

Record of Meeting
Federal Advisory Council and Board of Governors
Friday, May 10, 2019

Item 1: Current Market Conditions

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?

General Outlook

- Financial markets have seen a broad-based recovery in Q1, a stark reversal from the difficult 2018 Q4, with U.S. equities reaching all-time highs on the back of better-than-forecast earnings. Fixed-income instruments also continue to rally, most notably on soft inflation data coupled with the January announcement by the FOMC to be patient about raising interest rates, which has prompted a widespread reduction in interest rates.
- First-quarter real GDP growth came in at 3.2% with no signs of escalating inflation, topping the highest estimate in the consensus of economists surveyed by Bloomberg. At the end of the quarter, U.S. economic data were mixed, still pointing to a slowing economy as the effects of fiscal stimulus continue to wane. Mixed data concerning consumers put pressure on confidence. However, recent indicators, such as the strong April jobs report and the recent uptick in the leading indicators, have been more encouraging.
- Loan markets remain stable and healthy. Overall, economic sentiment within the borrowing space is positive, and actions by consumers and businesses indicate that they are still optimistic. The outlook for loan growth is stable, with strong pipelines beginning to build owing to seasonal momentum and declining interest rates on the long end, both of which should be supportive for continued growth.
- Loan pricing continues to be highly competitive, with lenders showing aggressive terms (pricing, tenor, and covenant packages). Pricing is particularly tight for high-quality owners and properties. Credit quality remains strong for commercial banks, with aggregate delinquency rates of 1.53% for commercial banks in Q4-18, the lowest in over 12 years (FRB). Deposit competition remains strong.

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?

(a) Small and medium-size enterprises (SME)

- Small business optimism has recently shown signs of stabilization after being briefly shaken by January's government shutdown.
- The recent decline in interest rates also appears to have had a positive impact on many categories of loan demand. This has been particularly true in capital spending for the SME segment.
- Today, the volume of business loans with originations of under \$1 million is currently back to levels we experienced in 2015.
- Charge-offs and delinquencies for the SME segment continue to trend at historically low levels, and the flat yield curve has encouraged borrowers to seek longer maturities for new fixed-rate loans.

(b) Commercial real estate (CRE)

- CRE loan growth has slowed, falling to less than 5% year-over-year growth in March, marking the weakest growth rate in five years.
- Commercial property prices are currently falling. Despite this, capitalization rates continue to remain low, and overall CRE prices remain elevated, with the CRE price index increasing by more than 50% in the last five years. We recognize that there are regional and sector differences in this area.
- Multifamily remains one of the strongest categories within the CRE space, owing to elevated home prices dampening affordability for families, particularly millennials. While year-over-year rent growth accelerated slightly to 2.8% in 2018, rent growth has slowed recently due to both the rapid growth in the years since the Great Recession and the volume of construction and deliveries over the last several years.
- Delinquency levels remain low and stable.

(c) Construction

- Construction lending has slowed due to market conditions, high prices for raw materials, and labor shortages, which are extending project lead times. The labor shortage in construction was 4.1% in January, matching an 18-year high.
- Balances of construction and land development loans at banks (H.8) grew at the slowest pace in three years of data. In February, private construction “put in place” was lower than one year previous, led by a 7% decline in single-family residential construction (Census).
- Construction delinquencies are near a 12-year low, with the percentage of noncurrent construction and development loans at 0.4% in Q4-18.

(d) Corporations

- The corporate loan market continues to be robust. Aggregate commercial and industrial (C&I) loans at large banks (H.8) increased at the fastest year-over-year pace in over three years, to 10% in March. The upward trend has been in place since early 2018.
- Debt capital markets remain constructive, recovering from the December/January disruption. Overall volumes are lower year-over-year, but availability for investing is strong. Longer term, the Council members continue to express concern about liquidity in these markets in times of stress.
- Bank lending standards on C&I loans to large and medium firms remained little changed, after easing for the prior seven consecutive quarters (Senior Loan Officer Survey).
- Capital markets have fueled demand for leveraged loans, which currently stand at \$1.2 trillion. Noticeably, 85% of new leveraged loan issuances are considered “covenant-lite,” up from about 60% in 2013 (FRB). A large percentage of these loans are predominantly being made outside of the banking sector.
- Delinquency rates on C&I loans at large banks fell to 0.8% in Q4-18, an over-three-year low (FRB).

(e) Agriculture

- Agricultural lending has slowed, along with weak farm income, weak commodity prices, stagnant land values, and rising delinquencies. Growth in loans secured by farmland is the weakest in over three years of data and below 4% year-over-year.
- Spring flooding in the Northern Plains and Western Corn Belt is having an impact on crop yields and livestock.
- Sentiment remains pessimistic about economic conditions. Items warranting attention include weaker farm financial conditions, uncertainties associated with tariffs and their impact on

demand, the cost of land, and the scarcity of labor, as well as declines in agricultural commodity prices, most of which have declined in excess of 30% over the past three years.

(f) Consumers

- Consumer loans at banks (H.8) grew 5% year-over-year in March, slower than 6% year-over-year growth in 2018. Despite some increases in delinquencies, consumer-lending trends remain stable, supported by the continued health of the economy, including tight labor markets, still-elevated consumer confidence, and accelerating wage growth.
- Although consumer delinquencies have modestly increased, losses are at historic lows. There appear to be differences between banks and nonbanks, with the overall banking quality remaining stable.

(g) Homes

- Sales of previously owned U.S. homes in March eased more than forecast, suggesting the housing market is still finding its footing after a weak 2018. This marked the fourth decline in five months, despite lower mortgage rates, sustained wage gains, and slower home-price appreciation, indicating the sector may need more time to stabilize after sales fell to a three-year low in January.
- Residential construction and loan production in the first quarter of 2019 was constrained across markets, primarily due to harsh, late winter conditions. Applications have jumped in March, signaling a potentially comparable volume of purchase transactions relative to last year.
- The lack of inventory remains an issue, despite high builder sentiment. The shortage of skilled labor appears to be affecting the ability to meet demand for new construction.
- Credit quality remains strong.
- Affordable housing continues to be a challenge nationally.

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?

- While the economy is doing well in aggregate, it is important to recognize that growth rates vary between rural and metropolitan markets, prime and subprime lending, and banks and nonbank lenders.

Item 2: CECL

The Current Expected Credit Loss (CECL) accounting standard is set to take effect January 2020. In the past year, much has been written about the pro-cyclical nature of the new standard. What are the Council's chief concerns in terms of a pro-cyclical impact? What does the Council think are appropriate regulatory steps to mitigate potential impact(s) on consumers and the economy?

Background

In 2016, the Financial Accounting Standards Board issued its CECL accounting standard, with the objective of providing financial-statement users with more useful information related to expected credit losses on loans and certain other financial instruments. CECL changes the guidance for reserves from an incurred, probable losses standard to the expected remaining life of loan losses standard that includes the impact of changes in future economic conditions.

Pro-cyclicality of CECL

The CECL guidance was intended to protect banks, their customers, and investors against a repeat of the 2008 financial crisis. However, every Council member agrees that implementation of CECL, as written, will increase the depth of economic downturns. The resulting pro-cyclical rise in reserves will be most abrupt at the lowest point in the economic cycle, during the trough of a recession. These concerns are exacerbated by the imperfection of economic forecasting.

Impact on Financial Results and Credit Availability

- The primary concern is significant reserve builds and therefore depleted capital levels, not prior to a recession, but rather in the middle of or late in a downturn. As a result, banks will be forced to preserve capital and restrict lending at a time when borrowers need credit the most.
- The greatest impact will be on longer-duration loans, such as mortgage, auto, consumer, small business, and some commercial real estate loans. As a result, smaller, less-diversified firms are likely to be disproportionately impacted compared with larger more-diversified institutions.
- More generally, loan loss allowances for borrowers with less-than-pristine credit histories or below-investment-grade ratings will be highly pro-cyclical because the credit risk outlook for those borrowers, and therefore the associated CECL-based allowances, are highly sensitive to changes in the forecasts of the relevant macroeconomic variables.
- The CECL model is also inconsistent with the economics of lending, as lifetime losses are recorded when the loan is booked, while income is recognized over the life of the loan. As a result, a growing loan portfolio will provide counterintuitive results, and the cost of borrowing could increase to offset the higher cost of lending.
- The impact of CECL on the economy could be a factor in the Federal Reserve's achievement of its dual mandate especially that of full employment, should credit become less available during times of stress.

Appropriate Regulatory Steps

Since the financial crisis, Congress and the federal financial regulatory agencies have enacted reforms through the Dodd-Frank Act to ensure that future crises will be either averted or diminished. These regulatory rules, including regulatory capital rules, were all developed prior to CECL; therefore, CECL reserves were not contemplated in the development of the reforms. Because it remains unknown exactly how CECL will impact the financial industry and interact with post-crisis regulations, the following actions are recommended to mitigate the potential impact on consumers and the economy.

- At a minimum, the Council recommends implementing a capital-neutral policy, in which a portion of the CECL reserves could be considered common equity tier 1 (CET1) capital. This policy would acknowledge the fact that any build in required reserves during stress times would be available to absorb losses and would therefore ensure more credit availability during times of stress. The Council believes the current phase-in approach does not accomplish this objective.
- The Council recommends that the agencies conduct a quantitative impact study to evaluate the potential effects of CECL on bank capital, as well as on lending and economic activity, in varying historical economic conditions and over time. The study should take into account that, in practice, the macroeconomic models and forecasts used in CECL will not have perfect foresight into future changes in the macroeconomic environment. This analysis will allow the agencies to evaluate the impact of CECL and ensure the standard is aligned with other broader policy objectives.

Economic Forecasting Implications

- Macroeconomic trends are extremely difficult to predict, and historically, forecast economic data and associated modeling efforts have been volatile and inaccurate and have lagged actual performance.
- Reviews of key economic-forecast variables going into the 2008 financial crisis show that forecasts missed inflection points in the economic cycle and lagged the actual downturn.
- Additionally, each institution would develop its own “reasonable and supportable” forecast and forecast time horizon, which would allow for significantly more judgment and lead to less comparability across institutions.

Item 3: Tax Law Changes

Now that the tax law has been in effect for one year, how would Council members evaluate its effects on their business or consumer customers? What bank customers benefited most from these changes? What did companies do with their new earnings or capital?

Introduction and Summary

The Tax Cuts and Jobs Act, which was the largest tax reform since 1986, substantially cut statutory tax rates for individuals and businesses through 2025 and permanently lowered the statutory tax rate for corporations from 35% to 21%. Capital-intensive businesses have also benefited from accelerated depreciation, which allows firms to expense the cost of their capital investments through 2022.

Council members unequivocally believe the comprehensive changes in tax law were a positive development for the U.S. economy and have helped contribute to strong labor-force trends, as additional workers were needed as companies invested for growth. The Council believes nearly all businesses, public and private, large and small, domestic- and international-based, experienced a net benefit. The impact to businesses also had favorable spillover effects to employees, as described below. The tax cuts were designed to add to economic growth, and GDP growth in 2018 of 2.9% year-over-year matched a 13-year high.

Tax reform, through lower taxes on businesses, immediate expensing of capital assets, and a move to a territorial tax system for international profits, greatly reduced the cost for businesses investing in the U.S. U.S. multinational businesses also benefited significantly, as the U.S. no longer taxes their foreign earnings as heavily as it did prior to the tax law changes. It will take many years before the full impacts are known, but all industries are expected to benefit from stronger investment conditions.

Individuals also benefited favorably from tax reform. Consumer confidence rose throughout the year as workers received higher after-tax paychecks. Consumer spending growth modestly accelerated, even as consumer loan rates reached the highest levels since 2008. All Council members reported increases in employee compensation, employee benefits, one-time bonuses, and other favorable compensation and benefits enhancements directly attributable to the change in tax law – specifically, consumers benefited directly from the favorable reduction in business taxes.

Effects on business and consumer customers?

The effects of tax reform on business and consumer customers have been positive. Lower business taxes enabled firms to invest for growth, raise employee compensation, and return capital to shareholders through enhanced capital-management strategies (dividends and buybacks).

- The effects can be seen in corporate income tax payments to the U.S. Treasury, which were \$233 billion in 2018, the lowest in nine years. The U.S. Bureau of Economic Analysis (BEA) reported that corporate profits rose 8% year-over-year in 2018, the strongest growth in six years.
- The tax savings allowed businesses to take advantages of growth opportunities. Pass-through deductions helped small businesses. The National Federation of Independent Business reported that

a net 34% of small businesses indicated that it was “now a good time to expand” in two different months of 2018, the highest levels in over 46 years of data.

- The strength in capital spending can be seen in the most recent GDP report from the BEA. For full-year 2018, nonresidential private investment increased \$242 billion (nominal), the fastest growth in eight years.

Consumers received higher after-tax income, with higher-income households receiving increased take-home pay and lower-income households receiving larger tax refunds.

- The effects of tax reform have been very positive for consumers. Higher-income households were helped by lower tax brackets, while lower-income households were helped by increased deductions and credits. However, limits on state and local tax deductions weighed on some individuals’ tax refunds, while some benefited from the higher alternative minimum tax exemption.
- The tax cuts benefited families and individuals by providing them with more after-tax disposable income. The Tax Policy Center has estimated that the average tax cut for all households in 2018 was about \$1,200. For middle-income households, the average was about \$900.
- The effects of increased take-home pay can be seen in the growth of personal disposable income, which accelerated to 5% year-over-year in 2018 (from 4.4% in 2017) and was the strongest in four years.

What bank customers benefited most from these changes?

Business customers benefitted greatly from the tax law changes, as corporate profit growth increased. Council members did not cite any particular industry that received additional or outsized benefits. Accelerated depreciation may have helped limit the impact of higher interest rates on capital-intensive businesses. Real equipment and software spending accelerated in 2018.

- Businesses that paid a high effective tax rate before the reform experienced a larger tax cut, which was beneficial to them, their shareholders, and their customers.
- The tax law also created the opportunity zone, or O-zones, program to increase investment in economically distressed communities. Investments in O-zones receive deferral and reduction of capital gains taxes.

Banks continued to observe strong consumer spending and saving patterns in 2018, fueled by a combination of strong confidence, labor-force participation, and wage growth, and by lower tax withholdings.

What did companies do with their new earnings or capital?

It is still early to fully understand the impact of tax reform on investment. The tax law changes clearly made conditions more favorable to invest for long-term growth – whether through direct business investment (capital spending), employment investment, or the redistribution of capital.

All Council members noted specific actions within our companies as a result of the tax law changes, including increases in the minimum wage, one-time bonuses to employees, and increased philanthropic giving and community development initiatives. A survey by JUST Capital found that companies directed 18% of their tax savings to increasing employment. Nearly 500 American employers have announced bonuses or pay increases, affecting more than 5.5 million American workers, according to the Council of Economic Advisers.

In addition, enhanced capital-management actions (dividends and buybacks) to shareholders were utilized in some cases. JUST Capital surveyed Russell 1000 companies and found that they directed 56% of their tax savings to shareholders. It is important to note that this action allows capital to be redeployed to other sectors or growth opportunities.

Item 4: Marijuana Banking

Roughly two-thirds of states have legalized some level of marijuana use either for medicinal or recreational purposes. However, federally regulated banks currently cannot do business with marijuana-related businesses or their vendors. While many state-chartered banks can bank those businesses, those that do are not eligible for FDIC insurance for their depositors. Does the Council believe that the current system is structured appropriately, given the recent changes in state law and the potential for continued expansion of legalization?

Council members make no comment on whether or not marijuana should be legalized either medicinally or recreationally. However, Council members do believe that the current system is unworkable and should be addressed to enable financial institutions to bank marijuana-related businesses and their vendors in states where marijuana-related activities have been determined to be legal.

Providing banking services to marijuana-related businesses and their vendors currently presents many challenges for banks. Federal law considers marijuana a Schedule 1 drug and prohibits its use for any purpose. For banks, that means all proceeds generated by a marijuana-related business operating in compliance with state law are unlawful and that any attempt to conduct a financial transaction with that money – including simply accepting a deposit – could be considered money laundering. Therefore, a financial institution that opens an account for a marijuana-related business as a customer, or transacts in proceeds derived from such a business, could be charged with (1) aiding and abetting the possession and distribution of marijuana and (2) engaging in money laundering. Additionally, although banking marijuana-related businesses is not directly prohibited by the FDIC, it may revoke deposit insurance if an institution has violated any applicable law or regulation.

While it may seem simple to just not bank a marijuana dispensary, current law also makes it illegal to bank the vendors of the dispensaries. These vendors would include the owner of the commercial real estate where the dispensary is located, as well as its law firm, accountant, electrician, etc. The requirement to “follow the money” results in significant time, effort, and additional Suspicious Activity Report (SAR) filings. As last reported by the Financial Crimes Enforcement Network (FinCEN), SAR filings have continued to rise, with more than 67,000 SARs filed on marijuana-related businesses since 2014. This increase in filings related to activities that individual states have deemed legal could mask true suspicious activity from being identified.

In 2014, FinCEN introduced guidance to clarify how financial institutions could service marijuana-related businesses while meeting their Bank Secrecy Act obligations through the filing of specific SARs. However, the basis for the FinCEN guidance is the recently revoked Department of Justice “Cole Memorandum.” While the FinCEN director has said publicly that the 2014 guidance still stands, regardless of the revocation, the legal basis for that position is unclear. As a result, most financial institutions, after considering the legal, regulatory, and reputational risk, have determined that the risk is greater than the potential reward when it comes to banking marijuana-related businesses and their vendors -- and therefore do not bank those entities.

With limited to no banking options, a cash-only marijuana economy exists, in which large amounts of cash are outside the banking system. This situation increases security risks to the marijuana-related businesses, their employees, and their vendors as they deal solely in cash. In addition, the cash-only nature of the business reduces the transparency of the transactions and makes it difficult for financial institutions and law enforcement to distinguish between ordinary activity and activities that may be suspicious or criminal. Permitting financial institutions to bank marijuana-related businesses and their vendors would improve the safety and efficiency of law enforcement by bringing these activities into the banking system. In addition to improving security and safety, there are economic benefits to providing banking services to marijuana-related businesses and their vendors. These benefits include reduced tax evasion; increased efficiency of tax collection; increased support for the local economy, especially when the vendors and employees of the marijuana-related businesses are concerned; and a more accurate assessment of economic risks.

There is currently proposed legislation in both the U.S. House of Representatives (Secure and Fair Enforcement Banking Act of 2019) and the U.S. Senate (Strengthening the Tenth Amendment Through Entrusting States Act of 2019) that aims to address the issue of financial institutions providing banking services to marijuana-related businesses. However, this proposed legislation does not fully solve the issue.

The Council believes there needs to be a clear legislative solution. Absent a change in federal law, national banks will continue not to bank marijuana-related businesses or their vendors.

Item 5: 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?

What are the labor market conditions in Council members' Districts?

The response from all Council Districts is that labor markets are tight. This is the same response as Council members reported at the February meeting, and it comes on the heels of strong job creation in 2018. This viewpoint is supported by the employment numbers in the first four months of 2019, with an average of 205,000 new jobs per month and an April unemployment rate of 3.6%. The strength in the labor market is consistent across entry-level positions and less skilled positions (such as auto technicians, truck drivers, and retail-services industry employees), as well as in highly skilled positions, including accountants, pilots, and IT positions. Recurring comments from employers about some of the less-skilled positions include the difficulty of finding qualified candidates who can pass a drug test. The passage of a comprehensive immigration reform by Congress would help a tight labor market in some job sectors and geographic areas.

What strategies are employers using to hire and retain good employees?

All strategies discussed at past meetings are still on the table to attract and retain good employees. All employers need to be creative and think outside the box. Providing a good wage and a basic benefit package is not enough to make a company attractive in today's job market. That said, compensation still is, and always will be, the most important factor in employment decisions. But now more than ever, the culture of a company plays a major role in where people want to work. The employer needs to be a good corporate citizen by giving back and investing in the community, as well as by allowing its employees to do the same by volunteering. Benefit packages today include more than health insurance and paid time off. Council members mentioned gyms, child care facilities, parental and caregiver leave, and flexible work schedules as benefits that are important to recent job candidates. Training is also a major factor in hiring the right people because employers are not finding qualified candidates with the required job skills. A number of companies are developing their own in-house training programs or working with area vocational-technical schools to train their new hires for the jobs needed.

Are employee wages rising, and if so, how fast?

Wages are rising but not to a level that would be expected given the tight labor market. Most Council members and employers report wages increasing in the range of 3% annually, which falls in line with the April jobs report showing an increase of 3.2%. An impact on the overall wage level, now and going forward, is the increase in the minimum-wage rate in municipalities, states, and large employers across the country. By implementing the higher minimum wage, employers have to address the resulting wage compression within their companies, which ultimately leads to higher wages across the board in the future for more than entry-level positions. This could accelerate an increase in wages at a faster pace than what would occur with the normal annual salary review.

Does the Council see any evidence that price inflation is picking up?

A few Council members see uneven signs of inflation in some pockets of the economy in their Districts. As some business costs are rising, companies only appear to be passing on modest increases in costs to the consumer when they can. With that being the case, the Council is mindful that this trend could accelerate, resulting in increased signs of inflation.

Item 6: Automation and Employment

Automation may be replacing many “mid-skill” jobs in the U.S. economy. How is automation affecting employment in the banking industry?

Financial institutions are identifying opportunities to use automation, with an initial focus on streamlining middle and back-office repetitive processes. While some believe this evolution will eliminate jobs, most Council members suggest that many roles will instead be changed. Over time, these technologies could be net job creators.

Focus on Upskilling/Reskilling the Workforce

While Council members have differing views on the impact of automation on job creation in the industry, there is a shared belief that the data needed to provide better insight are becoming available. Further technological innovations, additional data points on what tasks and processes are best suited for automation, and an increasing acceptance of individuals interacting with bots and kiosks may combine to accelerate role changes in banking and finance. Council members also agree that the most immediate focus needs to be on preparing workers for these changes, including circumstances in which employee activities will combine with automation. The task is to ensure that bank employees adjust to new technologies and adapt to these new roles. Banks are focused on staff development to ensure employees are prepared for this shift.

Historical Examples of Automation Affecting Employment

The first ATM was introduced in the U.S. in 1969. After slow growth, ATM deployment accelerated from 20,000 in 1980 to 400,000 in 2010. The common perception is that ATMs displaced bank tellers, but teller employment increased from 300K in 1970 to 491K in 2017. More tellers were needed because branches increased from 20K in 1969 to 79K in 2017, driven primarily by the growth in the number of smaller branches, made possible by ATMs and increased cross-state competition.

An example outside the banking industry is self-service check-in at airports. In 2004, 80% of passengers used ticket agents to check in. By 2012, only 20% used ticket agents to check in. Self-service check-in did decrease ticket-agent employment from 142.5K in 2009 to 132K in 2018. During the same period, though, overall employment in the air transportation industry increased from 470K to 508K, driven by 6% annual growth in passenger demand for global air traffic.

Some Impacts of Automation on Employment in the Banking Industry

Today’s technology efficiently executes manual, process-oriented tasks more than it did during prior periods of technology advancement. Deloitte reports that 58% of financial institutions have deployed or are in trial use with artificial intelligence (AI), machine learning (ML), and/or robotics process automation (RPA) in 2019.

Technology has changed how financial services are delivered to customers. Customers, whether consumers, companies, or investors, are driving the changes. Bank branch count is down 16% among the top 10 U.S. banks since 2009. Previously branch-based services are being enhanced by online and mobile delivery. What used to require a trip to a branch can now be accomplished with a simple smartphone picture. As of 2017, Forrester Research found that 79% of retail bank customers used digital channels at least monthly. That steady technology enhancement has enabled the top 10 banks to increase salary per headcount by a median of 39%, to \$121,000 from \$83,000, and to reduce headcount by a median 10% since 2009

Banks now rely on their branch networks to build relationships. Staff in financial centers previously focused on routine tasks such as check deposits, which are now increasingly done through mobile or ATM channels. Branch employees are now handling more individualized engagements with customers. Higher-compensated, “mid-skill” bank employees have the tools, training, and job parameters to focus on higher-value tasks and projects that further enhance the banking experience and level of service for customers and clients.

Banks’ back offices and contact centers will also continue to become more efficient, using maturing tools including “chatbots” and intelligent interactive voice response (IVR). AI, chatbots, and intelligent IVR systems are designed to simulate human interaction to handle less complex customer-service requests. By 2020, Gartner predicts at least 85% of banks will use chatbots. These capabilities will increase productivity, allowing banks to service the same number of customers with fewer sales and service associates.

The Changing Workforce

Forrester Research estimates that one in four jobs may be affected by AI, ML, or RPA technologies by 2019. As in the historical examples noted above, automation carries challenges but also opportunities that could lead to an expanded workforce:

Some jobs will go away

In general, low-productivity activities that were possibly too expensive or difficult to automate in the past are opportunities for increased efficiency. Examples include data entry jobs that are being replaced by imaging, customer self-service, and other options that move data entry away from banking employees. RPA will continue to replace repetitive work currently performed by humans.

Some jobs will be augmented or changed

AI promises to aid identification of patterns and other items of interest faster and better than humans. Workers can then use the analysis to make decisions or seek additional analysis. Credit analysis is one example; an underwriter’s new job may involve *training* the automated tool, *explaining* decisions, and *checking/sustaining* the automated decision (by providing guardrails or detecting any biases).

Some jobs will be redesigned

Automation will allow some jobs to be redesigned to improve employee experience and engagement and to increase their “value added.” For example, a job that involves collection and analysis of information from various sources for the purpose of analysis can be improved via automation. The first part – collection – is often the more rote portion of the task and can often be automated, allowing a worker to focus more time on the more interesting and engaging analysis aspects of a task. A banking-specific example is the Bank Secrecy Act (BSA)/anti-money laundering analysis, in which workers must routinely search multiple websites for company information. This routine search can be automated, leaving the more unique analysis/interpretation work to the BSA analysts.

Some new jobs will emerge

Ten years ago, data scientists, cybersecurity analysts, artificial intelligence architects, and mobile app developers were virtually nonexistent in the financial services industry. Now, they are among the most sought-after, fastest-growing, and highest-paying roles.

Item 7: Emerging Risks

As the long-lived current expansion continues to unfold, are there particular areas in which Council members see economic or financial risks beginning to emerge?

Emerging risks are those that have not yet become apparent and often involve an element of surprise. Given the intertwined nature of markets, monetary policy, and government, any major surprise could reverberate and pose a threat to the economy. Many of the emerging risks discussed herein were identified in the

February Record of Meeting and have been updated based on new information or a shifting of risk since the last meeting.

Council members have identified the following emerging-risk categories: (i) the increasing and high absolute level of corporate debt, (ii) overall fiscal stability/sustainability, (iii) the slowing of the global economy and further event risk, and (iv) cybersecurity risk.

Corporate leverage is a risk due to potential market stress and negative effects on capital expenditures.

- ***High levels of overall corporate debt and increased nonfinancial debt in a potentially slowing economic environment.*** Nonfinancial corporate debt is viewed as a financial risk that may have a higher propensity to default in the event of some market shock, whether economic or through the rate environment. As long as the economy remains stable and interest rates do not unexpectedly rise, debt-service payments should remain manageable since the majority of outstanding corporate debt was predominantly financed at lower rates than in previous cycles. However, one driver of strong debt-service coverage has been record corporate profits. In a profit recession, or even a reversion to historical profitability levels, coverage may fall to an inadequate level. In the past five years (2013-18), U.S. nonfinancial corporate debt has increased 36% to \$9.6 trillion, rising faster than corporate-sector nominal GDP, which increased 22% in that period. Moreover, the level of BBB-rated investment-grade debt, the lowest credit rating that many investment funds are permitted to hold, has grown approximately 287% since the start of the cycle (January 2009). This debt now comprises half of the investment-grade debt market, as compared to only one-third at the start of the cycle. A high volume of downgrades into high yield could impact the refinancing market and restrain overall corporate investment.
- ***Market Volatility.*** Capital markets volatility can negatively impact commercial lending activity, deal structures, syndication pipelines, and problem-loan resolution. Market liquidity risk differs from corporate refinancing risk, as the latter is mitigated by longer corporate-debt maturities through greater reliance on bond markets and a reduction in commercial paper and bank debt. On a macroeconomic level, if corporate cash flow is constrained by debt service, then corporate capital-spending plans may be delayed and adversely impact labor, productivity, and inflation in the *next* business cycle. If a period of financial stress creates substantial illiquidity in financial markets, widening of credit spreads and the constriction of credit availability could affect business activity.
- ***Growth in Nonbank Lending.*** Over the past several years, there has been significant growth in nonbank lending by companies not subject to the same stringent regulatory requirements as traditional banks. Loans underwritten by these nonbank entities are generally resold to investors, such as insurance companies, mutual funds, private loan funds, and other vehicles. In an economic downturn, these loans could create significant credit and liquidity risks if underwriting quality is subpar and the owners of the risk are not willing to work constructively with borrowers.

Fiscal stability and sustainability are at some risk

- ***Fiscal Stability.*** U.S. government spending is consistently in excess of 30% of GDP, outpacing revenue and creating deficits. The U.S. has historically consumed in excess of domestic savings, importing foreign savings surpluses. The fact that the fiscal deficit is growing at this point in the cycle, when one might expect the deficit to be shrinking, may be creating additional risk. Moreover, many states, including SALT states, will be challenged to balance budgets.
- ***Debt Ceiling/Government Shutdown/Federal Budget Stalemate.*** An emerging risk is the re-imposition of the debt ceiling, which becomes binding late in the year. If an agreement is not reached and results in a shutdown, it would result in significant disruption in the U.S. and could have global implications. While the current consensus is that this is a low-probability risk, a reprise of the debt-ceiling standoffs that occurred in 2011 and 2013 would be a high-impact event for markets. Shortly after the February FAC meeting, the last government shutdown was resolved.

While there appears to be no lasting impact on economic growth from the shutdown, future shutdowns could impact confidence and the economy going forward. With respect to the federal budget, the House has proposed increased spending for FY 2020, while the Senate and the administration have proposed cuts – creating a potential stalemate. There are risks of (a) sequestration; (b) another government shutdown; and (c) fiscal brinkmanship and uncertainty. Simulations by one Council member's bank suggest that sequestration could trim up to 0.5 percentage point from GDP growth in 2020.

Concerns over global economic growth trends, along with geopolitical and other event risk.

- ***Slowing World Economic Growth.*** The IMF now expects global growth of 3.3% year-over-year in 2019, down 20 basis points from its January forecast and the slowest global growth since 2009. The forecast noted, “The balance of risks to the outlook remains on the downside.” Contributing factors include:
 1. *Trade.* Continued uncertainty in the trade/tariff environment poses risk to wholesale and consumer prices, supply chains, and the availability of materials.
 2. *Yield Curve.* The spread between the 3-month and 10-year Treasury yield averaged 11 basis points in Mar2019, an over - 11-year low, and was inverted at the end of March, the first time this cycle.
 3. *Comprehensive Immigration Reform.* Member bank simulations suggest that lack of immigration at the Southern border could negatively impact GDP growth.
 4. *Brexit.* A no-deal Brexit may worsen economic conditions in Europe and aggravate the region’s ongoing slowdown, possibly causing a European recession. This would present a spillover risk for the U.S. economy.

Cybersecurity risks are a matter of national defense.

While cybersecurity does not pose a new risk, the rise in frequency and magnitude of “advanced persistent threat” attacks creates increasing financial risk to the financial services industry, the broader economy, and the country. For example, the power of newly introduced quantum computing significantly enhances the power and ability of bad actors to execute attacks that put information at risk. Recent disclosures of successful attacks against governments and related critical infrastructures have underscored the importance of cyber-risk management. In addition to the lost data, stolen money, and reputational harm of a cyber-event, institutions must learn to manage around the lost productivity and disruption to the normal course of business that occur with every attack. Management teams are challenged to respond to a changing threat landscape, increasing defense and resiliency capabilities, on a near-continuous basis. Existing staff and budgets are strained, and procuring additional resources is costly and difficult. Industry sources project there will be as many as 2 million unfilled cybersecurity positions worldwide by 2021. Given that cybersecurity professionals are industry agnostic, salaries are rising and companies are facing a general shortage of qualified candidates. An identifiable risk is that a major security breach at a systemically important financial institution could have a domino effect on confidence in the entire financial system, even though other financial institutions may be unaffected.

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 current monetary policy, a hold on further rate increases and the decline in securities held on the Federal Reserve balance sheet, seems appropriate. These steps appear to be well-timed.

Unemployment remains historically low, and employment gains are strong. Importantly, hourly wages are increasing. However, inflation seems generally subdued and stable in the 1.5 to 2.0% range, still below target, with no significant directional bias.

Very positively, recent employment gains remain strong, averaging 205,000 per month in 2019. Productivity is improving meaningfully – 3% in Q1 and 2.5% year-over-year – and is, importantly, moderating inflation pressures. In spite of the recent record low unemployment rate, the labor force participation rate has declined slightly.

The divergence of U.S. interest rates from rates in the rest of the developed world is now considerable and supports a pause in further rate increases.

Global economic strength is modest, possibly a bit slower, but still positive. China and Southeast Asia are strengthening. Europe is slower but positive, and emerging markets are stable. Oil prices are higher, but still in a very satisfactory range. Two primary global issues, Brexit and trade disputes, remain risk factors. However, trade talks with China are proceeding slowly, and Brexit has been given more time to be resolved.

Does the Council foresee any impact or significant disruptions to the financial system if interest rates continue to rise?

Overall, it would appear that a neutral monetary policy position has been achieved and further rate increases, at this point, would be counterproductive.