

**INTRODUCTION**

Liquidity represents the ability to fund assets and meet obligations as they become due. Liquidity is essential in all banks to compensate for expected and unexpected balance sheet fluctuations and provide funds for growth. Liquidity risk is the risk of not being able to obtain funds at a reasonable price within a reasonable time period to meet obligations as they become due. Because liquidity is critical to the ongoing viability of any bank, liquidity management is among the most important activities that a bank conducts.

Funds management involves estimating and satisfying liquidity needs in the most cost-effective way possible and without unduly sacrificing income potential. Effective analysis and management of liquidity requires management to measure the liquidity position of the bank on an ongoing basis and to examine how funding requirements are likely to evolve under various scenarios, including adverse conditions.

The formality and sophistication of liquidity management depends on the size and sophistication of the bank, as well as the nature and complexity of its activities. Regardless of the bank, good management information systems, strong analysis of funding requirements under alternative scenarios, diversification of funding sources, and contingency planning are crucial elements of strong liquidity management.

The adequacy of a bank's liquidity will vary. In the same bank, at different times, similar liquidity positions may be adequate or inadequate depending on anticipated or unexpected funding needs. Likewise, a liquidity position adequate for one bank may be inadequate for another. Determining a bank's liquidity adequacy requires an analysis of the current liquidity position, present and anticipated asset quality, present and future earnings capacity, historical funding requirements, anticipated future funding needs, and options for reducing funding needs or obtaining additional funds.

To provide funds to satisfy liquidity needs, one or a combination of the following must occur:

- Disposal of assets.
- Increase in short-term borrowings and/or issuance of additional short-term deposit and deposit-like liabilities.
- Increase in long-term liabilities.
- Increase in capital through earnings, capital injection, stock issuance, or issuance of other capital instruments.

Liquidity has a cost, which is a function of market conditions and the risk profile of the bank. If liquidity needs are met through holdings of high quality short-term assets, generally the cost is the income sacrificed by not holding longer term and/or lower quality assets. If funding needs are not met through liquid asset holdings, a bank may be required to incur additional liabilities, possibly under adverse market conditions at an undesirable cost.

**LIQUIDITY MANAGEMENT****Overview**

All banks should have board-approved written policies and procedures for the day-to-day management of liquidity. The liquidity strategy and policies should be communicated throughout the bank. The board of directors should be informed regularly of the liquidity situation of the bank, and the board should ensure that senior management monitors and controls liquidity risk. Bank management should have in place appropriate policies and procedures that set and provide for the regular review of limits on the size of liquidity positions over particular time horizons. Management information systems adequate to measure, monitor, control and report liquidity risk should be in place, and reports should be regularly provided to the board of directors and senior management. As part of a process for the ongoing measurement of funding requirements, management should analyze liquidity under various scenarios, and the underlying assumptions for such scenarios should be reviewed periodically. Relationships with lenders, other liability holders, and market participants should be diversified and reviewed periodically to ensure a capacity to access funding either through new borrowings or the sale of assets. Contingency plans must be in force and should include strategies for handling liquidity crises and procedures for addressing cash flow shortfalls in emergency situations. The bank should maintain an adequate system of internal controls that involves regular independent reviews and evaluations of the effectiveness of the liquidity management system, and that ensures necessary and appropriate remedial steps are taken.

Liquidity management includes evaluating various funding sources and the costs associated with the sources identified. Effective liquidity management does not necessarily mean that management should employ the cheapest funding source available. Management might opt to use a source that is not the cheapest in order to avoid a funding concentration, as concentrations in funding sources

increase liquidity risk. Funding diversification allows management to maintain access to different funding lines and allows more flexibility in selecting the appropriate funding source. The frequency of contact with the lender and use of a funding source are two possible indicators of the strength of a funding relationship. Also, in times of financial distress, an institution will benefit from a diversified funding base rather than the situation where funding is concentrated in one source. Along with the cost of funds and diversification issues, management should consider maturity and repricing balance sheet mismatches, anticipated funding needs, and economic and market forecasts in its liquidity planning.

The funding of ongoing operations, as compared to the ability to mitigate the impact of unexpected demands for immediate liquidity, can almost be viewed as two different situations with different planning requirements. Banks with historically stable asset structures and funding bases coupled with modest growth patterns and predictable competitive environments will likely have less exposure to unanticipated liquidity events. A liquidity crisis may stem from an unexpected event and have unanticipated effects. The nature of such an event places a premium on management planning which emphasizes flexibility and diversity in funding sources. While anticipating a potential liquidity crisis should be part of management planning, the extent of such planning will and should vary from bank to bank.

### **Board and Senior Management Oversight**

The board of directors should understand the nature and level of the institution's liquidity risk, establish the institution's tolerance for liquidity risk, and approve significant policies related to liquidity management. The board, or a committee of board members, should also ensure that senior management takes the necessary steps to monitor and control liquidity risk, which include the following:

1. Establishing procedures, guidelines, internal controls and limits for managing and monitoring liquidity to ensure adequate liquidity is maintained at all times.
2. Preparing contingency funding plans.
3. Reviewing the institution's liquidity position on a regular basis and monitoring internal and external factors and events that could have a bearing on the institution's liquidity.
4. Reviewing periodically the institution's liquidity strategies, policies, and procedures.

Regardless of the method or combination of methods chosen to manage a bank's liquidity position, it is of key

importance that management formulates a policy and develops a monitoring system to ensure that liquidity needs are met on an ongoing basis. A good policy should generally provide for forward planning which takes into account the unique characteristics of the bank, management goals regarding asset and liability mix, desired earnings, and margins necessary to achieve desired earnings. Forward planning should also take into account anticipated funding needs and the means available to meet those needs. The policy should establish responsibility for liquidity and funds management decisions and provide a mechanism for necessary coordination between the different departments of the bank. This responsibility may be assigned to a committee. Whether the responsibility for liquidity and funds management rests with a committee or an individual, strategies should be based on sound, well-deliberated projections. The board of directors and the examiner should be satisfied that the assumptions used in the projections are valid and the strategies employed are consistent with projections.

### **Policies and Procedures**

The following are examples of typical guidelines established by a sound liquidity and funds management policy:

- Provides for the establishment of an asset/liability committee. Define who will be on the committee, what its responsibilities will be, how often it will meet, how it will obtain input from the board, how its results will be reported back to the board, and who has authority to make liquidity and funds management decisions.
- Provides for the periodic review of the bank's deposit structure. Include the volume and trend of total deposits and the volume and trend of the various types of deposits offered, the maturity distribution of time deposits, rates being paid on each type of deposit, rates being paid by trade area competition, caps on large time deposits, public funds, out-of-area deposits, and any other information needed.
- Provides policies and procedures that address funding concentration in or excessive reliance on any single source or type of funding, such as brokered funds, deposits obtained through the Internet or other types of advertising, and other similar rate sensitive or credit sensitive deposits.
- Provides a method of computing the bank's cost of funds.
- In conjunction with the bank's investment policy, determines which types of investments are permitted, the desired mix among those investments, the maturity distribution and the amount of funds that will be

available, and reviews pledging opportunities and requirements.

- Conveys the board's risk tolerance and establishes target liquidity ratios such as loan-to-deposit ratio, longer-term assets funded by less stable funding sources, individual and aggregate limits on borrowed funds by type and source, or a minimum limit on the amount of short-term investments.
- Provides an adequate system of internal controls that ensures the independent and periodic review of the liquidity management process, and compliance with policies and procedures.
- Ensures that senior management and the board are given the means to periodically review compliance with policy guidelines, such as compliance with established limits and legal reserve requirements, and verify that duties are properly segregated.
- Includes a contingency plan that addresses alternative sources of funds if initial projections of funding sources and uses are incorrect or if a liquidity crisis arises. Establishes bank lines and periodically tests their use.
- Establishes a process for measuring and monitoring liquidity, such as generating pro-forma cash flow projections or using models.
- Defines approval procedures for exceptions to policies, limits, and authorizations.
- Provides for tax planning.
- Provides authority and procedures to access wholesale funding sources, and includes guidelines for the types and terms of each wholesale funding source permitted. Defines and establishes a process for measuring and monitoring unused borrowing capacity.

### **Management Information System**

A necessary prerequisite to sound funds management decisions is a sound management information system. Reports containing certain basic information should be readily available for day-to-day liquidity and funds management and during times of stress. Report formats and their contents will vary from bank to bank depending on the characteristics of the bank and its funds management methods and practices. Normally a sound management information system will contain reports detailing the following:

- Liquidity needs and the sources of funds available to meet these needs over various time horizons and scenarios. The maturity distribution of assets and liabilities and expected funding of commitments would prove useful in preparing this report.
- List of large funds providers.

- Asset yields, liability costs, net interest margins and variations both from the prior month and budget. Such reports should be detailed enough to permit an analysis of the cause of interest margin variations.
- Longer-term interest margin trends.
- Any exceptions to policy guidelines.
- Economic conditions in the bank's trade area, interest rate projections, and any anticipated deviations from original plan/budget.
- Information concerning non-relationship or higher-cost funding programs. At a minimum, this information should include a listing of public funds obtained through each significant program, rates paid on each instrument and an average per program.
- Information on maturity of the instruments, and concentrations or other limit monitoring and reporting.

Additional types of reports may be necessary depending on the bank's circumstances.

### **Internal Controls**

Banks should have adequate internal controls to ensure the integrity of their liquidity risk management process. An effective system of internal controls should promote effective operations, reliable financial and regulatory reporting, and compliance with relevant laws and institutional policies. Internal controls systems should provide appropriate approval processes, limits, and ensure regular and independent evaluation and review of the liquidity risk management process. Such reviews should address any significant changes in the nature of the instruments acquired, limits, and controls since the last review. Positions that exceed established limits should receive prompt attention of management.

### **WARNING INDICATORS AND CONTINGENCY LIQUIDITY PLAN**

Management should monitor various internal as well as market indicators of liquidity problems at the institution. Indicators serve as early warning signals of a potential problem or as later stage indicators that the institution has a serious liquidity problem. The early warning indicators, while not necessarily requiring drastic corrective measures, may prompt management and the board to do additional monitoring. Examples of these indicators include the following:

- Rapid asset growth funded by potentially volatile liabilities.
- Real or perceived negative publicity.

- A decline in asset quality.
- A decline in earnings performance or projections.
- Downgrades or announcements of potential downgrades of the institution's credit rating by rating agencies.
- Cancellation of loan commitments and/or not renewing maturing loans.
- Wider secondary spreads on the bank's senior and subordinated debt, and increasing trading of the institution's debt.
- Counterparties increase collateral requirements or demand collateral for accepting credit exposure to the institution.
- Correspondent banks decrease or eliminate credit line availability.
- Counterparties and brokers are unwilling to deal in unsecured or longer-term transactions.

Indicators that the institution potentially may have a serious liquidity problem include the following:

- Volume of turndowns in the brokered markets is unusually large, forcing the institution to deal directly with fewer willing counterparties.
- Rating sensitive providers, such as money managers and public entities, abandon the bank.
- The institution receives requests from depositors for early withdrawal of their funds, or the bank has to repurchase its paper in the market.
- Transaction sizes are decreasing, and some counterparties are even unwilling to enter into short-dated transactions.
- An increasing spread paid on deposits relative to local competitors, or national or regional composites.

### **Liquidity Contingency Plan**

Each institution's liquidity policy should have a contingency plan that addresses alternative funding if initial projections of funding sources and uses are incorrect or if a liquidity crisis arises, such as when an institution is having trouble meeting its cash letter. A liquidity contingency plan helps ensure that a bank or consolidated company can prudently and efficiently manage routine and extraordinary fluctuations in liquidity. Such a plan also helps management to monitor liquidity risk, ensure that an appropriate amount of liquid assets is maintained, measure and project funding requirements during various scenarios, and manage access to funding sources. In a crisis situation, management has little time to plan its strategy, so it is important to have a well-developed contingency liquidity plan prior to a crisis occurring. The need for contingency plans is even more critical for banks that have an increasing reliance on alternative funding sources.

The contingency plan should be updated on a regular basis and:

- Define responsibilities and decision-making authority so that all personnel understand their role during a problem-funding situation.
- Include an assessment of the possible liquidity events that an institution might encounter. The types of potential liquidity events considered should range from high-probability/low-impact events that can occur in day-to-day operations, to low-probability/high impact events that can arise through institution-specific, systemic market, or operational circumstances. As an example: Consider the impact that a credit rating downgrade or the general perception of a loss of creditworthiness would have on liquidity.
- Assess the potential for erosion (magnitude and rate of outflow) by funding source under optimistic, pessimistic, and status quo scenarios.
- Assess the potential liquidity risk posed by other activities such as asset sales and securitization programs.
- Analyze and make quantitative projections of all significant on- and off-balance sheet fund flows and their related effects.
- Match potential sources and uses of funds.
- Establish indicators that alert management to a predetermined level of potential risks.
- Identify and assess the adequacy of contingent funding sources. The plan should identify any back-up facilities (lines of credit), the conditions related to their use and the circumstances where the institution might use them. Management should understand the various conditions, such as notice periods, that could affect access to back-up lines and test the institution's ability to borrow from established backup line facilities.
- Identify the sequence in which sources of funds will be used for contingent needs. The uncertainty of the magnitude and timing of available resources may call for different priorities in different situations.
- Assess the potential for triggering legal restrictions on the bank's access to brokered deposits under PCA standards and the effect on the bank's liability structure.
- Accelerate the timeframes for reporting, such as daily cash flow schedules, in a problem liquidity situation.
- Address procedures to ensure funds will meet the overnight cash letter.
- Include an asset tracking system that monitors which assets are immediately available for pledging or sale and how much a cash sale of these assets will generate.

**FUNDING SOURCES: ASSETS**

Liquidity needs may be met by managing the bank's asset structure through either the sale or planned pay-down of assets. Banks relying solely on asset management focus on adjusting the price and availability of credit and the level of liquid assets held to meet cash demands in response to changes in customer asset and liability preferences. Assets normally assumed to be liquid sometimes are not liquidated easily and/or profitably. For example, investment securities may be pledged against public funds and repurchase agreements, or may be depreciated heavily because of interest rate changes. On the other hand, holding liquid assets for liquidity purposes becomes less attractive because of thin profit margins and capital maintenance requirements.

The amount of liquid assets that a bank should maintain is a function of the stability of its funding structure and the potential for rapid loan portfolio expansion. Generally, if the sources of funds are stable, established yet unused borrowing capacity is significant, and loan demand is predictable, a relatively low allowance for liquidity is required. Factors that may indicate that a higher allowance for liquidity is required include:

- The competitive environment is such that bank customers can invest in alternative instruments.
- Recent trends show substantial reduction in large liability accounts.
- Substantial deposits are short-term municipal special assessment-type accounts.
- A substantial portion of the loan portfolio consists of large problem credits with little likelihood of reduction or marketability.
- A substantial portion of the loan portfolio consists of non-marketable loans (e.g., longer term, non-amortizing, non-homogeneous loans may not be readily marketable).
- The bank expects customers to draw upon unused lines of credit or commitments in the near future.
- A concentration of credits has been extended to an industry with present or anticipated financial problems.
- A close relationship exists between individual demand accounts and principal employers in the trade area who have financial problems.
- A significant portion of assets is pledged to support wholesale borrowings.
- Access to the capital markets is impaired.

To balance profitability and liquidity, management must carefully weigh the full return on liquid assets (yield plus insurance value) against the expected higher return associated with less liquid assets. Income derived from higher yielding assets may be offset if a forced sale is necessary due to adverse balance sheet fluctuations.

**Investment Portfolio**

An institution's investment portfolio can provide liquidity through maturing securities, the sale of securities for cash, or by pledging securities as collateral in a repurchase agreement or other hypothecation. For an investment to be sold or pledged as collateral, it must not be presently encumbered. That is, the security cannot be pledged, used as collateral, sold under repurchase agreement, or otherwise hypothecated. Even if unencumbered, a security that is severely depreciated, has a small face amount, or is of poor credit quality is not a good candidate for collateral.

For accounting purposes, investment portfolios are separated into three categories: held-to-maturity (HTM), available-for-sale (AFS), and trading. Securities categorized as HTM are carried at amortized cost. To categorize a security as HTM, a bank must have both the intent and ability to hold the security to maturity. If the bank has any intention of selling an HTM security prior to maturity for liquidity purposes, the security is not eligible for classification as HTM. Sale of an HTM security could potentially call into question management's ability to hold other HTM securities to maturity. A reclassification might be required of the remaining HTM securities, categorizing them as AFS or trading. In addition, management would have difficulty categorizing future securities purchases as HTM. HTM securities, however, can be pledged or used as collateral in a repurchase agreement or other collateralized borrowing arrangements and provide the institution with a source of liquidity. Furthermore, in situations where an institution needs cash immediately, management might ignore the accounting ramifications of selling securities categorized as HTM rather than risk the institution's viability.

Institutions typically classify securities that will be used for liquidity as AFS. AFS securities are not subject to the "intent and ability" restrictions of HTM securities. Because AFS securities are marked to market regularly, any fair value gains or losses are recognized as they occur in a separate component of equity capital known as accumulated other comprehensive income. Therefore, if the institution needs to sell, pledge, or use an AFS security as collateral, the impact on GAAP capital is mitigated because the bank has already recognized the change in value of the security. However, since the unrealized gain

or loss on AFS securities is not reflected in regulatory capital prior to a sale, there will be an impact on Tier 1 Capital when the AFS securities are sold.

### **Asset Securitization**

Institutions that securitize assets essentially transform a pool of assets into cash. Asset securitization typically involves the transfer or sale of on-balance sheet assets to a third party who issues asset-backed securities that are sold to investors in the public debt market. Investors in these securities are paid from the cash flow received from the transferred assets. Assets that are typically securitized include credit card receivables, automobile receivables, commercial and residential mortgage loans, commercial loans, home equity loans, and student loans.

Securitization can be an effective funding method for banks. However, there are several risks associated with using securitization as a funding source.

First, some securitizations have early amortization clauses to protect investors if the performance of the underlying assets does not meet pre-specified criteria. If an early amortization clause is triggered, the issuing institution must begin paying principal to bondholders earlier than originally anticipated and will have to fund new receivables that would have otherwise been transferred to the trust. The issuing institution must monitor deal performance to anticipate cash flow and funding ramifications due to early amortization clauses.

Second, if the issuing institution has a large concentration of residual assets, the institution's overall cash flow might be dependent on the residual cash flows from the performance of the underlying assets. If the performance of the underlying assets is worse than projected, the institution's overall cash flow will be less than anticipated.

Also, an issuer's marketplace reputation is crucial to its ability to generate cash from future securitizations. If this reputation is damaged, issuers might not be able to economically securitize assets and generate cash from future sales of loans to the trust. This is especially true for institutions that are relatively new to the securitization market. Also, if loans held-for-sale are funded with short-term funding, the institution will have to find alternative funding sources if it is not able to sell these assets quickly.

Finally, residual assets that the issuing institution retains are typically illiquid assets, for which there is no active market. Additionally, these assets are not acceptable collateral to pledge for borrowings.

### **Loan Portfolio**

The loan portfolio has become a more important factor in liquidity management. Loans can be used as collateral for secured borrowings or sold for cash in the secondary loan market. Sales in the secondary market provide fee income, relief from interest rate risk, and a funding source to the originating bank. Refer to the Sources of Funds: Liabilities portion of this section for a discussion of pledging loans to secure advances.

### **Loan Commitments**

Loan commitments, such as fee-paid letters of credit used as backup lines, are traditional uses of funds that are off-balance sheet. Management should be able to estimate the amount of unfunded commitments that will require funding over various time horizons. Management should include its estimate of anticipated demands against unfunded commitments in its internal reporting and contingency planning. Examiners should consider the nature, volume, and anticipated usage of the institution's loan commitments when assessing and rating the liquidity position.

## **FUNDING SOURCES: LIABILITIES**

As an alternative to using assets to satisfy liquidity needs, these needs may be met through liability sources. Although core deposits continue to be a key liability funding source, many insured depository institutions have experienced difficulty attracting core deposits and are increasingly looking to wholesale funding sources to satisfy funding and liability management needs. Wholesale funding sources include, but are not limited to, Federal funds, public funds, Federal Home Loan Bank advances, the Federal Reserve's primary credit program, foreign deposits, brokered deposits, and deposits obtained through the Internet or CD listing services.

The use of such funding sources and the risks posed by them vary widely depending on a variety of factors and circumstances presented by the individual financial institution. Risks include potential increased exposure to credit, interest rate, and liquidity risk. Wholesale funding providers are generally sensitive to changes in the credit risk profile of the institutions to which they provide these funds and to the interest rate environment. For instance, such providers closely track the institution's financial condition and may be likely to curtail such funding if other investment opportunities offer more attractive interest rates. As a result, an institution may experience liquidity problems due to lack of wholesale funding availability

when needed. The decision whether or not to use liability sources should be based upon a complete analysis of factors such as the costs involved, concentrations, and the degree of management expertise available. In addition to serving as a supplement to asset liquidity, liability sources may serve as an alternative even when asset sources are available. The number of banks relying solely on managing the asset structure to meet liquidity needs is declining rapidly.

The use of wholesale funding, in and of itself, is not viewed negatively. Active and effective risk management can mitigate the added risks associated with the use of wholesale funding sources. When the terms and conditions of such funding sources are well understood and well-managed, such funding can facilitate an institution's ability to meet foreseen and unforeseen liquidity and funding needs. The challenge of measuring, monitoring, and managing liquidity risk, however, will typically increase with the greater use of nontraditional funding sources and, in some cases, require enhanced funds management processes, e.g., scenario modeling. In addition, contingency planning, capital management, and the control of reputation risk will take on added significance.

An evaluation of wholesale funding should be commensurate with the degree of risk faced and the quality of bank management as articulated more fully in the bank's liquidity and funds management policies. Wholesale funding use should be consistent with the institution's funds management policies, risk limits, strategic plans, and management expertise.

Reputation risk plays a critical role in a bank's ability to access funds readily and at reasonable terms. For that reason, bank staff responsible for managing overall liquidity should be aware of any information (such as an announcement of a decline in earnings or a downgrading by a rating agency) that could affect the market's or public's perception of the soundness of the institution.

## Deposits

The critical role deposits play in a bank's ongoing, successful operation clearly demonstrates the importance of implementing programs to retain and, in most instances, expand the deposit base and of monitoring the nature and volatility of the deposit structure. Increased competition for funds and the desire of most depositors to not only minimize idle, non-earning balances but also to receive market rates of interest on invested balances have given further impetus to deposit retention efforts. An effective

deposit management program should, at a minimum, include the following information:

- A clearly defined marketing strategy.
- Projections for deposit growth and structure.
- Associated cost and interest rate scenarios.
- Procedures to compare results against projections.
- Steps to revise the plan when needed.

A deposit management program should take into account the make-up of the market area economy, including local and national economic conditions; the potential for investing deposits at acceptable margins; management competence; the adequacy of bank operations; the location and size of facilities; the nature and degree of bank and non-bank competition; and, the effect of monetary and fiscal policies of the Federal government on the bank's service area and money and capital markets in general.

Once a deposit development and retention program has been devised, it must be monitored and adjusted as necessary. The long-range success of such a program is closely related to management's ability to detect the need for change as early as possible. Management must not only project deposit growth, but also determine the make-up of the accounts as to stable deposits, fluctuating or seasonal deposits, and volatile deposits. Management should remain knowledgeable of the characteristics of the deposit structure via periodic internal reports. Lack of such knowledge could lead to the unwise employment of funds and subsequent problems.

## Core Deposits

Core deposits are defined in the Uniform Bank Performance Report (UBPR) User Guide as the sum of demand deposits, all NOW and ATS accounts, MMDA savings, other savings deposits, and time deposits under \$100,000. Core deposits are generally stable, lower cost funding sources that typically lag behind other funding sources in the need for repricing during a period of rising interest rates. These deposits are typically funds of local customers that also have a borrowing or other relationship with the institution. Convenient branch locations, superior customer service, dense ATM networks, and low or no fee accounts are significant factors associated with the inertia of these deposits. However, in some instances, core deposit accounts (e.g., time deposits) might exhibit characteristics associated with more volatile funding sources. Conversely, deposit accounts generally viewed as volatile funding (e.g., CDs larger than \$100,000) might be relatively stable funding sources. Refer to the Examination Treatment of Liquidity (UBPR Ratios) section of this

chapter for discussion of ratio analysis involving core deposit ratios.

## **Public Funds**

Public funds are deposit accounts of public bodies, such as State or local municipalities. These types of deposits often must be secured and typically fluctuate on a seasonal basis due to timing differences between tax collections and expenditures. General economic conditions can also be a factor in assessing the volatility of such deposits, since public entities may experience revenue shortfalls in times of economic decline. Though regarded as generally volatile, these accounts can be reasonably stable over time, or their fluctuations quite predictable. Local municipal deposits, for example, are often required to be maintained in the local community and, therefore, may display greater stability. State and certain local deposits, on the other hand, can be bid-type deposits that may tend to be less stable. Therefore, investigation is often needed to make informed judgments as to their stability. Due to their size and potential volatility, examiners should review these deposits.

## **Large Depositors**

For examination purposes, large deposits are defined as those concentrations of funds under one control, or payable to one entity, which aggregate 2% or more of the bank's total deposits. By virtue of their size, such deposits are considered to be potentially volatile liabilities; however, examiners may determine that certain large deposits actually remain relatively stable for long periods. Therefore, examiners must also look at the nature of the relationship between the large depositor and the institution when assessing the volatility of large deposits. For example, a board member might maintain sizable deposit accounts in the institution because of his or her relationship with the institution. These deposits in aggregate might be considered large deposits, but are not volatile funds due to the stability of the relationship. Also, in reviewing large deposits the existence of related "Other Liabilities," such as borrowings and repurchase agreements, and associated loans or investment relationships should be considered.

A bank with a concentration of deposits in a limited number of accounts or substantial sums maturing simultaneously should address within its funding strategy the potentially volatile nature of these deposits. Considerations should include pledging requirements, affiliated relationships, and impact on liquidity and funds management, and the normally narrow interest spreads

associated with large deposits. To the extent that fluctuations in deposit and loan volumes adversely coincide, that is, deposits are low when loans are high, special liquidity management measures must be taken.

While the comments above deal with large deposits, similar concerns exist for other concentrated sources of funding.

## **Negotiable Certificates of Deposit**

Negotiable certificates of deposit (CDs) warrant special attention as a component of large deposits. They are usually issued by money center or large regional banks in denominations of \$1,000,000 or more and may be issued at face value with a stated rate of interest or at a discount similar to U.S. Treasury Bills. CDs of major banks are widely traded, may offer substantial liquidity, and are the underlying instruments for a market in financial futures. They are instruments ordinarily used to fund reinvestment goals of issuing banks as opposed to solving liquidity crises. Their cost and availability are closely related to overall market conditions. Any adverse publicity involving either a particular bank or banks in general can impact the CD market. These CDs have many features of borrowings and can be quite volatile. Fundamentally, there is little to distinguish these accounts from borrowings, but negotiable CDs clearly are a form of purchased funds. Intense competition for funds among financial intermediaries has led to the common use of CDs. Thus, as a practical matter, drawing technical distinctions between CDs (except for the purposes of deposit insurance or deposit assessments) as borrowings or deposits is, in large measure, academic.

## **Brokered and Rate Sensitive Deposits**

Deposit brokers have traditionally provided intermediary services for financial institutions and investors. However, the Internet, certificate of deposit listing services, and other automated services enable investors who focus on yield to easily identify high-yielding deposit sources. Customers who focus exclusively on yield are highly rate sensitive and can be a less stable source of funding than typical relationship deposit customers. These customers may have no other relationship with the bank and have no loyalty with their deposit funds. If more attractive returns become available, these customers may rapidly transfer funds to new institutions or investments in a manner similar to that of wholesale investors. Management should be aware of the number and magnitude of such deposits.



Management should perform adequate due diligence procedures before entering any business relationship with a deposit broker. Deposit brokers are not regulated by bank regulatory agencies. Also, management should assess potential risk to earnings and capital associated with brokered or other rate sensitive deposits.

Examiners should not wait for the Prompt Corrective Action provisions of Part 325 to be triggered, or the viability of the institution to be in question, before raising relevant safety and soundness issues with regard to the use of these funding sources. If a determination is made that a bank's use of these funding sources is not safe and sound, that risks are excessive, or that they adversely affect the bank's condition, then appropriate supervisory action should be immediately taken. The following are potential red flags that may indicate the need to take action to ensure that the risks associated with brokered or other rate sensitive funding sources are managed appropriately:

- Ineffective management or the absence of appropriate expertise.
- Newly chartered institution with few relationship deposits and an aggressive growth strategy.
- Inadequate internal audit coverage.
- Inadequate information systems or controls.
- Identified or suspected fraud.
- High on- or off-balance sheet growth rates.
- Use of rate sensitive funds not in keeping with the bank's strategy.
- Inadequate consideration of risk, with management focused exclusively on rates.
- Significant funding shifts from traditional funding sources.
- The absence of adequate policy limitations on these kinds of funding sources.
- High delinquency rate or deterioration in other asset quality indicators.
- Deterioration in the general financial condition of the institution.
- Other conditions or circumstances warranting the need for administrative action.

The term "brokered deposit" means any deposit that is obtained from or through the mediation or assistance of a deposit broker. When determining if a listing service is a deposit broker under Section 337.6 of the FDIC Rules and regulations, "brokered deposits" do not include those deposits obtained by a listing service that meets the following criteria:

1. The person or entity providing the listing service is compensated solely by means of subscription fees (i.e., the fees paid by subscribers as payment for their

opportunity to see the rates gathered by the listing service) and/or listing fees (i.e., the fees paid by depository institutions as payment for their opportunity to list or "post" their rates). The listing service does not require a depository institution to pay for other services offered by the listing service or its affiliates as a condition precedent to being listed.

2. The fees paid by depository institutions are flat fees: they are not calculated based on the number or dollar amount of deposits accepted by the depository institution as a result of the listing of the depository institution's rates.
3. In exchange for fees, the listing service performs no service except the gathering and transmission of information concerning the availability of deposits. This information may include an insured depository institution's name, address (including e-mail address), telephone number and interest rates. Except for providing this information, the listing service does not serve as a liaison between depositors and depository institutions. For example, the listing service does not pass information about a depositor to a depository institution.
4. The listing service is not involved in placing deposits or confirming the placement of deposits. Any funds to be invested in deposit accounts are remitted directly by the depositor to the insured depository institution and not, directly or indirectly, by or through the listing service.

For insured institutions that are not well-capitalized, brokered deposits include any deposit solicited by offering rates that significantly exceed market rates as defined by Part 337 of FDIC Rules and Regulations. Brokered deposits usually exhibit highly volatile characteristics and often carry higher interest rates than alternative sources of funds.

The use of brokered deposits by problem institutions has often been associated with abuses and contributed to failures with consequent losses to the deposit insurance funds. They can represent a consistent and heavy funding source to support unsound or rapid expansion of loan and investment portfolios.

Section 29 of the FDI Act, implemented by Part 337 of the FDIC Rules and Regulations, limits the use of brokered deposits. An undercapitalized insured depository institution may not accept, renew, or roll over any brokered deposit. An adequately capitalized insured depository institution may not accept, renew, or roll over any brokered deposit unless the institution has applied for and been granted an application for waiver by the FDIC. Only a well-capitalized insured depository institution is allowed to

solicit and accept, renew, or roll over any brokered deposit without restriction.

With respect to adequately-capitalized institutions, any safety and soundness concerns arising from the acceptance of brokered deposits are ordinarily addressed by the conditions imposed in granting the waiver application. In monitoring such conditions, it is incumbent on the examiner not only to verify compliance but also to assess whether any unanticipated problems are being created.

The acceptance of brokered deposits by well-capitalized institutions is subject to the same considerations and concerns applicable to any other type of special funding. These concerns relate to volume, availability, cost, volatility, and maturities and how the use of such special funding fits into the institution's overall liability and liquidity management plans. There should be no particular stigma attached to the acceptance of brokered deposits per se and the proper use of such deposits should not be discouraged.

Deposit development and retention policies should recognize the following:

- The restrictions on accepting, renewing or rolling over brokered deposits.
- The limits imposed by prudent competition.
- The pitfalls of uninformed reliance on brokered funds.

When brokered deposits are encountered in an institution, examiners should consider the effect on the overall funding and investment strategies of the institution, and verify compliance with Part 337. Any loans tied to specific brokered deposits should receive special scrutiny. Apparent violations of Part 337 or inappropriate use of brokered deposits should be discussed with management and the board of directors.

### **Secured and Preferred Deposits**

Secured and preferred deposits impose pledging requirements upon banks. Banks must secure U.S. government deposits, and most states authorize or require the pledge of assets to secure State and municipal deposits. Although several forms of security may be acceptable, U.S. government securities are the most commonly pledged. Many states also mandate that depositories secure trust department funds deposited in their own bank; bankruptcy court funds are often accorded similar treatment. In addition to strict regulatory or bookkeeping controls associated with pledging requirements, banks may establish various monitoring controls due to the impact pledging may have on liquidity. Accurate accounting for secured or

preferred liabilities gains added importance during bank liquidations since certain secured depositors and creditors gain immediate access to a bank's most liquid assets.

### **Bank Investment Contracts**

A Bank Investment Contract (BIC) is a deposit contract between a bank and its customer that permits the customer to deposit funds over a period of time and obligates the bank to repay the amounts deposited plus interest at a guaranteed rate to the end of the contract term. The contract term varies, and may range from six months to as long as ten years. Though not often seen today, BICs have been structured as non-transferable liabilities (i.e., not saleable in a secondary market). The customers for BICs have been, in most cases, sponsors of employee benefit plans such as pension plans or deferred compensation plans.

Examiners should consider the volume, maturity, and cost of the BIC funding in relation to both the bank's other deposit and any nondeposit funding. The examiner should be aware of the terms and conditions of the BIC contracts. BICs may provide specified periods and conditions under which additional deposits or withdrawals may be made to or from such contracts, and the bank's liquidity planning must reasonably estimate its cash flow from BIC funding under different interest rate scenarios.

### **International Funding Sources**

As in the case of domestic sources of funds, international funding may exist in a number of forms. The most common is the Eurodollar market. Eurodollar deposits are dollar-denominated deposits taken by a bank's overseas branch or its international banking facility (IBF). They are free of reserve requirements and deposit insurance assessments. The interbank market is highly volatile, and the bank's Eurodollar deposit-taking activity should be analyzed within the same context as all other potentially volatile funding sources.

### **Federal Funds Purchased**

Federal funds are funds deposited by banks at the Federal Reserve Banks and are designed to enable banks temporarily short of their reserve requirement to borrow reserves from banks having excess reserves. However, growth and change in the market have made this description deficient, as many market participants, including most state non-member banks, do not maintain

balances at the Federal Reserve. Moreover, a Federal funds transaction does not necessarily involve the transfer of a reserve balance, as in the case of banks borrowing excess balances from their correspondent banks.

The lending and borrowing of these balances has become a convenient method employed by banks to avoid reserve deficiencies or invest excess reserves over a short period of time. In most instances, Federal funds transactions take the form of overnight or over-the-weekend unsecured transfers of immediately available funds between banks. However, banks also enter into continuing contracts having no set maturity but subject to cancellation upon notice by either party to the transaction. Banks also engage in Federal funds transactions of a set maturity, but these comprise only a small percentage of all Federal funds transactions. The vast majority of Federal funds transactions are overnight or over-the-weekend transactions. Some institutions may access Federal funds routinely, perhaps as a liability management technique whereby the buyer (borrower) attempts to utilize the acquired funds to support a rapid expansion of its loan-investment posture as a means of enhancing profits. In any event, these transactions should be supported with written verification from the lending institution.

### **Treasury Tax and Loan Accounts**

Banks receiving Treasury Tax and Loan (TT&L) funds have the option of remitting those funds daily through a Federal Reserve Bank (remittance option) or maintaining those funds in an interest-bearing, demand account (note option). The note option permits banks to retain the TT&L funds as secured, purchased funds callable on demand. Under the note option, such funds should be shown in the examination report as deposits on the day received and as "Other Borrowed Money" on the following day. As borrowed funds, they must be analyzed as any other volatile funding source, which requires the encumbrance of assets for pledging purposes. Often, balances in TT&L accounts are not significant and do not present a material factor in assessing liquidity.

### **Borrowings**

Large regional and money center banks, and increasingly more community banks, rely heavily on funds generated from the assumption of liabilities. Larger banks generally have access to money markets and usually find that borrowing is the most economical way for them to meet short-term or unanticipated loan demand or deposit withdrawals. Community banks generally do not have the same broad access to money markets; their reliance on

funds generated from the assumption of liabilities is increasing as the availability of core deposits continues to decline.

The appropriate use of asset and liability funding sources may result in lower overall liquidity cost. By managing borrowings in a coordinated fashion with asset liquidity needs, banks can tailor liabilities to fit their cash flow needs instead of apportioning asset types and amounts to a given liability base. Locking in term funding can also reduce liquidity risk, especially if the bank can extend the duration of its liability structure. Accessing wholesale funds allows banks to obtain funds quickly and efficiently. Borrowing funds should never automatically draw criticism. Nevertheless, borrowings should be viewed as a supplemental funding source, rather than as a replacement for core deposits.

Managing liquidity through adjustments to liabilities requires management to plan strategies more carefully than if the bank managed liquidity based only on assets. If an institution is relying on borrowed funds, management should have a complete understanding of the associated risks, commensurate risk management practices, and a comprehensive contingency funding plan that specifically addresses funding as the institution's financial condition or the economy deteriorates.

Although borrowing funds has enabled many banks to meet expanding customer loan demand, this strategy is not riskless. Misuse or improper implementation of a borrowing strategy can have severe consequences. In all banks, and particularly in wholesale-funded ones, management must be constantly aware of the composition and characteristics of its funding sources. Examiners and banks should be aware of the following risks associated with borrowing funds:

- Secured borrowings can impact a bank's liquidity profile by pledging high quality assets, lessening the availability of such assets for contingent liquidity demands.
- If the institution's condition or the economic climate deteriorates, it will be more difficult to borrow funds economically, if at all, when needed the most.
- Changes in market conditions can make it difficult for the bank to secure funds and to manage its funding maturity structure.
- Due to rate competition, a bank may incur relatively high costs in obtaining funds and may lower credit quality standards in order to invest in higher yielding loans and securities. If a bank is purchasing liabilities to support assets already on its books, the high cost of borrowings may result in a negative yield spread.

- Preoccupation with obtaining funds at the lowest possible cost, without proper consideration given to diversification and to maturity distribution, intensifies a bank's exposure to funding concentrations and the risk of interest rate fluctuations, respectively.
- Management might not fully understand the terms of the particular borrowings. Some borrowings have embedded options that make their maturity or future interest rate uncertain. This uncertainty can increase the complexity of liquidity management and, under certain circumstances, may increase the cost of funding.

The extent of an institution's reaction to these risks will depend upon that particular bank's mix of funding sources and their risk tolerance. Risk tolerance is the willingness and ability of an individual or institution to borrow or lend money for a given risk/reward profile. Factors affecting risk tolerance of funds providers include:

- Obligations to fiduciary investors, such as money market funds, trust funds and pensions.
- Reliance on rating firms. Bylaws or internal guidelines may prohibit placing funds in banks that have low ratings.
- Obligations to disclose information on investment holdings.
- Self-interest in maintaining an orderly marketplace. For this reason major banks are slow in eliminating funding to other banks.
- Lack of a personal contact at the bank to provide timely and accurate information about its financial condition.

Federal Home Loan Bank (FHLB) advances have become a popular type of borrowing. To obtain advances an institution must be a member of an FHLB and, for most advances, must pledge collateral. The institution will also be subject to an annual audit verification of pledged collateral. There are many varieties of advances and the types of advances offered vary among the individual FHLBs. Access to advance funding can increase an institution's liquidity by affording an institution the ability to pledge otherwise illiquid assets as collateral. FHLB advances provide institutions with a link to the capital markets and make funds available at maturities and terms that might otherwise be unavailable. However, the FHLB scrutinizes an institution's credit risk profile on an ongoing basis. If an institution's financial condition deteriorates to a point where the FHLB begins to restrict further borrowing, the institution will suffer the effects of increased collateral requirements or reduced borrowing flexibility when it may be needed most. Specifically, if asset quality deteriorates the FHLB may refuse to renew

advances upon maturity, accelerate repayment of advances due to a covenant breach, raise collateral requirements, or reduce funding lines. Thus, while FHLB advances can be structured as long-term borrowings and provide a source of stable funding, the credit sensitive nature of FHLB advances distinguishes them from traditional core deposits. FHLB advances are referred to as credit sensitive because the institution's asset quality and overall financial condition drive the collateral terms and borrowing capacity. In contrast, the interest rate on FHLB advances is a function of prevailing market conditions, the size, and the particular type of advance. Additionally, if the FHLB has a blanket lien on the institution's assets, management loses the ability to sell its assets or pledge them to secure borrowings. Management should understand the ramifications of having advance funding curtailed in the event that the institution's financial strength deteriorates, and the bank's contingency plan should identify alternative sources of funding.

### **Repurchase Agreements**

In a securities repurchase agreement (repo), an institution agrees to sell a security to a counterparty and simultaneously commits to repurchase the security at a mutually agreed upon future date. Instead of borrowing money and pledging securities as collateral, the party to a repo transaction sells the securities today, and simultaneously agrees to buy the same security at the same price (with interest) at some point in the future. As a result, in economic terms, a repurchase agreement is a form of secured borrowing. The amount "borrowed" against the securities generally is the full market value less a reasonable "haircut." Most repos are day-to-day (overnight) funding, but terms of up to one or two years are not uncommon. Normally, the counterparty takes delivery of the securities, although a third party can hold collateral (a tri-party repo). The agreements are often standardized, using contract language adopted by the Bond Market Association. Examiners should reference the Modified Policy Statement on Repurchase Agreements of Depository Institutions with Securities Dealers and Others, dated February 25, 1998.

From an accounting standpoint, repurchase agreements involving securities are either reported as borrowings and loans or sales and repurchase commitments based on whether the selling institution maintains control over the future economic benefits associated with the underlying asset. If the repurchase agreement requires the selling institution to repurchase the identical asset sold, then, generally, the institution has retained control over the future economic benefits and should report the transaction as a borrowing. If the repurchase agreement does not require the bank to repurchase the identical security sold,

the agreement is reported as a sale of the securities and a commitment to purchase securities. For accounting purposes, a reverse repurchase agreement, which requires the buying institution to sell back the identical asset purchased, is treated as a loan. If the reverse repurchase agreement does not require the institution to resell the identical security purchased, it is reported as a purchase of the securities and a commitment to sell securities.

The vast majority of repurchase agreements mature in three months or less. One-day transactions are known as overnight repos, while transactions longer in duration are referred to as term repos. Institutions typically use repurchase agreements as short-term, relatively low cost, funding mechanisms. Likewise, reverse repos are used as short-term investment alternatives to other money market instruments, such as Federal funds. The interest rate paid on a repurchase agreement depends on the type of underlying collateral. In general, the higher the credit quality of the collateral and the easier the security is to deliver and hold, the lower the repo rate. Supply and demand factors for the underlying collateral also influence the repo rate.

Properly administered repurchase agreements that are conducted within a comprehensive asset/liability management program are not normally subject to regulatory criticism. However, repos that are inadequately controlled may expose an institution to risk of loss and will be regarded as an unsuitable investment practice. Since the market value of the underlying security may change during the term of the transaction, both parties to a repo may experience credit exposure. Although repo market participants normally limit their credit exposure by requiring margin collateral and by regularly marking term transactions to market, there is no substitute for a thorough credit review of repo counterparties prior to the initiation of transactions. For banks, broker/dealers are common counterparties.

Many portfolio managers have severely underestimated the credit risk associated with the performance of a counterparty and have failed to adopt the basic safeguards necessary to assure proper control over the underlying securities. Because of the numerous control deficiencies found to be associated with these transactions, the FDIC has established minimum standards for any depository institution engaged in repurchase agreement transactions. Financial institutions that are actively engaged in repurchase transactions should be encouraged to have even more comprehensive controls to suit their particular circumstances.

The risks inherent in repurchase agreement transactions should be controlled by an institution through policy guidelines that, at a minimum, provide the following:

- Establish written credit policies.
- Require identification and periodic credit evaluations of each counterparty.
- Establish maximum position and exposure limits for each counterparty.
- Mandate individual or master written agreements for all repurchase transactions that specify acceptable collateral types and maturities, call defaults and sellout provisions, ownership rights, substitute collateral rights, and persons authorized to transact business on behalf of both parties.
- Provide for acceptable control provisions over underlying securities.

Banks engaging in or planning to engage in the sale of repurchase agreements to retail customers are urged to consult with legal counsel competent in the field of securities law to determine what constitutes sufficient disclosure to customers as well as to ensure compliance with the antifraud and other applicable provisions of Federal and State securities law.

The full text of the policy statement on repurchase agreement transactions can be found in the Prentice-Hall volumes.

### **Dollar Repurchase Agreements**

Dollar repurchase agreements, also known as dollar repos and dollar rolls, provide financial institutions with an alternative method of borrowing against securities owned. Unlike "standard" repurchase agreements, dollar repos require the buyer to return to the seller substantially similar, versus identical, securities. Dealers typically offer dollar roll financing to institutions as a means of covering short positions in particular securities. Short positions arise when a dealer sells securities that it does not currently own for forward delivery. To avoid the costs associated with failing on a delivery, dealers are willing to offer attractive financing rates in exchange for the use of the institution's securities in covering a short position. Savings associations are the primary participants among financial institutions in dollar roll transactions, and mortgage pass through securities are typically used as the underlying collateral.

Supervisory authorities do not normally take exception to dollar repos, provided that the transactions are conducted for legitimate purposes and the institution has instituted

appropriate controls. However, dollar repos that are designed to permanently dispose of securities while circumventing accounting rules for loss recognition will be viewed as an unsuitable investment practice.

To qualify as borrowings, dollar repos must require the buyer to return to the seller "substantially similar" securities by the settlement date, which cannot exceed 12 months from the inception of the transaction. Mortgage pass-through securities repurchased are considered "substantially similar" to those sold if all of the following conditions are met. The securities must:

- Be collateralized with similar mortgages.
- Be issued by the same agency and be part of the same program.
- Have the same remaining weighted average maturity.
- Be priced to have similar market yields.
- Have identical coupon rates.
- Satisfy good delivery requirements.

In addition, securities used in dollar repo transactions must have been held in the seller's investment portfolio for a minimum of 35 consecutive days prior to the initiation of the contract.

Examiners should require appropriate financial statement adjustments in cases where institutions have improperly reported dollar repurchase transactions.

### **Federal Reserve Bank**

The Federal Reserve Banks provide short-term collateralized credit to banks at the Federal Reserve's discount window. The discount window is available to any insured depository institution that maintains deposits subject to reserve requirements. Banks must execute borrowing agreements and fully collateralize all borrowing to the satisfaction of the Federal Reserve. U.S. government securities are the most acceptable and most common type of collateral in obtaining a Reserve Bank loan, although any "bankable" asset is acceptable for pledging. Other acceptable collateral consists of mortgage-backed, asset-backed, municipal, sovereign, or corporate securities, and loans (municipal, commercial, 1- to 4-family residential). Collateral may be transferred to the Federal Reserve, held by the borrower in custody, held by a third party, or reflected by book entry. Types of discount window credit include primary credit (generally overnight credit to meet temporary liquidity needs), secondary credit (available to institutions that do not qualify for primary credit), extended credit (in exceptional circumstances for institutions under liquidity strain), and emergency credit (rare circumstances).

The Federal Reserve's primary credit program was designed to ensure adequate liquidity in the banking system and is intended as a back-up of short-term funds for eligible institutions. In general, depository institutions with composite CAMELS ratings of 1, 2, or 3 that are at least adequately capitalized are eligible for primary credit.

Since primary credit can serve as a viable source of back-up, short-term funds, examiners should view the occasional use of primary credit as appropriate and unexceptional. At the same time, examiners should be cognizant of the implications that too frequent use of these relatively expensive funds may have for the earnings, financial condition, and overall safety and soundness of the institution. Over-reliance on primary credit borrowings or any one source of short-term contingency funds may be symptomatic of deeper operational and/or financial difficulties. Institutions should ensure that use of primary credit facilities is accompanied by viable takeout or exit strategies.

Secondary credit is available to depository institutions that do not qualify for primary credit. This program entails a higher level of Reserve Bank administration and oversight than primary credit. The secondary credit rate is above the primary credit rate. The discount window is a means to provide relief to institutions that face temporary, unforeseen liquidity pressures. If an individual bank's borrowing becomes a regular occurrence, Reserve Bank officials will review the purpose of the borrowing and encourage the bank to initiate a program to eliminate the need for such borrowings. Appropriate reasons for borrowing include preventing overnight overdrafts, loss of deposits or borrowed funds, unexpected loan demand, liquidity and cashflow needs, operational or computer problems, or a tightened Fed Funds market.

The Federal Reserve will not permit banks that are not viable to borrow at the discount window. In 1991, the Federal Reserve Act was modified by the Federal Deposit Insurance Corporation Improvement Act to limit a bank's ability to access the discount window. Section 10B(b) limits Reserve Banks advances to not more than 60 days in any 120-day period for undercapitalized institutions. This limit may be overridden only if the primary Federal banking agency supervisor certifies the borrower's viability or if, following an examination of the borrower by the Federal Reserve, the Chairman of the Board certifies in writing to the Reserve Bank that the borrower is viable. These certifications may be renewed for additional 60-day periods.

**THE ROLE OF CAPITAL AND THE BANK HOLDING COMPANY****Bank Holding Company Considerations**

Discussion of liquidity and funds management thus far has addressed independent banks. While the principles are also generally true of holding company subsidiaries, there are additional factors that need to be considered. For larger holding companies, many of the management decisions and planning functions already discussed for liquidity management are performed at the corporate level for all subsidiary banks. Loans can be shifted through sales or participations within the affiliated group from banks with excessive loan demand to others with inadequate loan demand. Banks with unpledged assets or unused borrowing capacity can lend assets, cross collateralize an affiliate's borrowings, or fund liabilities for other banks in the chain. Purchased liabilities can be attracted at the corporate level and inserted anywhere in the affiliated group. Therefore, in viewing liquidity or interest sensitivity in subsidiary banks, it can be misleading to review only the mix, maturity and rate sensitivity of an individual bank's balance sheet. Also, examiners should consider Sections 23A and B of the Federal Reserve Act, State law, and the FFIEC Supervisory Policy on Securities Lending when reviewing transactions between affiliates.

Examiners should obtain holding company-wide information regarding the consolidated organization's approach to liquidity management that detail such items as where decisions are being made, and what alternatives or options are available through the parent or within the organization to provide for liquidity and control of rate sensitivity. While there is no reason to criticize the existence of centralized planning and decision making, there remains a legal responsibility of an individual bank's board of directors for managing its independent and unique affairs. It is important that they be aware of the bank's strategy and performance and provide informed approval.

The typical bank holding company has no independent source of revenue, no liquid assets, and a leveraged balance sheet. It is the subsidiary bank(s) that ultimately provides funds to service the parent's debt. However, the funds upstreamed to the parent company will be more of a factor in assessing the individual subsidiary bank's earnings and capital than the liquidity position.

**Trust Preferred Securities**

Trust preferred securities (TPS) have credit characteristics of deeply subordinated debt with long term maturities.

TPS are hybrid instruments that are generally considered debt securities when purchased by banks as investments, but have equity characteristics as the Federal Reserve allows their inclusion to a maximum of 25% of Tier 1 capital for the issuer, a BHC. Given the long term nature of trust preferred securities, it is more appropriate to view these instruments as part of the issuer's capital structure rather than a source of liquidity. After issuing TPS the BHC might downstream the cash proceeds to a subsidiary bank. In this case, the nonrecurring nature of the cash contribution to the downstream bank should be viewed more as a capital injection rather than as a funding source for ongoing operations. Examiners should consider the specific characteristics of TPS held as an investment and assess its marketability. Some TPS may be publicly traded while others may be actively traded in over-the-counter markets. Market makers for certain TPS are developing. On the other hand, certain TPS may not be actively traded and are thus relatively illiquid investments.

**The Role of Equity in Evaluating Liquidity**

Issuing new equity is a relatively slow and costly way to raise funds and should not be viewed as an immediate or direct source of liquidity. Raising capital to fund anticipated growth or a new business line presents management considerations distinct from liquidity concerns (e.g., return on equity targets, dilution of existing shareholder value, and the market's perception of the growth or development strategy). However, to the extent that a strong capital position helps an institution to quickly obtain additional debt and to economically raise funds, issuing equity can be appropriately considered a liquidity facilitator. An institution's capital level and its willingness and ability to raise additional equity should be considered when assessing liquidity.

**Commercial Paper**

Commercial paper is generally a short-term, negotiable promissory note, issued for short-term funding needs by a bank holding company, large commercial bank, or other large commercial business. Commercial paper usually matures in 270 days or less, is not collateralized, and is purchased by institutional investors. Rating agencies, such as Standard & Poor's and Moody's, rate these instruments based on the issuer's financial condition. A smaller community bank without agency ratings or name recognition in the market might find commercial paper to be an impractical and cost-prohibitive funding source. Given the short-term, debt-like nature of commercial paper, a holding company's ability to issue this instrument and downstream the funds to a subsidiary bank would

provide an additional funding source and, therefore, have a positive impact on the bank's liquidity position.

## **EVALUATION OF A BANK'S LIQUIDITY**

### **Liquidity Component Rating**

Perhaps more than any of the other component ratings, except the management component, the liquidity component should be assigned in the context of other financial factors. Banks with very strong capital positions and earnings fundamentals are likely to be able to easily fund ongoing operations and have no difficulty raising liquidity for even unforeseen events. Conversely, banks with low levels of capital, weak earnings, or asset deterioration, may find financing to be more expensive or borrowing line maturities reduced.

Under the *Uniform Financial Institutions Rating System*, in evaluating the adequacy of a financial institution's liquidity position, consideration should be given to the current level and prospective sources of liquidity compared to funding needs, as well as to the adequacy of funds management practices relative to the institution's size, complexity, and risk profile. In general, funds management practices should ensure that an institution is able to maintain a level of liquidity sufficient to meet its financial obligations in a timely manner and to fulfill the legitimate banking needs of its community. Practices should reflect the ability of the institution to manage unplanned changes in funding sources, as well as react to changes in market conditions that affect the ability to quickly liquidate assets with minimal loss. In addition, funds management practices should ensure that liquidity is not maintained at a high cost, or through undue reliance on funding sources that may not be available in times of financial stress or adverse changes in market conditions.

### **RATING THE LIQUIDITY FACTOR**

A rating of 1 indicates strong liquidity levels and well-developed funds management practices. The institution has reliable access to sufficient sources of funds on favorable terms to meet present and anticipated liquidity needs.

A rating of 2 indicates satisfactory liquidity levels and funds management practices. The institution has access to sufficient sources of funds on acceptable terms to meet present and anticipated liquidity needs. Modest weaknesses may be evident in funds management practices.

A rating of 3 indicates liquidity levels or funds management practices in need of improvement. Institutions rated 3 may lack ready access to funds on reasonable terms or may evidence significant weaknesses in funds management practices.

A rating of 4 indicates deficient liquidity levels or inadequate funds management practices. Institutions rated 4 may not have or be able to obtain a sufficient volume of funds on reasonable terms to meet liquidity needs.

A rating of 5 indicates liquidity levels or funds management practices so critically deficient that the continued viability of the institution is threatened. Institutions rated 5 require immediate external financial assistance to meet maturing obligations or other liquidity needs.

Liquidity is rated "1" through "5" with respect to the following:

- Volatility of deposits
- Reliance on interest-sensitive funds and frequency and level of borrowings
- Unused borrowing capacity
- The capability of management to properly identify, measure, monitor, and control the institution's liquidity position, including the effectiveness of funds management strategies, liquidity policies, management information systems, and contingency funding plans
- Level of diversification of funding sources
- Ability to securitize assets
- Availability of assets readily convertible into cash
- Ability to pledge assets
- Impact of holding company and affiliates
- Access to money markets
- The institution's earnings performance
- The institution's capital position
- The nature, volume, and anticipated usage of the institution's credit commitments

In appraising liquidity, attention should be directed to the bank's average liquidity over a specific period as well as its liquidity position on a particular date. Examination procedures for liquidity analysis are included in the Examination Documentation (ED) Modules. Refer to the ED Liquidity Module for additional guidance.

### **UBPR Ratio Analysis**

The UBPR is an invaluable analytical tool that shows the impact of management's decisions and economic conditions on a bank's earnings performance and balance sheet composition. Examiners should employ UBPR ratios



as helpful tools to analyze the institution's liquidity position. UBPR ratios should be viewed in concert with the institution's internal liquidity ratios on a level and trend basis when assessing the liquidity position. Peer group comparisons might not be meaningful since the liquidity and funding needs will be different for each institution.

composition, the risk profile, and other relevant and unique characteristics of the institution.

Some of the more common ratios that examiners use are:

- Net Short-Term Non Core Funding Dependence
- Net Non-Core Funding Dependence
- Net Loans and Leases to Deposits
- Net Loans and Leases to Total Assets
- Short-Term Assets to Short-Term Liabilities
- Pledged Securities to Total Securities
- Brokered Deposits to Deposits
- Core Deposits to Total Assets

Examiners should recognize that UBPR liquidity ratio analysis might not provide an accurate picture of the institution's liquidity position. Characteristics and behavior of asset and liability accounts should be scrutinized prior to analyzing liquidity ratios. Loans, securities, deposits, and borrowings should be evaluated before using UBPR ratios to draw conclusions concerning the liquidity position.

For example, the UBPR User Guide defines the types of deposit accounts included in "core deposits." Core deposits are generally considered stable, low cost funding sources, but, at a particular institution, core deposit account balances might fluctuate significantly or might be more prone to run-off. For example, out of area CDs less than \$100,000 obtained from an Internet listing service are included in core deposits under the UBPR definition, but it is nevertheless likely that such deposits should not be viewed as a stable funding source. Likewise, a local depositor might have CDs larger than \$100,000 in a community institution. The UBPR definition categorizes CDs larger than \$100,000 as non-core liabilities. However, should the institution be in good condition, such deposits are likely stable sources of funds because of the customer's loyalty; but should the institution experience financial problems, such deposits might also be volatile due to the uninsured nature of the deposits. Similarly, the UBPR categorizes FHLB advances as non-core funding. However, some advances are long-term and serve as a stable funding source. As long as the FHLB advances are fully collateralized to the satisfaction of the FHLB, it is likely that the advances will be renewed at maturity. Yet, as discussed above, FHLB advances are more credit sensitive than deposits. For these and similar reasons, examiners must consider these ratios in light of the particular circumstances; the community, the balance sheet