RECORD OF MEETING

Federal Advisory Council and Board of Governors

Friday, December 7, 2018

<u>Item 1: Current Market Conditions</u>
What is the Council's view of the current condition of, and the outlook for, loan markets and financial markets generally? Has the Council observed any notable developments since its last meeting for loans in such categories as (a) small and medium-size enterprises, (b) commercial real estate, (c) construction, (d) corporations, (e) agriculture, (f) consumers, and (g) homes? Do Council members see economic developments in their regions that may not be apparent from the reported data or that may be early indications of trends that may not yet have become apparent in aggregated data?

<u>General Outlook</u>

- Economic growth in most geographic regions remains solid. Job growth continues in all regions and, due to the tight labor market, wages are increasing. Job vacancies are historically difficult to fill. Consumer confidence also remains high in all regions, and actions by consumers and businesses indicate that they are still quite optimistic.
- Overall, loan market conditions remain fairly strong. Volume remains stable, while rate competition is intense. Terms and conditions are also quite competitive and declining somewhat in quality. There has been a modest widening of mortgage-backed securities (MBS) spreads, reflecting an increased level of volatility.
- Leverage loans have experienced strong volume. Standards are eroding somewhat, and secondary market executions have been affected by recent market volatility.
- Real estate loan growth conditions remain fairly strong overall. However, refinancing for single family residences (SFR) has slowed considerably, and purchase finance is now slowing. Credit quality remains good, with aggregate delinquency rates still very low.
- The Council's outlook for the loan market in the fourth quarter and early 2019 is for continued moderately strong demand, rate competition, and further competition on loan terms/conditions.
- Financial markets overall are strong and functioning well. Council members currently foresee no reason for this to change.

Has the Council observed any notable developments since its last meeting for loans in such categories as (a) small and medium-size enterprises, (b) commercial real estate, (c) construction, (d) corporations, (e) agriculture, (f) consumers, and (g) homes?

The Council has observed only modest developments since the last meeting. Overall, credit quality remains steady, losses remain at historically low rates, and loan demand is moderately strong. Loan pricing and underwriting standards are very competitive.

(a) Small and medium-size enterprises

- Small and medium-size business activity compared to the prior quarter and this time last year is positive. Businesses continue to actively borrow, express optimism, and indicate plans for further investment. Owners cite the strong economy and sales as drivers of their expansion decisions, while reporting record high levels of job openings for which they are finding fewer qualified applicants.

(b) Commercial real estate

- Loan growth for commercial real estate remains positive. The delinquency rate of commercial real estate loans overall remains very low.
- Loan demand for multifamily real estate is still good, while experiencing intense term and pricing competition. Capitalization rates on quality multifamily properties remain in the 3-4% range, and

thus negative leverage is beginning to appear, as loan rates reach higher levels than cap rates. Overall, apartment vacancies are holding steady. In many areas, rents have stopped escalating.

- Other commercial real estate lending is robust, with the same tight cap-rate characteristics as multifamily. Retail is the exception and continues to go through a time of uncertainty and reduced demand.
- Several geographic areas have seen slightly rising office and retail vacancies but falling industrial vacancies.

(c) Construction

- Construction loan demand is steady, and there is significant individual-unit construction activity. The markets for second and vacation homes are still moderately strong. Both residential and nonresidential construction continue to face labor shortages and higher material costs.

(d) Corporations

- Overall, the utilization levels for corporate lines of credit are consistent. To some extent, this contained utilization level reflects strong corporate earnings, supporting their cash-level needs.
- Fund capital raising has been strong among new and existing alternative platforms. The corporate lending market remains healthy. Short-term line utilization by investment funds (venture capital and private equity) remains strong, reflecting very active investing levels.
- Capital investments, steady refinancing, and merger and acquisition activity have added to corporate loan growth, but the growth has come with increased lender competition. The leveraged loan market is intensely competitive.

(e) Agriculture

- Agriculture is feeling the impact of tariffs. New agriculture loan volume has declined significantly since 2014-15 but is currently steady. Noncurrent loans have increased slightly but are still very low.

(f) Consumers

- Consumer loan indicators — including personal income, spending, retail sales, and credit quality — continue to reflect solid economic growth, and loan demand is steady.
- Card-related credit quality remains remarkably solid, despite higher interest rates. Delinquency rates are stable at 2.5%, far below prior-cycle lows, and late payments are lower than in prior periods.
- Automobile lending is strong, as is demand in the secondary market for automobile loans.

(g) Homes

- The single-family home loan market has recently experienced a significant slowdown of refinance volumes that is primarily rate driven.
- Overall, mortgage demand has slowed – 30-year fixed rates around 5% are having an impact. Existing home sales fell to a 30+ month low, while new home sales fell to a 20+ month low in September.

Do Council members see economic developments in their regions that may not be apparent from the reported data or that may be early indications of trends that may not yet have become apparent in aggregated data?

Of interest, the nonprofit segment of the economy (about 6% of GDP) is experiencing a generally strong year, in terms of both fundraising activities and new projects.

Importantly, the single-family home sale markets are clearly slowing. Increased rates, price run-ups, and new tax laws have all brought down home-purchase demand. Home prices are softening, and sale times are lengthening. Pricing of upper-end single-family residences (SFRs) is slipping in many urban markets. Pricing of entry-level and mid-range SFRs is steady but with measurably less demand. Single-family home sale markets are, quite recently, experiencing price pressure, rendering what could be a turning point. Conditions have shifted somewhat quickly from a seller's market to either a neutral or buyer's market in almost all urban and many suburban areas.

The Council expresses the opinion that productivity improvements, resulting in part from recent strength in capital expenditures, are possibly not fully reflected in the productivity gains as reported. The Council also notes that a meaningful number of recent hires have been drawn from the previously unemployed pool. This reflects the overall employment strength with contained wage inflation.

Item 2: Focus on Commercial Real Estate

Commercial real estate (CRE) is one area where there has been increasing concern about over-expansion. What is the Council's detailed view of this market segment? What is the status of commercial real estate activity in major local markets? How heavily invested are financial institutions and markets in commercial real estate loans and projects? Are there reasons to be concerned about particular financial sectors because of extensions of credit in this area?

What is the Council's detailed view of this market segment?

Overall CRE Market

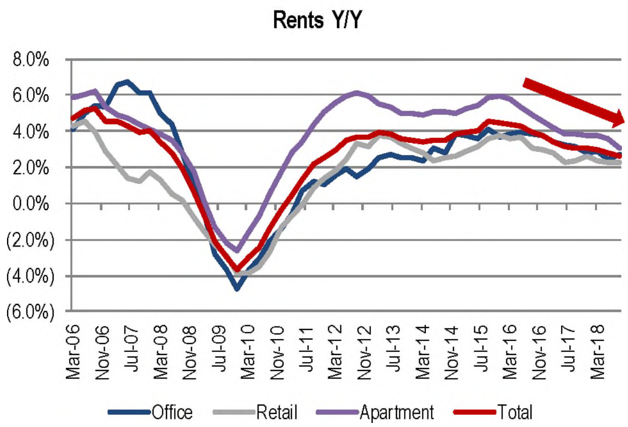
Overall market conditions are strong, with trends remaining broadly positive. Key fundamentals, including rent growth, occupancy, and absorption remain sound. Particularly strong is the industrial segment nationally, and although absorption is down from a record 61.5 million square feet recorded in the third quarter of 2017 versus 49 million square feet this past quarter, the overall strength and consistency of the market suggest that the industrial asset class can justify the consistently large construction totals seen over the past several quarters. Rents continue to rise, and vacancy is ticking down. This growth continues to be driven by logistics and growth in on-line businesses.

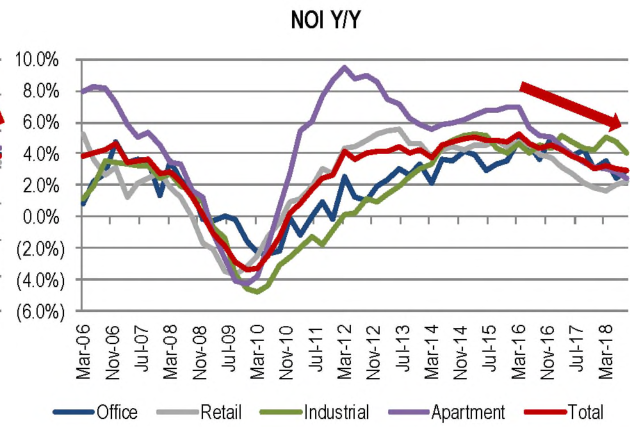
Conditions in the U.S. office market held steady during Q3'18. Absorption was positive at 13.4 million square feet and increased compared with the national performance one year ago. Rents edged up from Q3'17, and vacancy edged down 30 basis points – even with the delivery of 7.1 million square feet of new product. The construction pipeline remains robust in Q3'18 and now totals 77.6 million square feet. Another encouraging sign was that absorption outpaced deliveries during the third quarter. The previously mentioned 13.4 million square feet in absorption easily outpaced the 7.1 million square feet delivered during the quarter. Overall, U.S. office construction remains under control, at 1.6% of standing inventory.

Multifamily fundamentals remain strong, with the exception of some rent softening at the high end in urban-core locations. That market is becoming more saturated as recent development activity has focused on luxury urban-core product. There has been a recent shift in development activity from the urban core to secondary and suburban markets in an effort to create more workforce-housing supply. Retail development (except when anchored by a grocery store) continues to be out of favor with investors and lenders.

Notwithstanding the current broadly positive picture, it is notable that the growth rates in rent and net operating income (NOI) are slowing, as shown in Exhibit 1. The slowdown is due to both supply — an extended period of growth of all classes of CRE — and demand — higher interest rates and late-cycle demand dynamics. Council members expect the sector to be relatively stable, as long as economic growth remains moderate, rate increases are measured, and the capital markets remain open. However, a recession would result in significant risks in the sector and potentially meaningful losses.

Exhibit 1: Decelerating CRE Fundamentals





Source: Real Capital Analytics, NAREIT, REIS, NCREIF, and KBW Research.

Hypothetically, KBW estimates a 25-50 basis point increase in cap rates with 2-3% NOI growth would imply CRE prices flat to down 2-6%. We estimate a more severe 100 bp increase scenario would imply CRE prices down approximately 10-15% although NOI growth could potentially accelerate if higher rates implied strong economic growth or greater inflation.

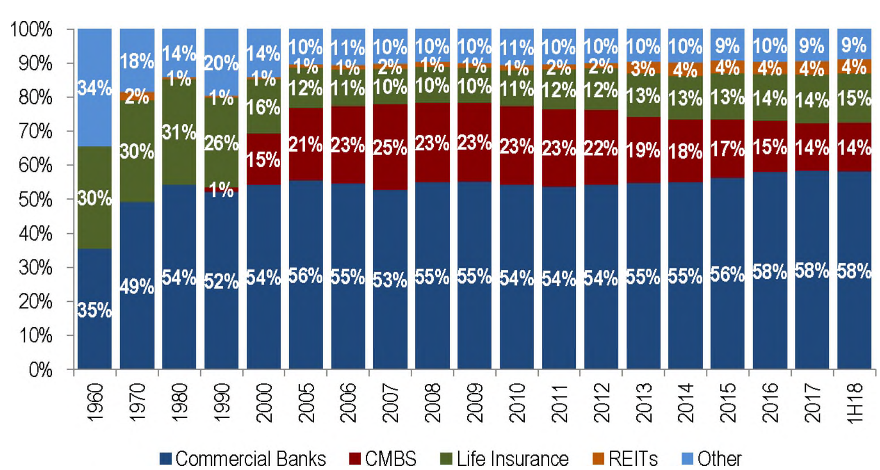
What is the status of commercial real estate activity in major local markets?

In general, the Council would not call out any specific markets, as most markets are broadly stable across asset classes. The one exception would be high-end urban-core multifamily assets in some of the bigger cities like New York, given recent increases in supply and the impact of tax reform on carrying costs.

How heavily invested are financial institutions and markets in commercial real estate loans and projects?

The U.S. CRE market is valued at approximately $10 trillion, with $4 trillion of commercial mortgage debt outstanding. Banks are the largest holders of CRE mortgage debt, as shown in Exhibit 2, at 58% of outstandings. There is an active securitization market for CRE debt, including GSE securitizations, which allows investors to hold CRE debt in the form of CMBS securities and in a REIT structure.

Exhibit 2: Commercial Mortgage Debt Outstanding by Holder (Excluding Multifamily)



Source: Federal Reserve and KBW Research.

Large banks have the highest levels of CRE on their balance sheets, but small banks have the largest concentration. Council members believe that banks under $50 billion in assets and nonbanks focused on CRE have the highest concentration risk in the CRE asset class.

Council members report that banks have been disciplined in terms of loan growth over 2017-2018, focusing on high-quality projects, top customers/investors/operators, diversity across geography and asset classes, and good structures and loan-to-value ratios. However, nonbank lenders have been more aggressive, taking on riskier projects with less structural protection and more aggressive pricing.

Are there reasons to be concerned about particular financial sectors because of extensions of credit in this area?

If market conditions weaken and CRE losses materialize, the lenders most exposed would be banks with high levels of CRE/capital. Losses on CMBS, life insurance, and REIT holdings would be absorbed by underlying real money investors or policyholders. This exposure could create second-order impacts on banks, but the Council does not believe this would be overly significant.

Item 3: Real-Time Payments

What is the current and likely future landscape for real-time payments? What is the right balance to strike between the Federal Reserve's role and The Clearing House's approach to real-time payments? Would new Federal Reserve services in this area be necessary or helpful?

Over the long run, the Council believes the market for faster payments appears promising. Adoption of real-time payment systems around the globe is growing and has already contributed to an environment in which many consumers, corporations, merchants, and financial institutions expect to be able to pay friends and vendors, settle bills, and transfer money instantaneously. The Council recognizes that consumers and businesses increasingly expect to complete transactions with a simple keystroke, swipe, or tap. To meet the expectation of a 24/7 digital economy, the Council is aware of the growing demand for broadly accessible faster payments that make funds available immediately. Faster payments services are expected to adapt and innovate to meet market demand and will ultimately replace slower, less secure, and/or binary funds-only transfer options.

Adoption of faster payments has begun through a private-sector, bank-centric solution offered by The Clearing House (TCH). This solution went live earlier in 2018, with an expectation of reaching full ubiquity by 2020. Council members unanimously welcome and agree with the Federal Reserve's interest in making real-time payments ubiquitous in the United States and believe the Federal Reserve has been a positive catalyst in moving the industry towards real-time payments through its sponsorship of the Faster Payments Task Force in 2015. There is also general acknowledgment that any effective offering for real-time payments (RTP) must be paired with strong fraud countermeasures, have clear governing rules around customer and bank liability, and facilitate strong interbank communication to help identify and isolate fraud and prevent large-scale losses.

In October 2018, the Federal Reserve invited comment on two potential actions: first, the Federal Reserve's development of a service for real-time interbank settlement of faster payments 24x7x365; second, the creation of a liquidity management tool that would enable transfers between Federal Reserve accounts on a 24x7x365 basis to support services for real-time gross settlement (RTGS) of faster payments, regardless of whether those services are provided by the private sector or the Federal Reserve Banks. To date, the question about the Federal Reserve's offering of an RTGS system has generated varying opinions from Council members.

- **Larger banks:** Council members who are already part of TCH's membership body and have plans to connect to TCH's real-time payments service expressed concerns about the introduction of a Federal Reserve-run RTGS system for faster payments. Council members who represent larger banks highlighted that TCH's private-sector solution is intended to serve all banks, and pricing for TCH's RTP rails is nondiscriminatory, meaning every bank (regardless of size) pays the same per-transaction fee; there are no volume discounts, no volume commitments, and no monthly minimums. Furthermore, there is no incentive to raise pricing, and TCH will commit to maintaining ownership of the system as a utility. This cohort also noted that a Federal Reserve system could put at risk the Faster Payments Task Force's goal of implementing a faster, ubiquitous, safe, and efficient real-time payment system by 2020. Concerns shared by this group include potential fragmentation of the market, potential duplication of costs driven by interoperability challenges between two real-time clearing and settlement networks, and potential slowdown or adoption delay in the market with the introduction of multiple system operators. Council members in this group believe that the TCH system will be better able to innovate as the sole utility for real-time payments, without being bound by interoperability constraints. These Council members also believe that a significant investment in resiliency and redundancy by TCH will obviate the need for an alternative system run by the Federal Reserve.

- **Smaller/community banks**: Council members that represent smaller/community banks believe the Federal Reserve should consider development of its own platform that is easily accessed; integrates with other payment platforms like Zelle, TCH, and the card networks; provides simple centralized settlement; applies a consistent regulatory perspective or rules; and helps to ensure a level playing field for banks and nonbanks. They shared the viewpoint that a Federal Reserve service could also benefit consumers and businesses by potentially lowering costs, increasing choice, and improving quality. Without a Federal Reserve option, these banks believe a single real-time solution owned by a subset of banks with no viable alternative could result in different pricing and rules for owner and non-owner banks, creating disadvantages for non-owners, and could also pose risks to the marketplace over time. Interestingly, as the Council members discussed this view at our pre-meeting, the smaller/community bank group became more comfortable with the notion of relying on a TCH-run RTP system, provided certain safeguards were in place. It was clear to all Council members that an enhanced education and communication effort is needed.

It is worth considering several practical considerations. TCH went live with its RTP rails earlier this year, and banks that represent 25% of the deposit base eligible for RTP are signed up. By January 2019, 50% of the eligible deposit base will be signed on, and expectations are for ~3,000 banks, or 65% of the eligible deposit base, to be live by end of 2019. Various banks are starting to invest in value-added products and services that can be offered by leveraging these rails, with product launches expected in early 2019. These banks see potential for the most activity, at least initially, in the bill-pay and business-to-business payments areas. As highlighted earlier, pricing for TCH's RTP rails is nondiscriminatory; these fees can come down over time as volumes build up and costs per transaction are lowered. Finally, the Federal Reserve should not assume that full interoperability of two real-time payments systems will be easy or possible. Full interoperability requires (1) payment message interoperability, (2) simultaneous real-time final clearing and settlement, and (3) interoperability of a rich two-way value-added message set (e.g., payment acknowledgment, request for payment, remittance advice).

The Federal Reserve has been a catalyst in moving the industry towards faster payments, but the objectives of establishing a separate RTP rail are unclear at this point. Also unclear is how these new rails will be funded, as ~20 large banks are already invested in TCH's RTP rails. Moreover, if the Federal Reserve decides to go ahead and build its own RTP rails, given the time it may take to bring such an initiative to fruition, it is possible that most of the smaller banks would have already built connectivity to TCH's rails and would then have to build new connectivity to the Federal Reserve's rails.

The Council recommends that the Federal Reserve work with TCH to address the concerns of the smaller/community banks under a scenario in which the TCH-run RTP system is the sole utility provider. Some of these concerns include: fair access and pricing; third-party service providers' willingness to prioritize this initiative and TCH undertakings around ownership, future innovation, and resiliency/redundancy. The general view is that if these matters can be resolved, there will be broader acceptance of the TCH as sole provider.

The idea of a Federal Reserve RTP platform has been considered for several years. The Council encourages the Federal Reserve to signal to the market what it intends to do as quickly as possible, regardless of the direction it chooses to pursue. A drawn-out decision on and announcement of the Federal Reserve's plans could potentially delay market adoption of faster payments.

There was consistent agreement among all banks on the Council about the Federal Reserve's second question: offering a liquidity management tool. The Federal Reserve has an important role to play in the move to real-time payments by enabling 24/7 Fedwire Funds services for bank-to-bank transfers as a liquidity management tool. This will help expedite adoption of real-time payments and minimize liquidity/risk challenges for banks participating in faster payments.

Item 4: LIBOR Transition

U.S. financial institutions are in the process of transitioning from LIBOR to SOFR (I) What challenges does this transition pose? (II) How can these challenges best be overcome?

Background Facts

- Banks will no longer be compelled to submit LIBOR rates post 2021. Currently, LIBOR is deeply embedded in banks' infrastructure and underpins more than $200 trillion of USD LIBOR contracts across a variety of products, the majority of these linked to derivatives. It is estimated that $36.6 trillion ($34 trillion over-the-counter derivatives; $2.6 trillion debt) will still be outstanding after the end of 2021. This number continues to grow as new contracts continue to reference LIBOR.
- Numerous working and sub-working groups have been set up and have selected alternative risk-free reference rates to replace LIBOR across each jurisdiction. Among these groups, the Alternative Reference Rates Committee (ARRC) has selected the Secured Overnight Financing Rate (SOFR) to be the USD LIBOR replacement. SOFR is an overnight, secured rate with no term structure in place. To date, $25 billion of SOFR debt has been issued, and $1.3 trillion notional of SOFR futures have been traded. During the first week of trading (October 9), $200 million swap notional was cleared through the Chicago Mercantile Exchange; year to date, a total of $5 billion SOFR swaps have traded.

What challenges does this transition pose?

The industry perspectives on LIBOR transition challenges span six key areas, as summarized here and further addressed in Section II.

(a) Economic

Meeting the 2021 deadline is challenging, as exposure to LIBOR continues to grow, and more time might be needed to prevent systemic risk. Uncertainty about the timing of SOFR markets becoming liquid and the different nature of the two rates present banks with various challenges. SOFR does not include a credit component, which may require spread adjustment and could pose valuation challenges — raising Council concerns as to SOFR's ability to become a true LIBOR replacement. On the timing of the transition, a move to the new rate might cause value transfer as well as create valuation, hedge accounting, and other accounting-rule complications that could impact bank financials.

(b) Conduct and Reputational

Financial institutions will need to be aware of the conduct and reputational risks that could arise. They will need to avoid the perception that they have benefited, given their approach to the transition. Firms may find it challenging to manage the risk of LIBOR discontinuation while continuing to market LIBOR products. Institutions will need to ensure that they are sufficiently prepared to engage a different and diverse customer base and be able to communicate the impact. This will only be achieved by ensuring any lack of LIBOR understanding is addressed internally and externally.

(c) Legal

Current fallback language across all product types does not account for a permanent discontinuation of LIBOR. The big challenge from a legal perspective is to produce a set of fallbacks that will ensure a transparent and smooth transition. Difficulties exist for establishing common language and triggers across different product types and different jurisdictions. Where fallback provisions in existing contracts are inadequate, there is a risk of contract frustration. Furthermore, overreliance on industry initiatives might lead to a wait-and-see approach and thus an inconsistent adoption of fallbacks.

(d) Operational

The complexity of LIBOR-referencing contracts could prove to be challenging for some product types, hindering future re-papering efforts. The infrastructure intricacy and the extent of LIBOR within banks' systems, applications, and models means that scoping LIBOR will become a challenging task. Furthermore, banks will need to become operationally ready, as they are not yet prepared to use the new rates, and any delays might hinder the transition, impacting customers and markets.

(e) Regulatory

The lack of a unified approach by regulators across the LIBOR jurisdictions can negatively impact the transition. LIBOR discontinuation is not mandated (no regulatory or legislative enforcement) and this too may lead to insufficient and limited industry action. Any unknown regulatory requirements and future constraints might cause timing challenges to completing the transition.

(f) Strategic

Institutions will be faced with difficulty identifying what a successful LIBOR transition should look like, and delivering on it, and perfecting the timing to launch new SOFR-based products. Finally, firms will need to deal with market uncertainty around depth of liquidity, term structures, market infrastructure, and the future fate of LIBOR.

How can these challenges best be overcome?

General Outlook and Recommendation

- Designing the transition program should include building a complete LIBOR impact assessment, exhaustively identifying the risks, laying out a detailed action plan, and developing a proper governance structure. Industry-wide participation will be important, as solutions will need to be transparent, consistent, and applied across the industry. Institutions will need to be aware of market events, continuously monitor the extent of SOFR developments, and be prepared for contingencies.
- Financial institutions should look to proactively manage their exposure through:
  - Writing new transactions referencing SOFR.
  - Restructuring LIBOR-referencing transactions where possible to reduce exposure.
  - Adopting fallbacks when they become available, prioritizing contracts maturing post 2021.

(a) Economic

Managing LIBOR exposures will require coordinating a cross-functional response to develop a process for identifying, monitoring, and reducing LIBOR exposures. Mitigating the SOFR-LIBOR disconnect will require industry engagement and dialogue to address the uncertainty and challenges in building a robust spread methodology. Market participants will need to implement an action plan to increase buy-side demand for SOFR-linked products.

(b) Conduct and Reputational

Market participants will need to consider outlining detailed client-outreach strategies and plans, delivering an initial communication and periodic updates, and ensuring that customers understand the risks or outcomes they might face. Disclosures will need to be clear, fair, and not misleading. Setting up and defining internal communications will require implementing an internal training strategy to equip client-facing employees with the knowledge required to answer client queries.

(c) Legal

Institutions will need to perform customer analysis for early identification of any clients for whom standard fallback language would not be adequate and/or acceptable. This analysis will feed into communication/outreach exercises and negotiation efforts with these customers, where appropriate. These plans will need to be altered for and adapted to industry developments throughout the transition. Uniform fallback language will mean that standardized language needs to be decided on in order to account for a wide range of LIBOR products.

(d) Operational

Reviewing the operating model and identifying likely changes to it will be key to assessing transition costs. This will require collection of system and process requirements and identification of broader impacts, such as margin requirements, specific system (settlements, collateral, trade systems, etc.) updates, and amendments. Furthermore, the back-book portfolio will require a detailed scoping exercise to size the operational impacts.

(e) Regulatory

Institutions will need to be prepared and ready, which will require set-up of centralized teams to provide horizon scanning for any regulation that may impact the LIBOR transition and to coordinate responses to regulators. This also will involve active engagement with regulators to minimize the occurrence and/or the impact of unexpected and unwanted regulatory results/interpretations.

(f) Strategic

Strategic considerations will depend on timely decisions by the ARRC on term structure methodologies and market participation in liquidity building. Institutions should consider conducting scenario analyses to prepare for the LIBOR transition and plan accordingly. Strategies for new SOFR products will need to be defined, including a first wave of priority SOFR products.

Item 5: Bank Deposits

How does the Council view the current dynamics of competition in the retail deposit market? What factors are most important?

How does the Council view the current dynamics of competition in the retail deposit market?

- Council members confirm that competition for retail deposits has heightened. The competitive landscape has also grown significantly, as evidenced by the growth of digital/internet banks (both standalone and as part of "traditional" banks) and an increasing number of competing investment opportunities promoting enhanced yield opportunities for depositors/investors.
- Deposit costs have also been rising, reflecting the increasing interest rate environment, along with the above demand factors. After seven Federal Reserve rate hikes over the last two years, the "standard deposit rates" that banks would once have reverted to after a deposit promotion expired now often stay largely unchanged.
- Council members have observed that some large banks are moving past regional pricing and are extending "personalized" offers (i.e., different from published rates) for certain clients.
- Some banks are also making higher rates available to clients that have the deepest relationships with the bank (e.g., active checking accounts, a minimum amount of balances, direct deposit, number of transactions) or that have the highest potential for increasing their relationships.
- Many digital banks are offering rates with no strings attached. It's estimated that digital bank deposits have been growing at over 8% per annum over the last seven years, double the rate of deposits for the total industry. Consumers can access the top-of-market rates with a click of the

button – e.g., current rates of 2.5% – 2.7% for one-year CDs, with small or nil minimum deposit requirements.

- Council members also highlight differences in the nature of the deposit competition, depending on a bank's size. Community and smaller regional banks report that deposit growth and pricing are challenging, as these banks are more often tied to a particular geographic region. But with pricing competition coming from larger banks, digital banks, and credit unions, community and smaller regional banks see themselves as largely price-takers. They are often more reliant on communities where deposits are leaving due to population migration and generational wealth transfers.
- The larger banks, also dealing with price competition, have been competing on broader capabilities, including developing digital capabilities and a wider or national footprint and offering a greater range of deposit products. But this strategy entails the continued need for investing in, and being able to offer, innovative digital capabilities, as well as having a physical network able to manage cost-overlay risks.
- Deposit composition varies among banks. Community and smaller regional banks operate at higher loan: deposit ratios and have seen this ratio rise over the last two years (typically from 85-90% to 90-95%). They are also more reliant than the larger banks on CDs (20-25% of deposits), and costlier CD usage is increasing. The largest banks typically operate at much lower loan:deposit ratios (60-70%) and, with their more diverse funding mix, are less reliant on CDs (5-10% of deposits).
- Larger banks continue to gain deposit market share from smaller banks. For example, banks under $10 billion in assets have seen a reduction in their deposit market share from 20.7% to 17.3% over the last five years.

What factors are most important?

- The increasing deposit costs and the investments in digital banking, technology, and enhancing customer service have been helped by some tail-winds, such as operating-cost reductions (efficiency ratios have reduced from 64% to 55% over last five years), low "point-in-time" credit costs, and reductions in the corporate tax rate. However, credit costs are expected to rise through the next phase of the economic cycle, and banks' costs are unlikely to keep decreasing, particularly with the need to invest in talent, branch rationalization, digital delivery, IT infrastructure, and compliance.
- The LCR (liquidity coverage ratio) requirement for the largest banks has driven further deposit demand, with the regulatory incentive for these banks to fund themselves with more retail deposits.
- Loan pricing/repricing is moving relatively slowly, as reflected in the strong competition for loans in a low loan-growth environment (+4.0% growth over the 12 months ending September 30, 2018) and the relatively flat yield curve. Loan pricing currently often appears more reflective of the benign part of the economic cycle, as opposed to reflecting longer-term "through-the-cycle" credit costs.
- Maintaining net interest margins will become more challenging. In Q3, deposit betas increased faster than loan betas. Over the last two years, loan yields have increased by 70 basis points, but risk-free two- and five-year Treasury bond rates have increased by 200 basis points and 170 basis points, respectively – so the real margin banks received to cover their credit and liquidity risks has decreased. This suggests some significant loan-yield increases need to occur to ensure that risk/liquidity and profitability margins remain appropriate.
- Deposit betas are expected to continue to rise as consumers increasingly demand higher rates in an environment characterized by increasing interest rates, the ease of moving funds to competitors offering higher rates (particularly using digital capabilities), and many competing investment opportunities.
- For community and regional banks, deposit raising through branch networks is under increasing competition from digital and larger banks offering a range of products and innovative technology.
- For all banks, the challenges of a relatively flat yield curve, the expected continuation of rate increases, a lowering in deposit "stickiness," and competing nonbank investment products will provide continued challenges for retail deposits. Banks must also keep an eye on ensuring that loan pricing reflects adequate returns for both credit and liquidity costs.

- In summary, the key factors of retail deposit competition are increasing digital competition, the rising interest rate environment, deposit betas that are beginning to increase faster than loan betas, deposit mobility allowing customers to chase better rates, growing loan:deposit ratios (particularly at smaller banks), larger banks' gains in market share (by offering customers access to broader networks, and more digital products), LCR requirements adding to retail-deposit demand, alternative investment opportunities, and finally, appropriate returns for loans in a rising-rate, low loan-growth environment.

Item 6: Diversity and Inclusion

In the Council's view, what role should regulators play in diversity and inclusion efforts? Does the Council have any suggestions about how regulators should think about diversity and inclusion in the financial services industry? In the Council's view, how do financial institutions think about data gathering with respect to diversity and inclusion, including compliance with section 342 of the Dodd-Frank Act? What are some of the challenges to increasing diversity and inclusion in the financial services industry, with respect to (a) employees, (b) suppliers, and (c) those served by the industry? What is the impact of a lack of diversity within the financial services industry? What successful initiatives or practices have Council members observed either in their own institution or in other institutions in Council members' Districts to achieve these objectives?

Council members believe that a clear and defined focus on diversity and inclusion is appropriate for the financial services industry as a matter of basic fairness, as well as to ensure that companies (1) reflect the customers and communities they serve and (2) can attract and retain the best talent. Council members note that diversity on boards of directors continues to improve, setting the tone from the top. Banks have been leaders in board diversity for many years.

Each organization determines appropriate metrics when it comes to diversity and inclusion. Council members believe that regulators should facilitate dialogue among organizations to encourage the sharing of best practices related to hiring and retaining diverse talent. By enabling an open exchange of ideas and successes, regulators can ensure that diversity and inclusion remains a focus for all companies and that the financial services industry remains at the forefront of diversity efforts.

Greater collaboration among regulators and financial services companies, with consideration for each firm's unique needs and business model, can help improve diversity and inclusion, leading to a greater ability to serve surrounding communities.

Data and analytics are critical to managing all aspects of business, including progress on diversity and inclusion for key areas, including representation, hiring, promotion and retention, culture, inclusion, and employee experience. Council members shared that they use data, including but not limited to the types of data points described in the standards issued by regulators in connection with section 342, to analyze where efforts focused on driving diversity and inclusion are working, areas or functions in which more work needs to be done, and where new programs or additional investments may be needed.

For potential employees, there is high demand across the industry for diverse high-performing talent and fierce competition to attract and retain these valuable candidates. This is particularly true for senior and revenue-generating roles. There is focus by Council members on attracting senior level talent, improving the pipeline of diverse candidates, creating programs to develop the next generation of leaders, and driving a culture where employees feel they can bring their entire identity to work.

For suppliers, supplier-diversity programs have helped companies make significant strides. The move toward consolidation of products and services consumption to larger-scale enterprises can inadvertently disadvantage minority-owned small businesses. Identifying new suppliers that can meet the scale and capabilities needs of financial institutions is a challenge. In addition, regulatory requirements for third parties in financial services can represent a significant barrier to entry for business enterprises in general, highlighting both the need for continued partnership in ensuring that diverse suppliers have access to capital and for specialist knowledge of the regulatory environment.

Council members have instituted a range of programs, initiatives, and practices to help achieve objectives related to diversity and inclusion. Across all of these efforts, sponsorship by leaders and accountability are paramount. Also essential is effective communication of the company's goals, opportunities, and successes, so that all employees can live these important values. Programs at Council members' institutions (and in the industry more broadly) include strong recruiting programs for diverse students at colleges and in MBA programs, training and development programs (including mentorships), and strong retention programs for diverse employees.

Employee resource/affinity groups provide excellent opportunities for employees of similar backgrounds to connect, along with their allies and advocates. These groups are open to all employees and are employee driven, but they have a formal structure and central operational support (i.e., through Human Resources). Members of these groups are encouraged to be highly active in their communities and assist with recruiting efforts; in addition, members are seen as strategic partners to help businesses reach diverse audiences. Council members note that the banking industry has helped lead industries of all types to broaden their definitions of diversity to include areas beyond gender and ethnicity.

Forums that encourage open dialogue help gather employees to discuss issues important to them. These conversations allow employees to explore and discuss differences in their experiences and perspectives, creating opportunities for more understanding and inclusion. Council members have instituted guiding principles and best practices for these conversations to ensure that employees can engage in a space where they are supported and have access to appropriate resources.

Applying diversity metrics and measurements helps ensure programs, resources, and networks reflect the communities in which institutions operate. In addition to the data-driven work outlined above, "Self ID" programs that help gather diversity data are increasingly common. Such programs are helping companies reinforce a commitment to diversity and inclusion while implementing talent management and development programs, as well as benefits.

Item 7: Employment and Inflation Dynamics

What are the labor market conditions in Council members' Districts? What strategies are employers using to hire and retain good employees? Are employee wages rising, and if so, how fast? Does the Council see any evidence that price inflation is picking up?

All Council members report extremely tight labor markets. Low unemployment has contributed to tighter labor markets across all sectors and regions. As a result, the labor market is intensely competitive for high-quality employees; however, some slack remains, possibly due to the quality of labor. Results from the latest National Federation for Independent Business (NFIB) survey on labor markets indicated that the "quality of labor is the biggest problem" and remained at a record high, significantly outstripping "labor demand" as a primary concern.

Organizations are implementing a range of solutions across the spectrum of the employment life cycle to hire and retain good employees. For example, the use of technology and data analytics is quickly advancing and is already having a significant influence on larger companies' talent strategies. Beyond technology, many employers are establishing a culture of recruitment throughout the organization, with a focus on driving an excellent experience for external and internal candidates. Employers are also increasing their focus on diversity and inclusion practices. A recent Deloitte study has shown that potential employees are increasingly seeking out organizations that align with their values – so much so that they would take nearly $7,000 less in annual salary to work for the right organization.

Specific strategies employers are using to attract and retain quality employees include:

- Creating flexible work-from-home opportunities

- Relaxing dress codes
- Allowing pets at work
- Redesigning benefit packages to provide cutting-edge parental and caregiver leave policies
- Student loan reduction/assistance packages
- Tuition assistance

Many communities are keen to help, working diligently with employers on becoming more inclusive as a way to attract diverse talent, as many employees choose where they want to live before they begin a job search.

Some Council members are reporting the use of hiring bonuses to attract potential employees rather than the use of more-persistent increases in wage levels. This practice is particularly prevalent in technology, manufacturing, and skilled trades. Council members are all reporting increases in their minimum wage, ranging from $14.00 - $25.00 per hour, depending on geography.

Overall U.S. wage growth has been pushed to just over 3%. Future expansions will involve automation and technology to reduce (or shift) labor needs to fewer, higher-skilled workers. In addition to wage increases, companies have expanded their benefits packages and amenities to attract and retain talent. Companies are also working with high schools, community colleges, and universities to increase the quantity and quality of job candidates, particularly for jobs related to technology, manufacturing, and skilled trades.

It should be noted that, despite strong employment and the expectation that higher inflation will follow, jobs and wages are coincident indicators at best, and are more often lagging, not leading, indicators. Markets reprice profit expectations first, and firms follow with actions to sustain profits. As a result, labor does not lead but rather *lags* profits.

Global competition and advances in technology are driving down real output prices. Firms normally increase capital spending, which should result in both productivity and real wage growth. Yet this chain of events has been slow to materialize. The NFIB reports that the "*percentage of firms planning to hire*" is running at 24%, which is much higher than the peak of around 17% during the prior expansion. This contrasts with the NFIB "*percentage (of firms) planning capital expenditures*" at only 31%, which is roughly in line with the 32%-34% range at the peak of the last recovery. This situation indicates that firms are reluctant to increase capital spending despite tight labor conditions, which indicates residual labor slack, albeit with significant labor quality problems.

Current economic projections call for moderating GDP growth, which should moderate inflation pressures. Aside from a decline in petroleum prices affecting CPI inflation broadly, there may be some contagion from the slowdown in the rest of the world that reduces inflation pressure. For example, the Global Manufacturing PMI fell to 52.1 in October, well below its early-2018 peak above 54. The percentage of countries with PMIs above the 50 boom/bust line also fell to 74% in October, down from its 2018 high of 95%. On the fiscal-policy front, prospects for additional U.S. fiscal stimulus look bleak for the U.S. as a whole, unless bipartisan political agreement can be reached.

At this point, it is not clear whether growth will slow sufficiently for the Federal Reserve's Federal Open Market Committee to deviate from its rate-hike pace of 25 basis points per quarter. With the market only priced for 63 basis points of rate hikes during the next year, investors appear to expect a pause in the pace or timing of rate increases.

Item 8: Monetary Policy

How would the Council assess the current stance of monetary policy? Does the Council foresee any impact or significant disruptions to the financial system if interest rates continue to rise?

The Council believes that the economy is at a different point in the cycle than it has been for the past several quarters, and as a result, monetary policy decisions are very delicate.

Current data clearly indicate that economic growth and employment are solid and that inflation is under control and near the desired Federal Reserve target. Short-term interest rates now approximate core inflation indicators and are seemingly neutral to either accelerating economic growth or contraction. However, monetary policy (which until recently has been accommodative), fiscal policy (which has been highly stimulative in the last year), and other exogenous factors (which continue to vacillate), all take time to work through the economic system into the current data.

As a result, the Council believes the Federal Reserve's recent policy statement is prudent and appropriate — that is, interest rates are both "historically low" and "just below the broad range of estimates of the level that would be neutral for the economy — that is, neither speeding up nor slowing down growth." The Federal Reserve not only has the latitude to increase rates gradually into a strengthening economy, but it also has the flexibility to pause on future rate increases and modify balance sheet runoff if data indicate an economic slowdown.

As always, the Council agrees that any contemplated actions should be data dependent, based on a broad range of both lagging and leading indicators. Caution is especially important at this time, given increasing uncertainty regarding the speed and strength of economic growth, as reflected in recent financial market volatility.

The Council continues to believe that the current target for the federal funds rate, along with further increases into a strengthening economy, and a methodical unwind of the Federal Reserve's crisis-level balance sheet, when taken together, will not significantly disrupt the financial system. The vast majority of borrowers, both consumers and businesses, are confident, in good financial condition, and can handle gradual rate increases in a strengthening economy — that is, making payments on their existing debt, while also spending and investing to support continued growth. There are some risks on the edges of the financial system to rising interest rates (e.g., leveraged lending by mostly nonbanks and marketplace lending to marginal borrowers). Nonetheless, the overall financial system is strong and has historically robust risk management, capital, capital generation, and liquidity to absorb even large dislocations — continuing to maintain safety and soundness, to lend, and to facilitate healthy economic activity.

12:00 pm – Luncheon for Council and Board members in the Board Room