

## Box 7: A Review of Sustainability Practices and the Adoption of Sustainability Criteria in the Management of Foreign Reserves

**Practices aimed at promoting responsible and sustainable investment have continued to gain acceptance among investors due to their impact on the security and soundness of companies, as well as on the real and financial economy.** According to the Principles for Responsible Investment (PRI), responsible investment involves considering environmental, social, and governance (ESG) factors when making investment decisions, such as in financial analysis, portfolio construction, and influencing companies or assets<sup>1</sup>. Investors' motivations for incorporating such factors may include achieving financial returns, managing risks, generating a positive social impact, and aligning their values with their investments, among others.

**In the case of central banks, interest in considering responsible investment practices in the management of foreign reserves is also growing; however,** the degree of progress in incorporating these practices varies depending on the type of mandate assigned to each institution and across central banks. In this regard, some have integrated sustainability as an additional pillar in their reserve management policy (for example, the central banks of the European System of Central Banks), while others operate under mandates that prioritize criteria such as safety, liquidity, and return (as is the case for Banco de la República). According to the HSBC Reserve Management Trends 2025<sup>2</sup>, 81% of surveyed central banks have incorporated elements of responsible and sustainable investment in their reserves or are considering doing so, and 14 central banks (36% of the sample) include sustainability as a fourth objective in reserve management.

In turn, the current macroeconomic and geopolitical outlook poses challenges for central banks in managing foreign reserves, including their approach to responsible and sustainable investment practices. An increasing number of geopolitical events and conflicts, changes in trade policies, high and persistent levels of global debt, and a growing protectionist sentiment are among the factors that have generated significant uncertainty in the economy and financial markets, affecting long-term growth and inflation prospects. This, in turn, directly influences the investment strategies of central banks and their asset allocation, as they seek investment alternatives to mitigate the exposure to various risks and diversify sources of returns. According to the results of the 2024 Invesco Global Sovereign Asset Management Study, among 57 central banks surveyed, 53% planned to increase their reserves over the next two years, while 52% intended to diversify their investments as a protective measure against risks and potential shocks. This could be reflected in changes in the composition of investments by type of asset and currency<sup>3</sup>. In this regard, the consideration of responsible and sustainable investment practices represents an alternative for central banks, particularly for monitoring and mitigating investment risks. Additionally, as institutions responsible for formulating policies, central banks play a key role in promoting measures that encourage investments and financing flows aligned with sustainability, such as 1) transparency and disclosure policies; 2) risk management and supervisory policies; 3) credit allocation policies; and 4) monetary policies<sup>4</sup>.

1 Principles for Responsible Investment. "Introduction to Responsible Investment," available at: <https://www.unpri.org/download?ac=19157>

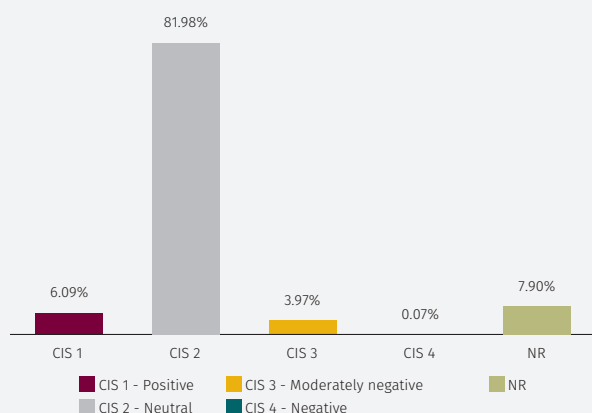
2 "HSBC Reserve Management Trends 2025", available at: <https://www.centralbanking.com/hsbc-reserve-management-trends-2025>

3 Invesco (2024). "Invesco Global Sovereign Asset Management Study.", available at: <https://www.invesco.com/content/dam/invesco/apac/en/pdf/insights/2024/july/invesco-global-sovereign-asset-management-study-2024.pdf>

4 Aligning finance with climate goals. Organization for Economic Co-operation and Development. [https://www.oecd.org/content/dam/oecd/en/publications/reports/2024/12/aligning-finance-with-climate-goals\\_6b70b161/aa7c23b2-en.pdf](https://www.oecd.org/content/dam/oecd/en/publications/reports/2024/12/aligning-finance-with-climate-goals_6b70b161/aa7c23b2-en.pdf)

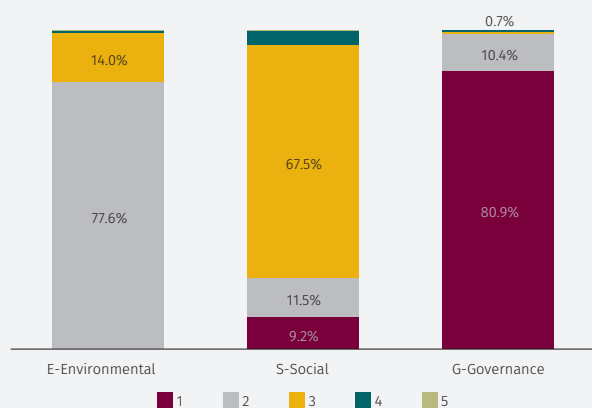
Graph B7.1  
ESG Profile of the Foreign Reserves Portfolio  
as of 30 May 2025

A. Credit Impact Scores (CIS)



NR: refers to issuers for which Moody's have not issued a credit rating yet.

B. Issuer Profile Scores – E, S, G Factors  
(percentage market value of the actively managed portfolio)



Source: Authors' calculations based on ESG data from Moody's Analytics, Inc.

In its particular case, **Banco de la República recognizes the importance of ESG factors as criteria associated with relevant sources of risk and seeks to become familiar with the best practices of other central banks in their role as manager of foreign reserves.** The above is always carried out in accordance with the legal mandate granted to Banco de la República and the safety, liquidity, and return criteria that govern foreign reserve management. Accordingly, in 2023, the International Investments Department created a working group to deepen sustainability-related issues within the Department and to promote coordinated initiatives aimed at advancing the incorporation of ESG factors into risk monitoring and investment oversight processes for foreign reserves. The primary responsibilities of the group include (i) updating the ESG rating profile of the investment portfolio and (ii) exploring sustainability metrics that could be implemented in the portfolio, taking best practices from other central banks as a reference.

**Regarding the ESG rating profile of the foreign reserve portfolio managed by Banco de la República, it remains high and stable across environmental, social, and governance factors.** Periodically, the Department evaluates the issuers in the portfolio using the ESG Score methodology employed by *Banco de la República* in 2023, based on information from Moody's Analytics, Inc. The methodology establishes a Credit Impact Score (CIS) on a scale from 1 to 5, where CIS-1 indicates that ESG factors have a positive influence on the credit profile, and CIS-5 indicates a negative impact of ESG attributes that may affect the credit rating. As of 30 May 2025, 88% of issuers in the foreign reserve portfolios fall within the CIS-1 and CIS-2 categories, indicating that the investment portfolio has a high ESG rating profile. For issuers in categories CIS-3 and CIS-4, the Department continuously monitors their evolution, while the portfolio remains free of issuers in CIS-5 or with a "Highly negative" rating (see Graph B7.1). In factor-based monitoring, 77.6% of the portfolio holds a neutral rating for the environmental factor, 67.5% receives a rating of 3 for the social factor, 81% is rated positive for the governance factor. These results indicate a strong ESG profile for the portfolio, suggesting low exposure to ESG-related risks.

**Regarding other specialized metrics, the literature identifies two approaches: forward-looking and backward-looking.** Backward-looking metrics are the most widely used, as they allow for the assessment of climate impact at the security or portfolio level and, therefore, contribute to measuring progress toward net-zero targets. Table B7.1 presents the metrics recommended for measuring transition risk in accordance with the Task Force on Climate-related Financial Disclosures (TCFD) and the Network for Greening the Financial System (NGFS). Total Carbon Emissions (TCE) measures the total emissions attributable to a portfolio, therefore providing a clear indication of its overall climate impact. Other measures, such as carbon footprint (CF), weighted average carbon intensity, and carbon intensity, are also highly useful, as they allow for comparisons across different loan portfolios. Taken together, these indicators provide a deeper understanding of a portfolio's exposure to transition risk, consistent with NGFS recommendations<sup>5</sup>.

On the other hand, understanding future trajectories toward net zero is also essential, given the growing interest in transition plans and the assessment of physical and transition risks. In this regard, forward-looking metrics are gaining relevance, and some that have been under development include carbon transition score, carbon

5 NGFS (2024). "Decarbonization Strategies for Corporate Portfolios of Central Banks". *NGFS Report*, available at: [https://www.ngfs.net/system/files/import/ngfs/media/2024/05/16/ngfs\\_technical\\_document\\_on\\_decarbonisation\\_strategies\\_for\\_corporate\\_portfolios\\_of\\_central\\_banks\\_0.pdf](https://www.ngfs.net/system/files/import/ngfs/media/2024/05/16/ngfs_technical_document_on_decarbonisation_strategies_for_corporate_portfolios_of_central_banks_0.pdf)

**Table B7.1**  
**Metrics for Measuring Transition Risk**

Backward-looking metrics		Forward-looking metrics	
Total carbon emissions	Absolute greenhouse gas (GHG) emissions financed by a portfolio, measured in tons of CO <sub>2</sub> equivalent.	Carbon transition score	Assess companies as leaders or laggards in relation to the risks and opportunities arising from the transition to a low-carbon economy, using a categorical classification or a score (0–1).
Carbon footprint	Total carbon emissions of a portfolio, normalized by the portfolio's market value, measured in tons of CO <sub>2</sub> equivalent per million dollars invested.	Carbon budget	Estimates how much a company can emit while remaining within the limits required to meet a 1.5 °C or 2 °C warming scenario by 2100.
Weighted average of carbon intensity	Average volume of carbon emissions, expressed in tons of CO <sub>2</sub> equivalent per million dollars of revenue, weighted by the share of each investment in the portfolio.	Climate value at risk	Measures the percentage change in a company's market value as a result of the potential effects of climate change.
Carbon intensity	Volume of carbon emissions, expressed in tons of CO <sub>2</sub> equivalent per million dollars of revenue.	Implied temperature rise	Indicates the increase in global temperature, in degrees Celsius (°C), that would occur at the beginning of the next century if the entire economy behaved similarly to the company in terms of exceeding or failing to meet the carbon budget required to keep global temperatures below 2 °C.

Source: Network for Greening the Financial System.

budget, climate value at risk, and implied temperature rise. In practical terms, these indicators enable the analysis of the extent to which a company is aligned, or expected to align, with a net-zero trajectory. Despite their growing use, the availability of comparable forward-looking and backward-looking data remains limited, which hinders their implementation. However, investors require a consistent manner to assess exposure to transition risk to identify the winners and losers in the transition to net-zero emissions.

**Some central banks, in their role as investors in capital markets, have demonstrated their commitment to contributing to the transition toward a low-carbon economy and aligning their portfolios with climate objectives, and have therefore been considering and implementing carbon emissions-related metrics.** Accordingly, there are cases in which metrics recommended by institutions such as the TCFD and the NGFS have been incorporated into central bank practices, such as the Eurosystem<sup>6</sup>, one of the pioneers in this area. Since 2023, the European Central Bank (ECB) has disclosed financial information on climate-related aspects, including data on carbon footprint and exposure to climate risks for the Eurosystem's loan portfolios related to monetary policy, the ECB's foreign reserves, and the ECB's non-monetary policy loan portfolios<sup>7</sup>. Regarding the ECB's foreign reserves, they reached a market value equivalent to EUR 103.1 trillion as of the end of 2024, comprising foreign currency portfolios (the U.S. dollar, yen, and renminbi), physical gold, and special drawing rights (SDRs)<sup>8</sup>. The metrics included in the information disclosed by the ECB are total carbon emissions, carbon footprint, weighted average carbon intensity, and carbon intensity for its holdings of sovereign, supranational, and agency bonds (with a nominal value equivalent to EUR 40.0 trillion), while cash, physical gold, and SDRs are excluded due to the lack of methodological guidelines for their treatment. Although the ECB does not define emission-reduction targets for its foreign reserves, the calculation and monitoring of these metrics promote transparency regarding the climate impact of its portfolios and their exposure to

<sup>6</sup> The Eurosystem comprises the European Central Bank and the national central banks of the European Union member states that have adopted the euro.

<sup>7</sup> The ECB's non-monetary policy loan portfolios include pension funds for its employees and its own investment loan portfolio.

<sup>8</sup> SDRs are a foreign reserve assets created by the IMF, whose value is based on a basket of five currencies: the U.S. dollar, the euro, the Chinese renminbi, Japanese yen, and the sterling pound.

climate-related risks, and support the net-zero targets and the transition to a low-carbon economy in the European Union.

*Banco de la República* closely monitors developments at other central banks to stay up to date on international best practices. The approach adopted by *Banrep* is primarily focused on monitoring the impact of ESG factors on the credit profile of investments, without considering them as an additional criterion within the institutional mandate. This is because the direct integration of these factors into the investment process presents several challenges, including limited standardization of available data and taxonomies, the market size and depth, and the consistency of these practices with the investment mandate granted. However, *Banrep* is exploring various complementary measures to the ESG profile already calculated, which would enable it to further incorporate ESG factors into the risk management processes of foreign reserve investments.