

May 12, 2023

Clinton Jones
General Counsel
Federal Housing Finance Agency
400 7th Street, SW
Washington, D.C. 20219
Via FHFA [Open for Comment or Input Page](#)

Re: RIN 2590-AB27 – [Enterprise Regulatory Capital Framework-Commingled Securities, Multifamily Government Subsidy, Derivatives, and Other Enhancements](#)

Dear Mr. Jones,

It is a pleasure to submit comments on behalf of [Ceres](#) and the [Ceres Accelerator](#) for Sustainable Capital Markets. Ceres is a nonprofit organization with over 30 years of experience working on climate change with the world's leading investors and companies to drive sustainability in the bottom line and through ambitious federal and state climate and clean energy policies. The Ceres Accelerator works to transform the practices and policies that govern capital markets in order to reduce the worst financial impacts of the climate crisis. It spurs capital market influencers to act on climate change as a systemic financial risk, driving the large-scale behavior and systems change needed to achieve a just and sustainable future and a net zero emissions economy.

Ceres works with leading global investors and companies. Our Investor Network is currently over 220 investors that collectively manage over \$60 trillion in assets. Ceres is a founding partner of the [Net Zero Asset Managers Initiative](#) and the [Paris Aligned Investor Initiative](#), which includes investors focused on sustainable investments within their portfolios and other assets. Our Company Network, of which Fannie Mae is a member, includes approximately 60 of the largest global companies and banks with whom we work on an in-depth basis on issues including climate strategy and disclosure.

I. INTRODUCTION

Ceres regularly engages with the FHFA, and previously submitted comments in response to the agency's [Climate and Natural Disaster Risk Management RFI](#) and [2022-2026 Strategic Plan](#). In 2020, we published the report [Addressing Climate as a Systemic Risk: A Call to Action for U.S. Regulators](#), which recommends practical actions FHFA can take to address climate risks. In June 2022, we published our second annual [Climate Risk Scorecard](#) for nine federal financial regulators,

including the FHFA, assessing regulator actions to protect our capital markets, financial institutions, and communities from climate-related financial risk. In February 2023, we published a paper with the Mortgage Bankers Association on [Housing Finance and Climate Risk](#).

Financial institutions are exposed to various climate-related financial risks, and Fannie Mae and Freddie Mac (the Enterprises) are no exception. Climate risk – which represents the potential financial losses associated with physical and transition risks resulting from climate change – poses significant financial risks to the nation’s housing and mortgage markets.¹ Both physical and transition risk can result in significant financial losses for the Enterprises, jeopardizing affordable housing goals and threatening the stability of the housing market. In 2022 alone, 3.4 million people lost their homes temporarily or permanently due to climate events such as fires, floods, and droughts,² and some research indicates that lenders are passing along higher-climate risk mortgages to the Enterprises.³

Physical risks include direct losses from weather-related events (including floods, droughts, extreme temperatures, and storms), as well as indirect losses from the effects of climate change on assets, businesses, and industries. The Enterprises are exposed to these risks through their mortgage loan portfolios,⁴ investments in securities backed by mortgages on properties in areas prone to extreme weather events, and real estate holdings. For example, rising sea levels may result in higher foreclosure rates due to homes being submerged or uninhabitable; increasing storm frequency such as hurricanes can level coastal communities; flooding from storms, sea-level rise, and changes in precipitation and snow melt threaten floodplain communities; and wildfires that now occur nearly year-round destroy entire communities in western states.

Transition risks are the economic and financial risks associated with the transition to a low-carbon economy, including regulatory, technological, market, and consumer shifts. The Enterprises may

¹ See, e.g., Jesse Gourevitch et al., UNPRICED CLIMATE RISK AND THE POTENTIAL CONSEQUENCES OF OVERVALUATION IN US HOUSING MARKETS, NATURE CLIMATE CHANGE (2023), https://www.researchgate.net/publication/368570167_Gourevitch_et_al_2023_Nature_Climate_Change.

² See Thomas Frank, *Disasters Displaced More Than 3 Million Americans in 2022*, SCI. AM. (Feb. 3, 2023), <https://www.scientificamerican.com/article/disasters-displaced-more-than-3-million-americans-in-2022/>.

³ See Jesse Keenan & Jacob Bradt, UNDERWATERWRITING: FROM THEORY TO EMPIRICISM IN REGIONAL MORTGAGE MARKETS IN THE U.S., CLIMATIC CHANGE (June 2020), <https://link.springer.com/article/10.1007/s10584-020-02734-1>; Amine Ouazad & Matthew Kahn, MORTGAGE FINANCE AND CLIMATE CHANGE: SECURITIZATION DYNAMICS IN THE AFTERMATH OF NATURAL DISASTERS, THE REVIEW OF FIN. STUDIES (2022), <https://academic.oup.com/rfs/article-abstract/35/8/3617/6427560?redirectedFrom=fulltext>.

⁴ See Ding Du, HURRICANES AND RESIDENTIAL MORTGAGE LOAN PERFORMANCE, OFF. OF THE COMPT. OF THE CURRENCY (2020), <https://www.occ.gov/publications-and-resources/publications/economics/working-papers-banking-perf-reg/pub-econ-working-paper-hurricanes-residential-mort-loan-perf.pdf>; Paulo Issler et al., MORTGAGE MARKETS WITH CLIMATE-CHANGE RISK: EVIDENCE FROM WILDFIRES IN CALIFORNIA, REG. OF FIN. INST. EJ. (July 2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3511843.

be exposed to these risks as the transition disrupts established markets and requires adaptation of business models in order to remain competitive. The same communities that are most vulnerable to physical climate risks also experience increased rates of mortgage default, depreciation in property values, and insurance pullouts. Furthermore, there is potential for losses from regulatory changes such as carbon taxes or shifts in consumer preferences away from certain products or services.

Related to both physical and transition risk, socioeconomic risk refers to financial loss as a result of climate impacts on physical assets, productivity/workability, infrastructure services, and natural capital. These impacts are likely to worsen and compound as climate change progresses, substantially disrupting global markets and financial systems. Socioeconomic climate risk also disproportionately impacts low- and moderate-income (LMI) communities and communities of color.⁵ Due to decades of systemic discrimination, redlining, and underinvestment, these communities disproportionately bear the economic burdens of climate impacts on housing.⁶ Affordable housing is also at increased risk from climate events such as sea level rise, storms, and flooding.⁷ These events further damage the affordable housing supply, leading to slower repairs and even the inability to rebuild new or build new homes where funding is scarce and rehabilitation and resiliency costs are high.⁸

⁵ See REPORT ON CLIMATE-RELATED FINANCIAL RISK, FIN. STABILITY OVERSIGHT CNCL. (Oct. 2021), <https://home.treasury.gov/system/files/261/FSOC-Climate-Report.pdf#page=24>; see also Isabelle Anguelovski et al., WHY GREEN “CLIMATE GENTRIFICATION” THREATENS POOR AND VULNERABLE POPULATIONS, PNAS (2019), <https://www.pnas.org/doi/10.1073/pnas.1920490117>.

⁶ See, e.g., Laura A. Bakkensen & Lala Ma, SORTING OVER FLOOD RISK AND IMPLICATIONS FOR POLICY REFORM, J. OF ENV'T'L ECON. & MGMT. (July 2020), https://www.frbsf.org/wp-content/uploads/sites/4/Bakkensen_Ma_2020.pdf; Patrick Sisson, *In Many Cities, Climate Change Will Flood Affordable Housing*, BLOOMBERG (Dec. 1, 2020), <https://www.bloomberg.com/news/articles/2020-12-01/how-climate-change-is-targeting-affordable-housing>; Daniel Cusick, *Past Racist “Redlining” Practices Increased Climate Burden on Minority Neighborhoods*, SCI. AM. (Jan. 21, 2020), <https://www.scientificamerican.com/article/past-racist-redlining-practices-increased-climate-burden-on-minority-neighborhoods/>; Brad Plumer and Nadja Popovich, *How Decades of Racist Housing Policy Left Neighborhoods Sweltering*, NY TIMES (Aug. 24, 2020), <https://www.nytimes.com/interactive/2020/08/24/climate/racism-redlining-cities-global-warming.html>; Sarah Kennedy, *The link between racist housing policies of the past and the climate risks of today*, YALE CLIMATE CONNECTION (Mar. 18, 2021), <https://yaleclimateconnections.org/2021/03/the-link-between-racist-housing-policies-of-the-past-and-the-climate-risks-of-today/>.

⁷ See, e.g., Maya K Buchanan et al., SEA LEVEL RISE AND COASTAL FLOODING THREATEN AFFORDABLE HOUSING, ENV'T'L RES. LETT. (2020), <https://iopscience.iop.org/article/10.1088/1748-9326/abb266/pdf>; Guillermo Ortiz et al., A PERFECT STORM: EXTREME WEATHER AS AN AFFORDABLE HOUSING CRISIS MULTIPLIER, CTR. FOR AM. PROGRESS (2019), <https://www.americanprogress.org/article/a-perfect-storm-2/>.

⁸ See, e.g., UNDERSTANDING CLIMATE RISK: WHAT WE LEARNED ABOUT THE IMPACT OF CLIMATE RISK ON AFFORDABLE HOUSING DEVELOPMENT, FED. RES. BANK OF SAN FRAN. (Mar. 2022), <https://www.frbsf.org/our-district/about/sf-fed-blog/understanding-climate-risk-impact-on-affordable-housing-development/>; Daniel McCue,

Physical, transition, and socioeconomic risk can impact the Enterprises' risk management in a variety of ways, including:

- *Mortgage default risk*: Climate events can disrupt the ability of homeowners to make mortgage payments if they are injured, unable to work, or their home or place of employment is damaged or destroyed.
- *Mortgage prepayment risk*: Borrowers in areas impacted by increasing climate events may sell their homes to move to safer areas, or they may refinance if damage from a climate event causes property values to decline.
- *Asset value*: Properties located in climate-vulnerable areas may become less attractive investments, decreasing property values and increasing the risk of default.
- *Loss severity*: The increasing frequency and severity of climate events can increase the severity of losses, substantially depressing the value of homes or making the decision to rebuild a community less politically or fiscally attractive.
- *Adverse selection*: Borrowers who live in areas with higher climate risks may be vulnerable to the risk that disclosure itself could trigger adverse repricing.

The Enterprises were established to help ensure a reliable and affordable supply of mortgage funds throughout the country. The Enterprises can also help protect housing during extraordinary periods of turmoil in the broader financial system and support mortgage lending that finances affordable housing. In order to mitigate the risks associated with increasingly frequent and severe climate events, the Enterprises must now contemplate and incorporate measuring and managing climate risks into their regulatory capital frameworks.

II. RESPONSE TO REQUEST FOR COMMENT

A. Question 4: Should FHFA adjust the regulatory capital treatment for exposures to MBS guaranteed by the other Enterprise to mitigate any risk of disruption to the UMBS?

A lower risk weight for exposure to mortgage-backed securities (MBS) guaranteed by the other Enterprise could incentivize Fannie Mae and Freddie Mac to increase their exposure to each other's MBS. If the underlying mortgages in these MBS are located in areas that are vulnerable to climate-related risks, this could increase the risk of default and impact the value of the MBS.

For example, climate-related events such as floods or wildfires could impact the credit quality of the underlying mortgages in MBS guaranteed by the other Enterprise. If the mortgages in these

Headlines from the 2019 State of the Nation's Housing Report, JOINT CTR. FOR HOUSING STUD. OF HARVARD U. (Aug. 7, 2019), <https://www.jchs.harvard.edu/blog/headlines-from-the-2019-state-of-the-nations-housing-report>.

MBS are located in areas that are vulnerable to climate-related risks, the risk of default could increase, which could in turn impact the value of the MBS and, depending on the size of the transaction, increase the risk to the Enterprise.

Similarly, climate-related risks could impact the liquidity and pricing of MBS. If a large number of homes are damaged or destroyed by a climate-related event, the supply of homes available to serve as collateral for MBS could decrease, which could reduce the liquidity of the market and impact the pricing of MBS. This concentration risk has already led to two credit unions closing due to climate risk, as outlined in the recent National Credit Union Administration report.⁹ Climate-related risks could even impact the broader housing market and the availability of credit for homebuyers if a region experiences frequent flooding or other climate-related events, and lenders become more hesitant to lend in that region, making it more difficult for homebuyers to obtain mortgages and impacting the availability of credit in the market.

To address these risks, the FHFA should consider requiring the Enterprises to assess the climate-related risks associated with the mortgages in their MBS, including through incorporation of climate-related stress testing, and adjust their capital requirements accordingly. The FHFA should also consider carrying climate risk through to g-fees and incorporating resiliency standards into the Uniform Appraisal Dataset to more accurately reflect the risk of loans and collateral, and to encourage adoption of mitigation and adaptation measures.¹⁰

B. Question 6: What should be the regulatory capital treatment of any credit risk mitigation effect of any indemnification or similar arrangements between the Enterprises relating to UMBS resecuritizations?

Indemnification or similar arrangements could provide credit risk mitigation by shifting the risk of default or other losses from one Enterprise to the other in the event of a UMBS resecuritization. However, these arrangements could also increase credit risk if climate-related risks are not accounted for.

Climate-related events can damage homes and other properties, leading to a decrease in their value and potentially higher default rates. This could result in higher losses for the Enterprises, which could ultimately impact the credit risk associated with UMBS resecuritizations. These risks could be more pronounced in geographic regions that are particularly vulnerable to climate-

⁹ ESTIMATING CREDIT UNION EXPOSURE TO CLIMATE-RELATED PHYSICAL RISKS, NAT'L CREDIT UNION. ADMIN. (Apr. 2023), <https://ncua.gov/news/publication-search/climate-financial-risk/estimating-credit-union-exposure-climate-related-physical-risks>.

¹⁰ See Lindsay Owens, SOAKED: A POLICY AGENDA TO PREPARE FOR A CLIMATE-TRIGGERED HOUSING CRASH, THE GREAT DEMOCRACY INITIATIVE (July 2020), <https://www.fhfa.gov/Videos/Documents/ClimateandHousingReport%E2%80%93Lindsay-Owens.pdf>.

related events, including coastal areas, regions with a high risk of flooding, or areas experiencing severe droughts that increase the risk of wildfires.

These events can also complicate legal and counterparty risks that may be created by indemnification or similar arrangements. For example, if one Enterprise indemnifies the other for losses related to mortgages in areas prone to flooding, and a flood occurs that results in widespread losses, the indemnified Enterprise could be exposed to significant legal and financial risks. These risks may be exacerbated by increased litigation or regulatory scrutiny related to climate-related financial risk and its impacts.

Additionally, climate risk could impact the demand for housing and mortgages, which could ultimately impact the credit risk associated with UMBS resecuritizations. For example, if climate-related events and risks lead to a decrease in demand for homes in particular geographic regions, housing prices may decrease and default rates may rise, resulting in higher losses for the Enterprises.

The FHFA should therefore consider requiring the Enterprises to assess the climate-related risks associated with the underlying mortgages in UMBS resecuritizations and adjust their capital requirements accordingly. The FHFA should also consider requiring the Enterprises to perform ongoing assessments and due diligence on the underlying mortgages with respect to their exposure to physical- and transition-related climate risks.

C. Question 10: Should FHFA consider additional thresholds and/or affordability restrictions for a multifamily mortgage exposure to qualify for a risk multiplier greater than 0.6 but less than 1.0?

Capital adequacy could be significantly affected by both transition¹¹ and physical¹² risks. Based on the outcomes of their 2022 climate scenario analysis, the ECB raised capital requirements for some banks.¹³ In general, Ceres recommend that existing capital adequacy regimes be expanded to include climate stress testing with eventual adjustments to both bank liquidity and capital requirements.¹⁴ This could include adjusting risk weights to incorporate the potential impact of

¹¹ FINANCIAL A NET ZERO ECONOMY: MEASURING AND ADDRESSING CLIMATE RISK FOR BANKS, CERES (Oct. 2020), <https://www.ceres.org/sites/default/files/reports/2020-10/Ceres%20Bank%20Risk%20Report%202020%20FINAL.pdf>.

¹² FINANCIAL A NET ZERO ECONOMY: THE CONSEQUENCES OF PHYSICAL CLIMATE RISKS FOR BANKS, CERES (Sept. 2021), <https://www.ceres.org/sites/default/files/reports/2021-09/Ceres%20Financing%20a%20Net%20Zero%20Economy%20FINAL.pdf>.

¹³ See *ECB sets deadlines for banks to deal with climate risks*, EURO. CTRL. BANK (Nov. 2, 2022), <https://www.bankingsupervision.europa.eu/press/pr/date/2022/html/ssm.pr221102~2f7070c567.en.html>.

¹⁴ In his [report](#) on Silicon Valley Bank's (SVB) failure, Federal Reserve Vice Chair for Supervision Michael Barr noted that the incident "emphasized why strong bank capital matters." He also emphasized the need for "enhancements to stress testing with multiple scenarios so that it captures a wider range of risk and captures

climate-related factors. For example, physical risks such as floods, wildfires, and hurricanes could increase the likelihood of default or loss severity on mortgages, while transition risks such as policy changes and technological advancements could affect the long-term value of mortgage assets.

We recommend the FHFA ensure that the Enterprises assess how climate-related financial risks could impact the value of collateral, whether climate risks change the concentration of risks across its portfolio, and how climate-related risks feed into and increase its credit risk. Likewise, the Enterprises must evaluate their ability to address climate-related shocks that could lead to the need for more capital, establish processes to control or mitigate the associated impacts, and actively engage with and collect data from clients to better understand transition strategies and risk profiles. Ensuring that mortgage pricing reflects climate risk would begin the process of adaptation and mitigation, protecting the Enterprises, borrowers, and the housing finance system more broadly.

Based on the results of climate stress testing, the FHFA should explore increasing the Enterprises' minimum capital requirements to ensure the Enterprises have sufficient capital to cover potential climate-related losses, including assigning higher risk weights to mortgage assets that are more exposed to climate-related risks.¹⁵

However, accessibility to affordable housing is particularly critical for areas exposed to climate disasters; LMI communities are often disproportionately at risk from these events and their after effects.¹⁶ Ceres recommends care and deep study on strategies to address potential risks to vulnerable and underserved populations. Actions to address climate-related financial risks could disparately impact financially vulnerable communities, exacerbating existing inequities by raising insurance or credit costs and encouraging disinvestment or climate redlining (also known as bluelining or climate gentrification).¹⁷

channels for contagion.” Although SVB’s collapse was unrelated to climate risk, the experience demonstrates the need for both financial institutions and their regulators to more critically examine emerging, unpriced risks “so that they think through the implications of tail events with severe consequences.”

¹⁵ See Bryony Collins, *Natixis to Weigh Climate Risk When Deciding on Loans: Q&A*, BLOOMBERGNEF (Nov. 14, 2019), <https://about.bnef.com/blog/natixis-to-weigh-climate-risk-when-deciding-on-loans-qa/>.

¹⁶ See, e.g., Bettina Bergöö, *Lenders: To Preserve Affordable Housing, Manage Climate Risk*, NAT’L RES. DEF. CNCL. (Oct. 23, 2019), <https://www.nrdc.org/bio/bettina-bergoo/lenders-preserve-affordable-housing-manage-climate-risk>; Caroline Ratcliffe et al., FROM BAD TO WORSE: NATURAL DISASTERS AND FINANCIAL HEALTH, J. OF HOUSING RES. (2020), <https://www.tandfonline.com/doi/full/10.1080/10527001.2020.1838172>.

¹⁷ See REPORT ON CLIMATE-RELATED FINANCIAL RISK, FIN. STABILITY OVERSIGHT CNCL. (Oct. 2021), <https://home.treasury.gov/system/files/261/FSOC-Climate-Report.pdf#page=24>; Joshua Thompson et al., CLIMATE GENTRIFICATION: VALUING PERCEIVED CLIMATE RISKS IN PROPERTY PRICES, ANNALS OF THE AM. ASSOC. OF GEOGRAPHERS (Feb. 2023), https://www.researchgate.net/publication/368696957_Climate_Gentrification_Valuing_Perceived_Climate_Risks_in_Property_Prices; Lindsey Jacobson, *Banks consider climate risk for home loans, a process called*

Instead of increasing the risk multiplier for multifamily mortgage exposures secured by a government subsidy that are found to be at increased climate risk, the FHFA should require or encourage the Enterprises to prevent and mitigate potential adverse impacts on affordable housing.

One potential approach could be to require lenders and borrowers invest in climate resiliency measures, such as energy-efficient upgrades or installation of sump pumps and storm windows, that would reduce the risk of default and improve the overall resilience of the housing stock.¹⁸ FHFA could also encourage the Enterprises to partner with community organizations and local governments, and take advantage of grant programs such as the HUD Community Development Block Grant or the Inflation Reduction Act.

The FHFA should also work with the Enterprises to provide incentives for mortgages that incorporate mitigation and resiliency efforts, including lower interest rates, programs that provide low- or no-interest loans to borrowers, preferential loan terms, public-private partnerships with government funding matched by private investments, and tax incentives. Further, FHFA should publish guidance on best practices for incorporating climate risks into underwriting and portfolio management practices, produce educational resources and other tools to help monitor and manage climate risks over time, and update building codes and sustainability standards.

D. Question 13: In addition to the risk-sensitivity enhancements SA-CCR provides relative to CEM, what, if any, other factors should FHFA consider in its determination to replace CEM with SA-CCR?

Several climate-related factors might impact the risk of underlying exposure on a derivative contract, which SA-CCR's enhanced sensitivity may help address.¹⁹

'underwaterwriting' or 'blue-lining,' CNBC (Sept. 20, 2021), <https://www.cnbc.com/2021/09/20/blue-lining-and-underwaterwriting-banks-consider-climate-change-risk.html>; Aparna Nathan, *Climate is the Newest Gentrifying Force, and its Effects are Already Re-Shaping Cities*, SCI. IN THE NEWS (July 15, 2019), <https://sitn.hms.harvard.edu/flash/2019/climate-newest-gentrifying-force-effects-already-re-shaping-cities/>; Allie Reilly, *What Climate Gentrification Means for Climate Adaptation Planning*, WSP (Sept. 16, 2022), <https://www.wsp.com/en-us/insights/2022-climate-gentrification-is-reshaping-america>.

¹⁸ See, e.g., WHY MULTIFAMILY AFFORDABLE HOUSING LENDERS MUST MANAGE CLIMATE RISKS, AND HOW TO START, ENERGY EFFICIENCY FOR ALL (Oct. 2019), <https://sahlln.energyefficiencyforall.org/sahlln/sahlln-resources/why-multifamily-affordable-housing-lenders-must-manage-climate-risks-and-how>; IDENTIFYING, VALUING, AND FINANCING CLIMATE RESILIENCE IN MULTIFAMILY AFFORDABLE HOUSING, ENERGY EFFICIENCY FOR ALL (June 2020), <https://sahlln.energyefficiencyforall.org/sahlln/sahlln-resources/identifying-valuing-and-financing-climate-resilience-multifamily-affordable>; Samantha Fu, *How Cities Can Tackle Both the Affordable Housing and Climate Crises*, URBAN INST. (Nov. 2, 2022), <https://housingmatters.urban.org/articles/how-cities-can-tackle-both-affordable-housing-and-climate-crises>.

¹⁹ The European Banking Authority's Regulatory Technical Standards on key aspects of SA-CCR specify methods for mapping derivative transactions to risk categories, including "climatic conditions" as a risk factor under the risk

Physical risks such as sea level rise, increased frequency and intensity of climate disasters, or a decline in property values due to climate risks can increase the credit risk of certain exposures on derivatives contracts by impacting counterparty risk, collateral risk, and market risk:

1. *Counterparty risk*: If a counterparty is impacted by physical risks, it may increase the likelihood of default or inability to fulfill contractual obligations.
2. *Collateral risk*: Collateral used to secure derivatives contracts may be impacted by physical risks could result in a reduction in the value of the collateral, making it more difficult to cover losses in the event of default.
3. *Market risk*: Physical risks can also impact market conditions (such as a decline in demand for certain commodities) and lead to increased volatility, which could impact the value of related derivatives contracts.

Transition risks such as changes in policy, technology, or market preferences may also impact the credit risk of certain exposures:

1. *Policy risk*: Changes in policy, such as the implementation of a carbon tax or regulation of emissions, can impact the value and profitability of certain investments. For example, a company heavily invested in coastal properties may be negatively impacted by a policy shift towards managed retreat, leading to a decline in the value of its assets and potential credit risks.
2. *Technology risk*: Technological advancements can also impact the value and profitability of certain investments. For example, advancements in energy efficiency may lead to a home with outdated heating and cooling systems decreasing in value.
3. *Market preference risk*: Changes in consumer or investor preferences towards sustainable products and services can impact the profitability of certain investments. For example, mortgage loans for homes that do not meet certain resiliency standards may be viewed as riskier, potentially impacting the credit risk associated with those loans.
4. *Industry shifts risk*: The transition to net zero can also impact the creditworthiness of a particular industry or sector, leading to changes in market valuations and credit spreads. For example, if there is a shift towards low-carbon technologies or sustainable practices, the valuation of fossil fuel-related assets could decrease, resulting in a decline in credit quality for certain exposures.

category “commodities.” EBA FINAL DRAFT REGULATORY TECHNICAL STANDARDS, EURO. BANKING AUTH. (Dec. 2019),

https://www.eba.europa.eu/sites/default/documents/files/document_library/Publications/Consultations/2019/CP%20on%20EBA%20launches%20consultation%20on%20technical%20standards/Final%20guidelines/EBA-RTS-2019-02%20%28Final%20draft%20RTS%20on%20SA-CCR%29.pdf#page=8.

Data availability on climate events and impacts may also affect the credit risk of underlying exposures on a derivative contract. Without accurate and timely data on climate risks, it is challenging to assess the potential impact of these risks on the creditworthiness of borrowers or counterparties. Data on climate risks can also help financial institutions proactively manage their credit risk exposure to these risks. For example, if data shows that properties in certain geographies are at a higher risk of flooding due to sea level rise, financial institutions can adjust their underwriting standards or loan terms to manage the potential credit risk associated with those properties.

E. Question 16: What, if any, other factors should FHFA consider in its determination that guarantee assets should be assigned an explicit risk weight?

The FHFA should consider the potential impact of climate risk on guarantee assets when determining their explicit risk weight, including physical risks and transition risks. Identified climate risks may justify a higher risk weight to reflect the potential impact of these risks on the creditworthiness of borrowers and counterparties.

To incorporate climate risk into the determination of explicit risk weights for guarantee assets, the FHFA should consider implementing climate risk scenario analysis exercises for the Enterprises. These scenarios would assess the potential impact of physical and transition risks on guarantee assets and provide insight into the appropriate risk weights for these assets under different climate scenarios.

Additionally, FHFA should consider requiring the Enterprises to disclose their exposure to climate risk in their public reporting and require them to incorporate climate risk management into their general risk management frameworks. This would enable the FHFA to better monitor and mitigate the potential impact of climate risk on guarantee assets and ensure the safety and soundness of the housing finance system.

F. Question 26: What, if any, changes should FHFA consider to the proposed change to the application of the stability capital buffer?

In addition to the timing clarification, the FHFA could consider incorporating climate risk considerations into the Enterprises' stability capital buffer calculation. First, the FHFA should encourage the Enterprises to incentivize investment in climate-resilient assets, such as those that integrate climate risk assessments as part of their underwriting process, comply with the most recent building codes, or use certain building materials, designs, or energy efficiency standards that would make properties more resilient to climate events.

Second, the FHFA should incorporate climate risk into Enterprise scenario analysis exercises. The stability capital buffer is designed to provide a buffer against losses during a period of financial stress. Climate risk could pose a significant risk to the financial system, and implementing climate scenario analysis exercises could help ensure that the stability capital buffer is appropriately calibrated to address these risks. Scenarios should include science-based assumptions about

physical risk as well as transition and socioeconomic risks; articulate the direct and indirect economic impacts; and consider how these factors may interact with each other and lead to cascading and compounding effects.²⁰ Scenarios should also cover a time horizon of at least 30 years, as climate risks will continue to increase over time. The FHFA should also consider increasing the size of the stability capital buffer based on the results of these exercises.

Third, the FHFA should regularly review and update the stability capital buffer to reflect the evolving nature of climate risks and to ensure that it remains appropriately calibrated to address those risks, while also reviewing opportunities to offset or counteract impacts of increased requirements.

Incorporating climate risk into the stability capital buffer can help the Enterprises account for the potential impacts of climate risk on their financial performance and ensure that they have adequate capital to withstand climate-related risks, while helping ensure the overall stability of the housing market and the financial system as a whole.

III. CONCLUSION

We thank the FHFA for its work maintaining the safety and soundness of the Enterprises, including through consideration of climate-related financial risk. We would be pleased to discuss any questions you may have on our feedback. Please contact our Manager for Banking Financial Regulation, Kelsey Condon (kcondon@ceres.org), at your convenience.

Sincerely,



Kelsey Condon
Manager, Banking Financial Regulation
Ceres Accelerator



Holly Li
Program Director, Net Zero Finance
Ceres Accelerator

²⁰ Multiple central banks have already begun conducting climate stress tests and scenario analysis, including the Federal Reserve, the European Central Bank, the Bank of England, the Bank of Japan, and the Central Bank of Brazil. *See* CLIMATE SCENARIO ANALYSIS BY JURISDICTIONS: INITIAL FINDINGS AND LESSONS, FIN. STABILITY. BD. (Nov. 2022), <https://www.fsb.org/wp-content/uploads/P151122.pdf>.

Steven M. Rothstein

Steven M. Rothstein
Managing Director
Ceres Accelerator