More "core" than core deposits

Why FHLBank advances are the most reliable source of funding and liquidity

Historically core deposits from an institution's immediate market area provided the funds that enabled an institution to make loans and invest in income generating assets.

Through the 1970s and into the 1980s, banking was almost entirely conducted in local markets. This began to change in the 1980s when barriers to interstate banking, branching and competition fell, opening up a new era of banking and competition.

The advent of online financial institutions, the introduction and nearly universal availability of digital technologies, such as remote deposit capture and mobile banking apps, are making the traditional concept of branch banking obsolete. However, locally based core deposits and the associated customer relationships they carry continue to represent the core economic value of community financial institutions.

These innovations are also reducing the need for traditional brick and mortar offices. They have increased competition in the capture of deposits. Generations of customers now exist that have grown up using technology to conduct personal financial business on a national and even a global basis.

Customers in local communities now enjoy the conveniences and product offerings provided by larger institutions even when the closest physical office location may be hundreds or thousands of miles away.

These "virtual" customers tend to be "rate shoppers" who will readily move their money to another institution offering a higher yield, thereby increasing the volatility of an institution's deposits.

The 2019 Conference of State Bank Supervisors survey of community bankers showed that competition for core deposits has grown fierce.

"Nearly 92% of respondents said competition was a very important or important factor in their ability to attract and retain core deposits."

Dominating competition for transaction deposits were institutions with branches or satellite offices, but no headquarters in the market. Institutions without a local headquarters or

June 1, 2020

... continued on page 2

branch were named by 10% of respondents as their most competitive threat for non-transaction deposits.

As one community banker noted — "Apps remove the need for bank products other than as holding tanks for short-term cash deposits."

Metastasis in Core Deposits

The continued evolution in banking has created challenges for many institutions to maintain and grow core deposits. It is also resulting in a change in consumer deposit behavior and other characteristics that traditionally made core deposits a stable, reliable and lower cost source of funding.

Deposits are shifting away from traditional checking, savings and time deposits into non-maturity deposit structures. Money market deposits were only 11% of total deposits in 1990. Today, they represent 38% of total deposits. Time deposits were approximately 33% of total deposits in 1950, and today are only 14% of total deposits.

This shift increases the potential volatility of the deposit base. The deposit portfolio is also shifting away from local sources. More and more, deposits are being purchased and relied upon by financial institutions through brokers, online listing and other non-local sources. Brokered and online listing service deposits now represent approximately 13% of total deposits.

The 2019 CSBS survey of community bankers indicated nearly 30% of bankers stated that depopulation will be an important limitation to retaining core deposits. Some bankers described being trapped in "shrinking" rural markets that "are saturated and economically stagnant." In addition, the same CSBS survey showed that nearly one-third of community bankers believe that either core deposit growth or cost of funds will be the single greatest challenge they face.

A significant portion of an institution's deposit portfolio through the years may have metastasized into a less attractive and reliable form of funding. As a result, deposits may no longer be the most reliable, stable and efficient source.

Why deposits are not the most reliable, stable or most efficient source of funding: There are four general reasons why deposits are inefficient and have a degree of uncertainty related to funding your balance sheet.

1. Customers are in control — not the bank or credit union.

- Deposits may leave for a variety of reasons, some of which are outside the control of the institution, such as negative press, depositor emotions or competition.
- Time deposits may leave prior to maturity based upon depositor emotions, life circumstances or economic analysis - even though an early withdrawal penalty is assessed.
- The customer determines the maturity schedule that best suits their requirements versus what best suits the institution.
- Non-maturity deposits can leave anytime at the depositor's discretion. Depositors own the call option.

2. Deposits may not be structured for a custom fit to the bank or credit union need.

- Deposits may not be available in the quantity and structures desired to fit the needs of an institution's balance sheet.

... continued on page 3

Core deposits are defined in the Uniform Bank Performance Report (UBPR) User's Guide as the sum of all transaction accounts, money market deposit accounts (MMDAs), non-transaction other savings deposits (excluding MMDAs), and time deposits of $250,000 and below.

- The composition of deposit portfolios has changed radically since 1990.

3.Deposits are not "just in time" funding.

- Deposits take time to attract, gather and may not exist on the balance sheet when needed.
- An institution may not be able to raise deposits due to a weak competitive profile and lack of product features, pricing and the desired experience demanded by customers.

4. Markets and competition add an element of uncertainty regarding deposit funding.

- Institutions are being challenged to compete for deposits on a local and national level.
- Institution are unsure of the offering rate required to be successful in raising local deposits.
- Many institutions experience a higher cost of deposits, when raising funds in a local competitive market than comparable funding in wholesale markets, even without factoring in marketing, sales and administrative expenses.
- Deposits are migrating away from rural or non-metropolitan markets limiting current and future institution asset growth and prosperity.

The traditional view of core deposits is also slowly changing. Traditional measures of institution liquidity, such as the Loan-to-Deposit/Shares (LTD) ratio are ineffective indicators of an institutions ability to withstand a stress event. An FHLBank Topeka Financial Intelligence article "The Fallacy of the Loan-to-Deposit (Share) Ratio" explains why the LTD ratio may no longer be a valid measure of liquidity.

Given today's competitive landscape, advances in technology and changes in customer behavior, are deposits really "core" anymore? Or, are they more akin to rate-sensitive monies that will leave an institution when there are more attractive alternatives available with just a few clicks of a mouse?

We will address these questions and others through a series of articles and papers beginning with this paper on the reliability and stability of FHLBank advances versus deposits. Future financial intelligence articles will discuss topics such as:

- Deposit trends and the shift in "core" funding
- Credit philosophy and collateral practices of FHLBank Topeka, contingent liquidity or "dry powder"
- Advantages of using FHLBank advances
- Finding hidden profits in deposit pricing and funding
- Liquidity & developing a strategic funding plan

The hallmark of community banks and credit unions is the personalized nature of the relationships they develop with their customers and the human interaction it involves. Therefore, local relationship-based deposits will always be a highly desired source of funding for an institution.

A well thought out and effectively executed strategy for acquiring and retaining these core customer relationships should always be an integral part of an institution's strategic business plan.

... continued on page 4

Excerpt from FDIC Manual of Examination Policies

Generally, examiners should view borrowings as a supplemental funding source, rather than as a replacement for core deposits. If an institution is using borrowed funds to meet contingent liquidity needs, examiners should determine whether management understands the associated risks and has commensurate risk management practices.

"Nearly one-third of community bankers believe that either core deposit growth or cost of funds will be the single greatest challenge they face."

Advantages of FHLBank Advances

In years past, most community-based institutions did not have access to alternative sources of funding, making core deposits critical sources of stable, low-cost funding. The changes in technology and financial markets that have occurred in the past 40 years, while creating business challenges, have also opened access to new sources of funding from the wholesale markets.

Institutions are now looking to these other sources to support their business plans and fill their funding needs. Wholesale funds used by community institutions include FHLBank advances, brokered deposits, fed funds purchased and repurchase agreements, listing service deposits, public fund deposits, other borrowed funds and discount window loans.

The 2019 CSBS survey reported that more than 74% of community banks acquire funds and will continue to use advances from an FHLBank. Another nearly 12% indicated that they intend to expand their use or begin using FHLBank advances in the future.

"We are not dependent on the advances," one banker said, "but knowing they are available is very important."

FHLBank advances are a desired source of funding by institutions of all types and sizes due to their unique characteristics. These characteristics make them the most stable, reliable and efficient source of funding for financial institutions.

FHLBanks have demonstrated through the years and through difficult economic cycles that they can be counted on for funding through the best and the worst of times. The performance of the FHLBank System through the financial crises of 2007 - 2008 is reviewed later in this article.

Four main reasons why FHLBank advances are the preferred source of funding ...

1. Advances are available immediately and easy to access.

- Funding is available immediately. The amount of funding and the rate is assured.
- Advances are easy to access through FHLBank Topeka's Members Only website or a phone call to the lending desk.
- Members incur no upfront costs for marketing, sales or ongoing administration reducing the total overall cost of funding.
- Members typically have excess unused collateral capacity providing them with immediate access to funds.

2. Advances are "custom fit" funding tailored to your needs.

- Funding is available for overnight use or for longer-term advance facilities.
- Members determine the advance structure, amount, final maturity and can elect to build in call protection where desired.
- Advances can be used to match fund assets to minimize a member's interest rate risk.
- Funding for future needs or projected cash flow gaps can be locked in advance, by using an FHLBank Topeka forward settling advance commitment.

3. The financial institution is in control, not the customer or the competition, providing

... continued on page 5

Excerpt from the NCUA Examiner Guide

The presence of borrowings and nonmember deposits may indicate a credit union is unable to meet its cash needs through member shares. Because these funds may incur higher costs and be more volatile than member shares, the condition generally requires a higher level of oversight. Examiners should assess whether a credit union uses increases in FHLB term borrowings to reduce liquidity risk or interest rate risk.

reliable funding.

- Members determine the advance structure, amount, final maturity and can elect to build in call protection where desired.
- Advances can be renewed or reissued at the members direction.
- Funding availability is not based on competition or other local and national market constraints.
- Funding is not subject to the whims of members' depositors.
- FHLBank collateral valuations and haircuts are historically consistent providing members with confidence in their funding capacity.
- Members have the flexibility to restructure advances to fit changing circumstances or needs.
- FHLBank funding is available to members irrespective of economic cycles and events that occur.
- FHLBank Topeka does not revise collateral haircuts based on the member's financial condition.

4. Advances are attractively priced with a built in return on investment.

- Advance pricing is attractive and generally compares favorably to most other wholesale funding sources.
- Advances compare favorably to local market deposit specials - especially when evaluated on a marginal cost basis.
- The stock acquired by members to support their borrowing provides an above market dividend, effectively reducing the net effective cost of the advance.

Regulator Perception

Despite the need for wholesale funding and the numerous advantages and benefits associated with the use of wholesale funding, there may still be a stigma that remains around the use of borrowings to fund an institution's balance sheet.

For instance, the 2019 CSBS survey of community bankers reported that loans from the Federal Reserve's discount window were used by only 17% of banks, which is the lowest usage of any wholesale funding source. This may reflect a reluctance by banks to use the discount window "out of concern that the act of borrowing might send a negative signal about their financial condition."

Borrowing from FHLBank does not carry the same negative perception as borrowing from the discount window. However, some regulators may still view the use of FHLBank advances as less desirable than deposits as a source of funding. We believe this perception of advances versus deposits is a carry-over from a bygone era of banking. It also may not consider the differences in actual operating practices that exist between individual FHLBanks.

The FDIC Manual of Examination Policies states that "stable deposits are a key funding source for most insured depository institutions. However, institutions are becoming increasingly reliant upon borrowings and other wholesale funding sources to meet their funding needs. Borrowings include debt instruments or loans that banks obtain from other entities such as correspondent lines of credit, federal funds, and FHLB and Federal Reserve Bank advances.

Providers of wholesale funds closely track institutions' financial condition and may cease or curtail funding, increase interest rates, or increase collateral requirements if they determine an institution's financial condition

... continued on page 6

is deteriorating. As a result, some institutions may experience liquidity problems due to a lack of wholesale funding availability when funding needs increase."

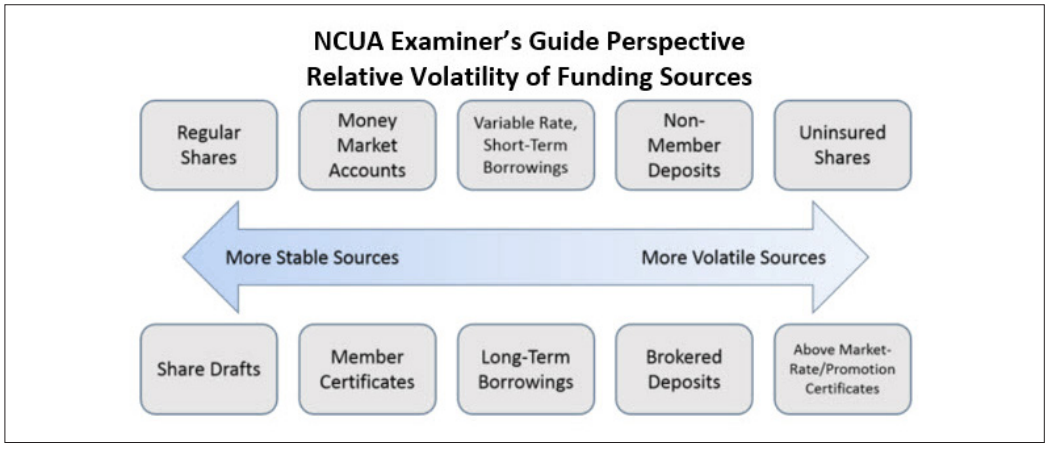
It is true that some FHLBanks' credit and collateral practices do result in higher collateral haircuts when a member's financial condition deteriorates. However, FHLBank Topeka collateral valuations and haircuts are not based on the member's financial condition. A member's capacity is determined primarily by the availability of eligible collateral no matter their financial condition.

We are proud of our history of working with troubled institutions to provide funding and liquidity up to their last day when or if required. FHLBank Topeka will provide funding to members in a stressed financial condition when they have more than 2% capital. If capital is less than 2%, funding will be provided if supported by the member's primary regulator and the FDIC.

The National Credit Union Association (NCUA) Examiner's Guide comments that "frequent, chronic, and unplanned borrowing may be evidence of underlying liquidity problems." The NCUA does acknowledge that borrowing from market counterparties such as corporate credit unions, correspondent banks, FHLBanks and repurchase agreement counterparties is a major component of a credit union's liquidity management.

The NCUA's perspective is that regular shares, share drafts, money market accounts and member certificates are less volatile than short or long-term borrowings as illustrated in this graphic.

The regular use of FHLBank advances may represent a very well-planned and thoughtful funding and liquidity strategy by credit unions. When you consider the advantages of advances versus relying on deposits, ongoing utilization of advances may reduce funding costs, enhance liquidity and reduce risk. Some members of financial institution management, owners and examiners have a distaste for wholesale funding sources specifically brokered certificates of deposits (CDs) and advances from FHLBanks.



... continued on page 7

Regulatory pressure on using this type of funding has been applied in the past by lowering liquidity grades on regulatory exams for those institutions that make use of what examiners deem "excessive" borrowings. This perception regarding use of wholesale funding has caused some institutions to curtail lending and asset growth, so they could reduce the use of wholesale funding to appease regulators and others. These decisions may have had unintended consequences such as increasing funding, liquidity and interest rate risk on their balance sheet.

The rationale that is commonly stated for this position is that wholesale funding is more expensive, more interest-rate sensitive and less reliable from a liquidity perspective than local market deposits. Additionally, regulators have in the past blamed wholesale funding sources, especially brokered CDs, for allowing institutions that have failed in the past to grow rapidly by originating high-risk loans increasing exposure to the Federal Deposit Insurance Corporation.

As a result, institutions may be "paying up" for deposits in an attempt to attract more "core" deposit customers, especially in this competitive era of banking. This action of "paying up" for deposits increases the potential volatility of the deposits themselves and funding risk to the institution.

The prudent use of wholesale funding alternatives, especially FHLBank advances, can reduce interest rate risk, improve earnings and increase institution liquidity from both on-balance sheet and off-balance sheet perspectives. The use of wholesale funding may be a critical part of an institution's overall business and funding strategy. This strategy and the use of wholesale funding should be appropriate to the institution's needs and documented in their business plans and operating policies.

We encourage everyone associated with the financial services industry to acknowledge the changes in the funding needs of the industry that have been brought on by changes in the social-cultural, economic and business environment that exists today. Wholesale funding is a necessary part of the funding mix for every institution because this type of funding can be more cost-effective, stable, reliable and play an important role in management of liquidity and interest rate risk.

By the same token, bankers also need to

... continued on page 8

Birth of The FHLBank System

Responding to the home mortgage foreclosure crisis of the Great Depression era, President Herbert Hoover spearheaded construction of a national system of FHLBanks.

Modeled on the Federal Reserve, the FHLBank System's size and implied government guarantee enables FHLBanks to raise money collectively and cheaply in the capital markets and make wholesale loans – termed advances – to member institutions, primarily for homeownership lending.

Thus for 88 years the FHLBank System has been the primary source of housing finance expertise in the U.S.

understand the risk/reward of these funding alternatives and be prepared to justify the use of non-local funding sources to regulatory agencies and articulate why they believe they are an important balance sheet management tool.

The history of the FHLBank System, why it was created, how it is structured and its ability to extend funding and liquidity to members through periods of stress provides insight as to why FHLBank advances are extremely stable and the most reliable source of funding that is available today to community financial institutions.

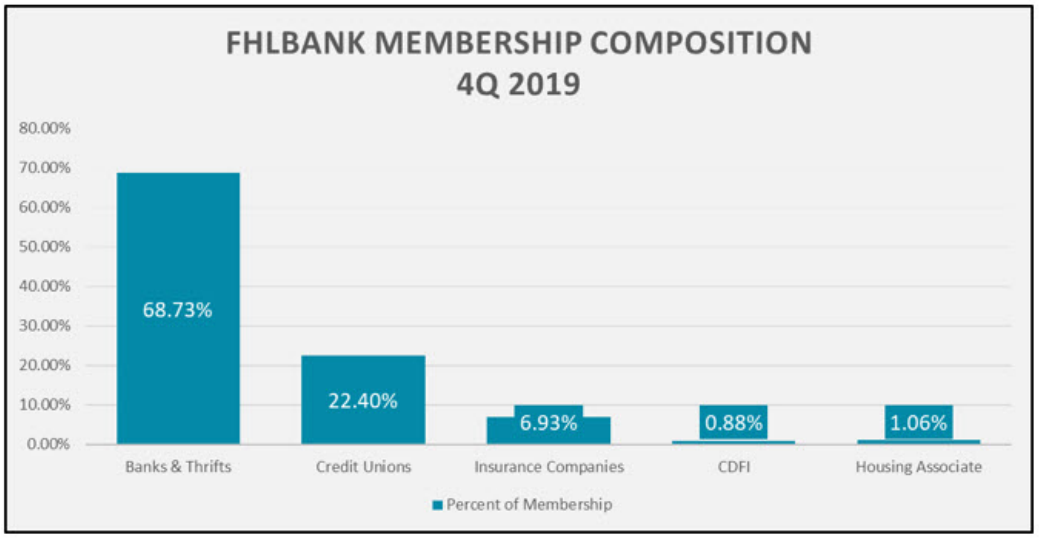
History and Membership of FHLBank

The FHLBank System was established in 1932 as a government-sponsored enterprise (GSE) to promote the development of housing and thereby increase homeownership. It carries out this mission by providing funding to institutions that are primarily engaged in home lending.

There are currently eleven regional FHLBanks with a total of over 7,000 member institutions. Each FHLBank is cooperatively owned by its members. Originally, nearly all FHLBank members were thrift institutions – savings and loans and savings banks – with a smattering of insurance companies.

In 1989, as an answer to the savings and loan crisis of the 1980s, Congress enacted the Federal Institutions Reform, Recovery and Enforcement Act, one provision of which allowed banks to become FHLBank members. As a result, thrift institutions now make up approximately 11% of FHLBank members, with nearly all the rest being banks, credit unions and insurance companies.

At the end of 2019, approximately 69% of FHLBank members were banks and thrifts, 22% were credit unions, 7% were insurance companies, and the remainder were housing associates and community development financial institutions.



... continued on page 9

The 11 FHLBanks are high quality, low risk GSEs organized as cooperatives. Each of the 11 FHLBanks is a separate legal entity with its own management, employees, board of directors and financial statements. FHLBanks are cooperatively owned by their member banks, thrifts, credit unions and insurance companies and are headquartered within the distinct geographic area that each FHLBank has been assigned to serve.

Members must maintain at least 10% of their assets in mortgage-related assets or be designated as "community financial institutions." The stated public purpose of the FHLBank System is to provide their members with financial products and services, most notably advances, to assist and enhance members' financing of housing and community lending.
The primary way FHLBanks provide funding is through loans, which FHLBanks refer to as advances. These advances are collateralized primarily by the borrowing institutions' residential loans and mortgage-backed securities. The terms on FHLBank advances can range from overnight to 30 years. Repayment can be through single payments or amortizing, and their interest rates can be fixed or adjustable.

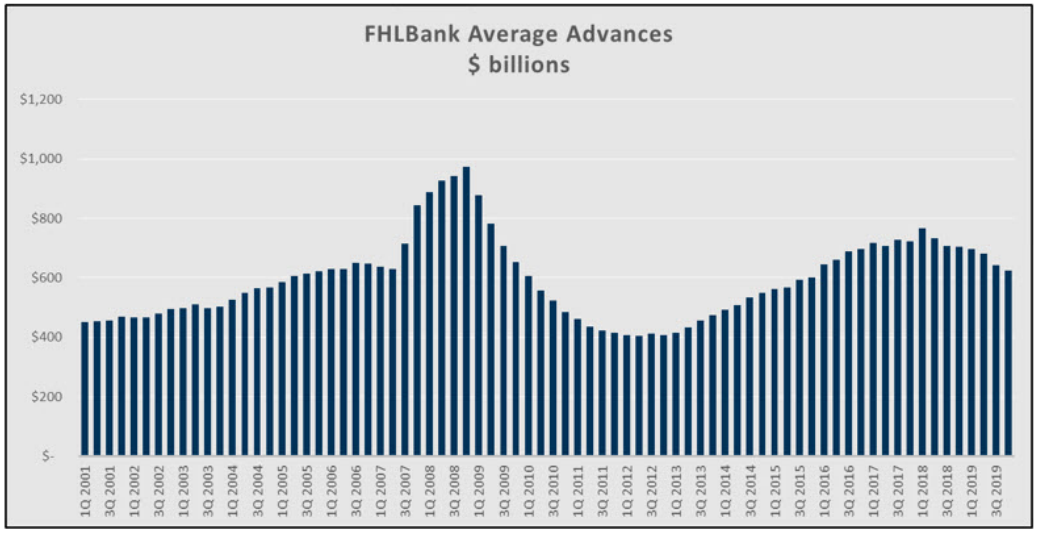
While the original purpose of FHLBank advances was to provide funding for residential real estate, borrowing institutions can use the funding for any purpose. Thrift institutions were mainly residential real estate lenders. So when they were the majority of FHLBank members, there was a close link between advances and overall residential real estate lending. But most banks today have a significant portion of their loan portfolios tied up in commercial real estate and/or commercial and industrial loans.

Take 10
Ten reasons why FHLBanks have strong government support:

1. Created by Congress in 1932 to provide stable funding in support of domestic residential housing
2. Recognized for fulfilling its public mission throughout the credit crisis
3. Authorized by the Federal Home Loan Bank Act, as amended
4. Regulated by the Federal Housing Finance Agency (FHFA)
5. Interest on FHLBank debt securities are exempt from state and local income tax
6. Ten percent of annual earnings are contributed annually toward affordable housing and community development programs
7. Debt issuance is subject to U.S. Treasury approval
8. A fiscal agency agreement exists with Federal Reserve
9. FHLBank securities are eligible collateral for certain public deposits
10. FHLBank securities are an eligible investment by national banks and thrifts

FHLBank lending increased substantially at the onset of the financial crisis in 2007, peaking in the third quarter of 2008. As financial conditions worsened, government programs were put in place that encouraged investors to shift funds back into the banking system. Investors and

... continued on page 10



depositors pursued a flight to safety and moved their money to insured deposit accounts.

Institution liquidity improved with this influx of deposits and FHLBank advances plummeted. Since their low plateau in 2011 and 2012, FHLBank advances have risen back to levels like those in the early 2000s.

Structure and Funding of FHLBanks

FHLBanks are structured as a member-owned cooperative with a member-provided capital base that is designed to expand and contract in response to member borrowing needs.

Members are required to capitalize all advances, typically at 4 to 5% of principal borrowed. FHLBanks then typically repurchase capital stock once the associated advances have been repaid. FHLBanks also have the option to manage the traditionally variable capital base by holding capital up to five years enabling them to preserve capital during periods of economic stress. Retained earnings, another component of capital, has grown over 600% since 2008 and provides another risk mitigate for both investors and members.

FHLBanks fund their operations principally through the sale of debt securities through a wholly owned subsidiary — the Office of Finance. FHLBanks maintain debt issuance programs designed to meet changing investor needs through an investor- and market-driven issuance model. Funding for FHLBanks comes from the issuance of bonds known as consolidated obligations.

The term consolidated obligations refers to the fact that when an individual FHLBank issues debt, that debt is a "joint and several" obligation of the entire FHLBank System. In other words, consolidated obligations, irrespective of which FHLBank issues them, are the collective liability of all the FHLBanks.

This feature of the debt reduces the risk associated with the default of any individual FHLBank and contributes to the perception that the liabilities of FHLBanks have tacit government

... continued on page 11

backing. Certain charter provisions combined with past government actions have also contributed to the perception in financial markets that GSE obligations are implicitly guaranteed by the federal government. This perception in turn allows FHLBanks to finance their activities by issuing debt on more favorable terms than any triple-A rated private corporation.

The primary type of FHLBank funding is issuance of short-term notes and medium to long-term bonds. The FHLBank System uses multiple debt programs and issuance methods to raise funding. Discount notes (DNs) are issued through both an active window program that provides maturity and settlement flexibility. DNs are also issued at auction with twice weekly offerings of notes with maturities up to six months.
Medium-term notes (MTNs) are issued through reverse inquiry for callable, bullets, floaters and structured notes and at auction for bullet and American callable securities. Global bonds are also issued through syndication by the FHLBank System.

Strength and Stability of the FHLBanks
The federal government regulates the FHLBank System for "safety and soundness" through the Federal Housing Finance Agency (FHFA). Like other financial regulators, the FHFA is authorized to set capital standards, conduct examinations and take certain enforcement actions if unsafe or unsound practices are identified.

FHLBanks are required to maintain a 4% minimum capital ratio. Total capital includes five-year Class B activity stock plus retained earnings and amounts paid for Class A membership stock plus any general allowance and other sources approved by their regulator. FHLBanks are also required to maintain a 5% leverage capital ratio and meet minimum requirements for risk-based capital.
FHLBanks may voluntarily suspend or eliminate dividends and/or early excess stock repurchases, as well as, increase membership and/or activity-based stock requirements to create additional capital.

FHLBanks are reliable liquidity providers through a lending model that has shielded the FHLBanks from sustaining any credit losses on advances for over 80 years. FHLBanks manage credit risk by fully collateralizing all advances. Credit limits are established for each member, and borrowing capacity is subject to ongoing review of a member's overall creditworthiness and collateral management practices.

Advances are secured by either a blanket lien, listing or specific pledge assets or physical delivery of collateral. UCC financing statements are filed on all members pledging assets. Lending capacity is regularly adjusted based on eligible pledged collateral and applicable haircuts.
Whole loan collateral, generally secured by real estate, must be performing. Securities collateral generally requires all securities to be rated single-A or higher and most must be delivered to the FHLBank or an approved securities custodian. Individual FHLBanks establish their own credit risk management guidelines and operating practices applicable to their individual district. Therefore, differences in credit and collateral practices may exist between the 11 FHLBanks.

As of Dec. 31, 2019, total advances outstand-

... continued on page 12

The prudent use of wholesale funding alternatives, especially FHLBank advances, can reduce interest rate risk, improve earnings and increase institution liquidity from both on-balance sheet and off-balance sheet perspectives.

ing to members were approximately $639 billion and were collateralized with approximately $2.7 trillion in member assets. This was approximately a 3.4 times collateralization ratio.

FHLBanks' assets and liabilities have some extremely important characteristics. As a lender, FHLBanks have priority over the claims of virtually all creditors; this includes not only a borrowing bank's depositors, but the FDIC and the Federal Reserve. This statutory lien, referred to by some as a "super lien" was originally established by the Competitive Equality Banking Act of 1987 (CEBA). It was enacted because of unique circumstances during the thrift crisis in the 1980s and the ambiguity in perfecting security interests with multiple creditors without possession.

The goal of CEBA was to improve the standing of FHLBanks as secured creditors by giving them priority in receivership over lien creditors such as the FDIC. This in turn would allow FHLBanks to lend more securely and ensure an adequate flow of liquidity to member institutions and through those institutions to businesses, homeowners and other consumers. FHLBanks routinely use derivatives and embedded options to reduce risk inherent in normal lending, investing and funding activities. Derivatives may be used related to advances to adjust repricing and/or options characteristics to more closely match the characteristics of FHLBanks' funding liabilities. In general, fixed-rate or option-embedded advances are executed simultaneously with an interest rate swap containing offsetting terms.

For mortgage loans and investments, FHLBanks manage interest rate risk through a combination of callable and non-callable debt and derivatives to achieve cash flow patterns and liability durations like the mortgages held in portfolio. A combination of swaps and options, including futures, may be used as a portfolio of derivatives linked to a portfolio of mortgages.

FHLBanks manage counterparty credit risk through credit analysis, collateral requirements and adherence to policy and regulations. Collateral agreements are required on all derivatives with collateral delivery thresholds typically established.

FHLBanks are required to maintain acceptable levels of contingent liquidity. They are required to hold a positive cash flow, including short-term investments, assuming no access to capital markets and assuming renewal of all maturing advances, for a period of up to 30 days. FHLBanks generally maintain additional liquidity beyond regulatory guidelines to meet obligations in the event of longer term disruptions in the debt markets. The average liquidity portfolio of all FHLBanks represented approximately 16% of total assets for 2019.

FHLBanks invest primarily in highly rated securities. Approximately 98% of investment securities are rated double-A or higher. FHLBank policies generally only permit purchase of triple-A rated Mortgage Backed Securities (MBS). The total average investment portfolio of all FHLBanks was approximately 31% of total assets for 2019.

The mortgage purchase programs provided to members by FHLBanks were created as alternatives to traditional GSE guarantee programs. FHLBanks held mortgage loans in portfolio at Dec. 31, 2019, of approximately

... *continued on page 13*

6.6% of total assets. Members retain a portion of the credit risk, and receive ongoing fee income for doing so, while transferring the interest rate and funding risk to the FHLBanks.

Members sell 15- to 30-year one-to-four family residential conventional conforming and government guaranteed fixed rate mortgage loans into the mortgage purchase programs.

These loans are credit enhanced to a triple-B or double-A equivalent. In addition, other programs provide a conduit to members, leveraging their FHLBank membership to transfer credit risk and gain access to liquidity for a variety of other loan types.

FHLBank debt has consistently met investor's needs for safety and liquidity. FHLBank system debt, while not explicitly government

Eleven Things You Should Know About Your FHLBank

1 The FHLBank System provides funding to institutions that are primarily engaged in home lending. Members must have at least 10% of their assets in mortgage-related assets.

2 There are eleven FHLBanks. Each is cooperatively owned by its members with its own management and board.

3 FHLBanks provide liquidity and funding through advances, collateralized by residential loans and mortgage backed securities. Members can use the funding for any purpose.

4 FHLBanks rely upon member-provided capital that expands & contracts in response to borrowing needs. Members must capitalize all advances at 4-5% of principal borrowed.

5 FHLBanks fund their operations through the sale of debt securities, referred to as consolidated obligations. That debt is a "joint and several" obligation of the entire System.

6 FHLBanks are required to maintain a 4% min. capital ratio and maintain a 5% leverage capital ratio along with other risk-based capital requirements.

7 The FHLBank lending model has shielded FHLBanks from suffering any credit losses on advances for over 80 years.

8 Advances are secured by blanket lien, listing or specific pledge assets or physical delivery of collateral. UCC financing statements are filed on all members pledging assets. FHLBanks have priority over the claims of virtually all creditors , including the FDIC, through a "super lien."

9 FHLBanks are required to maintain acceptable levels of contingent liquidity including sufficient cash flow and on-balance sheet liquidity to operations for a period of up to 30 days with no access to capital markets.

10 The FHLBank mortgage purchase program is provided as an alternative to traditional GSE guarantee programs. Members sell mortgage loans into the program that are credit enhanced.

11 In the aftermath of the 2007-2008 crises FHLBank was referred to as "the beating heart of the funding network that underpins the U.S. financial system."

... continued on page 14

guaranteed, is close in quality to U.S. Treasuries. FHLBank debt carries a "Aaa" rating from Moody's with a stable outlook and "AA+" and stable outlook from Standard & Poor's (S&P).

Performance Through the Crises

In July 2007, the credit rating agencies (S&P, Moody's and Fitch) responded to the rapid deterioration in the performance of recently originated subprime mortgages by taking a historical downgrade action on the entire sector of associated MBS.

The downgrade had global implications. Many of the very largest U.S. and European institutions were directly exposed to the subprime mortgage market. The ratings action also triggered a loss of confidence by investors in a broad array of structured finance products. Related selling and hedging activity put additional downward pressure on the prices of a broad range of structured finance securities.

The recognition of large accounting losses from marks to market resulted in a material deterioration in capital positions for exposed institutions. Uncertainty about the ultimate level of exposure by individual institutions prompted money market investors to reduce their exposure thereby leading to a sharp increase in cost and a significant reduction in the availability of term funding. This stress in term funding markets led to the inability of institutions to access term credit and amplified the correction in the housing and mortgage markets.

When faced with liquidity shocks, a government-sponsored liquidity provider (e.g. the central bank) should be available to act as a lender of last resort. However, at the outset of the liquidity crisis, the Federal Reserve saw little demand for primary credit through its discount window, even after lowering the discount rate from 100 basis points to 50 basis points above the Federal Funds target.

The lack of Discount Window lending during the crisis stemmed from the stigma of such borrowing. Institutions feared it would send an adverse signal about the financial viability of the borrower. The FHLBank System then stepped in as the lender of "first resort."

FHLBank advances grew rapidly during the 1990s and early 2000s following the introduction of commercial banks as FHLBank System members. However, from the end of 2005 through the first half of 2007, the level of outstanding FHLBank advances oscillated within a narrow range of $620 to $640 billion.

Outstanding advances ticked up slightly in July 2007, but then exploded during August and September 2007 – moving from $659 to $824 billion (a 25% increase). FHLBank advances stood at $875 billion at the end of 2007 – an amount equivalent to 6.2% of U.S. gross domestic product.

FHLBank advances were used, in part, to mitigate a funding shock as well as provide general balance sheet funding. In addition, large institutions were using FHLBank advances to fund mortgage loans in the securitization pipeline that were unexpectedly retained on balance sheet due to the breakdown in the secondary markets. Advances continued to grow into 2008, albeit at a slower rate, to $914 billion at June 30, 2008.

... continued on page 15

During the liquidity crisis, money market investors ran away from debit issued or sponsored by depository institutions and into instruments guaranteed explicitly or implicitly by the U.S. Treasury. During this time, investors sought the protection of federally guaranteed obligations and FHLBank funding costs declined relative to other benchmarks like LIBOR and AA-rated asset-backed commercial paper. By issuing implicitly guaranteed debt, the FHLBank System was able to re-intermediate term funding to member depository institutions through advances.

It became clear in December 2007 and again in March 2008 that the response of the FHLBank System alone was not enough to ease all the stress in term funding markets. Institutions ineligible for FHLBank membership, such as foreign banks and primary dealers, continued to have significant demands for term funding and were not borrowing from the Federal Reserve.

While operating using only the discount window and open market operations for most of its existence, necessity became the mother of invention, and the Federal Reserve then introduced seven new liquidity facilities as of Aug. 31, 2008.

During the crisis, the liquidity facilities of the Federal Reserve and the FHLBank System complemented and competed with each other. The FHLBank System took the early lead, and it was not until March 2008 that the Federal Reserve became the largest government-sponsored liquidity facility in terms of crisis-related lending to the financial system.

FHLBank Advance Growth Post-Crisis

FHLBanks have continued to grow significantly over the past few years with total assets surpassing pre-crises levels.

This growth has coincided with two changes in government policies: The implementation of the Liquidity Coverage Ratio (LCR) in January 2015 for the largest U.S. banking organizations and the reform of U.S. money market funds in 2016.

The preferential treatment in the LCR of medium-term borrowing from FHLBanks has given large institutions an incentive to borrow more from FHLBanks and less from private short-term money markets. FHLBank advances can be used to accommodate bank demand for high quality liquid assets (HQLA) to meet the LCR regulatory liquidity requirements.

Money market reforms also caused $1.2 trillion to shift from prime money funds to government money funds. These reforms depressed the market for commercial paper, a common source of financing for medium-sized and large banks.

One commentator on the money market reforms and Basel liquidity rules (LCR) in the aftermath of the 2007-2008 financial crises noted the importance of the FHLBank System:

"FHLBanks are the beating heart of the funding network that underpins the U.S. financial system."

... continued on page 16

Summary
Community financial institutions are being challenged to gather traditional "core" deposit funding and, most likely, will continue to face challenges in the future. FHLBank advances, based on the characteristics of advances and FHLBank performance over time in varied economic cycles, have proven to be the most reliable, stable and efficient source of funding available for institutions today.

Advances should be a core component of an institution's overall funding and liquidity plan — for both day-to-day operating needs and for contingent liquidity purposes. FHLBanks have long been considered safe intermediaries because their advances to members are over-collateralized. The "super lien" of their advances provides FHLBanks preferential treatment when institutions fail.

In addition, prudential regulations — such as the risk-based capital requirements and stress tests as well as the high liquidity requirements that FHLBanks maintain — have made FHLBanks a resilient funder of first choice.

Contact FHLBank Topeka today to discuss your advance solutions

☎ 800.809.2733 ✉ Lending@fhlbtopeka.com fhlbtopeka.com/intelligence

- The Rise in Loan-to-Deposit Ratios: Is the 80 the New 60? Banking Trends – Federal Reserve Bank of Philadelphia Research Department, by James Disalvo and Ryan Johnston
- An oversight on oversight: The Federal Home Loan Bank, Mark Cassell and Susan Hoffmann, September 2010
- Unintended Consequences of Post-Crises Liquidity Regulation, Financial Stability Conference 2019, Federal Reserve Bank of Cleveland and OFR, Suresh Sundaresan and Kairong Xiao
- The Federal Home Loan Banks: Two Lessons in Regulatory Arbitrage, Money and Banking, October 2019
- The Federal Home Bank System: The Lender of Next-to-Last Resort? Federal Reserve Bank of New York Staff Reports, Adam B. Ashcraft, Morten L. Bech, W. Scott Frame, November 2008
- Don't Trash a Trusty Hamer, Banking Exchange, February 2010
- The Increased Role of the Federal Home Loan Bank System in Funding Markets, FEDS Notes, Stefan Gissler and Borgahn Narajabad, October 2017
- The Real Story Behind the Surge in FHLB Advances: Macroprudential Policy Changed How Banks Borrow, Milken Institute, Jonathon Adams-Kane and Jakob Wilhelmus, September 2017
- "Super Lien" Doesn't Mean Super Risk: Money Market Intermediation, Security Interests, Federal Home Loan Bank Lien Protections and Systemic Risk, Jonathon A. Scott and Reginald T. O'Shields, 23 N.C. Banking, March 2019
- FHLBanks Office of Finance, Investor Presentation, January 2020
- 2019 CSBS National Survey, Conference of State Bank Supervisors, November 2019
- NCUA Examiner's Guide – Online Version, National Credit Union Association
- RMS Manual of Examination Policies, Federal Deposit Insurance Corporation, October 2019
- Community Bank Supervision, Comptroller's Handbook, Office of the Comptroller of the Currency, June 2018