



June 18, 2026

Via Regulations.gov

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Comptroller of the Currency
Attn: Comment Processing
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Benjamin W. McDonough,
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Jennifer M. Jones
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Attn: Comments/Legal OES
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Attn: OCC, Docket ID No. OCC-2026-0265; Fed. Reserve Sys., Docket No. R-1887, RIN 7100-AH20; FDIC, RIN 3064-AF29

**Re: Prime Mover Institute's Comment on the Proposed Rule Entitled
*Regulatory Capital Rule: Category I and II Banking Organizations, Banking
Organizations with Significant Trading Activity, and Optional Adoption for
Other Banking Organizations*, 91 Fed. Reg. 14,952 (Mar. 27, 2026)**

Dear Comptroller Gould, Secretary McDonough & Deputy Executive Secretary
Jones:

The Prime Mover Institute ("PMI") respectfully submits these comments in support of the proposed *Regulatory Capital Rule: Category I and II Banking Organizations, Banking Organizations with Significant Trading Activity, and Optional Adoption for Other Banking Organizations*, 91 Fed. Reg. 14,952 (Mar. 27, 2026) ("Proposed Rule"), issued

by the Office of the Comptroller of the Currency (“OCC”), the Board of Governors of the Federal Reserve System (“Federal Reserve”), and the Federal Deposit Insurance Corporation (“FDIC”) (collectively, the “Agencies”).

PMI is a public interest organization dedicated to advancing energy dominance in America. We work with coalition partners to engage rulemaking processes with technical information and legal arguments, calling attention to the effects regulation has on citizens, energy producers, the grid, and the rule of law.

America stands at a crossroads. A legacy of bad policy and worse ideas threatens the nation with blackouts and bill increases, right as demand for energy rises. In order for America to scale up its energy production and avoid the worst-case scenarios, we cannot cling to the policies and procedures that brought us here. Fortunately, both policymakers and the private sector realize the need for dramatic change. And courts have begun to look more skeptically at accretions of arbitrary regulatory power, which government officials have used to thwart energy production and use. This points the way to a future of streamlined regulation, taxpayer savings, and cheaper, more abundant energy for all.

The main obstacle to energy dominance is what Robert Bryce calls the “anti-industry industry,” the non-profit organizations and lawyers dedicated to defending the status quo. *See* Robert Bryce, *The Anti-Industry Industry* (Feb. 18, 2023).¹ These groups have used litigation, regulatory comments, and intimidation to forestall change. They will no doubt keep at it. But, despite their vast funding, they will not be able to maintain a policy regime that’s so far out of touch with the American public and their elected representatives. So long, that is, as the advocates of energy dominance show up to defend their ideas.

In the words of Vaclav Smil, “[p]rime movers are energy converters able to produce kinetic (mechanical) energy in forms suitable for human uses.” Vaclav Smil, *Energy Transitions* 10 (2d ed. 2017). In the same way, Prime Mover Institute helps convert insight into action.

Thank you for the opportunity to comment.

Respectfully submitted,

/Russell Greene/
Russell Greene
Managing Director
Prime Mover Institute

¹ <https://robertbryce.substack.com/p/the-anti-industry-industry>.

1. Introduction

We applaud the Agencies for their work to implement President Trump’s Executive Order 14,331, “Guaranteeing Fair Banking for All Americans,” by placing “the principle that the provision of banking services should be based on material, measurable, and justifiable risks” at the center of bank regulation. 90 Fed. Reg. 38,925, 38,925 (Aug. 12, 2025). The Agencies are taking admirable steps toward protecting American businesses from being penalized by financial institutions on “the basis of their ... lawful business activities” by proposing reforms that would help ensure that internal risk assessments by banks are “made on the basis of individualized, objective, and risk-based analyses.” *Id.*

One important development is OCC’s review of debanking activities by large banks. Its preliminary findings show that between 2020 and 2023, the nine largest banks in America by asset size “maintained public and nonpublic policies restricting certain industry sectors’ access to banking services,” in some instances assigning “‘environmental’ and ‘social’ ratings for clients and transactions exposed to certain” industry sectors.² OCC, *Preliminary Findings from the OCC’s Review of Large Banks’ Debanking Activities* 1–2 (Dec. 2025).³ Bringing these practices to light is a necessary first step towards ending them. But, as of now, banks continue to use such considerations in banking decisions in the name of mitigating “climate related financial risk” (“climate risk”). This concept includes both the *physical risk* of changes in weather patterns from anthropogenic climate change and the *transition risk*

² OCC has taken at least three other important steps. First is the proposed rule entitled, *Unsafe or Unsound Practices, Matters Requiring Attention*, 90 Fed. Reg. 48,835 (Oct. 30, 2025), which clarifies that a practice is “unsafe or unsound” only if it “is likely to (A) materially harm the financial condition of the institution; or (B) present a material risk of loss to the [Deposit Insurance Fund],” or “materially harmed the financial condition of the institution.” *Id.* at 48,838. It also clarifies that harm is not “material” unless it would significantly “impact the institution’s capital, asset quality, liquidity, earnings, or sensitivity to market risk,” or the risk that an institution fails. *Id.* at 48,838–39. Second is OCC’s withdrawal from the “interagency principles for climate-related financial risk management for large financial institutions,” a Biden-era effort to entrench ESG into the administrative state. *Rescission of Principles for Climate-Related Financial Risk Management for Large Financial Institutions*, 90 Fed. Reg. 51,756 (Nov. 18, 2025). Third is OCC’s proposed revision of the Uniform Financial Institutions Rating System, commonly referred to as the “CAMELS” rating system, to remove all references to “reputation risk” and remove the “special consideration” given to the “M” (Management) component by establishing a material financial risk threshold for assigning Management ratings of 3 or worse based on risk management weaknesses. *Uniform Financial Institutions Rating System*, 91 Fed. Reg. 29,128, 29,130–32 (May 19, 2026).

³ <https://www.occ.gov/news-issuances/news-releases/2025/nr-occ-2025-123a.pdf>.

of shifts in regulatory policy or consumer preferences in support of specific climate objectives. While shifts in both the meteorological and political environment may present risks that banks should account for, the concept of climate risk has served as cover for ideological agendas rather than sober risk assessment. This raises the cost of capital for critical industries while introducing new risks to the financial system.

The Proposed Rule does not explicitly address climate risk but proposes a framework that should prevent its misuse. The Agencies frame the Proposed Rule as designed to improve the risk sensitivity of capital requirements for banks, reduce complexity, and improve transparency and consistency. The Proposed Rule would replace the current dual calculation regime for Category I and II firms with a single expanded risk-based approach, remove internal models for credit and operational risk, and retain internal models only for market risk where modeling is empirically verifiable. 91 Fed. Reg. at 14,955–56, 14,959.

For corporate credit, the Proposed Rule’s key change is that a non-subordinated corporate exposure that a bank determines is “investment grade” may receive a 65% risk weight, while other corporate exposures generally receive a 100% risk weight. The investment grade definition remains tied to the borrower’s capacity to meet financial commitments over the projected life of the exposure, with low default risk and expected full and timely repayment. *Id.* at 14,975. Whether a corporate exposure is investment grade turns on a bank’s internal credit risk rating system, which must meet the rating-integrity requirements of the Proposed Rule. These requirements include annual validation of models and data inputs. To form the basis of the bank’s capital requirements, the credit risk rating system must “inform material business [and] risk management decisions,” including loan pricing, capital planning, loan-loss reserve estimation, and board decision-making. *Id.*

But the previous administration permitted and, in some instances, aggressively encouraged banks to incorporate climate risk into these rating systems. The possibility that misuses of climate risk could distort capital requirements is, therefore, very real. The continuation of such practices could result in carbon intensive industries facing higher costs of capital based on generalized factors that are immaterial or inapplicable to an obligor’s individual credit risk. The Agencies should thus consider whether the Proposed Rule includes sufficient guardrails to prevent the misuse of climate risk from distorting capital requirements.

This comment proceeds by describing how regulators pressured banks to incorporate climate risk into their credit risk management practices, and how this use of climate risk misallocates capital and introduces risk to the financial system. It then recommends clarifications to the Proposed Rule to reduce or eliminate those distortions and increase financial stability.

2. Regulatory Background

Between 2021 and 2024, federal banking supervisors deliberately pushed climate risk into the credit risk management systems of banks across the nation. President Biden’s Executive Order 14,030, “Climate Related Financial Risk,” declared it the policy of the federal government to mitigate climate risk consistent with achieving “a net-zero emissions economy by no later than 2050,” and directed the Treasury Secretary, as chair of the Financial Stability Oversight Council, to work with member agencies to incorporate this goal “into their respective regulatory and supervisory activities.” 86 Fed. Reg. 27,967, 27,968 (May 25, 2021). Without “clear congressional authorization,” the order directed bank regulators to pursue a climate policy goal of “vast economic and political significance,” *West Virginia v. EPA*, 597 U.S. 697, 716, 723 (2022) (cleaned up), under the guise of mitigating risks to the financial system.

The interagency *Principles for Climate-Related Financial Risk Management for Large Financial Institutions* (“*Principles*”), 88 Fed. Reg. 74,183 (Oct. 30, 2023), attempted to operationalize the incorporation of climate goals into bank supervision. The *Principles*, set forth by the Agencies promulgating this Proposed Rule, instructed the nation’s largest financial institutions to “consider climate-related financial risks as part of the underwriting and ongoing monitoring of portfolios,” including through “sectoral, geographic, and single-name concentration analyses,” and to “determine credit risk tolerances and lending limits related to material climate-related financial risks.” *Id.* at 74,188. Though the *Principles* did not directly address capital requirements, they directed banks to include climate risk considerations in the inputs that generate risk weights under regulatory capital frameworks.

The Federal Reserve’s pilot climate scenario analysis ran the six largest U.S. banks—Bank of America, Citigroup, Goldman Sachs, JP Morgan Chase, Morgan Stanley, and Wells Fargo—through climate risk scenarios. The banks translated those scenarios into “climate-adjusted credit risk parameters” by adapting credit risk models from the Network for Greening the Financial System (“NGFS”). Fed. Rsrv., *Pilot Climate Scenario Analysis Exercise: Summary of Participants’ Risk-Management Practices and Estimates* 1 (May 2024).⁴ Though the Federal Reserve emphasized that it “neither prohibits nor discourages” institutions from serving any lawful customer class, and the analysis was exploratory and carried no capital or supervisory consequences, the exercise nonetheless served as one more encouragement for banks to include climate risk in their credit rating systems. *Id.*

The *Principles* were formally rescinded in November 2025, but the regulatory backdrop from 2021 through 2024 normalized and encouraged the use of climate risk by banks in their underwriting, internal ratings, concentration limits, and capital

⁴ <https://www.federalreserve.gov/publications/files/csa-exercise-summary-20240509.pdf>.

planning—the very systems on which the Proposed Rule hangs the 65% versus 100% split in corporate exposure risk weights.

3. Banks Use Climate Risk in their Internal Credit Risk Management

Banks followed these overt cues from their regulators and have incorporated policies with specific objectives for greenhouse-gas emissions as inputs to their internal credit risk management practices. Banks have operationalized these policies through internal management committees. *See, e.g., JPMorgan Chase & Co., 2024 Climate Report* 5 (2024) (“JP Morgan 2024 Climate Report”) (touting “Firmwide Environmental Committee” and “Center for Carbon Transition”);⁵ Citigroup, *2024 Citi Climate Report* 9 (2025) (“Citi 2024 Climate Report”) (advertising “Sustainability and ESG,” “Climate Risk,” and “Environmental and Social Risk Management” teams).⁶ At JP Morgan, the Firmwide Environmental Committee has decision making authority over both its climate-related “methodologies, standards and practices” and climate-related “targets.” JP Morgan 2024 Climate Report at 5. Citi explains how it ties “sustainability-related goals into several executive scorecards” that drive “incentive compensation.” Citi 2024 Climate Report at 10. Citi’s goals also include “the development and operationalization of efforts to achieve [Citi’s] net zero commitment.” *Id.* These governance practices fuse climate goals into credit risk management practices.

Consistent with the now-rescinded *Principles*, banks employ “sectoral, geographic, and single-name concentration analyses,” and have established “credit risk tolerances and lending limits related to” climate risk. 88 Fed. Reg. at 74,188. As they explain in their sustainability reports and other disclosures, the nation’s largest banks use these practices to inform their individual credit risk ratings. These banks limit their exposure to certain industry sectors based upon their greenhouse gas emission intensity by setting emission-reduction goals for those sectors, *e.g., Bank of Am., Sustainability at Bank of America* 8 (2025) (reporting “Financing Activity targets” for 2030 with carbon-intensity reduction requirements for borrowers in the “auto manufacturing, aviation, cement, energy, power generation, iron and steel and maritime shipping ... sectors”);⁷ JP Morgan 2024 Climate Report at 8 (discussing “net zero-aligned targets for eight sectors – Oil & Gas, Electric Power, Auto Manufacturing, Aviation, Shipping, Iron & Steel, Cement and Aluminum”).

JP Morgan uses these sectoral targets in its Carbon Assessment Framework (“CAF”) for in-scope transactions in the targeted sector. Each CAF informs subsequent risk

⁵ <https://www.jpmorganchase.com/content/dam/jpmc/jpmorgan-chase-and-co/documents/Climate-Report-2024.pdf>.

⁶ <https://www.citigroup.com/rcs/citigpa/storage/public/2024-citi-climate-report.pdf>.

⁷ https://about.bankofamerica.com/content/dam/about/report-center/esg/2025/SustainabilityatBofA2025_WCAG2.2_121625.pdf.

assessments and the wholesale-credit transition-stress analysis for the sector. JP Morgan 2024 Climate Report at 9–10. Similarly, Citi’s 2024 Climate Report explains that its “Climate Risk Assessments & Scorecard” (“CRAS”) is “embedded in credit reviews” to evaluate the climate-related exposures and adaptation and mitigation plans of corporate clients. The scorecard appears to use such data—about each obligor’s progress towards specific policy objectives—in its risk management framework. Citi uses CRAS to “generate[] an overall climate risk score” that is “systematically assessed in client-level credit reviews for applicable sectors.” Citi 2024 Climate Report at 18–20, 26–28.

To achieve their sectoral emissions goals, banks actively employ “stewardship activities” “to help guide companies ... toward better sustainability and governance practices,” Morgan Stanley, *2024 Sustainability Report* 20 (2025);⁸ *see also* Barclays PLC, *2025 Annual Report* 83 (2026) (“We work closely with our clients to ensure that over time the activities we finance are aligned to the goals and timelines of the Paris Agreement.”).⁹ These practices leverage banking relationships to pressure firms to either exit or fundamentally transform their industry.

These practices *increase* risk for firms in the sectors subject to decarbonization targets imposed by banks. These *de facto* lending constraints act as headwinds to the President’s goals of ending illegal debanking and increasing energy production. Firms in these disfavored industries face the constraints of large banks limiting their sectoral exposure on the one hand and the increasing uncertainties of the private credit market on the other. *See, e.g.*, Sabri Ben-Achour, *More Investors Want to Pull Money from Private Credit Firms*, Marketplace (Jun. 4, 2026) (describing investor retreat from private credit firms);¹⁰ Hugh Leask, *Private Credit’s \$2 Trillion Boom Raises Global Stability Fears, Watchdog Warns*, CNBC (May 6, 2026) (expressing concern over risks in U.S. private credit markets).¹¹

4. The Risks of Climate Risk to the Financial System

Misguided efforts to manage climate risk in bank credit decisions has resulted in the misallocation of untold billions in capital, achieving the opposite of what its promoters intend.

⁸ https://www.morganstanley.com/content/dam/msdotcom/en/assets/pdfs/Morgan_Stanley_2024_Sustainability_Report.pdf.

⁹ <https://home.barclays/content/dam/home-barclays/documents/investor-relations/reports-and-events/annual-reports/2025/Barclays-PLC-Annual-Report-2025.pdf>.

¹⁰ <https://www.marketplace.org/story/2026/06/04/more-investors-want-to-pull-money-from-private-credit-firms>.

¹¹ <https://www.cnbc.com/2026/05/06/private-credit-stress-risks-financial-stability-markets.html>.

The global automotive industry offers an illustrative cautionary tale. The nation's largest banks have set decarbonization targets for the sector. JP Morgan warns in its latest sustainability report that "[i]ncreasing consumer demand for electric vehicles" could "negatively impact[] the equity value of slow-to-transition automotive manufacturers." JP Morgan 2024 Climate Report at 28. But at the same time, automakers had to write off \$70 *billion* on their electric vehicle businesses. Alessandro Parodi, *Explainer: Global Carmakers Book \$70 Billion Hit from EV Rollbacks*, Reuters (updated Mar. 12, 2026).¹²

"Stewardship" activities by banks actively encouraged automakers to lean heavily into electric vehicles. In 2022, Ford Motor Company aligned \$15.5 billion in revolving corporate credit to sustainability-linked performance indicators. Ford Motor Co., *Integrated Sustainability and Financial Report 2022*, at 9 (2022).¹³ Under the credit agreement—arranged by JP Morgan and syndicated to a lender group including Bank of America, Citibank, Goldman Sachs, and Morgan Stanley—Ford's interest rate fluctuated with the CO₂ emissions of its European passenger fleet. Ford Motor Co., *364-Day Revolving Credit Agreement* §§ 1.1, 2.19 (June 23, 2022) (filed as Ex. 10.3 to Ford Motor Co., Current Report (Form 8-K) (June 2022)).¹⁴ But Ford's vehicle electrification strategy produced losses at a massive scale—its "Model e" division lost \$4.7 billion in 2023, \$5.1 billion in 2024, and \$4.8 billion in 2025. Keith Naughton & Gabrielle Coppola, *Ford to Suffer \$19.5 Billion in Charges Tied to EV Overhaul*, Bloomberg (Dec. 15, 2025);¹⁵ Florian Treiss, *Ford Reports \$4.8 Billion Loss for its EV Business in 2025*, Electrive (Feb. 2, 2026).¹⁶ And, in December 2025, Ford announced an approximately \$19.5 billion write-down on its electric-vehicle investments, canceling next-generation models and converting a planned electric-vehicle truck plant to produce internal combustion engines. *Id.* While the banks touted progress on their sectoral emissions targets, the nation's automotive industry suffered catastrophic failure. The industry faces a long road to restore its competitive advantage on the global stage.

The bad bet on electric vehicles is a stark example of what can go wrong with misguided efforts to mitigate alleged climate transition risk. The banks based their risk

¹² <https://www.reuters.com/business/autos-transportation/global-carmakers-book-55-billion-hit-ev-rollback-2026-03-12/>.

¹³ https://corporate.ford.com/content/dam/na/ford/en_us/documents/corporate/reports/integrated-sustainability-and-financial-report-2022.pdf.

¹⁴ <https://d18rn0p25nwr6d.cloudfront.net/CIK-0000037996/84260c9a-7486-4b53-a733-e5579c11c389.pdf>.

¹⁵ <https://www.bloomberg.com/news/articles/2025-12-15/ford-to-repurpose-ev-battery-plant-for-energy-storage-batteries>.

¹⁶ <https://www.electrive.com/2026/02/11/ford-reports-4-8-billion-loss-for-its-ev-business-in-2025/>.

assessment on government commitments to achieve net zero or other climate targets by certain dates. But, measuring “misalignment with government climate goals does not actually quantify transition risk as a driver of credit risk.” Greg Hopper, Bank Pol’y Inst., *How Should Banks Manage Climate Transition Risk?*, at 2 (Aug. 13, 2024).¹⁷ What matters is not whether an obligor is aligned with long-term government policy—especially when unrealistic, unenforceable, or unlawful—but its alignment with the pace of change in the actual economy. *Id.* Transitioning to alternative energy sources more quickly than (and irrespective of) the rest of the economy actually *increases* the risk of default. *Id.*

Faced with the reality of unpopular mandates falling short of emissions goals, many governments have now revised their policies to acknowledge reality. *See, e.g.*, Philip Blenkinsop, *EU Drops 2035 Combustion Engine Ban as Global EV Shift Faces Reset*, Reuters (Dec. 16, 2025);¹⁸ Camila Domonoske, *Upending Norms, the Senate Votes to Undo California’s EV Rules*, NPR (updated May 22, 2025);¹⁹ Carla Westerheide, *UK Brings Forward Review of EV Sales Targets Under ZEV Mandate*, Electrive (Dec. 18, 2025).²⁰ But the damage along the way is unmistakable.

Transition risk, which is meant to account for “shifts in supply and demand for certain commodities, products, and services as climate-related risks and opportunities are increasingly considered,” assumes movement in a single direction and can be misleading. *Climate Risks and Opportunities Defined*, EPA (updated Feb. 10, 2026).²¹ Banks have long accounted for supply and demand changes during emerging opportunities. Singling out transition risk is needlessly duplicative. Doing so serves as a conduit for inserting political aims into banking assessments of risk and decision making.

Transition risk is actually two-sided—it “can go in either direction—towards more or less decarbonization—at different times and in different countries.” Greg Hopper & Bill Nelson, Bank Pol’y Inst., *Climate Transition Risk Cuts Both Ways* 2 (Apr. 22,

¹⁷ https://bpi.com/wp-content/uploads/2024/08/How-Should-Banks-Manage-Climate-Transition-Risk_.pdf.

¹⁸ <https://www.reuters.com/business/autos-transportation/eu-relent-combustion-engines-ban-after-auto-industry-pressure-2025-12-16/>.

¹⁹ <https://www.npr.org/2025/05/22/nx-s1-5387729/senate-california-ev-air-pollution-waiver-revoked>.

²⁰ <https://www.electrive.com/2025/12/18/uk-brings-forward-review-of-ev-sales-targets-under-zev-mandate/>.

²¹ <https://www.epa.gov/climateleadership/climate-risks-and-opportunities-defined>.

2026).²² But when it is used as a standalone risk category, it frequently serves to pressure outcomes towards a single future.

5. Banks Use Flawed NGFS Scenarios to Assess Climate Risk

The NGFS, a forum for the world’s central banks and other financial regulators, has created a set of climate risk scenarios to model the transition and physical risks that banks incorporate into credit risk management systems. *See, e.g.*, JP Morgan 2024 Climate Report at 26 (using “internationally recognized scenarios from [NGFS]”; *id.* at 9 (NGFS-derived transition outputs run through the “Wholesale Credit Risk stress framework ... to estimate the impact of different transition pathways on client financials and credit ratings”); Bank of Am., *ISSB: IFRS S2 Disclosure 2025*, at 16 (2025) (“Internally developed scenarios have primarily used the climate scenarios published by the [NGFS] as the main economic backdrop for the long-term transition and chronic physical risk scenarios[.]”);²³ *supra* Section 2.

The glaring methodological flaws embraced by NGFS warrants careful consideration from the Agencies to consider how to prevent such widely used scenarios from influencing the credit risk assessments that underlie the system for establishing capital requirements in the Proposed Rule.

The NGFS *transition* risk pathways assume a shadow carbon price as a proxy for climate policy. The scenario’s price rises to roughly \$294/tCO₂ by 2035 to incentivize net zero by 2050. This models the credit impact of a stipulated policy regime, not a forecast of actual risk or borrower default under reasonably anticipated market conditions. NGFS, *NGFS Climate Scenarios Technical Documentation, V5.0* (2024);²⁴ NGFS, *NGFS Climate Scenarios for Central Banks and Supervisors: Phase V*, at 21 (Nov. 2024).²⁵ As discussed in the previous section, the risk these scenarios model is premised on one-sided policy assumptions—not an inevitable (or even likely) future.

NGFS’s *physical* risk module is meant to model the relationship between GDP and global temperature rise. The chronic-physical-risk damage function NGFS adopted in Phase V (Nov. 2024), is based on Kotz et al., *The Economic Commitment of Climate*

²² <https://bpi.com/wp-content/uploads/2026/04/Climate-Transition-Risk-Cuts-Both-Ways.pdf>.

²³ https://about.bankofamerica.com/content/dam/about/pdfs/BofA_ISSB_IFRSS2Disclosure_2025_ADA.pdf.

²⁴ <https://www.ngfs.net/system/files/2025-01/NGFS%20Climate%20Scenarios%20Technical%20Documentation.pdf>.

²⁵ Available at *NGFS Climate Scenarios for Central Banks and Supervisors - Phase V*, NGFS, <https://www.ngfs.net/en/publications-and-statistics/publications/ngfs-climate-scenarios-central-banks-and-supervisors-phase-v> (updated Feb. 17, 2026).

Change, 628 Nature 551 (2024),²⁶ which implies “a 19% loss of global real income by 2050 and a 60% loss by 2100.” Greg Hopper, Bank Pol’y Inst., *The Flawed NGFS Damage Function Is Even More Flawed than We Thought* 1 (Aug. 14, 2025).²⁷

Greg Hopper, Senior Fellow at the Bank Policy Institute, dismantled this study. When he examined the underlying data, he found “very limited statistical evidence for any causation between the climate variables and material economic damage and no statistical evidence for the purported influence of the temperature variables that drive almost all the economic damage.” Greg Hopper, Bank Pol’y Inst., *The NGFS’s New Climate Damage Function: A Flawed Analysis with Massive Economic Consequences* 1 (Dec. 9, 2024).²⁸ The study only arrived at these conclusions because the “statistical procedure” on which the model was built was “arbitrary.” *Id.* Given these flaws, Hopper was bemused that NGFS “would adopt the results of a single academic paper” as the basis of its highly influential damage function that is baked into the “climate scenario toolkit” NGFS recommends to bank regulators across the globe for use in their supervisory activities. *Id.*; Hopper, *The Flawed NGFS Damage Function Is Even More Flawed*, *supra*.

A subsequent reexamination of the Kotz et al. study found that its authors made a large mistake in the data for Uzbekistan, which inflated the estimated economic losses from climate change in year 2100 by a factor of three. *See* Hopper, *The Flawed NGFS Damage Function Is Even More Flawed*, *supra* (discussing Tom Bearpark et al., *Data Anomalies and the Economic Commitment of Climate Change*, 644 Nature E7 (2025)²⁹). Kotz et al. attempted to revise their research by correcting the Uzbekistan data, but also suspiciously inserted new time trends that produced the same result that the flawed Uzbekistan data produced in the original paper. *Id.* at 6 & n.18. Kotz and his co-authors, faced with incontrovertible evidence of their paper’s flaws, ultimately retracted their paper. *See Retraction Note: The Economic Commitment of Climate Change*, 648 Nature 764 (2025).³⁰

But NGFS did not retract, remove, or recalculate its Phase V damage function. It issued a notice. *See* NGFS, *Statement Regarding Physical Risk Estimates in Phase V of NGFS Long-Term Scenarios* (Dec. 3, 2025).³¹ NGFS acknowledges the retraction but

²⁶ <https://doi.org/10.1038/s41586-024-07219-0>.

²⁷ <https://bpi.com/wp-content/uploads/2025/08/The-Flawed-NGFS-Damage-Function-Is-Even-More-Flawed-Than-We-Thought.pdf>.

²⁸ <https://bpi.com/wp-content/uploads/2024/12/The-NGFSs-New-Climate-Damage-Function-A-Flawed-Analysis-With-Massive-Economic-Consequences.pdf>

²⁹ <https://doi.org/10.1038/s41586-025-09320-4>.

³⁰ <https://doi.org/10.1038/s41586-025-09726-0>.

³¹ <https://www.ngfs.net/en/press-release/statement-regarding-physical-risk-estimates-phase-v-ngfs-long-term-scenarios>.

keeps the outputs of the retracted paper live on its website. The Phase V landing page still hosts the same scenarios, technical documentation, and damage-function note. *See supra* note 25. And the large banks, whose sustainability and climate reports discuss incorporating NGFS into their credit risk management policies, have remained conspicuously silent about how the retraction affects their use of climate scenarios in their climate risk management systems.

This episode highlights the importance of the Proposed Rule’s model validation and benchmark requirements. Any climate variable used in a rating must be documented and validated to show that it adds predictive power to the probability of default of the specific obligor beyond conventional credit metrics.

6. Suggested Changes to the Proposed Rule

PMI offers the following suggestions to improve the Proposed Rule. We agree with the Proposed Rule’s allowance for banks to use internal models to determine which exposures are investment grade and therefore deserving of the 65% risk weight. *See* 91 Fed. Reg. at 14,975–76. But many banks use internal models that employ qualitative, politically biased judgments that are divorced from empirically backed, fundamental credit risk analyses. The NGFS transition risk pathways are of this type. These qualitative overlays, tuned to specific policy objectives, can over- or under-estimate a company’s creditworthiness in ways that do not reflect actual risk. Further, such overlays are subjective, inconsistent across banks, and often duplicative of considerations that quantitative factors, such as commodity cyclicity, already account for in conventional metrics.

In practice, climate risk overlays act as lending policy constraints on greenhouse gas-intensive industries, and these constraints may in turn indirectly affect the criteria that companies in those sectors must meet to receive investment grade ratings. This undermines the Proposed Rule’s laudable goal of promoting consistent, objective, transparent standards and its requirement that the “determination of investment grade would occur at the obligor level,” as opposed to the industry or industry-sector level. *Id.* at 14,975. Because qualitative overlays can artificially favor or disfavor certain industries and industry sectors in their investment grade determinations, the Agencies should implement guardrails for investment grade determinations by banks to ensure they are grounded in robust, empirically based financial criteria. We believe this would be consistent with the Proposed Rule’s overall framework and support elimination of the politically biased practices that the Proposed Rule and other actions by the Agencies are working to end.

The Agencies can and should construct appropriate guardrails by strengthening the Proposed Rule’s Expanded Risk-Based Approach disclosure requirements in the following ways.

6.1. Require banks to disclose every criterion used in risk weight assessments and strengthen the validation requirements for internal credit risk rating models.

The Final Rule should require banks to disclose every criterion used to evaluate whether corporate exposures are investment grade and provide a detailed description of each qualitative consideration. This should include a requirement that banks identify and describe every empirical assumption underlying every qualitative consideration used. The Final Rule should strengthen the Proposed Rule’s annual validation requirement that banks “[a]ssess the reliability, accuracy, completeness, timeliness, and appropriateness of the data sources and other information used as part of the investment grade determinations,” to prevent misuse of climate-related qualitative considerations. 91 Fed. Reg. at 15,162. It is crucial that the Final Rule retain the requirement that each validation assess the “reliability” and “accuracy ... of the data sources used as part of the investment grade determinations” to ensure that banks do not continue relying on discredited methodologies such as the retracted NGFS damage function, which would divorce investment grade determinations from actual economic conditions. NGFS’s continued use of a flawed “climate damage function” highlights the importance of ensuring that the assessment of whether an obligor investment grade remain reliable, accurate, and free from such questionable methods. It is therefore imperative that climate risk scenarios undergo annual validation.

The Final Rule should specify that it is not “appropriate” to use an obligor’s alignment with long-term climate goals or policy—especially when unrealistic, unenforceable, or unlawful—as a proxy for the obligor’s default risk. As discussed in the electric-vehicle example above, *supra* Section 4, such goals and policies inevitably adjust to market realities, meaning that alignment with them is no indicator of creditworthiness.

The Final Rule should prohibit the application of broad portfolio- or industry-level climate risks as part of the basis for the investment grade determination. Any such risks should be categorized as idiosyncratic and individually tailored to the obligor. To ensure compliance with the standard of the rule that these assessments be at the obligor level, there should be enhanced scrutiny in the use of baseline climate scenarios, projected market conditions, or other models or predictions used to define those risks. The Agencies should clarify that use of climate risk considerations is “appropriate” only if the relevant bank demonstrates that it adds incremental predictive power for default beyond conventional quantitative and qualitative factors.

The Final Rule should specify that “completeness” requires an individualized assessment of the continuing or growing demand for an obligor’s products. This can incorporate scenarios in which climate policies become less rigorous and less supportive of alternative energy sources as well as scenarios in which decarbonization lags or reverses at the pace that current policies or goals aspire to. As global

automakers learned last year, this is necessary to account for the fact that “transition risk” cuts both ways. *See* Hopper & Nelson, *supra*, at 1–4.

These suggestions would not only free investment grade determinations from political bias and result in more robust risk assessments, but also provide a basis for resisting pressure from foreign governments to continue discriminating against obligors in greenhouse gas-intensive sectors. The European Central Bank (“ECB”) has taken the position that an obligor company’s lack of alignment with European Union climate goals is a “transition risk” that elevates default risk in a bank’s portfolio. Eur. Cent. Bank, Banking Supervision, *Risks from Misalignment of Banks’ Financing with the EU Climate Objectives* 6 (Jan. 2024).³²

If the Final Rule rejects unbalanced transition risk, it would serve as a basis for resisting pressure from the ECB and other foreign government entities to discriminate against obligors in politically disfavored sectors.

6.2. Require each bank’s board and senior management to attest that their internal credit risk rating system makes each investment grade determination at the obligor level.

Similar to the attestations required by public companies under the Sarbanes-Oxley Act of 2002, the Final Rule should require that each bank’s board and senior management annually attest that: (i) the bank has adequate internal controls and procedures to ensure that credit risk determinations are made at an obligor level, as opposed to an industry or industry sector level; (ii) each determination is supported by obligor-specific empirical metrics; and (iii) each determination was made independent of any relevant committees or persons responsible for pursuing a bank’s climate related goals or objectives. The certification should also attest that risk determinations are free from conflicts of interest that may arise from tying employee compensation or performance assessments to such goals and objectives. This requirement would enhance the integrity of investment grade determinations. The Agencies should consider appropriate penalties for inaccurate attestations consistent with applicable law and statutory authorities.

6.3. Require auditor attestation that internal models meet validation requirements and that validation is independent.

The Final Rule should require banks to obtain a third-party auditor’s attestation that their internal models meet validation requirements, and that the validation process for each model was performed independent of both its development, implementation, and operation and the bank’s ESG advisory committee. *See supra* Section 3. The Proposed Rule makes independent review of the validation process voluntary. 91 Fed. Reg. at

³² <https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.bankingsectoralignmentreport202401~49c6513e71.en.pdf>.

14,976. But the Final Rule should *require* independent third-party review of *both the independence and the substance* of the validation process.

6.4. Prohibit use of politically driven external credit ratings as benchmarks in the validation processes.

The Proposed Rule wisely requires the validation process for internal risk rating systems to include “benchmarking the investment grade ratings resulting from the internal credit risk rating system with external information relating to the creditworthiness of obligors.” 91 Fed. Reg. at 14,975. But its allowance that “benchmarking may include comparisons to external credit ratings of obligors produced by third parties,” *id.*, opens the door for banks to use credit ratings agencies whose own assessments may turn on the misuse of climate risk, smuggling inappropriate considerations into the credit risk management system.

A recent letter from twenty-three State Attorneys General explained how credit ratings agencies Fitch Ratings, Moody’s Investors Service, and S&P Global Ratings have downgraded their credit ratings of fossil-fuel companies or sectors “based on highly speculative ESG predictions and goals” that “contravene the Rating Agencies’ stated methodologies.” Letter from Twenty-Three State Attorneys General to Credit Rating Agency Leaders 1 (Apr. 22, 2026).³³ To prevent banks from using politicized external credit ratings to validate politicized internal risk rating models, the Final Rule should include that benchmarking may not incorporate external credit ratings of obligors produced by third parties that used predictions or goals regarding global emissions targets or future climate conditions to inform the credit rating.

6.5. Require banks to explain any apparent differential treatment of industries or industry sectors.

Lastly, the Final Rule should require banks to disclose the percentage of companies within each industry and industry sector that received an investment grade rating within the last five years, and explain any material differences across industries or industry sectors. This disclosure and explanation requirement would foreground, and thus discourage, any systemic differential treatment of businesses based on their industry or sector. Material differences should trigger enhanced scrutiny from regulators.

7. Conclusion

We once again commend the Agencies for working to ensure “that the provision of banking services ... be based on material, measurable, and justifiable risks.” Exec. Order No. 14,331, 90 Fed. Reg. at 38,925. To this end, the Proposed Rule makes significant progress towards confining capital requirements to obligor-specific default risk. The Agencies appropriately limit their task to promoting the safety and

³³ https://ago.nebraska.gov/sites/default/files/doc/Letter_7.pdf.

soundness of the financial system. Permitting the capital framework to become the vehicle for an economy-wide emissions policy that Congress has not enacted would raise questions of “vast economic and political significance” that require clear congressional authorization. *West Virginia*, 597 U.S. at 716.

The Final Rule, along with the clarifications we suggest, will increase fairness in lending and thus public trust in the American banking system, boost the American economy by increasing the efficiency of capital allocation, and bring greater stability to the American financial system.