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May 17, 2022

Ali Khawar
Acting Assistant Secretary
Employee Benefits Security Administration
U.S. Department of Labor
200 Constitution Avenue NW
Washington, DC 20210

Mr. Khawar,

Thank you for the opportunity to respond to the Employee Benefits Security Administration's (EBSA) Request for Information (RFI) on retirement savings and climate-related financial risk. We commend the EBSA – and the Department of Labor (DOL) more broadly – for taking proactive steps to assess climate-related financial risks, and for engaging with finance industry participants (through mechanisms such as this RFI) as you consider plans for future action.

At CoreLogic, property data - spanning single family residential, multifamily residential, and commercial - is our DNA. We provide real estate professionals, financial institutions, insurance carriers, government agencies, and other housing market participants with reliable, property-level data, analytics, and platforms that deliver the most qualified, comprehensive information available. We couple this with the country's most extensive network of field researchers, analysts, and data scientists to curate, connect, and uniquely enrich this property data with further insightful intelligence, particularly climate-related financial risks.

Our wealth of property data, analytical capabilities, and connectivity throughout the financial ecosystem places CoreLogic in the best position to holistically evaluate the physical risks of climate change and the potential impacts to our economy, including retirement savings and pensions.

The following pages will provide you with best practices for how the EBSA can best protect the live savings and pensions of U.S. workers and families from the threats of climate-related financial risk.

Our team of scientists, economists, and public policy experts would welcome the opportunity to brief EBSA staff on the information contained in this response. We look forward to continued conversations with your office as we all work collaboratively to protect our financial system from climate-related risks.

Sincerely,

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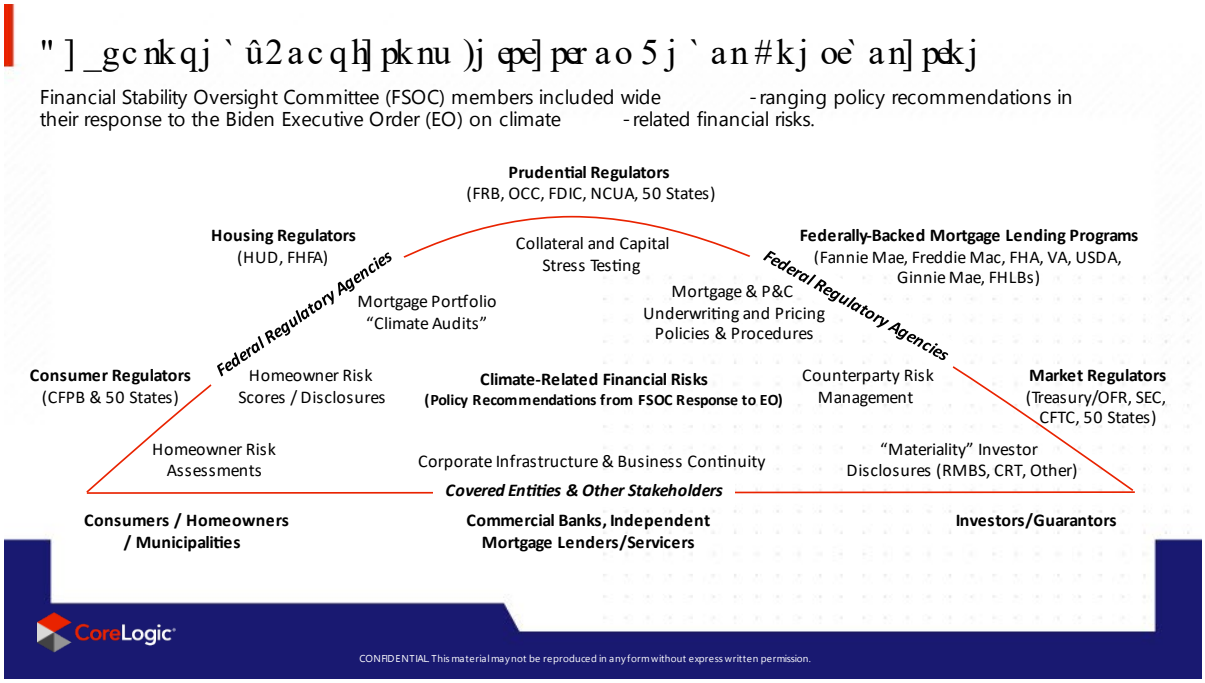
GENERAL

CoreLogic believes that climate change poses a clear, present, and increasing danger to our planet, amplifying both physical and economic risks.

As identified by last May's Executive Order 14030, and highlighted in Question 2 of this RFI, these risks can be classified into two broad categories: physical risks and transition risks, both of which could pose significant climate-related financial risks to retirement savings.

At CoreLogic, our focus on the first of these prongs – physical risk – has led us to develop a unique understanding of the specific data sets and analytical capabilities that will be required by fiduciaries and other asset managers to both measure and assess overall climate-related financial risk to their investment portfolios. This understanding allows us to clearly identify a total level of risk that takes into account a variety of natural hazards, is analyzed at the individual property level, and can be converted into a consistent and easily understandable risk metric. We then translate that risk metric into an assessment of economic value impact, aggregate them across locations, and then overlay them with climate change scenarios to deeply and broadly understand the total physical and economic impact of climate change across a range of geographic areas.



These broad-based economic and physical impacts of climate change are likely to reverberate across private and public investments, as well as equity and debt instruments. The impacts may be more near-term than currently envisioned and potentially larger than anticipated, based on the severity and frequency of perils that are impacting land parcels and properties all across the U.S. – an asset class that has historically been a mainstay of investments and one typically thought of as slow-moving and income generating.

Climate change is a complex, multi-faceted risk but translating its impact into financial terms also needs high specificity. All investments have exposure to physical risk with varying magnitude. Quantification of these investments is a good first step, especially areas with direct real estate exposure. These include private and public real estate holdings, REITs, mortgage-backed securities and equity and loans to funds or funds-of-funds that participate in such vehicles. Even money market funds, typically considered near-cash risk level investments, are collateralized by treasury securities including mortgage-backed securities[1]. Their maturity periods are typically shorter-term, dampening duration risk but there may be very little consideration / quantification, if any, of systemic risks from climate change.

Insurance assets are highly affected by these physical risks and since insurance premiums are perceived to be steady income streams, many large pension plans and lower-risk-seeking investment assets are highly exposed to this area. Another layer of risk is likely from indirect exposure to physical risk – with companies/counties that rely heavily on income generating physical assets. Energy and Mining are two example industries, and some municipal bonds carry both the tax revenue stream and assets' risks exposures.

Physical Risks & Homeownership

A home is typically the most important asset the average American will own in their lifetime. Securing this asset should be a high priority for every institution involved in this endeavor at every stage of its life cycle, including for fiduciaries and asset managers overseeing investments backed by physical assets (i.e., mortgage-backed securities). Physical risks are a key, highly impactful vector to this critical asset that can significantly shrink its value. Understanding risks from natural hazards – both individually and in composite – allows us to measure them accurately and compare their impacts across various geographies and types of property. Natural hazards are a science unto themselves but matching that with economic impact requires a deeper understanding of the physical features of a home, as well as its value and replacement costs in the event of a severe loss. Overlaying climate change scenarios helps contextualize these losses in a statistical and probabilistic framework.

As previously stated, we understand that physical risks are only one of the risks directly associated with investment exposure to assets, income streams, and liabilities. Transition risks – i.e., the cost of moving to a renewable energy economy – may amplify these.

DATA COLLECTION REGARDING ERISA-COVERED PLANS

Step one of EBSA's data collection process should be to establish a baseline of the current risk profiles for all physical structures across the United States that serve as collateral for their investments.

Establishing a Baseline of Physical Risk

Climate risks are high-gradient perils that can change over short distances, making them wide-reaching yet still acutely felt.

To understand these disparities, current and future risk data on numerous natural hazards – such as flood, wind, wildfire, and more – is needed for each individual structure. This is key: despite the fact that many areas in the U.S. are exposed to multiple natural hazards, the industry has historically reviewed these hazards individually. Although insightful, this does not provide an accurate risk measurement for structures that are impacted by multiple hazards. Instead, we need structure-specific, integrated hazard risk scores. The goal of an integrated hazard risk score is to represent the total hazard risk for any location across the U.S.

Because many property-and-casualty insurance companies and enterprise risk managers are already looking for a single score to reflect the combined risk of all natural hazards that affect their portfolio, CoreLogic created such a model that combines our existing natural hazard datasets into a comprehensive single hazard score. In our experience, these such models should incorporate, at a minimum, the following hazard risks:

- Earthquake
- Wildfire
- Inland Flood
- Severe Convective Storm
- Winter Storm
- Hurricane/Tropical Storm Surge
- Hurricane/Tropical Storm Wind

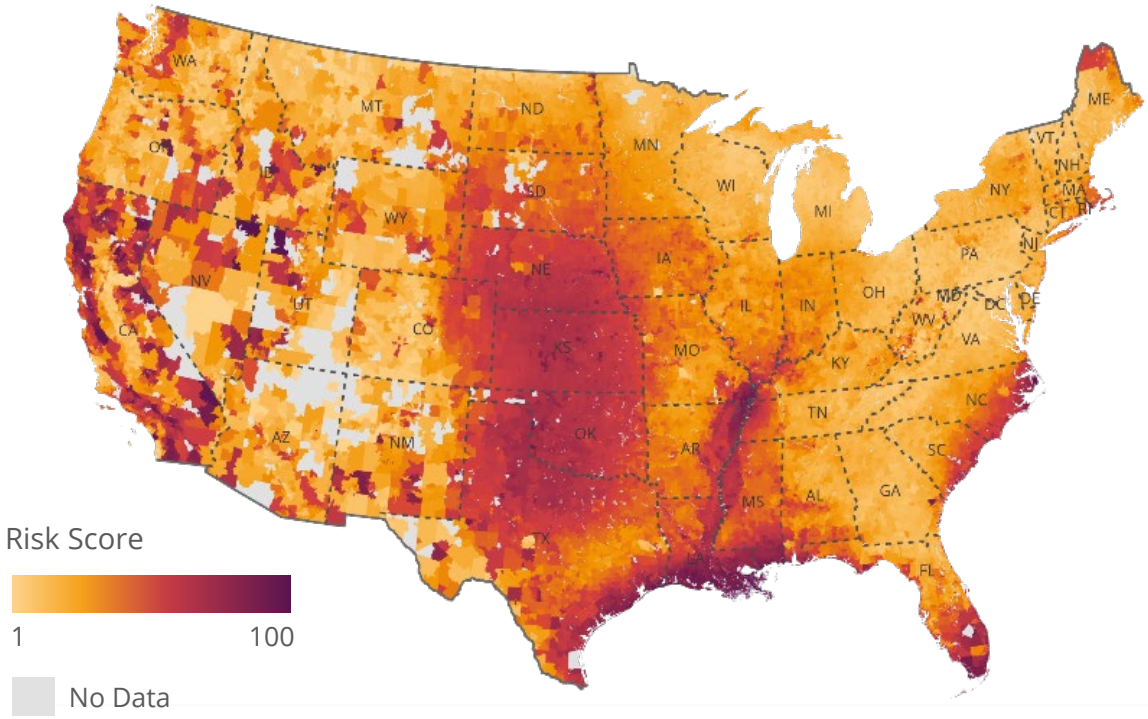
To create these scores, we utilized risk modeling to combine the severity and frequency of damage into a composite risk score, which represents the sum of the Annual Adjusted Loss (AAL) for the seven individual hazards mentioned above for approximately 105 million residential structures across the U.S. The value of this composite AAL, relative to the calculated Reconstruction Cost Value (RCV), is used to rank all structures with a 1-100 score, where the higher scores equate to higher risks.

These values can be used in insurance markets, in the housing finance ecosystem (primary and secondary), by investors in residential mortgage backed securities (RMBS), asset-backed securities (ABS), and credit risk transfers/other financial risk derivatives, and by financial services prudential regulators for supervisory stress testing and oversight, as well as by publicly traded companies preparing materiality disclosures in federal filings. Both the composite AAL and the individual AAL for the seven perils mentioned above are

calculated using our high definition Catastrophe Risk Models conditioned with today's climate.

Additionally, these composite scores can be represented in a composite risk map to identify the areas with the highest risk homes. The map below illustrates risk levels across the country, showing that the highest risk homes are in California (dominated by earthquake and wildfire); Texas, Oklahoma, Kansas, Nebraska (dominated by tornado/hail); along the Mississippi River (dominated by river flooding and earthquake risk); and large Gulf and Atlantic coastal stretches (dominated by hurricane winds and storm surge/riverine flooding).

CoreLogic 2020 Climate Change Catastrophe Report[2]



Catastrophe modeling and property risk analysis are paramount to accurately predicting, down to a parcel and structure(s) level, the damages that could occur. Fiduciaries can select investments and investment courses of action using composite risk scores applied across their portfolio(s) to understand physical risk impacts. With access to new catastrophe modeling and property data, fiduciaries are evolving in the way they select and protect investments, taking into consideration environmental factors that account for today's reality of risk.

With composite risk scores available across the United States, the second step is to get as granular as possible with those assessments.

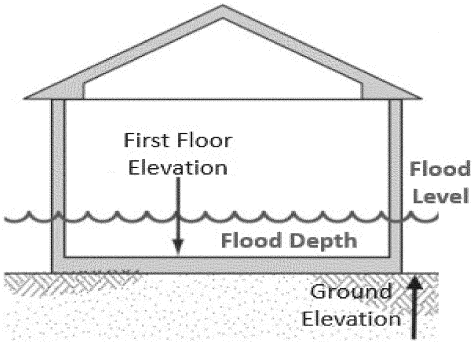
Achieving Granularity

There appears to be a perception within federal agencies that physical risk from climate change is already well understood. We respectfully suggest that the agencies look deeper into the data & analytics, at least regarding reliable property-level physical risk assessments.

To reliably assess physical risk, one must be able to both identify the property itself and identify the specific structure(s) on that property that require separate assessments. This identification requires geospatial/location data that can reliably assess the geographical boundaries of a property and its structure(s), along with rich data describing the attributes of the property's parcel/land and the structure itself. If the underlying location data is not accurate, assessments – such as AAL calculations – will not reflect the true risk to the structure, as exemplified below.

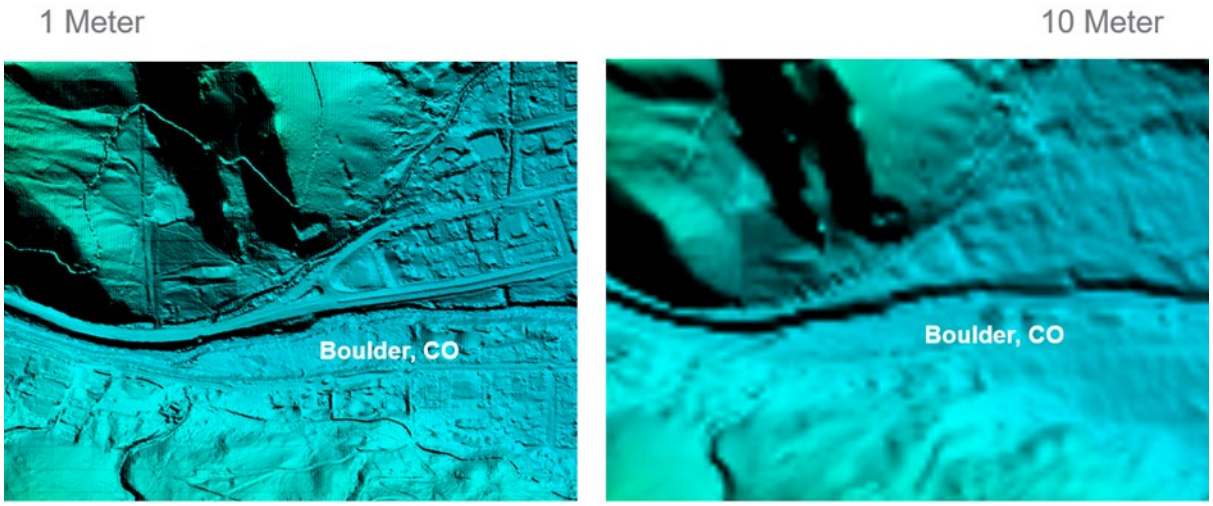
Source: CoreLogic

These reliable assessments involve the use of models that are based on underlying data inputs that reliably determine First Floor Height (FFH) Elevation (relative to sea level and ground level). They also require use of reliable technology innovations: most notably Light Detection and Ranging (LIDAR) technology, which employs an approach called Digital Elevation Monitoring (DEM) – the remote sensing technique used to identify the 3-D footprint of the structure(s), its ground elevation, and height above sea level – as well as the structure's first floor height relative to the ground elevation and sea level, including the number of inches above-or-below ground relative to industry standard safety benchmarks.



Source: CoreLogic

The key to reliability is use of 1-meter resolution DEM, the level of granularity necessary to permit reliable assessment of FFH elevation and related footprint data in any municipality that has relatively large population centers, including exurbs, suburbs, and urban core. Using anything less – such as 10-meter or 30-meter resolution DEM – in densely populated areas will not provide reliably accurate assessments for individual households, as evidenced below.



Source: CoreLogic

Now that we've identified composite risk scores and achieved a structure-specific level of granularity, the next, forward-looking step is to project future risk levels based on expected impacts from climate change.

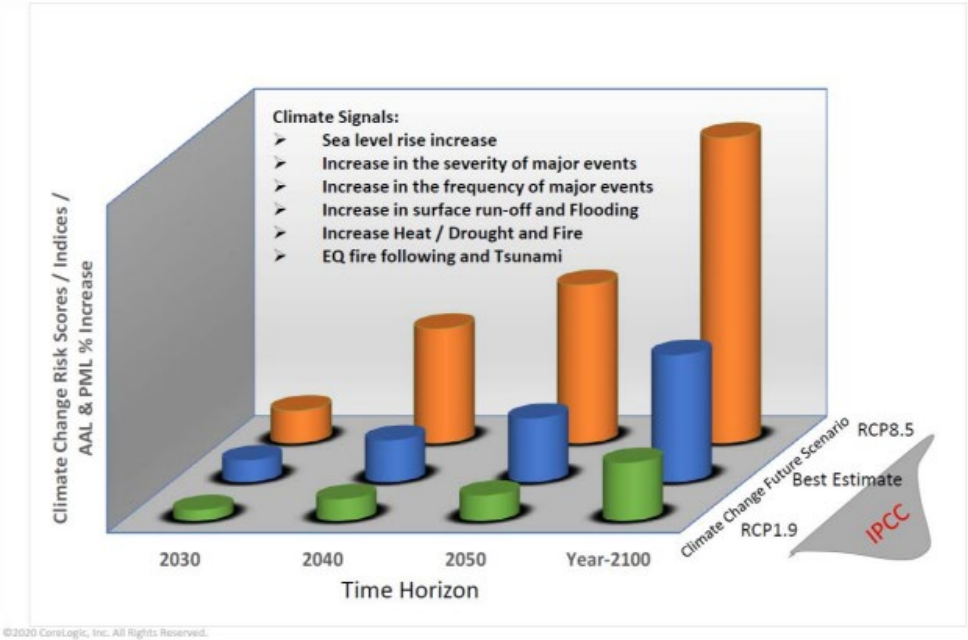
Climate Scenarios and Catastrophe Risk Models

The best way to measure climate-related financial risk is to use industry leading tools that are market-tested in conjunction with data, technology, and internationally recognized climate scenarios to stress test climate / catastrophe risk. CoreLogic recommends using catastrophic risk models informed by the Intergovernmental Panel on Climate Change (IPCC), the leading world body for assessing the latest science related to climate change, its impacts, and potential future risks.[3] Composite risk scores that integrate IPCC climate scenarios with market tested natural hazard modeling will give fiduciaries and EBSA a clearer understanding of the risks that insurers, asset managers, and fiduciaries face from climate change.

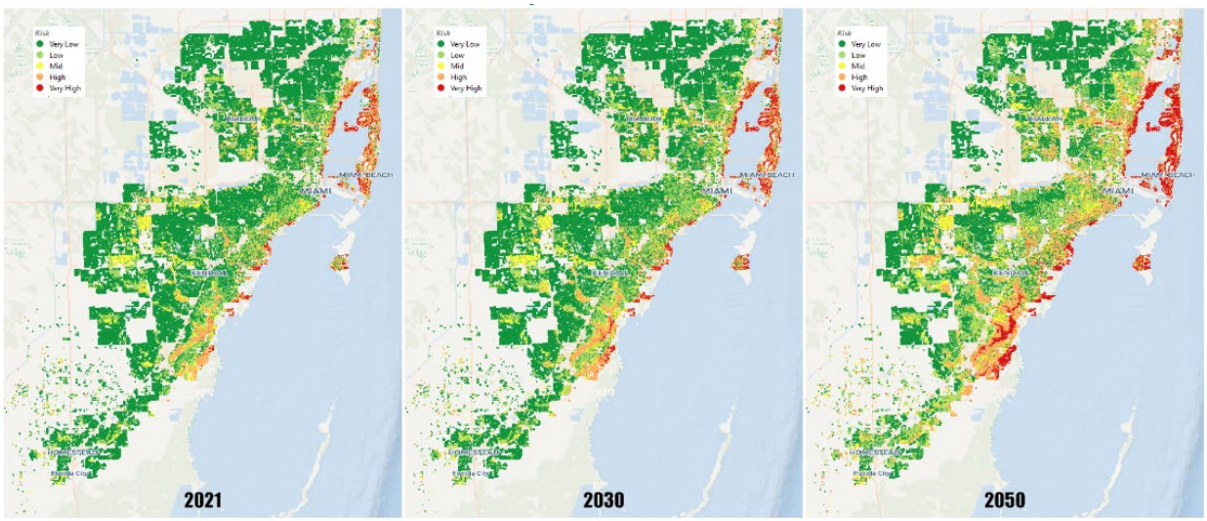
Over the past decade, the IPCC has worked to create Representative Concentration Pathways (RCPs) to model prospective climate futures based on varying projected levels of greenhouse gas concentration in our atmosphere. These four pathways provide insight into potential rises in global temperature alongside a number of additional consequences, such as rise in sea level. The IPCC 6th Assessment Report (due later in 2022) will include five Shared Socioeconomic Pathway (SSPs) scenarios to model prospective climate futures based on varying projected levels of greenhouse gas concentration in our atmosphere.

CoreLogic has taken these IPCC scenarios – which define the severity and frequency distributions of different future climate parameters (e.g. global temperature, sea surface temperature, sea level rise, precipitation, etc.) – and integrated them with our own suite of hazard risk data & high definition catastrophic probabilistic models to produce climate change risk metrics for each RCP scenario down to the individual property level, as exemplified by the case study below on Miami, Florida, where we calculated Average Annual Loss and Probable Maximum Loss estimates across the different IPCC climate change scenarios.

CoreLogic Average Annual Loss and Probable Maximum Loss Estimates across Different Climate Change Scenarios



Climate Change Multi-Peril Risk Index for Every Building in Miami under 2021, 2030, and 2050 Climate Conditions



This figure above shows the multi-peril risk index for every building in Miami under today's climate conditions (left-most figure), as well as the projected conditions in the years 2030

and 2050 (center and right-most figures, respectively). As we move from today's climate conditions to the future projections, more buildings move from green to yellow and from yellow to red as their risk profiles increase due to the effects of climate change.

As mentioned above, the IPCC expects to release an updated assessment report ('Assessment Report 6' or 'AR 6') in the first half of 2022. It is widely expected to be a significant update from the current assessment report (AR 5), which was produced in 2014. In preparation for this update, CoreLogic is readying its platform to incorporate the scenarios from AR 6 as soon as they are available.

EBSA Question

Should EBSA collect data on climate-related financial risk for plans? If so, please specify with as much precision as possible what information EBSA could and should collect, potential sources of such information, as well as how EBSA should collect it.

As discussed, EBSA should collect data on climate-related financial risk, particularly for investment plans collateralized by real property. It should solicit feedback from industry participants on consistent methods to measure climate change in both the physical and the transition vectors. We posit that CoreLogic's Composite Risk Score is an industry-verified example of an efficient, granular, and normalized way to view physical risk.

EBSA Question

Should EBSA use Form 5500 Annual Return/Report ("Form 5500") to collect data on climate-related financial risk to pension plans? Other than the Form 5500, are there other methods of collecting data on climate-related financial risks to plans that EBSA should consider?

Should every asset/loan seeking investment from ERISA-covered plans follow a consistent guide to quantify and report this risk, these metrics can quickly be rolled up at the portfolio level or across any type of investment. Using EBSA Form 5500 will drive transparency across employee benefit plans, and plan administrators will seek similar information across their investments. Given the breadth and depth of the risk, Form 5500 – which has high-level information on the size of the plan and its participants – may be an effective tool of information gathering.

ERISA FIDUCIARY DUTIES

ESG scores are a valuable tool for assessing climate change, but specificity, consistency, and financial impact remain key items of consideration. Rating systems are only so valuable in that they are both comparable across the investment landscape and quantifiable in their economic impact. To this end, both physical risk and transition risk, which are a part of the "E" in ESG can be well articulated. The "S" and the "G" elements are harder to quantify, normalize and translate into economic impact. All investments, regardless of asset class, fixed or variable income and/or capital appreciation potential and varied risk levels carry risks of climate change. A critical step ahead of classification of mitigation measures and before transfer of such risk participant/employee and the insurer/guarantor is the consistent measurement of the risk itself. Once these risks have been identified, pools of asset classes/investments can be created based on climate change risk impact into those facing the brunt of the impact vs. those relatively insulated. Highly-climate-risk-exposed investments could then be mitigated with exposure to "safer" areas.

EBSA Question

Some private sector sources are developing structured ESG research data for evaluating corporate performance. What are the best sources of information for plan fiduciaries to utilize in evaluating such risks with respect to plan investments? Are there difficulties or challenges in obtaining such information or comparing information from different sources? If so, what is the source or sources of those difficulties or challenges, and what are the solutions?

ESG research data, in our experience, is inherently asset class-specific. For example, many commercial vendors provide risk models for a variety of natural hazards that score the probability of damage to properties and quantify the associated reconstruction costs and average annual loss (AAL) to those properties, but with varying levels of accuracy. The presence of industry data standards are instrumental in ensuring that commercial vendors are reporting all applicable property-level and input and output data from their models on an "apples-to-apples" basis. Some asset classes with climate-related financial risk exposure, such as RMBS, enjoy robust industry standards, which allow fiduciary plan researchers to aggregate applicable and consistent data, which they can use to back-test the commercial vendor models themselves, along with other research questions they seek to answer. As such, we recommend that fiduciary plan researchers first focus on their highest priority asset class, ascertain whether a viable industry data standards body exists for said asset class, and then seek out commercial vendors from whom the fiduciary plan researcher can procure historical asset class data (delivered in industry standard data formats), as well as climate models that cater to those asset classes. The fiduciary plan researcher can then iterate accordingly with their next asset class priorities. CoreLogic is engaged in numerous industry data standards efforts and would be happy to engage directly on this topic further and as desired.

FERSA

Audit Programs

Establishing consistent metrics and pushing for transparency aids in the audit process. If a similar toolkit were to be used to measure risk, and a third-party evaluation mechanism is employed, the audit process could simply end up checking adherence to previously set guidelines and for reporting conformity of such information.

Asset Managers

A consistent methodology and tool kit may solve many reporting issues associated with climate-related financial risk both at the portfolio and at the individual security level – by the plan administrator, asset manager and at the corporate investment level. This may apply to both active and passive managers whose portfolios reflect the collective aggregate of climate-related financial risks.

Metrics

While ESG-friendly investments are interesting to many employees for their long-term savings, a wider goal could be to make all options more ESG friendly than before. To that end, greater measurement and transparency of ESG metrics – especially in regard to physical risk – could be a strong start in making investments more ESG-friendly.

MISCELLANEOUS

Coordination with the SEC

Prior to undertaking these efforts, the EBSA should ensure that it is coordinating with the Securities and Exchange Commission (SEC) on aspects related to data collection and general oversight, since the SEC's current proposed rule – *The Enhancement and Standardization of Climate-Related Disclosures for Investors (RIN 3235-AM87)* – would require registrants to provide similar climate-related information in their registration statements and annual reports.[4]

Because these two efforts parallel each other, both the SEC and the EBSA will need to collect and analyze data from overlapping groups of banking entities, investment firms, and other financial service providers. It would befit the two regulators to coordinate their data collection, analysis, and oversight efforts to ensure a 'whole-of-government' approach to assessing climate-related financial risks to our economy.

CONCLUSION

We commend EBSA for assessing climate change's financial impact in long-term investments covered under defined-benefit and defined contribution plans. The actions it takes in requiring standardized disclosure of climate change's impact in Americans' de-facto retirement vehicles and using such factors in its investment analysis will set standards for other organizations to emulate. Investment entities seeking capital and hoping to be a part of such plans will need start to providing climate change metrics and even mitigate their financial impact, enhancing their investment worthiness.

Making climate-related financial risk a key part of risk assessment – and having it be subject to all the considerations of holistic risk under the auspices of ERISA and more widely, in fiduciary responsibilities – would greatly enhance investor trust as well as participation in employees' savings plans, among other benefits. We strongly encourage EBSA coordination with the SEC and the IRS in wider consideration of climate-related financial risk measurement and transparency.

Finally, our team of climate scientists, economists, and public policy experts welcome the opportunity to engage with the EBSA team, at your convenience, to further share our insights into these critical matters of public policy, as well as solution pathways that we feel might position EBSA for successful outcomes.

REFERENCES

[1] As of December 31, 2020, around 64% of MMF repo investments were collateralized by Treasury securities and around 31% were collateralized by government agency securities, including mortgage-back securities (MBS). Under 5% of MMF repos were collateralized by other types of securities, including corporate bonds, equities, and asset-backed securities. Among all MMF types, prime MMFs are the main investors in repos backed by nongovernment securities. https://www.sec.gov/files/mmfs-and-the-repo-market-021721.pdf

[2] 2020 Climate Change Catastrophe Report. CoreLogic. https://www.corelogic.com/wp-content/uploads/sites/4/2021/05/report-2020-climate-change-catastrophe-report.pdf.

[3] Intergovernmental Panel on Climate Change. https://www.ipcc.ch/.

[4] The Enhancement and Standardization of Climate-Related Disclosures for Investors. Proposed Rule. Securities and Exchange Commission. [Release Nos. 33-11042; 34-94478; File No. S7-10-22] RIN 3235-AM87. March 21, 2022. https://www.sec.gov/rules/proposed/2022/33-11042.pdf.