The rise of environmental, social, and governance (ESG) risk factors and green bonds in public finance has produced growing pains regarding labeling and misconceptions about ESG investor motivations. Understanding the current situation's nuance is crucial for avoiding the pitfalls of blanket regulation and accommodating market demand.

WHAT IS ESG?
ESG is an acronym for environmental, social, and governance, which are non-traditional factors that are increasingly relevant in financial analysis. Federal regulation of ESG metrics does not currently exist, including disclosure, qualification, and labeling. Future regulation remains politically uncertain. In the absence of regulation, non-profits and international agencies have released a multitude of standards, qualifications, and frameworks that attempt to provide market standardization. To date, however, no single standard has been universally adopted.

WHAT'S THE TAKEAWAY?
ESG assets under management have grown, particularly those with environmental components.
Political attention to the term ESG may overlook distinctions between climate risks and sustainability goals.
Green bond issuance is growing in both public and private financial sectors, yet label requirements are unstandardized.
Green bonds have a modest pricing advantage in the municipal market that is more evident in the secondary market and influenced by external verification of the label.
The mobilization of using finance to bring about change has expanded from national catastrophes to routine investment practices in the era of ESG. ESG can be considered an outgrowth of the concepts of sustainable investing and socially responsible investing, which aim to create a more holistic financial analysis process. It has also grown to become an umbrella term for additional environmental and social risk factors. The term ESG first appeared in a 2004 United Nations report, but the practice of socially responsible investing can be seen as early as the 1980s.

The environmental component of ESG is currently the most prevalent factor due to its perceived urgency and the value of assets at risk. Increasing demand by corporations and individuals to combat climate change with investing practices has led to the creation of ESG equity funds and green bonds to direct capital towards mitigation efforts. Green bonds are fixed-income debt instruments where proceeds are dedicated to projects that have a positive environmental impact.

THE PREVALENCE OF ESG

ESG-related finance has grown drastically in recent years. As shown in Figure 1, the Sustainable Investment Forum estimates that total U.S. ESG related assets under management reached $7.6 trillion in 2022, up from $2.51 trillion in 2010.

The increasing market demand for ESG investments resulted in notable efforts by credit rating agencies to produce this accompanying data. The “big three” credit rating agencies, S&P, Moody’s, and Fitch, as well as dozens of smaller competitors all currently produce ESG data. The interest by for-profit credit rating agencies to provide ESG data indicates a sustained market demand for the information by investors.

As ESG has gained prevalence in financial markets, two categories of investors have emerged. The first are driven by ethical considerations to advance sustainable investing. The second are investors who include ESG data in their risk analysis process, such as evaluating a city’s chances of flooding before purchasing a municipal bond.

The growth of ESG investing is accompanied by increasing politicization of the term and disagreements on how non-financial factors are prioritized. Several states have passed legislation to limit the consideration of ESG factors in state and local government financial decision-making. By over-politicizing ESG, useful risk mitigation data may be ignored.

ESG REGULATION

ESG regulation varies by country. The United States has no federal ESG regulation, although the Security and Exchange Commission (SEC) asked for public input on climate disclosures in 2021. The European Union has adopted the Sustainable Finance Disclosure Regulation, which requires financial market participants to disclose how sustainability information is used in their investment procedures through enhanced product labeling. Climate-related disclosure is generally voluntary with few mandatory regulations in place.

The lack of regulation of ESG-focused financial products, including green bonds, is due to disagreements on what information and metrics dis-
closures should include, reporting complexity, and political opposition.

**ESG IN PUBLIC FIXED INCOME**

Public fixed income refers to debt issued by governments in the form of bonds. Green bonds are the most prevalent ESG investment vehicle for the fixed-income market. Governments and corporations are the two primary issuers of green bonds. Municipal bonds are issued by state and local governments to fund public infrastructure. Many are tax-exempt. Due to the public nature of these projects, they often align with ESG goals. Their infrastructure focus may also make ESG bond designations easily attainable for municipal issuers.

Global green bond issuance for public debt has steadily increased over the previous five years (see Figure 2), peaking at $187.1 Bn in 2021. Despite that increase, private green bond issuance currently has a larger market share. While still less prominent, Social Bonds, Sustainability Bonds, and Sustainability-Linked Bonds have also grown in the fixed income market.

**Figure 2: Global Public Green Bonds Issued ($Bn)**

Source: Climate Bond Initiative

**GREEN BOND REQUIREMENTS**

To address the increasing issuance of green bonds, two internationally recognized labeling standards have emerged in the fixed income market. The first is the more stringent Climate Bond Standards (CBS), which require third party verification of compliance by an approved vendor. The second labeling standard is the self-certified Green Bond Principles (GBP). Although CBS and GBP are the primary labeling standards, other standards exist, increasing market confusion around the labeling of green bonds. The existence of different standards also adds to the challenge of regulating the green bonds market.

**RISKS AND REWARDS OF GREEN BONDS**

One motivation for debt issuers to pursue a green label is to receive a speculative asset pricing advantage in the form of a lower interest rate. This phenomenon, known as a green bond premium or greenium, is the difference between the green bond’s yield and the yield on an equivalent non-green bond. The increased information disclosure of green bonds minimizes investment risks related to ESG factors. The reduced risk creates a safer investment, which may lower the yield investors require for their capital.

Current academic research shows mixed results on the existence of greeniums as well as the variables that influence their prevalence. The majority of studies find that, on average, the expected green bond premium is positive and statistically significant. Additionally, green bonds that receive third party labeling verification and trade in the secondary market generally experience higher premiums.

The political attention given to ESG policies has impacted state pension systems and municipal bond investors. One study estimated that local governments in Texas will pay an additional $303 to $532 million in interest on $32 billion in borrowing during the first eight months following the passage of one restrictive Texas law.

The appeal of a greenium has introduced the risk of “greenwashing” where bonds will falsely claim...
to be green in order to get an interest rate advantage. The prevalence of greenwashing in the bond market is difficult to quantify, but its existence is generally accepted. Studies have shown that receiving external verification of labels reduces the chances of greenwashing for bonds. The reputational risk to issuers accused of greenwashing further disincentivizes this practice.

**SUSTAINABLE INVESTING AND ESG AS A RISK MITIGATION TOOL**

Investors are attracted to the ESG market for different reasons. Some recognize market and demographic trends and try to incorporate these trends into financial products to attract investments. Others value the risk-mitigation information disclosed in ESG investments, as a way to incorporate transition risk into their investment process. Still other investors are attracted to the ESG market for altruistic motivations related to responsible investing and climate change. The green bond label provides a mechanism to signal to these investors, but it is an imprecise signal. Similarly, the anti-ESG policies enacted in some states contribute additional uncertainty to this market.

The reality of unique investor motivations should inform the creation of future regulation and public perception of ESG. Blanket regulation that treats all ESG investors the same is likely to reduce the chances of greenwashing for bonds. Blanket regulation that inform the creation of future regulation and public perception of ESG. Blanket regulation that treats all ESG investors the same is likely to reduce the chances of greenwashing for bonds. Blanket regulation that inform the creation of future regulation and public perception of ESG. Blanket regulation that treats all ESG investors the same is likely to reduce the chances of greenwashing for bonds. Blanket regulation that inform the creation of future regulation and public perception of ESG. Blanket regulation that treats all ESG investors the same is likely to reduce the chances of greenwashing for bonds. Blanket regulation that inform the creation of future regulation and public perception of ESG. Blanket regulation that treats all ESG investors the same is likely to reduce the chances of greenwashing for bonds.

The views expressed here are those of the author(s) and not necessarily those of the Mosbacher Institute, a center for independent, nonpartisan academic and policy research, nor of the Bush School of Government and Public Service.

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**Noel Nelson** is a financial analyst at USAA in the Chief Investment Office. He earned Master of Financial Management and Bachelor of Business Administration degrees from Texas A&M’s Mays Business School.

**Robert A. Greer** is an associate professor in the Bush School of Government & Public Service at Texas A&M University and a Mosbacher Research Fellow.

**Notes:**

2. 2010-2022. US SIF: Sustainable Investment Forum. The US SIF modified their data collection methodology in 2022, requiring more granular information for inclusion in the data set, which could contribute to that year’s steep decline in ESG assets under management.
10. Ibid.