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THE GSE REPORT

TRACKING THE GOVERNMENT'S ROLE IN THE FINANCIAL SERVICES INDUSTRY

A new hope for Mexico?

In July 2018, Mexico will elect not just a new president but every senator and representative, several governors and numerous local posts — more than 3,000 positions in all. The largest turnover of elected officials in Mexico's modern history, this vote will affect the nation's path for years if not decades to come. It will determine whether Mexico remains pragmatic, open to trade and investment, supportive of regional integration and friendly to the U.S.—or whether it turns inward, matching a U.S. turn toward protectionism and hostility and foregoing integration in favor of a more independent foreign policy and deeper relationships with other nations…

No other country influences the U.S. as much as its southern neighbor. Mexico remains one of America's largest trading partners, exchanging nearly $600 billion in goods that support millions of U.S.-based jobs and communities. It is the ancestral home to some 37 million Mexican-Americans and immigrants, and the place of residence for the largest U.S. diaspora. The two nations' energy refineries, pipelines and grids are interwoven, as are their waterways and environments. Each nation increasingly relies on the other to enhance national security and provide basic safety, sharing information and intelligence as they police local streets and go after terrorists and organized crime networks.

Shannon K. O'Neil
Council on Foreign Relations Blog
November 9, 2017

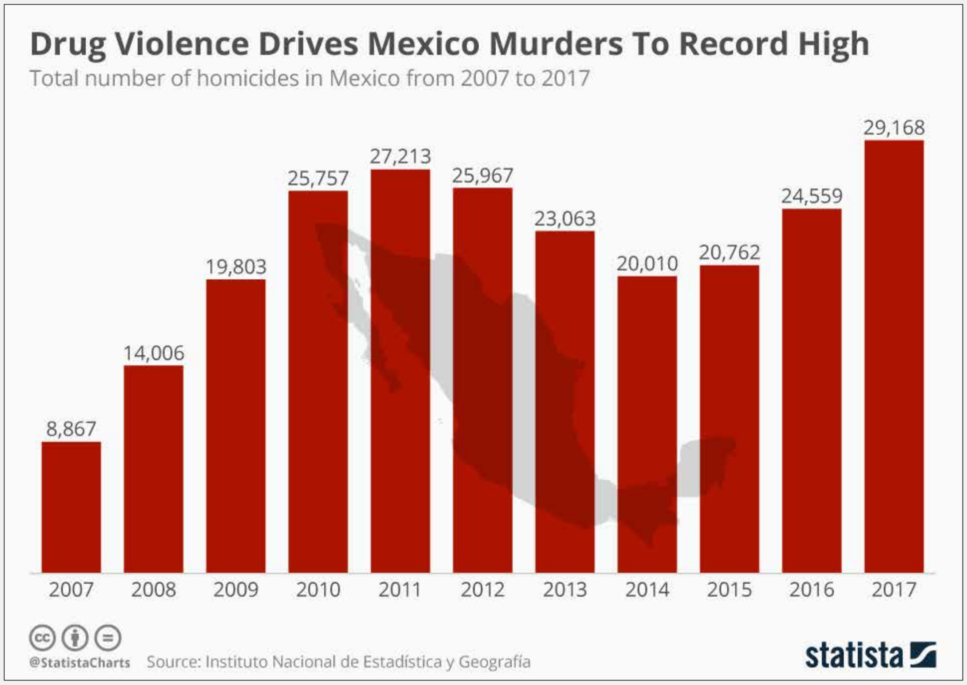
The last twenty years have been a disappointment for Mexico. The country has built up a new type of export-oriented manufacturing but has largely failed to kickstart a new era of economic growth or spread the wealth generated by the NAFTA-era economic model beyond a small and privileged segment of society. …Mexico always seems poised to become tomorrow's great economic success story, but unfortunately it may never reach its full potential. …
The combination of decades of slow wage growth, the persistence of a sprawling informal economy, and high levels of crime and corruption have proven to be unsustainable. People in Mexico are fed up.

Nathaniel Parish Flannery
Forbes
June 30, 2018

What comes after hope?

DRUG VIOLENCE DRIVES MEXICO MURDERS

Total number of homicides in Mexico



The real issue, perhaps, is that Mexico's greatest problems—massive inequality along with devastating crime and violence—cannot be fully resolved by its political system. In that, too, Mexico is hardly alone. It is merely one face of the great problem of our time, as oligarchic pressures crowd out democratic ones. MORENA's slogan is "Mexico's hope," and Mexicans have sorely earned it. But what comes after hope?

Carlos Bravo Regidor and Patrick Iber
Dissent Magazine
Spring 2018

On July 1, leftist Andres Manuel Lopez Obrador won more than 53% of the vote, giving him a broad mandate to upend the political establishment, oust the "mafia of power" ruling the country and govern for the poor.

CBS News
July 2, 2018

NAFTA and the U.S. elephant in the room

On the foreign policy front, Mexico's biggest challenge under a new president will likely be the successful completion of negotiations on the North American Free Trade Agreement with the United States and Canada. Concerns about other aspects of Lopez Obrador's foreign policy—suggestions that he would antagonize Washington by negotiating with criminal groups or would alter the country's military-dominated domestic security policy—are likely unfounded. But whoever wins the presidency will have to face the NAFTA negotiations in some form or another. The discussions could even be headed toward completion before a new president takes office—assuming that Mexico and Canada agree to U.S. demands, such as more stringent rules of origin for the automotive sector or a sunset clause for the agreement.

Or the trade negotiations could head down a rockier path. The administration of U.S. President Donald Trump could stick to its hardline demands and threaten to withdraw from the agreement. In that case, Mexico City and Ottawa would probably wait and hope that the U.S. Congress would restrain the White House's power to undo the agreement. If Congress steps in, a withdrawal may be beyond the administration's power, and the White House may decide that it is not in its political interests to fight for it ahead of 2018 midterm elections and the 2020 presidential vote.

Mexico is still likely to take the same broad approach toward NAFTA negotiations, assuming they are still going on in December. In Mexico, the deal is widely regarded by the country's elites as being economically beneficial, so even a Lopez Obrador administration would try to preserve the trilateral deal. However, enough uncertainty remains in the talks that a satisfactory conclusion for Mexico is still in doubt. With negotiations effectively stalled, Mexico is looking, at best, at a prolonged limbo, which draws out the uncertainty for foreign investors and Mexico's private sector. At worst, Mexico's economy could suffer if the Trump administration moves ahead with Section 232 tariffs on automobile imports or moves to end U.S. membership in NAFTA.

If Andres Manuel Lopez Obrador wins on July 1, his initial impact on Mexico's political scene will depend on his margin of victory and on whether he controls any houses of Congress. Any major gains by the Morena coalition in the Senate and lower house would likely drive the PAN and PRI into a rapid alliance to fend off Lopez Obrador's legislative advances. If his coalition takes majorities, the opposition's options will be much more limited. It will have to rely on the federal court system to slow any legislation it deems controversial, including attempts to amend the 2013 education reform, to enact laws to implement a cease-fire with criminal groups or to rewrite parts of the 2014 secondary laws for the energy reform. Nevertheless, the future for Mexico starts at the polls.

Stratfor World View
June 30, 2018

TRUMP ADMINISTRATION

The Trump administration proposes a massive reorganization of federal agencies

On June 21, the Trump administration released a blueprint for a massive overhaul of the federal bureaucracy, entitled “Delivering Government Solutions in the 21st Century, touching virtually every agency and impacting the way in which Americans receive government services.

“This effort, along with the recent executive orders on federal unions, are the biggest pieces so far of our plan to drain the swamp,” OMB Director Mick Mulvaney. “The federal government is bloated, opaque, bureaucratic and inefficient.”

The 126-page proposal contains a number of sweeping recommendations, including:

- Privatizing the Postal Service.
- Removing Fannie Mae and Freddie Mac from conservatorship and privatizing the GSEs
- Merging the Education and Labor departments.
- Reorganizing safety-net programs into a Department of Health and Public Welfare.
- Creating a government-wide public-private partnership office to improve services to citizens, and stewardship of public resources.
- Relocating more staff and offices outside the National Capital Region.
- Dramatically shrinking the Office of Personnel Management.
- Revamping the Army Corps of Engineers.

The plan, led by Mulvaney, relies on three drivers of reform:

- Information Technology Modernization.
- Data, Accountability, and Transparency.
- People and the Workforce of the Future.

"When transforming organizations to serve the needs of the 21st Century, it will be critical to leverage each of these key drivers," according to the report. "Ongoing work on this front is …part of the President's Management Agenda…In addition, these key drivers will inform next steps for each of the reform proposals…" The report outlined the following major root cause challenges facing the Federal Government that this plan addresses, including:

- "**Accumulated regulatory burden**. Over many decades, Federal agencies have imposed countless regulatory requirements on individuals, businesses, landowners, and state and local governments. Some of these regulations serve important public purposes. Many regulations, however, are outdated, duplicative, or unnecessary, yet they continue to impose costly burdens…

- **Structural issues**. Silos across Federal agencies and offices can hurt cross-agency collaboration, resulting in fragmented citizen services or excessive cost to deliver the mission…

- **Decision-making and processes**. Efficient and effective decision-making is fact-based and transparent. However, Government agencies do not consistently apply data driven decision-making practices. Smarter use of data and evidence is needed to orient decisions and accountability around service and results…

- **Leadership and culture**. Achieving beneficial outcomes that serve the public should be the Government's primary focus. Managers need sufficient discretion to execute programs effectively, foster the highest-performing workforce, and solve real-time problems. …The Administration will establish a transparent and data driven accountability structure through quarterly reviews and public updates on www.performance.gov that identifies successes and areas that need management attention.

- **Capabilities and competencies**. Antiquated, unsecure technology risks can leave the public frustrated and vulnerable. Too many Federal employees perform outdated duties that rely on outdated skillsets, and Government too often struggles to award effective, timely contracts…"

Many of the administration's proposals will require Congressional approval, including agency reorganizational authority. "[T]he proposals] that require congressional action will be really difficult to accomplish before the end of this Congress, and likely will be made even more difficult after the mid-term elections," said Robert Shea, an OMB veteran of the George W. Bush administration. "Those requiring only administrative action will be easier, though Congress has signaled that no such moves should be made without its approval." (*Delivering Government Solutions for the 21st Century*, Office of Management and Budget, June 21, 2018)

AGENCY SPECIFIC REFORM PROPOSALS

DEPARTMENT OF AGRICULTURE

Reorganizing the Agricultural Marketing Service

As part of the U.S. Department of Agriculture's (USDA) internal reorganization effort, it has undertaken significant changes to the Agricultural Marketing Service (AMS) to improve customer engagement, maximize efficiency, and improve agency collaboration. The Packers and Stockyards Program, Federal Grain Inspection Service, U.S. Warehouse Act Program, and International Commodity Purchasing were transferred to the Agricultural Marketing Service as new program areas in FY 2018.

Realigning USDA's Mission Areas

The USDA has begun realigning and consolidating certain offices into more logical organizational reporting structures. The realignment has included the creation of an Under Secretary for Trade and Foreign Agricultural Affairs, an Assistant to the Secretary for Rural Development (RD), and an Under Secretary for Farm Production and Conservation. Additionally, USDA is merging the Center for Nutrition Policy and Promotion (CNPP) into the Food and Nutrition Service (FNS). These efforts will improve service delivery by providing a simplified one-stop shop for USDA's farmer and rancher customers, advance agricultural trade and address the needs of Rural America.

DEPARTMENT OF ENERGY

Streamline Environmental Management Headquarters Organization

This effort will review the Environmental Management (EM) organizational structure to identify opportunities to streamline the management team. EM will specifically review supervisor-to-worker ratios, skill gaps, and cost reduction measures such as consolidating facilities and reducing administrative support. This proposal focuses on completion of the EM clean-up mission in an efficient and cost-effective manner.

Consolidate International Staff Under Office of International Affairs

The Department is consolidating international affairs offices from DOE's applied energy programs into the headquarters Office of International Affairs. This effort centralizes staff and resources with technical expertise and foreign affairs policy knowledge to advise on and carry out the Department's international engagement efforts.

Merge Shared Service Centers and Other Activities

The Department continues to merge DOE's Human Resources Shared Service Centers, consolidate human capital functions across the DOE enterprise, and merge DOE training and development functions. This effort will streamline processes, reduce costs, and improve services.

Office of Science Restructuring

The Department of Energy's Office of Science is evaluating several proposals to merge and consolidate field and headquarters activities to improve efficiency and reduce costs. Potential options for consideration include: merging geographically associated site offices; reorganizing the Integrated Service Centers; realigning safety and technical services; streamlining the Office of Science organization; and reducing staff and/or administration support costs.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Optimize National Institutes Health (NIH)

Restructure NIH's administrative functions to ensure operations are effective and efficient. This initiative represents the largest change management initiative in the history of NIH, and will align management with best practices and break down administrative silos through standardization of structures and processes agency-wide.

Consolidate Health Research Programs into National Institutes of Health (NIH)

Integrate the research of three programs into NIH – the Agency for Healthcare Research and Quality (AHRQ), the National Institute for Occupational Safety and Health (NIOSH), and the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR) to improve research coordination and outcomes. These entities would be initially established as three new NIH institutes: the National Institute for Research on Safety and Quality; the National Institute for Occupational Safety and Health, including the Energy Employees Occupational Illness Compensation Program; and the National Institute on Disability, Independent Living, and Rehabilitation Research. NIH will assess the feasibility of integrating health services research activities more fully into existing NIH Institutes and Centers over time.

Reorganize the Strategic National Stockpile (SNS) to the Assistant Secretary for Preparedness and Response (ASPR)

Restructure the SNS from Centers for Disease Control and Prevention to ASPR to consolidate strategic decision making around the development and procurement of medical countermeasures, and streamline operational decisions during responses to public health and other emergencies and improve responsiveness. This reorganization is intended to enhance enterprise effectiveness by more fully integrating the Stockpile with HHS' other preparedness and response capabilities.

DEPARTMENT OF HOMELAND SECURITY

DHS Air & Maritime Programs

This proposal would identify efficiencies and budgetary savings to be achieved by eliminating unnecessary duplication between U.S. Customs and Border Protection and U.S. Coast Guard air and maritime programs. This could include facility consolidation, standardized data, enhanced domain awareness and coordination, and common future capability requirements.

AGENCY SPECIFIC REFORM PROPOSALS, PAGE 2

Coordinated Operations, Planning & Intelligence

This proposal will evaluate how DHS headquarters and components will produce information and intelligence that is comprehensive, current, coordinated, operationally-focused and analytically-defensible, and increase the effectiveness of coordinated operational plans and policies. DHS's Office of Intelligence and Analysis, the Office of Strategy, Policy and Plans, and Office of Operations Coordination will explore areas such as analysis overlap, duplication and/or fragmentation; joint and integrated strategies and operations; common operating picture (COP) and alert warning; and operations centers overlap, duplication and/or fragmentation.

National Bio and Agro-Defense Facility (NBAF) Transfer from DHS to USDA

This FY 2019 Budget proposal would transfer operational responsibility for the National Bio and Agro-Defense Facility (NBAF) from DHS's Science and Technology Directorate (S&T) to USDA's Agricultural Research Service (ARS) in FY 2019. DHS would finish the construction and commissioning of the laboratory facility, while USDA would operate the facility in the future.

Organizing Headquarters Functions

This proposal would identify how DHS Headquarters can more effectively align Business Support and Mission Support functions to support Homeland Security mission delivery by enabling: (1) strategic governance, oversight, policymaking, and internal and external coordination; and (2) strengthening service and delivery of the business support and mission support functions to the Department. In tandem, the DHS Management Directorate is advancing agency-wide initiatives such as field efficiencies, modernizing financial systems and processes, and SOC consolidation.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

Reform Rental Assistance

HUD is seeking legislative reforms to decades-old rent policies that are confusing and costly, and often fail to support HUD-assisted individuals in increasing their earnings. HUD's Making Affordable Housing Work Act would offer public housing authorities (PHAs), property owners, and HUD-assisted families a simpler and more transparent set of rent structures to reduce administrative burden, incentivize work, and place HUD's rental assistance programs on a more fiscally-sustainable path.

Consolidate Headquarters Offices

HUD spends approximately $11.8 million per year on four leases within walking distance of its main headquarters at the Robert C. Weaver Federal building. HUD is in the process of consolidating these satellite offices into the Weaver building, reducing its real property footprint and annual leasing costs.

DEPARTMENT OF STATE

Modernizing IT, HR Operations, and Data Analytics

The State Department seeks to advance information technology (IT) modernization, including: allowing real-time collaboration; strengthening workforce readiness and performance management; and improving enterprise-wide data availability. This will involve enhancing data analytics to better inform decisions and investing in and implementing cloud technologies to allow employees to work more easily from any location, improve cyber security, streamline work processes, and consolidate duplicative systems. Cloud implementation has been underway since the end of 2017. By the end of March 2018, the Department had already migrated 16.6 percent of user mailboxes to cloud-based e-mail. This effort will also seek to improve connectivity between the State and United States Agency for International Development (USAID) IT platforms, thus ensuring increased collaboration and information access to improve effectiveness and efficiency.

Leadership Development and Training

The State Department seeks to enhance leadership training and development opportunities. To this end, the Foreign Service Institute is working to modernize and expand formal leadership training for all levels of the workforce and is implementing a program of mid-level leadership projects. The Leadership Advisory Board is reviewing the Department's Leadership and Management Principles and promoting leadership development activities more broadly.

Special Envoys

The State Department is integrating selected envoys and special representative offices into the regional and functional bureaus, and eliminating those envoys and representatives that have accomplished their original purpose, or have overlapping roles and responsibilities. This effort will empower regional and functional bureaus' policy direction, provide clarity in reporting authority, and strengthen communication channels. In consultation with the Congress, 17 such offices are being realigned as of May 2018.

Enhance Global Presence and Policy Processes

The State Department seeks to improve oversight of the U.S. Government's global presence under Chief of Mission authority, including enhanced interagency coordination to foster increased collaboration and oversight. The goal is to ensure the most efficient allocation of personnel consistent with U.S. interests around the world. State and USAID will work together to advance targeted reforms in this area, where changes are mutually reinforcing and can be effectively synchronized to maximize benefits as appropriate.

Enhance Operational Efficiencies

The State Department is examining ways to enhance human resources service delivery in order to simplify processes and reduce wasted time. Enhancements will also strengthen real property management both domestically and overseas, and achieve efficiencies in our acquisitions process to improve service delivery. State and USAID will work together to advance targeted reforms in this area, where changes are mutually reinforcing and can be effectively synchronized to maximize benefits as appropriate.

AGENCY SPECIFIC REFORM PROPOSALS, PAGE 3

DEPARTMENT OF THE INTERIOR

Aligning DOI Regions Across Bureaus

The Department of the Interior (DOI) seeks to establish common regional boundaries for its bureaus and offices to provide better coordination across the department, focus resources in the field, and ultimately, improve mission delivery. Currently, each DOI bureau manages its responsibilities using regional structures that follow different geographical boundaries. This inconsistency slows coordination between DOI bureaus and offices, other Federal agencies, and the American public that DOI serves.

Improving Efficiency through Shared Services

DOI is working to collocate bureau offices wherever possible and to emphasize the use of shared administrative support services across its organizational units. This will drive more efficient use of resources and ensure employees within each region and at the local level receive adequate support. Better utilization of the Interior Business Center (IBC) and DOI's consolidated Financial and Business Management System (FBMS) will also further these objectives.

DEPARTMENT OF THE TREASURY

Consolidate Alcohol and Tobacco Enforcement at Treasury

The FY 2019 Budget proposes to transfer all alcohol and tobacco responsibilities from the Department of Justice's Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) to Treasury's Alcohol and Tobacco Tax and Trade Bureau (TTB). This transfer would leverage TTB's resources and expertise relating to the alcohol and tobacco industries and allow ATF to continue to focus on its firearms and explosives mandates, enabling both agencies to more efficiently and effectively carry out their core missions of protecting the public.

DEPARTMENT OF TRANSPORTATION

Shared Services

The Department of Transportation (DOT) is taking a comprehensive look at implementing a shared services model for acquisitions, human resources, information technology, and motor vehicle pools across the Department. DOT is also working to consolidate office space and leases.

OST Streamlining

DOT is committed to rightsizing the Office of the Secretary (OST), which plays a critical role in overseeing DOT's Operating Administrations (OAs). To better support the OAs, offices and positions will be consolidated in areas such as research and development.

Workforce Development

DOT workforce development grants will be transferred to the new Department of Education and the Workforce to centralize workforce development policy and to deliver more efficient and effective outcomes.

DEPARTMENT OF VETERANS AFFAIRS

Electronic Health Record Modernization

This will transition the Department of Veterans Affairs (VA) to a new Electronic Health Records (EHR) system allowing for interoperability between the Department of Defense (DOD) and VA, and other community providers. The new system will permit efficient exchange of patient health information as military servicemembers transition from DOD to VA healthcare, and will enhance the coordination of care for veterans. Having a veteran's complete and accurate health information in a single common EHR system is critical to that care, and to patient safety. The new EHR system will enable VA to easily adopt improvements in health information technology and cyber security, which VA's current system is unable to do.

Community Care

To ensure veterans get the right care, at the right time, with the right provider, the Trump Administration and VA have worked closely with the Congress and Veteran Service Organizations (VSOs) to create legislation to merge all of VA's community care efforts, including the Choice Program, into a single, streamlined Federal program. The new community care program will improve veterans' experiences and healthcare outcomes and transform VA into a high-performing and integrated 21st Century healthcare system for more than 9 million veteran enrollees.

Appeals Modernization

VA is undertaking an initiative to replace its current claims appeals process, adopted after World War I, which is slow, complex, and confusing for veterans to navigate. In an effort to enhance veterans' experience, VA is accelerating implementation of a new system under which veterans have the option to submit appeals using one of three lanes based on their unique circumstances.

Financial Management Business Transformation

This ambitious effort will transform VA's financial management business processes and systems using an integrated approach. A modern integrated financial management and acquisition solution will enhance transparency, data accuracy, and improve fiscal accountability across the department, and will provide opportunities to improve the care and services provided to veterans.

Legacy IT Systems Modernization

Many of the 130 legacy information technology systems that VA relies on to administer and deliver veteran benefits are no longer supportable, and do not meet security compliance standards or support new, more efficient business processes. In addition, the inability of these systems to interface with one another results in severe redundancies which, in turn, results in inefficiencies and impedes the department's customer service to veterans. Collectively, modernizing legacy IT systems will streamline benefit delivery and appeals processing, ensure compliance with new security and accessibility standards, and expand veteran self-service capabilities while also promoting greater transparency.

AGENCY SPECIFIC REFORM PROPOSALS, PAGE 4

ENVIRONMENTAL PROTECTION AGENCY

Tailoring State Oversight

The Environmental Protection Agency (EPA) will recalibrate resources devoted to oversight of State-delegated programs, including the role of EPA National Programs and Regions, and their respective levels of effort. EPA will recognize States as the primary implementers and enforcement authorities where States have authorized delegation of Federal environmental programs. With input from the Environmental Council of the States (ECOS) and the States, EPA will streamline, reduce, and tailor its oversight activities to focus on national consistency and technical assistance to States as needed.

Examining EPA Field Presence

After streamlining and tailoring State oversight activities, EPA will assess the best locations from which to provide key functions and services to customers. Some functions may be performed more effectively with enhanced proximity to customers, while others may be more efficient, but equally effective, if consolidated. EPA will assess owned space vs. leasing space for field operations.

Improving Management of EPA Laboratories

EPA will review the current laboratory enterprise in an effort to operate EPA's labs in a more strategic, corporate, and efficient manner. This project starts with the identification and implementation of an enterprise-wide framework to create a more agile work environment and manage lab capabilities and capacity to meet the scientific demands associated with achieving the Agency's mission more efficiently and effectively.

GENERAL SERVICES ADMINISTRATION

Federal Motor Vehicle Fleet Management

The Federal Government operates more than 400,000 motor vehicles, including cars, trucks, SUVs, buses, and other specialty vehicles. The cost of operating motor vehicles can vary widely among Federal agencies. The President's Management Agenda initiative on improving mission support services includes consolidating Federal fleet management. This will reduce taxpayer costs and introduce efficiencies into Federal fleet management. To achieve these objectives, the General Services Administration will conduct studies of agency fleets to identify recommendations on improving fleet management. The study will include analysis of operational, maintenance, and inventory data to assess whether centrally leasing and managing motor vehicles is more cost effective than separate agency ownership and management of vehicles. GSA studies will also identify opportunities for reducing the overall size of the Federal fleet through car sharing or other such shared activities.

NATIONAL SCIENCE FOUNDATION

Introduce Two Convergence Accelerators to Support Interdisciplinary Research

The National Science Foundation (NSF) will introduce two "Convergence Accelerators" that will facilitate the agency's funding of interdisciplinary research. The Accelerators will focus on "Harnessing the Data Revolution" and the "Future of Work at the Human-Technology Frontier." Staff, budget, and resources for the Accelerators will be realigned from the current directorates and offices. Accelerator directors will be part of the NSF scientific leadership team. With separate staff, budget, and resources, the Accelerators will be NSF's primary units for conceiving, funding, and managing NSF-wide interdisciplinary activities in these areas.

OFFICE OF PERSONNEL MANAGEMENT

Implement a 21st Century Approach to Federal Employee Records and Data Management

The Office of Personnel Management (OPM) seeks to establish a secure Employee Digital Record (EDR), with as close to live updates as technologically feasible. By creating a permanent EDR, OPM can drive a data collection strategy that, among other things, collects employee data once and uses it many times across the employee lifecycle. This will reduce redundancy, inefficient and inaccurate reporting, costly vendor management, and incomplete data that creates challenges in applying modern business processes to core HR functions.

NUCLEAR REGULATORY COMMISSION

Merge the Office of New Reactors (NRO) and the Office of Nuclear Reactor Regulation (NRR)

The Nuclear Regulatory Commission (NRC) recognizes that a merger of NRO and NRR will provide flexibility and improved agility to manage uncertainties associated with the workloads in both the new and operating reactor business lines. As part of the merger of NRO and NRR, the NRC will conduct an assessment of technical review functions to identify efficiencies and eliminate redundancies.

Trump administration focuses on building a 5G mobile broadband network to fuel technological advances and continued economic growth

In testimony before Congress, Commerce Secretary Wilbur Ross said building a 5G mobile broadband network is a chief concern of the Trump administration. The wireless industry has pushed Congress and the administration aggressively to aid in the race to 5G, arguing the technology will help the U.S. gain an economic advantage over other countries that are building 5G networks, particularly China.

In a *CNBC* interview, Ross said, “I think the pitch that Sprint and T-Mobile are making is an interesting one, that their merger would propel Verizon and AT&T into more active pursuit of 5G. Whoever pursues it, whoever does it, we’re very much in support of 5G. We need it. We need it for defense purposes, we need it for commercial purposes.”

During his confirmation hearing, FCC nominee Geoffrey Starks told lawmakers that 5G technology is extremely important to the nation’s economy and making more spectrum bands available for 5G is one of the keys for success. “The race to 5G is on and the U.S., I believe, needs to maintain its leadership here,” said Starks. “In particular, 3.5, the C-Band, 5.9, 6.4 and then getting up into the high band, 24 GHz, 28, 37, 39, 47, 64” and higher. Each of those are going to play an important role. …It’s going to be essential that we start to modernize our siting of cells and our rights-of-way policies.”

In June, the FCC took steps to make additional high-brand spectrum available for advanced wireless services. “[These actions] are the building blocks of the nation’s 5G future and critical to continued U.S. wireless leadership,” wrote the FCC. “Pushing more spectrum into the marketplace for the next generation of wireless connectivity will contribute to economic growth, job creation, public safety, and our nation’s global competitiveness.” Specifically, the FCC adopted rules for adopting an operability requirement for the entire 24 GHz band, a sharing framework to allow use of a portion of the 24 GHz band for terrestrial wireless operations and Fixed Satellite Service (FSS) earth stations, a band plan for the Lower 37 GHz band, and spectrum aggregation rules applicable to certain bands. The Commission took these actions “in response to the growing demand for spectrum-based services and to facilitate the development of 5G.” (*The Hill*, Ali Breland, 05/01/18; F*ierceWireless*, Monica Alleven, 06/21/1/8; *Radio + Television Business Report,* 06/07/18)

Broadband service, coupled with “Halo-Fi” satellites—a network of inexpensive low earth orbit satellites that serve as “mico-routers”—will deliver fast, reliable Internet access at dramatically cheaper costs. Agora Financial’s Ray Blanco wrote:

> Customers now using Internet from the heavens have called it a game changer – clocking in at 12 times faster, yet 10 times cheaper than what they were forced to use before. Here's the best part… Until now, the precursor to this extraordinary technology has only been rolled out to 15 countries around the world. But soon, it could replace dial-up, cable, DSL and even fiber in every city and town in America. Making the lives of virtually every American more affordable and far less stressful.
>
> …It takes just three Halo-Fi "Micro-Routers" to cover an area the size of India and to blanket the entire earth in high-speed Internet. …[I]t could take as few as 648 micro-routers. Then, once the switch is flipped on, receiving Internet in your home is simple. No spotty modems. No outdated copper. No fiber. You don't even need to buy an antenna. You'd simply need to be near a school, public building or municipal building that has a receiver on its roof and your phones and computers will automatically log on. [Or], if you prefer, you can buy your own receiver for a one-time payment of about $200. (*Stock Gumsoe*, Travis Johnson, 03/08/18)

In an interview with *Seven Figure Publishing*, Blanco added:

> There's stuff that we can do now that we couldn't do before just because the cost of a space launch has dropped significantly. So now it's getting much cheaper to put something into orbit, thanks to companies like SpaceX. You've got Jeff Bezos over there with Blue Origin trying to do the same thing, he's been at it for a long ... So they're going to just mass produce, which is not something you hear about in the satellite business. These are largely one-off devices, usually built on a common platform, but very bespoke. So you're going to have mass production, small cheap sats, low earth orbit, constantly replenished as they fall out and bum up.
>
> You're going to have signal everywhere, you're going to have five, four bars everywhere. You're going to be over the Atlantic in a plane and you'll be able to watch Netflix or whatever. And it's going to be everywhere. So, you could be in the middle of Africa, in some poor region, they'll be able to put a receiver up on the roof and those kids are going to have broadband Internet, just like the kids in our schools have. It's going to be cheap enough for them, and you'll be able live anywhere in the United States, and be able to do the same thing. The receivers are going to be low power, they're going to be inexpensive, and the servers are going to be relatively inexpensive as well, compared to what we pay today. Very disruptive to the status quo. Like I said, the landline telephone business has been quite disrupted by the cell phone, and this is going to be something similar to that, but with data on top of voice. (*Seven Figure Publishing*, Ray Blanco, 06/27/18)

MONETARY POLICY

The Federal Reserve grows “relentlessly” more hawkish

“The economy is in great shape,” said Fed Chairman Jerome Powell at the June 13th press conference after the FOMC meeting. Inflation, as measured by the Fed’s preferred “core PCE” hit its 2% target and the central bank expects it to hit 2.1% by year-end. (Inflation, as measured by CPI, jumped to 2.8%.) “Job gains have been strong,” according to the FOMC statement. “[The] unemployment rate has declined [while] growth of household spending has picked up [and] business fixed investment has continued to grow strongly.”

In a unanimous vote, the FOMC raised its target for federal funds rate 25 basis points to a range between 1.75% and 2.0%. Moreover, two additional rate hikes are gradually “baked in” for 2018, based expectations of the 15 members of the FOMC, as reflected in the committee’s dot plot chart for 2018. Two more rate hikes this year would bring the top end of the fed funds target range to 2.5%. Moreover, rates are expected to rise three times in 2019 and once in 2020, increasing the fed funds rate to nearly 3.5%

Wall Street analyst Wolf Richer wrote:

> …This rate-hike cycle is different. It has now been going on for two-and-a-half years, during which the Fed hiked rates by 1.75 percentage points. The last rate-hike cycle lasted only two years, but the Fed pushed up rates by 4.25 percentage points to 5.25% by July 2006. The fact that this rate-hike cycle is so gradual allows the economy and markets, asset prices, and yields to adjust gradually – that’s what Powell pointed out when he said this “patience has borne fruit.” And it allows the Fed to keep going relentlessly.
>
> “The FOMC may be moving at a gradual pace but nonetheless is lapping the field,” wrote Regions’ analysts. “Central bank policies remain on divergent paths, with the FOMC far ahead of the field in terms of withdrawing monetary accommodation. This does not figure to change much, particularly with rising uncertainty over the global growth outlook. As such, this divergence in central bank policies will likely remain a source of swings in exchange rates and interest rates over coming quarters.” (*Economic Preview*, Regions, 06/25/18; *WolfStreet.com*, Wolf Richter, 06/13/18)

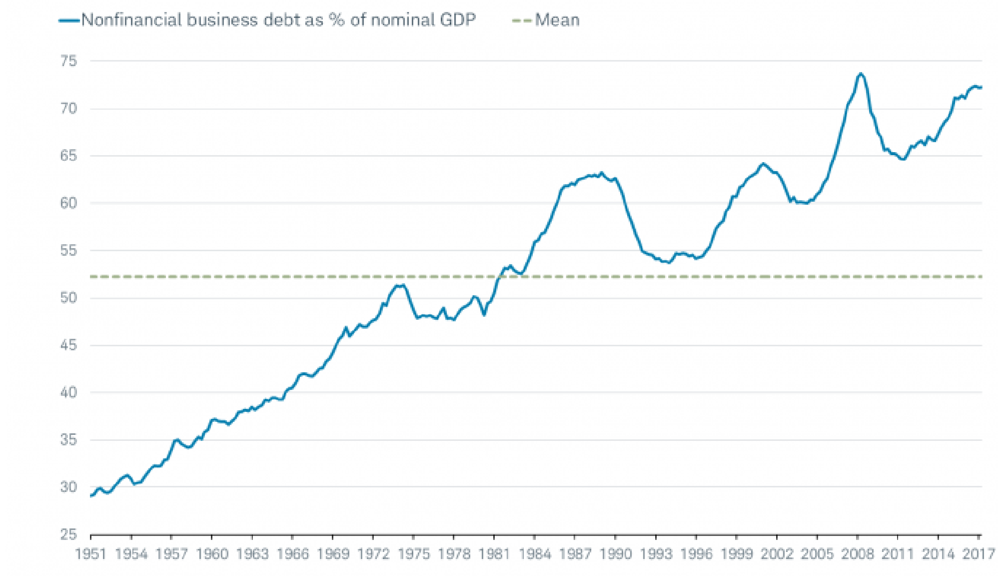
The unintended consequences of Zero Interest Rate Policy

“Rising corporate debt levels are definitely a risk in the long-term,” wrote Collin Martin, Schwab’s Director of Fixed Income Strategy. “Many companies took advantage of the low interest rate environment, which has persisted since the GFC by issuing more and more debt with low coupon rates, while extending the average maturity of their debt. According to SIFMA, corporate bond issuance has increased every year since 2011, and the amount of investment grade corporate bonds outstanding has more than doubled over the past decade.”

In the post crisis era, many companies loaded up on low rate debt. In this era’s low growth environment, coupled with uncertainties with regard to public policies, many companies deployed much of their debt proceeds to buy back stock. Now, the “ills” of leverage are coming home to roost, triggering downgrades. (*Debt Song: It’s Not a Pretty Tune*, Liz Ann Sonders and Collin Martin, 06/18/18)

NONFINANCIAL BUSINESS DEBT

As % of nominal GDP



Source: Charles Schwab, Department of Commerce, Federal Reserve, Ned Davis Research (NDR), Inc. (Further distribution prohibited without prior permission. Copyright 2018(c) Ned Davis Research, Inc. All rights reserved.), as of March 31, 2018.

On *WolfStreet.com*, Wall Street analyst Wolf Richer wrote

Companies whose credit rating is below “investment grade” can borrow in the capital markets in two ways: by issuing what is lovingly called junk bonds; and by issuing “leveraged loans.”

Leveraged loans are too risky for banks to keep on their books. Banks sell them, and they can be traded; or banks package them into Collateralized Loan Obligations (CLOs), and they’re traded as such. Being loans, they’re not considered securities, but they trade like securities. They’re the booming sisters of the languishing junk bonds.

According to Moody’s, this is what has been happening with junk bonds and leveraged loans:

- **Junk bond** issuance in the US plunged 52% in May from a year ago, to just $21 billion. Year-to-date, issuance has plunged 20% to $162 billion. The amount outstanding reached $1.27 trillion.
- **Leveraged loan** issuance in May jumped 37% from a year ago to a record $88 billion. Year-to-date, leveraged loan issuance rose 2.4% from a record in 2017, to $363 billion. The amount outstanding rose to $1.45 trillion. This is the first year that leveraged loans have bypassed junk bonds.
- **Combined**: As junk-bond issuance fell while leveraged loan issuance rose, combined issuance year-to-date fell 5.7% to $525 billion. The combined total outstanding amounts to $2.7 trillion.

The majority of companies are junk-rated. About 60% of the US companies that Moody’s rates have a credit rating of “speculative”—otherwise known as “high yield” or “junk,” according to John Lonski, Chief Economist at Moody’s Capital Markets Research.

…So in terms of dollars, the amount of junk bonds outstanding ($1.27 trillion) accounted for only 17% of the total amount of corporate bonds. But when the $1.45 trillion of “leveraged loans” are added to the picture, the total rises to 37% — and that’s a lot of high-risk debt.

But these junk-rated companies tend to be smaller. Though they carry a lot of debt in relationship to their size (that’s why they’re junk rated), in aggregate they can’t measure up to the investment-grade giants, like Apple and Walmart that can issue tens of billions of dollars in investment-grade bonds in one fell swoop. For example, Walmart is currently flogging $16 billion in bonds to fund the acquisition of a 77% stake in Flipcart, India's biggest online retailer.

Future "fallen angels" are in the bulge bracket

In terms of dollar amounts, 56% of outstanding debt is rated "medium grade" (from A3 to Baa3), according to Moody's. Baa3 is one hair above junk. A one-notch downgrade pushes a Baa3-rated company into junk territory and turns it into a "fallen angel." In other words, the majority of companies sit one to four notches above that level.

Since 2009, the amount of this outstanding "medium-grade" debt has surged at an annual rate of 10% to a record of $4.1 trillion, up 120% since the beginning of 2011!

…**One more word about Fallen Angels**

About $640 billion in bonds are rated Baa3, one hair above junk, up from $295 billion in Q3 2007, just before the Financial Crisis. A one-notch downgrade of the issuing company would put them into junk territory. This would be the "fallen-angel downgrade." Moody's points out that on average over the span of a year — and these have been the good times—10% of Baa3-rated companies are downgraded into junk…

In view of how most companies wish to avoid a fallen-angel downgrade, and given the age of the current business cycle upturn, companies having a Baa3 bond rating might opt for relatively conservative financial management. Such companies might be expected to proceed cautiously with capital spending, employee compensation, acquisitions, stock buybacks, and dividends.

This is one of the ways in which debt and credit ratings can impact the stock market: via scuttled share buybacks and dividend, long before the viability of the company is seriously in doubt. (*WolfStreet.com*, Wolf Richter, 06/24/18)

GLOBAL POLITICAL RISKS

- **German Chancellor Merkel secures agreement on asylum seeker returns and faces growing pressure on the trade front**
- **Economic turmoil in Iran triggers protests**
- **China—the land of contradictions**
- **Will political risks trigger global monetary reset?**

German Chancellor Merkel secures agreement on asylum seeker returns and faces growing pressure on the trade front

German Chancellor Angela Merkel has secured agreements from 14 EU countries—including Hungary, Poland, the Czech Republic, Belgium, Denmark, Estonia, Finland, France, Lithuania, Latvia, Luxembourg, the Netherlands, Portugal and Sweden—to take back asylum seekers who had previously registered elsewhere. At a summit on refugee settlement, EU leaders agreed to share out refugees on a voluntary basis and create "controlled centers" inside the EU to process asylum requests, making the deportation process for previously registered refugees far more effective.

This bilateral agreement also provides Merkel leverage in her stand-off with Bavaria's Christian Social Union, whose leader, Interior Minister Horst Seehofer threatened to defy Merkel by closing Germany's borders to some refugees and migrants—a move that would likely bring down her government.

The Irish Times' Derek Scally wrote:

> For three years the Christian Social Union (CSU) [e.g., Merkle's "sister party"] has demanded a tougher refugee line from the Merkel Christian Democratic Union (CDU), but always fallen into line. No more. After a federal election disaster last September, and another state election humiliation looming in October, the Bavarian lion is roaring now with a heady mix of superiority and vulnerability. "Every day people get news reports confirming their view that we politicians don't have the situation under control," said Alexander Dobrindt, CSU floor leader in the Bundestag. "Correcting this systemic failure is the task of the CDU/CSU union." (*SBS News*, 06/30/18; *The Independent*, 06/30/18; *The Irish Times*, Derek Scally, 06/30/18)

On the trade front, Merkel is facing growing pressure from President Trump, who is demanding the following actions:

- Germany increase its minimum contribution from its current 1.2% of GDP (in 2017) to 2% for their own NATO defense;
- Germany and the EU support enhanced sanctions against Iran
- Germany and EU lower or eliminate all protectionist trade barriers and negotiate new trade deals.

If these issues are not resolved, Trump has suggested placing a 20% tariff on all EU automobiles shipped into the U.S., a move that threatens the heart of the German economy—the auto industry, which generated total revenue of 426 billion euros of revenue in 2017 and employed more than 800,000 people. The German auto-sector—and the German economy—simply cannot survive without low cost access to the U.S., their biggest customer.

Today, the U.S. levies just a 2.5% tax on cars imported from Germany and other EU members versus 10% charged on all American-made cars sent to the EU. Approximately $192 billion of cars, trucks and parts are imported each year, including $96 billion under NAFTA.

Trump has also ordered Pentagon staffers to analyze the costs of a large-scale withdrawal or transfer of American troops from Germany. The American military presence in Germany is the largest U.S. force in Europe, including approximately 35,000 active duty troops. "[T]he question of where the Western defense pact fits into a 21st century in which Europeans disagree among themselves, as well as with the United States, on economic, trade and immigration issues, and in which the world is undergoing a basic realignment with the rise of Asia, has led some to consider a new arrangement," wrote *Washington Post*'s John Hudson, Paul Sonne, Karen DeYoung and Josh Dawsey (*Bloomberg*, Chris Reiter, 05/24/18; *Washington Post*, John Hudson, Paul Sonne, Karen DeYoung and Josh Dawsey, 06/29/18; *NBC News*, Alexander Smith, Abigail Williams and Andy Eckardt, 04/26/18)

Economic turmoil in Iran triggers protests

Geopolitical Futures' staff wrote:

> The Iranian government is buckling as problems mount for the Rouhani administration. A weak currency sparked protests among rank-and-file shopkeepers against the country's poor economic performance. Top officials from the Islamic Revolutionary Guard Corps made ominous statements. The

president is rumored to be considering a Cabinet reshuffle and has remained defiant as ever, insisting that his government will not fall even as rumors surface that he may be impeached. If the situation sours, impeachment may be the best Rouhani could hope for. Iran has overextended itself in Iraq, Syria and Lebanon, and its overextension, along with the death of the Iran nuclear deal, is putting a great deal of pressure on the country that has become the center of gravity in the Middle East. (*Geopolitical Futures*, 06/30/18)

China—the land of contradictions

Geopolitical Futures staff wrote:

> The week [of June 25th] began with police breaking up protests staged by army veterans. By midweek, President Xi Jinping was telling his country's diplomats to remain loyal to the Chinese Communist Party—a sign of his strength or his weakness, depending on how you look at it. By the end of the week, we were investigating reports that at least one major Chinese city had failed to pay its civil servants on time. Is the government beginning to crack, as so many of its predecessors have, under the weight of such a large and diverse country? Or is Chinese power so palpable that none of this matters, even in the absence of a credible opposition? There is perhaps no more important geopolitical story in the world. (*Geopolitical Futures*, 06/30/18)

China's economic expansion slowed further in June and its currency, the yuan, faced a fresh bout of weakness, underscoring the fragility of the world's second-largest economy in the face of on-going tariff disputes with the U.S. A sharp deceleration in Chinese credit expansion may have also slowed economic expansion, according to Bloomberg Economics' Fielding Chen at Bloomberg Economics. The impact of slower credit growth and the escalating trade war appears to have hurt sentiment for smaller companies and stock and property investors, according to Chen. The trade war has hurt market sentiment, but its impact on the economy hasn't yet materialized," he added.

"We see headwinds from China's housing market, export sectors and private firms on lower investment appetite, rising trade tensions between China and the U.S., and tighter credit conditions," Shen Lan, a Beijing-based economist at Standard Chartered Plc. "Deleveraging efforts will likely continue, but mainly through regulatory means rather than monetary policy tightening." (*Bloomberg News*, Xiaoqing Pi, and Adrian Leung, 06/27/18)

Will political risks trigger global monetary reset?

Agora Financial's Jim Rickards wrote:

A true global monetary reset (GMR) occurs more like every thirty to forty years. There were only three GMRs in the twentieth century: 1914, 1944 and 1971. The 1914 GMR was when nations abandoned gold to fight the First World War. The 1944 GMR was when nations returned to a gold standard at the Bretton Woods conference. The 1971 GMR was when the U.S. abandoned the Bretton Woods gold standard and the world moved to fiat currencies and floating exchange rates.

There have been no GMRs in the twenty-first century so far. Taking the tempo of three GMRs in the 105-year period beginning in 1914 gives an average of one GMR every thirty-five years. It has been forty-seven years since the last one. Using those statistics alone, it is not a stretch to say that the world is overdue for the next GMR.

To argue that no GMR is in the cards is to argue that somehow the global elites have achieved a permanent state of monetary nirvana. Nothing could be further from the truth. The international monetary system today is a patchwork of floating exchange rates, hard pegs, dirty pegs, currency wars, open and closed capital accounts, with world money waiting in the wings. It has no anchor. It is incoherent.

By "incoherent," …there was no anchor for the system, no universally agreed reference point or metric by which to judge currency values. You can judge every currency in relation to another currency, but there's no way to judge any currency by an objective standard under current rules.

… What my conversations with the global monetary elites have revealed is that while institutions like the Treasury, Fed and IMF may be powerful on paper, they are often dysfunctional and slow in practice. None of the leaders I spoke with, nor others I have followed, see the GMR coming. They share the view of David Dollar that the U.S. dollar will be the global reserve currency indefinitely and that no changes in the architecture of the international monetary system are expected.

As a result, when the GMR does happen we will be able to look back and say that no one saw it coming, at least among the elites. At the height of the storm it is likely that no one will really be in charge. The solutions that evolve are therefore far more likely to be ad hoc and temporary rather than thoughtful and long-lasting. The future does not hold a new Bretton Woods. A new Panic of 2008, but much worse is far more likely.

The catalysts for this new panic or loss of confidence in the U.S. dollar are all around us. Prime suspects include:

- The financial war with Iran will escalate. President Trump has already imposed financial sanctions on Iran that are more stringent that the ones in place for North Korea. This could result in concessions by Iran, but it could also result in pushing Iran into the arms of China as part of a larger global effort to escape the dollar payments system and overthrow the petrodollar agreement of 1974.

- Russia and China may create a new crypto-currency on a distributed ledger, or blockchain, which will serve as a way to keep account of trade balances and capital flows. Periodically those balances could be settled up with a quantity of gold that corresponds to the "gold price" measured in units of the new currency. The dollar would not be part of these calculations or settlements. The tripling of gold reserves by Russia and China in the past ten years lays the foundation for this. Other nations could join this New Axis of Gold including Iran, Turkey, North Korea, Venezuela and more.

The U.S. could destroy confidence in the dollar itself without a push from other nations. This would most likely be the result of out-of-control deficits and an expanding debt-to-GDP ratio, which already exceeds 105%. With trillion-dollar deficits as far as the eye can see and no restraint on spending, the debt-to-GDP ratio will exceed 110% in a few years and will be poised to surpass Italy not long after that.

An emerging markets crisis is unfolding. It is centered on the inability of emerging markets to pay dollar-denominated debt at a time when U.S. interest rates are rising and the dollar is (temporarily) growing stronger. Argentina, Venezuela and Turkey are the most likely candidates for a catastrophic default, but China, Brazil, Mexico and South Africa are also on shaky ground. Once the crisis begins in one of these countries, the contagion effect will be felt all over the world and a generalized panic will begin.

The major central banks are out of bullets because they have never normalized their balance sheets since the last crisis. Resort to zero-rate policies and quantitative easing will not produce the same effects as in 2008-2015. Citizens will see that the original efforts failed, and only produced a new crisis; therefore efforts to repeat the failed policies will not inspire confidence.

… The task of reliquifying the world will fall to the IMF by default, notwithstanding [former acting managing director of the IMF John] Lipsky's concerns that the IMF is not geared to respond quickly. The IMF may have no choice. Newly printed SDRs distributed to members, perhaps on a distributed ledger now being explored by the IMF, will be the only source of liquidity left… (*Strategic Intelligence*, Jim Rickards, 06/26/18)

FANNIE MAE AND FREDDIE MAC

Trump administration proposes to reform the federal government's role in mortgage finance

Pursuant to Executive Order (EO) 13781, entitled "Comprehensive Plan for Reorganizing the Executive Branch," the Trump administration addressed how the federal government's role in mortgage finance should be reformed, writing:

Summary of Proposal: This proposal would transform the way the Federal Government delivers support for the U.S. housing finance system to ensure more transparency and accountability to taxpayers, and to minimize the risk of taxpayer-funded bailouts, while maintaining responsible and sustainable support for homeowners. Proposed changes, which would require broader policy and legislative reforms beyond restructuring Federal agencies and programs, include ending the conservatorship of Fannie Mae and Freddie Mac, reducing their role in the housing market, and providing an explicit, limited Federal backstop that is on-budget and apart from the Federal support for low- and moderate-income homebuyers.

THE CHALLENGE

The U.S. housing market is supported by a complex system of Federal subsidies and programs intended to make mortgage financing accessible to a wide range of homebuyers. However, this system is challenged by the operation of two privately-owned Government sponsored-enterprises (GSEs), Fannie Mae and Freddie Mac, in conservatorship, a condition that has been maintained since 2008, in addition to overlapping and sometimes conflicting Federal goals. The Federal role in support of housing finance is not effectively targeted to households in need of assistance or sufficiently accountable to taxpayers, as the costs and benefits of that support are unclear.

In response, this proposal would end the conservatorship of Fannie Mae and Freddie Mac and propose better tailoring of delivery of Federal programs. Policy makers should also pursue an approach that would level the playing field with the private sector to decrease the Federal subsidies supporting housing.

THE OPPORTUNITY

This proposal would reorganize the way the Federal Government delivers mortgage assistance and go beyond restructuring Federal agencies and programs by transitioning

Fannie Mae and Freddie Mac to fully private entities. Competition to the duopolistic role played by the two privately-owned GSEs would be an essential element of reform to decrease moral hazard and risk to the taxpayer. Both Fannie Mae and Freddie Mac, as well as other competitive entrants, would have access to an explicit Federal guarantee for mortgage-backed securities (MBS) that they issue that is only exposed in limited, exigent circumstances. Such a guarantee would be on-budget and fully paid-for. This would also ensure that the Government's role is more transparent and accountable to taxpayers, minimize the risk of taxpayer-funded bailouts, and ensure that mortgage credit continues to be available in times of market stress for creditworthy borrowers.

WHAT WE'RE PROPOSING AND WHY IT'S THE RIGHT THING TO DO

Under the current system, Fannie Mae and Freddie Mac, two privately-owned GSEs, buy and guarantee mortgages from lenders and sell them to investors as MBS. Although they are private companies, they are congressionally chartered, a unique status that has been viewed as conveying an implicit Federal backstop that has in turn lowered their cost of capital relative to similarly-sized institutions. In 2008, Fannie Mae and Freddie Mac were taken into conservatorship and received (and continue to receive) an explicit but limited backing from the Treasury under a Preferred Stock Purchase Agreement (PSPA), which gives access to capital funding that covers any loss the enterprises may incur. In their Federal charters and by action of their primary regulator, the Federal Housing Finance Agency (FHFA), Fannie Mae and Freddie Mac have goals of providing a certain amount of financing to low- and moderate-income borrowers.

However, these affordable housing activities are not clearly accounted for on the Federal balance sheet. In addition to the GSEs, other Federal programs provide mortgage support, contributing to a large Federal footprint in the housing market. The Department of Housing and Urban Development (HUD) Federal Housing Administration (FHA) provides mortgage insurance intended to aid borrowers traditionally underserved by the conventional mortgage market, including lower-wealth households, minorities, and first-time homebuyers. The Departments of Veterans Affairs (VA) and Agriculture (USDA) also administer mortgage insurance programs targeted to veterans and lower-income rural households, respectively. The loans guaranteed by FHA, VA, and USDA are in turn packaged into MBS that are guaranteed by Ginnie Mae, a Federal entity operated by HUD. Together, loans backed by the GSEs and Ginnie Mae comprised about 70 percent of mortgages originated in 2017.

All these entities, taken as a whole, form a complex and overlapping network of cross-subsidization, without clear accountability as to who is paying for, and who is receiving, housing subsidies. Although the Federal role in the housing market has helped to facilitate the availability of the 30-year fixed-rate mortgage, the current system has structural flaws that have also created distortions in home pricing that may actually hinder the goal of homeownership. This reorganization proposal, which includes broad policy and legislative reforms beyond restructuring Federal agencies and programs, would:

- **Increase competition**. The proposal would remove the Federal charter from statute and fully privatize the GSEs. A Federal entity with secondary mortgage market experience would be charged with regulatory oversight of the fully privatized GSEs, have the authority to approve guarantors, and develop a regulatory environment that is conducive to developing competition amongst new private guarantors and the incumbent GSEs, ensuring they would all be adequately capitalized and competing on a level playing field. If the GSEs lost some of the benefits that have led them to dominate the market, this would enable other private companies to begin competing in this space. The regulator would also ensure fair access to the secondary market for all market participants, including community financial institutions and small lenders.

- **Increase transparency and accountability**. Under this proposal, which would also involve entities outside the Executive Branch of the Federal Government, guarantors would have access to an explicit guarantee on the MBS that they issue that is only exposed in limited, exigent circumstances. Taxpayers would be protected by virtue of the capital requirements imposed on the guarantors, maintenance of responsible loan underwriting standards, and other protections deemed appropriate by their primary regulator. The regulator would set fees to create an insurance fund designed to take effect only after substantial losses are incurred by the private market, including the guarantors, in order to ensure the continued availability of mortgage financing through shifting economic cycles. The projected cost of this guarantee and other fees charged would be on-budget and accountable, resulting in reduced implicit taxpayer exposure.

- **Align incentives and reduce overlap**. Under this reform proposal, which would also require legislative and policy changes affecting the mandates of entities that are not part of the United States Government, the GSEs would focus on secondary market liquidity for mortgage loans to qualified borrowers, while HUD would assume primary responsibility for affordable housing objectives by providing support to low- and moderate-income families that cannot be fulfilled through traditional underwriting and other housing assistance grants and subsidies. To effectuate this, the newly fully-privatized GSEs would have mandates focused on defining the appropriate lending markets served in order to level the playing field with the private sector and avoid unnecessary cross-subsidization. A separate fee on the outstanding volume of the MBS issued by guarantors would be used specifically for affordable housing purposes, and would be transferred through congressional appropriations to, and administered by, HUD.

- **Provide more targeted assistance to those in need.** The proposal would be designed so that the affordable housing fees transferred to HUD would enable FHA to provide more targeted subsidies to low- and moderate-income homebuyers while maintaining responsible and sustainable support for homeownership and wealth-building. Some of the fees could potentially be used to support affordable multifamily housing or other HUD activities. All of this support would be on-budget and accountable. (*Delivering Government Solutions in the 21st Century: Reform Plan and Reorganization Recommendations*, Office of Management and Budget, June 2018)

"It is long past time to end the failed model of private gains and public losses," said Senator Bob Corkier (R-TN). "I agree with the administration that creating competition is a critical step as we work to shrink Fannie and Freddie and put an end to `too big to fail' mortgage companies."

The Housing Policy Council (HPC), led by Ed DeMarco, a former Acting Director of the FHFA, released the following statement regarding the OMB's proposal to reorganize parts of the government:

"The Housing Policy Council is pleased that the Administration's proposal for government reorganization released by OMB recognizes the need for housing finance reform. The country needs a modernized housing finance system with competitors for Fannie Mae and Freddie Mac, a market based on private capital, and a catastrophic government backstop for the secondary market that provides protection for the taxpayers and the economy. The Housing Policy Council supports action on the issue and is ready to work with the Administration and Congress on ending the failed GSE-based system that has resulted in decade-long conservatorships and toward a market-based system that serves homebuyers, fosters competition, and protects taxpayers." -Ed DeMarco, President, HPC. (*Press Release*, Housing Policy Council, 06/21/18)

In a statement, the Community Home Lenders Association said:

> CHLA applauds the Administration for its call to end the conservatorship of Fannie Mae and Freddie Mac and to recapitalize and re-privatize them with an explicit government guarantee. However, CHLA continues to have significant concerns about adding GSE guarantors, which could facilitate vertical integration and hurt small lenders and consumers.CHLA also encourages the Administration to incorporate explicit policies of G Fee parity and banning volume discounts into their GSE reform proposals as they are developed, to protect those very same small lenders and consumers. (*Press Release*, Community Home Lenders Association, 06/21/18)

"MBA applauds the administration for releasing a proposal to reform Fannie Mae and Freddie Mac, which closely tracks with much of the work that has been done to date by policymakers on Capitol Hill," said David H. Stevens, president and CEO of the Mortgage Bankers Association. "It includes many core principles that MBA has long advocated for, such as an explicit government guarantee on (mortgage-backed securities) only as a catastrophic backstop, allowing for multiple guarantors and ensuring small-lender access." (*Mortgage Professional America Magazine*, Ryan Smith, 06/25/18)

"Unfortunately, the White House has not learned from history," said Nikitra Bailey, Center for Responsible Lending EVP. "This proposal is a bull in a china shop that threatens to harm our recovering economy and exacerbate our affordable housing crisis. Congress should reject this misguided plan." (*Press Release,* Center for Responsible Lending, 06/21/18)

"I understand the desire to tackle GSE reform," said Jesse Van Tol, CEO of the National Community Reinvestment Coalition. "The enterprises are more profitable, more stable and better-regulated than at any point in history. But GSE reform without an affordable housing mandate is not reform, it's a retreat. Homeownership is near a 50-year low, and the entire GOP policy agenda will make it harder for average Americans to build wealth for their families. It will be devastating for the working class. It will divide us even further." (*Mortgage Professional America Magazine*, Ryan Smith, 06/25/18)

On June 24, the *Washington Post* editorial board wrote:

…FHFA presides over a duopoly that has long since repaid the bailout and does observe tighter underwriting standards than it did before the crisis. In December, Treasury Secretary Steven Mnuchin allowed Fannie and Freddie to retain $3 billion in earnings each, to prevent technicalities in the 2017 tax bill from wiping out their capital. Mr. Watt, who was appointed to his five-year term by President Barack Obama in 2014, tried to nudge Fannie and Freddie toward the future by announcing that he would soon propose a new capital requirement for the agencies. Still, FHFA is quietly letting them guarantee slightly larger and riskier mortgages. The specter of another politically embarrassing bailout has been banished, but nothing fundamental has been achieved, nor will it be before the November election. With the Trump administration now on record, however, maybe 2019 will finally be the year for reform. (*Washington Post*, 06/24/18)

In a ratings outlook for Fannie Mae and Freddie Mac, S&P Global Ratings wrote:

We do not believe [the administration's GSE reform] proposals are likely to be enacted within the coming two years. The OMB's proposal includes several principles discussed in prior congressional attempts to redefine the role of the housing-related entities, notably the 2013 bipartisan bill sponsored by Sens. Corker and Warner that failed to secure the requisite broad support from lawmakers.

…We do not see substantial evidence that the OMB's proposals are likely to be enacted within the coming two years. The proposed changes to F&F do not provide much detail nor specify a timeframe for implementation. We believe the proposed changes would necessitate congressional approval, and we think it is unlikely that Congress would bring these proposals to a vote before the November mid-term congressional elections.

…Unless and until we come to believe that one of these reform initiatives will garner political support broad enough to be likely to be enacted within the coming two years, our ratings on F&F are unlikely to decouple from our ratings on the U.S. government.

As a result, S&P's outlook and ratings for Fannie Mae and Freddie Mac remain unchanged. If the administration's reform proposal were to pass as currently written, S&P said it would likely lower its AA+/A-1+ ratings on Fannie and Freddie's senior debt securities. (*HousingWire*, Kelsey Ramirez, 06/25/18)

The GSEs they are a-changin'

In the white paper, *GSE Reform Is Dead—Long Live GSE Reform!*, Jim Parrott and Mark Zandi wrote:

…With a new director at the FHFA next year, we are likely to see a meaningful shift in the role of Fannie Mae and Freddie Mac. This likely means a reduction of both the GSEs' footprint and the cross-subsidy they provide, and it may also mean an attempt to get the GSEs out from under the government's wing altogether. If it is any of these, it will mean higher mortgage rates, less access to credit, and disruption to the housing and mortgage markets and broader economy.

The next FHFA director should instead expand the GSEs' current credit risk transfer process to more sources of private capital, expand the common securitization platform into a more robust market utility, and make the GSEs more transparent. If the next FHFA director were to accomplish these key steps, it would put the nation into position to transition to a housing finance system in which mortgage credit is as available as it is today but in a way that poses less risk to taxpayers and the economy. (*GSE Reform Is Dead—Long Live GSE Reform!*, Jim Parrott and Mark Zandi, May 2018)

In the summer issue of *SCI—Securitization Innovation in Focus*, Structured Credit Investor wrote:

A new common security for Fannie Mae and Freddie Mac is one year away, with implementation set for June 2019. This shifts the ongoing debate over how to reform the GSEs and how the U.S. mortgage market should function at a time when private companies are issuing securitizations, which look increasingly like those of the government enterprises. …The clear direction of travel provided by FHFA focuses the debate on GSE reform, with various proposals to reshape the government enterprises, apparently facing a shrinking window of opportunity. …While the GSEs' evolution is not complete, it is well underway. They have established and grown credit risk transfer (CRT) programs and are very different businesses to the ones that existed before the crisis.

…The FHFA and GSEs have accomplished perhaps 80% of the reform that is needed, but two things remain: creating actual private equity and the appropriate ownership structure," said Andrew Davidson & Co.'s Richard Cooperstein. "Most market participants and commentators have moved on from the—erroneous—arguments about the need for many competitors as the solution. The GSEs' CRT programs are highly efficient and are a key source of private capital, but the GSEs also need private equity. The GSE market has the hallmarks of regulated utilities; large entry barriers, shared infrastructure and large community value. Consequently, a regulated utility ownership structure should be well adapted."

Taxpayers should have about 5%—or $250 billion—of credit protection in the GSEs for $5 trillion of guaranteed mortgages, according to Cooperstein. To recapitalize the GSEs, he advocates raising $100 billion of equity for the enterprises, along with a "fully penetrated" CRT program.

Competition will not work for the mortgage insurance industry because the cost of infrastructure and intellectual property for servicing, automated underwriting systems, quantitative models, securitizations, which would be needed for each new mortgage guarantor in a competitive multiple guarantor would be prohibitively expensive, argues Cooperstein. Moreover, if each guarantor had its own CRT security, the market would be fragmented and illiquid. Issuing combined securities would lead to free rider problems "because firms are incentivized to contribute riskier loans and benefit from more valuable combined securities," said Cooperstein. "Who arbitrates to assure consistent quality? And by the way, the same problem would exist for standard MBS as well. Maybe combining Fannie and Freddie into the Common Securitization Platform (CSP) would not result in free riding, but with five new entrants, it seems inevitable."

"We have to accept there are limits to what can be changed and that no system will ever be perfect, but taking into consideration the legislative calendar, the current state of the GSEs and assessing what is possible, the Moelis plan—or the very similar principles proposed by Mel Watt or by the Independent Community Bankers of America—makes the most sense," said Moelis & Company's Landon Parsons. "Essentially all three keep Fannie and Freddie as two entities but prevent them from having the investment portfolios which got them into trouble, with strong oversight by the FHFA and much increased capital. There should be significant private capital so that Fannie and Freddie can meet and achieve SIFI-like capital requirements. They could then continue their CRT activities as a second level of credit protection providing the frosting on the cake."

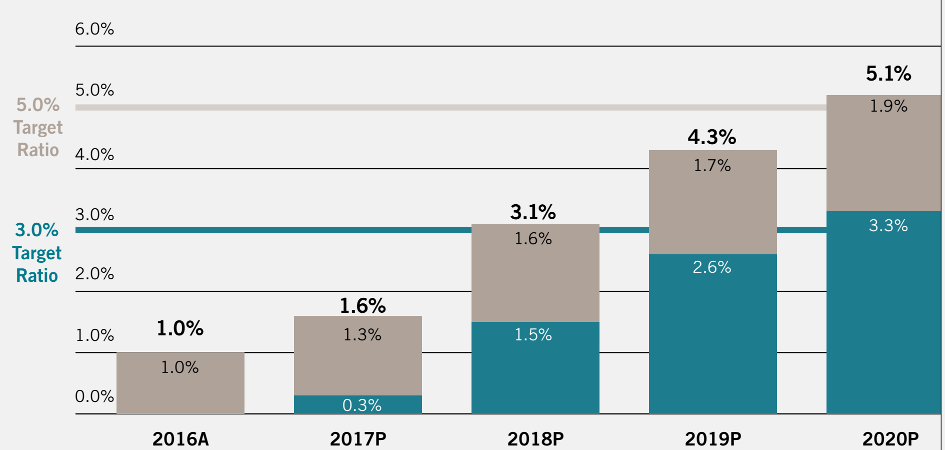
There is a growing consensus that Fannie Mac and Freddie Mac should be private enterprises, regulated like utilities, continuing their CRT activities. The Moelis Blueprint, published last year, outlines Parsons' firm's proposals for how this could be achieved.

Moelis envisages up to US$180bn of core capital through retained earnings and common stock issuance complemented by CRT and reinsurance transactions. This would add up to over 3% core capital with another 2% from CRTs.

PROJECTED CONSOLIDATED LEVERAGE FOR FANNIE AND FREDDIE

	CAPITAL	MINIMUM THRESHOLD
Primary Leverage Ratio	Core Capital	**3.0%** of Total Assets
Secondary Leverage Ratio	Core Capital plus Outstanding CRT	**5.0%** of Total Assets

Figure 4: Projected Consolidated Leverage Ratio
$ Billions at December 31



	2016A	2017P	2018P	2019P	2020P
Core Capital[1]	($188)	$12	$75	$131	$167
CRT Capital[2]	54	67	78	88	97

Source: Company filings, Moelis estimates
1. Core Capital includes Common Equity and Junior Preferred Stock
2. CRT Capital includes CRT debt issued and outstanding to third parties

Source: *Blueprint for Restoring Safety and Soundness to the GSEs*, Moelis & Company LLC, June 2017

"Our plan maintains all the reforms already enacted," said Parsons. "The GSEs could be made to resemble more of an income-orientated stock than a growth stock. Our plan not only accomplishes Treasury Secretary Mnuchin's principles but also bears striking similarity to Mel Watt's plan, with the exception that he proposes an explicit 100% government guarantee of mortgage bonds—which is compatible with the Moelis plan, but adds the complication of requiring Congressional approval."

REBUILDING THE ENTERPRISES' FORTRESS BALANCE SHEET

$ billions

		REBUILDING CORE CAPITAL	% ASSETS[1]
Adj. 2016A Core Capital	SPS principal reduced to reflect original contractual terms, with any remainder exchanged into equity	**$1B**	**+0.0%**
Retained Earnings[2]	Dividends suspended until capital build is completed	**$62B**	**+1.2%**
Common Equity Raised	2018 relisting, 2019 offering(s)	***Initial* $40B** / ***Follow-on* $40B**	**+1.6%**
Preferred Stock Issuances	2020 issuances augment existing junior preferred stock (to the extent not converted)	**$25B**	**+0.5%**
2020P Core Capital	Dividends resume	**$167B**	**3.25%**

Source: Company filings, Moelis estimates
1. Based on 2020 projected total assets of $5.1 trillion
2. Retained earnings net of common and preferred dividends

Source: *Blueprint for Restoring Safety and Soundness to the GSEs*, Moelis & Company LLC, June 2017

Advocates for housing finance reform are keen that the process starts sooner rather than later with administrative reform occurring first, if necessary, followed by Congressional approval of the 100% guarantee at a later date.

Moelis' white paper, *Blueprint for Restoring Safety and Soundness to the GSEs,* can be dowloaded here. (*SCI—Securitization Innovation in Focus*, StructuredCreditInvestor.com, Summer 2018; *Blueprint for Restoring Safety and Soundness to the GSEs*, Moelis & Company LLC, June 2017)

Editor's note: Moelis & Company LLC served as financial advisors to certain non-litigating preferred stockholders of Fannie Mae and Freddie Mac.

COMPARISON OF SAFETY AND SOUNDNESS BLUEPRINT TO OTHER PROPOSALS

	'KILL' GSES	2013 SENATE BILL	URBAN INSTITUTE PLAN1	RECAP & RELEASE	2017 MBA PLAN	2017 ICBA PRINCIPLES	SAFETY AND SOUNDNESS BLUEPRINT
Ends the failed business model arbitraging cheap funding	✔	✔	✔	?	✔	✔	✔
Puts new private capital in a first loss position	✔	✔	✔	✔	✔	✔	✔
Maintains the 30-year mortgage	✖	✔	✔	✔	✔	✔	✔
Provides explicit, paid-for, support to ensure stable market for legacy obligations	✖	✔	✔	?	✔	✔	✔
Feasibly maintains market access to non-bank and non-SIFI mortgage originators	✖	✖	✔	✔	✔	✔	✔
Maintains affordable housing initiatives	✖	✖	✔	?	✔	✔	✔
Does not disrupt mortgage rates, home prices, TBA markets and other Agency-related financial markets	✖	✖	✖	✔	✔	✔	✔
Allows Treasury to capture proceeds from monetizing GSE warrants	✖	✖	✖	✔	?	✔	✔
Explicitly limits government support, and allows this limited support to be reduced over time	✔	✖	✖	?	✖	✖	✔
Quick and feasible implementation	✖	✖	✖	✖	✖	✖	✔

Source: *Blueprint for Restoring Safety and Soundness to the GSEs*, Moelis & Company LLC, June 2017

FHFA proposes minimum capital requirements for GSEs post-conservatorship

The Federal Housing Finance Agency has proposed new minimum capital requirements for Fannie Mae and Freddie Mac that would go into effect when FHFA ends its conservatorship of the two GSEs. Under the proposal, Fannie's and Freddie's targeted combined capital would be $180.9 billion. The proposal would also include components for market and operational risk. The agency has proposed two different minimum capital requirements for the GSEs—(1) 2.5% capital requirement for all assets and off-balance sheet guarantees and (2) 1.5% capital requirement for the GSEs' trust assets and 4% capital for all non-trust assets. FHFA has asked for public comment on both minimum capital requirement structures.

"FHFA's proposed rule is based on a capital framework that is generally consistent with the regulatory capital framework for large banks, but reflects differences in the charters, business operations, and risk profiles of the Enterprises," wrote the agency.

Is FHFA's proposed GSE capital requirements an intellectual exercise of sign of change ahead for the enterprises? "It seems like a reasonable compromise in terms of numbers, but obviously it's theoretical," said Bose George, a managing director at Keefe, Bruyette & Woods. "It's a framework people can use for the future."

Others, however, saw the proposal as having a more substantial impact.

FHFA's proposed capital framework "is largely the one [the GSEs] use today" with regard to pricing and counterparty risk management, according to Urban Insitute's Jim Parrott. "It really does provide a sort of blueprint for the kinds of things we ought to be thinking about legislatively," said Parrott. "Even if we defer to the regulators ultimately, at least we see at the end of the day what a rich capital regime should look like, and then we can decide then and our legislators can decide then what role they want to play in setting guardrails around what a regulator ought to do."

"What's nice about it really first and foremost is for the first time it shows those who are not in FHFA or the GSEs exactly how the capitalization framework that they use today works," added Parrott. "It should be helpful going forward because even if the next FHFA migrates off of this somehow, it is the document to which we'll all turn to understand what we're trying to argue about." (*American Banker*, Hannah Lang, 06/15/18)

In a letter to FHFA Director Watt, the trade organizations and civil rights groups wrote:

> Development of capital restoration plans and suspending the net-worth sweep are crucial first steps to rebuilding capital buffers, and to accelerating the date when the GSEs can finally be released from conservatorship as safe, reformed, regulated mortgage aggregators for lending institutions of all sizes and charters. These first steps help protect the taxpayers and help enable the GSEs to fulfill their statutory mandate of facilitating the financing of affordable housing for low-and moderate-income families while maintaining a strong financial condition. As stated above, HERA gives FHFA the authority to take these actions.
>
> …[T]he mere development of such recapitalization plans does not in any way interfere with the prerogatives of Congress to adopt GSE reform legislation. In fact, we believe such plans would enhance Congress' understanding of what recapitalization entails, which would be a benefit to Congress as it looks for the best policies in this area.

The signatories include the Community Home Lenders of America, Independent Community Bankers of America, The Leadership Conference on Civil and Human Rights, Leading Builders of America, NAACP, National Community Reinvestment Coalition, National Urban League, Prosperity Now, and The Community Mortgage Lenders of America. (*Press Release*, Independent Community Bankers of America, 06/18/18)

Fannie Mae and Freddie Mac release their first quarter earnings

During the media call for Fannie Mae's first quarter results, CEO Tim Mayopoulos said:

> We reported pretax income of $5.4 billion for the first quarter, compared to $5 billion for the fourth quarter of 2017, reflecting the strength of our underlying business. In addition, we reported $4.3 billion in net income and $3.9 billion in comprehensive income for the quarter. These compare with a net loss of $6.5 billion and a comprehensive loss of $6.7 billion for the fourth quarter of 2017.
>
> The primary driver in the shift in net income was the one-time negative impact to our fourth quarter results from the Tax Act. As we had said last quarter, that was a one-time event resulting [from] a reduction of the corporate tax rate. Starting this quarter and going forward, we will benefit from this lower rate. The benefit in the first quarter was approximately $700 million.

We also had $1 billion in net fair value gains this quarter primarily due to interest rate increases. Looking ahead, we expect to remain profitable on an annual basis for the foreseeable future. However, as we've discussed in the past, factors such as interest rates and home prices are beyond our control, and fluctuations in these factors make our quarterly results potentially volatile. We expect to pay a $938 million dividend to Treasury in June 2018, and based on our strong first quarter results we will retain $3 billion in capital that should help us weather modest volatility in our results. (*Press Release*, Fannie Mae, 05/03/18)

FANNIE MAE'S SINGLE-FAMILY LOANS WITH CREDIT ENHANCEMENT

	2016		2017		YTD 2018	
Credit Enhancement	Outstanding UPB	Percent of Book Outstanding	Outstanding UPB	Percent of Book Outstanding	Outstanding UPB	Percent of Book Outstanding
Primary mortgage insurance & other[5]	$509B	18%	$566B	20%	$583B	20%
Connecticut Avenue Securities™ (CAS)[6]	$503B	18%	$681B	24%	$731B	25%
Credit Insurance Risk Transfer™ (CIRT™)[7]	$101B	4%	$181B	6%	$193B	7%
Lender risk-sharing[6]	$23B	1%	$65B	2%	$78B	3%
(Less: loans covered by multiple credit enhancements)	($211B)	(8%)	($335B)	(12%)	($362B)	(12%)
Total UPB of single-family loans with credit enhancement	$925B	33%	$1,158B	40%	$1,223B	43%

Freddie Mac reported comprehensive income of $2.2 billion for the first quarter of 2018, driven largely by the company's strong competitive fundamentals, a $0.4 billion benefit from the reduced corporate tax rate and continued guarantee book growth. Market-related impacts and gains from legacy asset dispositions were modest at $0.2 billion, after-tax, in the first quarter. Freddie Mac will not remit a dividend payment to the Treasury, as the company rebuilds its $3.0 billion capital buffer.

"Freddie Mac delivered $2.2 billion of comprehensive income this quarter, despite a major change in interest rates," said Freddie Mac CEO Donald H. Layton. "In a period with no significant items and little impact from legacy asset dispositions, this demonstrated the increased stability of our earnings. …In short, our results this quarter provide a particularly clear view of our earnings capacity and the progress we've made in fulfilling our mission by creating a better housing finance system for lenders, investors, families and taxpayers."

On March 31, Freddie Mac reported $121.5 billion on the enterprises' credit single-family credit guarantee portfolio, which provided 23.5% of the coverage remaining on that date. (*Press Release*, Freddie Mac, 05/01/18; 10Q, Freddie Mac, 05/01/18)

FREDDIE MAC CREDIT ENHANCEMENTS

	March 31, 2018		December 31, 2017	
(In millions)	Total Current and Protected UPB(1)	Maximum Coverage(2)	Total Current and Protected UPB(1)	Maximum Coverage(2)
Primary mortgage insurance	$338,457	$86,622	$334,189	$85,429
STACR debt note(3)	661,399	19,183	604,356	17,788
ACIS transactions(4)	650,420	7,148	617,730	6,736
Senior subordinate securitization structures	16,986	2,211	12,283	1,913
Other(5)	15,641	6,362	15,975	6,479
Less: UPB with more than one type of credit enhancement	**(842,161)**	**—**	(775,751)	—
Single-family credit guarantee portfolio with credit enhancement	840,742	121,526	808,782	118,345
Single-family credit guarantee portfolio without credit enhancement	995,217	—	1,020,098	—
Total	**$1,835,959**	**$121,526**	**$1,828,880**	**$118,345**

(1) Except for the majority of our STACR debt notes and ACIS transactions, our credit enhancements generally provide protection for the first, or initia credit losses associated with the related loans. For subordination, total current and protected UPB represents the UPB of the guaranteed securities. For STACR debt notes and ACIS transactions, total current and protected UPB represents the UPB of the assets included in the reference pool.

(2) Except for subordination, this represents the remaining amount of loss recovery that is available subject to the terms of counterparty agreements For subordination, this represents the UPB of the securities that are subordinate to our guarantee and held by third parties, which could provide protection by absorbing first losses.

(3) Maximum coverage amounts represent the outstanding balance of STACR debt notes held by third parties.

(4) Maximum coverage amounts represent the remaining aggregate limit of insurance purchased from third parties in ACIS transactions.

(5) Includes seller indemnification, Deep MI CRT, lender recourse and indemnification agreements, pool insurance, HFA indemnification and other credit enhancements.

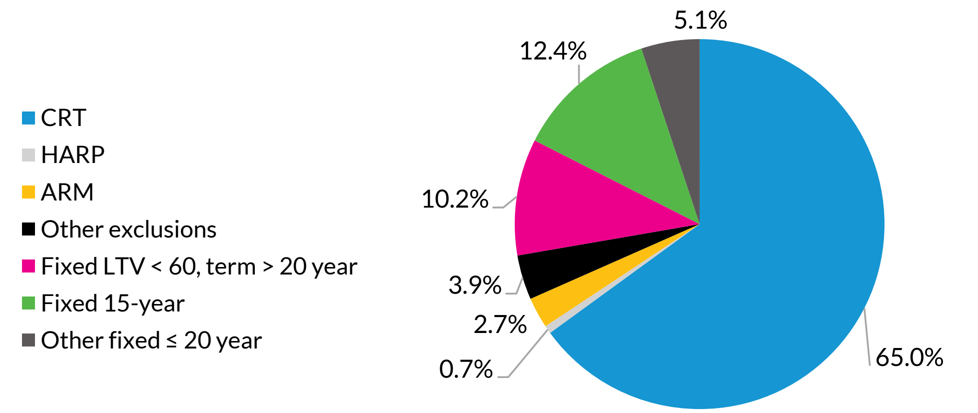
A fork in the road for the GSEs' credit risk transfer

In a working paper on the GSEs' credit risk transfer program, Urban Institute's Laurie Goodman concluded:

> The Fannie Mae and Freddie Mac credit risk transfer (CRT) programs have been a huge success. Starting in 2013, the government-sponsored enterprises (GSEs) have transferred the risk on increasing amounts of reference collateral. But rising interest rates and declining origination volumes suggest that, over the next few years, the GSEs will struggle to keep CRT volumes flat. This will require the GSEs to choose between increasing their capital markets transactions and increasing CRT at the point of acquisition. Moreover, although we believe the GSEs will continue to broaden their offerings, the growth in the market is likely to come from outside GSE space. We have already seen a notable expansion in CRT by the mortgage insurance companies and could eventually see trading in

CRT indexes and the emergence of CRT issuance by banks, should they get capital relief.

BREAKDOWN OF THE 2017 GSE SINGLE-FAMILY BOOK OF BUSINESS



Source: Urban Institute calculations from eMBS data.
Note: ARM = adjustable-rate mortgage; CRT = credit risk transfer; GSE = government-sponsored enterprise; HARP = Home Affordable Refinance Program; LTV = loan-to-value ratio.

The white paper is available here. (*Credit Risk Transfer: A Fork in the Road*, Laurie Goodman, June 2018)

The cost of originating a mortgage loan hits an all-time high in the first quarter

"In the first quarter of 2018, falling volume drove net production profitability into the red for only the second time since the inception of our report in the third quarter of 2008," said Marina Walsh, MBA VP of industry analysis. "While production revenues per loan actually increased in the first quarter, we also reached a all-time high for total production expenses at $8,957 per loan [up from $8,475], as volume dropped." On average, independent mortgage banks and mortgage subsidiaries of commercial banks reported a loss of $118 per loan originated in the first quarter of 2018—down from a profit of $237 per loan in the first quarter. (*HousingWire*, Kelsey Ramirez, 06/07/18)

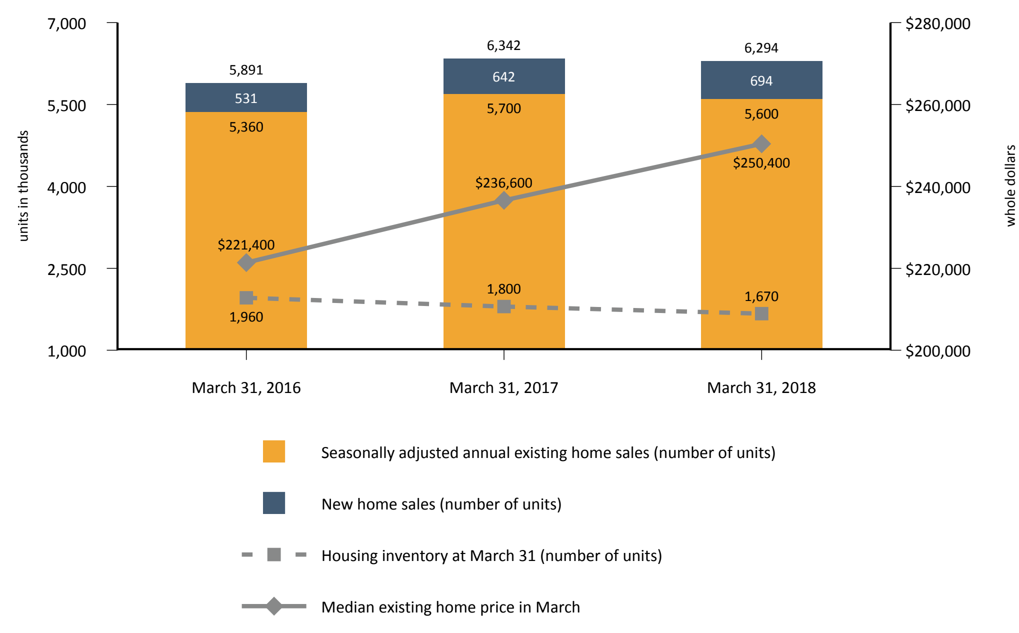
Mortgage lenders reported a net negative profit margin outlook for the seventh consecutive quarter, as rising home prices and tight housing supply continue to put a squeeze on mortgage demand, according to Fannie Mae's Q2 2018 Mortgage Lender Sentiment Survey®. "Lenders remain bearish this quarter as they continue to face headwinds from rising mortgage rates, tight supply, and strong home price appreciation, which have drastically reduced refinance activity and restrained home purchase affordability," said Doug Duncan, SVP and chief economist at Fannie Mae. "These factors have combined to squeeze mortgage origination volumes and have increased competitive pressures. Increased competitiveness will likely persist as a top driver of lenders' mortgage business strategy. We expect this will prompt businesses to turn to cost-cutting as a means of managing their bottom lines, with payroll reduction likely to assume a more prominent role in future belt-tightening efforts." (*Press Release*, Fannie Mae, 06/12/18)

Consumer confidence in the housing market is high despite rising prices and rising mortgage rates

U.S. home sales were relatively flat in the first quarter of 2018 compared to the first quarter of 2017, amid rising home prices and low housing inventory. (*Combined Financial Report*, Federal Home Loan Banks, Quarterly Period Ended March 31, 2018)

U.S. HOME SALES, INVENTORY AND PRICES

Figure 1: U.S. Home Sales, Inventory, and Prices



Source: National Association of REALTORS® for existing home sales, housing inventory, and median existing home price.
Source: U.S. Department of Housing and Urban Development for new home sales.

Despite rising home prices and mortgage rates, consumer confidence in the housing market is at all time highs, particularly across the South and West, according to the Chase Housing Confidence Index. Nearly 80% of those surveyed said now is a good time to sell, while only 17% said it's a bad time to buy a home—due largely to affordability challenges.

"These record results were driven by healthy assessments of local real estate market conditions among existing homeowners, but even more so by surging expectations among renters," said Terry Loebs, founder of Pulsenomics, a partner with Chase on the Index. "Seven in 10 renters now express confidence in their ability to afford a home someday, and nearly three-quarters of those with an opinion say that buying a home is the best long-term investment a person can make.

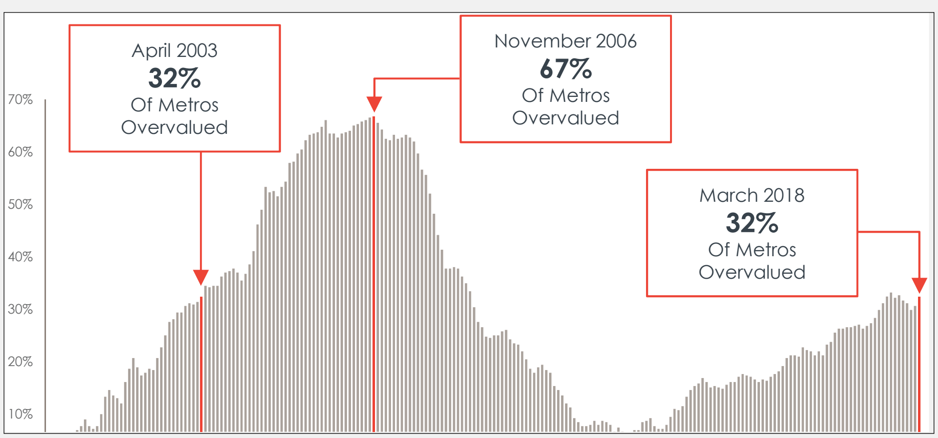
Are home prices overvalued?

Corelogic's chief economist Dr. Frank Nothaft wrote:

> We found that 32 percent of MSAs in the U.S. were potentially 'overvalued' by our metric in March. (Figure 1) The last time that one-third of metro areas were overvalued in a rising price environment was Spring 2003. While many metros were frothy 15 years ago, the valuation bubble was still localized and not national; however, rapid price growth during the following three years led to 67 percent of markets overvalued by 2006. Thus, while we do not have a national valuation bubble today, continued rapid price growth raises the specter of a new bubble forming within the next few years.

MORE OVERVALUED METROS SINCE 2012

% of MSAs overvalued



Source: *Corelogic Home Price Index and Market Conditions Indicator* through March 2018 for MSAs

> When viewed by location, most of today's frothy metros are along the seacoast or in the western mountain states. To illustrate, the CoreLogic Home Price Index for the Denver metro area was about 30 percent above the pre-Great Recession peak, even after netting out inflation. In contrast, real per capita income in Denver has grown by less than that pace since 2006.
>
> The CoreLogic Market Conditions Indicator is an early warning signal for bubbly markets. It should be used in concert with other metrics, such as a comparison of prices with local rents, to determine if values have become untethered to market fundamentals. And while it shows that the U.S. is not in a valuation bubble yet, there are many urban areas where prices appear to have become delinked to their long-term relationship with income. (*The MarketPulse*, Dr. Frank Nothaft, June 2018)

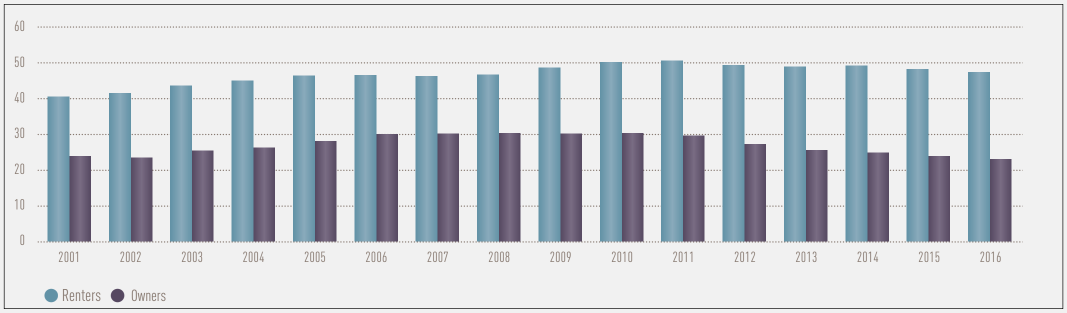
Housing's affordability GAP is large and growing

In *The State of the Nation's Housing 2018*, the staff of the Joint Center for Housing Studies of Harvard University wrote:

> By many metrics, the housing market is on sound footing. With the economy near full employment, household incomes are increasing and boosting housing demand. On the supply side, a decade of historically low single-family construction has left room for expansion of this important sector of the economy. Although multifamily construction appears to be slowing, vacancy rates are still low enough to support additional rentals. In fact, to the extent that growth in supply outpaces demand, a slowdown in rent growth should help to ease affordability concerns.
>
> Indeed, the cumulative effect of strong growth in housing costs and modest gains in household incomes has left nearly half of today's renters with cost burdens, including a quarter with severe burdens. The rising cost of homes for sale also raises down payment and closing costs, making it more difficult for individuals and families to make the transition to owning.

NEARLY 50% OF RENTER HOUSEHOLDS AND 25% OF OWNER HOUSEHOLDS ARE COST BURDENED

Share of household burdens (%)



National efforts are necessary to close the affordability gap. Housing policymakers have many opportunities to address the cost side of the equation, including the increasing size and quality of homes; lack of productivity improvements in the residential construction sector; escalating costs of labor, building materials, and land; and barriers created by a complex and restrictive regulatory system. However, tackling this broad mix of conditions will require collaboration of the public, private, and nonprofit sectors in a comprehensive strategy that fosters innovation in the design, construction, financing, and regulation of housing.

But even if successful, these efforts will not produce decent, affordable homes for the millions of households that simply cannot pay enough to cover the costs of producing that housing. For these families and individuals, there will always be a need for public subsidies. The federal government's failure to respond adequately to this large and growing challenge puts millions of households at risk of housing instability and the threats it poses to basic health and safety. Many state and local governments are doing their part to expand assistance, but a more robust federal response is essential to any meaningful progress in combatting the nation's housing affordability crisis. (*The State of the Nation's Housing 2018*, Joint Center for Housing Studies of Harvard University, June 2018)

Innovative technologies poised to reinvent the housing market

On *DisruptionHub.com*, Laura Cox outlined how new technologies are poised to revoluntize home construction and mortgage lending:

[

1. **3D printed homes.** In 2017, Russian company Apis Cor 3D printed a 400 square foot house in 24 hours. Industrial 3D printers aren't exactly cheap, but over time their price has plummeted. It seems likely that soon, small to medium construction and housing companies will be able to work with additive manufacturing. They may not have the resources to print entire houses, but could begin to work on smaller projects with the aim of making building processes quicker and more robust. 3D printing could streamline the time it takes to build a house, as well as making it cheaper to do to. It also has the potential to offer personalization and customization, perhaps giving buyers the opportunity to have an influence on design elements too.
2. **Self driving technology.** Built Robotics has developed an autonomous track loader that is safer and more efficient than human driven alternatives. The autonomous track loader is fitted with lidar sensors and a computer 'brain' that helps it navigate around building sites. Just like other autonomous technologies, the system gets better over time. The company has also avoided some of the major challenges associated with self driving cars by deploying the self driving machine in more controlled environments. Using autonomous technology could create cost savings that should, in theory, make it quicker and easier to construct homes.
3. **Smart home systems**. With demand for housing comes demand for resources, power and maintenance. This places immense strain on housing associations and housing companies, as well as inconveniencing tenants or homeowners when their needs are not met. Smart home systems, however, reveal when and where resources are needed most through property profiles. Kasita, for example, has created a modular smart home that regulates lighting and climate. By applying home automation systems, housing companies and organisations can target limited resources. This can also help to flag potential problems before they become serious, such as faulty home appliances.
4. **Blockchain for real estate.** Even if you can afford to buy a house (or at least get a mortgage), the next steps are far from straightforward. Real estate relies on cooperation and communication between lots of different parties, all of whom demand a fee. However, by moving this process onto the blockchain, house sales could take place without the need for brokers and banks. Smart contracts could be set up to build trust in real estate negotiations, showing the full record of agreements and transactions to avoid confusion and streamline the process. Blockchain technology could also be used to make renting more efficient and rewarding. Decentralized rental platform Rentberry is the first company to use blockchain for this application, automating standard rental tasks and bringing transparency to rental agreements.
5. **DIY digital tools.** For many, owning (let alone building) a house is often an unattainable dream. This is especially the case for younger people, who are often tied into 35-year mortgages. In a TED talk given [in May], PLACE Technologies founder Sarah Murray

explained how DIY digital tools could be used to transform the current business model that makes it so hard to get on the property ladder. Traditional construction is notoriously complicated, building houses from scratch. But you wouldn't have your car built on your driveway, or your laptop built in your room. If houses could be designed by prospective owners via a digital platform, the lengthy process of construction could become more efficient. PLACE aims to offer personalized houses that are designed by the owner and constructed in 30 days – from $75,000. (*DisruptionHub.com*, Laura Cox, 06/26/18)

FANNIE MAE

Fannie Mae continues sharing mortgage risk with the private market

On May 4, Fannie Mae announced that it had secured commitments for two new front-end Credit Insurance Risk Transfer™ (CIRT™) transactions. These will be the fourth and fifth deals completed on a flow basis, meaning the risk transfer will have been committed prior to Fannie Mae's acquisition of the covered loans and the insurance coverage will be effective as soon as the loans are acquired. Coverage and pricing are committed for 12 months, beginning with March 2018 deliveries.

In CIRT FE 2018-1, which became effective March 1, 2018, Fannie Mae will retain risk for the first 50 basis points of loss on an approximately $12 billion pool of loans. If this $60 million retention layer is exhausted, reinsurers will cover the next 325 basis points of loss on the pool, up to a maximum coverage of approximately $390 million. With CIRT FE 2018-2, which also became effective March 1, 2018, Fannie Mae will retain risk for the first 50 basis points of loss on an approximately $8 billion pool of loans. If this $40 million retention layer is exhausted, reinsurers will cover the next 325 basis points of loss on the pool, up to a maximum coverage of approximately $260 million. Coverage for these deals will be provided based upon actual losses for a term of 10.5 years from the effective date. (*Press Release*, Fannie Mae, 05/04/18)

On June 11, Fannie Mae completed its second and third traditional Credit Insurance Risk Transfer™ (CIRT™) transactions of 2018 covering existing loans in the company's portfolio. The two deals, CIRT 2018-2 and CIRT 2018-3, which together cover $10 billion of loans. To date, Fannie Mae has acquired about $6.2 billion of insurance coverage on $254 billion of loans through the CIRT program. (*Press Release*, Fannie Mae, 06/11/18)

On June 26, Fannie Mae priced its fourth credit risk sharing transaction for 2018, issuing a $939.5 note offering under its Connecticut Avenue Securities® (CAS) program. The reference pool for CAS Series 2018-C04 consists of more than 103,000 single-family mortgage loans with an aggregate outstanding unpaid principal balance of approximately $24.7 billion. The loans in this reference pool have original loan-to-value ratios between 80.01 and 97 percent and were acquired from October 2017 through January 2018.

With the completion of this transaction, Fannie Mae will have brought 27 CAS deals to market since the program began, issued $33 billion in notes, and transferred a portion of the credit risk to private investors on over $1 trillion in single-family mortgage loans as part of the CAS program. Since 2013, Fannie Mae has transferred a portion of the credit risk on approximately $1.4 trillion in single-family mortgages through all of its risk transfer programs. (*Press Release*, Fannie Mae, 06/26/18)

Fannie Mae markets re-performing and non-performing loans

On June 13, Fannie Mae began marketing its seventh sale of re-performing loans as part of the company's ongoing effort to reduce the size of its retained mortgage portfolio. The sale consists of approximately 27,000 loans, having an unpaid principal balance of approximately $6.17 billion, and is available for purchase by qualified bidders. This sale of re-performing loans is being marketed in collaboration with Citigroup Global Markets, Inc. Bids are due on July 10, 2018. (*Press Release*, Fannie Mae, 06/13/18)

On June 12th, Fannie Mae announced the winning bidders for its thirteenth non-performing loan sale. The sale includes approximately 9,800 loans totaling $1.64 billion in unpaid principal balance, divided among four pools. The winning bidder for the transaction is MTGLQ Investors, L.P. (Goldman Sachs). The transaction is expected to close on July 20, 2018. (*Press Release*, Fannie Mae, 06/12/18)

On June 26, Fannie Mae announced VRMTG ACQ, LLC (VWH Capital Management, LP), a minority woman owned business, is the winning bidder for its thirteenth Community Impact Pool of non-performing loans, comprise of approximately 667 loans totaling $129.23 million in unpaid principal balance, secured by properties in New Jersey, New York, Baltimore, Maryland, Cook County, Illinois, and Miami, Florida areas. The transaction is expected to close on August 20, 2018. (*Press Release*, Fannie Mae, 06/26/18)

Fannie Mae announces $26 million low-income housing tax credit investment

On June 28, Fannie Mae announced it will provide a $26 million low-income housing tax credit (LIHTC) equity investment to facilitate the construction of Far Rockaway Village, a 457 unit residential development in the downtown Far Rockaway area of Queens, NY. Fannie Mae is backing the project through The Richman Group Affordable Housing Corporation, a Fannie Mae LIHTC fund partner. Fannie's financing backs the first phase of Far Rockaway Village, which will be the largest residential development in downtown Far Rockaway. (*Press Release*, Fannie Mae, 06/28/18)

FREDDIE MAC

Freddie Mac has transferred a portion of the credit risk for more than $1 trillion in single-family mortgages

On June 8, Freddie Mac priced its second Seasoned Credit Risk Transfer Trust (SCRT) offering of 2018—a rated securitization of approximately $1.6 billion of both guaranteed senior and unguaranteed subordinate securities. Freddie Mac SCRT Series 2018-2 issued approximately $1.5 billion in guaranteed senior certificates and approximately $127 million in unguaranteed mezzanine and subordinate certificates on June 13, 2018. (*Press Release*, Freddie Mac, 06/08/18)

On June 12, Freddie Mac priced $1.05 billion Structured Agency Credit Risk (STACR®) 2018-DNA2 Notes, its second lower LTV deal of the year. This is also the second STACR transaction in which the notes are issued by a trust rather than as Freddie Mac debt. To date, Freddie Mac has transferred a portion of credit risk on more than $1 trillion in single-family mortgages through its diverse credit-risk transfer (CRT) program.

"We have transferred a significant portion of mortgage credit risk to private investors on more than $1 trillion of single-family mortgages—and we're very proud of reaching this important milestone in our credit risk transfer program," said Mike Reynolds, vice president of credit risk transfer. "Our innovation and leadership in CRT is building a better housing finance system for homebuyers and taxpayers, and providing global investors a growing number of opportunities to invest in the U.S. residential housing market." (*Press Release*, Freddie Mac, 06/12/18)

Freddie Mac announces new members of its management team

John Krenitsky has joined Freddie Mac as SVP and Chief Compliance Officer (CCO), effective June 1, following the retirement of current CCO Carol Wambeke. As COO, Krenitsky will oversee and manage Freddie's compliance with legal and regulatory requirements and related controls that govern the company's business activities.

Krenitsky joins the enterprise from Discover Financial Services, where he managed an enterprise-wide compliance risk program as chief compliance officer. Previously, he was chief compliance officer for BNP Paribas Subsidiaries, including BancWest Corporation and Bank of the West. Krenitsky spent 13 years working for M&T Bank, first as a deputy general counsel and then as chief compliance officer. Before joining joining M&T Bank, Krenitsky was a commercial litigation attorney in Buffalo, NY. He holds a Juris Doctor degree from the State University of New York at Buffalo, Law School and a bachelor's degree in public policy from Hamilton College.

"John's sharp legal mind and experience in building and managing enterprise-wide compliance risk programs makes him the ideal person to be Freddie Mac's chief compliance officer as we continue on our transformation journey,"said Anil Hinduja, Freddie Mac EVP and Chief Enterprise Risk Officer. "In short, he is the right person for the job at the right time for the company." (*Press Release*, Freddie Mac, 05/14/18)

Ricardo Anzaldua joined Freddie Mac as EVP and Senior Legal Advisor to CEO Donald Layton in May 2018. After a transition period, Anzaldua is expected to succeed William H. McDavid, EVP, General Counsel and Corporate Secretary following his retirement at the end of 2018.

Anzaldua was EVP and General Counsel of MetLife, Inc., from 2012 until 2017. Previously, he held senior positions in the legal department of the Hartford Financial Services Group and a partner at the law firm of Cleary, Gottlieb, Steen & Hamilton LLP. Anzaldua received a B.A. degree from Brown University in 1979 and a J.D. degree from the Harvard Law School in 1990.

"For six years, Bill McDavid has driven the legal and regulatory strategy that helped transform Freddie Mac into a fundamentally better company. His counsel will be sorely missed," said Freddie Mac CEO Donald H. Layton. "At the same time, we welcome to Freddie Mac Ricardo Anzaldua, an accomplished attorney and experienced general counsel whose experience and advice will be invaluable as we prepare for the future." (*Press Release*, Freddie Mac, 4/30/18)

Freddie Mac launches its "Borrowers of the Future℠" campaign

In May, Freddie Mac launched the "Borrower of the Future℠" to help mortgage originators better understand and address the evolving needs of the next generation of consumers driving housing demand. Freddie Mac will issue white papers, report and articles, drawing on its leading marketplace position and access to data to glean valuable insights and share knowledge on what changing demographics and new behavioral economics mean for home ownership. In addition, Freddie Mac is partnering with NYU Professor Arun Sundararajan to obtain his insight into how digital technologies and the future of work change the dynamics of homeownership, leveraging research and expertise to further advance the initiative's efforts.

"The increase in self-employed and the rise of the sharing economy and digitally-driven lifestyles are having a tremendous impact and leading to shifts in behavioral, economic and societal factors," said Chris Boyle, Freddie's Chief Client Officer. "Collectively, the industry must now take into account these dynamics as we think about how to effectively help the next generation find the home of their dreams. We're excited to serve in this important role to help the industry better understand the Borrower of the Future, and then drive the conversation on how to apply these insights to make the mortgage process more efficient and affordable."

"I'm delighted to be collaborating with Freddie Mac on such a forward-looking initiative," said Professor Sundararajan. "As digital forces transform varied aspects of business and life, industries across the spectrum will need to adapt. Our collaboration will shed light on the demographic, economic, technological and cultural factors reshaping the needs and preferences of the future homebuyer, enabling the industry to evolve efficiently and effectively to address new market realities." (*Press Release*, Freddie Mac, 05/21/18)

Freddie Mac launches new employment initiative for homeowners in "high needs" areas

On June 14, Freddie Mac announced a new partnership with NextJob, a re-employment solutions company headquartered in Bend, OR, to provide job search assistance to current and aspiring homeowners living in high-needs and other persistent poverty areas. This initiative is part of Freddie Mac's three-year Duty to Serve plan, which targets middle Appalachia, the lower Mississippi Delta, Colonias and other tracts located in persistent poverty counties. This initiative is designed to help financially distressed homeowners in underserved markets and assist homeowners who have Freddie Mac Home Possible® mortgages.

Initial partners include CDC of Brownsville, TX, D&E in Mississippi, FAHE in Kentucky's Appalachia region and HOPE Enterprise Corporation, headquartered in Jackson, MI. In some of these designated high-needs areas, the unemployment rate is much higher compared to the national average. For example, in the Mississippi Delta, the unemployment rate was 6.2 percent compared to the national average of 3.8 percent for April 2018. Issaquena county of the Mississippi Delta had an unemployment rate as high as 11.6 percent in 2017.

To help struggling homeowners, Freddie Mac will alert its servicers who have Home Possible mortgages and determine if the borrowers are eligible to receive NextJob services. Once an approved borrower is engaged with NextJob, they will be eligible for one-on-one job coaching, access to "Job Talk" webinars and NextJob's proprietary online job search training program. Additionally, partner organizations can refer prospective borrowers to receive employment or re-employment services under the initiative.

In June 2015, Freddie Mac launched its first homeowner re-employment pilot with NextJob and other lenders to help borrowers secure employment and avoid foreclosure. Homeowners who took part in the pilot increased their job search skills by 32% and acquired jobs at nearly triple the normal rate of re-employment. Many borrowers were classified as long-term unemployed before the program and, on average, borrowers acquired new employment in just over four months.

"While some parts of the country are benefitting from low unemployment rates, many rural areas continue to see limited opportunities and flattening or declining wage growth," said Mike Dawson, Freddie Mac VP of single-family affordable lending strategies and initiatives. “Through our work with NextJob, and by partnering with leading local organizations on the front lines of this problem, we are capitalizing on the success of our past employment programs to help the next frontier of unmet workforce development needs. This partnership will provide meaningful opportunities to create and sustain homeownership for families across rural America.” (*Press Release*, Freddie Mac, 06/14/18)

FEDERAL HOME LOAN BANKS

The Federal Home Loan Bank System reports net income of $858 million for the first quarter of 2018

On March 31, the Federal Home Loan Bank System reported total assets of $1.1 trillion, including $697 billion of advances and $54.9 billion of mortgage loans held in portfolio. The System reported total capital of $56.6 billion and a GAAP-to-assets ratio of 5.21%.

SELECTED FINANCIAL DATA

	2018	2017			
(dollars in millions)	March 31,	December 31,	September 30,	June 30,	March 31,
Selected Statement of Condition Data at					
Investments(1)	$ 329,412	$ 307,280	$ 318,349	$ 312,548	$ 308,551
Advances	697,066	731,544	719,387	706,849	660,740
Mortgage loans held for portfolio	54,915	53,843	52,226	50,555	48,990
Allowance for credit losses on mortgage loans	(17)	(16)	(16)	(17)	(18)
Total assets	1,087,860	1,103,451	1,097,509	1,081,699	1,026,027
Consolidated obligations					
Discount notes	389,052	391,480	407,311	428,684	376,967
Bonds	627,837	641,601	620,706	582,248	581,538
Total consolidated obligations	1,016,889	1,033,081	1,028,017	1,010,932	958,505
Mandatorily redeemable capital stock	1,237	1,272	1,347	1,484	1,462
Capital					
Total capital stock(2)	37,285	37,657	37,007	36,883	35,003
Additional capital from merger(3)	—	—	—	—	9
Retained earnings	18,463	18,099	17,681	17,238	16,779
Accumulated other comprehensive income (loss)	890	724	628	442	223
Total capital	56,638	56,480	55,316	54,563	52,014
Selected Statement of Income Data for the quarter ended					
Net interest income	$ 1,265	$ 1,236	$ 1,236	$ 1,189	$ 820
Provision (reversal) for credit losses	2	—	(1)	1	—
Net interest income after provision (reversal) for credit losses	1,263	1,236	1,237	1,188	820
Non-interest income (loss)	4	58	28	37	492
Non-interest expense	312	330	314	285	407
Affordable Housing Program Assessments	97	98	97	96	93
Net income	$ 858	$ 866	$ 854	$ 844	$ 812
Selected Other Data for the quarter ended					
Cash and stock dividends	$ 499	$ 448	$ 411	$ 394	$ 406
Dividend payout ratio(4)	58.16%	51.73%	48.13%	46.68%	50.00%
Return on average equity(5)(6)	6.01%	6.23%	6.19%	6.36%	6.20%
Return on average assets	0.30%	0.32%	0.31%	0.32%	0.31%
Average equity to average assets(6)	5.06%	5.07%	4.99%	5.03%	4.98%
Net interest margin(7)	0.45%	0.45%	0.45%	0.46%	0.31%
Selected Other Data at					
GAAP capital-to-asset ratio	5.21%	5.12%	5.04%	5.04%	5.07%
Regulatory capital-to-assets ratio(8)	5.24%	5.17%	5.11%	5.14%	5.19%

(1) Investments consist of interest-bearing deposits, securities purchased under agreements to resell, federal funds sold, trading securities, available-for-sale securities, and held-to-maturity securities.
(2) FHLBank capital stock is redeemable at the request of a member subject to the statutory redemption periods and other conditions and limitations. (See *Note 13 - Capital* to the accompanying combined financial statements for additional information on the statutory redemption periods and other conditions and limitations.)
(3) Additional capital from merger resulted from the merger effective May 31, 2015, between the FHLBank of Des Moines and the FHLBank of Seattle, and primarily represented the amount of the FHLBank of Seattle's closing retained earnings balance as of the merger date, adjusted for fair value and other purchase accounting adjustments, and identified intangible assets, and is net of dividends paid by the FHLBank of Des Moines subsequent to the merger date. The balance in additional capital from merger was depleted following the first quarter dividend payment in May 2017.
(4) Dividend payout ratio is equal to dividends declared in the period expressed as a percentage of net income in the period. This ratio may not be as relevant to the combined balances because there are no shareholders at the FHLBank System-wide level.
(5) Return on average equity is equal to net income expressed as a percentage of average total capital.
(6) Mandatorily redeemable capital stock is not included in the calculations of return on average equity or average equity to average assets.
(7) Net interest margin is equal to net interest income represented as a percentage of average interest-earning assets.
(8) The regulatory capital-to-assets ratio is calculated based on the FHLBanks' regulatory capital as a percentage of total assets. (See *Note 13 - Capital* to the accompanying combined financial statements for a definition and discussion of regulatory capital.)

In the first quarter of 2018, the FHLB System reported $858 million, an increase of $46 million—or 5.7%—compared to the same period last year. The System's increased profitability resulted from an increase in net interest income and a decrease in non-interest expense, partially offset by lower gains on derivatives and hedging activities and no gains on litigation settlements.

The System's top 10 FHLB advance holding borrowers held $265.6 billion in aggregate on March 31st, representing 38.0% of the System's outstanding advances. (*Combined Financial Report*, Federal Home Loan Banks, Quarterly Period Ended March 31, 2018)

TOP 10 ADVANCE HOLDING BORROWERS BY HOLDING COMPANY

At March 31, 2018 ($ in millions)

Holding Company Name(1)	FHLBank Districts(2)	Principal Amount	Percentage of Total Principal Amount of Advances
Wells Fargo & Company	Des Moines, San Francisco	$ 58,829	8.4%
JPMorgan Chase & Co.	Pittsburgh, Cincinnati, Chicago, Des Moines, San Francisco	56,833	8.1%
Citigroup Inc.	New York, Dallas, San Francisco	30,996	4.4%
Bank of America Corporation	Boston, Atlanta, Des Moines, San Francisco	29,140	4.2%
The PNC Financial Services Group, Inc.	Pittsburgh, Atlanta, Cincinnati	19,537	2.8%
Ally Financial Inc.	Pittsburgh	18,550	2.7%
MetLife, Inc.	Boston, New York, Pittsburgh, Des Moines	16,670	2.4%
New York Community Bancorp, Inc.	New York	12,535	1.8%
Mitsubishi UFJ Financial Group, Inc.	San Francisco	11,900	1.7%
Navy Federal Credit Union	Atlanta	10,629	1.5%
		$ 265,619	38.0%

(1) Holding company information was obtained from the Federal Reserve System's web site, the National Information Center (NIC), and SEC filings. The NIC is a central repository of data about banks and other institutions for which the Federal Reserve System has a supervisory, regulatory, or research interest, including both domestic and foreign banking organizations operating in the United States.
(2) At March 31, 2018, each holding company had subsidiaries with advance borrowings in these FHLBank districts.

FHLB stakeholders voice concern about the complexity of FHFA's proposed rule on the allocation of affordable housing funds

The Federal Housing Finance Agency received more than 404 comments on the agency's proposed rule that would provide the Federal Home Loan Bank System flexibility in allocating affordable housing funds. Many stakeholders voiced concern about the complexity of the proposed rule, which resulted in a 30-day extension on the comment period to June 12. Many voiced concern about the restrictiveness of the proposal, writing:

"The [rule's] outcomes-based framework around which the proposed rule is built significantly changes the AHP from a program that rewards those projects most aligned with priorities in a scoring framework," wrote the Federal Home Loan Banks in a June 1st letter. Specifically, the FHLBs wrote:

- The outcomes-based framework around which the proposed rule is built significantly changes the AHP from a program that rewards those projects most aligned with priorities in a scoring framework
- The proposed outcome requirements may reduce the pool and diversity of sponsors.
- The minimum requirements for special needs and homeless populations are excessive.
- The minimum requirement for very-low income households is excessive.
- The proposed outcomes-based framework penalizes the FHLBanks if outcome requirements are not met.
- Re-ranking of applications reduces the AHP's transparency.

The American Bankers Association urged FHFA to reconsider its approach to modifying the FHLBs' Affordable Housing Program. The proposed "complex, highly prescriptive, outcomes-based framework for awarding AHP funds that is less flexible, more complex from a compliance standpoint and less transparent," according to the ABA. "Revisions to the AHP should focus on making the program more efficient and responsive to locally identified needs, not on imposing strict new national standards and penalties."

"Mandating the priorities as proposed under the AHP amendment will reduce the number of developments that will score competitively to be awarded an AHP grant," wrote Chase Bank's Laurie Perez. "Any amendments to AHP should encourage the maximum creation of affordable housing and not discourage it."

"The new required outcomes create a national, prescriptive program that prevents individual FHLBs from addressing the particular needs of their local communities and respective districts," said Ann Koosachev, National Association of Federally-Insured Credit Unions' senior regulatory affairs counsel.

"[Certain provisions] seriously undermine FHFA's efforts to make the AHP program more efficient and could in fact make them more cumbersome and less effective," said Garth Rieman, National Council of State Housing Agencies' director of housing advocacy and strategic initiatives." (*Banking Journal*, American Bankers Association, 06/11/18; *Correspondence*, Federal Home Loan Bank System, 06/01/18; *Press Release*, National Association of Federally-Insured Credit Unions, 06/13/18; *Press Release*, National Council of State Housing Agencies, 06/14/18)

FHLB-Pittsburg and Pennsylvania Housing Finance Agency partner to fight homelessness

The Federal Home Loan Bank-Pittsburgh (FHLB-Pittsburg) and Pennsylvania Housing Finance Agency (PHFA) have partnered to create Home4Good, a housing entity aimed at ending homelessness in Pennsylvania, and provide $4.5 million of funds for its launch.

“We have many good programs across Pennsylvania that work to keep people in housing,” including affordable housing and rental housing options for older adults, low to moderate- income families, and people with special housing needs, according to PHFA Executive Director and CEO Brian Hudson. Home4Good will support PHFA’s mission by distributing its funds as grants to organizations that help people find or retain housing or offer supportive services.

Any organization that provides services fitting these criteria can apply for funding, including local governments, nonprofits and housing authorities. Home4Good’s grant application deadline ends on September 14. “With some additional targeted funding, we feel [these organizations] can make a tremendous difference in our joint effort with the Federal Home Loan Bank of Pittsburgh to reduce and perhaps even end homelessness in our state,” said Hudson. (*HousingWire*, Jeremiah Jensen, 06/18/18)

GINNIE MAE

Senate confirms Brian Montgomery to serve as FHA Commissioner

Six-months after the Senate Banking Committee approved his nomination, Brian Montgomery was approved by a bipartisan Senate vote of 74-23 to serve as the next FHA Commissioner. Montgomery previously served as FHA Commissioner from 2005 to 2009.

"Brian brings a wealth of housing knowledge and experience to HUD, having held this position in two previous administrations, and we're excited to welcome him back to the agency," said HUD Secretary Ben Carson. "FHA's work is critical to HUD's mission of advancing sustainable homeownership opportunities and quality affordable housing for all Americans. Brian understands this better than anyone and will be ready on day one to address the challenges of today's housing market." (*Multifamily Executive*, 05/29/18)

President Trump nominates Michael Bright to lead Ginnie Mae

The Trump administration formally nominated Michael Bright to serve as president of Ginnie Mae. Bright, who joined the agency in July 2017 as EVP and chief operating officer, has also been serving as Ginnie Mae's interim president. Previously, Bright led Milken Institute's Center for Financial Markets, where he led the housing program. Prior to joining the Milken Institute, he served as a top aide for Senator Bob Corker (R-TN), where he helped author the Corker-Warner housing finance reform bill. After leaving Capitol Hill, Bright was VP in BlackRock's financial advisory operation and SVP of business development for PennyMac. (*HousingWire*, Ben Lane, 05/15/18)

Congress needs to overhaul "dark ages" FHA

The Department of Housing and Urban Development believes a "critical element" of housing finance reform is the modernization of risk management and technology platforms of FHA, according to Adolfo Marzol, a senior advisor to HUD Secretary Ben Carson.

"The difference now between FHA and, say, Fannie Mae or Freddie Mac are truly stark," said Marzol. "We really are in the Dark Ages. FHA and Ginnie Mae rely on COBOL-based operating systems, which were invented in 1959 for use on mainframe computers. FHA's system is comparable to that used by Fannie Mae 12 to 15 years ago, according to Marzol.

FHA Commissioner Brian Montgomery also feels “very strongly” about the need to update the agency’s computer system. “Whether as you think about the future you would put relatively more importance on getting borrowers into homes and having access to credit through FHA, or whether you would be relatively more concerned about the risks the ... program might present the taxpayers … the case for the modernization of FHA I think is compelling on both sides of that,” said Montgomery. (*American Banker*, Hannah Lang, 06/18/18)

Ginnie Mae is developing digital collateral capabilities

Ginnie Mae is planning a pilot program that will securitize digital mortgages as early as 2019, according to the agency’s report *Ginnie Mae 2020*. The agency wrote:

> Our approach will allow us to gradually implement policies and systems that fully incorporate digital mortgages into Ginnie Mae’s business model. The business model we envision will allow Issuers to securitize digital promissory notes that are executed on a uniform smart document format, with elements and specifications like the SMART Doc format used by the Government Sponsored Enterprises (GSEs) Fannie Mae and Freddie Mac. The desired format will leverage MISMO standards to facilitate integration and data exchanges. The use of a specified uniform format will also enable Ginnie Mae to replace manual processes with automated system-based solutions and streamline the initial certification process for loan packages that contain digital mortgages.
>
> While we engage in the technical work necessary to promulgate the standards applicable to electronic closings, digital instruments and electronic vaults, we will also work with the housing programs we support to standardize policies and any other origination requirements for digital mortgages. We will also work closely with the GSEs to benefit from their experience with digital mortgages and to ensure our solution can easily be adopted by Issuers already using similar technology for conventional loans. We believe aligning policies across federal housing programs and developing technical standards are foundational steps; they will be our priority during the initial stages of our digital collateral strategy.
>
> We aim to complete these foundational steps by 2019 and then authorize pilot programs enabling Issuers to securitize digital mortgages, even as we continue to develop other aspects of our Digital Collateral Strategy. The pilot programs will enable us to test our approach, optimize processes and arrive at a strategy that promotes large-scale adoption.
>
> Something to note about the business model we are contemplating as part of a pilot approach is that it would prohibit Issuers from commingling digital mortgages with

traditional paper mortgages in the same loan package. We would have two reasons for requiring the separation of digital instruments from traditional collateral files.

First, pools or loan packages comprised of digital mortgages (Digital Mortgage Pools) would be subject to a different pool certification process. Unlike traditional pools that are delivered to and certified by a third-party custodian, Digital Mortgage Pools would be delivered directly to a designated Ginnie Mae electronic vault and subject to an automated, system-based initial certification process.

… Ginnie Mae is in the final stages of implementing its Single-Family Pool Delivery Module, which implements MISMO standards. Having a MISMO compliant pooling and delivery system will enable Ginnie Mae to validate that the borrower, property and loan data attributes received as part of a pool data set are consistent with the digital instruments delivered to Ginnie Mae's eVault. We have also initiated an acquisition strategy for obtaining the necessary eVault services, which may include leveraging existing contract vehicles or using a new and separate procurement process for these services. Despite the implementation of automated initial certification processes, our business model will continue to leverage third-party custodians for final certifications and for maintaining loan files that are not yet digitized (such as title insurance policies).

Second, by segregating digital mortgages, we intend to protect the marketability of any loan package containing traditional paper notes. As an integral part of our mission, we need to promote the liquidity of mortgage servicing rights (MSRs). When we consider the pool-level structure of the MBS Program, we believe that allowing traditional paper notes to be included within a pool or loan package, which also contains digital mortgages, may reduce the marketability of the corresponding MSR.

Despite this segregation at the pool level, Digital Mortgage Pools will qualify for delivery into multiple Issuer securities, along with other pools comprised of traditional paper notes. We plan to adjust pool and loan package requirements to accommodate various levels of digital mortgage production and will be considering additional incentives for Issuers to go digital.

As we venture into the securitization of digital mortgages, we look forward to receiving feedback from industry subject matter experts and MBS Program participants. We will announce additional details about our implementation timeline and the availability of pilot programs as they are developed. (*Ginnie 2020: Roadmap for Sustaining Low-cost Homeownership*, Ginnie Mae, June 2018)

HUD seeks comment on the disparate impact rule

The Department of Housing and Urban Development issued an advance notice of proposed rulemaking (ANPR), seeking comment on if the 2013 Disparate Impact Rule should be revised in light of the 2015 Supreme Court ruling in Texas Department of Housing and Community Affairs v. Inclusive Communities Project, Inc. Comments must be submitted to HUD by August 20, 2018.

Ballard Spahr's Richard J. Andreano, Jr. wrote:

While the Supreme Court held in *Inclusive Communities* that disparate impact claims may be brought under the FHA, it also set forth limitations on such claims that "are necessary to protect potential defendants against abusive disparate impact claims." In particular, the Supreme Court indicated that a disparate impact claim based upon a statistical disparity "must fail if the plaintiff cannot point to a defendant's policy or policies causing that disparity" and that a "robust causality requirement" ensures that a mere racial imbalance, standing alone, does not establish a prima facie case of disparate impact, thereby protecting defendants "from being held liable for racial disparities they did not create." Significantly, while *Inclusive Communities* held that liability may be established under the FHA based on disparate impact, the district court subsequently dismissed the disparate impact claim against the Texas Department of Housing and Community Affairs based on the limitations on such claims prescribed by the Supreme Court in its opinion.

In the ANPR, HUD notes that in response to a notice it published in the Federal Register in May 2017 inviting comments to assist HUD's identification of outdated, ineffective, or excessively burdensome regulations, it received numerous comments both critical and supportive of the Rule and taking opposing positions on whether the Rule is inconsistent with *Inclusive Communities*. HUD also notes that in a report issued in October 2017, the Treasury Department recommended that HUD reconsider applications of the Rule, particularly in the context of the insurance industry. (We have previously reported on a challenge to the Rule by the American Insurance Association and National Association of Mutual Insurance Companies in D.C. federal district court.)

The ANPR contains a list of 6 questions of particular interest to HUD. Issues addressed in the questions include the Rule's: burden of proof standard and burden-shifting framework; the definition of "discriminatory effect" as it relates to the burden of proof for stating a prima facie case; and the causality standard for stating a prima facie case. (*National Law Review*, Richard J. Andreano, Jr., 06/20/18)

Representative Maxine Waters (D-CA) has introduced Restoring Fair Housing Protections Eliminated by HUD Act of 2018 (H.R. 6220), which would require the HUD Secretary to implement the Affirmatively Furthering Fair Housing Rule. The bill would also reinstate the Local Government Assessment Tool that assists jurisdictions in complying with the AHH rule and to conduct a review of fair housing complaints, submitted via an online platform, and report the resolution of complaints to Congress. H.R. 6220 would also codify HUD's mission to include language referring to "inclusive and sustainable communities free from discrimination" and require the HUD Secretary to reissue a Federal Register notice regarding a proposal to require owners and operators of HUD-funded homeless shelters to post a notice informing individuals of their rights under HUD's "Equal Access in Accordance with an Individual's Gender Identity in Community Planning and Development Programs" rule. (*Mortgage Professional America*, Francis Monfort, 06/29/18)

Governor Andrew Cuomo (D-NY) announced that New York is moving to intervene in the lawsuit, National Fair Housing Alliance et al v. Carson, over allegations that HUD has failed to enforce the Fair Housing Act. Specifically, the litigants are attempting to block HUD from unnecessarily delaying implementation of the Affirmatively Furthering Fair Housing Rule's requirement for an Assessment of Fair Housing.

New York will support its intervention in the lawsuit by submitting evidence that demonstrates that HUD's failure to adequately enforce the Fair Housing Act will harm residents and communities in New York State. HUD has abdicated its statutory requirement to administer its programs in a manner that affirmatively furthers fair housing for years to come, argues the state in its motion.

"As a former HUD Secretary, it is unconscionable to me that the agency entrusted to protect against housing discrimination is abdicating its responsibility, and New York will not stand by and allow the federal government to undo decades of progress in housing rights," said Cuomo. "The right to rent or buy housing free from discrimination is fundamental under the law, and we must do everything in our power to protect those rights and fight segregation in our communities." (*Mortgage Professional America*, Francis Monfort, 05/16/18)

FARM CREDIT SYSTEM / FARMER MAC

So far, the House and Senate Farm Bills have minor impact on FCS

"So far, the 2018 House and Senate Farm Bills now pending in Congress would have a minor impact on the FCS, which is good news for bankers," wrote Bert Ely in Farm Credit Watch. "On June 21, the House passed its version of the next Farm Bill (H.R. 2) while on June 13, the Senate Agriculture Committee sent to the Senate floor its version of the Farm Bill (S. 3042). The full Senate will take up the Farm Bill before the end of June, with passage of the bill likely, after numerous floor amendments are considered. Differences between the two bills will then have to be resolved in a conference committee, which is expected to begin work in July. While there is a reasonable chance that Congress will enact a new Farm Bill this year, if it does not, then Congress almost certainly will extend the current Farm Bill, passed in 2014, for another year. (*Farm Credit Watch*, Bert Ely, June 2018)

Farm Credit System reduces lending to smaller borrowers even as System grows

On *Farm Credit Watch*, Bert Ely wrote:

> Despite the FCS's supposed emphasis on lending to young, beginning, and small (YBS) farmers and ranchers, data in the FCS's annual information statement for 2017 documents the declining importance of small borrowers to the FCS over the last several years. Although total FCS lending from year-end 2015 to year-end 2017 increased $22.9 billion, or 9.7 percent, the total amount lent to those who borrowed less than $250,000 was essentially flat, rising to $32.93 billion at year-end 2016 from $32.64 billion at the prior year-end (13.8 percent of total FCS lending) and then dropping to $32.85 billion at the end of 2017, just 12.7 percent of total FCS lending. The FCS had 423,591 borrowers in this loan-size category at year-end 2017. However, a substantial portion of the $208 million increase in borrowings under $250,000 over that two-year period may have been accounted for by the $144 million increase in FCS rural home loans as most of those loans should have been under $250,000.
>
> FCS lending in the next two borrower-size categories — $250,000 to $500,000 and $500,000 to $1 million — showed a similar flatness in outstanding loans. Total loans in the smaller of these two categories grew just $614 million, or 2.9 percent, over the two-year period, while total loans in the larger category grew $753 million, or 3.1 percent. Some of

the borrowers in these categories may have moved into the larger loan categories as they grew their farming or agribusiness operations.

Over that same two-year period, though, FCS lending to its largest borrowers — fewer than 1,000—increased dramatically. At the end of 2015, the FCS had just 804 borrowers with at least $25 million in loans outstanding. Collectively, they had borrowed $71.3 billion, 30.2 percent of all FCS lending. Two years later, at the end of 2017, the FCS had 982 borrowers who had borrowed at least $25 million, for total borrowings of $85.26 billion, 32.9 percent of total FCS lending. Not only are the FCS's largest borrowers becoming more numerous — a 22 percent increase in just two years — but their share of FCS borrowing increased by 2.7 percentage points. I suspect many of these large borrowers are agribusinesses and utilities, not farmers or ranchers.

The next smaller loan-size category — $5 million to $25 million — showed a similar result, an increase of 311 borrowers, to 3,965, at year-end 2017 from 3,654 at year-end 2015. Their borrowings rose less dramatically, from $35.95 billion at year-end 2015 to $38.84 billion two years later, accounting for 15 percent of total FCS lending. This contrast shows the extent to which the FCS is increasingly focused on lending to the largest farming and agribusiness operations in the United States, the farms, ranches, and businesses least in need of the taxpayer subsidy provided by the FCS. There is some good news, though — the FCS only had one credit exposure in the $1 billion to $1.5 billion size range at the end of 2017, down from two such exposures at the end of 2016.

FCS YBS lending data reported by the Funding Corporation tries to tell a different story, keeping in mind that the FCS erroneously reports YBS data. For example, a loan to a young (Y) farmer (under 35) who has been farming less 10 years or less (B) and has less than $250,000 in annual gross sales of agricultural products (S) will get counted three times in the YBS data — once as a Y, once as a B, and again as an S. If he or she has three FCS loans outstanding, say a real estate loan, an operating loan, and an equipment loan, that person will be counted nine times in the FCS's YBS data even though that borrower would get counted just once in the lending data cited in the preceding paragraphs.

This multiple counting severely exaggerates the extent of the FCS's YBS lending. For example, the FCS reports that the aggregate amount of individual loans to young farmers and ranchers increased 4.7 percent from year-end 2016 to year-end 2017; loans to the overlapping group of beginning farmers increased 4.4 percent over the same time period; and loans to small farmers increased 2 percent. The differences between the more favorable YBS data and loan data by the size of the total amount borrowed strongly suggests that the FCS needs to begin aggregating the total amount borrowed by a particular borrower when reporting on its YBS lending. (*Farm Credit Watch*, Bert Ely, May 2018)

Farm Credit System is prepared for a weaker farm economy

"Some deterioration in credit quality" for borrowers in the agricultural sector is evident in a new set of financial indicators of the Farm Credit System posted by Farm Credit Administration (FCA), according to FCA's chief economist Steve Gabriel. While the farm sector "is going through kind of a rough spot right now," the decline in creditworthiness is small and gradual over the past year, according to Gabriel. "First of all, the credit quality issues were at very low levels coming into this period." Indicators of stress "are starting to increase but very gradually."

On March 31, the ratio of bad debt (nonperforming loans) to total loans by the four FCS banks and 69 lending associations increased four basis points from 0.81% for the first quarter of 2017 to 0.85% at the end of March 2018. Over the same period, the System's gross loan volume increased from $250.2 billion to $261.4 billion.

The System's relatively healthy financial picture is attributed to "lots of restraint, not only by Farm Credit but other lenders as well," according to Gabriel. "They learned their lesson back in the 1980s. There is nothing remotely resembling what we experienced in the 80s."

The Farm Credit System reported "strong earnings, higher capital levels and favorable portfolio credit quality for the first quarter in 2018," according to the Farm Credit Administration. "Overall, it is financially strong and remains safe and sound. …Producers across the farm economy will face stress on cash flows from rising interest rates and higher fuel costs. Higher interest rates and declining cash rents will put downward pressure on farmland values. Uncertainties regarding agricultural trade policy and the farm bill will have a direct bearing on the farm economy."

"Looking at forecasts, we don't see any big bumps coming," said Gabriel. "But that assumes normal conditions and we know that's not going to happen. There are lots of unknowns. We could see back-to-back bad weather years and could have a spike in prices. A big change in ethanol policy could be a big source of demand. China is said to be ramping up ethanol; if that were to take off, it could be big source of demand. [However,] normal yields, fairly subdued commodity prices for grains and soybeans and interest rates rising – is going to put pressure on land values and cash flows. There likely will be pressure on producers to tighten their belts." (*Agri-pulse.com*, Jim Webster, 06/20/18)

FARM CREDIT SYSTEM MAJOR FINANCIAL INDICATORS

Quarterly Comparison ($000)

At and for the 3 months ended	31-Mar-18	31-Dec-17	30-Sep-17	30-Jun-17	31-Mar-17
FCS Banks[1]					
Total Assets	292,050,031	289,079,600	281,784,558	281,374,293	281,557,605
Gross Loan Volume	229,770,408	228,084,765	221,196,832	220,771,847	220,657,920
Nonaccrual Loans	434,739	324,571	346,898	305,674	262,223
Cash and Marketable Investments	60,517,256	59,146,365	58,536,899	59,134,552	59,532,555
Net Income	554,179	664,871	480,188	524,302	522,053
Nonperforming Loans/Total Loans[2]	0.20%	0.15%	0.17%	0.15%	0.13%
Capital/Assets[3]	6.38%	6.44%	6.68%	6.60%	6.47%
Unallocated Retained Earnings/Assets	0.00%	0.00%	0.00%	0.00%	0.00%
Return on Assets[4]	0.77%	0.77%	0.73%	0.75%	0.75%
Return on Equity[4]	12.08%	11.62%	10.83%	11.41%	11.69%
Net Interest Margin[5]	0.96%	0.96%	0.98%	0.98%	0.98%
Operating Expense Rate[6]	0.31%	0.33%	0.33%	0.33%	0.33%
Efficiency Ratio[7]	21.86%	25.55%	24.45%	24.12%	24.02%
FCS Associations					
Total Assets	193,348,457	195,817,424	191,949,736	189,686,438	188,180,651
Gross Loan Volume	183,115,796	184,638,381	181,115,751	179,574,344	178,551,492
Nonaccrual Loans	1,430,816	1,344,366	1,353,345	1,362,342	1,366,803
Net Income	1,045,035	1,270,878	958,094	824,482	849,705
Nonperforming Loans/Total Loans[2]	0.96%	0.88%	0.91%	0.95%	0.97%
Capital/Assets[3]	20.01%	19.31%	19.64%	19.47%	19.43%
Unallocated Retained Earnings/Assets	0.00%	0.00%	0.00%	0.00%	0.00%
Return on Assets[4]	2.20%	2.06%	1.88%	1.79%	1.83%
Return on Equity[4]	11.09%	10.44%	9.59%	9.18%	9.52%
Net Interest Margin[5]	2.78%	2.71%	2.72%	2.72%	2.73%
Operating Expense Rate[6]	1.42%	1.41%	1.42%	1.43%	1.45%
Efficiency Ratio[7]	38.78%	32.66%	38.68%	41.32%	41.92%
Total Farm Credit System[8]					
Total Assets	333,029,000	329,518,000	321,591,000	320,381,000	320,127,000
Gross Loan Volume	261,378,000	258,777,000	251,162,000	250,464,000	250,234,000
Bonds and Notes	270,958,000	267,119,000	260,199,000	260,259,000	260,648,000
Nonperforming Loans	2,209,000	1,967,000	2,036,000	2,045,000	2,023,000
Nonaccrual Loans	1,863,000	1,660,000	1,701,000	1,671,000	1,623,000
Net Income	1,266,000	5,189,000	3,716,000	2,466,000	1,244,000
Nonperforming Loans/Gross Loans[2]	0.85%	0.76%	0.81%	0.82%	0.81%
Capital/Assets[3]	16.87%	16.81%	17.26%	17.02%	16.69%
Surplus/Assets	13.43%	13.24%	13.55%	13.99%	13.52%
Return on Assets[4]	1.54%	1.61%	1.55%	1.55%	1.58%
Return on Equity[4]	9.14%	9.48%	9.12%	9.21%	9.44%
Net Interest Margin[5]	2.44%	2.48%	2.52%	2.46%	2.43%

Trump Administration is considering “tariff payments” to farmers

In *USA Today*, Secretary of Agriculture Sonny Perdue wrote:

The U.S. has to stand up to China's abusive trade practices like intellectual property theft. And we won't leave farmers to face Chinese bullying alone.

…President Donald Trump is standing up to China, which wrongly believes it can bully our farmers to get America to back away from defending our national interests. The president understands that our farmers feed, fuel and clothe this nation and the world, and he will not allow U.S. agriculture to bear the brunt of China's retaliatory tactics.

…[T]he president has instructed me to craft a strategy to support our farmers in the face of retaliatory tariffs. At the U.S. Department of Agriculture, we have tools at our disposal to support farmers faced with losses that might occur due to downturns in commodities markets. To this point, we have not unveiled our strategy, as it is not good practice to open our playbook while the opposing team is watching.

But farmers should know this: They have stood with President Trump and his policies, and we will make good on our promise to stand with them as well. If China does not soon mend its ways, we will quickly begin fulfilling our promise to support producers, who have become casualties of these disputes.

Without question, there is much at stake for this nation in trade disagreements. A bullying and predatory China has made no secret of the fact that it seeks to acquire America's technological crown jewels by any means necessary — through physical and cybertheft, forced technology transfer, evasion of our export controls, and state-directed and -funded investment in sensitive technology. And while it may seem outrageous, China has rejected American genetically engineered products, while sending agents crawling in corn fields to pilfer samples of our technology and even purchasing a company that provides U.S. farmers with key genetically engineered seeds.

President Trump has said correctly that if China captures the industries of tomorrow, America will not have an economic future to look forward to — and our national security will be severely compromised. Cutting-edge technologies — from artificial intelligence, autonomous vehicles and biotechnology to aerospace, high-tech shipping and robotics — are critical to our defense. We are faced with a decision: Will others determine our destiny, or will we control our own future?

China began raiding our economy long before a team of thieves infiltrated that Iowa corn field, but President Trump aims to stop the larceny now. The president is a tough negotiator, and I am confident that American agriculture will flourish because of trade relationships that are smarter, stronger and better than before. China might underestimate the strength and resolve of American farmers, but the president does not. And he will not allow our agricultural producers to suffer because of China's continued bad actions. (*USA Today*, Sonny Perdue, 06/26/18)

The Trump administration is looking at ways to use USDA's Commodity Credit Corporation to offer a financial backstop for farmers to protect farmers if China implements tariffs on ag products. The CCC can borrow up to $30 billion from Treasury to support the ag sector, including livestock, row crops, fruit and vegetables farmers. The USDA could direct the CCC to purchase specific crops to support farmers' revenues. Alternatively, the CCC could sell ag commodities to other government agencies and donate food to domestic, foreign or international relief agencies.

Alternatively, administration officials are also considering using "Section 32" funds to farmers to minimize the potential impact of Chinese tariffs on their crops. In the FY2018 March omnibus budget, Congress removed earlier restrictions on CCC activities.

"[President Trump] has directed the Secretary [of Agriculture] to use the authorities he has to protect farmers," according to the USDA. "It wouldn't be prudent to give away our playbook and let China know exactly how we would plan to mitigate what they have threatened," said USDA Secretary Sonny Perdue. "But we can say this: we will not allow our agricultural producers to bear the brunt of China's retaliation, as we defend our own interests as a nation." (*AgWeb.com*, Jim Wiesemeyer, 06/20/18)

Blockchain: change is coming to agricultural supply chains

In a special report on the uses of blockchain technology in agriculture, CoBank's Trevor Amne and Tanner Ehmke concluded:

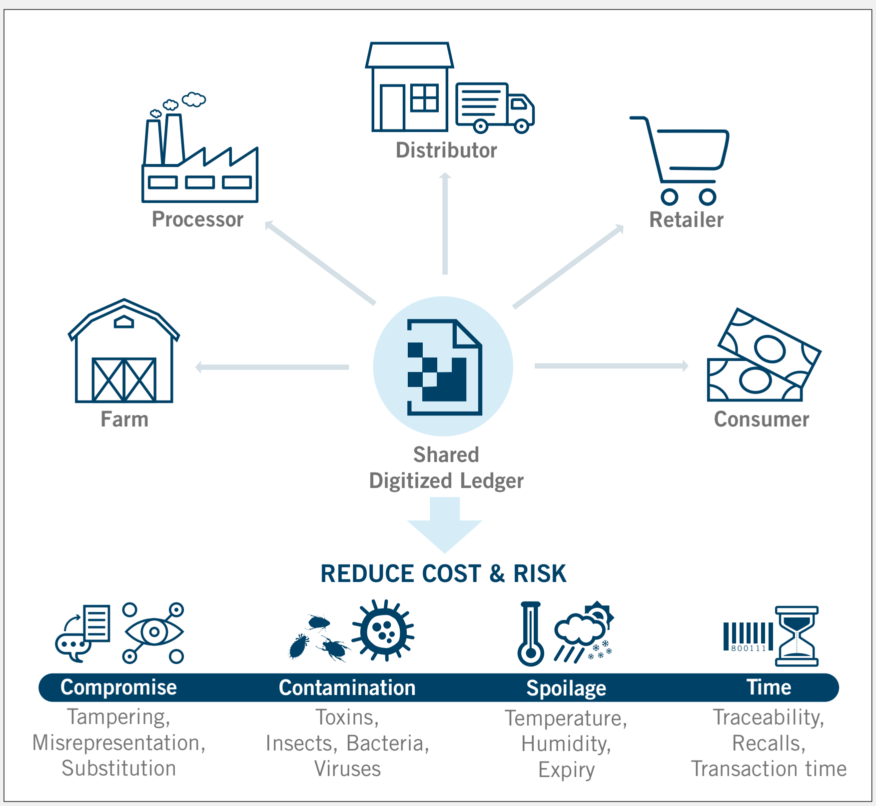
- Agribusiness interest in blockchain, an emerging technology that permanently records transactions on a shared digital ledger, is rapidly growing.
- For the agricultural supply chain, blockchain technology promises increased efficiencies through enhanced data management, lower transaction costs, optimized logistics, more robust traceability, and enhanced food safety protocols.

- Prominent technology companies are creating partnerships with global logistics companies and retailers to develop blockchain applications that can be used for the efficient tracking and delivery of agricultural products.

- Blockchain will accelerate the industry's movement toward greater transparency and traceability from field to fork. This will bring opportunity for growers and a tool for the rest of the supply chain to combat food fraud and offer verifiedproducts to consumers.

- Demands for increased traceability will also create challenges. Agricultural producers could face greater scrutiny, and co-ops and elevators will need to adjust as identity preservation becomes more important.

BLOCKCHAIN TECHNOLOGY PROMISES EFFICIENCES IN AGRICULTURE SUPPLY CHAINS



Agribusiness interest in blockchain technology is rapidly growing. Increasingly, companies are recognizing how the emerging technology's enhanced data management capabilities can create supply chain efficiencies and reduce friction in transactions. The agriculture sector stands to benefit from the technology's potential to lower transaction costs, optimize logistics, increase traceability, and enhance food safety protocols.

… Over the long term, blockchain could hasten the bifurcation of the agricultural industry. As blockchain technology develops and gains acceptance, supply chain participants will increasingly demand others in the supply chain to also participate. Late adopters of the technology will be at a disadvantage and could have access to fewer markets. Meanwhile, early adopters will extend their reach, become more competitive and increase their influence globally.

Blockchain is not a panacea or a quick way to solve all of agriculture's supply chain challenges. Adopters of blockchain technology will face greater scrutiny in a media-rich environment when greater transparency is offered on issues ranging from sustainability practices to animal welfare. Blockchain will also serve to improve supply chain transparency and accountability, but bad actors will still exist and find new ways to defraud buyers.

However, even with its limitations, blockchain will further enable agribusinesses to successfully meet transparency requirements and deliver valuable information to consumers, while cutting transaction costs. And those that take advantage of blockchain's benefits are likely to reap the rewards in a world of information-hungry consumers.

Blockchain use cases in agriculture will continue to evolve, while entirely new applications will be born from innovation that may not seem conceivable today. With retailers and merchandisers already adopting blockchain to increase cost efficiency and increase value to consumers, the continued push towards integration, interoperability, and communication will broaden the technology's potential for global agribusiness applications. (*Blockchain: Change is Coming to Agricultural Supply Chain*s, Trevor Amen and Tanner Ehmke, May 2018)