Slowing Agricultural Markets Highlight the Importance of Sound Risk Management Principles

by Tara L. Humston, Senior Vice President, Division of Supervision and Risk Management, Federal Reserve Bank of Kansas City*

After serving in various leadership positions throughout the supervision function at the Federal Reserve Bank of Kansas City, I recently succeeded Senior Vice President Kevin Moore, who retired from the Federal Reserve Bank of Kansas City after 37 years of service. Throughout my career, Kevin often mentored me and shared important lessons learned from his time starting as a bank examiner during the height of the farm crisis in the 1980s, which resulted in more than 200 agricultural banks failing from 1984 to 1987.¹ He is well known to many as a supervisor who had seen it all and viewed experience and judgment as critical success factors in banking. He also shared stories of how growing up in the rural community of Harlan, IA, with a population of 4,900, gave him the opportunity to see firsthand just how critical agricultural banks are in providing local farmers and other commodity producers with access to credit. Today, agricultural banks remain just as vital in providing credit to these farm and ranch communities, as illustrated in Figure 1, which shows the large concentration of agricultural banks² in the Midwest and other more rural parts of the U.S. In aggregate, agricultural banks actually hold almost half of all agricultural loans at U.S. commercial banks (Figure 2).

My purpose in referencing Kevin’s experiences and counsel is not that I think a turn to a 1980s-style crisis is imminent. Banking conditions are good today compared with those of the 1980s, with higher capital levels, sound earnings performance, and overall satisfactory asset quality indicators.

¹ Supervisors have defined an agricultural bank as a bank with combined agricultural production and farmland loans accounting for 25 percent or more of total loans. About one-third of those agricultural banks are considered “highly concentrated,” meaning total agricultural lending is more than 300 percent of their total risk-based capital.

* The author thanks Assistant Vice President Nick Hatz of the Federal Reserve Bank of Kansas City’s Omaha Branch for his contributions to this article.

¹ See www.fdic.gov/bank/individual/failed/banklist.html.

continued on page 6
What is LIBOR?

LIBOR is a global financial benchmark and reference rate that is meant to represent the average rate that large banks pay for unsecured, short-term borrowing. It is calculated using an average of rates submitted by a panel of banks (referred to as a “panel bank”) and is published daily for five currencies — the U.S. dollar (USD), the pound sterling, the euro, the Japanese yen, and the Swiss franc — across seven maturities. LIBOR often serves as a reference rate on which the interest rate for other types of financial transactions is based. Today, LIBOR is referenced in a wide range of financial contracts, including mortgages, business loans, floating rate notes (FRNs), and derivatives.

LIBOR is expected to go away sometime after 2021. A global effort is now under way to transition market participants to alternative reference rates.

The expected discontinuation of LIBOR is important for community banks because they may have LIBOR exposures on the asset or liability side of the balance sheet at the bank and/or bank holding company. Many financial contracts typically underwritten or purchased by community banks may reference LIBOR, including retail mortgages, commercial real estate (CRE) loans, or hedging instruments such as interest rate swaps. On the liability side, some debt instruments, such as trust preferred securities (TruPS), may be priced off LIBOR. Community banks with exposure to LIBOR may have increased operational, legal, and reputational risks. Planning for LIBOR’s cessation is prudent risk management.

This article provides background information on the transition away from LIBOR, discusses the planning efforts to move to alternative reference rates in the United States, provides some detail on one of those alternative rates, and recommends additional sources of information on these topics.
Why might LIBOR go away?
Andrew Bailey of the UK’s Financial Conduct Authority (FCA),\(^2\) which regulates LIBOR, gave a speech in July 2017 stating that the reference rate will continue through the end of 2021, but after that date, its continued publication cannot be guaranteed.\(^3\) This watershed speech highlighted LIBOR’s uncertain future and accelerated a global effort to transition toward alternative reference rates.

During the financial crisis, regulators discovered that certain panel banks would purposefully misstate the rate they submitted to generate profits on trading positions tied to LIBOR and the marginal fluctuations thereof and to present a stronger credit profile during this period of economic stress.

Since the financial crisis, there has been a significant decline in the market activity underlying LIBOR (i.e., bank wholesale unsecured funding) due to a multitude of factors.\(^4\) Because of this limited underlying activity, panel banks often submit quotes based on expert judgment — or their best guess of what the rate should be — rather than on actual transactions. On average, Federal Reserve staff members estimate, there are six or seven transactions per day underpinning one- and three-month LIBOR across all the panel banks.\(^5\) The longer maturities have even fewer transactions.

What is the current estimated exposure to USD LIBOR?
Based on information from the “Second Report of the Alternative Reference Rates Committee (ARRC),”\(^6\) the estimate of transactions that currently reference USD LIBOR rates is approximately $200 trillion worth of derivatives and cash products.\(^6\) The vast majority of this exposure — $190 trillion — is found in derivative products, including interest rate swaps, options, and futures. Most derivative products are not typically seen on community bank balance sheets, although community banks may use derivatives, such as interest rate swaps, to hedge their LIBOR interest rate risk exposure. The remaining USD LIBOR exposure — approximately $10 trillion — can be found in various types of cash products. The cash products with the largest USD LIBOR exposure are FRNs at $1.8 trillion, syndicated loans at $1.5 trillion, retail mortgages at $1.2 trillion, and CRE/commercial mortgages at $1.1 trillion. Other products that reference LIBOR include other consumer loans, nonsyndicated business loans, and securitized products such as asset-backed or mortgage-backed securities and collateralized loan obligations. If the contracts underlying these transactions mature after 2021, the LIBOR rate will need to be replaced by an alternative reference rate when LIBOR is no longer published after 2021.

What are some of the risks for financial institutions associated with LIBOR going away?
Community banks may have exposure to the LIBOR rate if their contracts, or the legal document underlying the financial transaction, contain a reference to LIBOR for determining the interest rate. Many existing financial contracts do not contain appropriate “fallback” language to specify which interest rate should be used in the event that LIBOR is no longer published. Failure to determine a new rate acceptable to the parties of each contract may result in confusion about what to do under the contract (e.g., how to calculate interest payments). A lack of appropriate fallback language could also result in legal risk, as neither party to the contract may be willing to accept a reduced margin because of a change in the reference rate.

Uncertainty about the rates on assets and liabilities could result in increased interest rate risk exposure. In addition, LIBOR may be embedded in systems, formulas, and financial models; therefore, its discontinuance could also pose an operational risk for firms. Finally, effective and consistent communication would be necessary to inform key stakeholders and clients about the implications of moving away from LIBOR.

---

\(^2\) The FCA regulates LIBOR’s administrator, ICE Benchmark Administration (IBA), as well as the panel banks that submit LIBOR quotes to IBA.


This article discusses how banks can identify and manage the credit risks associated with lending to a continuing care retirement community (CCRC). Historically, this type of lending was predominantly conducted at large banks. However, a growing number of regional and community banks have recently become involved in providing financing for senior care facilities as the number of facilities increases to meet the demands of an aging U.S. population. In addition, bankers are becoming more knowledgeable about providing financial services to investors of CCRCs. Credit extensions to this sector can be profitable and beneficial if the associated risks are identified and managed.

The Aging of America
According to 2010 census data, 10,000 people in the United States reach age 65 on a daily basis. The data also state that there are 40 million people who are 65 years of age or older. This number is projected to more than double to about 83.7 million by 2050 (see the figure on page 15). Additionally, the data indicate that seniors aged 85 and older totaled 6 million in 2010; this number is projected to increase to 19 million by 2050.

Factors contributing to longer life expectancy within the overall population include changes in lifestyles such as better diets; cessation of smoking, alcohol, and drug use; and more adherence to wellness and fitness programs. In addition, advances in medicine, including medical technology and medical devices, contribute to prolonged life expectancy and a better quality of life, particularly for the elderly. As the population lives longer, demand in this cohort for specialized housing and long-term care increases. The U.S. Census Bureau publication, 65+ in the United States: 2010, shows that most seniors live in a regular residence. However, the percentage of seniors living in long-term care facilities or community housing with services increases with age. For example, only 2.6 percent of Medicare enrollees between the ages of 65 and 74 in 2010 lived in a long-term care facility or community housing with services, but the percentage was 22.2 percent for those over the age of 85. As a result, the number of CCRCs in the United States has increased to meet those needs.

The Rise of Continuing Care Retirement Communities
CCRCs date back to the early 1900s, when various faith-based organizations opened retirement communities to care for their elderly members. CCRCs vary in size and configuration, with a typical community consisting of a campus that provides residents a continuum of housing and services choices in one setting. The primary mission of most CCRCs is to provide an environment that enriches the lives and promotes the dignity and self-esteem of their residents. Services provided at a CCRC include necessities of daily living, such as dining, grooming, and social activities, as well as nursing care. Most CCRCs include apartments for independent living, space for assisted living, and beds for skilled nursing care. As the medical needs of seniors increase, CCRCs are adding units for those requiring specialty care for chronic conditions as well as for dementia and other

---


4 As defined in the report, “long-term care facilities” are certified by Medicare or Medicaid, while “community housing with services” are residences that include a retirement community, a continuing care retirement facility, an assisted living facility, or a similar situation. See Loraine A. West, Samantha Cole, Daniel Goodkind, and Wan He, 65+ in the United States: 2010: Current Population Reports, June 2014; available at www.census.gov/content/dam/Census/library/publications/2014/demo/p23-212.pdf.

memory-related illnesses. CCRC operations are complex because they provide housing choices, health care, dietary options, hospitality, and recreational activities. In addition, staff must have a wide variety of skills to cover the range of services offered to residents.

The industry experienced rapid expansion during the 1970s and the mid-1980s and attracted some for-profit investors. However, nonprofit organizations continue to dominate this field. According to the National Investment Center, there were 14,000 senior housing and nursing care properties across the country as of the end of 2016.⁶

A study conducted by gerontology scholar Linda Hollinger-Smith and colleagues on how adult children of current CCRC residents view CCRCs in light of their parents’ experiences “shows that 93 percent of respondents would recommend their family members’ CCRC to others and were likely to consider a CCRC lifestyle for themselves.”⁷

---

⁶ The National Investment Center is a leading provider of timely and comprehensive performance data on the senior housing and care industry.


---

Types of Loans Used to Finance CCRCs

Because loans secured by a CCRC are in the commercial real estate space, these loans have the same credit requirements as loans secured by other providers of housing services, such as developers and operators of multifamily homes, condominiums, townhomes, cottages, and carriage homes. However, loans to CCRCs are different from traditional housing financing options in several important ways. First, Medicare and Medicaid regulations do not permit assignment of receivables to a lender in the event of a default or bankruptcy. Second, financing a CCRC is complex because actuarial principles for the length of the residents’ occupancy are used for planning and pricing a CCRC’s business model. Third, a disruption in the cash flow assumptions of a CCRC is possible if the CCRC is required to reimburse an individual’s entrance fees (i.e., fees to secure housing in the facility) when the individual leaves the facility.

Credit extensions to a CCRC can include one type of loan or a combination: land acquisition and development loans, construction loans, acquisition loans for an existing facility, refinance loans of existing debt, improvement loans to an existing community, equipment purchase loans, revolving debt loans, and permanent working capital loans. Given the wide choice of loan products, a lender needs to carefully select the loan product that it has the expertise, credit appetite, and capital requirements to support. It is important for underwriters to note that because Medicare/Medicaid receivables cannot be assigned to a lender in a default or bankruptcy, this collateral may not be a secondary source of repayment for a loan.

continued on page 14
Slowing Agricultural Markets Highlight the Importance of Sound Risk Management Principles

continued from page 1

Risk management practices also have evolved and improved. Nevertheless, we are mindful to not forget the lessons of the past in our oversight of a large portfolio of community and agricultural banks in the Tenth District, especially those institutions that report a higher level of credit concentration risk. Against this backdrop, this article recaps the lessons learned from the 1980s relative to today’s challenging agricultural outlook; highlights the importance of sound underwriting, ongoing monitoring, and credit risk ratings; and outlines several risk management practices, many of which you will find captured in Supervision and Regulation letter 11-14, “Supervisory Expectations for Risk Management of Agricultural Credit Risk.”

**Figure 1: Agricultural Banks Play a Critical Role**

![Map of Agricultural Banks and Highly Concentrated Agricultural Banks](source: National Information Center and Reports of Condition and Income (Call Reports))

Lessons Learned from the 1980s

One key lesson learned from the 1980s is that proactive risk management practices could lessen the damage that small communities can experience as the result of a downturn. Significant risk management mistakes made in the 1980s resulted in severe financial stress at agricultural banks. For example, problem loans surfaced quickly at banks that made credit decisions based on collateral value rather than cash flow analysis. Moreover, inadequate board of directors oversight, including reactive capital and liquidity strategies, was common at banks that eventually failed. These risk management issues were exacerbated at agricultural banks with larger credit concentrations.
The table provides current key financial ratios for all U.S. banks under $10 billion, agricultural banks, and highly concentrated agricultural banks, as well as comparative ratios from December 1982 for those agricultural banks that eventually failed from 1984 to 1987. Keep in mind the table does not reflect the quality of risk management functions and is solely focused on the financial data. The agricultural banks that failed reported lower capital levels that were not commensurate with the increasing layering of risks, including large credit concentrations, rapid loan growth, rising nonperforming loans, and a low reserve level. These agricultural banks had very little financial cushion to handle a market downturn or borrowers experiencing financial stress.

**What’s Different Today?**
While the current prolonged and gradual declines in farm net income since 2013 have led to greater borrowing needs, and highly concentrated agricultural banks are reporting increasing loan-to-deposit ratios and smaller liquid asset cushions (Figure 3), it is reassuring to recognize that agricultural banks today report stronger aggregate financial metrics and ratios. Highly concentrated agricultural banks today report in aggregate approximately 37 percent more capital and 56 percent more in reserves than those agricultural banks that eventually failed from 1984 to 1987. Moreover, agricultural banks report an increasing and positive trend in capital levels and a steady increase in reserve levels since 2011 (Figure 4), despite the downturn in agricultural conditions. In addition, it has been noted during examinations that underwriting standards have remained conservative, with

<table>
<thead>
<tr>
<th>Source: Call Report as of December 31, 2018; failed agricultural banks as of December 31, 1982</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table: Concentration Levels Remain Elevated, but Financial Metrics Are Stronger Than in the 1980s</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>All U.S. Banks &lt;$10 Billion</th>
<th>Agricultural Banks</th>
<th>Highly Concentrated Agricultural Banks</th>
<th>Failed Agricultural Banks (1984–1987)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ag Loans to Equity Capital</td>
<td>50%</td>
<td>268%</td>
<td>392%</td>
<td>396%</td>
</tr>
<tr>
<td>Return on Average Assets</td>
<td>1.3%</td>
<td>1.3%</td>
<td>1.3%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Equity Capital to Assets</td>
<td>11.5%</td>
<td>11.3%</td>
<td>10.8%</td>
<td>7.9%</td>
</tr>
<tr>
<td>Three-Year Ag Loan Growth</td>
<td>5.8%</td>
<td>6.9%</td>
<td>16.3%</td>
<td>25.1%</td>
</tr>
<tr>
<td>Loans to Deposits</td>
<td>85%</td>
<td>82%</td>
<td>91%</td>
<td>70%</td>
</tr>
<tr>
<td>Noncurrent Loans to Total Loans</td>
<td>0.8%</td>
<td>1.1%</td>
<td>1.4%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Allowance for Loan and Lease Losses to Total Loans</td>
<td>1.2%</td>
<td>1.4%</td>
<td>1.4%</td>
<td>0.9%</td>
</tr>
</tbody>
</table>

* Although over 200 agricultural banks failed from 1984 to 1987, over 3,200 agricultural banks survived the height of the 1980s crisis, as their financial metrics demonstrated more conservative strategies combined with stronger underwriting standards and board oversight.

Source: Call Report as of December 31, 2018; failed agricultural banks as of December 31, 1982
agricultural bankers often requiring larger down payments or additional collateral requirements and performing extensive analyses to determine whether a borrower could generate sufficient cash flow to meet loan payments.

Furthermore, agricultural lending continues to rely on relationship banking, and most agricultural lenders have in-depth knowledge of and experience in their local and regional markets to make well-informed credit decisions. Learning from their experiences in the 1980s, agricultural lenders now perform extensive and global cash flow analyses to determine whether borrowers can generate enough cash flow to make loan payments, require protective loan covenants, and use more sophisticated automated software packages that can provide for a sensitivity analysis or stress test on an individual loan basis. Furthermore, it has been noted that

---

**Figure 3: Liquidity Risk at Highly Concentrated Agricultural Banks Has Increased**

Note: Liquid asset ratio is defined as: interest bearing bank balances + federal funds sold + securities purchased under agreement to resell + total investment securities – pledged securities, as a percentage of total assets.

Source: Reports of Condition and Income

---

**Figure 4: Capital Trends Remain Positive and Reserve Levels Have Slightly Increased**

Source: Reports of Condition and Income
agricultural lenders are reluctant to permit farmers to use the rising value of their farmland to increase their borrowing power. As land values skyrocketed in the earlier part of this decade, agricultural lenders required larger down payments on new farm real estate loans, set caps on the amount they were willing to lend per acre, and used more historical values for underwriting. Many agricultural lenders now use credit enhancements such as loan guarantee programs through the U.S. Department of Agriculture’s Farm Service Agency to appropriately structure weaker borrowers and reduce overall credit risk. Building upon these positive developments in underwriting at agricultural banks, agricultural lenders should continue to adhere to prudent underwriting and monitoring of creditworthy borrowers, particularly in light of declines in overall agricultural market conditions (Figure 5).

**Basic Credit Principles Remain Relevant**

In properly underwriting new or existing credit, it is important that credit memorandums clearly articulate basic borrower and loan information, such as identification of the borrower, the purpose of the loan, analysis of carryover debt, terms of repayment, and alternative sources of repayment. The basic credit principle of “cash is king” remains essential. A borrower’s working capital provides a greater cushion for unexpected events and costs, and also places a borrower in a position to launch a new initiative even in challenging times. Proper loan structure is also a key principle and can help agricultural lenders and borrowers maneuver through various obstacles. Furthermore, the growing credit needs for many agricultural borrowers underscore the importance of requiring borrowers to provide timely and accurate financial information, also a key underwriting principle. This not only helps lenders to monitor the loan but also helps borrowers to manage their businesses. The collateral inspection process has also proven to be an important tool that adds integrity to financial reporting, particularly for a riskier lending area such as cattle feeding. An agricultural bank’s consistent and well-documented inspection process helps both the agricultural lender and the borrower assess whether the credit is being used efficiently.

In addition to sound underwriting and ongoing monitoring of borrowers’ financial reports, agricultural lenders should be familiar with borrowers’ annual marketing plans. Marketing plans are created to organize, direct, and handle upcoming agricultural projects, including the ability to identify the best potential markets and find the most effective and efficient means of bringing products to market. In an environment of lower and more volatile commodity prices, agricultural lenders need to understand the importance of a borrower’s ability to execute a strong marketing plan. Many financially stressed borrowers have a poor marketing plan or fail to execute a sound marketing plan. Many agricultural lenders have indicated that the strongest borrowers review their marketing plans weekly or daily to know when and how to capture sales to cover their breakeven expenses plus a profit.

**Accurate Credit Risk Ratings Are Essential**

Well-managed credit risk rating systems promote informed decision-making, measure credit risk, and differentiate...
individual credits by the risk they pose. Agricultural banks should realistically and accurately rate the risk of loans and document any workout plans. It has been noted that many agricultural borrowers have restructured debt to adjust to tighter margins and provide working capital. Although the continued strength of farm real estate values has likely shielded many agricultural banks from a higher level of adversely classified loans, merely having land equity does not preclude adverse classification. The key underwriting principle is that the payback period selected should depend upon the useful economic life of the available collateral and on realistic projections of the operation’s payment capacity. With a restructured note, a risk rating downgrade may be appropriate; however, a borrower performing according to the agreed-upon plan may also warrant an upgrade or pass designation. Overall, there are no hard and fast rules examiners use to adversely classify agricultural loans, including those borrowers with carryover debt. They carefully examine all relevant facts to ensure an accurate risk rating.

**Prudent Risk Management Practices Are Expected Regardless of Market Conditions**

Despite the severe problems many agricultural banks experienced in the 1980s, one of the many lessons learned is that most agricultural banks did not fail. In fact, studies\(^3\) of bank failures in the 1980s indicate agricultural banks that pursued more conservative lending, liquidity, and capital strategies and applied proactive risk management practices eventually recovered and survived. Although adopting these practices does not necessarily provide immunity to similar downturns, agricultural banks that incorporate prudent risk management principles and sound underwriting are better positioned to weather business cycle fluctuations or unforeseen credit problems. The current supervisory response has been to raise awareness of lessons learned from past downturns through outreach efforts (see Resources box) and ongoing supervisory activities. Based upon my experiences and stories shared with me, the key message is to be proactive and focus on building capital and liquidity levels while enhancing risk management practices. We should strengthen and follow these practices before the farm economy weakens any further or agricultural borrowers’ financials show more signs of pronounced risk.

---

3 See www.fdic.gov/bank/historical/history/.
CECL Corner

**Latest CECL News: Agencies Allow Three-Year Regulatory Capital Phase-In for New Current Expected Credit Losses (CECL) Accounting Standard**

On December 21, 2018, the federal bank regulatory agencies approved a final rule (capital rule) modifying their regulatory capital rules and providing an option to phase in over a period of three years the day-one regulatory capital effects of the updated accounting standard known as the current expected credit losses (CECL) methodology. The final rule also revises the agencies’ other rules to reflect the update to the accounting standards.

The capital rule phase-in is intended to address the concerns stated by some banking firms about the difficulty in capital planning due to the uncertainty about the economic environment at the time of CECL adoption. The regulatory agencies also committed to closely monitoring the effects of CECL on regulatory capital and lending practices.

In addition, the capital rule incorporates the term “adjusted allowance for credit losses” (AACL) and amends the Federal Reserve Board’s stress testing regulations so that covered firms that have adopted CECL do not include provisions determined under the new accounting standard until the 2020 stress cycle.

**FASB Workgroup Fields Questions About CECL Transition**

As the banking industry moves toward the CECL methodology, which takes effect in less than a year for firms that file financial statements with the Securities and Exchange Commission and other institutions that meet certain criteria, bankers, bank examiners, and other stakeholders have a forum for airing questions and concerns about the implementation of the new accounting standards.

The CECL Transition Resource Group (TRG), a workgroup created by the Financial Accounting Standards Board (FASB), gathers input from stakeholders, evaluates implementation issues, and presents them to the FASB, which decides what response is needed. In addition, the workgroup provides a setting that allows stakeholders to learn about the new guidance from others directly involved with implementation. Members of the TRG, which meets periodically, include financial service regulators, community bank leaders, and auditors.

The questions must relate to a potential implementation problem that the guidelines do not address or do not address clearly. The issue must have wide relevance to those subject to CECL.

Feedback can be submitted through the FASB website, available at https://tinyurl.com/yasfgrt6. Materials and webcasts of past meetings and information about upcoming meetings are also available on the site.

**Additional Resources**

How are the Federal Reserve and market participants addressing the transition from LIBOR?

LIBOR’s uncertain future poses a risk to the U.S. financial system given the large number of financial contracts that reference USD LIBOR. In 2014, members of the Board of Governors of the Federal Reserve System and the Federal Reserve Bank of New York convened the ARRC, a working group that is led by market participants, to identify an alternative reference rate to USD LIBOR and to organize the U.S. response to the movement away from USD LIBOR. The membership of the ARRC originally consisted of global derivatives dealers; however, recognizing the impact that this transition will have on a wide set of market participants, the ARRC broadened its membership in 2018 to include a more diverse group of participants. This change in the group’s participants should promote a broad consensus on its recommendations and a variety of viewpoints. Community banks are represented on the ARRC through industry trade groups such as the Independent Community Bankers of America and the American Bankers Association.

What are the ARRC’s objectives?
The ARRC’s primary objectives are to identify an alternative risk-free reference rate to USD LIBOR, consider best practices for fallback language in financial contracts, and develop an adoption plan for transitioning to alternative reference rates.

The ARRC has made significant progress in meeting these objectives. In 2017, after considering several options, the ARRC identified the Secured Overnight Financing Rate (SOFR) as its preferred alternative risk-free reference rate, and the Federal Reserve Bank of New York began publishing SOFR in April 2018. The ARRC has formed working groups to focus on providing suggested contract fallback language for a variety of financial products. In addition, the ARRC has turned its focus to issues affecting consumer products. The ARRC also adopted a transition plan in October 2017 that emphasizes the development of liquidity in contracts referencing SOFR in order to support the development of a term rate for SOFR with different tenors, such as a one- or three-month rate, in addition to the overnight rate.

What is SOFR?
The ARRC identified SOFR as the rate that, in its consensus view, is the preferred risk-free alternative rate to USD LIBOR. SOFR represents the cost of borrowing cash overnight in the repurchase agreement (repo) market using U.S. Treasuries as collateral. It is fully based in observable transactions, calculated using data from multiple segments of the Treasury repo market. The ARRC discusses the rationale for selecting SOFR in its “Second Report,” dated March 2018. SOFR is published each business day on the Federal Reserve Bank of New York’s website.

SOFR has a substantial number of underlying transactions, roughly $800 billion to $900 billion in average daily volume, and is a nearly risk-free rate that reflects general secured financing conditions in U.S. money markets. By comparison, LIBOR has approximately $500 million to $1 billion in average daily volume, depending on the tenor.

What is the market adoption of SOFR to date?
Although market adoption of SOFR is voluntary, use of the rate in financial products has already begun. As of May 2019, the notional amount of debt issuance via SOFR-linked FRNs surpassed $100 billion. Issuers of these FRNs include Fannie Mae, Freddie Mac, Barclays, JPMorgan, Toyota, Federal Home Loan Bank, and Wells Fargo.

7 More information on the ARRC and its progress on achieving its objectives is available at www.newyorkfed.org/arrc.
In the derivative markets, the Chicago Mercantile Exchange Group (CME), which operates an American options and futures exchange, launched SOFR futures in May 2018, and average daily volume and open interest have been on an upward trajectory since the launch. Furthermore, the London Clearinghouse (LCH), a British multi-asset clearing-house, and CME began offering cleared over-the-counter SOFR swaps in July and October of 2018, respectively.

What are some of the differences between LIBOR and SOFR?
SOFR is a secured rate, reflecting the cost of borrowing cash using U.S. Treasuries as collateral. LIBOR, on the other hand, is an unsecured rate. Therefore, SOFR is lower than the unsecured LIBOR because it does not reflect a credit risk premium. In addition, SOFR is an overnight rate, like the Prime Rate, whereas LIBOR is published for multiple maturities ranging from overnight to 12-month (with the three-month tenor being the most common). Moving from a term unsecured rate to an overnight secured rate may affect the economics of a financial transaction (such as a loan) and is one of the challenges associated with this transition. Some type of spread adjustment will be needed when moving to SOFR, in the same way that loans based on the Prime Rate have different spreads compared with loans based on LIBOR. Although currently there is no SOFR term rate, building liquidity in the derivatives markets linked to SOFR will help with the development of a term structure for SOFR. The industry participants of the ARRC and its various working groups are discussing and working through these challenges, with a specific working group dedicated to the development of a forward-looking term rate.

Are there any supervisory expectations right now for Fed-supervised financial institutions?
In 2018, the Federal Reserve focused its efforts on increasing awareness of LIBOR’s possible cessation in 2021 and the need for supervised institutions to consider transitioning to alternative rates.14 To date, the Federal Reserve has not issued any rules, regulations, or guidance regarding the transition from LIBOR. The possibility that LIBOR is no longer available after 2021 is a material emerging risk, resulting from a change in market practice. As with all emerging risks, prudent risk management means that financial institutions should understand the emerging risk and the risk implications for the institution, as well as consider options for mitigating any potential negative impact.

What can firms do to prepare for a transition away from LIBOR?
An important first step for institutions in preparing for LIBOR’s possible discontinuance after 2021 is to understand their current financial exposure. Financial exposure is generally considered to be the size of activity tied to USD LIBOR across all financial products (e.g., if a bank has two $400,000 adjustable rate mortgages (ARMs) where the rate is tied to LIBOR, it has $800,000 in exposure to LIBOR in ARMs). As mentioned earlier, LIBOR can be found in a variety of products, including derivatives, business loans, mortgages, FRNs, securitizations, deposits, and debt.

Once an exposure is identified, financial institutions should understand the risk implications and determine the actions that may be necessary, such as communicating to clients and counterparties. Additionally, in order to better understand the legal and operational risks associated with each contract, financial institutions should evaluate the contractual terms that outline what happens if LIBOR goes away and whether that language is sufficiently clear for risk mitigation purposes. These considerations are important for existing contracts (particularly longer-dated contracts) as well as new contracts.

Where can I find more information on the LIBOR transition?
The ARRC’s website offers a wealth of information on the ARRC initiatives and updates on SOFR development.

14 The Federal Reserve conducted an Ask the Fed webinar in June 2018, followed by an Industry Outreach webinar together with other Federal Financial Institutions Examination Council members in December.

15 See www.newyorkfed.org/arrc for more information.
Evaluating the Financial Condition of a CCRC

The process of evaluating a credit extension to a CCRC is unique. Each CCRC is a standalone operation and should be evaluated on its ability to operate at a profitable and sustainable level.

A CCRC’s financial ratios differ from traditional commercial real estate financial analysis in that the receivables turnover is slower. Most of a CCRC’s receivables are from Medicare and Medicaid, and the government tends to reimburse a CCRC for care and services provided to residents well over 90 days from the billing date. Furthermore, there are strict billing procedures and practices for private insurers as well as for Medicare and Medicaid that must be followed to ensure that the receivable is not rejected or the reimbursement not unduly delayed. An example of an important ratio unique to this industry is the “days cash on hand,” which serves as a key measure of a CCRC’s liquidity positions.

Other factors that may impact the cash flow of a CCRC are charitable contributions and investment income, which tend to fluctuate with economic cycles and volatility in the stock market and may also be subject to restricted use. Furthermore, as part of its mission, a CCRC may provide benevolent care to residents who qualify for financial assistance or to long-term residents who run out of funds. The level and duration of such care have to be factored in when evaluating the financial condition of the CCRC.

The Commission on Accreditation of Rehabilitation Facilities (CARF)–Continuing Care Accreditation Commission (CCAC) focuses on four major components of a CCRC’s financial results: margin (profitability) ratios, liquidity ratios, capital structure ratios, and contract type ratios. In analyzing an organization’s financial ratios and trends, it is equally important to benchmark them against other competitors to determine the organization’s strengths and weaknesses.

Understanding How Market Conditions and Economic Trends Affect CCRCs

The CCRC industry is highly dependent on personal wealth and government assistance. For most retirees, their home is their single largest asset. Most seniors sell their homes to meet the entrance fee requirement for a CCRC contract. Because most seniors have to sell their homes before moving into a CCRC, underwriting guidelines should include an analysis of the residential housing market within the footprint where the CCRC is being marketed. Demand for CCRC space is also dependent on general economic conditions. Economic downturns tend to have an adverse effect not only on the residential real estate market but also on the stock and bond markets and consumer sentiment. As a result, demand fluctuations are common in the industry. CCRCs are also subject to the same economic changes that affect the general U.S. economy, such as access to capital, a skilled labor force, and general economic trends and conditions.

---

8 This ratio is used to determine the number of days the borrower can pay his or her operating expenses from available cash.

9 Benevolent care programs enable residents to remain at the facility after they have exhausted their financial resources.

10 The CARF–CCAC Financial Advisory Panel is a for-profit advisory group that provides financial ratios and trends for the Continuing Care Retirement Community. This publication provides key data for evaluating the financial condition of a CCRC as well as peer ratios for comparison.


Assessing and Managing Risks Associated with CCRCs

Long-term planning and robust risk management practices are critical for the viability of a care provider. The primary assets of a CCRC are its buildings and campus. Because of this, commercial real estate risk is the primary concern when lending to this sector. The customary risks associated with underwriting a commercial real estate loan (for example, appraisal, feasibility studies, demand and supply projections, location, and construction timetable) should be identified and managed in the underwriting process. There must be documented and well-supported assessment of the project’s creditworthiness as well as stress-tested scenarios of the borrower’s capacity and ability to perform under difficult circumstances.

There must be documented and well-supported assessment of the project’s creditworthiness as well as stress-tested scenarios of the borrower’s capacity and ability to perform under difficult circumstances.

Lenders who do not want a long-term asset on their books may opt to finance the construction costs and require repayment from a long-term funding source such as a pension fund, insurance company, or government agency. In such cases, the bank needs to ensure strict adherence to the construction budget and timeline. A permanent lender may require the borrower to achieve occupancy and operating level goals before funding its commitment. An operator’s track record as well as the size and complexity of the project should be diligently assessed for the probability of success.

As is the practice with any prudent commercial loan transaction, the lender should have an understanding of the operator’s business plan and its ability to deliver results that are sufficient to repay debt, meet the expectations of the residents, and comply with regulatory requirements for such facilities. Unlike when loaning to other businesses,

---

it is important for the lender to know and understand the frequency, composition, and complexity of the cash flow stream of a CCRC because of the timing and limits on reimbursement from third parties (for example, private insurance, Medicare, and Medicaid). Entrance fees, which are paid by the resident in exchange for the facility taking the risk of providing future higher-cost services, are another factor that may distort a cash flow stream. These fees are often refundable and are recorded as deferred revenue.

During the underwriting process, the lender should consider the use of covenants, guarantees, reporting requirements, and milestones for financial performance in the loan documents to protect itself and to enable close monitoring of the borrower.

**Regulatory and Entrance Barrier Risks**

Unlike other commercial real estate projects, a CCRC may have to obtain a certificate of need (CON) from a state to break ground for a new facility. According to the National Conference of State Legislatures, 34 states currently maintain some form of CON requirement for skilled nursing facilities. The basic assumption underlying the regulation is that oversupply of health-care facilities results in health-care price inflation. Price inflation occurs when an operator cannot fill all its beds and fixed costs have to be met by charging more for beds in use. Like any other construction project, a CCRC developer should have the appropriate zoning, building, easement, and utility permits and variances. It is a prudent practice to include these intangible items in the loan documents and assign them to the bank in the event of default.

The operators of CCRCs must also comply with local, state, and federal regulations governing the level and quality of care provided to residents as well as regulations pertaining to standards and condition of the facilities. Noncompliance and repeat violations can lead to suspension of payments or revocation of an operator’s license. In this regard, a lender should request and review all inspection records that relate to quality of care, building code violations, and other reports incidental to operating the facility and as well all corrective actions taken to remediate concerns or violations.

**Actuarial Risk**

CCRC finances are complex because actuarial principles are used for planning and pricing models. The actuarial model assumptions have to be reasonable to ensure that the operator can appropriately price the future cost for assisted and skilled care. The residents pay a graduated entrance fee based on the level of future care desired. These fees are used to cover future benefits promised to the residents when they sign an agreement to enter a CCRC. These actuarial assumptions are becoming increasingly difficult to project in light of improvement in life expectancy for all age groups and genders.

**Reimbursement Risk**

Reimbursement risk can occur if a payment to a CCRC in return for services rendered to a resident of the facility is delayed or not received at all. Private pay residents and private insurance companies usually promptly pay the full amount billed for services provided by the CCRC. However, for Medicare and Medicaid residents, the reimbursement amounts are significantly less — about 70 percent of the cost to care for a beneficiary. Reimbursement risk has to be well managed by a CCRC by ensuring that the number of private pay and private insurance residents far exceed Medicare and Medicaid beneficiaries.

**Conclusion**

People are living longer, and they want the ability to live independently but still have the convenience of, for example, seeing a medical professional in the same facility. Therefore, CCRCs have become a highly desirable option to the aging population. Underwriting credit extensions to a CCRC is challenging. It differs from traditional commercial underwriting because it combines risk elements from various external factors. Credit extensions to investors in CCRCs can be profitable and beneficial if the associated risks are identified and managed. Commercial real estate risk is the primary concern when lending to this sector because the primary assets of a CCRC are its buildings and campus. The lender needs to have an understanding of the CCRC’s business plan and ability to consistently execute that business plan and deliver superior results sufficient to repay debt, meet the expectations of the residents, and comply with regulatory requirements.
Regulators, academics, and executives gathered to discuss the increasing role of fintech in the financial and banking industries during the Fintech and the New Financial Landscape conference on November 13–14, 2018, at the Federal Reserve Bank of Philadelphia. The Bank cosponsored the event with the Federal Deposit Insurance Corporation, the Bank Policy Institute, the Brookings Institution, and the Wharton School of the University of Pennsylvania.

Executives from various fintech providers, including Avant, Elevate, LendingClub, Marlette Funding, PayPal Inc., and Upstart, explained how their companies use machine learning and artificial intelligence to assess consumers’ financial health and to enhance the customer experience. This may provide subprime borrowers the ability to access credit and enjoy shorter application processes as well as transparency on rates and payments.

The research portion of the event confirmed several current fintech understandings and provided insight into common assumptions. Many of the providers discussed how they lend to the “invisible prime,” which may include low-risk subprime borrowers or individuals with thin credit files. Although the fintech focus may shift toward higher-risk customers, much of the current consumer profile is similar to the borrowers that banks lend to, which fintech executives believe creates an opportunity for banks and fintech providers to collaborate.

Much of the discussion centered on concerns about ensuring safe, responsible use of alternative data while preserving consumer privacy and fair lending. Current initiatives that were highlighted included the Small Business Borrowers’ Bill of Rights and California’s Truth in Lending Standards for Small Businesses.

To further understand fintech and how alternative data sources and big data are being used in the financial industry, explore some research and related information that were discussed during the conference and that may be relevant to community banks:


Federal and state financial regulatory agencies issued an interagency statement on supervisory practices regarding financial institutions affected by flooding in the Midwest. The agencies recognize the serious impact of flooding in the Midwest on the customers and operations of many financial institutions and will provide appropriate regulatory assistance to affected institutions subject to their supervision. The agencies encourage institutions operating in the affected areas to meet the financial services needs of their communities. The statement, which was issued on March 25, 2019, is available at www.federalreserve.gov/newsevents/pressreleases/bcreg20190325a.htm.


Five federal regulatory agencies issued a joint final rule to implement provisions of the Biggert–Waters Flood Insurance Reform Act of 2012 requiring regulated institutions to accept certain private flood insurance policies in addition to National Flood Insurance Program policies. Regulations implementing the federal flood insurance statutes prohibit regulated lending institutions from making loans secured by improved real property located in special flood hazard areas unless the property has adequate flood insurance coverage. The press release, which was issued on February 12, 2019, is available at www.federalreserve.gov/newsevents/pressreleases/bcreg20190212a.htm.


Federal Reserve Board Chair Jerome H. Powell gave a speech at the Rural Places, Rural Spaces: Closing Financial Services Gaps in Persistent Poverty America, a policy forum sponsored by Hope Enterprise Corporation. The event was held at Mississippi Valley State University, Itta Bena, MS, on February 11, 2019. Chair Powell’s speech on “Encouraging Economic Development in High-Poverty Rural Communities” is available at www.federalreserve.gov/newsevents/speech/powell20190212a.htm.

Governor Lael Brainard gave a speech at the Research Symposium on the Community Reinvestment Act, which was hosted by the Federal Reserve Bank of Philadelphia in Philadelphia on February 1, 2019. Her speech on “Strengthening the Community Reinvestment Act: What Are We Learning?” is available at www.federalreserve.gov/newsevents/speech/brainard20190201a.htm.
The Federal Reserve Board launched an article series on financial conditions and concerns of consumers and communities. The article series, titled Consumer & Community Context, features original analysis about the financial conditions and experiences of consumers and communities, including traditionally underserved and economically vulnerable households and neighborhoods. The press release, which was issued on January 16, 2019, is available at www.federalreserve.gov/newsevents/pressreleases/other20190116b.htm.

The Federal Reserve Board announced appointment of the chairs and deputy chairs of the Federal Reserve Banks for 2019. The press release, which was issued on January 9, 2019, is available at www.federalreserve.gov/newsevents/pressreleases/other20190109a.htm.

---

Bank Examinations Benefit from Improved Collaboration

The Federal Reserve System (FRS) is committed to making the process of data sharing as fast, easy, and secure as possible. In the third quarter of 2018, the FRS sponsored an upgrade to its platform for securely sharing files for supervisory activities with its institutions. This enhanced platform provides the following key improvements:

- **Upgraded User Interface**
  - Provides quicker navigation through folders and files, and allows users to more easily find where documents should be uploaded and reviewed.

- **Improved Performance and Bulk Upload**
  - Provides enhanced upload capabilities, such as uploading hundreds of documents in a single action. A drag-and-drop feature allows multiple files to be placed into specific folders.

- **No Installation Required**
  - Because the platform is fully web based, eliminating the need to install additional software downloads or third-party browser plug-ins.

- **New Mobile App**
  - Allows users to view documents and check the status of uploads on mobile devices.

- **Increased Support**
  - Includes new tutorial videos for users to become acquainted with the platform. User guides, videos, tutorials, frequently asked questions, and other online resources are also available.
Supervision & Regulation (SR) & Consumer Affairs (CA) Letters

The following SR and CA letters that have been published since the last issue (and are listed by most current) apply to community banking organizations. Letters that contain confidential supervisory information are not included. All SR letters are available by year at www.federalreserve.gov/supervisionreg/srletters/srletters.htm and by topic at www.federalreserve.gov/supervisionreg/topics/topics.htm. A complete list of CA letters can be found at www.federalreserve.gov/supervisionreg/caletters/caletters.htm.

SR Letter 19-9  “Bank Exams Tailored to Risk (BETR)”
SR Letter 19-8  “Frequently Asked Questions on Current Expected Credit Losses Methodology (CECL)”
SR Letter 19-7  “Statement on the Implications of the New Lease Accounting Standard on Regulation H”
SR Letter 19-5  “Communication Expectations for Community Bank Examinations and Inspections”
SR Letter 19-4/CA Letter 19-3 “Supervisory Rating System for Holding Companies with Total Consolidated Assets Less Than $100 Billion”
SR Letter 19-2  “Voluntary Private Education Loan Rehabilitation Programs”
SR Letter 18-8  “Interagency Statement on Sharing Bank Secrecy Act Resources”
CA Letter 18-8  “Revised Interagency Examination Procedures for Consumer Compliance”
SR Letter 18-7  “Updates to the Expanded Examination Cycle for Certain State Member Banks and U.S. Branches and Agencies of Foreign Banking Organizations”
SR Letter 18-6  “Interagency Exemption Order from Customer Identification Program Requirements for Loans Extended by Banks and Their Subsidiaries to Commercial Customers to Facilitate Purchases of Property and Casualty Insurance Policies”
SR Letter 18-5/CA Letter 18-7 “Interagency Statement Clarifying the Role of Supervisory Guidance”