend towards a degree of uniformity in the assets structures of the major banks, and in the presentation of their accounts, was probably also encouraged when the London clearing banks (then ten in number) began publication in 1921 of a combined monthly statement showing their average weekly balances, both by individual banks and in aggregate.

Nevertheless, the evidence of the representatives of the 'Big Five' London clearing banks given before the Committee on Finance and Industry (the Macmillan Committee) nearly ten years later acknowledged no uniform or explicit conventions guiding the distribution of their assets, although the following description given to the Committee by Mr. Hyde, managing director of the Midland Bank Limited, of the proportions in which that bank sought to divide its assets is remarkably close to the actual assets structure of the London clearing banks as a whole at that time:

> "We say that we want to keep about 11 per cent. of cash . . . Then we come to our second line, and our second line primarily is the money that we have at call and short notice in the London money market . . . We aim at keeping about 7 per cent. of our assets in that form. Then our next line is our bills . . . we keep about 15 per cent. of our assets in bills. The next item is investments. We hold a considerable amount of money in the form of short-dated Treasury Bonds of the British Government and a certain amount of longer-dated stock . . . and we aim at keeping about 12 per cent. of our assets in the form of investments. That leaves us with approximately 55 per cent. that we can lend in the shape of advances to our customers."[a]

It is interesting to note that the first three lines of defence against any withdrawal of deposits represent one-third of total assets (or rather more than one-third expressed as a proportion of deposit liabilities), a similar proportion to the "financial reserve" advocated by Rae nearly fifty years before.

By 1939, however, there was evidence of the more specific convention that, as a matter of banking prudence, a minimum reserve of 30% of deposit liabilities should be held in the form of liquid assets. In the *Midland Bank Monthly Review* of February-March 1939 it is stated:

> "Less well recognized or understood, however, [than the cash ratio] is the observance of another ratio—also important if somewhat less rigidly observed—which we may describe as the '30 : 70 ratio'. This entails the maintenance of total liquid assets—that is, cash itself together with assets constantly and readily being transmuted into cash and reconverted back into earning assets[b]—at a level of at least thirty per cent. of deposit liabilities."

The rigid observance, however, of a uniform and specific minimum ratio of those assets defined as "liquid" to deposit liabilities did not fully emerge until the return to an active monetary policy in 1951.

Bank liquidity and the control of credit

In recent decades the convention or regulation governing liquid asset ratios has been extended in many countries to act as an instrument of credit control by stipulating that commercial banks must maintain certain minimum 'reserve' requirements. These are usually expressed in the form of ratios between selected assets and part or all of a bank's deposit liabilities. The ratios may be applied uniformly to all deposits or they may differentiate, for example, between deposits repayable on demand and those where prior notice of withdrawal is required, or between deposits held for residents and those held for non-residents.

In a number of countries minimum ratios have been imposed on the banks by statute. Specific legislation in this form has not appeared necessary in the United Kingdom because of the existence of a conventional pattern of assets structure to which the larger domestic banks already adhered. This convention provided the foundation for an

[a] Minutes of Evidence, published 1931, Question 871.
[b] The article later made it clear that investments were excluded from this definition.

informal understanding between the Bank of England and the London clearing banks on the observance of a minimum Liquidity Ratio.

The Cash Ratio In the early part of this century attention and comment used to focus predominantly on the banks' Cash Ratio (the ratio of bank notes, coin and balances with the Bank of England to total deposits). This was natural at a time when the gold standard imposed certain restraints on the supply of cash; moreover, there was not at that time the large volume of short-term public sector debt in the hands of the banks that could be used to repair any depletion of cash resources. The advent of the Exchange Equalisation Account, the increase in the supply of Treasury Bills, the readier interchangeability between cash and Treasury Bills —with the Bank of England ready not only to act as a lender of last resort but also from time to time to absorb surplus cash by selling Bills —and the gradual establishment among the London clearing banks of firm conventions as to the proportion of assets to be held in the most liquid forms, all helped to make the Liquidity Ratio more important for credit control than the Cash Ratio. (The latter, however, maintained since the end of 1946 by agreement between the London clearing banks at 8% of total deposit liabilities, still has a role to play, in that the degree of pressure on it influences the Treasury Bill rate—that is the price at which any interchange between Treasury Bills and cash normally takes place.)

Definition of the London clearing banks' Liquidity Ratio The observance by a group of banks of a uniform minimum Liquidity Ratio requires a definition of what assets are to be regarded for this purpose as 'liquid'. Over the past decade the London clearing banks have in all important respects agreed upon a common definition of liquid assets for the purpose of calculating the Liquidity Ratios of individual banks; the few remaining differences are of a minor nature. This definition excludes those assets which mainly represent claims on other members of the group (cheques in course of collection on, and balances with, other banks), because most of these items, although highly liquid so far as individual banks are concerned, are not realisable outside the group. Liquid assets now include the following items:

1. *Coin, bank notes and balances with the Bank of England* Small quantities of Scottish and Irish notes are included but they are not a significant part of the total. Foreign currency notes and coin held in the banks' tills are also included here or under "Other money at call and short notice"; the practice varies. Balances with the Bank of England do not for this purpose include Special Deposits.

2. *Money at call and short notice* Comprising:

   (*a*) *Money lent to the London discount market*

   All money lent to the members, at present twelve, of the London Discount Market Association.

   (*b*) *Other money at call and short notice*

   This item includes money lent for periods not exceeding one month to other (non-clearing) U.K. banks, to money brokers on the Stock Exchange, to bill brokers and similar money market institutions which are not members of the London Discount Market Association, to jobbers and stockbrokers, including loans from Account to Account, and to bullion brokers. It also includes balances in specified currencies with banks in the United Kingdom and abroad, some foreign currency notes and coin in tills, and the banks' own holdings of Tax Reserve Certificates.

3. *U.K. Treasury Bills discounted*

4. *Other bills discounted and re-financeable credits* Other bills include, in addition to bills discounted by the banks for their customers, bank or trade bills purchased from the market, normally with a usance of three months or less. Any holdings of treasury bills of Commonwealth or foreign governments are also included, as are commercial bills denominated in currencies other than sterling.

Some part of the banks' medium-term export credits has been included under this heading since February 1961. These export credits are advances made to finance exports involving deferred payments over more than three years from the date of contract and guaranteed by the Export Credits Guarantee Department: that part covering instalments falling due for repayment within eighteen months is eligible for re-financing by the Bank of England and is transferred by the banks from the heading " Advances and other accounts " to this item.

The Liquidity Ratios of the London clearing banks are calculated by expressing the totals of their liquid assets, as defined above, as percentages of their total deposit liabilities, whether in sterling or foreign currency (and including the internal accounts of the banks themselves).

Official recognition of 30% An important step towards a uniform and explicit minimum Liquidity Ratio for the London clearing banks was taken in 1951 when the Governor of the Bank of England indicated to the banks that a Liquidity Ratio of from 32% to 28% would be regarded as normal but that it would be undesirable for the Ratio to be allowed to fall below 25% as an extreme limit. By 1957 the 30% minimum had become more rigid and the Governor told the Radcliffe Committee:

> "I have left the [clearing] banks in no doubt, during the recent phase of credit restriction, of my view that they should not allow their liquidity ratios to fall significantly below 30 per cent.; and I have made it clear that I reserved the right to make observations if there were any considerable divergence."[a]

The Radcliffe Committee was of the opinion that a 30% Liquidity Ratio was more than normal banking prudence required, and one of the bank chairmen in evidence to the Committee mentioned 25% as a tolerable minimum for short periods for an individual bank; but for purposes of credit control the minimum Liquidity Ratio has remained at 30%.

Liquidity of other banks 1. *The Scottish banks* The convention of a 30% minimum Liquidity Ratio accepted by the London clearing banks has no precise parallel among the Scottish banks. This is partly because their position as note-issuing banks means that much of the immediate need for cash to meet a withdrawal of deposits can be satisfied out of their reserve of unissued notes. In addition, with a much higher proportion of deposit accounts to total deposits than the London clearing banks, their need for liquidity is somewhat less.

The Scottish banks publish a combined monthly statement of their principal liabilities and assets, although individual banks' figures are not published. Since October 1960 they have adopted a common definition of liquid assets and have calculated a combined ratio of liquid assets to total deposits plus notes outstanding, in this monthly statement.

The principal differences between the Scottish banks' definition of liquid assets and that adopted by the clearing banks are:

(*a*) *Balances with, and cheques in course of collection on, other banks in the United Kingdom* These are included as liquid assets by the Scottish banks because a large proportion of the funds are held by, or being collected from, banks outside the Scottish banking system.

(*b*) *Coin, notes and balances with the Bank of England* Under this heading the Scottish banks include also Bank of England notes held at certain specified offices or set aside by the Bank of England to their order as cover for their own notes in circulation. This cover for the banks' own note issues in excess of their authorised circulation is not hypothecated to the note-holders.

2. *The accepting houses*

The accepting houses, defined here as the seventeen members of the Accepting Houses Committee, have no published conventional definition of liquid assets nor do they observe a common minimum ratio of liquid assets to deposit liabilities. The nature of their business nevertheless requires them to maintain a very high degree of liquidity; one accepting house

[a] Minutes of Evidence, Question 1,754.

stated a few years ago[a] that their policy had been to maintain a ratio between the total of call money and discounts on the one hand, and customers' deposits on the other hand, of between 40% and 50%. The combined figures of the deposits and main assets of the accepting houses (shown in Table 12 of the Statistical Annex) indicate that this policy is probably followed by a number of houses, although in recent years, for the accepting houses as a whole, the ratio has been maintained by including very short-term loans to U.K. local authorities in addition to call money and discounts.

In addition to their liabilities on deposits, the accepting houses also have a large liability in the form of their outstanding acceptances, the total volume of which forms another yardstick against which liquidity must be measured. The Bank of England, through consultation with the accepting houses, maintain some influence on the quality of these acceptances; and bills accepted by the houses are eligible for rediscount at the Bank provided that one other British name appears on them.

3. *Other banks in the United Kingdom*

For the other banks, in particular the overseas and foreign banks in London, there can be no single definition of liquid assets or standard of liquidity because their requirements and operating conditions vary so widely. Moreover, their U.K. operations form only a part of their total business and many of these banks can, if necessary, look to their head offices abroad for assistance.

Seasonal movements in the Liquidity Ratio

The effect of a minimum level to the Liquidity Ratio is to restrict the free use of the liquid assets which must be held in order to satisfy that minimum. In order to have some leeway to meet contingent liabilities or larger uses of existing lines of credit the banker must constantly seek to keep his Liquidity Ratio comfortably above the minimum.

In addition to this general inducement to maintain some excess above the minimum, there is also a particular factor which tends to keep the Ratio appreciably above it for much of the year. This is the marked seasonal pattern of the U.K. Budget, under which approximately 40% of the total annual tax revenue is received by the Exchequer during the last quarter of the financial year. The tax payments are reflected in the London clearing banks' balance sheets by substantial reductions in deposits and in liquid assets, both of which fall seasonally to a low point in March. The average fall in the London clearing banks' combined Liquidity Ratio between mid-December and mid-March in the last four years has been of the order of about three points; it varies somewhat from year to year and cannot be accurately predicted, being affected both by the size of the Exchequer surplus in these three months and by the extent to which tax payments are made by taking advances rather than by drawing on deposits. These banks will therefore attempt to work to something like a seasonally adjusted Ratio, building up their Ratios gradually between April and December in anticipation of the seasonal fall. While therefore this 'excess' of liquid assets between April and December is in a sense earmarked against the coming revenue season, it may at times afford the banks a temporary escape if the authorities endeavour to restrict credit expansion by pressure on the Liquidity Ratio.

The control of credit

Such pressure on the Liquidity Ratio will normally take the form of attempts to increase the amount of government debt held outside the banking system by more than any increase in government borrowing. This pressure can be applied through budgetary policy, through making net sales of Treasury Bills or government stocks to the non-bank public, or by influencing the amount of non-marketable government debt held by the public. An increase in government debt held by the public will reduce bank deposits, and as they are transferred to government account in settlement of the purchases the banks will suffer a corresponding loss of liquid assets, causing the Liquidity Ratio to fall. Pressure by the authorities may, however, be frustrated for a time in a number of ways.

The ease with which the London clearing banks can reduce pressure on their Liquidity

[a] Evidence given before the Tribunal of Inquiry about the raising of Bank Rate, December 1957, Questions 5,305 to 5,318.

Ratios is, in the short run, governed largely by the extent and maturity of their security portfolios, because their advances, although in most cases technically repayable on demand, cannot be called in quickly without serious effects on the borrowers. A large proportion of the London clearing banks' gilt-edged holdings is in short-dated stocks with less than five years to run to maturity and these stocks can normally be realised without substantial loss.

The initial effect of stock sales by the London clearing banks on the total of the banks' liquid assets will vary with the identity of the other parties to the transactions. First, the banks' sales may be taken up by the authorities; such sales will increase the banks' liquid assets by the amount of the proceeds, leaving deposits unchanged. Secondly, sales may be made to the discount market, and the discount market may finance its increased holdings of stock either by selling Treasury Bills to the banks or by borrowing more call money from the banks. In this case, too, the banks' liquid assets will increase by the amount of the stock that they have sold, with no change in deposits. There is, however, a limit to the amount of stock that the discount houses are able, or willing, to hold in relation to their resources. Lastly, the banks' sales may be to the general public, reducing bank deposits by the amount of the sales but leaving liquid assets unchanged and so increasing the Liquidity Ratio, although to a lesser extent than if the sales had been made to the authorities or to the discount market. But sales of stock by the banks to the public may well have a secondary effect. For example, to the extent that they replace sales that would have been made by the authorities to the public, the reduction in the banks' liquid assets, equal to the fall in deposits, that would otherwise have occurred, does not take place: or, to the extent that the public finances its purchases of stock from the banks by holding less Treasury Bills or non-marketable government debt, its deposits will be unchanged and the final effect will be the same as if the banks had sold the stock direct to the authorities.

The scope for the London clearing banks to sell government stock in order to increase their advances, or to bolster their liquid assets, must now, however, be much more limited than it was in recent years. In the middle of 1958 the ratio of the London clearing banks' investments to their total deposit liabilities was about 33%. By the middle of 1961 it had fallen to a low point of under 14% and even after the banks' purchases of gilt-edged stock this year it is now (at mid-November 1962) no higher than 17%—and by no means all of these investments are likely to be regarded by the banks as readily available for sale for the purpose of increasing either advances or liquid assets.

There are also certain limitations in having arrived at a Liquidity Ratio for credit control purposes by a process of evolution from the original banking concept. By accepting the bankers' definition of 'liquid assets' certain constituents of the Ratio are more under the bankers' than the authorities' control. If the volume of commercial bills in the market is growing, a switch, for example, by the London clearing banks in accommodating industrial and commercial customers by discounting bills rather than by making advances will inflate liquid assets; and, in the same circumstances, liquid assets could also be inflated by increasing advances to the discount market to hold a greater volume of commercial paper. Again, while the supply of cash and of Treasury Bills, the main restorative of cash, can be influenced by the authorities, foreign cash is less easily influenced; and the acceptance of foreign deposits can therefore also be used to inflate liquid assets.

In part also the pressure exerted by the authorities on the Liquidity Ratio of the London clearing banks may be offset by the diversion of normal business to other channels of credit, where a liquidity control may not be appropriate or may not easily be applied. Or again, when the authorities are endeavouring to exert pressure by sales of securities to the non-bank public, the latter's appetite for securities may so wane that the authorities may in the end find themselves buying, rather than selling, such debt.

Many of these offsetting factors may only operate at certain times or for a certain length of time. But in the sphere of monetary control, where time is important, it may sometimes mean that normal monetary pressures have to be supplemented by 'requests' and

other measures such as the Special Deposits Scheme currently operating. In many countries this reinforcement is provided by a compulsory variable liquidity ratio: in the United Kingdom a variable 'reserve ratio' (of cash) was mooted as long ago as 1931 by the Macmillan Committee, whose Report[a] suggested that:

> " . . . as to a variation within certain narrow limits, the banks should accept the advice of the Bank of England as to the average figure at which they should keep their reserve balances . . . Whatever ratio of reserves be fixed as suitable, it is in any event most important that it should be rigidly adhered to by the banks. For the power of the Bank of England to control the aggregate volume of credit in the country by means of open-market operations and other measures essentially depends on the rigidity of this ratio."

The choice between a variable reserve, or liquidity, ratio and the system of Special Deposits was largely determined by the need to find a general measure of credit restraint that was a specific monetary arrangement between the central bank and the commercial banks and that did not appear to be designed principally as a device for government financing. A sterilised deposit, which figures separately in the banks' balance sheets and in the Bank of England Return, as under the Special Deposits Scheme, has, or should have, a far more temporary appearance than a variable ratio with no fixed norm. The choice was also influenced by the historical antecedents of the present minimum Liquidity Ratio: having accepted a Ratio which has arisen from the conventions of prudent banking and the protection of depositors, it would not be consistent to alter it arbitrarily for other purposes.

[a] Cmd. 3897, published 1931, Paragraph 370.