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Nov 17, 2020

Ann E. Misback
Secretary Board of Governors of the Federal Reserve System
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Washington, DC 20551
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Docket ID: No.R-1724: RIN 7100-AF95

RE: Response to Request for Comment on Federal Reserve Board Capital Planning Requirement Proposal: Amendments to Capital Planning and Stress Testing Requirements for Large Bank Holding Companies, Intermediate Holding Companies and Savings and Loan Holding Companies; Docket ID: R-1724; RIN 7100-AF95

Dear Secretary Misback:

We appreciate the opportunity to comment on the proposed rule *Regulations Y, LL, and YY: Amendments to Capital Planning and Stress Testing Requirements for Large Bank Holding Companies, Intermediate Holding Companies and Savings and Loan Holding Companies [R-1724]*, specifically responding to Section II: Questions 15-19 (see questions in Appendix I). Our comments specifically focus on the importance of integrating climate change risks into the stress tests and capital planning process.

As a center focused on accelerating systems change to reduce the worst financial impacts of the global climate crisis, the Ceres Accelerator for Sustainable Capital Markets[1] knows that the financial sector, and the bodies that regulate it, have a responsibility to understand and mitigate the systemic financial risks posed by climate change.

In its November 2020 biennial report on financial stability[2], the Federal Reserve itself has acknowledged that the climate crisis poses risks to financial stability, and has signaled that they are in the process of conducting research to understand the impacts of climate change risks on the financial sector.

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[1] Ceres is a sustainability nonprofit organization working with the most influential investors and companies to build leadership and drive solutions throughout the economy. Through powerful networks and advocacy, Ceres tackles the world's biggest sustainability challenges, including the climate crisis, water scarcity and pollution, and inequitable workplaces. The Ceres Accelerator for Sustainable Capital Markets is a center within Ceres that aims 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. For more information, visit ceres.org and follow @CeresNews

[2] Board of Governors of the Federal Reserve System, *Financial Stability Report,* November 20, 2020. https://www.federalreserve.gov/publications/files/financial-stability-report-20201109.pdf

The ongoing coronavirus pandemic provides an important analogy to consider as we address climate change risks. The pandemic has underscored the interconnected nature of our financial markets, and how environmental and social factors magnify the financial impacts of systemic risks.

The stress test is emerging as an increasingly important tool for banks and regulators to understand how individual firms, and correspondingly how the sector writ large, are positioned to be able to withstand climate impacts. Regulators in the Netherlands, UK, Canada, Singapore, and Japan have been infusing climate risks into stress testing (or plan to do so in 2021), and the European Banking Authority is considering taking similar action.[3] As the Board seeks to amend rules affecting stress tests, we believe that it must consider explicitly including climate risks among the inputs to stress tests conducted on major banks. Beyond the stress test itself, the board may consider reviewing capital adequacy requirements in light of mounting climate risks to banks.[4]

Financial institutions face mounting physical risks and significant and unrecognized transition risks

Climate change presents two overarching types of risk: physical and transition. Financial services companies, including banks and insurers, face a tidal wave of physical risk as the financial impacts of more intense storms, droughts, fires, and other climate-related disasters, in addition to creeping temperature rise and sea-level change, increase over time. Physical risks threaten real assets, owned by banks and their customers, real estate loans, and a wide range of other business lines. This year alone has seen drought and historic wildfires in the West and an onslaught of damaging tropical storms on the Gulf and Atlantic coasts, representing the sixth consecutive year in which the U.S. has seen "10 or more billion-dollar weather and climate disasters."[5]

At the same time, as we move towards a lower carbon economy, the financial sector faces transition risks from multiple inexorable trends, including increased legislation and regulation, growth in litigation, technology change, and consumer and public sentiment shifts. Considered distinct from physical risks, "transition risks are related to the impacts caused by the changes in

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[3] The FinReg Blog at Duke University Law School, *Climate-Related Prudential Risks in the Banking Sector and Emerging Regulatory and Supervisory Practices*, July 15, 2020. https://sites.law.duke.edu/thefinregblog/2020/07/15/climate-related-prudential-risks-in-the-banking-sector-and-emerging-regulatory-and-supervisory-practices/

[4] Institute for Climate Economics, *Integrating Climate-related Risks into Banks' Capital Requirements*, March 2020. https://www.i4ce.org/wp-core/wp-content/uploads/2020/03/IntegratingClimate_EtudeVA.pdf

[5] The Independent, *Record 16 Climate Disasters Have Hit the U.S. in 2020,* October 8, 2020. https://www.independent.co.uk/environment/climate-change-crisis-wildfire-hurricanes-heatwave-weather-damage-cost-b886125.html

the current socio-economic model to transform itself into a new low-carbon emissions model… [and] can negatively impact counterparts' cash flows and assets."[6] More plainly stated: transition risks arise when shifting from business-as-usual to a "less polluting, greener economy."[7] Importantly, transition risks do not only threaten a particular company or industry, but like physical risks, transition risks may affect the entire economy through acute or chronic systemic shocks: these risks do not occur in nor remain in silos.

The transition to a cleaner economy, driven by global policy action, is inevitable. While transition risks may be significant, multiple analyses show that failure to implement climate mitigating policies only exacerbates future policy-related transition risk. Financial risks are minimized by acting sooner; delaying action only magnifies the negative impact.[8] The Bank of England states clearly that carbon-reducing policies themselves are not to blame, as "risk of delaying action altogether would be far worse."[9] Allowing greenhouse gases to continue to be emitted at dangerous levels will worsen the physical impacts of climate change, which would likely result in a more sudden, reactionary policy response that would create a greater shock to unprepared companies, financial institutions, and the economy.[10]

In October, Ceres released *Financing a Net-Zero Economy: Measuring and addressing climate risk for banks*[11], a first-of-its-kind assessment of the loan portfolios of U.S. banks. The analysis shows that more than half of syndicated loans by major U.S. banks carry significant transition risk due to loan clients' lack of preparation for a carbon-constrained world. Banks face substantial losses from direct exposure from energy-producing industries and those most reliant on them (including energy-intensive manufacturing, buildings, transportation, and agriculture), which in combination could lead to substantial losses. These risks reverberate throughout the economy, from banks to bank holding companies to nearly all corners of the financial sector and beyond. And while this impact is significant, it only captures a portion of each bank's business and a single type of risk (transition risk and not physical). The report also found that banks are vulnerable to climate risks from within the financial sector itself: The extent to which banks finance each other leads to indirect transition risk from exposure to other firms' own direct risk, while banks could also face balance-sheet contagion (or "fire

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[6] Institute for Climate Economics, *Integrating Climate-related Risks into Banks' Capital Requirements*, March 2020. https://www.i4ce.org/wp-core/wp-content/uploads/2020/03/IntegratingClimate_EtudeVA.pdf

[7] Bank of England, *Climate Change: What are the risks to financial stability?*, Accessed October 25, 2020. https://www.bankofengland.co.uk/knowledgebank/climate-change-what-are-the-risks-to-financial-stability

[8] Ibid.

[9] Ibid.

[10] Oliver Wyman, *Climate Change: Managing a new financial risk*, February 2019. https://www.oliverwyman.com/content/dam/oliver-wyman/v2/publications/2019/feb/Oliver_Wyman_Climate_Change_Managing_A_New_Financial_Risk_paper.pdf

[11] Ceres, *Financing a Net-Zero Economy: Measuring and Addressing Climate Risk for Banks*, October 19, 2020. https://www.ceres.org/resources/reports/financing-net-zero-economy-measuring-and-addressing-climate-risk-banks

sales,") where assets are rapidly devalued and banks are forced to sell them to stay in compliance with regulatory capital requirements.

Stress tests and capital requirements are ways to expose climate exposure by banks, and identify corrective action.

While banks themselves can address some risk by conducting internal scenario analyses that adjust for climate-influenced variables, central banks and supervisors have tools of their own. As the Board states in its proposal, "Stress testing enables the Board to assess whether large firms have sufficient capital to absorb potential losses and continue lending under severely adverse conditions." Climate change fits well within this purpose, as potential losses and lending in adverse conditions are increasingly likely. Climate risks are large and currently unmanaged, which could lead to financial institution failure across the board. A London School of Economics study projects that, unless addressed, climate change could reduce the value of global financial assets by as much as $24 trillion by the end of the century[12] – permanent damage far worse than the 2007-2009 financial crisis. And, a 2019 study by the National Bureau of Economic Research warns that if GHG emissions are not significantly reduced, the U.S. could see a 10.5% drop in real income by 2100.[13] Stress tests could help prepare for these impacts by revealing climate pain points on a bank's books and whether the firm has proper capital to cover these risks.

Beginning with integration of climate risk into required stress testing, regulators can gauge the impact of a variety of climate change scenarios, including rapid shifts toward a low-carbon economy in reaction to severe storms or crippling drought. The Federal Reserve should help define scenarios, time horizons, and modeling approaches that should be used.[14]

International counterparts offer U.S. regulators examples of these resilience-building efforts. A global effort, the Central Banks and Supervisors Network for Greening the Financial System (NGFS), released this summer its "Guide to Climate Scenario Analysis for Central Banks and Supervisors," which details recommendations for regulators and financial institutions to better integrate climate risk into scenario analysis and stress testing.[15] The Bank of England intends to conduct a "Biennial Exploratory Scenario" that will test the resilience of major financial services companies to a range of climate impacts, including how they would cope with more frequent

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[12] Simon Dietz, Alex Bowen, Charlie Dixon, Philip Gradwell, *'Climate value at risk' of global financial assets*, April 4, 2016. https://www.nature.com/articles/nclimate2972

[13] National Bureau of Economic Research, *Long-Term Macroeconomic Effects of Climate Change: A Cross-Country Analysis*, August 2019. https://www.nber.org/papers/w26167

[14] Ceres, *Addressing Climate as a Systemic Risk: A call to action for U.S. financial regulators*, June 2020. https://www.ceres.org/sites/default/files/reports/2020-06/Financial%20Regulators%20FULL%20FINAL.pdf

[15] Network for Greening the Financial System, *Guide to climate scenario analysis for central banks and supervisors*, June 2020. https://www.ngfs.net/sites/default/files/medias/documents/ngfs_guide_scenario_analysis_final.pdf

severe weather events such as flooding and rising sea levels, as well as what would happen if there was a sudden "fire sale" of fossil fuel-related assets[16]. Japan's Financial Services Agency that is piloting a scenario analysis and stress testing program, starting with five of among the nation's largest banks.[17] A recently published report by Fitch Ratings discusses the stress tests that will be developed for EU-regulated banks.[18]

Where banks have risk exposure, in addition to working with them to put in place good risk management systems, the Board should also consider imposing higher capital requirements for those banks that are identified as being significantly exposed to climate risk. While the Board's proposal does not specifically include changes to capital requirements, the Federal Reserve should consider capital adequacy adjustments in response to concerning results on climate-included stress tests. As Fitch recently reported, a growing number of international regulators "make clear that climate scenario analysis and stress testing should explicitly feed into banks' capital adequacy."[19]

As noted in a recent report by the Institute for Climate Economics, capital requirements can be a tool used within a "risk approach, which seeks to increase banks' resilience to climate-related risks and thereby ensure financial stability… [corresponding] to the primary objective of capital requirements."[20] Increasing liquidity standards should be addressed for a similar purpose.

Various mechanisms have been suggested to sufficiently reflect climate risks in capital requirements. While "all of [the mechanisms] have their advantages and disadvantages," the financial industry and regulatory authorities must work together to analyze (or develop new) methods for integrating climate risk into capital adequacy determinations, giving adequate attention to assessing risks affecting each type of asset. [21]

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[16] Bank of England, *The 2021 Biennial exploratory scenario on the financial risks from climate change*, https://www.bankofengland.co.uk/paper/2019/biennial-exploratory-scenario-climate-change-discussion-paper

[17] Responsible Investor, *Japanese regulator gears up for climate scenario analysis pilot for banks*, September 3, 2020. https://www.responsible-investor.com/articles/japanese-regulator-gears-up-for-climate-scenario-analysis-pilot-for-banks

[18] McKinsey, *Banking imperatives for managing climate risk*, June 1, 2020. https://www.mckinsey.com/business-functions/risk/our-insights/banking-imperatives-for-managing-climate-risk

[19] Fitch Ratings, *Climate Stress Tests Will Eventually Influence Bank Capital*, September 10, 2020. https://www.fitchratings.com/research/banks/climate-stress-tests-will-eventually-influence-bank-capital-10-09-2020

[20] Institute for Climate Economics, *Integrating Climate-related Risks into Banks' Capital Requirements*, March 2020. https://www.i4ce.org/wp-core/wp-content/uploads/2020/03/IntegratingClimate_EtudeVA.pdf

[21] Ibid.

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More information on climate risks facing the financial sector and how regulators and supervisors may be able to address these risks through stress testing and changes to capital requirements can be found in Appendix II below.

We thank you for your consideration and would be happy to answer any questions.

Sincerely,

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Ceres

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Appendix I: *Questions 15-19 from Section II of Request for Comment*

Question 15: What if any changes should the Board consider with respect to the scope of application of its existing capital planning guidance and why? What if any considerations regarding firms' risk profiles should be factored into the applicability of capital planning guidance and why? Factoring in the applicability of the Board's regulations, what if any aspects of the Board's capital planning guidance should be changed or tailored differently based on firms' risk profiles and why?

Question 16: The Board is interested in comment on whether changes are appropriate to its supervisory guidance on capital planning, in light of experience with the guidance and factors such as the recent tailoring and stress capital buffer rules and other applicable regulatory requirements. Please describe appropriate changes and the rationale behind them.

Question 17: How should existing guidance on capital planning be adapted, if at all, to reflect times of heightened and prolonged uncertainty? For example, how has the COVID event influenced firms' capital planning and loss estimation processes? How should these types of adjustments be reflected in the Board's guidance on capital planning?

Question 18: How should the Board weigh the potential benefits of revising its capital planning guidance against the potential burdens, given the current economic environment? How could any such burdens be mitigated?

Question 19: How well does the existing guidance on capital planning reflect sound practices for managing risks across firms of various risk profiles and promote safety and soundness? With a goal of balancing clarity and flexibility, how could the guidance be improved in its application to firms with differing risk profiles? What aspects of industry practice or other developments should be considered in any potential updates to this guidance, and how?

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Appendix II: Resources

Ceres, *Financing a Net-Zero Economy: Measuring and Addressing Climate Risk for Banks*, October 2020. https://www.ceres.org/resources/reports/financing-net-zero-economy-measuring-and-addressing-climate-risk-banks

Ceres, *Addressing Climate Risk as a Systemic Risk: A call to action for U.S. financial regulators*, June 2020. https://www.ceres.org/sites/default/files/reports/2020-06/Financial%20Regulators%20FULL%20FINAL.pdf

Deloitte, *The Predictive Power of Stress Tests to Tackle Climate Change*, https://www2.deloitte.com/content/dam/Deloitte/fr/Documents/sustainability-services/deloitte_climate-risk-assessment.pdf

Institute for Climate Economics, *Integrating Climate-related Risks into Banks' Capital Requirements*, March 2020. https://www.i4ce.org/wp-core/wp-content/uploads/2020/03/IntegratingClimate_EtudeVA.pdf

Network for Greening the Financial System, *Guide for Supervisors Integrating climate-related and environmental risks into prudential supervision*, May 2020. https://www.ngfs.net/sites/default/files/medias/documents/ngfs_guide_for_supervisors.pdf

The FinReg Blog at Duke University Law School, *Climate-related Prudential Risks in the Banking Sector and Emerging Regulatory and Supervisory Practices*, July 2020. https://sites.law.duke.edu/thefinregblog/2020/07/15/climate-related-prudential-risks-in-the-banking-sector-and-emerging-regulatory-and-supervisory-practices/

International Monetary Fund, *Stress Testing at the IMF*, January 1, 2020. https://www.imf.org/en/Publications/Departmental-Papers-Policy-Papers/Issues/2020/01/31/Stress-Testing-at-the-IMF-48825

Climate Change: Managing a new financial risk, https://www.oliverwyman.com/content/dam/oliver-wyman/v2/publications/2019/feb/Oliver_Wyman_Climate_Change_Managing_A_New_Financial_Risk_paper.pdf