



5 Steps The Next Federal Reserve Chair Must Take To Address Climate-Related Financial Risk

by:

Becca Ellison, Adele Shraiman

August 2021

Introduction



The climate crisis is here, and it is threatening our entire financial system—and with it, our entire economy. As climate-fueled disasters sweep the country, they are ruining homes and infrastructure, and disrupting business and supply chains. And as these costs mount, they are borne by Americans across the country—all too often, the low-income communities and communities of color that are already overburdened with systemic harms. In 2020, climate disasters [cost](#) the United States \$95 billion, nearly double the losses of 2019. At 4 degrees of warming, the global economic losses could reach [\\$23 trillion](#) by 2100, several times the cost of the 2008 crash.

And yet, Wall Street has failed to take the steps needed to protect our economy, and to stop fueling the risks of the climate crisis. In fact, big banks have only [increased](#) their investments in the fossil fuels that are driving climate risk. Unless the government takes actions to rein in the financial sector's foolhardy behavior, the American people could once again be left to foot the bill for Wall Street's malfeasance.

Fortunately, President Biden promised an [all-hands-on-deck approach to fighting the climate crisis](#), including through [financial regulation](#) to protect the stability of the financial sector and the economic security of every American. Several agencies will have critical parts to play, but one in particular

plays an enormous role in its oversight of the U.S. financial sector, and indeed the overall stability of the U.S. and global economy: the Federal Reserve (also known as the “Fed”).

The Fed oversees banks across the country, and has a mandate to address risks to individual institutions and the financial system overall. As a crucial part of our country’s bank-regulatory system, the Fed supervises and regulates the largest banks and their subsidiaries, giving it comprehensive insight into the happenings of the nation’s biggest, and riskiest, financial actors. The Fed’s responsibilities [include](#): handling the nation’s monetary policy to promote maximum employment and stable prices, protecting the stability of the financial system against risk, promoting the safety and soundness of individual financial institutions, supporting payment systems, and promoting consumer protection and community development. Addressing climate risk is key to fulfilling all of these missions. And leadership at the Fed must play an active role in embracing these important responsibilities.

In the coming months, President Biden must decide who he wants to nominate as Chair of the Federal Reserve Board of Governors (“Fed Chair”), as the term of the current Chair, Jerome Powell, ends in February 2022. The president will also be making decisions about nominees needed to fill several additional vacancies on the Board, including a key Vice Chair position. Together, these nominations have the potential to reshape the Fed in a major way.

President Biden must ensure that any candidate nominated for the Fed is committed to using every tool that the Fed has available to prevent a climate-fueled economic crash.

This memo lays out why action by the Fed is essential, and 5 critical steps it must take to confront the irresponsible and unsustainable fossil fuel financing and other climate-risky behavior in which the U.S. financial sector is engaged:

1. Creating mandatory climate-risk disclosure rules
2. Conducting regular climate stress tests
3. Setting “capital requirements” to ensure banks internalize some climate-related risks
4. Limiting investments that are not in line with the Paris agreement
5. Updating the *Community Reinvestment Act* regulations to drive equitable green finance

With these actions, the Fed can help fulfill its mandate, and protect the American economy.

Part 1:

The Federal Reserve Has A Critical Role To Play In Preventing A Climate-Fueled Financial Crash



Climate change poses severe risks to the financial system in two major ways:

1.1 PHYSICAL RISKS:

Which are caused by extreme weather and other climate-related disasters. For instance, floods, wildfires, droughts, shifting agricultural belts, and resulting political instability can dramatically decrease the value of key assets (like homes and infrastructure) and impair the ability of owners to pay back the loans used to finance them. Physical risks can also then threaten the value of financial assets (like stocks and bonds) that are tied to the value of the tangible assets, and they can decrease productivity and disrupt business operations, thus implicating the entire economy.

1.2 TRANSITION RISKS:

Which are the risks to the economy posed by the necessary shift from a fossil fuel-based economy to a clean energy economy. For instance, as our economy moves away from polluting energy sources like oil and gas, the value of fossil businesses and assets can decline. Laggard companies that refuse to adjust their portfolios will be especially at risk. These shifts can have profound impacts on financial markets, as well.

Banks are not addressing these risks on their own. Despite climate-fueled [extreme weather events already costing us tens of billions of dollars](#) per year, big banks are still [pouring money](#) into destructive fossil fuel projects and continuing to put both

our economy, and all of humanity, at risk. Indeed, the largest US banks—JPMorgan Chase, Citigroup, Wells Fargo, and Bank of America—have been the world’s largest funders of fossil fuels in the years since the Paris Climate Agreement was signed.

After Wall Street’s reckless maneuvers cratered our economy in 2008, Congress passed laws that required the Fed to do more to prevent a future crash. The *Dodd-Frank Wall Street Reform and Consumer Protection Act* (known as “Dodd-Frank”) was designed with the specific intention of avoiding another 2008-like recession by giving the Fed more authority, and responsibility, to respond to the “[challenges of the 21st century marketplace](#).” Today, there is perhaps no greater challenge to our financial system than the one posed by the climate crisis. And, as explained below, there are arguably no stronger tools for confronting those threats than those held by the Fed.

Fortunately, the Federal Reserve itself [acknowledges](#) that climate risks can manifest as shocks to the financial system, and that it has an important role to play in protecting the stability of our financial system by appropriately addressing climate risks. And the Fed has taken some initial steps. In December 2020, the [Fed joined the Network for Greening the Financial System \(NGFS\)](#), as Evergreen had called for in the [Evergreen Action Plan](#). The NGFS is a group of central banks from across the world contributing to the development of climate risk management in the financial sector and leading the mobilization of mainstream finance to support the transition to a sustainable economy. Notably, the Fed was the last major central bank to join the group. In addition, in January 2021, the Federal Reserve Board [created](#) the Supervision Climate Committee (SCC) to identify and assess climate risks and improve resilience at individual

banks, and created the Financial Stability Climate Committee to complement the work of the SCC, with the goal of identifying and addressing climate risks to the financial system as a whole.

Even with these steps, current Fed Chair Jerome Powell has, to this point, not done nearly enough to protect our financial system from climate risks. For one, the [Federal Reserve’s pandemic-related emergency lending portfolio was severely overweight](#) in oil, gas, and coal companies. In taking such action, the Fed made clear it would serve as the lender of last resort for risky fossil fuel bets, aiding a sector already in significant financial trouble before the pandemic, and setting up the entirely wrong incentives when it comes to climate risk. And overall, when compared to the (still quite weak) green policies and initiatives of the central banks of other G20 countries, the United States ranks 13th, and [the Federal Reserve earned a D-](#) on the Green Central Banking report card. Under Chair Powell’s leadership, the [U.S. has fallen behind in addressing climate-related financial risk and its drivers](#), and the climate failures have been accompanied by a broader [deregulatory](#) agenda that has weakened the Fed’s ability to safeguard the financial system from Wall Street greed and short-termism.

We cannot afford to stall on climate action any longer—the Fed must take its mandate seriously and use all of the tools at its disposal to [rein in the risk](#) that the climate crisis poses to our financial system. The physical and transition risks of climate change will destabilize employment and prices, threaten the safety and soundness of individual financial institutions, slow equitable community development, and undermine the stability of the entire financial system. The Fed has a duty to act.



President Biden has made clear that he takes climate-related financial risk seriously with his May [Executive Order](#). Now, he must ensure his nominees for the Federal Reserve Board are committed to taking the following urgent and essential steps in

order to protect our financial system from the existential threat posed by the climate crisis. Unless the Fed acts quickly and decisively, America could stand on the brink of a climate-fueled financial crash.

Part 2:

Five Crucial Steps The Next Fed Chair Must Commit To Take To Rein In Climate Risk

Under current authorities, the Fed has many tools available to tackle climate financial risk, and a mandate to protect the financial system. Here are 5 actions the next Fed Chair must commit to take:

2.1 THE FED SHOULD ESTABLISH MANDATORY CLIMATE-RELATED DISCLOSURE RULES.

For too long, Wall Street has been hiding its risky fossil fuel investments from the public, hoping investors and regulators won't notice the threat they are posing. Then, as a baseline, the Fed should establish strong disclosure rules for all banks, requiring them to share quantitative information on the greenhouse gas pollution they are financing so that investors and regulators can understand whether banks' balance sheets and activities are aligned with a low carbon economy. This transparency is a key step to understanding and tackling the risk that climate poses to our financial health.

While the Securities and Exchange Commission (SEC) will likely be driving many of the requirements around disclosure for public companies, the Fed has an important role. In particular, the Fed should push for more climate-related data to be included on so-called "[call reports](#)." These reports are administered by the Federal Financial Institutions and Examinations Council (FFIEC) —and the Fed is a collaborator on this council. Call reports



are designed to give financial regulators more information about the health of banks, and the health of the banking system overall. By pushing the FFIEC to include climate risk information on the call reports—for example, what lending banks are doing to oil and gas companies—the Fed can help increase transparency around which banks are facing, and causing, climate risk. Then, regulators and the public can make more sound decisions about how to approach each institution.

Moreover, the Fed has [reportedly](#) started asking banks to detail what steps they are taking to mitigate climate-related risks. But the Fed has not publicly detailed what information it is asking for, nor has it released any information that the banks are providing. As part of its disclosure regime, the Fed should make this process transparent and share its findings with the public.

2.2 THE FED SHOULD CONDUCT REGULAR CLIMATE STRESS TESTS.

While mandating climate disclosure is an important part of protecting our financial system from a climate crash, it is only the first step—providing investors, regulators, and the public with this additional information does not provide a guarantee that they will make the rational choice to move funds away from fossil fuels and otherwise mitigate climate-related risk. The Fed also needs to make sure that banks are prepared to survive climate-related shocks to the financial system. To do this, the Fed must conduct regular climate stress tests to determine how prepared banks are for climate-related shocks.

The Fed, under its Dodd-Frank authority, already uses stress tests to assure banks' resilience to traditional macroeconomic risks by modeling the

impact that an economic shock would have on a bank's profitability and balance sheet. The stress tests are supposed to ensure banks have a sufficient cushion baked into their financial plan to withstand a hypothetical severe shock, while still providing the financial services the economy needs to thrive.

A climate stress test would operate along the same lines as existing stress tests, and would model how climate-related shocks, including extreme weather events and the low-carbon transition, could impact banks. But whereas existing stress tests use a horizon line of nine fiscal quarters, climate stress tests would look 15-30 years down the line. Climate risks accumulate over time, the impacts are severe and fairly certain, and the changes are non-linear and often irreversible (or at least not quickly reversible). So while banks might not be facing existential climate risks in the next nine fiscal quarters, the choices that they make now do have profound impacts on the severity of the threat they will face down the road. With these longer horizon tests, the Fed can then better understand the true risks at play, and help individual financial institutions to take steps to mitigate those risks. And eventually these two types of stress tests could, at least partially, merge—with near term climate risks being included in the existing macroeconomic stress tests.

Indeed, central banks in other countries, like France and Japan, have already begun conducting stress tests to measure firms' exposure to climate risks, and the NGFS, of which the U.S. is a member, recently published [guidelines](#) for climate stress tests. The Fed must follow suit.

2.3 THE FED SHOULD INCREASE “CAPITAL REQUIREMENTS” FOR CLIMATE-RISKY ASSETS.

In order to truly reduce risk, regulatory interventions must require institutions to take protective action. To do this, the Fed [should use](#) its Dodd-Frank authority to increase so-called “capital requirements” for assets vulnerable to physical and transition climate risks.

Capital here [refers](#) to the money banks have obtained from their shareholders through stocks, and from the earnings that they have retained and not paid out. When banks are required to maintain more capital, they are more able to absorb losses—capital (unlike the other forms of financing that banks use) does not need to be paid back by a certain date, which gives banks a cushion in the face of losses. So with more capital on hand, a bank can be more resilient to economic shocks. Capital requirements are set, in part, according to the risk associated with each type of asset that the bank holds. So for risky assets, like perhaps a coal plant, federal regulators can impose higher capital requirements to account for the higher risk that the asset poses to the bank’s stability. Banks with higher exposure to high-fossil assets would then be forced to hold more capital to be responsive to the risks these assets pose to the bank’s health.

In addition to helping banks be more resilient, these capital requirements can also encourage the banks to actually make different choices. Banks don’t like having to hold large amounts of capital. Due to tax treatment, capital is a more expensive form of financing than debt. High capital requirements can also end up reducing the pay of bank executives, by making it less likely the bank can hit certain earnings targets. And these requirements keep

banks from shifting risk onto their creditors, which they have incentives to do. So with higher capital requirements in place for things like financing fossil fuel production, banks may choose not to take on the risky asset in the first place, and will instead invest in more climate-friendly projects.

Capital requirements that reflect climate risk send the correct message to the banking system about what investments are risky to their stability, and to all of us.

2.4 THE FED SHOULD ULTIMATELY LIMIT ACTIONS THAT ARE NOT IN LINE WITH THE PARIS CLIMATE AGREEMENT.

While setting high capital requirements will help banks understand and respond to climate risks, the best way regulators can eventually ensure that banks are addressing both physical and transitional climate risk is to impose limits on how much greenhouse gas pollution a bank can finance overall. These “portfolio limits” would require each financial institution’s holdings to align with science-based emissions targets. In short, the limits will affirmatively and effectively reduce risk.

It’s no secret—Wall Street is bankrolling climate chaos. From 2016 to 2020, the six biggest U.S. banks—all of which fall under the Fed’s supervision—provided [\\$1.2 trillion in lending](#) and underwriting to the fossil fuel industry, representing a third of global bank support for fossil fuels. These fossil fuel projects are fueling the climate crisis and dumping toxic pollution into the atmosphere. This pollution disproportionately sickens and kills members of communities of color and low-income communities. And more greenhouse gas pollution means worsening climate impacts and more risk to the financial sector.

To address this, the Fed should impose limits on the amount of greenhouse gas pollution that banks can finance through their lending and investment portfolios (these are known as “financed emissions”). Like with subprime mortgages in 2008, climate risks occur across geographies and lines of business in ways that banks cannot appropriately diversify or hedge. To deal with that reality, strict portfolio-level limits on total greenhouse gas pollution are necessary in order to lessen the impacts of the climate crisis and protect our financial system from being overexposed to risk. To truly address and mitigate the risk, the Fed should eventually require firms to [fully exclude fossil fuels](#) and other high-carbon sectors entirely from their portfolios within a set timeline.

Portfolio limits would also help drive investment into climate-safe assets and guide investment away from potentially-stranded fossil fuel assets, preempting additional harm and accelerating the renewable energy transition. If banks fail to transition their lending at the pace required, communities of color and low-income communities will be left holding the bill. Those communities are being hit first and worst by the climate crisis, and they already face challenges accessing financial services needed to protect themselves from climate impacts and to rebuild after disaster strikes. If banks are losing money hand over fist in stranded assets because they insisted on worsening the climate crisis, that pain will be felt most acutely in these vulnerable communities. Portfolio limits can help avoid the worst case outcomes, and move instead toward a more sustainable, and more just, future.

2.5 THE FED SHOULD IMPROVE THE IMPLEMENTATION OF THE *COMMUNITY REINVESTMENT ACT* TO DRIVE GREEN FINANCE.

Structural racism in the U.S. has led to shocking inequality—the average white family in the U.S. has [10 times more wealth](#) than the average Black family. Among other impacts, the [racial wealth gap restricts economic growth](#) and continuously high unemployment and economic insecurity in communities of color represents a direct failure by the Fed to deliver on its mandate to preserve financial stability and maximize employment. This inequality leads directly to climate injustice—to give just one example, historical redlining of BIPOC neighborhoods has made them [more vulnerable to extreme heat](#) than communities which were not redlined.

Now, the Fed must address this injustice. Interventions to address racial inequality and mitigate climate risk can uplift vulnerable communities, reduce the wealth gap, and ensure nobody is left behind in the sustainable transition. And under the *Community Reinvestment Act*, the Fed has the ability and the obligation to drive equitable green finance. The CRA was passed in 1977 with the goal of promoting investment in low- and moderate- income (LMI) communities by requiring banks to meet credit needs of the communities they were located in. But it needs regulatory updates.

In particular, the Fed should clarify that the climate needs of LMI communities, like coastal resilience infrastructure, urban green spaces, renewable energy projects, and other green investments meet the CRA standards for lending. In addition, the Fed must formally include race and climate on CRA exams to assess how banks are incorporating

climate and environmental justice goals into their CRA lending. Banks should receive a “satisfactory” score only if they are actively evaluating climate needs in their lending, and working directly with communities to understand what is most needed. With updates to CRA implementation, the Fed can

more effectively support the climate resilience of these communities, drive more money into a sustainable transition, and begin to address the disproportionate harm that low-income communities and communities of color face as a result of the climate crisis.



Conclusion

This is a make-or-break moment for building a livable future. President Biden must deliver on his climate pledges by nominating only individuals who are committed to mobilizing the full power of the Federal Reserve to mitigate climate risks, rein in reckless bets from Wall Street, and ensure that all Americans are taken care of as we transition to a clean energy economy. While the Fed has taken some small steps, in general, it has failed to act decisively to reduce climate risk.

We don't have time to wait. While Chair Powell and the Federal Reserve Board continue to hesitate on climate, our financial system is racing toward a climate crash. We can't let big banks catapult us into another recession. We need strong leadership in the Federal Reserve that will put its money where its mouth is, and deliver the kind of bold policies we need to prevent climate catastrophe and help guide us into a new just and thriving clean energy economy.

Acknowledgements

The authors would like to thank Gregg Gelzinis, Yevgeny Shrago, Alex Martin, Sarah Dougherty, David Arkush, and Brett Fleishman for reviewing this paper. This paper also would not have been possible

without the Evergreen team, including Lena Moffitt, Jamal Raad, Sam Ricketts, Jared Leopold, Holly Burke, Weston Gobar, and Trevor Dolan. All views and any mistakes are solely those of the authors.