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Global Standard Setting Organizations and U.S. Domestic Financial Supervision and Regulation

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Chairman Barr, Ranking Member Foster, and distinguished members of the Subcommittee, thank you for convening today's hearing, "Transparency in Global Governance." and thank you for inviting me to testify.

My name is Paul Kupiec. I am a senior fellow at the American Enterprise Institute, however this testimony represents my personal views. It is an honor for me to be able to testify before the subcommittee today.

My background in financial market supervision and regulation includes almost 40 years as a professional economist specializing in risk measurement and banking regulation. I have held senior positions at the Federal Reserve Board, the FDIC, the IMF, Freddie Mac, the BIS and JPMorgan before joining the American Enterprise Institute. Since my professional experience regarding risk measurement is directly relevant for the topic of today's testimony, in Appendix A I provide my December 2023 curriculum vitae that provides more details about my background and qualifications.

I will begin my testimony by summarizing my findings.

Recent history has seen a proliferation of quasi-governmental international standard setting bodies that formulate and disseminate international "best practice" codes and standards for the regulation and supervision of member institutions' nationally regulated financial firms. These bodies are not accountable to the U.S. Congress and are not required by any formal mechanism to serve the national interest of U.S. citizens.

The best practice codes and standards issued by these quasi-governmental organizations do not have any legal standing. However, the organizations' members typically pledge to implement, as closely as possible, domestic financial regulations and supervisory policies that are consistent with the best practice codes and standards approved by the national standard setting body.

U.S. independent financial regulatory agencies are using international best practice codes and standards to promulgate new rules and supervisory policies that expand the agencies domestic powers, often without Congressional consultation or approval, under the guise that these new regulations and powers are needed to comply with internationally agreed upon "best practice" codes and standards. The process is facilitated by UN-chartered multinational organizations—primarily the International Monetary Fund and The World Bank Group—that explicitly pressure member nations to domestically adopt supervision and regulation policies consistent with the "best practice" codes and standards issued by several international setting bodies as part of their Article IV member surveillance duty. The G-20 chartered Financial Stability Board also specifies a list of these codes and standards that its members should implement domestically.

The process of drafting best practice financial supervision and regulation codes and standards and encouraging nations to adopt them domestically is virtuous when the adoption of these standards demonstrably improves domestic bank safety and soundness and financial sector

resiliency without unduly restricting economic growth. Unfortunately, this is not always the case. The new best practice codes and standards related to climate-change and the "greening" of finance have little to do with improving the safety and soundness of regulated financial institutions. Indeed, the standard setting bodies publicly issued reports state that there is no current or historical data that shows that purported climate—change risks have caused outsized bank losses, let alone cause banks to fail. The best practice standards are designed to "measure" and mitigate hypothetical risks that may or may not cause significant bank losses should they materialize in the coming century.

Far from being legitimate safety and soundness standards, these new bank climate-change capital standards are an effort to promote and implement industrial policy by using financial agency regulatory powers in ways not imagined when Congress drafted these agencies' statutory charters. The new climate-change best practice financial supervision and regulation standards impose new rules intended to discourage regulated financial firms from investing or providing credit to politically *disfavored* "brown" firms and industries in favor of investing in so-called "green" or "sustainable" firms and industries aligned with a "green" political industrial policy. These codes and standards are explicitly designed to regulate the activities of political disfavored nonfinancial "brown" firms and industries by limiting their access to bank-supplied credit and capital markets funding. They are designed to use financial regulations to regulate nonfinancial economic activities.

Absent specific legislation directing otherwise, U.S. financial regulatory agencies have an implicit duty to remain neutral and not use their rulemaking powers to promulgate regulations and supervisory policies that allocate credit and capital to industries and firms favored by a political agenda unless specifically empowered to do so by Congress. To do otherwise is an unauthorized and unwarranted exercise of domestic financial regulatory power. Moreover, the explicit and very public link between the current executive branch's political agenda and the new regulatory policies proposed or adopted by our so-called "independent" financial regulatory agencies should spur Congress to revisit these agencies' statutory charters and more explicitly limit these agencies' powers to policing activities that have demonstrably created, or will soon create, material losses and bank failures. "Soon" should be explicitly defined to mean a horizon of at most a few years as no agency, not even the Federal Reserve or our other "independent" financial regulatory agencies, is capable of making accurate predictions about distant future economic conditions.

I support legislative efforts like "The Congressional Banking Regulation Priorities and Accountability Act of 2024," that would increase the accountability of domestic U.S. financial regulatory agencies' to U.S. Congress for issues related to their participation in the activities of independent global standard setting bodies. I would urge the Congress to expand this bill so that it goes beyond banking and imposes similar accountability duties on the Securities and Exchange Commission, the Commodity Futures Trading Commission, and the Federal Insurance Office. I would also urge Congress to revisit the authorizing statutory legislation of the "independent" financial regulatory agencies and explicitly limit their ability to impose new costly regulations to limit distant future hypothetical risks when there is no evidence that these risks pose a threat to financial system safety and soundness over the course of the next few years.

Relevant experience working with/for international standard setting bodies

I do not know if I should be proud or embarrassed, but as you can tell from my CV (Appendix A), during the course of my career I have worked for, with, or in cooperation with many of the international standard setting bodies that are the topic of today's hearing.

While my work has supported the agenda of some of these organizations (including the BIS¹, the BCBS, the IADA, the IMF, and the World Bank), it was conducted in a support role assigned by a U.S. financial regulatory agency or, in the case of the Financial Stability Assessment Programs (FSAPs), in support of the IMF's Article IV country monitoring function. I had no role in these organizations' governance, and my engagements focused on traditional safety and soundness supervision and regulation and stress tests that predate the recent standards issued by the so-called "climate-change" and "sustainability" standard setting bodies as well as the recent guidance issued by the BCBS.

As my career experience demonstrates, U.S. federal financial regulators and their staff participate in a number of international standard setting bodies. Financial agency staff are assigned to support these standard setting bodies efforts to craft and issue 'non-binding' agreements that characterize international "best practices" regarding financial regulations and the supervision of financial markets and institutions. While none of these international "best practice guidelines" legally bind regulatory practices in participating nations, it is common for participating regulators to pledge to support the agreed upon best practice guidelines and, to the fullest possible extent, implement them in their home countries.

Global standard setting bodies and domestic financial supervision and regulations

The number of so-called "global governance, standard setting, and monitoring organizations" that have come to play an influential role in the formulation of U.S. financial regulatory policies in the last 30 years or so is astonishing. Such organizations include:

- The Bank for International Settlements (BIS)
- The Basel Committee on Banking Supervision (BCBS)
- Financial Stability Board (FSB)²
- The International Organization of Securities Commissioners (IOSCO)³

² The Financial Stability Board (FSB) is the successor to the Financial Stability Forum (FSF) that was formed in 1999. The FSB is a not-for-profit association hosted by the BIS in Basel, Switzerland. It was established in 2009 by the G20 to monitor and assess vulnerabilities in the global financial system and recommend policies to mitigate

them.

¹ Apologies for using so many acronyms here, but they are all defined below.

³ According to its website: "IOSCO was created in 1983...[as] an international cooperative body. ...In 1987 ... IOSCO [became] a not-for-profit legal entity ...sanctioned by the Québec National Assembly. ... The Secretariat remained in Montreal until 1999 when it was then moved to Madrid. In 1998 IOSCO adopted a comprehensive set of Objectives and Principles of Securities Regulation (IOSCO Principles), now recognized as the international regulatory benchmarks for all securities markets. In 2003 the organization endorsed a comprehensive methodology ...to conduct an objective assessment of the level of implementation of the IOSCO Principles in members' jurisdictions and to help develop practical action plans to correct identified deficiencies.

- The International Association of Insurance Supervisors (IAIS)⁴
- The Network for Greening the Financial System (NGFS)⁵
- The International Association of Deposit Insurers (IADI)⁶
- The International Accounting Standards Board (IASB)⁷
- The International Sustainability Standards Board (ISSB)⁸
- The Sustainability Accounting Standards Board (SASB)⁹
- The International Organization of Pension Supervisors (IOPS)¹⁰
- The Sustainable Insurance Forum (SIF)¹¹
- The Group of 20 (G20)
- The International Monetary Fund (IMF) and the World Bank

As I have seen first-hand in many cases, pressure for the domestic implementation of these "international best practice guidelines" is standard <u>policy</u> in the IMF FSAP evaluation processes. International standard setting organizations recommend subject matter experts for FSAP missions to evaluate a nation's financial sector supervision and regulations against the organization's agreed-upon international codes and standards that summarize "best practice"

⁴ According to its website, the IAIS was:""[e]stablished in 1994. ...[It is] a voluntary membership organization of insurance supervisors and regulators...[and] the global standard-setting body responsible for developing and assisting in the implementation of principles, standards and guidance as well as supporting material for the supervision of the insurance sector."

⁵ According to its website: "At the Paris "One Planet Summit" in December 2017, eight central banks and supervisors established the Network of Central Banks and Supervisors for Greening the Financial System...to help strengthening the global response required to meet the goals of the Paris agreement and to enhance the role of the financial system to manage risks and to mobilize capital for green and low-carbon investments in the broader context of environmentally sustainable development. To this end, the Network defines and promotes best practices to be implemented within and outside of the membership of the NGFS and conducts or commissions analytical work on green finance." The NGFS boasts all of the international regulatory standard-setting bodies in its ranks including, The International Monetary Fund, The World Bank, The Basel Committee on Banking Supervision, The Bank for International Settlements, the Financial Stability Board, The Organization for Economic Cooperation and Development.

⁶ IADI is chartered as Swiss association and is hosted by the BIS in Basel, Switzerland.

⁷ According to its website: "The IASB is an independent group of experts... appointed by the Trustees of the IFRS Foundation through an open and rigorous process responsible for the development and publication of IFRS Accounting Standards, ...[and] for approving Interpretations of IFRS Accounting Standards as developed by the IFRS Interpretations Committee."

⁸ According to its website: "The International Sustainability Standards Board (ISSB) was established in November 2021 at the UN Climate Change Conference (COP26) to create a global baseline of sustainability disclosures that meet capital market needs."

⁹ The SASB is a subsidiary effort of the UN-linked ISSB.

¹⁰ According to its website: "[T]he IOPS was formed in 2004 by the Organization for Economic Co-operation and Development (OECD) and the International Network of Pension Regulators and Supervisors in 2004. ...[It approved its original version of] Principles of Private Pension Supervision in 2006," and subsequently, a methodology to assess these principles. The principles were revised in 2010 following the Great Financial Crisis.

¹¹ According to its website, the SIF was "Established by the UN with the support of the International Association of Insurance Supervisors (IAIS) in December 2016 ... to address sustainability and climate change issues impacting insurance companies, markets and policy holders..."

guidelines. In my experience, FSAP reports approved by the IMF board nearly always include recommendations that a member country adopt regulations, or if needed, draft and pass new legislation, so that the member country fully complies with the international best practice codes and standards assessed by the FSAP mission.

Pressure to implement national adoption of BCBS international capital standards increased when the BCBS began rolling out Basel III to fix the shortcomings in Basel II that were made apparent by the 2008 Great Financial Crisis. In 2012, the BCBS established its Regulatory Consistency Assessment Program (RCAP) to monitor and assess the adoption and implementation of its standards. The RCAP: (1) periodically monitors the progress of member country adoption of Basel III regulatory standards into domestic regulations based on information provided by each member jurisdiction; and, (2) evaluates the consistency and completeness of the adopted standards, including deviations from the Basel III regulatory framework. RCAP national assessment ratings are made public to encourage member countries to fully implement its Basel standards within a prescribed time frame.

Further pressure to implement selected financial "best practice" codes and standards emanates from the FSB. The FSB has assembled a <u>Compendium of Standards</u> "that are internationally accepted as important for sound, stable and well-functioning financial systems." In particular, the FSB identifies the BCBS, IOSCO, IAIS, IADI standards, among others, as "key standards…deserving of priority implementation."¹²

The BCBS governance decisions are made by senior government financial regulatory agency officials from member countries. BCBS staffing is provided by national financial regulatory agency employees and BIS staff. It is my understanding that IOSCO, IAIS, and IADI have similar governance and staffing arrangements with the exception that IOSCO is headquartered in Madrid while the IAIS and IADI headquarters are hosted at the BIS in Basel, Switzerland.

The governance decisions of some of the more recently organized international setting bodies are not necessarily dominated by senior government officials from national financial regulatory agencies. Indeed the governance of some of these organizations can be influenced by activists and "experts" advocating self-interested policies or a favored political agenda. In many cases, these international standard setting bodies have little or no direct accountability to Congress or the American people leaving open the possibility that they could issue "best practice guidelines" that advance special interests in the guise of safety and soundness best practices.

Even well-intentioned international best practice guidelines reflect compromises that must be made to reach international agreement. Such compromises may not result in the most efficient safety and soundness regulation of U.S. financial markets and institutions or be consistent with overall U.S. national interests. Moreover, as history has already demonstrated, widespread

¹² In a <u>letter</u> to G20 Ministers and Central Bank Governors dated February 4, 2015, FSB chairman (and governor of the Bank of England) Mark Carney, makes clear to FSB members that the decisions of the FSB are directives, which all FSB members are expected to carry out. In this letter, Carney states specifically that FSB members—including the Federal Reserve—have agreed to "Full, consistent and prompt implementation of agreed reforms."

adoption of uniform supervision and regulation standards will not promote global financial stability if nations adopt a standard that turns out to be flawed as has happened with past BCBS standards like the Basel market risk amendment, Basel II, and more recently, Basel III minimum liquidity standards. Past financial crisis and bank failures can be directly linked to flaws in these prior widely adopted "international best practice" codes and standards.

While the best practice codes and standards issued by these international organizations are not legally binding on any organization member country, many have or are adopting a strategy successfully pioneered by the BCBS. The strategy is to use multinational organization FSAPs and membership responsibilities of code-setting bodies to pressure member countries into adopting domestic supervision and regulation standards that conform with best practice codes and standards issued by the organization. This process can be virtuous when the adoption of international best practice codes and standards demonstrably improves domestic bank safety and soundness and financial sector resiliency without unduly restricting economic growth. Unfortunately, this is not always the case.

"Green" Industrial Policy and Bank Regulatory Capital Rules

The NGFS has been working with the BCBS to impose the NGFS's "green" agenda through amendments and additions to the BCBS Basel III capital requirements and Basel Core Principles for Effective Banking Supervision. These new climate-change rules are explicitly designed to increase the minimum regulatory capital banks must hold if they invest in, or provide credit to, so-called "brown industries" even though there is absolutely no current or historical data that supports the conjecture that investing or providing credit to "brown" industries increases the current or near term riskiness of a bank's earnings, let alone increases the probability that a bank might fail. "Near term" means horizons of up to a few years, which, realistically, is about the longest time frame before the uncertainty associated with bank business forecast accuracy makes them useless.

The BCBS adopted the "green" narrative that climate change risk to financial institutions can arise from two sources: physical risks and transition risks. Physical risk is the risk of bank losses that arise from the changes in weather and climate that impact economies. Transition risk is the risk of bank losses that arise as a result of an economy transitioning from reliance on fossil fuels to a low-carbon economy.

The BCBS's Climate-related Financial Risks Task Force was created to report on the transmission channels of climate change risks to the banking system, the methodologies banks and supervisors use to measure these risks, and to develop effective supervisory practices to mitigate climate-related financial risks. The task force issued four reports that summarize the international standard setting bodies' findings on best practices regarding bank measurement and management of so-called "climate-change" risk: (1) Climate-related financial risks: a survey on current initiatives (April, 2020); (2) Climate-related risk drivers and their transmission channels (April, 2021); (3) Climate-related financial risks – measurement methodologies (April, 2021); and, (4) Principles for the effective management and supervision of climate-related financial risks (November 2021).

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BCBS survey results

The BCBS survey responses of members indicated that: (1) current data are not sufficiently granular or reliable to feed into the potential climate change risk assessment models; (2) there is no robust analytical framework for assessing climate-related financial risks; and, (3) there are large uncertainties associated with quantifying the impacts of climate change and an insufficient understanding of how climate change and the transition towards a low-carbon economy affect specific sectors, regions, markets and consequently the financial system.

BCBS survey respondents indicated that the regulatory agencies' work on climate-change was influenced by the Network for Greening the Financial System (NGFS). Several respondents also "indicated that they were working with private sector agents to identifying 'best practices' to mitigate climate-related financial risks."

Owing to a lack of data and robust methodologies to link hypothetical climate-change risks to actual bank losses and required capital cushions under Basel Pillar 1 capital requirements, respondents favored using "stress testing of climate-related financial risks," as a mechanism to justify Basel Pillar 2 add-on capital requirements for climate change risk. The report notes, "In this context, stress testing has to be understood in a wide sense and includes developing key risk indicators and conducting sensitivity analysis." The survey also found that "in several instances, [climate-change] supervisory guidance issued by national regulatory agencies "[required] banks to increase credit availability to 'green' and 'low carbon' sectors."

BCBS transmission channel report findings

The BCBS climate change transmissions channel report asserts,

"Banks and the banking system are exposed to climate change through macro- and microeconomic transmission channels that arise from two distinct types of climate risk drivers. First, they may suffer from the economic costs and financial losses resulting from the increasing severity and frequency of physical climate risk drivers. Second, as economies seek to reduce carbon dioxide emissions...these efforts generate transition risk drivers... through changes in government policies, technological developments, or investor and consumer sentiment. They *may* also generate significant costs and losses for banks and the banking system. [emphasis added]"

It is important to note, that the statement "may" is logically equivalent to the statement "may not", and yet the thrust of all of the BCBS findings and principles is that climate-change is a separate source of risk that will, if unaddressed by explicit new internationally coordinated supervision and regulations, expose banks to losses large enough to generate "systemic financial system risk" at some point in the future. The BCBS report makes this assertion despite a lack of data or evidence that such events have occurred in the past and an inability to scientifically assess the probability they might happen in the future.

The BCBS transmission channel report finds specifically that,

• "[L]ittle work that takes climate risk drivers all the way through to the impact on banks.
... Given its forward-looking nature, analysis of transition risks is focused on scenario analysis."

- "[A] limited amount of research and accompanying data that explore how climate risk drivers feed into transmission channels and the financial risks faced by banks."
- "Existing analysis does not generally translate changes in climate-related variables into changes in banks' credit, market, liquidity or operational risk exposures or bank balance sheet losses."

The climate change "physical risk drivers" that the BCBS reports are expected to occur over the coming decades or centuries include:

- a rise in sea levels
- increases in the variability of precipitation
- higher occurrence of landslides
- regional increases in drought trends and "desertification"
- more frequent wildfires
- higher frequency of extreme temperatures
- recurring and increasingly severe floods

Notwithstanding this forecast of impending climate-change plagues, there is little in the historical record that substantiates that these alleged trends are currently underway. For example, there is no trend in the number of "hot" days between 1895 and 2017,with 11 of the 12 years with the highest number of such days occurring before 1960. NOAA's U.S. Climate Reference Network temperature data show no trend over the 2005–2020 reporting period. The frequency of U.S. tornados of severity EF1 show no trend, while tornados of severity EF2 or greater show a downward trend since 1954. The frequency and severity of hurricanes and lesser tropical storms show no significant trend since satellite measurements began in the early 1970s. There is no discernable trend in US data that measures drought frequency and severity. Recent studies conclude that "the global area burned [by wildfire] appears to have declined over past decades, and there is increasing evidence that there is less fire in the global landscape today than centuries ago." In short, actual data do not show that climate change is making severe weather events increasingly common—at least not yet.

Moreover, concrete <u>historical evidence</u> suggests that banks not only manage to survive severe weather events without significant distress but, on average, also profit from loans made to finance recovery efforts. Recall the specific severe weather event that was hurricane Katrina. There were many banks in the path of the hurricane and yet none failed despite the massive physical damage inflicted by the storm.

The BCBS transitions paper has artfully anticipated the critique that there is no evidence of these physical risk specters in the historical data. It argues that, because climate change is evolving rapidly and likely to induce nonlinearities in physical risk drivers,

"[V]ery little reliance can be placed upon historical experience to assess their [physical risk] magnitude or to identify patterns." Consequently, "assessments of climate risks must account for elevated levels of uncertainty, even while there is no uncertainty that climate change is under way. This uncertainty arises from, but is not limited to, assumptions around future emissions pathways and the impact that these have on physical

hazards, interactions between natural systems, future paths of policy, technological advances, and consumer and market sentiment."

Regarding transition risks, the BCBS report focus on so-called "stranded assets" or assets that formerly were valuable in a carbon-intensive economy but lose significant value as the economy transitions under zero-carbon government policies. The paper argues,

Transition-related changes in official sector policy, technological advances and investor sentiment could lead to changes in borrowing costs and an abrupt repricing of financial assets. Investors in financial markets could reward borrowers they believe will be resilient through, or may stand to gain from, the transition away from a carbon-intensive economy. At the same time, investors could increase the risk premia they demand from carbon-intensive borrowers.

Again, these assertions are not supported by data. The BCBS paper states that research conducted to identify the hypothesized "risk differentials between assets that are more or less sensitive to transition risks is limited and is generally inconclusive." The lack of empirical evidence is chalked up to the fact that time horizons involved in these studies are shorter than "the time horizons over which transition-related effects are projected to crystallize."

What has also become clear but goes unmentioned is that climate change government policies can create "green" stranded assets that could be a risk for banks. One concrete example is the highly accelerated depreciation rates observed on the prices of used electric vehicles. Another is the build-up of excess manufacturer and dealer electric vehicle inventories as consumer demand becomes satiated at adoption levels lower than anticipated.

BCBS climate change risk methodology report

The BCBS task force climate change methodology paper states: "[C]limate-related financial risks have unique features, [including] uncertainty stemming from data, models or the limited ability of the past to act as a guide for future developments." The report goes on to state,

Assessment of climate-related financial risks will require new and unique types of data, different to the data banks have traditionally used in financial risk analyses. The data needed to map risk exposures and translate climate-related risks into financial risk estimates may be only partially available and may not adequately meet traditional data quality standards, such as the length of history, completeness, and granularity needed to support the risk decision-maker. Moreover, data describing the historical relationship between climate-related impacts and their economic and financial consequences may not be representative of future climate-economy or climate-financial relationships.

The report continues, noting that some progress has been made in identifying "brown industry" carbon-emitting offenders who will presumably be impacted by so-called transition risk and receive Pillar 2 credit risk capital surcharges. The report mentions some specific examples of the methodologies in use:

[S]ectoral classification is a commonly observed differentiator for transition risk, as some jurisdictions collect and publish data on GHG emissions by sector. When economic

sector classifications are associated with average emissions, the measurement implication is that all corporate entities that share the same classification are associated with the same relative average amount of GHG emissions. Accordingly, all entities within a sector might be categorized according to the transition risk ascribed to the sector.

And,

Observed practices among banks also include the use of indicators related to "greenness" of financial assets and real estate exposures as proxies for transition risk, including measures of alignment with [political] climate targets.

Other approaches purport to analyze the greenhouse gas emission (GHGs) of individual counterparties,

Counterparty-based risk assessments often entail an analysis of the climate-related opportunities and risks for companies that the bank finances or is considering financing (e.g. considering the company's carbon footprint, climate change adaptation solutions, strategic positioning). ...Climate-related risks are commonly assessed separately from standard credit risk assessments. ... In principle, credit officers can adjust the credit score based on the climate risk assessment.

Observed ratings practices include assigning a climate risk rating for each client comprising all physical and transition risks to which the client is exposed, or developing a materiality matrix to apply a climate-related risk rating for existing and new clients.

An example of such a climate risk assessment uses a traffic light classification. (red/amber/green) to differentiate clients according to their relative exposure to climate-related risks, where clients exposed to elevated climate-related risk are assigned a "red" or "amber" rating. . . .

Notwithstanding the use of these methodologies, the reports states:

[S]ome banks have performed analyses to assess the potential risk differential between "green" and "brown" activities. One example of a backward-looking analysis is the comparison of cases of energy firm downgrades with proxies for "green" activities (e.g. renewable energy power generation) and "brown" activities (e.g. coal and gas-fired power generation). With a range of methodologies being applied by different financial institutions, *strong conclusions on a risk differential have not been established so far*. [emphasis added]

In contrast to methods for quantifying hypothetical transition risk, the BCBS task force found that methods to measure climate-change physical risk—actual physical losses from climate-change-induced weather events—are even *less* well developed. This is a surprising finding if banks are actually exposed to material climate change physical risk given that data on historical weather-related material physical losses should be available and banks would already have the incentive to measure these risks. Regardless, the report states, "[p]rogress has been less tangible in empirically capturing banks' exposures to physical risks".

The BCBS task force reports that, at present, banks and supervisors are:

"At an early stage of translating climate-related risks into robustly quantifiable financial risk." There is a lack of "measurement methodologies [for linking hypothetical climate change risks to] traditional risk parameters (such as probability of default or loss-given-default) because of the availability and relevance of historical data describing the relationship of climate to traditional financial risks, and questions around the time horizon."

When it comes to bank supervisory measures of transition risk, the BCBS task force found that transition risk for corporate exposures is often measured by indicators of a corporate's GHG emission intensity, carbon footprint or sensitivity to government climate policies measured either at the individual firm level or using an industry sector average approach where the "sectors deemed most sensitive to transition risk [are] based on sectoral carbon intensity (e.g. Bank of France (2020); Central Bank of Malaysia (2019)) ... [or assigned] "according to national classification frameworks into climate-policy-relevant sectors, considered vulnerable to transition risk. Counterparty transitional risk measures can be then used for example, "in a sensitivity analysis of banking system exposures to corporate decarbonisation, or ... for more comprehensive scenario analysis and stress testing."

The final key conclusion of the BCBS task force emphasizes the hypothetical nature of the entire endeavor and how far removed are bank climate change related losses from any measurable historical experience,

Given that future climate-related financial risks will probably differ from observed patterns, recourse to historical data in risk estimation or model calibration is limited. Instead, quantifying climate-related risks to banks necessitates applying a suite of assumptions about the interactions among the climate, anthropogenic activity, and economic activity that will impart considerable uncertainty to the estimation process. These assumptions involve forecasting the behavior of economic actors and policymakers and the future of technological advancement, and resulting projections of future emissions pathways, modelling the impact of emissions on climate, and quantifying the economic consequences of climate impacts." [Consequently,] "assessing climate-related financial risks will require new and unique types of data – not necessarily the same as those banks have traditionally used in financial risk analyses – [to translate] climate risk drivers into economic risk factors; [to link] climate-adjusted economic risk factors to exposures; and to translate climate-adjusted economic risk into financial risk.

The impacts that arise from "a suite of assumptions" will presumably be estimated using climate change stress tests that involve hypothetical scenario assumptions that span decades into the future. In contrast, current bank stress test modeling typically focuses on shorter term horizons, with scenarios spanning three- or, at the most a five-year horizons. The long time horizons associated with climate change scenarios are a serious impediment. In almost all cases relative to forecasting bank revenues and costs including investment losses, forecast accuracy declines as forecast horizons increase. The BCBS task force report recognizes this issue stating,

The time horizons over which climate risks manifest present a considerable challenge for risk quantification. ... Given the discontinuity between existing risk measurement

processes and the horizon over which climate risks may materialize, existing risk forecasting approaches may be inadequate to capture the risks of a changing climate and may require retrofitting existing or creating new approaches to adequately assess these longer-dated risks.

Given that the BCBS task force reports repeatedly emphasize the lack of data and methodologies suitable for measuring banking risks associated with hypothetical climate change physical and transition risks that are conjectured to occur over decades or centuries, you might think the BCBS would have concluded that, at present, there was no basis for issuing "best practice" climate change risk measurement and management practices. The task force reports fully admit that there is no historical data that shows that these risks have yet been problematic for banks. Based on those finding alone you might imagine it prudent to revisit the issue when robust data and methodologies are at a further stage of development. The BCBS instead decided to issue new prescriptive best practice codes and standards that require banks to spend significant amount of funds to, reorganize internal risk management operations, purchase data, and hire outside "expert" consultancies to quantify risks that currently are not material, and going forward, are likely to arise primarily as a consequence of government mandates and "green" policies that will disrupt the efficient production of good and services as determined by competitive market forces and consumer demand.

BCBS "Principles for the effective management and supervision of climate-related financial risks,"

The introductory paragraphs of the BCBS "Principles for the effective management and supervision of climate-related financial risks," appear to allow for the possibility that climate change may pose little or no material risk to a bank. However, the actual 18 principles articulated clearly presume that "possible" should be interpreted to mean that, within an undefined time frame, all banks will face material risks from climate change and must therefore allocate ample resources today, to include even explicit duties at the senior management level, to identify, assess, and manage the bank's climate change physical and transitional risks notwithstanding the fact that there is no concrete historical data either presented by the BCBS or otherwise that supports such a broad assertion.

The BCBS principles assert that, "Banks should continuously develop their capabilities and expertise on climate-related financial risks commensurate with the risks they face and ensure they have appropriate resources allocated to managing these risks." But again, the principles do not seem to allow much room for a bank's management to decide—and for its supervisor to agree—that a bank faces no additional material risk from climate change other than the normal banking risks the bank already adequately measures and manages, and would therefore be imprudent for the bank to waste resources implementing principles that require the bank to isolate, measure, and institute, "policies procedures and controls ... across the entire organization in all relevant functions and business units, including, for example, in client onboarding and transaction assessment" to manage climate change as a separate and distinct source of bank risk.

The BCBS "Principles for the effective management and supervision of climate-related financial risks," mirror the other three BCBS reports by repeatedly references the fact that there is little in

the way of historical concrete data that links the presumed hypothetical climate-change physical and transitional risks to actual bank loan defaults, operational risk losses, or the market risk of banks' traded investment securities. The BCBS response is that banks should spend resources to create or buy data and outside consultants to help them make these presumed analytical links, even though there is no historical evidence that such links exist. The clear BCBS assertion is that these hypothetical links exist and bank supervisors are requiring banks to spend money to find them.

The lack of concrete historical data that links hypothetical climate change risk to actual bank losses does not dissuade the BCBS from measuring something that may not exists since supervisors can always require banks to run hypothetical climate change stress tests to manufacture bank "potential" future losses at will. BCBS Principle 12 requires banks to,

[M]ake use of scenario analysis, including stress testing, to assess the resilience of their business models and strategies to a range of plausible climate-related pathways and determine the impact of climate-related risk drivers on their overall risk profile. These analyses should consider physical and transition risks as drivers of credit, market, operational and liquidity risks over a range of relevant time horizons." The principle requires bank stress test to: "(i) [explore] the impacts of climate change and the transition to a low-carbon economy on the bank's strategy and the resiliency of its business model; (ii) [identify] relevant climate-related risk factors; (iii) [measure] vulnerability to climate-related risks and [estimate] exposures and potential losses; (iv) [diagnose] data and methodological limitations in climate risk management; and (v) [inform] the adequacy of the bank's risk management framework, including risk mitigation options. Banks may explore the use of stress testing to assess the adequacy of their financial positions in the near term under severe yet plausible scenarios, though these capabilities are expected to mature more progressively over time as methodologies evolve.

In a nod to the underlying special interests driving the global green agenda, the BCBS principles require banks to expend resources to pay outside "experts" to critique their climate-change stress test models: "The field of climate scenario analysis is highly dynamic, and practices are expected to evolve rapidly, especially as climate science advances. Climate scenario models, frameworks and results should be subject to challenge and regular review by a range of internal and/or external experts and independent functions."

The Arbitrary Nature of Climate Change Scenarios and Stress Testing

Climate-change scenario analysis and stress tests are the favored "regulatory tool" for modeling hypothetical climate-change transition risk because such an approach is "completely unburdened by what has been." Since there are no historical data that documents material bank losses and failures from transition risk, let alone past episodes where bank failures from transition risk threatened financial system stability, regulators must concoct hypothetical future scenarios that will create the losses they assert will emerge as economies transition away from GHG intensive production to "green" "sustainable" production.

In these climate change scenario and stress test exercises, regulators will require banks to estimate the losses that they might accrue in the distant future should climate change somehow

catalyze the modern-day equivalent of the old-testament plagues that in turn trigger government policies or demand changes that limit GHG-intensive industries ability to continue operations.

A stress-test based approach for setting bank climate change capital requirements has two gigantic measurement problems. First, the climate change scenario(s) must accurately anticipate the future economic conditions. And secondly, regulators must be able to translate projected macroeconomic climate change scenarios into accurate predictions about individual bank profits and losses.

Few if any financial regulators possess the prescience necessary to accomplish the first step even when dealing with common bank risk exposures. In 2006, the subprime crisis was less than 2 years away, but the Federal Reserve did not see it coming. The New York Fed's staff was publishing papers that dismissed the idea of a housing bubble and the Federal Reserve Chairman's speeches argued—worst case—there may be some "froth" in local housing markets. Even as the subprime bubble burst, the new Fed Chairman publicly opined that the economy would suffer only minor fallout. The assumption that somehow regulators will be able to accurately predict the effects of climate change on the economy decades into the future is "heroic" by any measure.

Even if climate change scenarios correctly anticipate future climate change physical and transitional risk drivers, these must be translated into individual bank profits and losses. Actual data show that bank profits do not closely follow changes in GDP, inflation, unemployment, or any other common macroeconomic indicators. The best macroeconomic stress test models explain maybe 25 percent of the quarterly variation in individual bank profits and losses, meaning that more than 75 percent of the variation in bank profit and losses cannot be predicted using GDP, unemployment, or other common business cycle indicators. Accurately linking bank profits and losses to climate change physical and transitional risk will be even more challenging as there is no historical data that can be used to calibrate climate change models.

Because of these measurement issues, bank loss predictions from current macroeconomic stress tests have very little objective accuracy. Even using the best statistical models, there remains a great deal of uncertainty surrounding how each bank may actually perform in the scenario even when a stress scenario accurately anticipates future economic conditions. The accuracy of climate change stress tests will be even more suspect.

These issues make stress testing and scenario analysis more of an art than a science. These tools are inappropriate for setting individual institution capital standards when capital is required to cover purely conjectural losses. There are just too many places to make mistakes.

The Fed—an institution that, time and again, has proven that it cannot forecast interest rates, the inflation rate or GDP growth over the next three months let alone years into the future—gets to decide what level of individual bank losses are "accurate" in hypothetical climate apocalypse scenarios. The Fed is also the judge of whether the bank will have sufficient capital in the future to absorb these fictional losses. Moreover, as a practical matter, banks cannot dispute the assumptions of the Fed's imaginary catastrophic scenario, nor can they dispute the accuracy of

the Fed's bank-specific loss estimates because, the stress test exercise is repeated on a periodic basis, and in the next round, the Fed will still be the bank's regulator.

Greenhouse Gas Emissions and U.S. Financial Regulatory Policy

On May 20, 2021, President Biden issued <u>Executive Order 14030</u>, which directed the U.S. Secretary of the Treasury as the Chair of the Financial Stability Oversight Council (FSOC), to "engage with FSOC members to consider the following actions by the FSOC"

- (i) [assess], in a detailed and comprehensive manner, the climate-related financial risk, including both physical and transition risks, to the financial stability of the Federal Government and the stability of the U.S. financial system;
- (ii) [facilitate] the sharing of climate-related financial risk data and information among FSOC member agencies and other executive departments and agencies (agencies) as appropriate;
- (iii) [issue] a report to the President within 180 days of the date of this order on any efforts by FSOC member agencies to integrate consideration of climate-related financial risk in their policies and programs, including a discussion of:
- (A) the necessity of any actions to enhance climate-related disclosures by regulated entities to mitigate climate-related financial risk to the financial system or assets and a recommended implementation plan for taking those actions;
- (B) any current approaches to incorporating the consideration of climaterelated financial risk into their respective regulatory and supervisory activities and any impediments they faced in adopting those approaches;
- (C) recommended processes to identify climate-related financial risk to the financial stability of the United States; and
- (D) any other recommendations on how identified climate-related financial risk can be mitigated, including through new or revised regulatory standards as appropriate;

In late October 2021, the FSOC responded to the president's executive order by issuing a report announcing that it had determined that climate change posed a systemic risk to the financial sector. The Dodd-Frank Act created the FSOC and assigned it with the responsibility to identify and mitigate financial "systemic risk." However, by oversight or design, the Act never defines systemic risk notwithstanding the 39 times the term appears in the 849-page legislation.

By never defining the term "systemic risk", the Dodd-Frank Act created ambiguity the FSOC can exploit to designate institutions, activities, or practices as a source of systemic risk—a designation that requires federal financial regulatory agencies to promulgate new regulations to mitigate the risk.

The FSOC report mimics the BCBS climate change task force conclusions repeating claims that systemic risk arises in part because climate change is making severe weather events more common which increases the risk of bank failures. Moreover, climate change transition risk—

risk that materializes because of "changes in public policy, adoption of new technologies, and shifting consumer and investor preferences all have the potential to impose added costs on some firms ... [reducing their] ability to meet their financial obligations."

It is worth noting that the consensus views expressed by the FSOC's members in its climate change report exactly mirror the administration's climate change policy stated on the non-FSOC pages on the U.S. Treasury's website,

Climate change is an existential threat to the planet and an emerging and increasing threat to the global financial system and economy, including our own. At the same time, the transition to a net-zero economy represents an historic economic opportunity for companies, industries, and countries.

The U.S. Department of the Treasury is committed to leveraging the full extent of its capabilities in support of the Biden Administration's government-wide approach to addressing climate change. Treasury is working to enable and expedite the whole-of-economy net-zero transition while promoting the resiliency of the financial system to climate-related risks.

Climate change was *not* an FSOC priority before the Biden administration took office, and it may not be a priority for the next administration. The FSOC's argument presumes that the administration's specific GHG reduction policies will be durable when in fact they are part of a political agenda that is subject to change with every election cycle. The start-stop nature of politically-directed bank regulations will raise the cost of bank credit for all businesses and consumers and stifle economic growth.

While there was no new associated Congressional legislation that empowered financial regulatory agencies to focus on creating new regulations to limit greenhouse gas emissions, following the FSOC's designation of climate change as a systemic risk, the <u>Federal Reserve</u>, <u>FDIC</u>, <u>Comptroller of the Currency</u>, <u>Securities and Exchange Commission</u>, and <u>Commodities Future Trading Commission</u> all began working on new regulatory policies intended to require companies to make new measurements, disclosures, and comply with new rules that limit their investments in greenhouse gas intensive activities and companies in order to reduce climate-change systemic risk.

Keep in mind that Congress never granted independent financial regulatory agencies the power to regulate nonfinancial firms' access to bank credit and market sourced investment capital. The systemic risk provisions of the Dodd-Frank Act apply to federally regulated banks, financial institutions, and to nonbank financial institutions designated to be "systemically important" by the FSOC. The latter must be nonbank companies "predominantly engaged in financial activities." ¹³

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¹³ The FSOC report on climate-change risk essentially argues that the companies emitting greenhouse gases (GHGs) are the ultimate source of systemic risk. But these companies are predominately nonfinancial in nature and consequently not subject to the provisions of the Dodd-Frank Act. The administration circumvents that problem by arguing that they have not designated the emission-intensive firms as systemic, but instead have determined that these firms carry heightened credit risk as a consequence of so-called "climate-change transitional risk." Transition risk is a hypothetical credit-risk multiplier linked to GHG emissions.

In November 2023, U.S. bank regulatory agencies issued, "Principles for Climate Related Financial Risk Management for Large Financial Institutions," the U.S. domestic counterpart to the BCBS November 2021 international standard. These new regulations are intended to apply to institutions with consolidated assets of over \$100 billion and, in principle, allow for some tailoring of the intensity of required bank climate-change risk measurement and management activities according to the materiality of a bank's climate-change exposures. The U.S. domestic regulatory principles are largely consistent with the BCBS principles with some added discussion concerning "low and moderate income and other underserved consumers and communities." In the preamble addressing public comments, the agencies assert that the principles do not go "beyond the agencies' statutory mandate relating to safety and soundness, including [eschewing any] changes in response to suggestions that the agencies promote a transition to a lower carbon economy."

Support for the hypothesis that these new bank climate-change regulations are more concerned with advancing the current administration's political agenda of imposing a "green industrial policy" than they are with ensuring bank safety and soundness, is provided by a Biden administration U.S. Treasury official in an article he wrote before the administration even took office. The article explains in detail the administration's plan to use bank and securities market regulators to introduce new rules and requirements to raise the costs, or equivalently, lower the returns that can be earned by, lending to, or investing in businesses or projects that are deemed to be "environmentally unsustainable".

In a 2020 <u>article</u> published in the *Cornell Journal of Law and Public Policy*, <u>Graham Steele</u>, who until recently was Assistant Secretary of the Treasury for Financial Institutions, described a detailed plan to use federal financial regulatory agency powers to help implement a new national industrial policy without legislation. The plan was to use the powers of the financial regulatory agencies to restrict the flow of credit and capital to firms and activities that produce GHGs.

The plan uses the Financial Stability Oversight Council (FSOC) to declare climate change as a systemic risk which in turn requires FSOC members to use their Dodd-Frank regulatory powers to impose new regulations to mitigate the alleged climate-change systemic risk threatening the financial system.

Climate-change regulations would take the form of heightened capital requirements for bank loans to GHG intensive firms and activities. ¹⁴ These higher capital requirements will be justified by claiming that climate-change factors elevate the future credit risk profile of targeted borrowers.

According to Mr. Steele, to limit GHGs, regulators will also increase minimum collateral haircuts and margin requirements on capital market transactions and place new regulatory caps

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¹⁴ A cardinal rule of financial regulation is that you can't regulate a risk unless you can measure it. The risk measure in this case could use public data if public companies were required to periodically disclose their scope 1,2 and 3 GHG emissions measured using the GHG Protocol. Public companies' scope 1 and 2 emission estimates, and eventually their scope 3 emission estimates would have to be "certified" by an appropriate third party climate-change consultancy creating a new lucrative "green" consulting industry.

on the total amount of GHGs that can be emitted by the firms whose securities are held by mutual funds, pension funds, public investment companies, and insurance companies. These caps could require divestitures. These new heightened regulatory restrictions would be applied to counterparties from specific targeted industries.

To quote Mr. Steele,

[C]apital rules can be updated to increase risk weights on the basis of climate risk to reflect the potential for capital intensive losses based on financial climate risks. Risk weights could be increased for loans and investments in climate change-driving assets, as well as credit exposures to sectors that are vulnerable to the effects of climate change. These risk weights would apply, at a minimum, to all financing of the industries that encompass the 100 producers that, as of 2017, accounted for 71 percent of global industrial greenhouse gas emissions, as well as agribusinesses operating in areas that are sensitive to deforestation, to better reflect the true costs and risks from the climate impacts of these investments.

Time has revealed that the plan Mr. Steele described is the Biden administration's blueprint for using the "independent" financial regulatory agencies to implement his administration's net-zero policies.

If the hypothetical climate change and economic transitions occur, they will gradually over decades if not centuries. Climate change alarmists need to understand that "The Day After Tomorrow" was not a documentary. From a safety and soundness perspective, there is no reason to believe that banks' current risk measurement and management processes will not endogenously adjust if and when forecasts of amplified physical weather events and production transitions occur. It will be in banks' own financial interest to measure and manage these risks should they materialize. The current push by government regulators to require banks to install new costly methods and procedures that will result in higher capital requirements for "brown" credits cannot be justified as efficient safety and soundness regulation when alleged hypothetical bank climate-change related losses, if they materialize, are decades away.

Appendix A: Paul Kupiec Curriculum Vitae current through December 2023

Current Position

2013- Senior Fellow, American Enterprise Institute

Prior Experience

2004-2013	Director FDIC Center for Financial Research (CFR) and, Associate Director, Center for Financial Research Branch, Division of Insurance and Research, Federal Deposit Insurance Corporation
2010-2013	Chairman, Research Task Force Subcommittee of the Basle Committee on Bank Supervision
2000–2004	Deputy Division Chief, Banking Supervision and Regulation, Monetary and Financial Systems Department, International Monetary Fund.
1998-2000	Director / Principal Economist, Financial Research, Freddie Mac, McLean, Virginia.
1997-1998	Vice President, The Risk Metrics Group, J. P. Morgan, New York, New York.
1988 -1997	Senior Economist, Division of Research and Statistics, Federal Reserve Board, Washington, D.C.
1990-1991	Official, Bank for International Settlements, Basle Switzerland

1985-1988 Assistant Professor of Finance, North Carolina State University, Raleigh, NC.

Professional Editor, *The Journal of Financial Services Research* (2007-2013)

Service Associate Editor, *The Journal of Financial Services Research* (2005-2007)

Associate Editor, The Journal of Risk (1998-present)

Editorial Board, The Journal of Risk Management in Financial Institutions (2007-present)

Associate Editor, Journal of Investment Management (2013-present)

Director, Southern Finance Association (2013-2015)

Referee for many academic journals

Education The University of Pennsylvania, Ph.D in Economics, 1985.

Specialization in Finance, Theory and Econometrics

The George Washington University, Washington D.C., B.S. Economics, 1980.

Publications (Chronological)

- "Initial Margin Requirements and Stock Returns Volatility: Another Look," *Journal of Financial Services Research*, Vol. 3, No. 2/3, pp. 189-202, 1989.
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Professional Conference Organization Committees

Program committee member, Southern Finance Association Annual Meetings, (2005-12).

Co-organizer (with Haluk Unal), the FDIC-JFSR Fall Banking Research Conference (2004-2012).

Co-organizer (with Robert Jarrow and Stuart Turnbull), the annual Derivative Securities and Risk Management Conference (2005-2012).

Program Committee and organizer for the 2007 Basel Research Task Force Workshop held at the FDIC.

Program Committee for Basel Research Task Force Conference on the Integration of Market and Credit Risk Measurement (Berlin 2007).

Program Committee for Basel Research Task Force on Stress Testing (Amsterdam 2008).

Other Professional Service

2009-2015 The Financial Stability Institute (FSI), a service organization supported by the Bank for International Settlements and Basel Committee on Bank Supervision member institutions.

---Lecturer at multiple FSI Workshops on various topics in risk measurement, regulatory capital, stress testing, deposit insurance, financial sector crisis management, and Basle capital and leverage regulations.