

July 20, 2023

Financial Stability Oversight Council
Attn: Eric Froman, Assistant General Counsel for Banking and Finance
U.S. Department of the Treasury
1500 Pennsylvania Avenue NW, Room 2308
Washington, DC 20220
Via regulations.gov

Re: FR Doc. # 2023-08964 – Proposed Interpretive Guidance on Authority to Require Supervision and Regulation of Certain Nonbank Financial Companies;
FR Doc. # 2023-08969 – Proposed Analytic Framework for Financial Stability Risk Identification, Assessment, and Response

Dear Mr. Froman:

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 policy. 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 currently includes over 220 investors that collectively manage over \$50 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 includes approximately 60 of the largest global companies and banks with whom we work on an in-depth basis on climate strategy and disclosure, among other issues.

In this letter, Ceres provides input on two actions proposed by the Financial Stability Oversight Council (FSOC or Council): (1) the proposed guidance on Systemically Important Financial Institution (SIFI) determinations for Non-Bank Financial Institutions (NBFIs) (Proposed Guidance), and (2) the proposed financial stability analytic framework (Proposed Analytic

Framework).¹ Ceres strongly supports both actions as essential to strengthening the resiliency of the U.S. financial system and economy. We are grateful for this opportunity to comment and offer additional recommendations.

I. INTRODUCTION

We strongly support the Proposed Guidance. In the wake of the 2008 global financial crisis, Congress established SIFI designations as a critical tool to proactively address threats posed by NBFIs to U.S. financial stability. The proposal would remove the unwarranted hurdles to making such designations added in 2019. This streamlining is necessary to ensure that Federal Reserve supervision and prudential standards are put in place before NBFIs cause widespread and lasting damage to our financial system and economy, as happened during the 2008 financial crisis. The proposal also would add a substantive component to guidance (incorporating the Proposed Analytic Framework by reference), thereby providing needed clarity and transparency about FSOC's expectations.

We also applaud the Proposed Analytic Framework and support its measured approach to addressing financial stability risk. In particular, we support its proposed approach to monitoring asset classes, institutions, activities, vulnerabilities and transmission channels. By implication, this framework calls for a strengthened federal macroprudential response to climate-related financial risk. However, given the unique threats to financial stability posed by climate change – including [recent projections](#) that between a third and a half of humanity will face extreme heat, food scarcity and higher death rates unless emissions are sharply curtailed – we recommend adding an explicit description of how climate-related financial risk will be addressed. We offer recommendations for integrating climate risk into the framework.

Our responses to questions posed by FSOC are provided at relevant junctures in our comments below.

¹ Proposed Interpretive Guidance on Authority To Require Supervision and Regulation of Certain Nonbank Financial Companies, RIN 4030-[XXXX], 88 Fed. Reg. 26234 (Apr. 28, 2023); Analytic Framework for Financial Stability Risk Identification, Assessment, and Response, RIN 4030-[XXXX], 88 Fed. Reg. 26305 (Apr. 28, 2023). This comment is filed under both dockets.

II. THE PROPOSED GUIDANCE WILL RESTORE AND STRENGTHEN THE NBF SIFI DESIGNATION PROCESS

A. SIFI Determinations are a Critical Element of the Dodd-Frank Framework for Avoiding a Financial Crisis and Taxpayer Bailout

Among the key lessons of the 2008 financial crisis is that unsupervised and unregulated NBFIs can be a significant contributor to financial instability.² It is now widely understood that financial institutions will seek to capitalize on any competitive advantage that arises when their regulatory obligations are lower than peers, expanding market share at the expense of those facing greater supervision and thereby augmenting systemic risk.³

In enacting Dodd-Frank, Congress sought to address this problem by assigning FSOC the duty to identify any NBFIs posing a financial stability risk and to designate these NBFIs as SIFIs so that they fall under a rigorous supervisory regime. Yet today, due in large part to regulatory roadblocks put in place in 2019, not a single NBF is designated as a SIFI. According to FSOC's [2022 Annual Report](#), no NBFIs are under review in either Stage 1 or Stage 2 of the Council's designation process.

This breakdown in the SIFI designation process took place in the context of massive growth of the NBF sector relative to chartered banks. In 2013, the NBF sector operated at the scale of \$5 trillion, less than half of the size of the \$13 trillion banking system; today, at \$18 trillion, NBFIs are [approaching the same size as the \\$23 trillion banking industry](#). Finance leaders ranging from the [Financial Stability Board](#), [International Monetary Fund](#) and [European Central Bank](#) have issued calls for urgent regulatory attention to this financial stability risk.

B. The Proposed Guidance Will Remove Unwarranted Roadblocks to SIFI Determinations and Provide Valuable Substantive Guidance

In the immediate aftermath of Dodd-Frank's enactment, FSOC followed through with important steps to implement its NBF duties. FSOC promulgated 12 C.F.R. 1301.10(a), describing how the Council makes a SIFI determination based on the statutory standards. FSOC thereafter designated four NBFIs as SIFIs, designations that have since been rescinded or invalidated.

Unfortunately, in 2019, FSOC issued [interpretive guidance](#) that effectively eliminated its ability to further designate NBFIs as SIFIs. In May of that year, two former Treasury Secretaries and

² See [House Financial Services Committee Testimony of Fed Chair Ben S. Bernanke](#) (2010) (linking 2008 crisis to “gaps in our financial regulatory framework that allow large, complex, interconnected firms . . . to operate without robust consolidated supervision”).

³ See Miguel, et al. [Climate Change Regulation: Bank Lending and Real Effects](#) (2022) (Brazil's climate risk assessment policy led to contraction in large banks' financed emissions but failed to reduce total emissions because lending to high-polluting companies was taken over by small banks not covered by the policy).

two former Federal Reserve Chairs, including current Secretary Yellen, predicted in a [comment letter](#) that the changes would “neuter the designation authority,” “mak[ing] it impossible to prevent the build-up of risk in financial institutions whose failure would threaten the stability of the system as a whole.”

As noted above, this prediction proved to be correct. Today, FSOC is unable to fulfill its statutory duties due to the roadblocks put in place in 2019. This freezing of the SIFI determination process heightens the risk of instability in our financial system. We applaud FSOC for recognizing the problem and support each of the key components of its Proposed Guidance.

First, we support removal of the 2019 Guidance’s unduly narrow approach to evaluating and addressing financial stability risks, which precludes FSOC from acting unless it has first concluded that other agencies are failing to act and then concluded there is a likelihood of material financial distress. (*Response to FSOC Question 4*). Section 113(a)(1) of Dodd-Frank sets forth two alternative standards for assessing a risk to financial stability that, if met, would lead to a SIFI designation: designation may be warranted either due to “material financial distress” at the NBF, or due to the “nature, scope, size, scale, concentration, interconnectedness, or mix of the activities” of the NBF. The 2019 Guidance inappropriately relies on responses by other primary regulators to FSOC’s Section 120 recommendations and effectively eliminates FSOC’s ability to act under either of the two statutory standards. The 2019 Guidance also contradicts Dodd-Frank Section 113(a)(2), which sets forth a host of risk factors to be considered apart from the firm’s financial distress and other agencies’ response to that distress.

In the 2008 financial crisis, the source of instability was not lack of regulatory attention to any particular institution’s financial distress; it was the failure of regulators to address the widespread practice of originating and securitizing mortgage-backed securities. In enacting Section 113, Congress recognized that when NBFs are participating in entity-based or industry-wide practices that give rise to financial stability risk, FSOC must be empowered to address them.

Second, we support removal of the 2019 Guidance’s unwarranted and burdensome requirement of a cost-benefit analysis. (*Response to FSOC Question 8*). Removal of this requirement will reduce the time needed to make SIFI determinations and help ensure that financial institutions take timely corrective actions, thereby advancing the Dodd-Frank Act’s financial stability objectives. As FSOC makes clear, the benefits of a SIFI designation – averting a financial crisis – are potentially enormous and incalculable. Nothing in Dodd-Frank states or implies the need for a cost-benefit analysis.

Third, we support the proposed removal of 2019 Guidance’s “financial stability of the United States” definition, which inappropriately precludes FSOC from acting on impaired financial intermediation or impaired financial market functioning without a finding that such impairment “would inflict severe damage on the broader economy.” (*Response to FSOC Question 3*). FSOC’s proposed replacement approach, relying on the Proposed Analytic Framework for a description of how FSOC would evaluate a “threat to the financial stability of the United

States,” ensures that FSOC and other financial regulators take a consistent approach to financial stability risks, regardless of whether those risks arise from banks or NBFIs.

Finally, we support the proposed reliance on the Proposed Analytic Framework as the overarching substantive framework for SIFI determinations. (*Response to FSOC Question 1*). NBFIs will benefit from greater clarity and transparency regarding whether they are candidates for SIFI designation and actions that may be needed to avoid or rescind such designations.

The increased clarity and transparency also will help advance FSOC’s mission of imposing market discipline and avoiding the need for last-ditch financial stability measures such as taxpayer bailouts.

C. NBFIs’ Contributions to Climate-Related Financial Risks, and Exposure to Such Risks, Highlights the Urgency of Restoring and Strengthening SIFI Determinations

One of the consequences of the 2019 abandonment of the SIFI determination process has been the absence of any federal review of NBFIs’ handling of climate-related financial risks. Reviving the SIFI determination process reinstates a vital tool for the FSOC to assess and, where appropriate, act on financial stability risks linked to climate change.

Many NBFIs are privately held and not subject to the disclosure rules applicable to public companies. The complexity and opacity of their operations means that their contributions and exposures to systemic climate risk is not well understood; this lack of understanding itself adds to financial stability risk. A [June 2023 report of the Federal Insurance Office](#) highlights this problem, finding that monitoring of climate risk in the insurance industry is “fragmented across states and limited in several critical ways.”

Available data suggest that many large NBFIs are failing to adequately prepare for the rapid decarbonization of the economy and intensification of physical climate impacts. Carbon Tracker [finds](#) that the global economy is facing the risk of \$1 trillion in asset strandings, as current fossil fuel reserves hold ten times the amount of carbon that can feasibly be burned while achieving the Paris Agreement’s 1.5 °C target, and hundreds of billions of dollars are currently being raised to fund fossil fuel exploration and production. Reclaim Finance [estimates](#) that the world’s 30 largest asset managers alone hold roughly \$550 billion in fossil fuel assets in their portfolios. Some of these asset managers have substantial voting power and thus [influence over climate-related practices](#) of publicly-traded companies. The European Central Bank [evaluated](#) handling of climate risk by 23,000 asset managers worldwide, finding that it is “poorly assessed.” Some funds are reducing transition risk by adopting sustainable investment strategies, but “no significant segment of the investment funds sector achieves a clear reduction in its exposure to physical risk.”

Two other NBFIs sectors, insurance and real estate finance, likewise require FSOC’s urgent attention due to climate risks. Like the asset management sector, key companies in these sectors are contributing to financial stability risk due to large-scale fossil fuel financing.⁴ These sectors also have substantial intersecting risks arising from their growing exposures to climate-related disasters. The U.S. experienced an [annual average of 18 billion-dollar weather and climate disasters](#) in the 2018-2022 time period, far in excess of the annual average of the 8.1 billion-dollar annual average from 1980-2022. [Climate scientists anticipate a continued increase](#) in these extreme weather events as atmospheric concentrations of greenhouse gas emissions grow.

Homeowners and many others will inevitably be harmed by these disasters, but if the insurance and real estate finance industries effectively manage climate risks, they will be well-positioned to help speed the transition to a more sustainable future. Unfortunately, as shown by the recent departures of State Farm and Allstate from California and Farmers from Florida, [many insurers are abandoning entire markets](#) in response to climate-related disasters. According to a [2023 study](#) of high-risk private credit by Americans for Financial Reform (AFR), “[i]nsurers now face the twin risks of rising liabilities and rapidly-growing exposure to increasingly higher-risk corporate debt – leaving them in a precarious financial situation should a recession arrive.” The disparities of insurance access and coverage by geography and income level also exacerbate market instability, as shown in recent Ceres reports on [inclusive insurance](#) and [financial recovery gaps in South Carolina](#).

As the AFR report explains, a key source of insurance industry debt financing is private credit funds that, like insurers, operate outside the U.S. supervisory framework. Real estate finance is likewise dominated by unregulated NBFIs. From 2007 to 2011, the annual number of [mortgages issued by banks declined from 2.8 million to 1.5 million](#); mortgages issued by NBFIs during this period increased from 1.2 million to 3.2 million. All of these sectors are exposed to significant and intersecting financial stability risk as property owners face insurmountable disaster recovery costs. In 2022 alone, [3.4 million people](#) lost their homes temporarily or permanently due to climate events such as fires, floods, and droughts.

As in the 2008 financial crisis, the housing market today is characterized by a wide assortment of financial actors engaged in high-risk activities outside the scrutiny and supervision of financial regulators – the very conditions that Congress sought to head off in enacting the SIFI designation provisions of Dodd-Frank. To protect our financial system from climate risks and other vulnerabilities in NBFIs sectors, FSOC should finalize its Proposed Guidance and move quickly thereafter to restart the SIFI determination process.

⁴ See [Climate Risk and Resilience Analysis](#) (2022) (portfolios of insurers regulated by California Department of Insurance included \$538 billion in fossil fuel industry investments in 2019).

III. THE PROPOSED ANALYTIC FRAMEWORK WILL HELP REDUCE FINANCIAL STABILITY RISK, BUT MORE ATTENTION TO CLIMATE-RELATED FINANCIAL RISK IS NEEDED

A. The Proposed Analytic Framework’s Holistic and Precautionary Approach Will Help Reduce Financial Stability Risk

Among the lessons of past financial crises are that risks to financial stability can be diverse and build up over time, dislocations in financial markets and failures of financial companies can be sudden and unpredictable, and regulatory gaps can breed risk. To prevent a financial crisis, FSOC needs a holistic and precautionary approach for monitoring and assessing financial stability risk. Although (as discussed below) we believe climate risk deserves more focused attention, the Proposed Analytic Framework provides this needed holistic and precautionary approach. (*Response to FSOC Question 1*).

Until now, financial regulators’ consideration of financial stability risks has not benefited from a single framework for identifying and assessing such risks and deciding appropriate actions to address them. This new framework takes a holistic approach by covering a broad array of institutions “including banking organizations, broker-dealers, asset managers, investment companies, insurance companies, mortgage originators and servicers, and specialty finance companies.” It will provide essential guidance to FSOC when making its SIFI determinations, Section 120 recommendations, payment, clearing, and settlement (PCS) activity designations, and financial market utility (FMU) designations. It also will assist primary financial regulatory agencies when considering prudential measures for entities under their jurisdiction.

We strongly support the Proposed Analytic Framework’s definition of a threat to financial stability as any threat to the financial system “being resilient to events or conditions that could impair its ability to support economic activity.” This definition encourages financial regulators to take a precautionary approach, with prudential measures undertaken well before impaired functioning “would inflict severe damage” – the too-little-too-late threshold currently found in the 2019 interpretive guidance for SIFI designations. (*Response to FSOC Question 2*).

We are pleased that FSOC emphasizes its “broad statutory mandate” to monitor an expansive range of asset classes, institutions, and activities, vulnerabilities and transition channels that affect financial system stability. (*Response to FSOC Question 3*). FSOC also helpfully provides a non-exhaustive list of vulnerabilities and metrics it expects will be considered, such as leverage, liquidity risk, operational risk, and (especially relevant for NBFIs) complexity and opacity. (*Response to FSOC Questions 4 and 5*).

As FSOC noted in its 2021 [Report on Climate-Related Financial Risk](#), this conventional methodology for assessing financial stability risk is “well suited” for addressing climate-related financial risk because physical and transition risks tend to manifest as traditional risks such as credit risk, liquidity risk, market risk, and operational risk. In the 2021 report, it identified two

transmission channels through which climate risk acts on these system vulnerabilities: specific economic sectors (where impacts may include property damage and business interruption) and the macroeconomy (where impacts may include feedback through product and labor markets). The Proposed Analytic Framework uses slightly different terminology – it states that risks will be evaluated on an entity-specific or sector-wide basis and then provides a non-exhaustive list of transmission channels that includes exposures, asset liquidation, critical function or service, and contagion. These flexible approaches are effectively the same and equally suitable for evaluating climate risk. (*Response to FSOC Question 6*).

Although the core architecture of financial stability risk assessment set forth in the Proposed Analytic Framework is well-suited for addressing climate risk, climate risks nonetheless pose enormous analytical challenges not yet addressed by U.S. financial regulators. We discuss these challenges below and offer recommendations for how FSOC can address them with necessary rigor.

B. Fossil Fuel Financing and Lack of Transition Plans at Banks and NBFIs is Destabilizing the Financial System

The Proposed Analytic Framework appropriately highlights the need for attention to activities “that are sizable and interconnected with the financial system” that can destabilize markets or impair financial institutions. Importantly, it acknowledges that destabilization and impairment “may arise even when those activities are intentional and permitted by applicable law ... or activities that involve moral hazard ... that result in the creation and transmission of significant risks.” This describes well the impacts of bank and NBFIs fossil fuel finance, as well as the [failure of most of the largest financial institutions](#) to prepare and disclose adequate plans for transition to a decarbonized economy. As discussed below, the steady increase of greenhouse gas emissions, largely due to fossil fuel combustion, is already having destabilizing effects and much greater destabilization is anticipated if governments and businesses fail to make rapid and deep emissions cuts.

In Part II above, we discuss why NBFIs’ climate risks require the attention of financial regulators. The same can be said about chartered banks. Since the issuance of FSOC’s 2021 [Report on Climate-Related Financial Risk](#), in which FSOC declared that climate risk is “an emerging and increasing threat to the financial stability of the United States,” major U.S. banks have continued to provide large-scale support for fossil fuel development, worsening this threat. As explained in a 2023 Fed discussion paper [What Are Large Global Banks Doing About Climate Change?](#), although many large banks in the U.S. and elsewhere have announced policies

to restrict fossil fuel finance, “[t]o date, most of these financing restrictions appear symbolic, seemingly to avoid reputational damage.”⁵

As FSOC stated in its 2022 [Annual Report](#), “exposures to climate change can come through a variety of financial products that are complex, opaque, and insufficiently regulated.” Among these products are derivatives, which have the potential to dramatically increase a bank’s climate risk exposure and amplify systemic risk.⁶ The Proposed Analytic Framework will serve as an important tool for identifying and addressing climate risks from derivatives as well as for identifying innovative tools and products that help to reduce systemic climate risks.

C. The Proposed Analytic Framework Would be Strengthened with the Addition of an Analytic Approach to Climate Risks

FSOC briefly acknowledges in the Proposed Analytic Framework that climate-related financial risks may affect the resiliency of the financial system. However, it offers no information regarding how those impacts will be addressed in the framework.

As the [Federal Reserve Bank of Richmond](#), [Assistant Treasury Secretary Graham Steele](#), [Bank of England Governor Andrew Bailey](#), and many other leading experts have noted, climate risks are different from other sources of risk to financial stability and deserve special attention. The climate finance literature provides abundant evidence that any framework for addressing threats to financial stability must deal with the unique challenges that climate risk poses, with both components – transition risk and physical risk – identified as major vulnerabilities. Below, we summarize key research findings about climate risk assessments and recommend ways that the Proposed Analytic Framework could be strengthened to incorporate these lessons. We recommend that the Proposed Analytic Framework include an appendix on climate risk assessment that identifies these as priority actions, with a timeline and success metrics, so that progress on this critical need can be closely monitored.

1. Implement rigorous climate-focused scenario analysis and stress testing

Scenario analysis and stress testing are critical tools for understanding and addressing the systemic risks posed by climate change. As Ceres notes in [Addressing Climate as a Systemic Risk: A Call to Action for U.S. Regulators](#) (2020), traditional scenario analysis and stress testing are inadequate to capture the unique and ubiquitous issues presented by climate risk. Knowledge of what those risks are, and identifying key variables and uncertainties, will lay the foundation

⁵ See also Ceres, [U.S. Banks and the Road to Net Zero](#) (2023) (emissions reductions targets of the six largest U.S. banks are failing to adhere to best practices); Ceres, [Financing a Net Zero Economy: The Consequences of Physical Climate Risk for Banks](#) (2021) (bank climate risk disclosures are missing key components of physical risk); Ceres, [Financing a Net Zero Economy: Measuring and Addressing Climate Risk for Banks](#) (2020) (banks’ transition risk from syndicated loan portfolios is much greater than disclosed).

⁶ See Ceres, [Derivatives & Bank Climate Risk](#) (2022).

for effective risk mitigation and eventual integration into annual stress tests. Our primary focus here is therefore on the need to strengthen understanding and measurement of climate risks through robust climate scenario analysis exercises.

In [Confronting the ‘Climate Lehman Moment’: The Case for Macroprudential Climate Regulation](#) (2020), Assistant Treasury Secretary Steele states the need with urgency and clarity: regulators must “preemptively launch an inquiry into a range of prospective climate crisis scenarios and seek to anticipate how such scenarios might be prevented.”

Numerous other experts have expressed a similar view. In [A New Framework for Assessing Climate Change Risk in Financial Markets](#) (2020), Fed researchers Alvarez et al. call for a new “comprehensive framework” for assessing the “serious threat” posed by climate change to financial stability, highlighting “the compounded effects of irreversible changes” and the inadequacy of historical data sets. According to the authors, it is time to end the separation of financial, operational, and climate risk assessment frameworks; modeling and analysis must be strengthened to address how “changes in climate patterns affect the interactions among the financial risks.”

In [Climate Change and Financial Stability](#) (2021), Fed researchers Brunetti et al. highlight the problem of weak institutional knowledge of climate change, including of non-linearities and tipping points in climate conditions. According to the authors, climate scenario forecasting is challenged by this poor understanding of abrupt changes and the limited value of historical data. A particular concern is correlated shocks across the economy and financial system and the accuracy of models that estimate risks at leveraged financial intermediaries.

In their report [Climate Scenario Analysis by Jurisdictions](#) (2022), the Financial Stability Board (FSB) and the Network for Greening the Financial System (NGFS) outline findings from climate scenario planning exercises by 53 global institutions and offer important observations on why these exercises may be understating climate exposures and vulnerabilities. Similarly, in [Principles for the Effective Management and Supervision of Climate-Related Financial Risks](#) (2022), the Bank for International Settlements explains how climate scenario analysis could be better used “to identify relevant risk factors, size portfolio exposures, identify data gaps and inform the adequacy of risk management approaches.” Also in 2022, the European Central Bank released the [results of its supervisory review](#) of banks’ management of climate risk, finding significant deficiencies and imposing new capital requirements on some banks, and published a [compendium of good practices](#), including recommendations for climate scenario analysis.

In a blistering July 2023 [report](#) *The Emperor’s New Climate Scenarios*, the Institute and Faculty of Actuaries (IFoA) and the University of Exeter found that, due to a disconnect between climate scientists, economists, and model users in the financial services industry, commonly-used climate change scenarios used by financial institutions are underestimating risk. They show how key climate change impacts such as tipping points, sea-level rise, and mass migration are routinely excluded from consideration and how these deficiencies are leading to implausible

scenarios, with some modeled results going so far beyond climate science as to anticipate positive economic outcomes from a failure to transition.

A key takeaway from the IFOA and University of Exeter report is that financial institutions are focusing too narrowly on microeconomic concerns and paying insufficient attention to systemic risks. U.S. regulators are at risk of making the same mistake; under the Dodd-Frank Act it is a core responsibility of FSOC to guard against this.

In January 2023, the Fed launched its [first-ever climate scenario planning exercise](#), a pilot involving the six largest U.S. banks. Although this was a welcome step, the exercise’s design suffered from many of the same deficiencies outlined in the IoFA/ University of Exeter report, as outlined in a [Ceres review](#). Among the key elements of climate scenario analysis missing from the Fed’s plan: attention to indirect or second-round effects of bank activity; assessment of the impacts to other assets outside of a bank’s loans; integration of firm-level information from banks’ client engagements; utilization of data from other key agencies such as the Federal Emergency Management Agency and Federal Insurance Office; attention to climate-related changes in asset prices and credit ratings; and attention to late and disorderly transitions or no transition scenarios.⁷ The Proposed Analytic Framework provides an important opportunity to address these critical elements of climate scenario analysis.

Recommendation: The Proposed Analytic Framework should include guidance to financial regulators and financial institutions on design of climate scenario analysis, using best practices drawn from the literature and recent scenario planning exercises.

2. Address dangerous asset price bubbles

In a well-functioning capital market, asset pricing would reflect all material risk, including climate risk. Unfortunately, [as suggested by Nicholas Stern](#), author of the landmark 2006 review of the economic impacts of climate change, climate change may be the greatest market failure in history. Due to the rapid transition of the economy to cost-competitive low-carbon technologies, assessments of transition risk should be leading to substantial declines in valuations of carbon-intensive assets. A 2023 [Rocky Mountain Institute report](#) finds the global demand for fossil fuels has already peaked and after a brief plateau, will begin declining in 2025. Yet prices of carbon-intensive assets do not yet reflect these dramatic shifts.

Based on forecasts of declining demand, economists have estimated that carbon-intensive assets are overvalued in the range of [\\$1 trillion](#) to [\\$4 trillion](#), a “carbon-price bubble” that, if rapidly

⁷ In [Acute Climate Risks in the Financial System: Examining the Utility of Climate Model Projections](#) (2023) Pitman et al. call for central bankers to jettison the current approach of using global ‘top-down’ climate scenarios to explore financial risks, arguing that only city-scale scenarios are relevant to financial institutions. [Brammer et al.](#) (2023) challenge the appropriateness of the Fed’s application of a traditional approach to scenario analysis, which “assess[es] the effects for a major financial collapse over nine quarters,” to climate change, which unfolds over decades.

deflated, could lead to a financial crash at a scale greater than the 2008 global financial crisis.⁸ Leading experts have similarly expressed concerns about mis-pricing of assets exposed to the physical impacts of climate change.⁹

In its 2020 report [Managing Climate Risk in the U.S. Financial System](#), the CFTC’s bipartisan Climate-Related Risk Subcommittee, expressing concerns about financial instability arising due to asset mis-pricing, attributes the problem to the unique nature, and poor understanding of, climate risk.¹⁰

Recommendation: Transparency and high-quality data regarding climate risk’s impacts on business operations and financial performance are critical to ensuring that asset prices accurately reflect material risk. Although transparency of publicly-held financial institutions will likely improve following implementation of the SEC’s [proposed](#) climate-related disclosure rule, FSOC should act in parallel to address significant information gaps relating to climate risk management by both public and private financial institutions.

To facilitate monitoring of financial stability risk, the Analytic Framework should call for annual disclosures modeled after those many financial institutions already produce voluntarily using guidelines from the Task Force on Climate-related Financial Disclosures. Specifically, we recommend requiring the following annual disclosures from banks and regulated NBFIs:

- Emissions reduction targets with an explanation of their consistency with net-zero emissions by 2050
- The transition plan, with milestones and metrics, being used to ensure progress toward the target
- Governance and compensation structures being used to ensure progress toward the target
- New products and services being used to ensure progress toward the target
- Scenario analysis and other risk assessment measures, with details on methodologies and metrics

⁸ See Ceres, [Financing a Net Zero Economy: Measuring and Addressing Climate Risk for Banks](#) (2020).

⁹ See, e.g., European Central Bank, [The Macroprudential Challenge of Climate Change](#) (2022 (warning of “an abrupt reassessment of climate risk pricing resulting, for example, from a salient physical risk event” with “associated asset price contagion” could destabilize the financial system); see also Brunetti, et al., *ibid* (pervasive underestimation of climate risk could lead to excessive leverage in addition to asset bubbles).

¹⁰ See also Condon, [Market Myopia’s Climate Bubble](#) (2022) (asset mis-pricing attributable to lack of accurate information about climate risk, including the failure to capture extreme events and the correlation of such events).

- Any efforts underway to integrate climate risk management into the organization’s broader enterprise risk management (ERM) framework

3. *Address impacts of climate risk to low-income communities, communities of color, and other vulnerable communities*

In addressing climate risk’s contribution to financial stability risk, FSOC must explicitly address the disproportionate impacts of climate risk (including climate risk mitigation responses) on low-income communities, communities of color, and other vulnerable communities. Financial stability is dependent on public trust in the financial system and, as OCC notes in its [2022 annual report](#), “reducing inequality in banking is important to safeguarding trust.” Addressing the disproportionate impacts of climate risk is also essential for regulators to address their statutory fair lending responsibilities and otherwise prevent unjust outcomes. Conversely, adopting inclusive approaches to climate risk management represents a significant opportunity to build a more just and sustainable economy.

Ceres’ August 2022 [comment](#) in response to the Fed, OCC, and FDIC’s request for comment on their joint notice of proposed rulemaking under the Community Reinvestment Act describes how climate risk disparately impacts and exacerbates existing inequities in vulnerable and low- and moderate-income (LMI) communities, particularly communities of color. The January 2023 report, [Inclusive Insurance for Climate-Related Disasters](#), jointly produced by Ceres and the University of Pennsylvania’s Wharton School, likewise explains how economic impacts of climate-related disasters in the U.S. disproportionately harm LMI communities and communities of color, and can cause [long-term](#) financial harm to households with little financial safety net available to them. The May 2023 report, [Addressing Financial Recovery Gaps for South Carolina Households](#), jointly published by Ceres and the Environmental Defense Fund, draws on quantitative and qualitative analyses from disaster recovery and insurance programs in South Carolina and find that the root causes of the disaster recovery gaps there are unequal distribution and access to recovery financial resources.¹¹

Impactful action to address these issues includes requiring insurers to expand offerings to include accessible insurance products for unmet needs and provide transparent discounts for disaster mitigation, and requiring financial institutions to understand and credibly assess the communities

¹¹ See also [Ceres’ May 2023 comments](#) to the Federal Housing Finance Agency in response to its proposed rule to revise the Enterprise Regulatory Capital Framework (“Due to decades of systemic discrimination, redlining, and underinvestment, these communities disproportionately bear the economic burdens of climate impacts on housing. Affordable housing is also at increased risk from climate events such as sea level rise, storms, and flooding. These events further damage the affordable housing supply, leading to slower repairs and even the inability to [rebuild or build] homes where funding is scarce and rehabilitation and resiliency costs are high.”); Ceres’ comments to the [Fed, OCC, and FDIC](#) in response to their proposed Principles for Climate-Related Financial Risk Management for Large Banks (recommendations on protecting financially vulnerable communities); Ceres’ [June 2023 comment](#) to the NCUA in response to its Request for Information on Climate-Related Financial Risk.

they serve while ensuring climate risk management strategies don't disproportionately impact or increase burdens on financially vulnerable communities (including disinvestment).

Recommendation: FSOC should include in its Analytic Framework guidance for evaluating how financial institutions are mitigating potential disproportionate and other adverse impacts to LMI communities and communities of color from climate risks and climate risk management responses. FSOC should work with the Financial Literacy and Education Commission (FLEC) to assess the resilience of financially vulnerable populations and provide best practices for financial institutions to address these issues.

4. *Build capacity to address climate risk*

The literature on climate-related financial risk is replete with examples of how financial regulators fail to bring sufficient knowledge and expertise on climate risk to their supervisory work. In [Financial Risks of Climate Change: Piranhas or Red Herrings?](#) (2023), Pui and Werner examine climate scenario exercises conducted by financial regulators across the globe and find a serious disconnect with current understanding of climate change, raising concerns about “whether stress testing is indeed robust and decision-useful.”¹² The authors offer a host of recommendations, including “[b]roadening the sphere focus of climate scenarios beyond strictly financial outcomes” and “[e]nsuring there is representation from various disciplines” such as science, energy, policy, and business.

Expanding the focus of climate scenarios beyond strictly financial outcomes does not mean that regulators should disregard their financial stability mandates. Instead, it means that climate change operates in a non-linear fashion, with damage to natural systems and the macroeconomy steadily accumulating well before any visible impact on the financial system. If a natural system reaches a climate tipping point, or if supply chains of key economic sectors suddenly become frozen due to concentrated risks, a financial crisis could suddenly emerge. This suggests the need for building up the ranks of climate scientists capable of modeling change at appropriate geographic and temporal scales, as well as economists with expertise on segments of the real economy that face significant climate-related financial risk. Enlisting experts on decarbonization pathways, including those with business and policy knowledge, will likewise be important.

Finally, FSOC must build deep expertise on geopolitics. Of the many irreversible changes stemming from climate change, the ones that most deserve priority attention from financial regulators are those that permanently destroy freshwater, food supplies, and other conditions

¹² The authors identify three ways that this work has failed to accurately reflect climate risk. First, financial regulators typically employ models based on the severe outcomes of past financial crises, whereas climate change has to date produced smooth macro-economic pathways. Second, financial regulators simulate a shock event followed by recovery, whereas climate science anticipates irreversible tipping points. Finally, financial regulators focus primarily on financial shock events, whereas physical climate risk is more likely to manifest in systemic damage to the real economy before ensuing financial crises.

essential for human habitation. A [May 2023 paper](#) by Lenton et al. finds that climate change has already put roughly 9% of people (600 million) outside the “human climate niche,” defined as “the historically highly conserved distribution of relative human population density with respect to mean annual temperature.” If temperatures continue to rise at the current rate, roughly one-third of the world’s population would fall out of the climate niche most conducive to human life by 2100. Countries that have contributed the least to global GHG emissions, such as Burkina Faso and Mali, would face the worst consequences from this extreme heat.

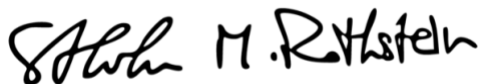
A [May 2023 paper](#) by Bauer et al. also highlights the disproportionate impacts of this environmental degradation on low-income nations and communities of color: “the detrimental effects of 1.5 °C warming and the additional effects due to overshoots are strongest in non-OECD countries. Constraining the overshoot inflates CO2 prices ... while mitigation costs increase sharply in developing countries.”

There can be little question that if large swaths of land are rendered uninhabitable due to food and water shortages and extreme heat – conditions forecasted by leading climate scientists under some emissions scenarios – the result will be large-scale human mortality and displacement and destabilization of the global economy and financial system. FSOC must ensure that the financial regulatory agencies have the expertise to grapple with this systemic risk and its impacts on the U.S. economy.

Recommendation: FSOC should inventory key staffing needs for effective scenario analysis and other climate risk assessments and mitigation responses. The Proposed Analytic Framework should be amended to reflect this updated approach.

We thank you for your leadership and this opportunity to comment on the Proposed Guidance and Proposed Analytic Framework and welcome any additional opportunities to provide input. If there are questions please reach out to Steven Rothstein at srothstein@ceres.org or our consultant, John Kostyack at john@kostyackstrategies.com.

Sincerely,



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