



Bank Counsel Roundtable Emerging Issues—GSE and Blockchain Developments April 30, 2019





A BRIEF HISTORY OF HOUSING FINANCE IN THE UNITED STATES:

- Before the 1930s, mortgage lending was primarily private from Banks and Savings & Loans; there was no Federal involvement
 - Home loans were short-term and required frequent renewal/rollover





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A BRIEF HISTORY OF HOUSING FINANCE IN THE UNITED STATES:

- 1938 1968: HUD, VA and "original" Fannie Mae bring Federal involvement.
 - Fannie Mae, then a government agency, existed to provide liquidity to the market by buying mortgages from Banks and S&Ls.
 - Freddie Mac originally only accessible by S&Ls
- 1968- 2008: Evolution to Current Market.
 - Fannie Mae privatized, and Freddie Mac modified to permit it to act as a direct competitor
 - Ginnie Mae created to securitize government guaranteed loans.
 - S&L crisis; emergence of private mortgage companies and "originate to sell" model
 - 1980's: creation of private securitization structures
 - 1990's: Congress imposes "affordable housing" guidelines; emergence of the subprime market
 - 1999: Gramm-Leach-Bliley Act declares derivatives out of bounds for regulators; emergence of credit default swap market on mortgage securities
 - 2000-2007: The Big Party.



THE FINANCIAL CRISIS

- Late 2006-2007: the subprime market disintegrates; subprime originators and aggregators fail
- Summer/Fall 2007:
 - July: Bear Stearns Mortgage Funds collapse
 - August: Liquidity Dries Up in U.S. and Euro Markets (LIBOR spread over comparable treasureship increases by 196 bps)
 - October-December: Large Banks report huge mortgage-related losses caused principally by significant reduction in underwriting standards



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THE FINANCIAL CRISIS

- 2008:
 - March: Bear Stearns collapses
 - July 30: Congress enacts Housing and Economic Recovery Act of 2008, creating the Federal Housing Finance Agency (FHFA) to regulate Fannie Mae, Freddie Mac and the Federal Home Loan Banks
 - Through August: Aggressive sales of Fannie Mae and Freddie Mac Preferred Stock to "recapitalize" the GSEs
 - September 7th: FHFA puts Fannie Mae and Freddie Mac into Conservatorship
 - Week of September 15th: Lehman collapses; AIG is bailed out; Merrill Lynch is acquired by Bank of America
 - Week of September 25th: JP Morgan buys Washington Mutual assets from the FDIC
 - Week of October 2nd : Wells Fargo acquires Wachovia
 - October 3rd : Emergency Economic Stabilization Act enacted by Congress, creating the Troubled Assets Relief Program
 - October 14th: Federal Government forces largest banks to accept TARP preferred stock funding



THE YEARS SINCE THE CRISIS

- Disappearance of the Non-Conforming Securitization Market
 - Most Jumbo A Loans have been held "on balance sheet" at Banks until recently.
 - Subprime loans are very rare
 - Qualifying Mortgages or "QMs" predominate the market
 - Fannie Mae and Freddie Mac underwriting programs used to determine QM compliance
- The Dodd-Frank Act created the CFPB, which was given jurisdiction over consumer protection laws:
 - Includes Truth-in-Lending Act, Real Estate Settlement Procedures Act, Home Mortgage Disclosure Act
 - Aggressive enforcement creates uncertainty for the mortgage market
- Work on the Single Security and Common Securitization Platform by Fannie Mae and Freddie Mac.



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FANNIE MAE AND FREDDIE MAC 12/31/18

- Assets
 - Fannie Mae: \$3,418,318,000,000Freddie Mac: \$2,063,660,000,000
- Liabilities
 - Fannie Mae: \$3,412,078,000,000Freddie Mac: \$2,058,583,000,000
- Capital
 - Fannie Mae:
 - Senior Preferred Stock 120,836,000,000 (3.53%)
 - Preferred Stock 19,130,000,000 (0.55%)
 - Common Equity 6,240,000,000 (0.18%)
 - Freddie Mac:
 - Senior Preferred Stock 72,648,000,000 (3.52%)
 - Preferred Stock 14,109,000,000 (0.68%)
 - Common Equity 4,477,000,000 (0.21%)



CAPITAL

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THE PLAYERS IN 2019-2020 – THE TRUMP ADMINISTRATION

 Treasury Secretary Mnuchin made hundreds of millions by buying IndyMac Bank, a major mortgage lender, from the FDIC in 2009 and selling it in 2015





- Director Calabria was the Director of Financial Regulation Studies at The Cato Institute from 2009-2019, where he advocated for a substantial reduction in the federal government's role in housing finance.
- He repudiated some of his prior views to win confirmation
- The Administration does not appear interested in moving toward a Housing Finance System of which Cato would approve.



THE PLAYERS IN 2019-2020 - CONGRESS

- Sen. Crapo wants to move housing finance reform legislation in this Congress.
- Rep. Waters, to date, has focused on criticizing the banking industry and seeking to expand (or at least, to preserve) affordable housing goals and subsidies







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THE PLAYERS IN 2019-2020 – OUTSIDE INTERESTS

- Mortgage Bankers Association
- American Bankers Association
- Other Bank and Credit Union Trade Associations
- "Consumer" Advocates
- Wall Street Interests
 - Investment Banks
 - Hedge Funds holding Fannie Mae and Freddie Mac Preferred Stock



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THE MBA PROPOSALS

- Inject much higher levels of risk-bearing private capital into the mortgage system, while dramatically reducing the system's reliance on government support.
- Enhance the stability of the mortgage system with multiple guarantors that will operate as privately-owned utilities.
- Protect taxpayers and consumers with a clear set of market conduct rules, prudential requirements, and a new federally-backed Mortgage Insurance Fund (standing behind the mortgage backed securities, not the Guarantors themselves) financed with appropriately priced insurance premiums. [But there will still be a Federal Government guaranty.]



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THE MBA PROPOSALS

- Ensure that mortgage lenders of all sizes and business models have equal access to the secondary market.
- Improve service and performance in the secondary market with multiple guarantors competing on operations and systems development, customer service, product parameters and innovation, and pricing and execution.
- Minimize disruption during the transition to the new system by preserving what works in the current system and utilizing the existing regulatory framework where appropriate.
- Meet the needs of the full continuum of households, from families requiring the most directly subsidized, affordable rental homes to those served by the completely private jumbo single-family lending market



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THE MBA PROPOSALS

To summarize,

"If you like your mortgage company, you can keep your mortgage company."





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THE SENATE OUTLINE

- Sen. Crapo has provided an "outline" of his reform proposals, which track many of the MBA's proposals:
- Guarantors of mortgage backed securities:
 - Guarantors will be private companies.
 - The primary business of guarantors will be to guarantee the timely repayment of principal and interest to investors of eligible mortgages that are securitized through a securitization platform operated by Ginnie Mae.
 - Fannie Mae and Freddie Mac will be private guarantors.
 - Guarantors will not be permitted to offer volume-based discounts on the guarantee fee or other terms.
 - Guarantors will be required to maintain (i) a minimum statutorily required capital ratio and (ii) additional capital requirements established by the FHFA.
 - Credit box: a lot like the current Fannie and Freddie underwriting requirements and QM requirements



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THE SENATE OUTLINE

- Regulation of Guarantors
 - FHFA's structure will be changed so that it is run by a bi-partisan board of directors instead of a single Director.
 - FHFA will charter, regulate, and supervise guarantors.
 - FHFA will be required to establish prudential standards.
 - FHFA will be required to approve guarantors' pricing [utility model].
- Regulated Financial Institutions will not be permitted to be, or to own, guarantors.



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THE SENATE OUTLINE

- Ginnie Mae
 - Ginnie Mae will guarantee timely repayment of principal and interest on securities that receive credit enhancement from guarantors that are approved and regulated by FHFA.
 - Ginnie Mae will operate the Single Security and Common Securitization Platform currently being developed by Fannie Mae and Freddie Mac.
 - Ginnie Mae will provide a catastrophic government guarantee at the security-level, backed by the full-faith and credit of the United States.
 - Ginnie Mae will operate a mortgage insurance fund (MIF).
 - The MIF will be funded through insurance premiums paid by guarantors.
 - If the MIF is depleted and draws on Treasury, guarantors would be charged higher insurance premiums to pay back taxpayers and rebuild the MIF reserves to the required reserve ratio.



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THE SENATE OUTLINE

- Affordable Housing
 - Current affordable housing goals and duty-to-serve requirements will be replaced with a new Market Access Fund, which will provide grants, loans, and credit enhancement to address the homeownership and rental housing needs in underserved and low-income communities.
 - The Housing Trust Fund, Capital Magnet Fund, and Market Access Fund will collectively be funded through an annual assessment of 10.0 basis points of the total annual loan volume guaranteed by each guarantor.



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MARCH 29, 2019 WHITE HOUSE MEMORANDUM

- The Secretary of the Treasury is hereby directed to develop a plan for administrative and legislative reforms (Treasury Housing Reform Plan) to achieve the following housing reform goals:
 - Ending the conservatorships of the GSEs upon the completion of specified reforms;
 - Facilitating competition in the housing finance market;
 - Establishing regulation of the GSEs that safeguards their safety and soundness and minimizes the risks they pose to the financial stability of the United States; and
 - Providing that the Federal Government is properly compensated for any explicit or implicit support it provides to the GSEs or the secondary housing finance market.





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MARCH 29, 2019 WHITE HOUSE MEMORANDUM

 For each reform included in the Treasury Housing Reform Plan, the Secretary of the Treasury must specify whether the proposed reform is a "legislative" reform that would require congressional action or an "administrative" reform that could be implemented without congressional action. For each "administrative" reform, the Treasury Housing Reform Plan shall include a timeline for implementation.



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MARCH 29, 2019 WHITE HOUSE MEMORANDUM

- The Secretary of Housing and Urban Development is hereby directed to develop a plan for administrative and legislative reforms (HUD Reform Plan) to achieve the following housing reform goals:
 - Attempting to ensure that the FHA and GNMA assume primary responsibility for providing housing finance support to low- and moderate-income families that cannot be fulfilled through traditional underwriting;
 - Reducing taxpayer exposure through improved risk management and program and product design; and
 - Modernizing the operations and technology of the FHA and GNMA.



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THE HOUSE PLAN



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THE HOUSE'S PRIORITIES

- "It is particularly important to ensure that underserved borrowers and communities are not overlooked. This means housing finance reform will need to include a comprehensive strategy around access to affordable mortgage credit, as well as access to affordable rental housing."
 - Rep. Maxine Waters, January 16, 2019
- "A housing finance reform plan must maintain a government backstop for the mortgage system, modernize credit scores and provide troubled homeowners with ways to avoid foreclosure, a senior House Democrat said Tuesday." Rep. Gregory Meeks, D-N.Y., who chairs the House Financial Services Committee's subcommittee on consumer protection and financial institutions, said those three components are "nonnegotiable" requirements for any legislative fix for the governmentsponsored enterprises.

- American Banker, April 2, 2019



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WHERE DO WE GO FROM HERE?

- There is sufficient common ground among the industry, the Administration and the Senate to get a deal done.
- The House will want to move the proposals significantly to the left.
- Once the Treasury Plan is provided under the March 29 White House Memo, we'll see if the Administration is prepared to force the House's hand.
- Unless the Treasury Plan provides for Administrative changes that will substantially reduce the government role in the housing finance system, it is doubtful any legislation will pass before the 2020 election.



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Introduction

- The blockchain phenomenon is now mainstream
- Every innovation speech and equity pitch must say "blockchain" at least a dozen times
- While cryptocurrency coins have abounded in number—both nationally and internationally—
 - Innovation in other areas has been decidedly slow
- Governmental and private parties have adopted differing approaches to blockchain innovation



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How Do You View Blockchain???

- Perspectives are important
 - Blockchain versus application resident on the blockchain
 - Governments view blockchain nominally as an incidental technology and not as the predominant application
 - Blockchain is really a sophisticated Excel spreadsheet and nothing more....



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Agenda

- Provide some observations regarding the banking industry's perspective about the eventual value and use of blockchain as a technology
 - Including applications resident on a distributed ledger
- Look at the federal government's approach
- · Look at state governments' approach



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U.S. Bank's Definition of Distributed Ledger



A Distributed Ledger (DL) is a system that enables parties that don't fully trust each other to form and maintain consensus about the existence, status and evolution of a set of shared facts

- Think of it as a "secured spreadsheet" that sits in the cloud that multiple parties can review
- Each transaction is guaranteed by a set of cryptographic keys
- All transactions are stored and updated in one database in realtime (or near-real-time)
- Automated logic can be added to the ledger to trigger rules and actions
- Movement of value between counterparties occurs without having the need to trust, because that's built into the mechanism. No need for a centralized third party to do that



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Distributed Ledger Practice at U.S. Bank

Inform and engage with the enterprise to understand how distributed ledger technology can be used at U.S. Bank

- Research
 - Review and synthesis of white papers
 - Engagement with start-ups and consultancies exploring the technology
 - Monitoring of technology developments within the financial services industry
- Internal business development
 - Enterprise-wide outreach to share industry developments and bank activities
 - Engagement with business line stakeholders to facilitate participation in pilots and proofs of concept
 - Support business lines in investment due diligence as required
- · Program management
 - Provide leadership for pilots and proofs of concept on behalf of business lines
 - Engage with technology to provide development support for activities
 - Provide monthly progress updates to senior management



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Financial Services Use Cases Under Development, Exploration

| Use Case | Rationale |
|--------------------------------------|--|
| Loan syndications | Improve efficiency, audit, information sharing |
| Asset-backed securitization | Improved visibility to assets/ provenance |
| Security services | Faster clearing and settlement |
| Identity management for corporations | KYC/Risk management |
| Letter of Credit processing | Operational efficiency, document management |
| Cross-border remittances | Cost and operational simplicity |
| Supply Chain tracking and logistics | Shipping tracking and expense management |



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Categories of Governmental Entities Involved in Blockchain

- Banking
 - FRB
 - FDIC
 - OCC
 - CFPB
 - FFIEC

- Securities
 - SEC
 - CFTC
- Law Enforcement
 - FinCEN
 - State regulators



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Governmental Entities

- SEC—focus on cryptocurrency
 - Almost everything is a security under Howey case
 - A continuing series of enforcement actions to require SEC registration
 - Has resulted in issuance of the majority of coins (and some tokens) occurring outside of the US
 - The SEC's ecosystem theory continues to support this interpretative position
- CFTC—cryptocurrency and tokens are commodities
 - Under Dodd-Frank practically everything is a commodity
 - Form of self-enforcement makes CFTC an easier compliance matter



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Governmental Entities

- Prudential Banking Regulators
 - Virtually nothing is contained in examination and supervision materials
 - This hands-off approach has permitted banks the leeway to determine the usefulness of blockchain as a tool
 - Announcement of sandboxes and experimental regulatory leeway
 - FDIC
 - · occ
 - CFPB
 - Controversial authority to exempt blockchain from regulatory guardrails applicable to functionality of imbedded applications



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Governmental Entities

- FinCEN—Money Services Businesses and AML Compliance
- State Regulators—Money Transmission Laws

The reality of cryptocurrency transactions is that an extremely high percentage of payment transfers continues to involve criminal activity—at least within two degrees of a transaction



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State Legislative Efforts

- A growing number of state legislators have adopted or introduced legislation to define blockchain-related terms
 - Many critics have analogized efforts to early attempts to legislate in the area of electronic records and signatures—to what eventually became the UETA and the E-SIGN Act
- A close examination of most of these efforts may indicate there is not a need to legislate because of perceived legal or operational needs—but as part of a state economic strategy to attract technology companies



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Arizona

Arizona Statutes—Section 44-7061—Signatures and records secured through blockchain technology; smart contracts; ownership of information; definitions

- A signature on a blockchain is considered to be in an electronic form and to be an electronic signature
- A record or contract secured through blockchain technology is considered to be in an electronic form and to be an electronic record.
- · Smart contracts may exist in commerce and are legally enforceable
- · Data stored on a blockchain is owned by the person or entity placing the data on the blockchain
- "Blockchain technology" means distributed ledger technology that uses a distributed, decentralized, shared and replicated ledger, which may be public or private, permissioned or permissionless, or driven by tokenized crypto economics or tokenless. The data on the ledger is protected with cryptography, is immutable and auditable and provides an uncensored truth."
- A "smart contract" means an event-driven program, with state, that runs on a distributed, decentralized, shared and replicated ledger and that can take custody over and instruct transfer of assets on that ledger."



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Nevada

- Nevada's Electronic Transaction Act defines blockchain as an electronic record of transactions or other data which is:
 - Uniformly ordered;
 - Redundantly maintained or processed by one or more computers or machines to guarantee the consistency or nonrepudiation of the recorded transactions or other data; and
 - Validated by the use of cryptography
- Nevada also prohibits local governments from taxing blockchain technology



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Tennessee

- Tennessee definition of distributed ledger technology:
 - Any distributed ledger protocol and supporting infrastructure, including blockchain, that uses a distributed, decentralized, shared, and replicated ledger, whether it be public or private, permissioned or permissionless, and which may include the use of electronic currencies or electronic tokens as a medium of electronic exchange
- Tennessee law now specifies that—
 - A signature that is secured through blockchain technology is considered to be in an electronic form and to be an electronic signature.
 - A record or contract that is secured through blockchain technology is considered to be in an electronic form and to be an electronic record."
 - Smart contracts are enforceable



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Speakers



Joseph T. Lynyak III - Dorsey & Whitney LLP

Joe Lynyak is a financial services partner in Dorsey & Whitney's Financial Services Practice. Focusing his practice on the regulation and operation of financial service intermediaries, he provides counsel on strategic planning, application and licensing, legislative strategy, commercial and consumer lending, examination, supervision and enforcement and general corporate matters. He has extensive expertise across a comprehensive range of issues before federal and state regulatory agencies such as the Federal Reserve Board, OCC, FDIC, NCUA, CFPB, SEC, FTC and California and New York Banking Departments. Mr. Lynyak's representative clients include foreign and domestic banks, savings associations, credit unions, holding companies and mortgage banking companies. He can be contacted via email at Lynyak.joseph@Dorsey.com or at 310.386.5554.



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Speakers



Thomas O. Kelly, III - Dorsey & Whitney LLP

Tom is a partner in and co-chair of Dorsey's Finance and Restructuring Practice Group. His practice focuses on representing creditors in bankruptcy and out-of-court restructurings and representing providers of mortgage warehouse finance facilities. Prior to his return to law practice in 2008, Tom was the Senior Credit Officer for Default Management for GMAC-RFC's warehouse lending and correspondent loan purchase businesses. Tom also has extensive experience in all forms of commercial finance, including leveraged acquisitions, asset-based financings, syndicated lending facilities, subordination agreements, purchases and sales of financial assets, and other credit-related transactions.



Speakers



Jacob Kleiner - U.S. Bank

Jake Kleiner is a Vice President in U.S. Bank's Research and Development team. Jake is a member of the blockchain and distributed ledger practice, with a focus on network building and potential opportunities for equity investment. Prior to joining U.S. Bank, Jake held financial services roles in private equity and investment banking.

Jake holds a B.S.B. in finance and entrepreneurial management from the Carlson School of Management at the University of Minnesota.



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Questions?



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