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The Catalytic Impact of Resilience and Sustainability Facility Arrangements

Y. Diallo, P. Escalante, L. Kaltani, T. Kapan, F. Langowski, and D. Nyberg

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The Catalytic Impact of Resilience and Sustainability Facility Arrangements

Prepared by Y. Diallo, P. Escalante, L. Kaltani, T. Kapan, F. Langowski and D. Nyberg*

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ABSTRACT: The Resilience and Sustainability Facility (RSF), which was added to the IMF's lending toolkit in 2022, provides affordable longer-term financing to support countries undertaking macrocritical reforms to reduce risks to prospective BoP stability emanating from extreme weather events and pandemics. This paper draws early lessons from RSF arrangements by exploring whether they have been able to meet one of their core objectives, namely catalyzing financing from other sources. A multipronged approach is used consisting of a survey of country teams, an econometric study, and analysis of non-traditional data. According to a survey of IMF country teams most countries with RSF arrangements received climate finance, mainly from synergies with public sources. The econometric analysis shows that approval of an RSF is associated with increased MDB climate finance and Official Development Assistance (ODA) in low-income countries, thus strengthening the RSF's link to BoP stability. Non-traditional data drawing from news media and labor market developments point to potential higher financing in the future.

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IMF WORKING PAPERS

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Contents

Glossary

BoP	Balance of Payments
CD	Capacity Development
CF	Credit Facility
CPD	Climate Policy Diagnostic
C-PIMA	Climate Public Investment Management Assessment
EIB	European Investment Bank
EMDEs	Emerging Market and Developing Economies
EMs	Emerging Markets
FCL	Flexible Credit Line
FCS	Fragile and Conflicted-affected State(s)
FDI	Foreign Direct Investment
GCF	Green Climate Fund
GRA	General Resources Account
LICs	Low-Income Countries
MDBs	Multilateral Development Banks
MFIs	Multilateral Financial Institutions
NDC	Nationally Determined Contribution
ND-GAIN	Notre Dame Global Adaptation Initiative
ODA	Official Development Assistance
PEFA	Public Expenditure Financial Accountability
PFM	Public Financial Management
PIM	Public Investment Management
PLL	Precautionary Liquidity Line
PPF	Project Preparation Facility
PPP	Public-Private Partnership
PRGT	Poverty Reduction and Growth Trust
PSM	Propensity Score Matching
RM	Reform Measure
RSF	Resilience and Sustainability Facility
RST	Resilience and Sustainability Trust
SBA	Stand-By Arrangement
SDS	Small Developing State(s)

TA	Technical Assistance
UCT	Upper Credit Tranche
UNFCCC	United Nations Framework Convention for Climate Change

Executive Summary

The Resilience and Sustainability Trust (RST) was approved by the IMF's Executive Board in April 2022 and became operational in October 2022. RST lending through RSF arrangements provides affordable longer-term financing to support countries undertaking macrocritical reforms to reduce risks to their prospective BoP stability emanating from extreme weather events and pandemics.[1] One core objective of an RSF arrangement is to shape the conditions which unlock additional financing from multilateral development banks (MDBs), bilateral donors, and private investors. This paper uses a multipronged approach to draw early lessons on the extent to which RSF arrangements catalyze finance through: (i) an IMF country team survey; (ii) an econometric study; and (iii) an analysis of non-traditional data. This complementary approach is intended to overcome some of the challenges related to the still limited period of RST operations and difficulties identifying causality, while also pointing to areas for future research as a larger number of RSF arrangements come to completion. Drawing on these analytical approaches, the paper offers early evidence of the link between RSF arrangements and other finance, thus strenghtening the RSF's link to BoP stability.

According to a survey of IMF country teams, countries with RSF arrangements received a median value of climate finance of around 0.5 percent of GDP between 2023-2024 with the majority being from public sources. The survey indicates that countries that held a climate finance roundtable, convened by the IMF, received slightly higher median climate finance, compared to those that did not. The survey also points to the need to identify investable projects (including public private partnerships), improve data provision, and strengthen the enabling frameworks, such as the regulatory and legal frameworks, to foster private and official finance. Technical assistance (TA) from development partners and macrostructural reforms under the accompanying upper credit tranche (UCT)-quality IMF-supported program can play an important role in addressing these gaps.

The econometric study finds that countries with an RSF arrangement received higher climate finance from MDBs compared to non-RSF program countries. These results hold when considering different subsamples of Poverty Reduction and Growth Trust (PRGT) and General Resource Account (GRA) countries. PRGT-eligible countries with RSF arrangements also received higher Official Development Assistance (ODA) commitments.

Analysis of non-traditional data allows for identifying possible early implementation effects that may not yet be reflected in conventional metrics but that could be lead indicators of additional climate financing in the future. Specifically, there seems to have been increased media coverage of climate finance-related topics following approvals of RSF arrangements. Labor market indicators show an association between RSF arrangements and green job creation.

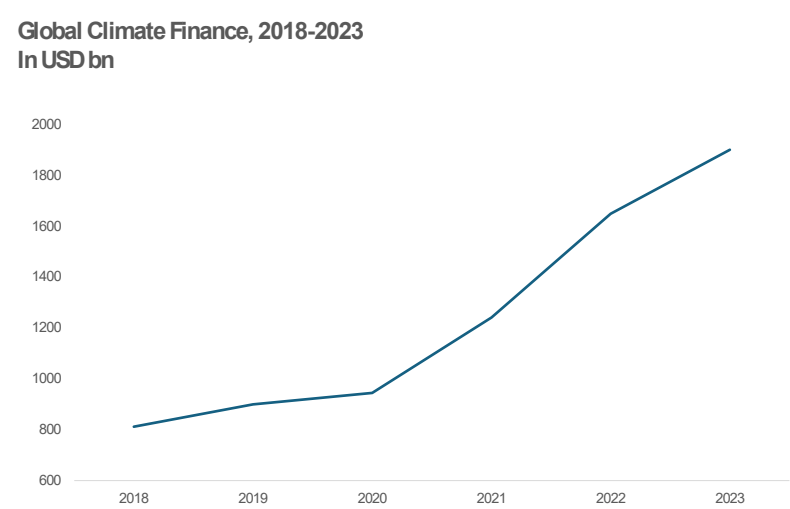
Taken together, the above approaches point to early findings of a potential enabling environment created in the context of RSF arrangements in reducing countries' risks to prospective BoP stability. While RSF arrangements appear to have been associated mainly with official finance, increased private sector participation is critical to meet significant longer-term climate investment needs. In this context, enhancing the enabling investment environment related to data and monitoring, developing new financial instruments, regulation, and bankable projects, possibly supported by TA, is critical to scaling up private sector finance. Building on this early assessment, the paper points to several future directions of research once additional data are available and as more RSF arrangements come to completion.

[1] See 2022 Proposal to Establish a Resilience and Sustainability Trust and 2024 Interim Review of the Resilience and Sustainability Trust and Review of Adequacy of Resources.

Context

In recent years, global climate finance (both private and public) has grown significantly. Annual flows more than doubled between 2018 and 2023, driven by increased investments in sectors like electric vehicles and renewable energy (see Figure 1). This growth has been supported by international agreements such as the Paris Agreement, the rise of blended finance mechanisms, and greater private sector engagement in climate-related investments. However, despite this progress, available climate finance remains well below the needs of developing countries estimated at up to USD 7 trillion cumulatively until 2030 by the United Nations Framework Convention on Climate Change (UNFCCC) Standing Committee on Finance.[2]

Figure 1. Global Climate Finance, Public and Private



Source: Climate Policy Initiative, Global Landscape of Climate Finance 2025 - CPI

Private climate finance is also on an increasing trend, but its volume is lagging behind official finance.[3] Emerging markets and developing economies (EMDEs) in particular find it challenging to attract private climate finance due to structural issues such as unattractive risk-return profiles, the ease of doing business, investors' fiscal sustainability concerns and lack of investable projects (Chen et al., forthcoming).

The RST was established in 2022 to provide policy support and longer-term financing to help member countries enhance economic resilience and sustainability and reduce risks to countries' prospective BoP stability, emanating from extreme weather events and pandemics. The IMF's Executive Board approved the establishment of the RST in April 2022, and the RST became operational in October 2022. The RST complements the Fund's existing lending toolkit by providing longer-term, affordable financing to members to help them address longer-term structural challenges, including from climate-induced shocks and pandemic preparedness. As of end-November 2025, 26 RSF arrangements had been approved (see Figure 2), spanning a broad group of member countries – PRGT-eligible, Fragile and Conflict-afflicted States (FCS), Small Developing States (SDS) as well as middle-income countries which are not PRGT-eligible (Figure 3).[4]

[2] See UNFCCC Standing Committee on Finance: New collective quantified goal on climate finance.

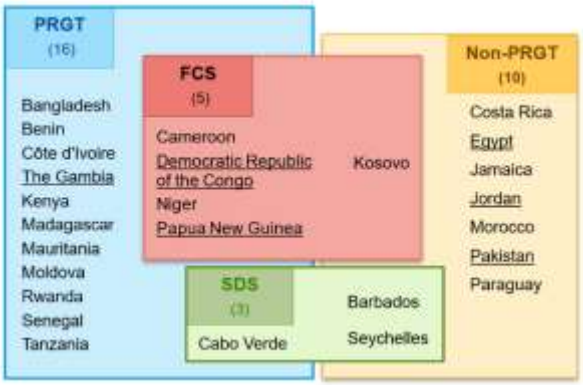
[3] Private climate finance refers to funding from non-governmental sources—such as banks, institutional investors, corporations, and foundations—intended to support projects, programs, or initiatives that mitigate greenhouse gas emissions and/or enhance climate resilience, and which can be measured or tracked according to recognized criteria. See IMF (2023) for a discussion of private finance flows.

[4] RSF arrangements approved after end-November 2024 are not included in the analysis of this paper.

Figure 2. RSF Eligibility and Approved Arrangements

As of November 2025

Figure 3. RSF Country Groups



As of November 2025[5]

Note: Underlined RSF arrangements were approved after November 2024 and are not included in the analysis of this paper.

As part of the RST's goal of supporting prospective BoP stability – defined as the balance of a country's inflows and outflows of international monetary transactions during a specified period – and reducing macro-critical risks, RSF arrangements are intended to help catalyze public and private finance**.** The financing provided by RSF arrangements is relatively small compared to countries' investment needs for eligible structural challenges. Catalyzing financing is therefore essential to support prospective BoP stability, and RSF operations and reforms can contribute to this objective. However, given the short history of the Trust, studying the linkage between the RSF and synergies with other financing and identifying any causal relationship is challenging. First, the number of RSF arrangements, and especially the number of completed ones, is limited and the post-RSF period is relatively short, so working with annual data poses challenges, especially given lags in official data reporting. Second, there is limited cross-country data on climate finance flows in general, and available data is often not directly comparable due to differences in definitions, divergent reporting standards, and gaps in coverage.[6] This applies in particular to private flows, which are often not labelled explicitly (Chen et al., forthcoming). Third, RSF arrangements may only have a delayed catalytic impact on climate finance via the staggered reforms that they help implement and the associated financing they provide and can therefore take time to have an impact. Within these constraints, this paper follows a multipronged approach to identify any early insights on other financing and other 'enablers' that can facilitate climate financing in the future. First, the paper uses a survey of IMF teams working on countries with RSF arrangements. Second, an econometric analysis explores the association between RSF arrangements and various types of financial flows. Third, the paper uses non-traditional data that do not suffer from the same delays as official data and which can point to other enabling effects of RSF arrangements.

[5] Countries are classified according to the 2024 Staff Guidance note on the IMF's engagement with small developing states (SDS) and as fragile and conflict-affected (FCS) according to the FY25 list (https://www.imf.org/en/-/media/files/publications/pp/2023/english/ppea2023010-s003.pdf).

[6] See Jachnik et al (2019) for a discussion of efforts in tracking climate finance flows. See also Gemayel et al (2025) on climate finance challenges in Sub-Saharan Africa.

Country Team Survey Results

In October 2024 a survey was shared with IMF teams working on countries that at the time had an ongoing, or completed, RSF arrangement. The objective was to assess the arrangement's actual and potential impact on climate finance both from private and public sources, as well as to identify structural impediments and areas of opportunity for future climate financing.[7] The survey results provide descriptive, stylized facts intended to offer initial insights into the potential catalytic role of RSF arrangements. To the best of our knowledge, this is the most comprehensive survey conducted to date which adds to our knowledge base on the experience of member countries in IMF climate policy lending. Its findings, however, do not imply causal relationships due to the inherent selection bias of focusing exclusively on countries with RSF arrangements, and they may also be influenced by concurrent broader reform efforts, pre-existing policy momentum, and data availability.[8]

The first part of the survey focused on information on the amount of public and private climate finance that countries received following the approval of the RSF arrangement, both committed and disbursed. In this context, an additional question inquired about the effectiveness of the climate finance roundtables, organized by IMF staff at the request of the authorities, in catalyzing climate finance.[9] The survey also asked about the types of finance instruments that have been developed or were under consideration, such as green bonds, climate insurance schemes, etc. to facilitate the flow of climate finance. The second part of the survey focused on the main impediments that may be holding back additional climate investments, such as climate-related regulation, data, and availability of investable projects.[10] All 20 teams working on countries with RSF arrangements approved by the IMF's Executive Board at the time of survey roll-out provided responses.[11]

RSF and the Flow of Climate Finance

Based on the country team survey, countries with active RSF arrangements received median climate finance of 0.5 percent of GDP between 2023-2024, with notable variation between countries (see Annex Table A.12 for climate finance by country). These figures include data from all 20 countries in the survey, of which 15 provided quantified (non-zero) answers. The survey also asked for reported figures to be broken down by broad categories of public and private climate finance, where the public finance category includes multilateral development banks, multilateral financial institutions (MFIs) and bilateral donors. The survey results indicate that most climate finance to RSF countries was from public sources, while the limited available data suggests

[7] For a glossary and definitions of climate finance indicators, please see: Glossary | Macroeconomic Climate Indicators Dashboard.

[8] The survey results only allow comparisons between the 20 RSF countries for the post-RSF period. As such, they are subject to the selection bias of countries having been approved for an RSF which may be correlated with factors such as pre-existing climate reforms, institutional strength or other donor-supported programs. The econometric analysis, which follows this section, attempts to address these limitations.

[9] See also "Catalyzing Financing for Climate Resilience" by Prasad and Kapan (forthcoming).

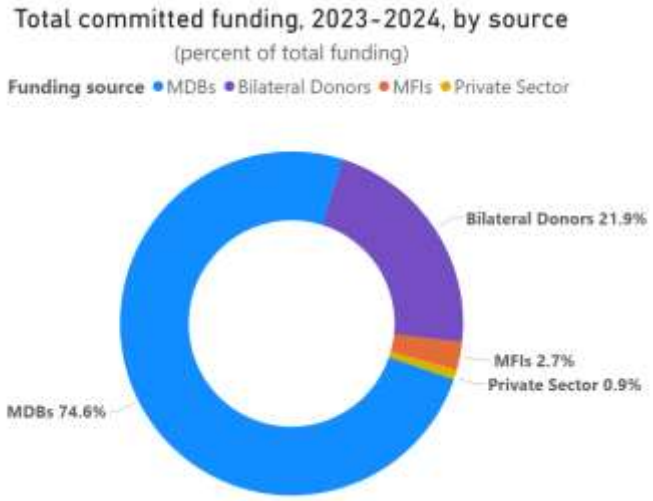
[10] The 13-question survey is structured as follows: (i) a table with a breakdown of annual climate finance commitments and disbursements; (ii) seven qualitative yes/no questions on climate finance instruments, public private partnerships, climate finance roundtables, coordination and monitoring, CD and TA; (iii) four qualitative questions with subjective ratings related to the catalytic potential of RSF reform measures, the potential impact of RSF features in attracting official or private climate finance, impediments to mobilizing climate finance; and finally (iv) an open-ended space for recording additional comments or clarifications to survey responses.

[11] The IMF Executive Board has approved six RSF arrangements since the survey rollout (Board approval date in brackets): Papua New Guinea (December 2024); Democratic Republic of Congo (January 2025); Egypt (March 2025); Pakistan (May 2025); the Gambia (June 2025); and Jordan (June 2025). These are not included in the analysis of this paper.

that the share of private climate finance is small. The responses show that MDBs committed around ¾ of the total funding, bilateral institutions committed 22 percent, while the private sector share so far was limited with less than one percent of the total financing received (see Figure 4).[12]

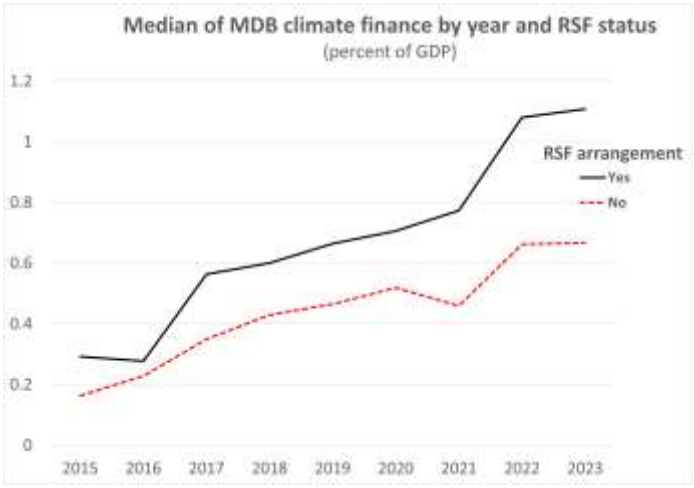
The results from the country team survey complement existing data on overall climate finance. Sources of climate finance have different definitions and time coverage, so numbers are not directly comparable, but they are still informative about trends. Figure 5 suggests that climate finance provided by MDBs to RST-eligible countries has been on an upward trend since 2015 (consistent with institutional climate finance commitments), with an overall median of 0.8 percent of GDP in 2023.[13] It also shows that countries with RSF arrangements received higher climate finance flows relative to those without even before the introduction of the RSF, which may be due to country characteristics such as capacity and willingness to implement climate reforms. In the econometric analysis that follows below we formally analyze whether the apparent faster increase in MDB climate finance is due to the RSF arrangement while correcting for potential selection bias due to differences within the group of RST-eligible countries.

Figure 4. Sources of Additional Climate Finance during an RSF Arrangement



(Survey Question: Climate-budget support and other financing. Please complete the table below with the amount of climate financing from different sources that your country has received or will receive following the approval of the RSF program.)

Figure 5. MDB Climate Finance



Source: 2023 Joint Report on Multilateral Development Banks' Climate Finance.

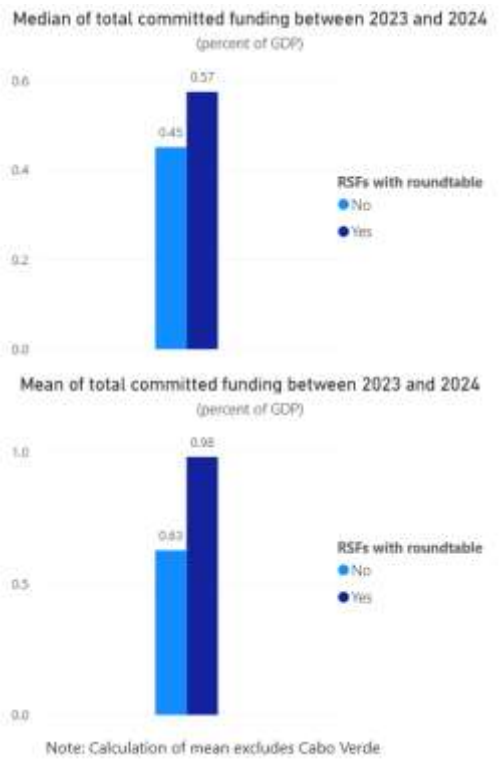
[12] Note that these numbers likely underestimate total financing received since the survey only provides partial information. Country teams and authorities typically do not have a systematic way of monitoring all climate investments in a country, especially investments from the private sector.

[13] The climate finance from MDBs refers to total climate finance received by RST-eligible countries up to 2023, with data sorted based on whether countries had an ongoing, or completed, RSF at the time of survey rollout. The data are not directly comparable to the country team survey which asks about climate finance directly related to the RSF.

In the context of RSF arrangements, climate finance roundtables have been held in half of the RSF countries to facilitate and coordinate climate finance. While the roundtables are not part of the official RSF arrangement, the IMF helped national authorities in 10 RSF countries[14] to convene these roundtables in close partnership with major stakeholders, including the World Bank and regional MDBs. These roundtables serve as a unifying umbrella for discussion and collaboration among policymakers, international organizations, and the private sector. The goal of the roundtables is to understand the main barriers to climate finance that the country is facing and identify solutions, including through RSF-complementary policy actions, capacity development (CD), and programmatic approaches for crowding in additional financing for the authorities' climate agenda.

The survey results show that RSF countries which held climate finance roundtables received relatively more financing compared to other RSF countries. In the period 2023-24, countries with climate finance roundtables and an active RSF received median climate finance commitments equivalent to 0.6 percent of GDP, compared to a median amount of 0.5 percent of GDP for countries without such roundtables (see Figure 6)[15].

Figure 6. Climate Finance Roundtables



An essential feature of the roundtables for supporting climate finance has been their role in enhancing coordination among various stakeholders to achieve scale. With the substantial climate financing needs of EMDEs exceeding the capacity of any single institution, coordination among governments, international financial institutions, and development partners is critical to mobilizing climate finance at the needed scale. Additionally, as discussed below, lack of targeted climate policies and an enabling environment for climate investments were cited as major impediments to climate finance by most country teams in the survey. Government action across multiple fronts—including legal, regulatory, and institutional — is needed to address these impediments, which requires a coordinated effort from various government agencies. Climate finance roundtables have been instrumental in bringing together both government and external stakeholders, helping them to better coordinate their efforts. Finally, the lack of a pipeline of bankable climate projects is the most frequently cited impediment to scaling up climate finance in the survey. Almost all roundtables to date have also identified project pipelines as a major constraint. Through the collaboration following these roundtables, country authorities are working with development partners to establish Project Preparation Facilities (PPFs) to develop a pipeline of climate projects. These PPFs lay the groundwork for developing climate projects, which provide opportunities for development partners to scale up their support (see also Prasad and Kapan (forthcoming)). As expressed in several joint press releases, partners have increased their financial support

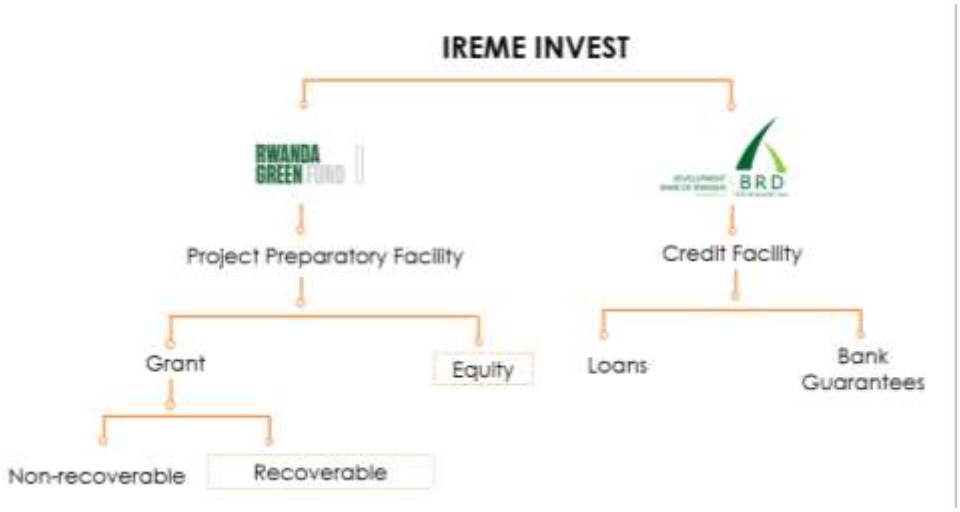
[14] As of end-2024.

[15] Cabo Verde is excluded from the chart as an outlier. As a small island country, exceptionally large financing (Euro 300 million) resulted in the equivalent amount of 12.4 percent of GDP in 2024.

following roundtables.[16,17] Box 1 discusses Rwanda's experience with raising climate funding, including through its climate finance roundtable.

Box 1: Rwanda's experience raising climate finance

Rwanda has adopted a new programmatic approach to supporting climate investments as an outcome of the coordination through the climate finance roundtable co-convened by the Rwandan authorities and the IMF in the context of the RSF arrangement. The authorities are supporting the scaling up of climate finance through their green investment facility, Ireme Invest, which was announced in late 2022 during COP27. Ireme Invest consists of a Project Preparation Facility (PPF) and a Credit Facility (CF) providing blended finance and serves as an example of a programmatic approach to supporting climate investments. The PPF arm provides grants to private investors to fund enabling activities at the early stages of a project, such as feasibility studies. The CF arm provides concessional loans and credit guarantees to investors. Accessing concessional loans from the CF requires self-investment from the project investors, which creates a direct catalyzing mechanism for private sector investments.



Source: Rwanda Green Fund

Ireme Invest has started investing in smart mobility, clean energy, climate-smart agriculture, and other sustainability-focused sectors. As of mid-2025, the CF arm has approved loans totaling over USD 22 million, which will facilitate total investments of about USD 100 million. By end-2025, the CF was expected to approve additional loans totaling around USD 40 million, which will facilitate additional total investments of close to USD 60 million. Ireme Invest supports businesses of various sizes, which mostly mobilize domestic financial resources for their investments.

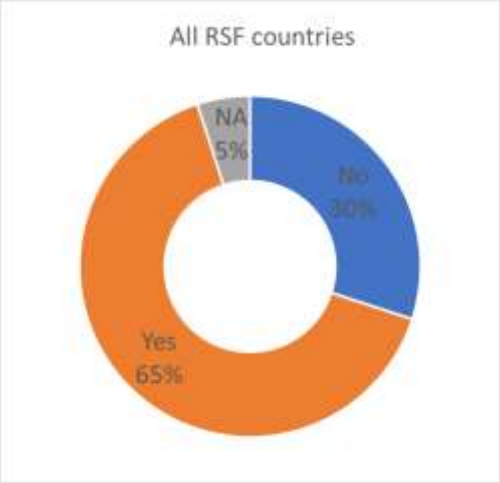
The RSF arrangement has been catalytic in mobilizing additional budget support from the international development partners and scaling up the resources of Ireme Invest. Following the enhanced collaboration with development partners that was initiated with the climate finance roundtable, Rwanda received USD 100 million of budget financing from the Agence Française de Développement and the Italian Cooperation system, with support from Cassa Depositi e Prestiti, as well as a USD 100 million low-cost loan from the European Investment Bank (EIB) to support Ireme Invest. Additionally, the government of Rwanda also announced its plan to contribute USD 40 million as equity capital to Rwanda Development Bank to support Ireme Invest's CF.

[16] See the Rwanda and Côte d'Ivoire press releases.

[17] Climate finance roundtables are held in RSF countries where local authorities express strong interest in hosting a roundtable to bring together various stakeholders. Countries with pre-existing policy momentum or with stronger institutions and higher capacity may be more likely to express strong interest in hosting a roundtable. Accordingly, the relatively higher financing received by RSF countries which held a roundtable compared to other RSF countries should be interpreted with caution.

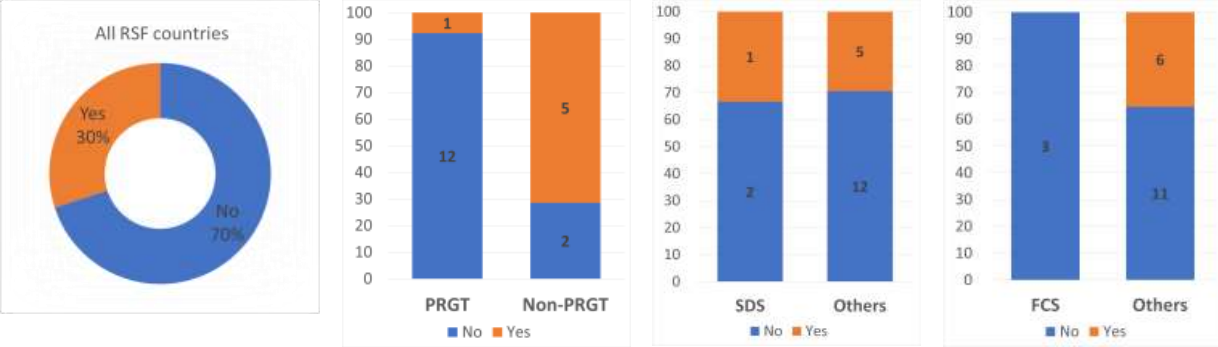
Most RSF countries are developing innovative finance instruments to scale up climate finance (65 percent; see Figure 7). This includes green bonds, climate insurance schemes, sustainability-linked bonds, disaster funds, sustainable loans, and debt for climate conversions. Using innovative sources of finance for the longer-term structural reforms under the RSF will be critical to meet large investment needs (see also the discussion in IMF (2023)).

Figure 7. Climate Finance Instruments (Percent)



(Survey Question: Following the RSF arrangement, are any climate finance instruments being developed or issued?)

Figure 8. Monitoring of Catalytic Impact (in percent; number of countries)



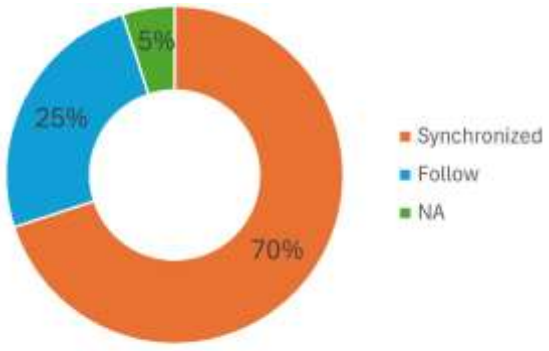
(Survey Questio: Are there specific variables that you monitor to assess the catalytic impact of the RSF in your country?)

The survey responses indicate that only 30 percent of the RSF country teams monitor specific indicators of climate finance. This suggests that the data on financing reported in the survey likely suffer from significant gaps and potential underreporting. Notably, monitoring of the catalytic impact of RSF arrangements is less common among PRGT-eligible countries and FCS (see Figure 8), and in the survey the five country teams that did not provide quantified (non-zero) answers are PRGT-eligible countries (see Annex Table A.12). Because the monitoring gap is concentrated in these groups, our comparative analysis is likely biased downwards, as empty entries or "NA" are recorded as zero in the dataset.[18] Relatedly, climate finance coordination units were not established in any of the FCS, possibly reflecting capacity constraints (Figure 9). These results suggest a role for setting up monitoring within designated institutions, possibly supported by TA drawing on best practices in high-capacity RSF countries to reduce the monitoring gap. Encouragingly, almost all country teams report that policies under the RSF are coordinated (i.e. "synchronized", "follow") with overall national climate policies and objectives (see Figure 10). However, this makes it more challenging to isolate the direct effect of the RSF as observed outcomes may also reflect pre-existing reforms, institutional strength, or parallel donor programs which would have made approval of an RSF more likely.

Figure 9. Coordination Units (in percent; Number of countries)

(Survey Question: Did the RSF program support the creation of climate finance coordination units within your government?)

Figure 10. RSF and National Climate Policies

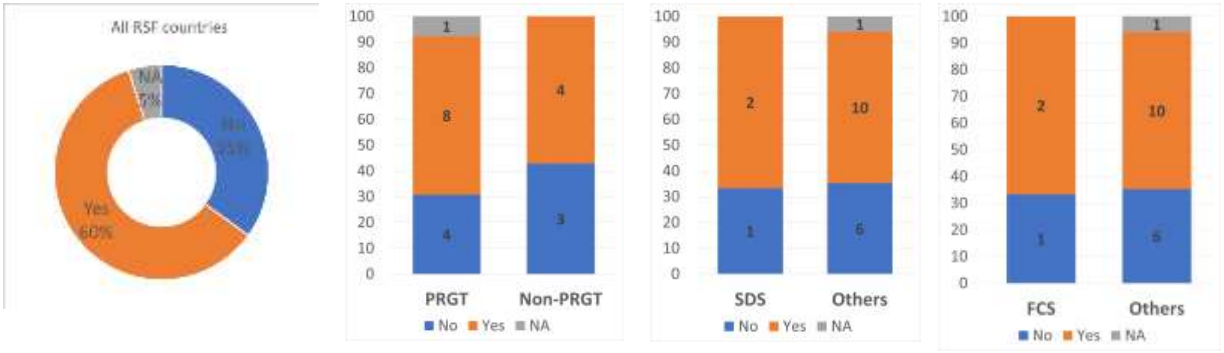


(Survey Question: Was the RSF part of a synchronized policy impetus by the country authorities to give prominence to climate change policies? Or did it lead it or follow it?)

[18] Further potential reporting bias might also result from surveying IMF country teams instead of the country authorities, in particular regarding private climate finance flows which are less likely to be monitored by country teams.

Public/private partnerships (PPPs), which have the potential to catalyze private finance, have been set up in several countries with RSF arrangements. In view of the large investment needs relating to climate risks, it is crucial to tap into private sector financing and expertise. In this context, PPPs can be a valuable tool to facilitate increased investments.[19] A majority of IMF country teams working on countries with RSF arrangements report use of PPPs (60 percent, Figure 11), including low-income countries (LICs), SDS, and FCS.[20] Drawing on best practices in climate finance investment supported by PPPs in countries with RSF arrangements could facilitate learning and increased use of PPPs, but TA could also be envisioned to support the legal framework to enable enhanced PPPs.

Figure 11. Public-Private Partnerships (in percent; number of countries)



(Survey Question: Are any public/private partnerships that support climate investment being set up or expanded in size/scope? Examples include green financing facilities, project preparation facility or blended finance structures.)

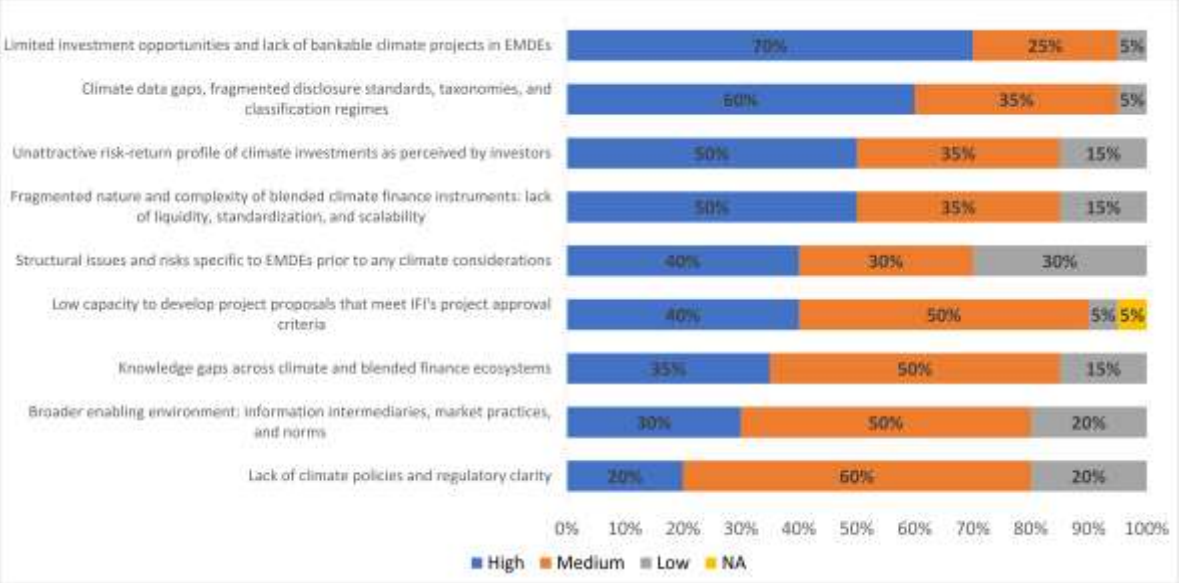
[19] Proper management of PPPs requires the adoption of institutional and legal frameworks to assess and limit risks as such projects often entail sizable contingent liabilities (see Government Objectives: Benefits and Risks of PPPs Public Private Partnership).

[20] References to a LIC and a PRGT-eligible country are used interchangeably in this paper.

Main Impediments to Climate Finance

The survey asked country teams to rate the main impediments to climate finance in their countries (see Figure 12). The lack of investable and bankable projects was listed as a high impediment by the largest share of respondents (70 percent), followed by gaps in the climate information architecture (climate data, disclosure standards, and climate taxonomies), and unattractive risk-return profiles of climate investments for private investors. Limited investment opportunities continue to be the primary impediment when only considering PRGT-eligible countries and the second most highly rated impediment for emerging markets (EMs), underscoring their prevalence as a shared challenge across these groups. To generate additional investments, country teams highlighted the importance of subsidy reforms, carbon pricing, and regulation (see Annex Table A.3). On subsidy and regulation, this includes incentives to shift to green electricity generation and building the energy efficiency and resiliency of the building stock, and carbon pricing such as carbon taxes or emissions trading schemes.[21]

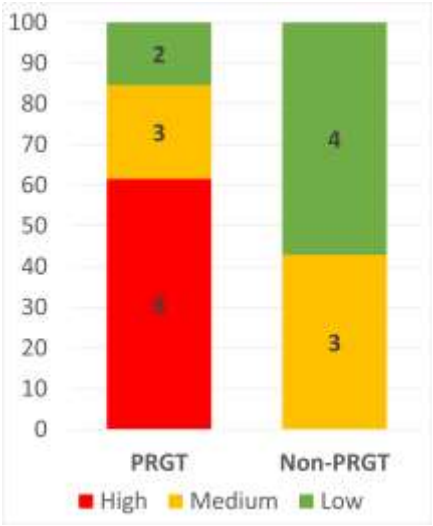
Figure 12. Main Impediments to Climate Finance



(Survey Question: Please rate whether the following factors are a high, medium or low obstacle to the growth of climate finance in your country.)

[21] For a discussion of constraints to scaling up private climate finance in EMDEs, see also Prasad and Kapan (forthcoming) and Puig et al 2021.

Figure 13. Structural impediments (in percent; Number of countries)



(Survey Question: Please rate whether the following factor is a high, medium or low obstacle to the growth of climate finance in your country: Structural issues and risks specific to EMDEs (e.g., monetary, fiscal, and financial policies, FX risks, etc.) prior to any climate considerations.

The survey results also highlight different barriers to scaling up climate finance for LICs and EMs. Structural issues specific to EMDEs which affect all investments, such as FX risks and fiscal policies, were cited as a major barrier for scaling up climate finance by 40 percent of all countries, whereas that share increases to 62 percent for PRGT-eligible countries (see Figure 13). In addition, the broader enabling environment is a high barrier for 45 percent of LICs but at most a medium barrier for non-LICs (Annex Table A.11). In contrast, for EM country teams structural issues are the lowest rated of the listed impediments, whereas the fragmented nature and complexity of climate finance instruments are rated highest. For FCS, low capacity to develop project proposals is the third most highly rated impediment, highlighting the importance of targeted reform measures (RMs) and TA during the RSF arrangement to support capacity building (See also Box 2 for a discussion of Niger's experience in raising climate finance, including impediments to higher funding.) The impact of sustained reform momentum on the investment environment and catalytic finance is expected to be of a longer-term nature and may, therefore, not be fully captured in short-run assessments.

The most commonly deployed form of PPPs among countries with RSF arrangements are the PPFs already mentioned earlier. In line with the survey results that the lack of a pipeline of bankable projects is one of the most frequently identified impediments to scaling up climate finance, authorities in several countries with RSF arrangements are working with development partners to establish PPFs to develop a pipeline of climate projects, with a particular focus on climate adaptation. The PPFs are being established to identify and prioritize projects that align with the countries' climate goals, carry out feasibility assessments and project structuring, and ensure that project proposals reach the investment stage. While at this early stage the share of private climate finance is limited, the establishment of PPFs lays the groundwork for an acceleration of private finance in the future.

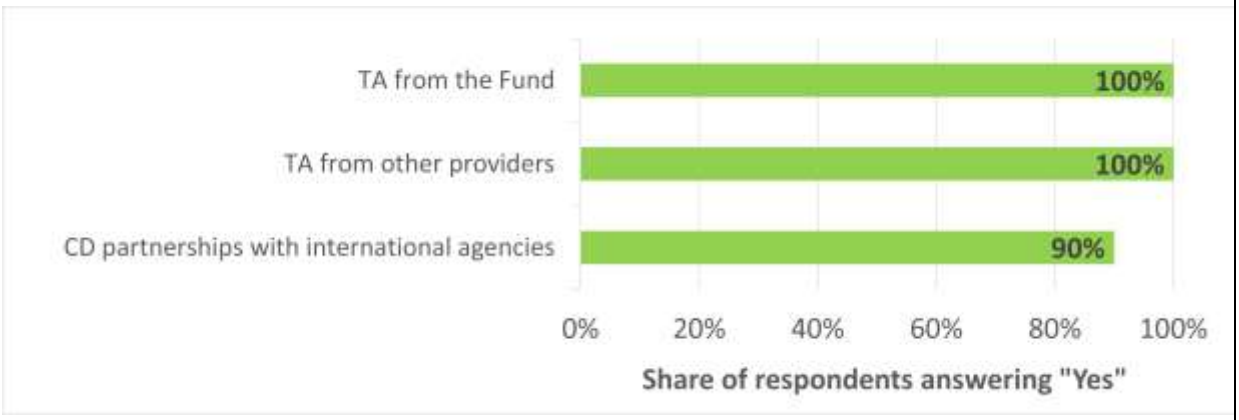
All countries with RSF arrangements have received CD support. Climate-related CD from the Fund or other providers is a key feature of RSF arrangements, both for developing pre-RSF diagnostics and for supporting the implementation of underlying reform measures. High-depth RSF reforms[22] are pivotal to overcoming structural and institutional barriers for climate finance but can often be ambitious relative to countries' implementation capacity.[23] Increased coordination and sequencing of CD delivery from the Fund and partners

[22] Defined as "reforms that lead to permanent institutional changes, such as by involving legislative changes (parliamentary approval), or conditions with long-lasting impact" (IMF (2025)).

[23] See Section B of the 2024 Interim Review of the Resilience and Sustainability Trust and Review of Adequacy of Resources.

during an RSF arrangement, therefore, creates an enabling environment and incentivizes climate financing by MDBs and bilateral donors. The survey results show that country teams consider TA in green public financial management (PFM)/climate-public investment management assessments (C-PIMA), public investment management (PIM), climate budget tagging, and carbon pricing and taxation as most critical to helping with RSF reforms. The RSF arrangement also facilitated partnerships with international agencies to support capacity building (90 percent of RSF arrangements, see Figure 14) such as through the enhanced IMF-World Bank cooperation framework[24]. TA on subsidies and regulation is also seen as most effective in scaling up private sector climate finance.

Figure 14. Capacity Development by Type of Provider

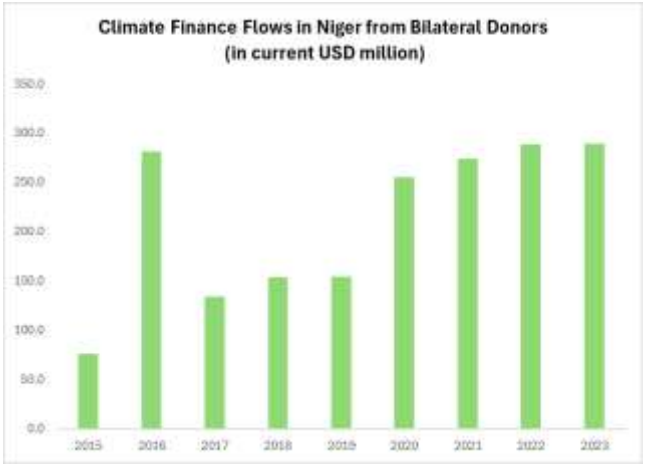


(Survey Questions: i) Has your country benefited from any technical assistance to support the implementation of climate reforms under the RSF from the Fund? ii) Has your country benefited from any technical assistance to support the implementation of climate reforms under the RSF from other providers? iii) Did the RSF help develop partnerships with international agencies (such as World Bank, GIZ, AfDB, AFD etc.) to support capacity building for climate issues?)

[24] https://www.imf.org/en/News/Articles/2024/05/31/pr-24194-world-bank-group-and-imf-deepen-joint-effort-to-scale-up-climate-action.

Box 2: Challenges and Opportunities for Climate Finance Flows in Niger

Niger is classified as the most vulnerable country to climate change according to the Notre Dame Global Adaptation Initiative's (ND-GAIN) Country Index, a global measure that ranks countries based on their vulnerability to climate change and their readiness to adapt to its impacts. More frequent natural disasters such as floods and droughts contribute to the deterioration of the economic and social conditions of people, with significant macroeconomic costs for the economy. According to its Nationally Determined Contribution (NDC), Niger's adaptation and mitigation targets[1] require about USD 10 billion in investment over the period 2021-2030, of which the government expects to finance about 26 percent, leaving the remainder to development partners. However, climate finance mobilization to meet investment needs is slow, with external support having fallen short of needs, while insecurity in the Sahel has weighed heavily on the country's fiscal space. Over the first three years of the implementation of the NDCs (2021-2023), Niger received less than USD 1 billion from donors for climate finance, potentially foreshadowing difficulties to cover the total financing needs for the full implementation of the authorities' climate agenda. The private sector's contribution to climate finance has been insignificant. While the country presents opportunities for investment in large-scale renewable energy projects (solar and wind power), energy-efficient technologies in buildings, and climate-smart agriculture, including agroforestry, and the development of better water management systems, a study conducted by UKAid has identified several barriers to scaling up climate finance, including:



Source: OECD (2025), Aid activities targeting Global Environmental Objectives (dataset)

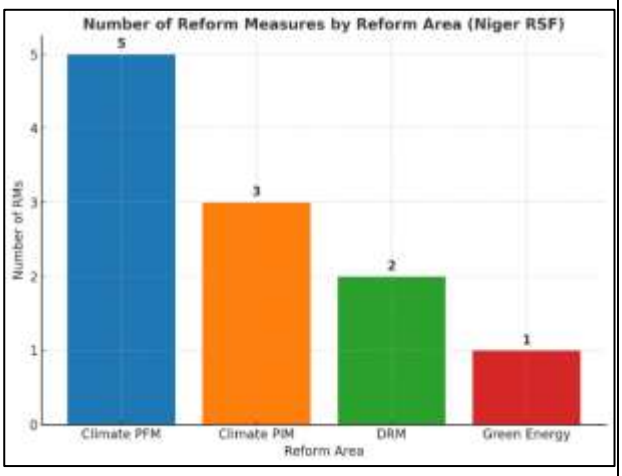
- Lack of accredited institutions to effectively develop, submit for funding, and implement climate projects;
- Limited domestic capacity to understand donors' rules and procedures, and develop bankable projects;
- Weak financial system; and
- Underdevelopment of the private sector, limiting its contribution in climate finance and the overall development of the country.

Moreover, the non-standardization of access requirements for climate finance across financing providers poses additional challenges for increasing climate finance. However, the authorities are making efforts to mobilize funding despite facing several impediments that are beyond their control. For example, the accreditation process for BAGRI (a public bank) with the Global Climate Fund (GCF) has been initiated although there have been recent delays due to the GCF's introduction of a new accreditation process.

[1] Niger's NDC pledges sectoral emission reductions of up to 12.6 percent unconditionally and 22.8 percent conditionally in agriculture/forestry by 2030, alongside energy sector cuts of about 11 percent unconditionally and up to 48 percent conditionally, relative to a business-as-usual scenario.

Box 2: Challenges and Opportunities for Climate Finance Flows in Niger (cont.)

Niger was the first FCS to benefit from an RSF arrangement in 2023. The arrangement aims to support the authorities' agenda to build resilience to climate change by providing low-cost financing, TA, and promoting necessary reform measures. The total financing expected to be disbursed amounts to about USD 131.5 million. The RSF includes eleven RMs anchored in four pillars: (i) strengthening climate-sensitive planning and budgeting (Green PFM), (ii) integrating climate issues into public investment management (C-PIM), (iii) enhancing disaster-informed fiscal planning, and (iv) promoting renewable energy (green energy). Several development partners, including the World Bank and the German international cooperation agency (GIZ) coordinate with the IMF to support RM implementation. These reforms aim to build the foundations of resilience by embedding climate considerations across fiscal and investment frameworks.



The RSF arrangement is expected to leverage, directly or indirectly, additional climate finance. By improving the regulatory environment — including green accountability and transparency — the RSF will indirectly encourage the financing of climate investments by donors and green FDI. One RSF RM consists of direct financing and TA support to local small and medium enterprises for the development and implementation of projects in renewable energy fields. The framework supported by this reform has been finalized, but the financing expected from banks, donors, and the government is not available to fund the relevant projects. Moreover, the climate budget tagging framework established under the RSF arrangement contributes to improved awareness of climate adaptation and mitigation, improved transparency, and alignment of climate priorities with the budget, which can ultimately also enable climate finance mobilization.

After the approval of the RSF, the coup d'état in 2023 led several development partners to withdraw from Niger and suspend their financing support, limiting space to finance climate investments. According to the country team survey, following the approval of the RSF arrangement, Niger received USD 1.3 million from bilateral donors and USD 577 million from the World Bank over the period 2023-2024. Moreover, the persistence of insecurity, coupled with the country's fragile condition, are limiting the expected catalyzing effect of the RSF arrangement from both public and private sources. Indeed, findings from the survey highlight the following challenges that limit the catalytic role of the RSF arrangement in mobilizing additional financing: (i) Limited investment opportunities and lack of bankable climate projects, (ii) Unattractive risk-return profile of climate investments as perceived by investors, (iii) Climate data gaps, fragmented disclosure standards, taxonomies, and classification regimes, (iv) Knowledge gaps across climate and blended finance ecosystems, and (v) Lack of an enabling environment such as information intermediaries (credit rating agencies, ESG data and product providers, sustainability practitioners, etc.), market practices, and norms. Addressing these multifaceted challenges requires coordinated efforts to restore donor confidence, strengthen institutional capacity, and engage the private sector to unlock Niger's climate investment potential.

Conclusions from the Country Team Survey

The RSF country team survey points to several areas of progress but also shows (?) scope for improvement, especially to attract additional private sector climate finance. The RSF has proven to be a popular facility to support the authorities' climate policies. Based on the country team survey, RSF countries have received a median amount of around 0.5 percent of GDP in climate finance. Climate finance roundtables have supported somewhat higher official climate finance through the coordination of official finance sources such as MDBs. Climate finance roundtables may also enhance public-private coordination by better aligning government policies with private sector needs. The survey responses also suggest that RSF RMs have been well-synchronized with the national climate policy objectives. Looking ahead, enhancing the RSF catalytic role for private sector finance will require strengthening the regulatory framework, relevant data, and subsidy reforms. These policies are critical to develop bankable and investable projects to attract and scale up private finance, while noting that many of the effects of the structural reforms for catalytic finance may materialize over a longer horizon. The survey results also suggest that enhanced and targeted TA in these areas – especially in low-capacity countries – could be helpful in supporting the implementation of reforms and strengthening the catalytic role of RSF arrangements.

Econometric Approach

The catalytic role of IMF lending in mobilizing additional financial flows has been widely studied, with evidence pointing to both positive and nuanced effects that depend on program financing size, facility type, and economic conditions. Several recent papers are worth highlighting. Krahnke (2023) reviews the mixed evidence on the catalytic role of IMF lending, noting that while IMF programs generally attract debt-type inflows, excessively large program sizes can weaken or even reverse this effect. Cohen-Setton and Toni (2024) find that emergency IMF financing during the COVID-19 pandemic had a positive catalytic effect, though the composition varied by income group: for LICs, the emergency financing, which does not come with any conditionality attached, attracted additional funding from development partners (0.6 percent of GDP in grants and loans per 1 percent of GDP in IMF financing) but not private inflows, while for middle-income countries, it boosted both public and private financing. He et al (2024) find positive effects of IMF programs on ODA: a one percentage point increase in IMF disbursements relative to GDP catalyzes additional ODA of 2.7 percentage points of GDP, of which 1.4 percentage points come from multilateral donors. Lisi (2022) finds that precautionary instruments, such as the Flexible Credit Line (FCL) and Precautionary Liquidity Line (PLL), enhance market confidence by lowering sovereign bond spreads and mitigating financial shocks. Finally, Maurini and Schiavone (2021) find that the impact of the involvement of the Fund on the propensity of private investors to lend to program countries depends on the program type with precautionary arrangements lowering private gross inflows but increasing total net inflows and traditional Stand-By Arrangements (SBAs)—particularly those that go off-track—reducing both gross and net inflows.

Following the literature above, an econometric analysis to explore the causal relationship between the RSF arrangements and other financial flows is conducted below. This is intended to complement the survey findings which cannot establish a causal relationship between the RSF arrangement and the climate finance data obtained from the survey. The econometric analysis attempts to investigate rigorously the causal link between RSF arrangements and other financing flows going beyond just climate-related flows given data limitations. An important challenge that arises when assessing the impact of IMF arrangements is the potential for selection bias, as a variety of factors enter into a decision to approve an IMF program. For instance, Krahnke (2023) points to a sharp decline in gross capital inflows in the lead-up to an IMF program with only a gradual resumption thereafter. In addition, Bird (2001) and Dreher and Walter (2010) emphasize that empirical studies on the impact of IMF programs often encounter counterfactual challenges, as predicting the outcomes without the program could be difficult, and therefore the estimation of the impact induced by program participation is challenging. It is crucial to note that countries with an RSF arrangement are not randomly selected.[25] Consequently, RSF approval may be systematically correlated with unobservable or omitted variables that are strongly associated with climate finance flows—the outcome variable in this analysis.

The econometric analysis relies on an extensive database from various sources. It uses a large panel dataset covering 143 countries (i.e. all RST-eligible countries) over the period 2000 to 2024, of which the last three years capture RSF arrangements given RST operationalization in 2022 (Table 1). The analysis focuses exclusively on all RST-eligible countries to reduce potential selection bias related to having an RSF

[25] Indeed, RST eligibility is based on a combination of per capita income and population thresholds and to qualify for an RSF arrangement, eligible members would need to have: (i) a package of high-quality reform measures (ii) a concurrent on-track qualifying UCT program with at least 18 months remaining at the time of RSF arrangement approval and (iii) sustainable debt and adequate capacity to repay the Fund. Furthermore, the identification of reform measures should be supported by climate change diagnostics such as the World Bank's Country Climate and Development Report and Climate Change Knowledge Portal, the IMF's Climate Policy Diagnostic (CPD); or a Climate Public Investment Management Assessment (C-PIMA).

arrangement. The sample of 143 countries ("All" in Tables 2-6) is split into various subsamples to analyze the effect of having an RSF arrangement, controlling for the underlying UCT-quality program. The first subsample is the "PRGT" subsample: the RST-eligible countries which are also PRGT-eligible (whether the country has a UCT-quality program or not). The second subsample is "UCT," the RST-eligible countries which have an active UCT-quality program at any point during the sample period (whether the country is PRGT-eligible or not). The third subsample is "PRGT+UCT," the RST-eligible countries which have an active UCT-quality program at any point during the sample period *and* are PRGT-eligible.

The dependent variables include financial flows from both public and private sources, which consist of climate finance from MDBs, ODA (committed amount and excluding any IMF commitments that are qualified as ODA-eligible), portfolio investment (inflows), and direct investment (inflows). The treatment variable is a dummy variable that equals 1 if a country is under an RSF arrangement and 0 otherwise. Since the post-RSF timing dimension remains limited and many financial flows data end in 2023, there might be less variability in our dependent variables, which makes it more challenging to assess the impact of the treatment. Given that an RSF arrangement is always concurrent with a UCT-quality program, the model includes a dummy variable that equals 1 during time periods under a UCT-quality arrangement, and 0 otherwise. This allows us to distinguish the pure impact of the RSF arrangement from the impact of the accompanying UCT-quality program.[26] In addition, the baseline control variables have been selected based on their correlation with the probability of a country to benefit from an RSF arrangement, including GDP per capita, external debt-to-GDP ratio, climate vulnerability and readiness indices, and country fixed characteristics (FCS, SDS, and regional dummies).

Table 1. Data sources for econometric analysis

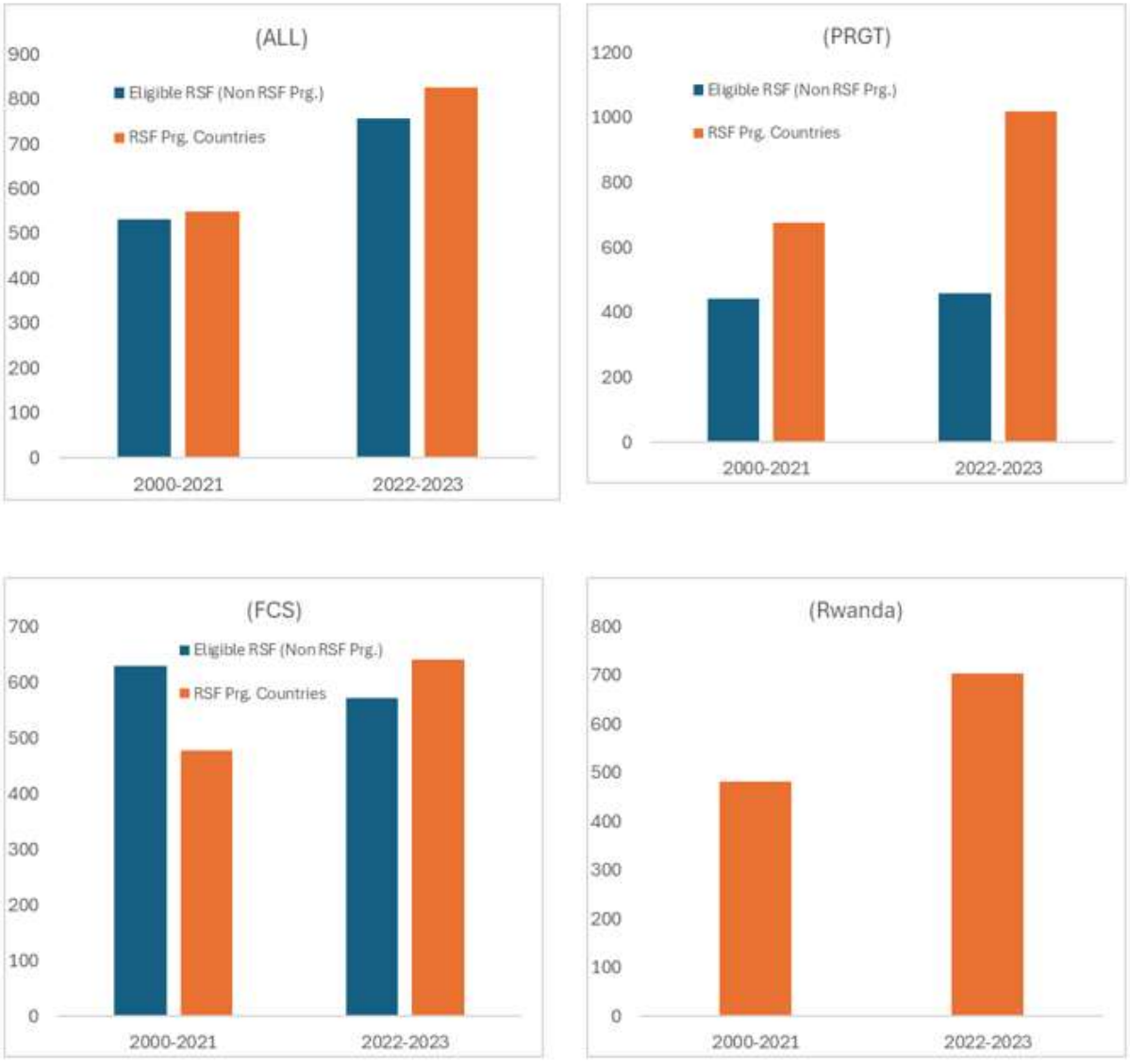
Data	Sources	Frequency	Coverage
Treatment Variable			
RSF active year	IMF	Monthly/Yearly	2000-2024
Outcome variables			
Climate Finance inflows from MDBs (Committed)	Joint Report on MDBs' Climate Finance	Yearly	2015-2023
ODA (Committed)	OECD	Yearly	2000-2023
Portfolio Investment			
inflows	IMF BoP statistics	Quarterly	2000-2024
Direct Investment			
inflows	IMF BoP statistics	Quarterly	2000-2024
Balancing variables between Treated and Control groups			
Economic variables			
GDP per capita	WEO	Yearly	2000-2024
External Debt ratio to GDP	WEO	Yearly	2000-2024
Climate variables			
Climate risk index	Germanwatch or NDGAIN		2021
Countries characteristics			
Small States	Metadata	Fixed	
Fragility	Metadata	Fixed	
Region	Metadata	Fixed	
Other IMF programs	IMF MONA database	Yearly	2000-2024

The summary statistics across multiple sub-samples suggest that RSF countries have experienced a significant increase in ODA commitments since the approval of their RSF arrangement (2022–2023) compared to the period before (2000–2019) (Figure 15). The same applies to non-RSF countries. On average, countries under RSF arrangements have higher ODA commitments than non-RSF program countries both before and after the establishment of the RSF. Similar trends are observed when limiting the sample to PRGT-eligible countries. However, for the PRGT group, the increase in ODA commitments after the RSF approval is larger than in the sample without RSF arrangements. When limiting the sample to FCS countries, we observe a significant increase in ODA commitments for FCS countries under an RSF. Interestingly, FCS countries with an RSF arrangement experienced, on average, higher ODA commitments than other FCS countries, whereas the

[26] In the "UCT" subsample, all countries have a UCT program, hence the UCT dummy drops out.

opposite was true before. There is no significant change in ODA commitments for non-RSF FCS countries between the two periods. When analyzing individual countries with an RSF arrangement, data shows that most countries experienced an increase in the level of ODA committed following the approval of the RSF, with the exception of some SDS. The example of Rwanda is provided in Figure 15 below for illustration. These stylized facts also hold when the total ODA commitments are adjusted for inflation.

Figure 15. ODA commitment average before and after the operationalization of the RST (in Constant Prices; 2022 USD millions)



Countries also experienced a significant increase in climate finance from MDBs in the years when the RSF was active compared to the countries and years without RSF. However, no significant difference is observed in private financing between countries with RSF arrangements and those without.

Table 2 presents descriptive statistics of outcome variables for the treated group (years under RSF) and the control group (years without RSF), as well as for different subsamples. Across all variables and samples considered, countries during RSF periods, on average, received significantly higher financial flows compared to countries and years without RSF, except for portfolio and direct investment liabilities in the full sample. However, when testing the significance of the difference in means between the treatment and control groups using a t-test, only climate finance from MDBs shows statistical significance for the full sample. No statistical significance is found for direct investment liabilities or portfolio investment, regardless of the sample

considered. Indeed, the catalytic impact of the RSF on private finance may take longer to materialize and is conditional on the RM implementation as corroborated in the literature on IMF programs.[27] In addition, as currently most RSF arrangements are in LICs which have limited or no market access[28], the impact on private investment from such lending may be less pronounced.

Table 2. Descriptive Statistics of Outcomes Variables, 2000-2024

Countries Group	Control (RSF=0)			Treatment (RSF=1)			
Variables	N	Mean	SD	N	Mean	SD	Test (p)
Panel A: All							
ODA commitment (million USD)	2,697	533	1,106	14	932	1,536	0.178
Direct Investment Liabilities (million USD)	1,082	52,700	126,000	10	25,200	26,900	0.491
Portfolio Investment Liabilities (million USD)	991	35,400	96,900	10	5,190	5,240	0.324
Climate Finance: MDB (million USD)	864	328	591	14	701	942	0.021**
Panel B: PRGT Countries							
ODA commitment (million USD)	1,383	474	729	9	1,351	1,865	0.001***
Direct Investment Liabilities (million USD)	398	5,780	9,340	5	7,110	7,600	0.752
Portfolio Investment Liabilities (million USD)	314	415	986	5	754	846	0.446
Climate Finance: MDB (million USD)	464	167	271	9	855	1,122,621	0.000***
Panel C: Countries with UCT programs							
ODA commitment (million USD)	898	771	1,492	14	981	1,573	0.633
Direct Investment Liabilities (million USD)	385	47,000	110,000	10	25,200	26,900	0.533
Portfolio Investment Liabilities (million USD)	361	30,200	93,200	10	5,190	5,240	0.398
Climate Finance: MDB (million USD)	338	366	462	14	701	942	0.012**
Panel D: PRGT countries with UCT programs							
ODA commitment (million USD)	564	660	823	9	1,351	1,865	0.016**
Direct Investment Liabilities (million USD)	144	5,780	8,890	5	7,110	7,700	0.741
Portfolio Investment Liabilities (million USD)	122	428	820	5	754	846	0.386
Climate Finance: MDB (million USD)	194	196	239	9	855	1,122,621	0.000***

The regression analysis below investigates the relationship between RSF arrangements and climate finance flows more rigorously. To address potential endogeneity and counterfactual concerns, the analysis uses the entropy balancing methodology. Entropy balancing is a generalization of conventional matching methods proposed by Hainmueller (2012). It enables the identification of the impact of IMF-supported programs (RSF in this case) by comparing program and non-program countries that are as similar as possible in terms of observable characteristics, after purging for country- and time-specific factors (catching indirectly non-observable characteristics). The methodology offers several advantages over traditional treatment effect estimators and regression analyses. First, it creates a synthetic control group that closely matches the program group, ensuring a high degree of covariate balance. Second, unlike simple regression methods, entropy balancing does not require a predefined empirical model for IMF program adoption, reducing issues related to model misspecification and multicollinearity. Third, it employs a reweighting scheme that maintains base

[27] For example, Mody and Saravia (2006) emphasize that IMF programs can catalyze flows in countries with sound policies but may deter flows in countries with weaker fundamentals, suggesting a conditional catalytic effect.

[28] Chen et. al (forthcoming) note that only 8 percent of developing economies have an investment-grade sovereign credit rating, which deters international investment, and better climate policies do not lead to higher credit ratings by rating agencies.

weights, thus preserving information while achieving balance. Finally, the methodology accounts for unobservable factors by considering the panel dimension of the data, allowing for control over country and time-specific factors in the regression analysis. However, the entropy balancing methodology could be limited by its reliance on observed covariates and can produce unstable or extreme weights when the overlap between groups is poor or too many balancing constraints are imposed. In addition, the methodology does not account for unobserved factors, lacks direct diagnostics for common support, and can overfit when over-specified. Moreover, the results of the estimation may be affected by time-varying unobservables, including political developments or bilateral donor initiatives that are not fully captured in the data, as well as by RSF–UCT simultaneity. While incorporating these additional factors would be desirable, data limitations over the study period preclude their systematic inclusion. Therefore, results are conditional on the selected observable variables used in this paper, including GDP per capita, debt-to-GDP ratio, vulnerability and readiness indexes from the ND-GAIN database, dummy variables for FCS and SDS.

The econometric analysis suggests that an RSF arrangement contributed to additional climate finance provided by MDBs and to ODA flows, but not necessarily to private financing. However, the significance of the coefficients depends on the model specification and the sample used.

- Using standard panel regression estimation (i.e. fixed and random effects), the results in Table 3 show that an RSF is positively associated with all financial flows considered in this study. However, the results are statistically significant only for climate finance from MDBs and ODA when using random effects estimation (Panel 2 of Table 3)—after controlling for country-specific characteristics, including whether a country is classified as an FCS or an SDS, as well as climate variables.

- After addressing potential endogeneity issues through the entropy balancing method (Tables 4a and 4b), the coefficients for the RSF remain positive. The coefficient associated with climate finance flows from MDBs is significant across all subsamples (Panel 1 of Table 4b). The results suggest that having an RSF arrangement is associated with about a 50 percent increase in climate finance flows from MDBs in the full sample of all RST-eligible countries with the effect being robust across the subsamples. Moreover, MDB financing, measured as a share of GDP, is estimated to increase by around 30 percent following RSF approval (Table 6). However, the impact of the RSF on ODA is statistically significant only for the PRGT-eligible countries subsample (panel 2 of Table 4b, Columns 2 and 4). For the PRGT-eligible countries, having an RSF arrangement is associated with a 20 percent average ODA increase compared to non-RSF countries. ODA commitment, expressed as a share of GDP, is estimated to increase by 14 percent in PRGT-eligible countries.

- However, an important caveat is that the data does not allow for a clean separation between net additional financing and a potential reallocation within existing ODA and MDB envelopes. As a result, observed increases in climate-related flows following RSF approval may partly reflect crowding out of non-climate financing, rather than fully additional resources.

- The coefficient associated with portfolio and direct investments is positive, but not statistically significant for any of the samples considered.

- While IMF programs are often expected to catalyze private capital flows, recent research (e.g., Krahnke (2023)) suggests that large or front-loaded official financing may temporarily crowd out private investment, as investors reassess their exposure in light of the seniority of IMF claims. This

mechanism could help explain the negative and significant coefficient of UCT financing in column 2 of Table 5, reflecting a short-term substitution between official and private flows during periods of heightened vulnerability. At the same time, this result should be interpreted with caution, as the potential endogeneity of the UCT variable is not fully addressed in the empirical specification.

To check robustness, we scale our outcome variables by GDP to make countries comparable whatever the size of their economy (Table 6)[29]. The results remain robust in terms of both significance and the sign of the coefficients associated with the RSF, except for direct investment (as a percentage of GDP). Specifically, the RSF has a negative and statistically significant effect on direct investment inflows (as a percentage of GDP) for both the global sample and UCT countries. This finding is consistent with the literature on the substitution between official flows and private investment following an IMF program (Krahnke (2023)). Moreover, using Propensity Score Matching (PSM) combined with Difference-in-Difference estimation, only the coefficient associated with the RSF for the PRGT sample is significant for climate finance from MDBs. None of the coefficients are significant for the other outcome variables or samples.

In summary, the econometric analysis suggests that the catalytic role of the RSF in mobilizing other sources of finance depends on both the type of financial flows and the country context. The catalytic effect of the RSF has started to work with initial significant impacts on climate flows from MDBs. Specifically, the RSF appears to have a positive and statistically significant effect on attracting additional climate finance from MDBs across all sub-samples. In addition, a similar positive and statistically significant effect is observed for ODA financing but only for the subset of PRGT-eligible countries. This difference likely reflects the fact that ODA flows are typically directed toward LICs, whereas many EMs—and some higher-income SDS—are not major ODA recipients. In contrast, portfolio and foreign direct investment flows are more relevant for EMs. Meanwhile, access to private finance remains limited for some PRGT-eligible countries, particularly SDS and FCS.

[29] While expressing dependent variables as ratios to GDP is common in the literature, particularly for cross-country comparisons, this paper, analyzes within-country dynamics following RSF approval, rather than cross-country scaling effects. Nominal flows better capture the timing and magnitude of financing responses associated with RSF-supported reforms at the country level. As shown in Table 6, results based on GDP-scaled variables yield qualitatively similar conclusions, providing reassurance regarding the robustness of the main findings. This approach is consistent with strands of the IMF-related catalytic literature, which often analyze financing flows in levels (frequently in constant U.S. dollars and sometimes log-transformed), rather than as ratios to GDP—for example, Stubbs, Kentikelenis, and King (2016), who examine nominal aid commitments in constant U.S. dollars.

Table 3: Fixed and Random Effects Panel Regression Results

Panel 1: Fixed Effects

VARIABLES	(1) Climate Finance	(2) ODA	(3) Direct Investment	(4) Portfolio Investment
RSF	0.574*	0.189	0.036	0.118
	(0.328)	(0.167)	(0.303)	(0.973)
UCT	0.242*	0.145***	-0.083	-0.484*
	(0.123)	(0.034)	(0.082)	(0.272)
Observations	865	2,385	1,058	969
R-squared	0.102	0.059	0.158	0.070
Number of Countries	109	119	77	73
Country Fixed Effects	Yes	Yes	Yes	Yes
Control Variables	Yes	Yes	Yes	Yes

Panel 2: Random Effects

RSF	0.763**	0.206	0.031	0.100
	(0.331)	(0.167)	(0.302)	(0.975
UCT	0.284**	0.149***	-0.092	-0.460
	(0.119)	(0.034)	(0.081)	(0.271
Observations	843	2,325	1,047	958
Number of Countries	106	116	76	72
Country Fixed Effects	Yes	Yes	Yes	Yes
Control Variables	Yes	Yes	Yes	Yes

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
In the FE estimation, control variables include GDP per capita and the debt-to-GDP ratio, while in the random effects model, additional variables are included such as climate vulnerability and readiness, dummy variables for FCS and SDS, as well as regional fixed effects. All dependent variables are log-transformed.

Table 4a: Average Comparison of Control Variables Before and After Balancing

	Before Balancing		After Balancing	
Variables	Treated	Control	Treated	Control
GDP per capita	4896	3864	4896	4896
Debt (%GDP)	63.38	53.66	63.38	63.46
FCS	0.07143	0.2985	0.07143	0.07158
SDS	0.1429	0.2895	0.1429	0.1429
Climate Readiness	0.4023	0.3805	0.4023	0.4023
Climate Vulnerability	0.4684	0.466	0.4684	0.4684
UCT	1	0.3824	1	0.9995

Table 4b. Entropy Balancing Regression Results by Sample

Panel 1: Climate Finance from MDBs

VARIABLES	(ALL)	(PRGT)	(UCT)	(PRGT+UCT)
RSF	0.440***	0.528***	0.440***	0.528***
	(0.149)	(0.181)	(0.155)	(0.191)
UCT	0.282	0.281		
	(0.183)	(0.279)		
Observations	843	448	349	201
R-squared	0.921	0.901	0.921	0.901
Country Fixed Effects	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
Control Variables	Yes	Yes	Yes	Yes

Panel 2: ODA Commitments

VARIABLES	(ALL)	(PRGT)	(UCT)	(PRGT+UCT)
RSF	0.098	0.405***	0.099	0.405***
	(0.146)	(0.105)	(0.150)	(0.108)
UCT	0.614**	0.554		
	(0.280)	(0.423)		
Observations	2,325	1,174	895	560
R-squared	0.938	0.935	0.938	0.935
Country Fixed Effects	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
Control Variables	Yes	Yes	Yes	Yes

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
Control variables include all covariates used to balance the treated and the control group. These include GDP per capita, debt-to-GDP ratio, climate vulnerability and readiness indexes, dummies for FCS and SDS. All dependent variables are log-transformed.
“All” is the universe of RST-eligible countries. “PRGT” is the subsample of RST-eligible countries which are also PRGT-eligible. “UCT” is the subsample of RST-eligible countries which have an active UCT program at any point during the sample period. “PRGT+UCT” is the subsample of RST-eligible countries which have an active UCT-quality program at any point during the sample period and are PRGT-eligible.

Table 5. Entropy Balancing Regression Results by Sample (cont.)

Panel 3: Direct Investment

VARIABLES	(ALL)	(PRGT)	(UCT)	(PRGT+UCT)
RSF	0.010	0.056	0.009	0.057
	(0.046)	(0.044)	(0.048)	(0.048)
UCT	-0.023	-0.134**		
	(0.029)	(0.055)		
Observations	1,047	387	395	149
R-squared	0.995	0.992	0.995	0.992
Country Fixed Effects	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
Control Variables	Yes	Yes	Yes	Yes

Panel 4: Portfolio Investment

VARIABLES	(ALL)	(PRGT)	(UCT)	(PRGT+UCT)
RSF	0.236	0.044	0.236	0.044
	(0.302)	(0.274)	(0.318)	(0.297)
UCT	0.044	-0.758**		
	(0.326)	(0.317)		
Observations	958	306	371	127
R-squared	0.896	0.960	0.896	0.960
Country Fixed Effects	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
Control Variables	Yes	Yes	Yes	Yes

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
Control variables include all covariates used to balance the treated and the control group. These include GDP per capita, debt-to-GDP ratio, climate vulnerability and readiness indexes, dummies for FCS and SDS. All dependent variables are log-transformed.
"All" is the universe of RST-eligible countries. "PRGT" is the subsample of RST-eligible countries which are also PRGT-eligible. "UCT" is the subsample of RST-eligible countries which have an active UCT program at any point during the sample period. "PRGT+UCT" is the subsample of RST-eligible countries which have an active UCT-quality program at any point during the sample period and are PRGT-eligible.

Table 6: Robustness check analysis

Panel 1: Climate Finance from MDBs (%GDP)				
VARIABLES	(ALL)	(PRGT)	(UCT)	(PRGT+UCT)
RSF	0.296***	0.361***	0.296***	0.361***
	(0.067)	(0.092)	(0.070)	(0.098)
UCT	0.019	-0.015		
	(0.047)	(0.112)		
R-squared	0.912	0.873	0.912	0.873
Country Fixed Effects	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
Control Variables	Yes	Yes	Yes	Yes
Panel 2: ODA Committed (%GDP)				
VARIABLES	(ALL)	(PRGT)	(UCT)	(PRGT+UCT)
RSF	0.057	0.140**	0.058	0.139*
	(0.065)	(0.070)	(0.067)	(0.072)
UCT	0.615**	1.130***		
	(0.241)	(0.346)		
Observations	2,341	1,189	905	569
R-squared	0.891	0.825	0.891	0.825
Country Fixed Effects	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
Control Variables	Yes	Yes	Yes	Yes
Panel 3: FDI Inflows (%GDP)				
VARIABLES	(ALL)	(PRGT)	(UCT)	(PRGT+UCT)
RSF	-0.112**	-0.045	-0.112**	-0.045
	(0.045)	(0.046)	(0.048)	(0.050)
UCT	0.037	-0.180***		
	(0.029)	(0.051)		
Observations	1,047	387	395	149
R-squared	0.986	0.993	0.986	0.993
Country Fixed Effects	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
Control Variables	Yes	Yes	Yes	Yes
Panel 4: Portfolio Investment Inflows (%GDP)				
VARIABLES	(ALL)	(PRGT)	(UCT)	(PRGT+UCT)
RST	0.018	0.044	0.018	0.045
	(0.086)	(0.108)	(0.090)	(0.117)
UCT	0.121**	-0.025		
	(0.060)	(0.066)		
Observations	958	306	371	127
R-squared	0.963	0.975	0.963	0.975
Country Fixed Effects	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
Control Variables	Yes	Yes	Yes	Yes

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
Control variables include all covariates used to balance the treated and the control group. These include GDP per capita, debt-to-GDP ratio, climate vulnerability and readiness indexes, dummies for FCS and SDS. All dependent variables are log-transformed.
“All” is the universe of RST-eligible countries. “PRGT” is the subsample of RST-eligible countries which are also PRGT-eligible. “UCT” is the subsample of RST-eligible countries which have an active UCT program at any point during the sample period. “PRGT+UCT” is the subsample of RST-eligible countries which have an active UCT-quality program at any point during the sample period and are PRGT-eligible.

Non-Traditional Data

Non-traditional indicators can provide useful early signals of climate-related developments that may precede measurable changes in climate finance data. Given the relatively short operational history of the RST and the inherent lag in traditional macroeconomic indicators, the analysis above is complemented with information from select non-traditional data. These alternative indicators may capture high-frequency changes and early implementation effects that may not yet be reflected in conventional metrics. As these data sources are available only for a subset of countries and reflect an early phase of RSF implementation, the evidence presented here should be viewed as illustrative. The aim is to highlight how shifts in climate-related media coverage and changes in demand for green skills may offer early indications of reform momentum and potential future patterns in climate investment and finance. These preliminary findings, therefore, serve as a starting point for future research into potential relationships between RSF arrangements and observed policy changes and economic outcomes as more data becomes available. As broader country coverage and longer time series accumulate, these indicators can complement traditional data and support deeper analysis in future work.

The methodology employs two approaches: (i) text analysis using Factiva to follow climate-finance discourse and media salience; and (ii) labor market data from LinkedIn to monitor green job creation. These data sources can be analyzed at a higher frequency than traditional data to assess the role of the RSF arrangements over time, helping to fill the data gap that was noted by many country teams in the survey.

Monitoring Climate-Finance Discourse Through News Data

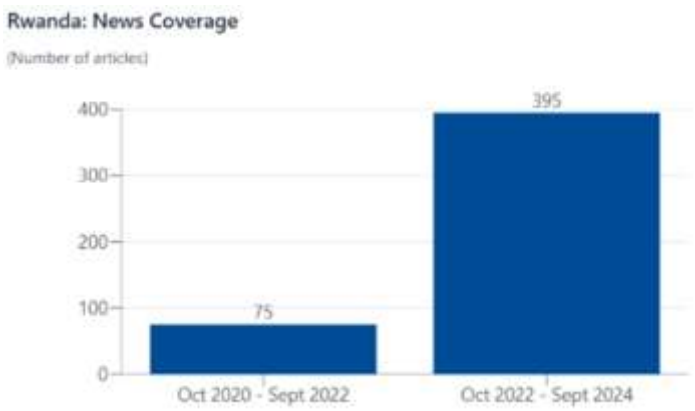
The first approach uses text analysis media coverage to point to some initial evidence of shifts in climate finance-related media coverage post-RSF approval. Factiva Analytics was used as the primary source for this exercise, given the IMF’s institutional access and established technical support for systematic extraction of the data at the time of the analysis. The analysis focuses on the frequency and number of articles that mention climate finance-related topics in RSF countries by using a set of climate-finance-related keywords.[30] Coverage is examined over a four-year window, two years before and two years after RSF staff-level agreement dates to help identify changes in media attention surrounding the period of approval.

Initial results point to an increase in climate finance-related coverage following RSF arrangements (see Figure 16). Across RSF countries, we observe an increase in the frequency of articles referencing climate-finance

[30] Keywords used in search: "climate finance," "green bonds," "debt swaps for climate," "carbon credits," "carbon pricing," "low-carbon finance," "renewable energy financing," "climate resilience bonds," "net-zero financing," "climate policy investments," "ESG financing," "digital climate finance solutions," "carbon offset markets," "climate tech investments," "climate change mitigation and adaptation," "climate change resilience," "disaster risk mitigation," "decarbonization," "climate change transition risks," "investment in renewables," "greening of the financial system," "framework for climate finance public-private partnerships," "investor confidence for climate investment," and "catalyze public and private climate finance."

related themes. While this pattern cannot isolate the effect of the RSF from other concurrent developments, it indicates periods when climate-finance topics received greater media coverage, providing a useful descriptive signal of heightened public attention.

Figure 16. Factiva Text Analysis and Media Coverage



Note: Article counts are based on searches of global news articles using climate-finance-related keywords.

Hiring Rates for Green Jobs

Developments in labor market indicators point to an association between RSF arrangements and green job creation. This approach draws on a labor market indicator from LinkedIn: the hiring rate for jobs that require green-related skills. The indicator measures shifts in hiring towards occupations that rely on green skills and, therefore, provides a useful signal of emerging labor-market demand associated with climate-related activities.

The analysis relies on LinkedIn's green skills taxonomy, which classifies occupations based on the extent to which they depend on green skills: green jobs, which cannot be performed without extensive green skills knowledge; greening jobs, which typically require some application of green skills; and greening potential jobs, which may occasionally require them.[31] Given current data availability, the current analysis focuses on LinkedIn's Green Jobs hiring rate. [32, 33]

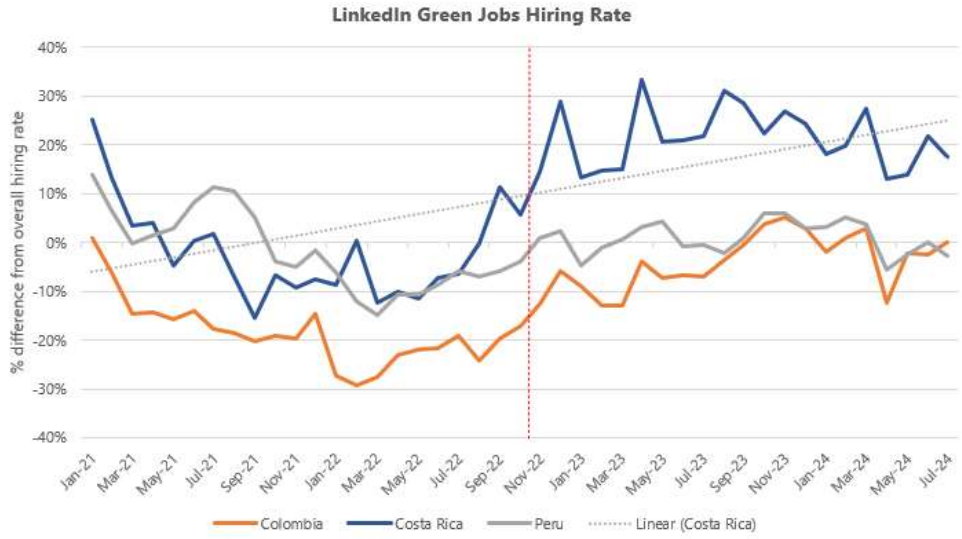
[31] Definitions based on LinkedIn's Global Green Skills Report 2022.

[32] The Development Data Partnership (DDP) is a consortium amongst international organizations that provides the market, legal, and technical infrastructure necessary to facilitate public-private data partnerships for public goods at scale.

[33] See LinkedIn's Global Green Skills Report 2023 and a sample case study through an article published by the World Bank using this indicator.

Figure 17. Green Jobs

Note: Costa Rica is the only RSF country among the countries shown. Colombia and Peru are included as regional comparators based on available LinkedIn data.



Among countries with an RSF arrangement, Costa Rica is the only country with hiring data for green jobs. While LinkedIn provides broader country coverage, comparable hiring-rate indicators for RSF countries remain limited at this stage. For this reason, a small set of regional comparators, Colombia and Peru, was selected from the limited pool of countries with comparable LinkedIn data.

Within these constraints, the analysis tracks changes in Costa Rica's hiring rate for green skills jobs around the time of its RSF approval. Preliminary patterns suggest a shift in hiring toward jobs that require green skills (see Figure 17). The chart shows an upward movement in Costa Rica's green jobs hiring rate relative to these regional peers, alongside cyclical volatility observed in high-frequency labor-market indicators. While the timing coincides with the RSF approval period, this pattern is descriptive and not intended to imply causality as hiring dynamics may reflect broader structural trends, sector-specific developments, or other macroeconomic factors unrelated to the RSF. As LinkedIn expands country and sectoral coverage, this hiring-rate metric could support more systematic analysis of green-skills demand and its relationship to climate-policy implementation.

Conclusions

This paper uses a multi-pronged analytical approach to draw early lessons on the catalytic impact of RSF arrangements. Three complementary approaches are used: (i) a country team survey; (ii) an econometric study; and (iii) analysis of non-traditional data.

A survey of country teams indicates that countries with RSF arrangements received around 0.5 percent of GDP in climate finance, the majority of which was from public sources, while the share of private climate finance was small. For countries that held a climate finance roundtable, the survey results show higher median climate finance commitments compared with countries that did not. The survey highlights the scope to strengthen investable projects through PPPs, data provision, and the enabling framework relating to regulation. TA can play an important role in strengthening data provision and the regulatory framework.

The econometric study finds that the role of RSF arrangements in mobilizing additional finance depends on both the type of financial flows and the country context. Specifically, RSF arrangements appear to have a positive and statistically significant effect in attracting additional climate finance from MDBs and ODA sources, although the latter is significant only for PRGT-eligible countries.

Analysis of non-traditional data allows for identifying possible early implementation effects that may not yet be reflected in conventional metrics but that could foreshadow additional climate finance in the future. Text analysis and media coverage point to some initial evidence of increased climate finance references post-RSF approval. Labor market indicators from select countries suggest an association between RSF arrangements and green job creation.

While climate finance associated with RSF arrangements mainly comes from official sources, increased private sector finance is critical to meet significant investment needs related to longer structural change and for supporting prospective BoP stability. In this context, enhancing the enabling investment environment related to data and monitoring, developing new financial instruments, enhancing the regulatory frameworks, and developing a pipeline of investable projects, supported by TA, is critical to scaling up private sector finance. [34]

Several strands of future research can build on the early findings of this paper as more RSF arrangements are approved, more come to completion, and there is more time for implementation of RSF-supported reforms. A few possible avenues include:

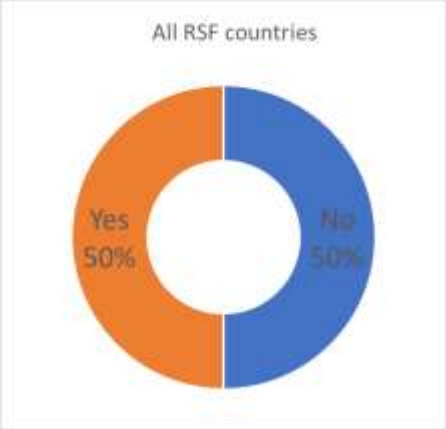
- (i) an expanded country team survey of all RST-eligible countries with UCT-quality arrangements to more accurately capture the marginal effect of RSF arrangements on climate finance, including in non-LICs. A survey of the authorities of countries with an RSF arrangement could provide complementary information to the staff survey. A survey of key climate finance providers could also shed light on experience and areas for improvement.
- (ii) additional econometric analysis with private climate finance data would be critical once additional data are available. Additional robustness checks could include heterogeneity analysis to allow for more precise estimates and additional control variables.
- (iii) Finally, analyzing interest rate spreads in the wake of RSF-arrangement approvals could help assess other catalyzing roles of RSF arrangements and whether they create fiscal space through lowering the cost of external debt issuance. The link between RST lending and key fiscal governance institutions could be also analyzed more comprehensively by using the IMF's C-PIMA data, or the publicly available quantified PEFA (Public Expenditure Financial Accountability) scores.

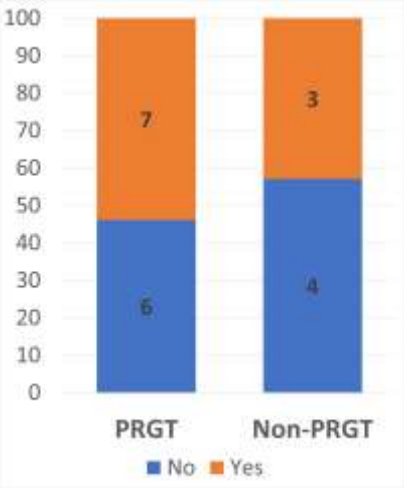
[34] For a discussion of possible policy measures see, for example, Gemayel et al (2025) and IMF (2023).

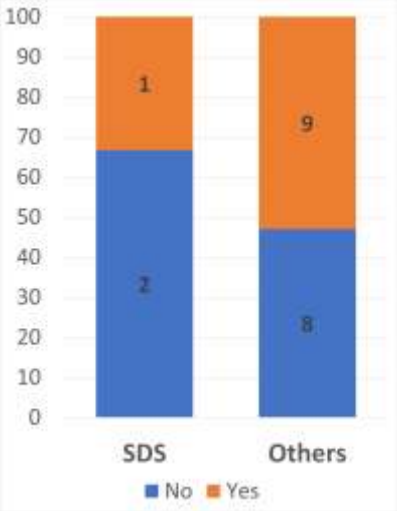
Annex I. Additional Charts

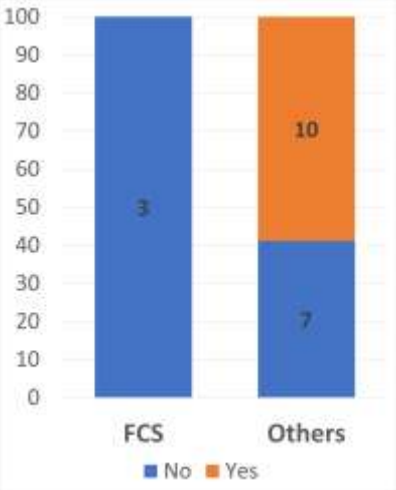
Annex Table A.1. Climate Finance Roundtables (percent; number of countries)

(Survey Question: Did your country conduct a "climate finance roundtable" supported by the IMF?)

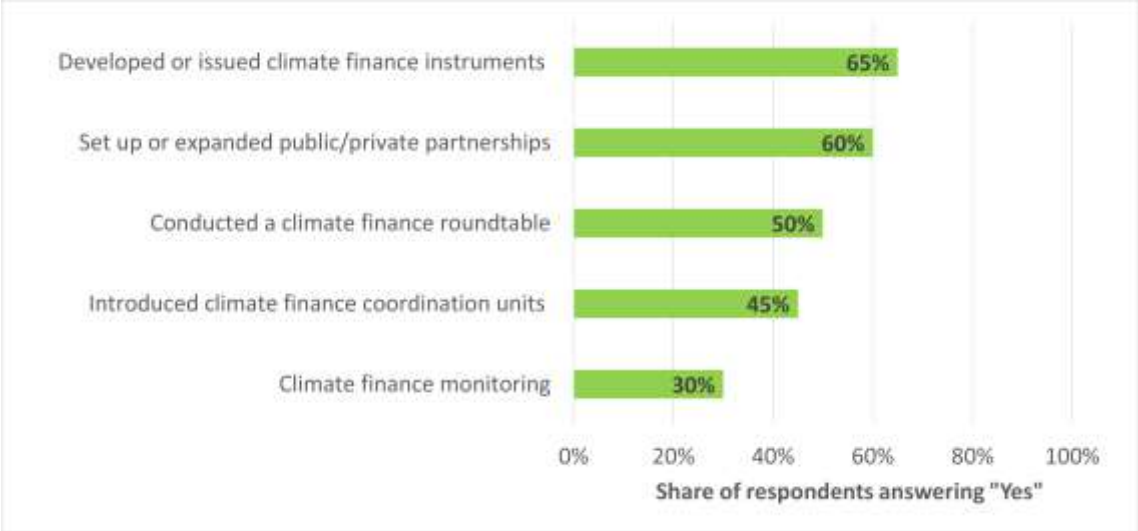






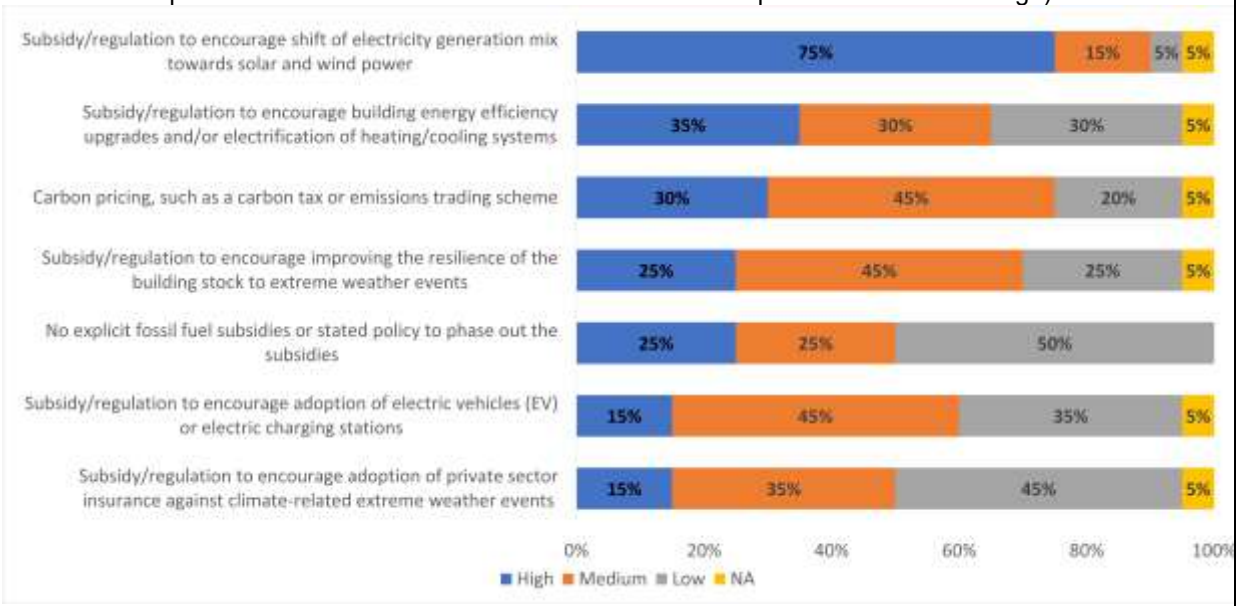


Annex Table A.2. Summary of RSF Climate Finance Policies



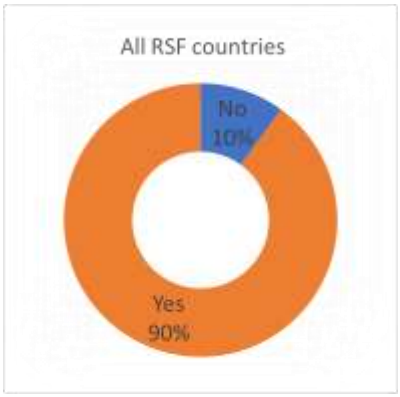
Annex Table A.3. Catalytic Potential of RSF Reform Measures

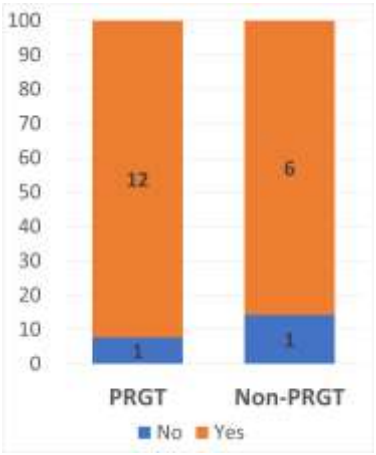
(Survey Question: In your view, do the following RSF reform measures have a high, medium, or low potential to lead to additional climate investments or private climate financing?)

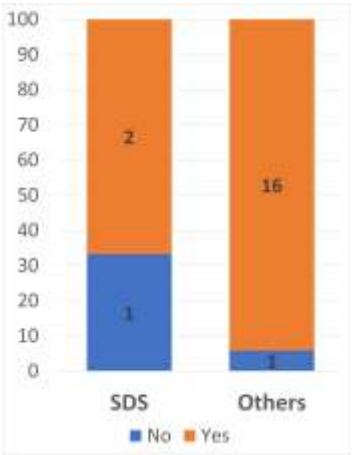


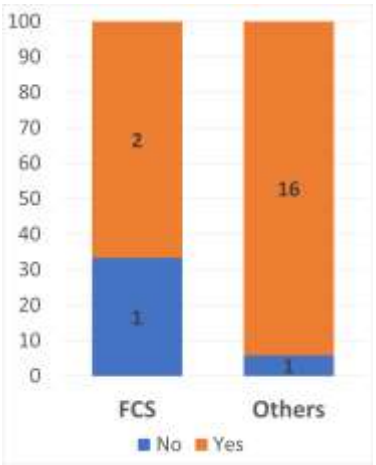
Annex Table A.4. Partnerships and Capacity Building (Percent; number of countries)

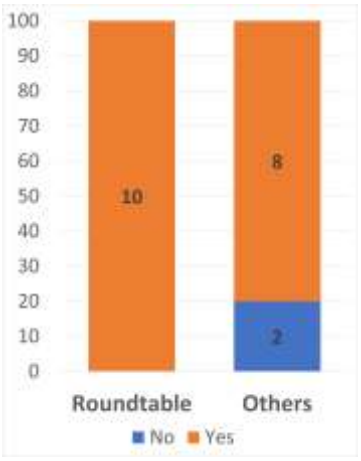
(Survey Question: Did the RSF help develop partnerships with international agencies (such as World Bank, GIZ, AfDB, AFD etc.) to support capacity building for climate issues?)





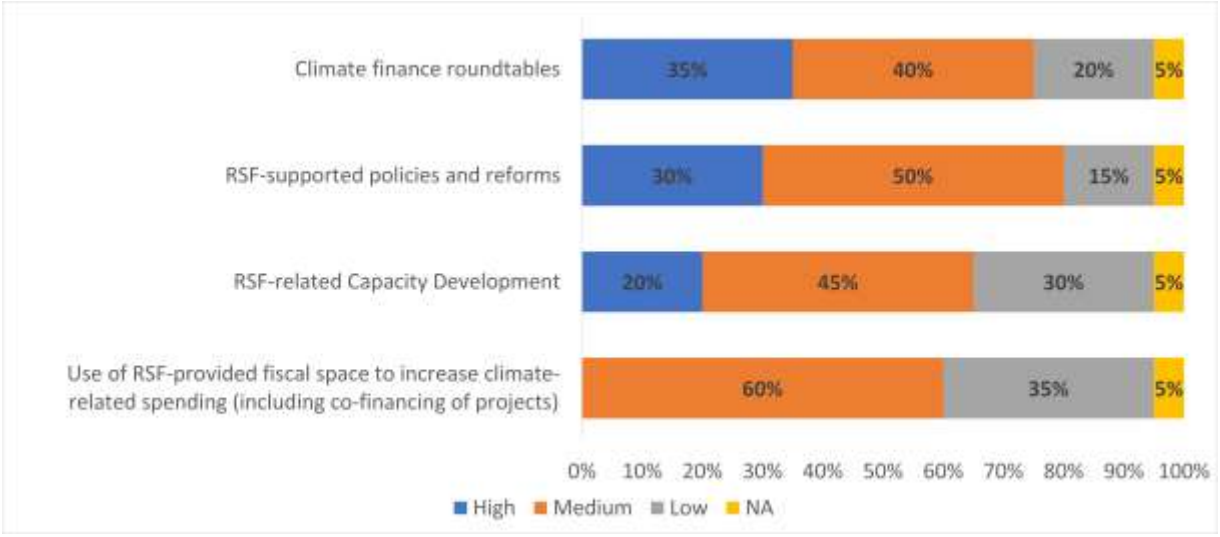






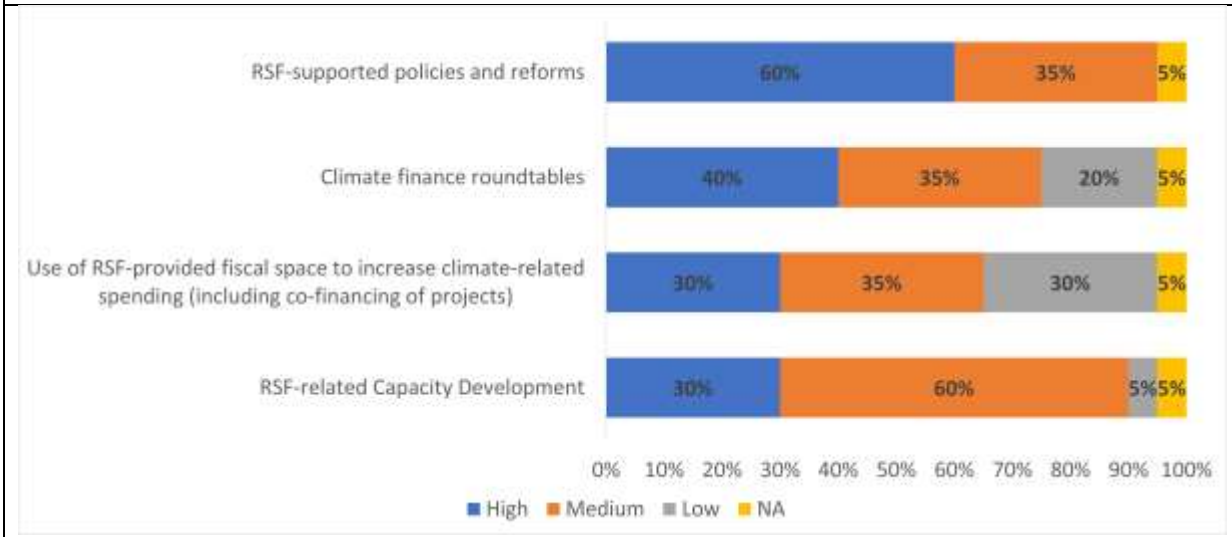
Annex Table A.5 Both roundtables and RSF are seen as important for attracting private finance

(Survey Question: In your view, do the following IMF climate-related operations have a high, medium, or low impact on attracting additional *private* climate finance?)



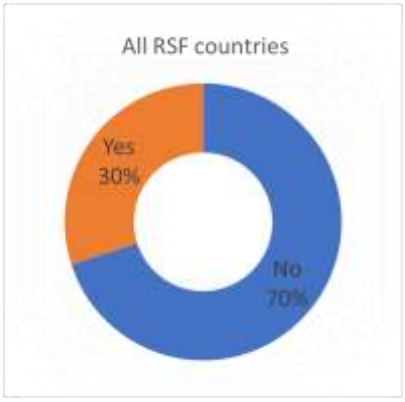
Annex Table A.6. RSF policies/reforms are rated as most important for attracting official climate finance

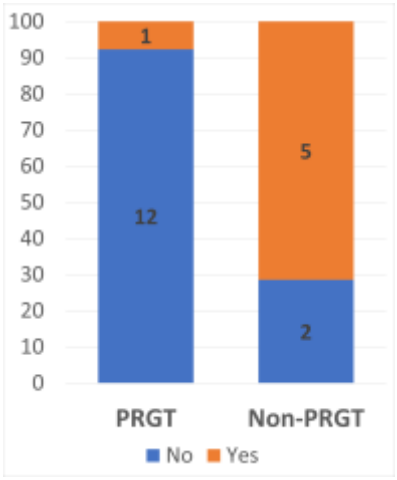
(Survey Question: In your view, do the following IMF climate-related operations have a high, medium or low impact on attracting additional *official* climate finance?)

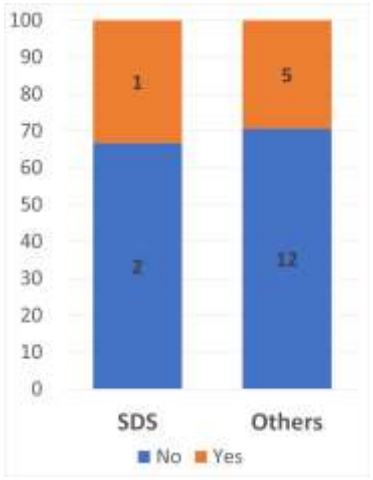


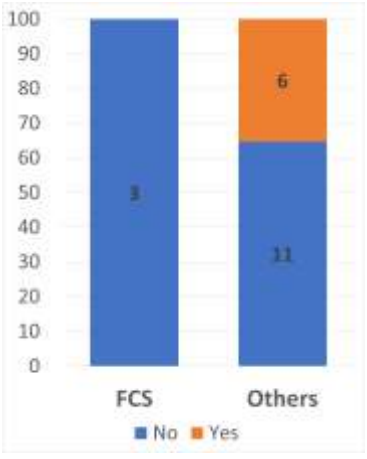
Annex Table A.7. Climate finance monitoring (Percent; number of countries)

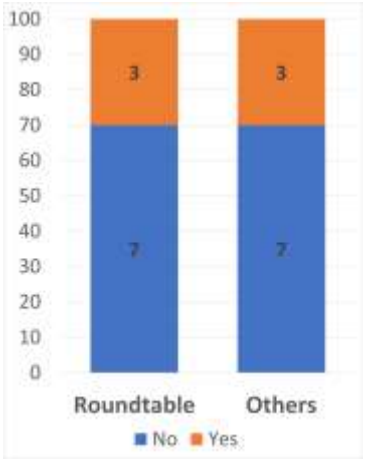
(Survey Question: Are there specific variables that you monitor to assess the catalytic impact of the RSF in your country?)





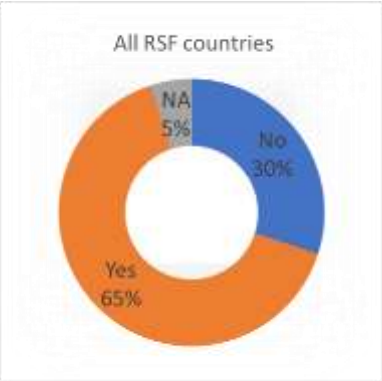


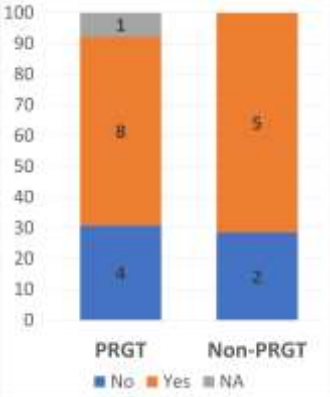


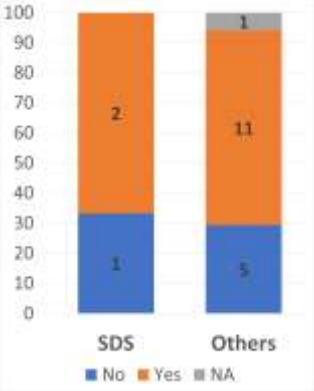


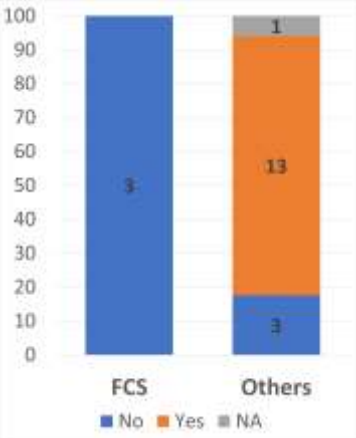
Annex Table A8. Climate Finance Instruments (Percent; number of countries)

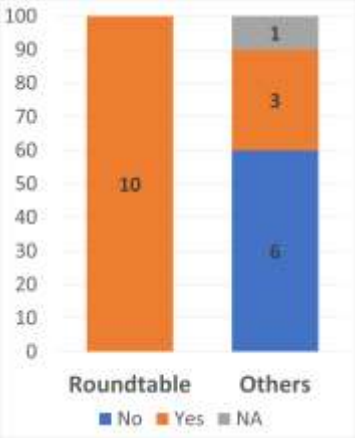
(Survey Question: Following the RSF arrangement, are any climate finance instruments being developed or issued?)





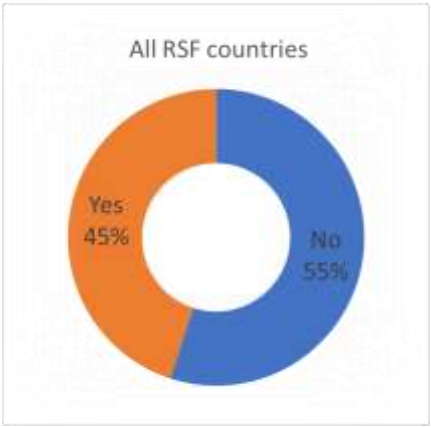


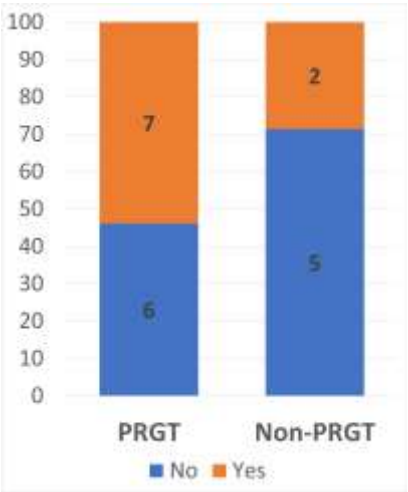


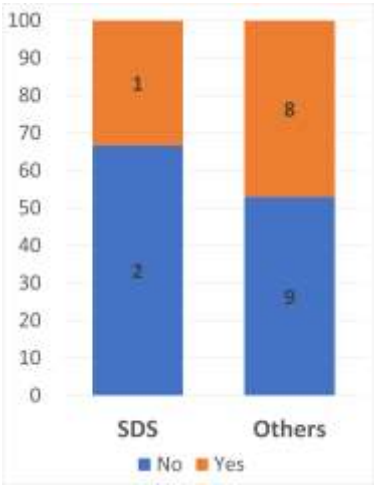


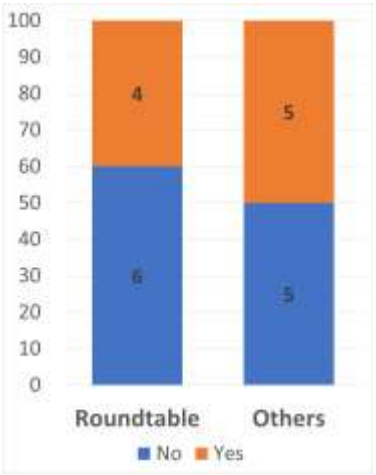
Annex Table A9. Climate Finance Coordination Units (Percent; number of countries)

(Survey Question: Did the RSF program support the creation of climate finance coordination units within your government?



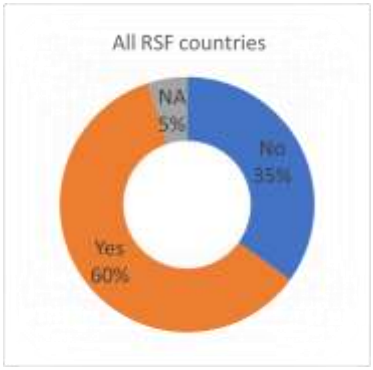


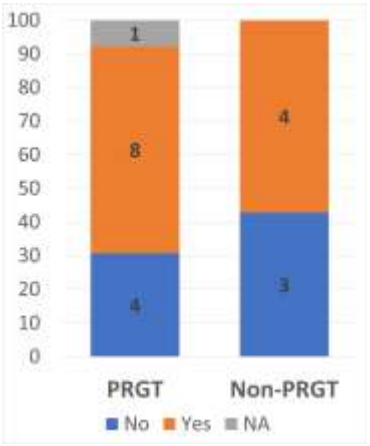


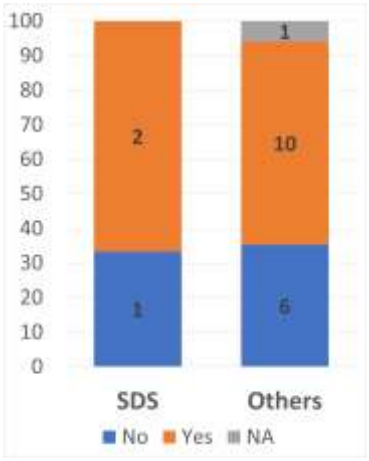


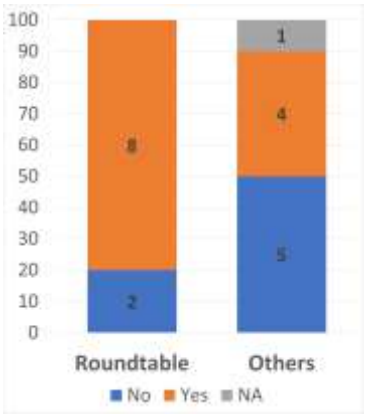
Annex Table A.10. Public Private Partnerships (Percent; number of countries)

(Survey Question: Are any public/private partnerships that support climate investment being set up or expanded in size/scope? Examples include green financing facilities, project preparation facility or blended finance structures.)





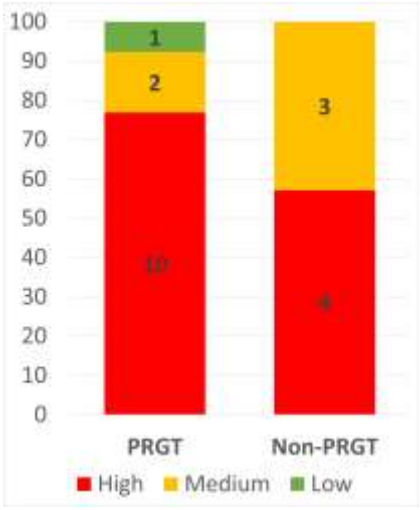




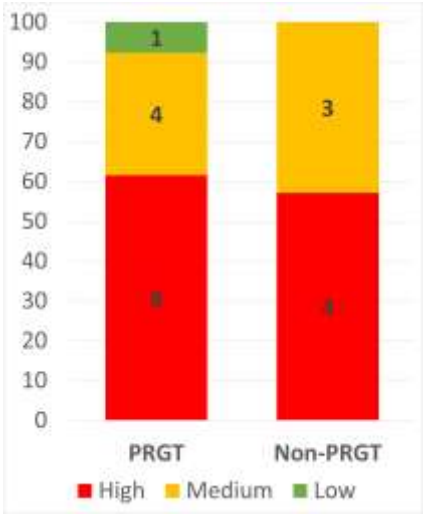
Annex Table A.11. Select Impediments to climate finance by PRGT status (Number of countries)

(Survey Question: Please rate whether the following factors are a high, medium or low obstacle to the growth of climate finance in your country.)

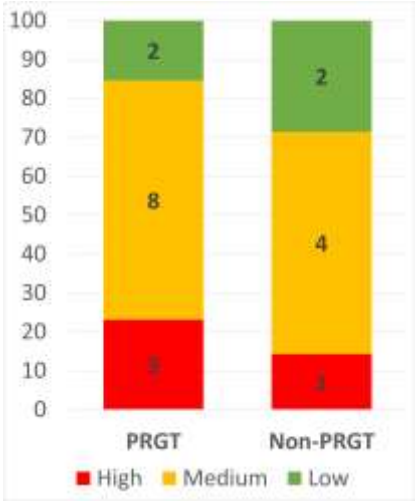
Limited investment opportunities and lack of bankable climate projects in EMDEs



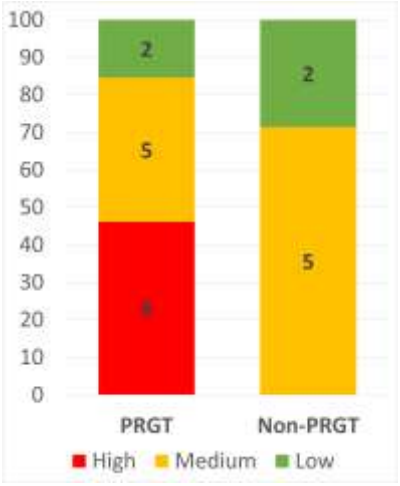
Climate data gaps, fragmented disclosure standards, taxonomies, and classification regimes



Lack of climate policies and regulatory clarity

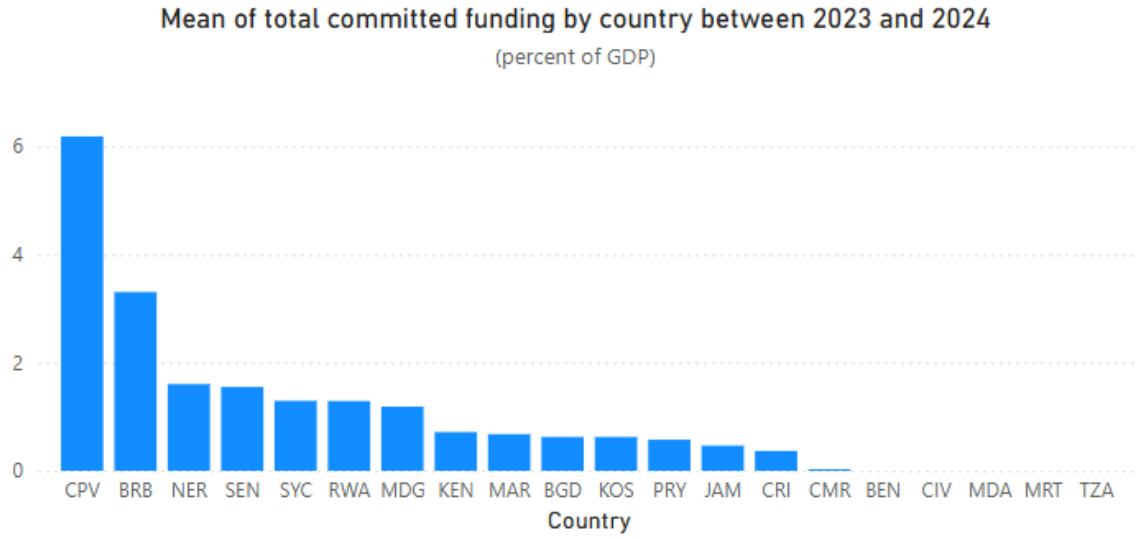


Broader enabling environment



Annex Table A.12. Country overview

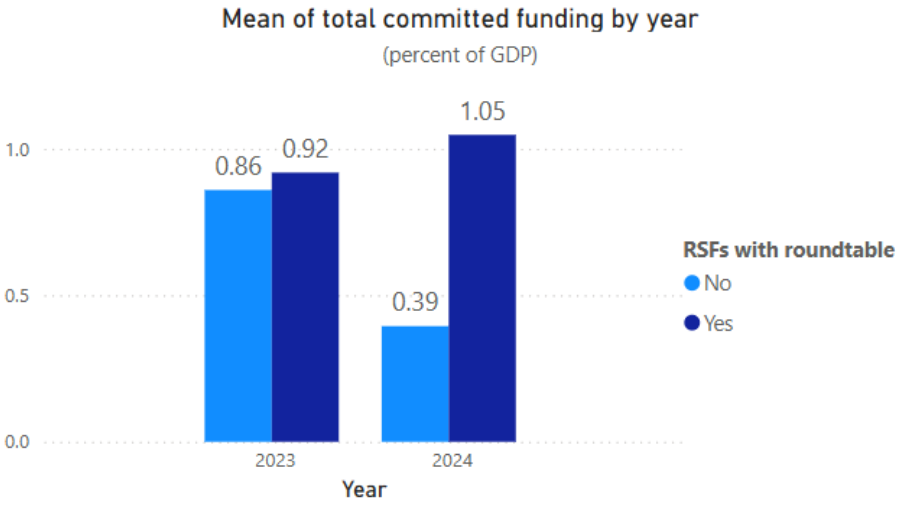
(Total funding is defined as the sum of funding committed by four sources: Multilateral Development Banks, Multilateral Financial Institutions, bilateral donors or the private sector).



Code	Country	2023	2024	Mean
CPV	Cabo Verde	0.00	12.36	6.18
BRB	Barbados	2.98	3.63	3.30
NER	Niger	1.79	1.42	1.60
SEN	Senegal	1.62	1.48	1.55
SYC	Seychelles	1.68	0.91	1.29
RWA	Rwanda	2.58	0.00	1.29
MDG	Madagascar		1.19	1.19
KEN	Kenya	0.18	1.25	0.72
MAR	Morocco	0.86	0.50	0.68
BGD	Bangladesh	0.00	1.25	0.63
KOS	Kosovo	1.25	0.00	0.63
PRY	Paraguay	0.44	0.71	0.58
JAM	Jamaica	0.00	0.93	0.47
CRI	Costa Rica	0.00	0.74	0.37
CMR	Cameroon		0.01	0.01
BEN	Benin	0.00	0.00	0.00
CIV	Côte d'Ivoire		0.00	0.00
MDA	Moldova	0.00	0.00	0.00
MRT	Mauritania	0.00	0.00	0.00
TZA	Tanzania		0.00	0.00
	Mean	**0.84**	**1.32**	**1.08**

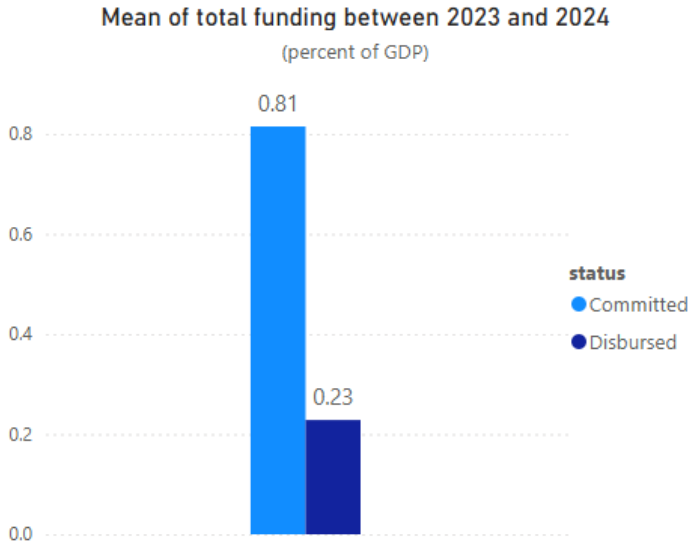
Annex Table A.13. Committed funding by year.*

(Total funding is defined as the sum of funding committed by four sources: Multilateral Development Banks, Multilateral Financial Institutions, bilateral donors or the private sector).



Note: Calculation excludes Cabo Verde

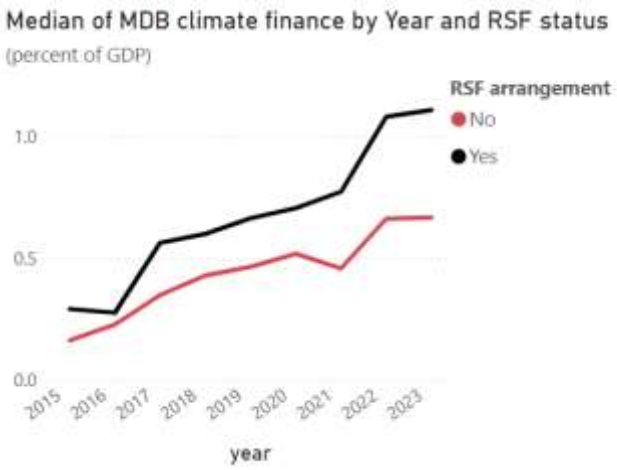
Annex Table A.14. Committed versus disbursed funding.*

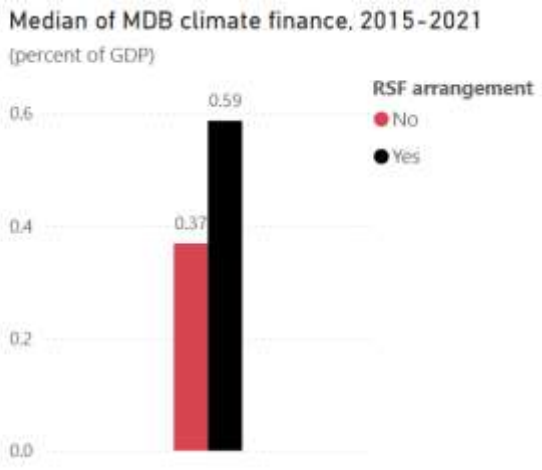


Note: Calculation excludes Cabo Verde

* Cabo Verde is a small island country that received exceptionally large financing in 2024 amounting to Euro 300 million (or 12.4 percent of GDP in that year).

Annex Table A.15. MDB climate finance in RST-eligible countries





MDB Climate Finance by year for RSF countries

ISO	2015	2016	2017	2018	2019	2020	2021	**Median**
BEN	0.18	0.03	0.35	0.88	2.06	0.78	1.31	**0.78**
BGD	0.38	0.50	0.07	0.40	0.61	0.30	0.18	**0.38**
BRB	0.02	0.09			0.92	3.06	2.22	**0.92**
CIV	0.01	0.15	0.56	0.59	0.89	0.72	0.56	**0.56**
CMR	0.01	0.05	0.91	0.47	1.92	0.14	0.94	**0.47**
CPV	0.06		0.76		0.49	0.27	0.88	**0.49**
CRI	0.35		0.01	0.01	0.25	0.61	0.33	**0.29**
JAM	0.15	0.40	0.35	1.85	0.02	0.37	0.29	**0.35**
KEN	0.37	0.21	0.71	1.26	0.38	0.45	0.53	**0.45**
KOS	1.18	0.84	0.43	0.61	1.22	0.74	1.02	**0.84**
MAR	0.83	0.65	0.56	0.83	0.72	0.69	0.64	**0.69**
MDA	0.58	1.31	1.16	0.06	0.58	1.61	1.38	**1.16**
MDG		0.31	0.99	0.65	1.99	1.49	3.12	**1.24**
MRT		0.09		0.15	0.49	0.66	0.34	**0.34**
NER	0.12	1.57	0.42	0.23	2.11	1.19	1.47	**1.19**
PRY	0.01	0.01	0.13	0.73	0.31	1.53	0.08	**0.13**
RWA	0.74	0.66	2.19	2.25	1.17	3.49	2.65	**2.19**
SEN	0.23	0.08	3.24	1.18	0.72	1.08	1.60	**1.08**
SYC	1.75			0.11	0.00	0.36	0.60	**0.36**
TZA	0.51	0.28	1.02	0.36	0.07	0.59	0.67	**0.51**

Source: 2023 Joint Report on Multilateral Development Banks' Climate Finance

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PUBLICATIONS

The Catalytic Impact of Resilience and Sustainability Facility Arrangements

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