October 31, 2022

Honorable Sandra Thompson
Director
Federal Housing Finance Agency
400 7th Street, S.W.
Washington, D.C. 20024

Dear Director Thompson,

Covius is pleased to provide the attached response to the FHFA RFI on Fintech in Housing Finance.

As a 30+ year technology and service provider to the mortgage and auto finance sector, Covius has stayed relevant by continuing to develop its technology to meet our evolving client demands. As such, Covius is in a unique position to understand the context of this FHFA RFI and to objectively understand the business requirements of more than 5,500 Covius clients.

Those clients encompass 15 of the top 20 U.S. banks and 1000's of independent mortgage bankers. Moreover, the Covius product suite supports the entire life cycle of residential lending and loan servicing, including technology and products to support origination activities, loan closing, post-closing, secondary markets and due diligence, servicing boarding, servicing oversight, loss mitigation, pre-foreclosure, title curative, foreclosure, and asset disposition.

If your team has any questions, please have them reach out to me directly.

Sincerely,

Jonathan Kunkle
EVP, Chief Product Officer

Covius Response to the FHFA RFI on Fintech in Housing Finance

Questions on Fintech and Innovation General

A.1 How do primary and secondary mortgage market participants define fintech in the housing finance sector? What key factors should be considered?

Financial Tech or "fintech" is a broad brushstroke term used widely across the financial services space and tends to mean different things to different audiences, since it's not defined by any one source. The mortgage sector of financial services uses the term fintech to categorize firms in one or more of these manners:

- Providers of new or innovative technology: these firms have *created* new technologies to help solve existing challenges that often include customer, operations, compliance and/or data issues
- Providers using new technologies tied to legacy systems or processes: these firms have *adopted* cutting-edge technologies such as blockchain, robotic process automation, smart contracts and/or artificial intelligence to improve their existing core products
- Providers who leverage technology to advance human processes: these firms have *augmented* their human capital services with technology to improve efficiency, quality and timeliness

Markets adopt innovation when its participants see a clear financial benefit from doing so. That financial benefit can be from better customer adoption and pull through, improved operational efficiencies, better quality, less risk, and/or better sales price of the finished product. In the markets Covius serves, the "less risk" category tends to align with compliance and, in all cases, based on the oversight and risk of regulatory challenges, compliance tends to be the primary factor that most influences fintech in the mortgage space.

A.2 What factors currently inhibit the adoption of fintech and innovation in the primary and secondary housing finance sector? Are there specific challenges related to privacy laws, industry standards, or current practices?

A desire to be efficient and compliant drives most decisions around adoption of innovative technologies in the markets that Covius serves. The enactment of additional state specific information security and compliance rules continues to exert pressure on technological innovation and can create operational uncertainty as a changing regulatory environment creates additional financial risks. Companies must effectively navigate privacy rules, data protection and consumer protection rules on federal, state and local levels by implementing effective controls. These controls most often add expense to technological development and operations with little correlation to revenue, direct consumer benefit or opportunities. Third parties often present an appealing solution for financial services companies seeking to implement sound solutions without developing something new. As such, all innovation and fintech companies must first be vetted by potential lenders or servicers to ensure their technology adheres, at minimum, to standard infosec and privacy requirements based on the sensitivity of the data being used and accessed and that company's ability to adapt to changes in an agile manner.

A.3 How could FHFA facilitate adoption of "responsible innovation"?

In 1997 Steve Jobs noted that Apple was successful because it identified the needs of the consumer and then figured out the technology to solve those needs, rather than trying to build cool technology and trying to get the consumer to use it. A similar approach here would be for the FHFA to define a need (such as the recent initiatives to solve for the use of rent data to allow for credit access to underserved markets) and encouraging the fintech community of vendors to bring forth technology to solve that need. Additional responsible innovation here could include the use of the NCTUE (National Cable Telco Utilities Exchange) data source for even more payment history.

B.1 What kind of fintech activities have the greatest potential to positively impact the housing finance sector? Describe several situations in which a product or service has been or could be used, the factors considered in determining importance, and associated impacts.

One of the greatest positive impacting technology advancements was the implementation of consumer-permissioned access to source data to validate income and assets. This has improved the borrower experience, reduced loan production costs and vastly reduced fraud and compliance risks. Lenders who successfully imbed these technologies in their borrower portal see even more adoption than requests via email or SMS text. Regardless, each borrower who opts into these validations reduce overall operational costs, including the elimination of revalidation costs at loan closing, as part of loan QA, or even in diligence for later securitization. Another similar fintech advancement that will positively impact the housing finance sector include new technology for consumer-permissioned access to IRS tax records,

In general, technological enhancements in the fintech sector that are benefiting the borrower and ensuring loan production compliance are rule driven workflow solutions and robotic process automation (RPA) designed to read the underlying data, move processes forward automatically in prescribed, compliant manners without human interruption. These prescribed actions ensure all files are moved through the process in a manner that most benefits the consumer's experience, the lender's compliance, and in a timely fashion.

B.2 What are the typical time requirements of each process within the mortgage lifecycle? What are the "critical path" activities that drive the mortgage timeline and borrower expense? How could fintech be applied to improve efficiency, reduce costs, reduce time requirements, or facilitate equitable outcomes for borrowers?

The mortgage origination process is without a doubt complex. There are critical components of the loan origination process including the application, application processing, underwriting, credit decisions, quality checks and loan funding. Each stage of the mortgage lifecycle is governed by specific time periods, which can be complicated in instances where borrower(s) are relying on any non-wage income, they have any negative credit history, the valuation of the property isn't quite as expected, or there is a cloud in the property's title. Each of these nuances can impact each of the critical path activities by extending the average time of approving a loan application, delaying a closing or increasing the expense a borrower may see with higher interest rates, larger down payment requirements or other additional cost for the credit.

Because a changing regulatory environment creates inefficiencies and complex rules, the cost to produce a loan has continued to rise. Innovation in Fintech creates sustainable and repeatable processes that both work to drive higher compliance while creating a more navigable and understandable process that is accessible and understandable to the consumer. Even when the latest technology is deployed, the regulatory risk plays out in a "Check the Checker" process. The risk is a non-salable loan, an unexpected non-QM loan, or regulatory fines. Rules driven solutions using data enriched environments permit machines to perform these functions without deviation from the programming rules, ensuring compliance without additional checks and creating a sound audit trail. Only when the data is evaluated and exceptions exist, will the process be triggered to a human for additional interpretation and escalation.

The cost of human revalidation and reverification is borne by the consumer. The $9,000 average cost to produce a loan must be made up on the gain on sale, which means that cost is factored in the interest rate at upfront costs the consumer is asked to pay. That credit expense is reflected directly in the affordability equation. Lower income borrowers may not quality at all, simply because of the high costs to produce a mortgage loan.

There is no secret sauce to using fintech to drive out efficiencies. Covius has developed innovative technologies in each stage of the mortgage process to allow our clients to increase their operational efficiencies, remain compliant, and improve the borrower experience. These reduce the overall costs to produce a mortgage loan and help offer platforms that are accessible and understandable by the consumer.

B.3 What are the typical drivers of repetitive requests to borrowers or reevaluation of underwriting information by the lender in the mortgage process, and what opportunities exist to automate processes?

The most common drivers of repetitive requests to borrowers in the loan origination process include data related to income, assets, employment verification and credit history. In mortgage origination, the market is already solving some of this by driving to consumer-permissioned source data, digitization of paper data, and advancements in decision engines and artificial intelligence to create human-like analysis capable of calculating true income, validation of underlying assets and initial underwriting decisions. Covius is continuing to develop technologies to help our customers reduce these repetitive tasks, including the addition of reusable verification solutions that can be automatically updated throughout the mortgage fulfillment process.

In loan servicing, improved digital communication helps servicers better know their customer, provide access to collect information about potential hardships, and open portals to permissioned source data when a workout option must be underwritten.

B.4 What are the existing data challenges that most prevent data-driven decision-making in the mortgage lifecycle?

In the recent past, data available on unstructured paper documents inhibited full data-driven decision making opportunities. New OCR technologies enabling intelligent capture have unlocked the data found on paper forms, including data from these unstructured documents. Reading tax returns with OCR has always been relatively simple because the required data is always anchored in the same location on the IRS-provided forms. However, reading paystub data is exponentially more complex because even within a large payroll provider like ADP, there are more than 4,000 variations of how the data is presented. Today's OCR technology has solved for paystub, bank statement and other asset forms, unlocking data-driven decision making for all loan files, both at the time of origination, as part of a loan modification, or even as part of diligence in a securitization trade.

The consumer-authenticated data sources have also unlocked data that does not have to be otherwise validated because it is from a verified source. But beyond the consumer permitting access to the data, the digital data access to licensed consumer data is fragmented across multiple service providers. Covius has solved this with a waterfall approach, allowing requests to first hit a pure consumer-authenticated solution before falling next to licensed consumer data across multiple providers.

The slow adoption of eMortgage has further been a challenge to data-driven decision making, specifically in subsequent trading activity of any non-eMortgage loan where the loan dataset isn't readily available to validate data to docs.

B.5 What are the existing regulatory and policy barriers to adopting and implementing fintech within the mortgage lifecycle?

Covius has spent decades adapting technology and processes to help lenders operationalize the ever-changing mortgage compliance landscape. Necessary regulatory policies do create barriers for fintech adoption, but there are ways the regulatory bodies can work with the lender, servicer, and vendor community to ensure laws and regulations are written or amended to improve the manufacturing process and encourage innovation, rather than making the process more complicated for worthy homeowners obtaining mortgage credit.

The FHFA can and should help the industry be that bridge between the bodies contemplating changes or new regulatory governance and the understanding of how the practice of implementing these requirements may have an adverse effect on the industry. Further, the FHFA should assist the industry in promoting necessary change to the federal regulations, where the complexity and variation of state law makes adoption of technology aimed at improving the process of or access to obtaining and maintaining mortgage loans. Specific examples the industry has voiced include federally permitted usage of remote online notary, standardization of land records across all states, counties and parishes, and simplification of usury laws at the federal level.

Questions on Equitable Access

C.1 What new fintech tools and techniques are emerging that could further equitable access to mortgage credit and sustainable homeownership? Which offer the most promise? What risks do the new technologies present?

There are several new tech enabled tools and techniques being deployed that have the benefit of furthering equitable access to mortgage credit, including:

- Automated underwriting engines: the advent of a data-enriched origination process has permitted lenders to adopt decision engines that automate much of the underwriting process
    - When making decisions with binary data, it is unlikely that racial bias will be introduced – the borrower simply qualifies or does not
    - Reportable data can be garnered from these systems that shows how a lender has an unbiased view on its credit decisions
    - When taken as a whole, data from all lenders using these systems can help regulators understand how underwriting criteria might be loosened to improve equitable access without jeopardizing credit risk

  Risk points:
    - It is essential that the decision is correlated to a memorialized rule set that can recreate the same decision many years later
    - Each lender is responsible to ensure the rules used do not unintentionally create equitable bias

- Alternative credit sources: the GSEs initiatives to evaluate payment histories from rents and utilities creates homeownership opportunities for those that may otherwise not have a full credit file

- Timely rent and utility bill payments are not reported to the credit bureau, but can indicate an individual's ability to manage their finances and ability to repay
- These applicants might be able to turn their rent into equity earning mortgage payments, at the same time help them build a better reportable credit profile
- The NCTUE (National Cable Telco Utilities Exchange) data is also available from Equifax and can augment the information being supplied by landlords now.

Risk points:

- A landlord's payment recordation isn't as highly regulated as that of a loan servicer, so discrepancies could exist in the data set
- A landlord may also accept cash payments, which may be laundered money and would not be a feasible payment type in a traditional mortgage loan
- Rather than just lacking a credit history, the applicant may not have the right understanding of credit and its risks and could unknowingly be entering into a credit transaction without the proper education about it

- In the home preservation category, the mobile device is likely the most likely key to provide the homeowner and the loan servicer with technology tools to help ensure all loss mitigation and foreclosure prevention options are tapped. These include emerging technology that:
  - Can create a consumer-led, video-based inspection of the property that creates an image store of the property and its condition, contact with the homeowner including best means of contacting them for further dialogue about workout options
  - Augmentation of the video inspection data with valuation products to create a more accurate, hybrid valuation that better ensures that the right workout options are made available to the homeowner
  - Ability for the consumer to use the phone to transmit images of supporting documents for the loss mitigation underwrite
  - Direct eSign and digital notary solutions to simplify the process of closing a loss mitigation offering

  Risk Points

  - Lower income borrowers may not have access to a smart phone capable of supporting the emerging technology

C.2 What emerging techniques are available to facilitate or evaluate fintech compliance with fair lending laws? What documentation, archiving, and explainability requirements are needed to monitor compliance and to facilitate understanding of algorithmic decision-making?

Many new technologies are being deployed to make automation a part of the mortgage process. The new data-enriched state, including irrefutable source-based data, has permitted the industry to adopt automated decision engines, robotic process automation, and, in some cases, the use of artificial intelligence to make human-like interpretations of data. Covius is engaged with many of these practices, where credit, verification, title and valuation data can empower it.

Automation of the mortgage process makes evaluation of compliance much simpler, as the machine-based approach creates repeatable programmed processes with time stamped details that leave an auditable data trail that is easier to review than that of a potentially undocumented human decision. The proper documentation of the algorithms used to facilitate a machine-based decision ensures a better audit trail for later review. Additionally, the data enrichment of the process creates more visibility into the underlying data in which decisions would be made that may not comply with fair lending laws or other regulations, allowing lenders to immediately shift course and fix these issues.

As noted above, a tenant of any automated system is the preservation of the rule set and a reference in any decision to the rule set that was used at the time. In doing so, a lender can use the technology to answer any later audit on that process. Further, when these automated decision trees are used with an enriched data set, blockchain and related technologies can be used to provide evidence linkage to the rules used and the underlying data.

C.3 Are there effective ways to identify and reduce the risk of discrimination, whether during development, validation, revision, and/or use fintech models or algorithms? Please provide examples if available.

Yes. At a minimum, automated decision engines can ignore any racial identification within a loan file and simply rate the risk based on income, value and ability to repay. Other technologies are being deployed to automatically review appraisals to ensure no humans are visible in any picture and remove and replace those pictures before submission. Additionally, the GSE appraisal data is being used to validate comparable properties, which helps ensure the appraiser wasn't biased during their review.

Questions on Fintech Risk

D.1. What risks do fintech and fintech firms present to the economy and the financial sector? To the housing sector? To FHFA-regulated entities? To counterparties of FHFA-regulated entities and other third parties? To mortgage borrowers and consumers?

One primary risk that fintech presents is that not all fintech activity falls within the current regulatory frameworks of a banking entity. An example of this is traditional payment processing being replaced by digital solutions like Venmo, Paypal and others. When fintech falls outside of the regulatory perimeter, regulated entities must balance consumer demand for these technologies with the risks they pose to them. Sandboxes, accelerators or innovation hubs add interaction options for tech and finance to help identify and mitigate risks in the new business models before consumer risk is introduced.

Another risk recently highlighted by Michael Hsu, Acting Comptroller of the Currency, is the blurring of lines between fintech providers and banking entities. Hsu noted that it is becoming far more difficult for regulators to distinguish between where the bank stops and the tech firm starts, which could create information technology risks around information security and resilience and raise customer protection issues. Others have identified that this risk is far more prevalent in non-banks, as well.

The majority of recent fintech developments in the mortgage space are centered on accessing consumer data. In fact, Section 1033 of the 2010 Dodd Frank Act grants all consumers the right to personal financial data in a usable electronic format. However, there are two types of access being used today by firms accessing and then selling the consumer's data to mortgage lenders and servicers:

- Consumer credentialed access to the data: In this case the business requiring the consumers data uses technology that prompts the consumer to authorize access using their credentials.
- Business justified access to the data: In this case system-to-system, business-to-business data access has been previously built and the firm providing the data relies on the requestor having a justifiable reason for them to access the data, even without the consumer's awareness that their data is being shared

Unfettered access to the volume of digitized data could create significant threats when cyber security is considered. As digitization increases and storage of data expands, innovations in security are crucial.

And as the digitization of data continues to expand, so does the need for a federally defined permitted usage of data. Most financial services companies would benefit from the use of the data they collect, both in better understanding the consumer but also modeling, predicting and targeting their customers for better products and services. However, because consumer laws are so stringent, it is often a complicated tasks for these entities to improve their business practices by using this data.

D.2 What risk management practices do industry participants use to address the risks posed by fintech and innovation in housing finance?

Industry participants follow the guidance set by various regulatory bodies, including the CFPB, regarding third part risk management. Third party oversight includes evaluation of an entity's risk and compliance program, information security, financial stability and insurance. Evaluation metrics, however, are independently set by each entity without any type of industry risk baseline or standard requirement. Banks, IMBs and other financial services entities adopt their own risk appetite and tolerance, vendor tiering and audit questionnaires. While there is some consistency in audit questions, there is no industry standard against which to measure their vendors. Most fintech entities dedicate significant resources to managing audit responses, with added considerable costs and effort to complete. This burden can create barriers to entry. An industry adopted standard diligence package can drive industry standards, create useable and comparable data among industry participants, reduce costs of audit and oversight, reduce barriers to entry and drive minimum acceptable corporate controls, security practice and risk mitigation practices. The minimum standards should be further based on the types of data being accessed and the risk to the consumer of unauthorized disclosure of that type of data.

D.3 What particular risks to consumer privacy have been associated with fintech? What practices are being used to manage these risks?

Current risks posed by fintech to consumers can broadly be categorized around loss of privacy, data security, rising risks of fraud or scams and unauthorized use of data. Fintech firms employ a variety of practices to manage and mitigate these risks including multi-factor authentication, forced password changes, developing high-tech alternatives to passwords, including biometrics like facial recognition or fingerprints. Fintech firms create innovative solutions to data storage, including the expansion of blockchain technology to decentralize and encrypt data storage to enhance data security.

Questions on RegTech

E.1 What are the most promising areas for applying technology to regulatory and compliance functions? Please describe opportunities for "regtech" to simplify or improve compliance with FHFA, Enterprise, or FHLBank requirements.

The unlocking of data from legacy images using new OCR technologies has vastly improved the ability to take legacy mortgage files and use automation to re-underwrite and revalidate the credit decisions and compliance practices used when the loan was manufactured.

Likewise, a data enriched origination or servicing practice can be evaluated with these tools on a 100% sampling, rather than a random check on a smaller percentage of loans.

Questions on Stakeholder engagement
F.1 What forms of stakeholder engagement are most effective in facilitating open, timely, and continuous discussion on the challenges and opportunities presented by the application of fintech to housing finance?

There is a broad range of groups important for the success of an innovative fintech initiative. These would vary depending upon the type and scope of the project. However, generally stakeholders could include customers, banks, IT management, compliance/regulatory expertise and risk experts. Covius is willing and able to dedicate its expertise to participate in broader FHFA initiatives on innovation, fintech, and consumer protection. As evidenced by the MBA residential technology committee, broad participation through the inclusion of multiple lenders, servicers, and vendors ensures the lack of bias in these working groups.

F.2. What are some topics for a housing finance-focused "tech sprint" and how could FHFA encourage participation?

Topics for a housing finance-focused "tech sprint" should include:
-Innovations in Data security, data usage, and data access
-Expanding mobile banking/payment options for the "unbanked"