RECORD OF MEETING

Federal Advisory Council and Board of Governors
Friday, February 7, 2014

Item 1: Current Banking Market Conditions

What is the Council's view of the current condition of, and the outlook for, loan markets and financial markets generally?

The most significant feature of current market conditions is the deterioration of C&I loan terms and conditions, which the Council believes to be significantly rooted in increased competition from the shadow banking sector.

- The banking sector continues to have excess capacity with loan demand varying from soft to moderate, with greatest loan demand in C&I and CRE loans. Competition for loans remains intense as banks are chasing a limited pool of very creditworthy borrowers. Banks are winning deals by relaxing underwriting standards, such as covenant levels, pricing, collateral advance rates, guaranty burn-off, and longer loan tenor.
- Loan spreads have tightened, particularly on new deals, and fees are lower and harder to obtain.
- Going into 2014, the financial markets are influenced by uncertainty over federal fiscal and monetary policies and by ever-changing regulatory metrics. Investor concerns about rising long-term interest rates and the potential for short-term rate increases are dissuading investors from committing capital to longer-term fixed-rate products in favor of floating-rate and equity investments.
- Despite the recent correction, equity markets have demonstrated substantial gains across broad categories during the past year. Dealers are less willing to hold sizable inventories of bonds, primarily due to more stringent capital and liquidity requirements.
- Borrowers appear cautious due to concerns over potential tax increases and regulations, the slow growth of the economy, and uncertainty regarding health care costs. While they remain selective about new borrowing and capital expansion, businesses and consumers are finding themselves in a position where they need to make investments.
- Although the unemployment rate has continued to decline, consumer confidence has been slow to recover and households continue to deleverage their balance sheets and save at a higher rate than the pre-recession period.
- Much of the growth in the commercial sector has been driven by increased business investment in fixed assets and inventories.

(A) Small Business Lending:
Has credit availability for, and demand for credit from, small businesses changed

significantly recently? Have there been changes in lending standards for these borrowers?

- Overall demand for credit by small businesses is slowly recovering. Business owners continue to be cautious about significant capital outlays and are unwilling to increase leverage due to a lack of confidence in the economic environment. In general, small business owners have maximized their operational efficiencies and require less working capital to finance current operations.
- Members report there is ample capacity in the industry, resulting in aggressive competition mainly related to loan structure and pricing.
- Despite subdued loan demand, some respondents were able to increase loan production among small businesses by targeting their prospecting and lending activities at owner-occupied real estate loans and health care equipment and acquisition financing.
- No substantial changes in lending standards were noted, other than some associated with the targeted lending activities mentioned above. One member noted that cash flow and score thresholds remain, but capital and loan-to-value requirements were eased.
- Weaker customers appear to be using nonbank financing alternatives more frequently. Alternative lenders that are largely unregulated are finding ways to satisfy loan demand for borrowers that are not being served by traditional banks.

(B) Commercial Real Estate Lending:

Have there been any changes in the Council's view of the challenges in the commercial real estate market? How are commercial real estate loans performing compared to your expectations?

- Members report that commercial real estate loan portfolios are generally performing well and that fundamentals continue to improve for most property types. The pace of improvement varies widely by geographic location, with faster improvement in those markets enjoying higher levels of job growth.
- The challenge of fierce competition for financing quality projects continues. While C&I demand is muted, more banks are looking to CRE loans for growth, which is putting pressure on both structure and pricing. Multiple sources of financing for CRE have returned to the marketplace, including CMBS, providing property owners with alternatives to traditionally structured debt.
- Challenges in property performance continue to exist with retail and office properties, as both have experienced a slow recovery.
- The multifamily market continues to be strong. Apartment projects are leasing well ahead of projections, although in some markets, the pace is slowing. The increased supply should be monitored for its impact on rental rates and the potential for overbuilding in some sub-markets.
- Industrial demand is moderate to strong in select major metropolitan markets, with vacancy rates at levels that have spurred new construction activity and, in some markets, have attracted investor interest.
- The hotel industry is improving, continuing a trend that began in 2011. Investor interest has returned.
- Continued growth and asset quality improvement in the commercial real estate portfolio is expected, as it is performing reasonably well and better than expectations. Contributing to

the portfolios' performance are low interest rates, the slowly improving economy, and higher occupancy rates.

(C) Construction Lending:

What is the Council's view of the availability of credit for construction and development projects? Has the Council seen any changes in the demand for construction loans recently?

- The availability of credit for commercial real estate construction projects remains ample but varies by both property type and location.
- Loan terms available for these opportunities continue to become more aggressive as lenders compete for the business. Requests are more carefully underwritten with preference given to known operators and existing customers. However, some lenders have loosened terms in some cases to attract good projects.
- Members are experiencing "consistent" or "solid" demand for construction loans, with one member reporting that demand is increasing.
- Multifamily project demand remains strong across the board and regularly attracts multiple lenders competing for the business.
- Demand for office and industrial construction loans varies by location. For example, demand has moderated or increased in parts of California, while it has remained steady in Houston and Dallas.
- Credit availability for office and retail projects is heavily dependent on pre-leasing and/or substantial equity contributions. In most markets, building on a speculative basis cannot be justified. Investor demand for this type of credit is also limited, given that both of these property types are lagging the recovery.
- Industrial fulfillment centers (for online retailers and the online operations of brick-and-mortar retailers) have sparked some industrial construction demand. Construction loans for renovating older infill industrial properties have also increased both on the West Coast and nationally.
- There has been an increase in both demand and credit availability for single-family construction loans in some metropolitan areas. Many of these local and regional developers are financially strong, having withstood the recession, and are commanding aggressive loan terms. National homebuilders still dominate the marketplace, so project-specific financing remains at very low levels. Publicly traded homebuilders are acquiring regional homebuilders for their lot supply.

(D) Agricultural Lending:

Have there been any recent changes in agricultural lending?

- In 2013, agricultural commodity prices declined rapidly as a result of record acreage being planted, overall good growing conditions, and record harvests. This has resulted in spot prices being 40% lower for corn, 10% lower for soybeans, and 22% lower for wheat compared to one year ago. Sugar beet prices are down 50% from prior years.
- This drop in commodity prices will significantly reduce farm income, profits, and land rents, tempering what had been a rapid increase in farmland values. Agricultural lenders have tightened underwriting standards with an expectation that the multiyear increases in farmland value will end.

- Severe drought in California will result in the fallowing of several thousand acres of farm ground. Farm input and equipment suppliers will also experience reduced demand for seed, fertilizer, and equipment. Within the Dallas District, bankers also continued to report negative effects from drought, although some areas have improved. These shortages may result in a temporary increase in prices.
- Banks will be reviewing their portfolios for changes in credit quality. The industry is coming off of a number of years of above-average income, thus many producers have working capital and balance sheet strength to carry them through 2014.
- In the upper Midwest, early projections for 2014 indicate that crop values will be less than the cost of production, with very few marketing opportunities available to improve income. Stress is expected in 2014 and likely 2015, particularly for producers with longer-term fixed production costs, such as land rents that were established under the assumption of higher commodity prices.
- The outlook for protein (beef, swine, and poultry) and dairy sectors is very positive for 2014. Falling grain prices result in more favorable margins for protein producers who use feed grains to raise animals and for food processors who utilize these grains as raw materials. Grain processors also benefit from greater demand for storage and transportation.

(E) Consumer Lending:
What changes have you seen in consumer lending?

- Consumer attitudes and willingness to spend appear to be improving, as seen by credit card spending growth hitting a four-year high in December. However, the pace of spending is uneven from month to month.
- With regard to consumer lending activity, responses are mixed:
  - Some members reported a decline in consumer loan volume in the fourth quarter due to economic uncertainty and rising rates.
  - However, others report that consumer credit continued its recent growth pattern and that outstandings rose at an annual rate of 4.75% during November.
- Because real estate-secured loans (e.g., home equity loans) form the bulk of new loans, their volumes have increased in recent months, the sustainability of which remains to be seen. In some markets, home equity lending is soft as home values have stabilized but continue to be significantly lower than pre-recession levels.
- Home equity loans will now be underwritten under the Dodd-Frank Ability-to-Repay rules, which became effective in January 2014. Early anecdotal evidence suggests the number of borrowers who qualify for home equity loans is being constrained. Some of that demand will likely shift to other forms of consumer credit offered by banks and nonbanks.
- Overall borrower credit quality remains strong and stable, and overall portfolio asset quality trends are favorable. However, increasing losses in some sectors (e.g., student loans) have been seen.
- It was also noted that banks may be faced with higher delinquencies and incremental losses on home equity originated in the boom years of 2004-2007, when loans start resetting after ten years. Many borrowers, absent loan modification, will be required to start paying both interest and principal.

(F) Home Mortgage Lending:
What changes have you seen in the home mortgage market in the past three months? What is happening to house prices?

- Mortgage application volumes have fallen, with two members reporting applications down 22% and 37% in Q4 from Q3. These levels are also down significantly from Q4 2012 levels.
- Loan volumes have also significantly declined, both in purchase and refinance transactions. Refinance volume in particular has dropped dramatically due to rising interest rates.
- Purchase transactions have become an increased percentage of new mortgages in recent months. Refinancing volumes are expected to be significantly lower in 2014 as well.
- Declining mortgage applications and increased interest rates have led the Mortgage Bankers Association to lower their forecast for 2014 mortgage originations.
- Lenders continued to work on preparing for the implementation of the Dodd-Frank Ability-to-Repay and Qualified Mortgage rules that went into effect January 10, 2014. Internal resources have been focused on systems implementation, training, and education for front-line and back-office personnel. The new rules could further dampen mortgage production as some lenders may narrow their suite of available products.
- Housing prices have risen over the course of Q4. October marked the 20th month of consecutive monthly increases in home prices nationwide on a year-over-year basis. Price increases are projected to continue but at a slower pace. Despite price gains, some vicinities (including many low-income, urban areas) still have a large percentage of homes that have a negative equity position.
- Interest is starting to be seen in the jumbo market, and many lenders over the past three months have started to aggressively price their jumbo nonconforming products lower than the conforming agency (Fannie Mae and Freddie Mac) products.
- Spreads on the sale of mortgages have tightened, which may cause financial institutions to consider adding mortgages to their portfolio.
- Mortgage loan portfolio quality has improved, as measured in reduced delinquency and lower loss rates.

(G) Mortgage Foreclosures:
What changes has the Council seen in the pace of mortgage foreclosures during the past three months?

- From an overall market perspective, the inflow of new foreclosures appears to be moderating. National foreclosure starts in December were down 28% from a year ago and down 1% from the prior month.
- The pace of foreclosures remained unchanged in Q4 compared to Q3 but has decreased significantly (ranging from 28% to 40%) compared to Q4 2012.
- A member reported that foreclosures as a percentage of total loans have fallen to their lowest level since Q2 2008. Mortgage foreclosure rates in the three Eleventh District states have also shown some recent improvement, falling 2.5% in Louisiana, 3.4% in New Mexico, and 1.3% in Texas.

- In California, notices of defaults dropped 10.8% in Q4 2013 compared with the prior quarter, and 52% from the prior year, based on research from DataQuick. Default notices filed in Q4 2013 against California homeowners were at the lowest level since Q4 2005.
- Foreclosures in process are maintained at a higher level in some areas due in part to backlogs in the judicial foreclosure states and changes in the foreclosure process. Foreclosure sales timelines continue to show improvement in nonjudicial states.

Item 2: The Outlook for Banking in 2014

What is the council's view on the following matters in the coming year:

(A) The greatest competitive challenge for the industry?

- The greatest competitive challenge facing U.S. banks today is achieving returns that are consistently greater than the cost of capital, given the cumulative effect of higher capital requirements and increased regulatory restrictions and costs. This challenge is common to all U.S. banks, regardless of size and scope, and presents a significant threat to the long-term viability of an industry necessary for sustained economic growth. The following factors are driving down capital returns:
  - Regulatory uncertainty around end-state capital and liquidity requirements (e.g., changes in Supplementary Leverage Ratio and Liquidity Coverage Ratio) force management to hold more capital than they otherwise would.
  - Costs of implementation and compliance have proven unduly burdensome to smaller entities.
  - Litigation costs related to the financial crisis continue to present a challenge to the operating environment with each agreement building upon the last; in addition, capital requirements are likely to increase substantially under Basel 2/3 as a result of ongoing settlements, even when banks have exited the associated businesses and/or product offerings.
  - The ongoing low-interest-rate environment continues to suppress product margins regardless of bank size.
  - New and innovative competitors have been quick to recognize the opportunity to compete with regulatory-burdened banks; unregulated, nonbank innovators are making meaningful inroads to lending (e.g., peer-to-peer) and payment systems while avoiding costly regulation.
  - Banks' ability to retain talent will continue to be challenged as compensation remains under legislative and regulatory pressures globally and as competition with financial companies outside of regulatory purview grows.
  - Cybersecurity presents a challenge to banks that face continuously evolving and increasingly onerous requirements given their important role in the financial system; it is yet to be seen who bears the ultimate costs associated with securing payment systems.
  - Rating agency concerns around banks generating adequate returns have the pro-cyclical effect of increasing the cost of funding, thereby driving down returns further; like investors, rating agencies are struggling to find a clear path to sustainable returns through the forest of regulatory change.

- These many and varied issues present significant competitive challenges to banks' ability to generate an acceptable return on equity. Investors have choices; a competitive and regulatory environment that continues to foster uncertainty will ultimately lead them to allocate capital from banks to more attractive alternatives. The capacity of the banking industry to successfully raise capital during the 2008-09 crisis was a critical part of the stabilization of the U.S. economy. An important question is, given banks' inadequate prospective returns, would U.S. banks be able to repeat that success in future crises.

***(B)* The most substantial regulatory concern for the industry?**

Overview

- Today's banking industry is in a cycle of rapid rulemaking across multiple jurisdictions and, in some of those jurisdictions, across multiple regulators. The aggregated impact is the greatest concern to the industry. That said, individual banks have specific concerns driven by business model, geographic coverage, and absolute size.
- Large banks that have a presence in capital markets are generally focused on issues related to constraints on leverage and international competitiveness, where regulatory rule sets have the potential to vary geographically and lack necessary coordination with U.S. counterparts. Smaller banks are focused on the rapidly increasing and unpredictable costs of compliance with new regulation, particularly on the consumer lending front. Both large and small banks share a common concern that the onslaught of new regulation coupled with unpredictable and aggressive enforcement will cause real damage to investor returns. Ultimately, this could impede banks' ability to play their critical role in the U.S. economy by disrupting the industry's capital attraction.

The regulatory challenges facing U.S. banks can be separated into two baskets.

- First, the breadth of rulemaking and speed of implementation are remarkable and require careful coordination across regulators.
    - Regulators have rewritten capital requirements under Basel 2.5 and 3, both of which significantly increase capital charges across nearly all asset classes. These new rule sets are more complex than previous versions and require substantial investment to implement, particularly as U.S. banks have yet to come out of Basel 2 parallel. Basel 3 risk-based capital requirements may prove to be of less relevance for larger banks as the introduction of the U.S. Supplementary Leverage Ratio ("SLR") is likely to be the dominant measure of capital sufficiency. The current U.S. proposal would establish a meaningfully higher capital requirement for U.S. banks than foreign peers, placing substantial pressure on lower-risk, flow-based businesses, especially securities-dealing activities. Notably, investors have increased pressure on U.S. banks to comply with Basel 3 and other proposed rules well in advance of required implementation dates.
    - In addition to new capital rules, Basel has expanded its scope to include two measures of liquidity: the Liquidity Coverage Ratio ("LCR") and the Net Stable Funding Ratio. Not dissimilar to the SLR approach, U.S. regulators have proposed a stricter version of the LCR. This has the potential to both increase requirements at U.S. banks relative to foreign peers and prove costly to implement due to its "worst-of" 30-day calculation requirement.

    - The costs associated with implementing new capital and liquidity rules are compounded by a lack of coordination among U.S. regulators. U.S. banks continue to be supervised by numerous bodies, each often pursuing its own agenda. Roles and responsibilities often remain unclear, leaving room for multiple regulators to establish conflicting or overlapping but disconnected agendas. Similarly, internationally active banks continue to suffer from foreign regulators not working collaboratively with their U.S. counterparts. This issue comes at a high cost as some foreign regulators have sought to ring-fence capital and liquidity resources that are well in excess of Basel standards.
- The second basket of challenges relates to the sheer volume of new rules and the intensity of implementation on the part of regulators.
    - Smaller banks in particular face implementation costs that reflect complex rule sets often designed with their larger counterparts in mind, where associated costs are borne across a broader enterprise. These costs can increase substantially when one adds implementation of new regulation related to consumer lending activities.
    - Banks face potential challenges relating to the Consumer Financial Protection Bureau, where a bias toward enforcement action rather than rulemaking may leave banks with an unclear understanding of consumer regulations and may result in an exit from products and services that are beneficial to consumers. In addition, the extension of consumer protection regulatory findings to banks' safety and soundness ratings may be overly punitive given the relative newness of rules, their lack of clarity, and the time required to resolve issues with the agencies. It serves as an example of regulatory intensity that appears to be on the rise.
    - The costs of regulatory implementation extend beyond dollars and cents to management attention. U.S. bank management teams and support staff are stretched by overwhelming regulatory change. This comes at a time when many business strategies require the discontinuation of product offerings that generate revenues at the margin but no longer make economic sense under the current operating environment. The ability to adequately staff audit, compliance, risk, finance, operations, and technology control positions to meet regulatory challenges is an ongoing and sometimes daunting task.
- So what should be done? In short, the industry and its regulators need time to understand the impact of all that has been accomplished thus far. U.S. regulators should coordinate and agree to roles and responsibilities that do not compete with one another. U.S. and international regulators should better collaborate on large-bank regulation and end protectionist behaviors that perversely increase the likelihood of a bank failure by restricting flows of capital and funding across the enterprise. U.S. lawmakers should recognize that the path to economic recovery necessarily includes healthy capital markets, consumer and commercial lending, and financial product innovation – all of which should be subject to a level playing field of regulation across bank and nonbank entities.

(C) **The most significant technological change in banking?**

- There are a lot of important technological changes in banking. All are game-changing. In part, investments are needed to stay relevant to our customers; in part, they are needed to ensure cybersecurity.

- The digital revolution in processing, storage, and communication of information continues to have broad and profound impacts on the broad economy. The banking industry, which has its basis in both information and access to the payments system, is especially sensitive with impacts ranging though new participants, structure, capacity, economics, capabilities, security, regulation, and customer behavior.
- The Council believes that for the banking industry, technologies can be both enabling and/or disruptive. Any significant technology change for banking may have both, but will probably be fundamentally disruptive to incumbents and will require that banks and other financial system participants continue to transform their products, operating platforms, and business models. These changes can be broadly grouped into the following areas:
    - **Data security.** Recent reports about data security clearly highlight this aspect of technological change as a "show stopper" in both scale and impact. The question of data security will be taken up in item 3; however, it cannot be overstated that there are fundamental issues of systems design and revision of standards, which will require immediate re-engineering to support public confidence in the payments system.
    - **Payments system.** The shift in the payments system from paper-based to digital platforms is now at a tipping point, where the costs of maintaining physical platforms will accelerate the transition. New payment system entrants have different business models that use the capacity and resources of the regulated banking system, but clearly do not have the same cost structure and may not have the same issues with security and regulation. It is not difficult to imagine that new, convenient, technology-intermediated interfaces sponsored by Internet companies become consumers' preferred mode of payment, leaving the traditional banks in the position of diminished growth, no longer in a primary relationship with their customers, and facing rising costs of regulatory compliance, problem resolution, and other customer services.
    - **Talent and ideas**. Access to technology experts with relevant experience and skills will continue to be a critical challenge, especially in retaining talent while the pace of change accelerates. Notably, the reliability, integrity, and robustness of the various platforms used by banks and the banking system depend on both the inventiveness of this talent base and their personal integrity. Likewise, the pace and benefits of innovation may be limited by threats of patent infringement and/or the manipulation of standards.
    - **Big Data and data mining**. Accurate and robust customer information has always been of critical importance to financial services companies. Big Data refer to data sets that are complex, at times unstructured, and often larger than the traditional data sets banks process today. With an increased focus on front-to-back processing, an expansion in the breadth and depth of risk metrics, and the growing complexity of banks' global regulatory environment, Big Data and the corresponding analytics will be a critical focus area for the industry in 2014.
    - **Mobile platforms**, such as smartphones, will continue to gain accelerated customer acceptance along with preference for self service. While new applications may provide opportunities for sales of additional services, there is also an acceleration of the obsolescence of physical branches. One member noted: "Over the last decade, branch transaction volume has fallen by 45 percent. In fact, no trend has impacted

the financial services industry as much or as quickly as the drive-to-digital." The integration of financial services activities into hardware, operating systems, and non-bank applications could also change the economics and relative competitiveness of banks' customer acquisition and retention strategies.

    - **Artificial intelligence**. One, if not the most, important function of banks is the identification and assessment of risk. New technologies, including high-frequency trading, ALCO structuring, credit scoring, and sophisticated bank modeling and dynamic stress testing, depend on complex and interrelated technologies – iterative, high-speed systems that build on themselves to "learn" in real or near-real time. These will be increasingly required and relied upon to assess and manage both specific and systemic risks.
    - **The cloud**. The abstraction and virtualization of data storage and processing services into remote centers accessible through high-bandwidth connections impacts the convenience, cost, and capacity of any data-intensive industry, which certainly includes banking. One member expected to see "a continued focus on cloud computing in 2014, as banks strive to optimize and reduce their infrastructure costs associated with their underlying compute plant. Where there is an ever-increasing demand for compute cycles and storage, cloud providers can manage parts of our plant as an alternative to managing and growing our own data centers. This will include the virtualization of existing resources (servers, storage, etc.), as well as an evolution from 'private' to 'hybrid' to 'public' cloud."
    - **Digital currencies.** Alternative currencies, such as bitcoin, have been receiving a lot of media play. Several members noted that the introduction of digital currency could be a very disruptive phenomenon.
    - **Fixed income market.** New regulations in Dodd-Frank, combined with the integration of trading, will potentially transform fixed-income markets, which will become more and more electronic across multiple aspects of the trade lifecycle. From pre-trade checks to execution on emerging SEFs (Swap Exchange Facilities) to centralized clearing of trades, our industry will be delivering more and more E*Trading technology in the fixed-income domain.

***(D)* The general prospects for mergers and acquisitions?**

- Current views on the general prospects for mergers and acquisitions are dependent on the size of the acquiring institution.
    - Most see little or no merger opportunities for the four largest institutions given the "Too Big to Fail" discussions in Washington and the new capital requirements.
    - Views are mixed for regionals and super-regionals, with some regionals stating that they believe mergers create unknown legal and regulatory risks and others feeling that strategic mergers would create scale badly needed to realize efficiencies in a world of soaring regulatory and technology costs. The enhanced prudential standards for larger banks serve as a deterrent to grow via acquisition unless substantial efficiencies can be gained.
    - There was a consensus that most of the merger activity will exist in the community bank space. A lack of succession planning has led to small community bank CEOs who are tired and ready to retire but are without a successor. Private equity firms

purchased failing institutions during the crisis. With the benefits of these prior deals waning, many are looking to deploy a "roll-up" strategy to continue to create value.

- Earnings have improved for most banks, albeit from a very low base, largely due to the continued improvement in credit. This, combined with the anticipation of higher rates, has improved many banks' currency value, which they would like to use to acquire institutions where they can realize efficiencies and improve their future earnings outlook. Investors expect consolidation in the industry, which is a driver of higher stock prices. Yet, activity remains subdued as a result of looming regulatory, legal, political, and economic uncertainty.
- In normal times, M&A activity allows for the rightsizing of the economics and returns in a business. The evolving and complex regulatory landscape clouds the typical M&A decisionmaking process (for both sides of the equation) and thus is having a dampening effect on M&A activity. A proposed large regional acquisition, now delayed for 18 months due to the lack of regulatory approval, serves as a warning to would-be buyers and sellers that the process can be cumbersome and time consuming.
- Overcapacity continues to exist in the industry with 6,900 depository institutions and approximately 97,000 branches in the U.S. banking system. Currently, only half of banks are able to produce returns above their cost of capital.
    - The inability to generate returns above the cost of capital creates a longer-term safety and soundness issue for the industry if investors believe that regulators will dampen needed industry consolidation.
    - Furthermore, lower returns threaten the industry's ability to raise capital through equity issuances. Since 2007, large and regional banks have issued over $100 billion in common equity (excluding the common equity issued to support acquisitions).[1] It is frightening to consider what would have happened had these banks not had access to the capital markets during this time.
    - Further risk exists when all discretionary resources are used to meet soaring regulatory costs, and less-regulated nonbanks can devote their resources to innovative new payment solutions and enhanced delivery platforms that have the potential of disrupting the business as it exists today.
- Many in the industry believe that the extension of consumer protection regulatory findings to safety and soundness ratings that then prevents them from engaging in M&A activity seems overly punitive given the lack of clarity in how rules are interpreted and the protracted timeline to resolve issues with the agencies.

Item 3: Data Theft and Banking

The recent theft of personal information from a large retailer has increased concerns about the security of such information. What steps have banks taken to safeguard customer information and to ensure that their customers' electronic transactions are secure? To what extent do large data breaches pose a threat to the financial health of individual firms and to the financial system more broadly?

[1] Source: SNL Financial. Excludes TARP preferred. Issuance gross of any redemptions. (Includes Bank of America, Citi, Wells Fargo, JPMorgan, PNC, U.S. Bancorp, Fifth Third, BB&T, Regions, KeyCorp, SunTrust, Capital One, Huntington, M&T, and Comerica).

What additional steps can the industry and regulators take to minimize the risk of theft of customer data?

Ensuring security of personal information is critical as large data breaches pose a threat to confidence in the financial system

- In today's environment, an enormous amount of data is transmitted and stored electronically by the public and private sector, requiring all parties involved to continually evolve the security measures used to protect that data.
- Recent breaches show that the sophistication of attacks is increasing and attackers are more able to rapidly monetize the information they steal. The interconnected nature of the U.S. financial system means that these attacks may have a broad effect on the industry.
- Although systemically important financial institutions are generally able to absorb the financial impacts of large data breaches at retailers, the impact on smaller financial institutions can be more severe.

Banks have led the way in information security to ensure customers' personal information and electronic transactions are protected

- Generally, banks have mature programs that employ sophisticated processes and technologies to manage existing and emerging information security risks. Such programs generally involve a risk-based approach and comprise multiple layers of security as outlined in industry standards. Some of these security measures include:
    - **Encryption** ensures information is shared between authorized parties.
    - **Authentication** ensures authorized parties are properly identified and authenticated prior to gaining access, including passwords, PINs, and multifactor authentication mechanisms such as tokens and biometrics.
    - **Internal access controls** ensure that access to customer information within the financial institution is limited to personnel who require it based on their role and job responsibilities.
    - **Fraud detection strategies and intrusion protection and prevention systems** are designed to detect and respond to suspicious activity on a customer's account or in the financial institution's technology environment.
    - **Training and awareness programs** ensure employees are educated about proper handling of sensitive information.
    - **Vendor management programs** ensure third-party vendors and partners are held to the same information security standards as the financial institution's internal systems.
- A number of forums, such as the Financial Services Information Sharing and Analysis Center (FS-ISAC), exist to allow financial institutions to share information regarding existing and emerging threats and best practices.
- Financial institutions have provided customers with information on how to prevent fraud and the tools to better monitor their own accounts, including customer alerts.
- To date, most reported large breaches have occurred with vendors or other participants (such as retailers and merchant processors), which suggests that banks generally have successfully protected in-house data, but that other "weak links" need to be further addressed.

Banks have collaborated with other participants in the payment system to share best practices and establish standards to protect cardholder data through the Payment Card Industry (PCI) Security Standards Council

- In response to a number of well-publicized breaches of credit card data from large retailers in 2003-2005, PCI ramped up security requirements for merchants, acquirers, processors, and networks.

PCI Data Security Standard – High Level Overview

Build and Maintain a Secure Network and Systems	1. Install and maintain a firewall configuration to protect cardholder data 2. Do not use vendor-supplied defaults for system passwords and other security parameters
Protect Cardholder Data	3. Protect stored cardholder data 4. Encrypt transmission of cardholder data across open, public networks
Maintain a Vulnerability Management Program	5. Protect all systems against malware and regularly update anti-virus software or programs 6. Develop and maintain secure systems and applications
Implement Strong Access Control Measures	7. Restrict access to cardholder data by business need to know 8. Identify and authenticate access to system components 9. Restrict physical access to cardholder data
Regularly Monitor and Test Networks	10. Track and monitor all access to network resources and cardholder data 11. Regularly test security systems and processes
Maintain an Information Security Policy	12. Maintain a policy that addresses information security for all personnel

- Notwithstanding recent breaches, the security of the payments ecosystem has improved since the introduction of PCI and its Data Security Standard. In particular, most merchants are no longer storing account information that was the source of most earlier large breaches, and CID (3 digits on card back) helped address several fraud types.
- Following several years of improving U.S. fraud trends, new threats have resulted in higher industry fraud losses even before the recent breaches. Total U.S. fraud is estimated in 2013 at around $6-7B (12-14bps of card volume), of which roughly 2/3 is absorbed by banks and the remaining 1/3 by retailers. The rapid growth of "card-not-present" transactions has contributed to higher industry fraud losses, as has the growth of less secure "signature debit" (unique to the U.S.).

There is no one "silver bullet" fraud solution, but rather a combination of tools and technologies is required

- While many are now refocused on EMV (chip cards), the table below shows no single technology will mitigate all fraud types. Instead, a combination of chip, plus PIN, plus tokenization, and adherence to evolving PCI standards (including encryption) are needed. The combination will ensure the most robust fraud protection possible by providing stronger protection of sensitive transaction data while also rendering compromised data less useful or less valuable for committing fraud.

Fraud Type	Rounded % of Total Fraud	Fraud-Mitigating Technology
Counterfeit/Skimming	35%	EMV (and/or PIN)
Card-Not-Present	40%	Tokenization + PIN equivalent
Fraud Application, Account Takeover	15%	Authentication
Lost/Stolen	10%	PIN

All fraud data derived from various industry sources

- The recent, large merchant breaches have resulted in widespread costs, inconvenience, and consumer and industry concerns. However, there is not currently industry-wide agreement on the best path forward. Questions include:
  - Is EMV really cost-justified to put in place at this point (one estimate is a cost of $3B to banks for issuing chip cards plus $5-7B cost to retailers for new terminals)?
  - How should EMV be implemented (chip and PIN or just chip, transition timing, liability and costs, consumer education)?
  - What are the other steps to be taken (tokens, card-not-present protections, encryption, etc.)?
  - Who controls the new standards and how are they implemented (banks, networks, industry group, merchants)?
- Several entities are currently pursuing higher security efforts:
  - Major networks have individually announced liability shifts for EMV implementation beginning in 2015.
  - The Clearing House (TCH Secure Cloud) and the major networks (through EMVCo) are both pursuing tokenization.
  - Retailer groups are heavily weighing in on security requirements and costs.
  - PCI is continuing to enhance security requirements.
  - The FIDO Alliance (Fast IDentity Online) was launched in 2013 to replace online passwords with more secure and easier-to-use authentication methods.
  - New entrants (PayPal, Google, Square, etc.) are pursuing wallets and other efforts that could impact security positively or negatively.

An independent governing entity would allow all participants in the U.S. payments system to come together to identify the best solutions and migration path to combat card-present and card-not-present fraud

- The success of new fraud-mitigating technologies in the U.S. will require unified industry adoption to ensure the highest return on investment while also allowing for global interoperability. Open access and industry collaboration is required to ensure all payment methods are as secure as possible, now and in the future. The industry began using magnetic stripe technology that was open, interoperable, and noncompetitive. That became the basis for today's global payments industry. Evolving magnetic stripe to new technologies, such as EMV, biometrics, mobile, etc., requires the same open access, industry collaboration, and noncompetitive environment. The successful adoption of new technologies in other countries largely can be attributed to these principles being implemented by independent governing entities, such as the UK Payments Administration

(previously APACS) which successfully led a transition to chip and PIN that reduced UK fraud from 15bps to 5bps over a several-year period.
- A public awareness campaign on behalf of all payment-system players through an independent governing entity would educate customers about new card features as well as the importance of and how to go about protecting their personally identifiable information in order to safely perform digital transactions.

Data protection is a shared responsibility for all payment-system players
- The most useful regulatory and/or industry framework is one that ensures breached parties understand and assume the proportional cost of any customer data-loss event, enabling firms to make rational data-security investment decisions. Merchants, processors, acquirers, issuers, and service providers all share in the responsibility of data protection. However, the financial liability for fraudulent activity today largely falls on the issuers.
- Laws and regulations related to security and notification procedures should be standardized. Banks, through their industry associations, support legislation that would better protect consumers by replacing the current patchwork of state laws and establishing a set of national requirements. Compulsory notification of significant breach events that affect the broad financial consumer base should also be considered as banks are generally on their own to discover the cause and potential impacts to clients.

Item 4: The Banking Outlook in Europe

What are the most important recent developments for banks in Europe and do these developments point to an improvement in the European banking environment?

Overview
- Stabilizing European economies and institutional and regulatory enhancements suggest improvement in the European banking environment, but national recoveries are fragile and uneven. Moreover, given the high percentage of credit provided by banks in Europe, there is concern about their ability to finance growth in the near term while deleveraging and adapting to more stringent regulatory standards.

European Economy
- Although divergent national economic performances make a generalized assessment difficult, conditions have broadly stabilized. Tail risks have receded and sovereign borrowing rates have declined significantly, highlighted by the return of Ireland and Portugal to the markets. Growth remains trepid, with the European Commission forecasting a GDP increase of 1.1% in 2014. Only Germany (+5%) and France (+1%) have seen real GDP growth since 2008, and Portugal, Spain, and Italy have contracted by more than 5%. Maintaining the difficult balance between stimulus and austerity also constrains growth in countries with high debt burdens.
- The persistently high rate and long duration of unemployment demonstrate the weakness of the recovery. EU unemployment stands at over 12%, with nearly one-half of the unemployed having been out of work for more than one year. Youth unemployment remains extraordinarily high, with troubling implications for future growth and social

stability. One-third of Italians and Portuguese between 18 and 25 are unemployed, and the rate is more than 50% in Spain and Greece. Consumption remains lackluster and real disposable income continues to suffer despite low inflation.

Institutional Framework

- With a strengthening economy and a central bank committed to provide support, EU member states have taken significant steps to enhance and centralize the financial regulatory framework.
  - The Single Supervisory Mechanism will bring under ECB supervision 130 institutions in 18 countries, representing 85% of the banking assets in the Eurozone. A comprehensive asset-quality review is underway, to be followed by stress tests later this year.
  - The Single Resolution Mechanism establishes a pan-European board in charge of resolutions, drawing upon a fund to be built up over the next several years. Resolution of large institutions, which would require the use of taxpayer funds for cross-border resolutions, remains controversial. The contemplated Eurozone deposit guarantee scheme appears not to be a short-term priority, as national deposit guarantee programs are emphasized.
  - On January 29, 2014, EU Commissioner Michel Barnier proposed a framework that would separate from the depository institution certain activities, including proprietary trading. The proposal was criticized by Germany and France and appears unlikely to be considered by the European Parliament before the end of Barnier's term in May.

European Banking Conditions

- In the last several years, European banks have deleveraged, absorbed credit losses and legal costs, shed lower-quality assets and nonstrategic businesses, and raised approximately €100 billion in new capital. Improving sovereign debt positions also reduce vulnerability to securities losses.
- Investor and counterparty confidence will be enhanced by rigorous and credible stress tests.
- Although many European banks have repaid crisis-period loans, governments still hold majority positions in several important institutions, reducing flexibility in the event of unsatisfactory stress-test results or other dislocations.
- Even as the regulatory framework is solidified and institutions become more willing to make longer-term commitments, banking asset growth is expected to be slow. Weak demand for credit from both households and European-oriented corporates, combined with low banking-credit supply in the wake of deleveraging and new regulations, will constrain growth.

<u>Item 5</u>: <u>Economic Discussion</u>

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?

- Council members report generally similar positive trends in commercial real estate, and growth expectations appear uniformly tempered by uncertainties around the economic outlook, regulatory burdens, health care and tax reforms, and rising interest rates.

Employment/Wages

- Broadly speaking, the labor market appears to be slowly gaining momentum. Strengths include broad-based, private-sector job creation with improving growth in manufacturing and construction jobs. Weaknesses include sluggish real-wage growth, uncertainty in employer-provided health care premiums, and a lingering high level of long-term unemployed whose skills and income potential is probably permanently degraded. Competition for new college graduates is increasing. There is growing evidence of wage pressures, with firms reporting that it has become increasingly difficult to find skilled labor and somewhat more difficult to find unskilled labor.

Manufacturing

- In the Western region of the U.S., the commercial aerospace industry outlook remains robust with a large backlog of orders that continues to rise. Wood-products manufacturers report rising orders and sales. Semiconductor producers are reporting gradually strengthening demand and sales. Defense-related manufacturers remain more cautious about future sales and order flows given recent federal budget cuts. The Dallas District reports that leading indicators are stronger than they have been in several years, and even those manufacturing firms that suffered through poor December weather see that setback as transient and expect to increase production over the next six months.

Energy

- Energy production remains strong in the Bakken shale deposit in western North Dakota. Activity related to the development of this field and the infrastructure to support it is providing that market with one of the strongest economic activity centers in the country and a resulting low unemployment rate. Coal-related EPA regulations have broadly increased energy costs and have prompted at least one chemical company to cancel plans for a new domestic facility.

Real Estate

- The multifamily housing sector in nearly all regions continues to be very strong both in demand and new construction. While differing in magnitude by region, there was a broad consensus that increasing home prices and a slight rise in interest rates will likely mean a slight drop in housing affordability, providing a mild headwind to home sales. One District noted that recently announced layoffs of employees in residential-lending-related jobs is viewed as evidence of adjusting supply to meet demand.

Economic Activity

- The Eleventh District economy is currently growing at a moderate pace, with a slight acceleration evident over the last six weeks. Energy, real estate, and the service-providing portions of the regional economy are especially strong, while construction employment has

yet to catch up to construction activity. The Seventh District reports a positive outlook, and strength is expected to continue in the auto, aerospace, and energy industries. Moderate economic growth continues across the Twelfth District, and the outlook is for somewhat stronger economic growth for the region over the remainder of 2014. There is widespread regional growth in retail sales, manufacturing, residential and commercial real estate, agriculture, mining, and energy extraction.

Agriculture

- In the West, agricultural sales and production continues to expand. A healthy corn harvest has helped reduce feed costs for livestock and dairy producers, but a lack of seasonal rainfall in much of California has raised concerns about the worsening drought conditions in the state. In the Ninth District, farm commodity prices are declining for small grains and may impact producers in 2014. Sugar prices are also stressed, but milk prices are stable.

Retail Sales

- Many report that while consumers remain cautious, consumer finances and balance sheets have improved substantially, positioning consumers to make purchases they have been delaying for several years. In the Midwest, increased spending is expected on inventories, especially by auto dealers in anticipation of increased demand, and on structures, such as grocery stores, automobile dealerships, and auto supplier plants. Western regions suggest that retail sales growth has been stronger for online vendors, home furnishing and furniture stores, and auto dealers, while sales gains were weaker than past years for personal computers, televisions, and cameras. There is solid consumer and business demand for the regions' cloud services and information technology services companies.

Item 6: Monetary Policy

How would the Council assess the current stance of monetary policy?

- The intent of policy is clearly to be very accommodative. The Fed is on course to add another $465 billion to its bond holdings in 2014. Changes to the FOMC's forward rate guidance in December are clearer and imply a later start to tightening. Total asset purchases are projected to conclude by the end of 2014, and the FOMC is expected to keep the federal funds rate near zero until 2015. The new guidance stresses inflation, which is well below the Fed's target, as well as a variety of new labor-market indicators to replace the unemployment rate as a policy gauge once the 6.5% unemployment threshold is reached. On balance, these new indicators suggest more labor market slack than the unemployment rate does.
- In practice, however, markets have been skittish since it became clear the Fed planned to reduce its rate of bond purchases. In the second half of last year, 10-year Treasury note yields almost doubled from 1.6% to 3.0% at year-end. Since then, they fell back to 2.6%, but only because disruption in riskier markets, including global equities and emerging markets, have sparked a flight-to-quality rally into Treasuries. With Treasury note yields still a percentage point above their recent lows, traders clearly remain nervous about the end of the Fed's long-term asset purchase program.

12:00 Luncheon for Council and Board Members in the Board Room