IEO

Independent Evaluation Office
of the International Monetary Fund

BACKGROUND PAPER

BP/24-01/06

Evolution of IMF Engagement on Climate Change

Kevin P. Gallagher, Cyrus Rustomjee, and Andrea Arevalo

 BP/24-01/06

IEO Background Paper
Independent Evaluation Office
of the International Monetary Fund

Evolution of IMF Engagement on Climate Change

Prepared by Kevin P. Gallagher,[*] Cyrus Rustomjee,[†] and Andrea Arevalo[‡]

May 9, 2024

[*] Consultant, Independent Evaluation Office of the IMF; Professor and Director, Boston University Global Development Policy Center. I wish to thank Lukasz Jannils, and Richard Xu for their assistance with the information materials, and Arun Bhatnagar and Amy Gamulo for their help with formatting the report.

[†] Assistant Director, Independent Evaluation Office of the IMF.

[‡] Economist, Independent Evaluation Office of the IMF.

Contents

ABBREVIATIONS

BOP	Balance of Payments
CCPA	Climate Change Policy Assessment
CD	Capacity Development
COP	Conference of the Parties
CSR	Comprehensive Surveillance Review
FSAP	Financial Sector Assessment Program
GHG	Greenhouse Gas
GNS	Guidance Note for Surveillance under Article IV Consultation
ISD	Integrated Surveillance Decision
MCM	Monetary and Capital Markets Department (IMF)
MD	Managing Director
RCF	Rapid Credit Facility
RES	Research Department (IMF)
RFI	Rapid Financing Instrument
RST	Resilience and Sustainability Trust
SDR	Special Drawing Right
SPR	Strategy, Policy, and Review Department (IMF)
UNFCCC	United Nations Framework Convention on Climate Change

EXECUTIVE SUMMARY

A framework for IMF engagement on climate change has developed over time. This framework consists of a general legal framework for surveillance, surveillance review, and a climate strategy. The 2012 Integrated Surveillance Decision, 2014 Triennial Surveillance Review and 2015 Surveillance Guidance Note collectively provide a structure for addressing climate change in bilateral surveillance, based on its influence on balance of payments stability, macrocriticality, and the Fund's expertise. The 2021 Comprehensive Surveillance Review reaffirmed the macrocriticality of climate change and clarified the criteria for how climate change would be incorporated in surveillance; but more granular guidance, including in the 2022 Staff Guidance Note, has been minimal. The 2021 Climate Strategy recognizes the need to address climate change adaptation, mitigation, and transition risks. However, with the legal framework in place almost a decade earlier and Fund experience accumulated over several years, it took considerable time for the Fund to establish a climate strategy, particularly in comparison with other international financial institutions.

The Fund’s climate work advanced alongside the evolution of the legal framework, guidance, and strategy on climate change. IMF engagement on climate issues evolved over an extended timeframe, including prior to the evaluation period. This process gained momentum in 2012 and was further spurred in 2015 with Managing Director Lagarde's assertion of the macrocriticality of climate change Fund work in the lead-up to the UNCCC Conference (COP 21). Coverage of climate issues in the Fund’s work, including in research, modelling capacity and an array of toolkits, expanded considerably over the evaluation period. By 2021, the Fund had accumulated substantial experience in the coverage of the economic and financial aspects of climate adaptation, mitigation and transition risks in bilateral surveillance and multilateral surveillance.

Numerous decision-makers and processes have shaped the Fund's approach to climate change. Successive IMF Managing Directors have been instrumental in this evolution, with the GPAs acting as a key catalyst and public statements significantly influencing how the IMF is perceived externally. The impact of the membership has fluctuated, with the IMFC playing a minimal role, and the Board becoming more influential from 2017 in guiding the pace and direction of the Fund's climate initiatives through groups of Board members who coalesced in promoting the climate agenda. Despite limited institutional support for much of the evaluation period, the staff were a crucial driving force behind the Fund's climate work. Partner institutions, along with external stakeholders and events, also helped to galvanize the Fund's engagement.

Decision-making to develop, incentivize and support the human resources needed to deliver the Fund’s work on climate change was inefficient and created a sizeable gap between the level of institutional ambition and resources to deliver. The 2021 Climate Strategy acknowledged the initial ad hoc staffing approach, prompting the creation of a formal coordination and monitoring system. The lack of sufficient granular data on staff numbers working on climate change, particularly in the earlier part of the evaluation, contributed to the

challenges in delivering climate work. The Executive Board agreed to a phased budget increase aimed at bolstering the Fund's capacity in strategic areas, including climate change. However, the allocation for implementing the climate strategy was determined only after the strategy's approval and ultimately did not meet the budgetary projections initially outlined in the Climate Strategy. Risk reports underscored the challenges and potential risks of integrating emerging issues like climate change in a flat-budget environment, while the Climate Strategy emphasized the need for increased Fund engagement on climate change to mitigate reputational and strategic risks.

I. INTRODUCTION

1. **The activities of the IMF have expanded significantly over the past two decades, to include issues such as climate change, inequality and gender, as the IMF's role has changed and the manner in which the IMF has applied its mandate has evolved (IEO, 2023).** IMF members and stakeholders have largely supported its changing role, acknowledging these changes as a response to both the evolution of the global economy and a better understanding of how these issues have important consequences for IMF member's balance of payments (BOP) and financial stability. Yet concerns have also been raised, including issues related to decision-making processes, governance, achieving common understanding and clarity of decisions taken and how these decisions have been operationalized.

2. **This paper contributes to the IEO's evaluation of the Evolving Application of the IMF's Mandate, focusing on the IMF's engagement on climate change. The focus, consistent with the evaluation, is on the surveillance mandate, while considering in some instances that engagement has involved other activities. It has several key objectives.** These include to review and assess: (i) the decision-making processes and drivers of change that guided the evolution of the Fund's climate policy work, including the roles of the IMF Managing Director (MD) and IMF management, IMF shareholders, the Executive Board and others; (ii) how key differences of perspective have been managed; (iii) human resource and budgetary processes; (iv) and institutional risk. Consistent with the Issues Paper for this evaluation, the paper focuses on the IMF's surveillance mandate; and does not evaluate the IMF's performance or effectiveness in implementing its climate policies or outcomes of Fund engagement in member countries.

3. **The paper draws on several sources of information**. These include: (i) IMF internal documents including policy papers, surveillance reviews, research papers, bilateral surveillance, budget, human resource and planning documents; (ii) external documents from international institutions and the academic literature; (iii) qualitative and quantitative desk analysis; (iv) interviews of IMF staff, Offices of Executive Directors, external stakeholders; and (v) the results of surveys of IMF staff and member country authorities. It draws on previous IEO evaluations where relevant, in particular as relates to the evolution of the IMF's work on climate change.

4. **The paper is organized as follows.** Sections II traces the evolution of the Fund's climate work since 2012. Section III reviews and assesses the key drivers, including roles of the MD, Shareholders, the Executive Board, IMF staff and external actors and events, in shaping the Fund's climate work. Section IV identifies key differences of perspective that have emerged as the Fund's work has evolved. Section V reviews and assesses decision-making processes related to human resources, budgeting and treatment of risk; Section VI concludes.

II. EVOLUTION OF IMF ENGAGEMENT ON CLIMATE CHANGE

5. **The IMF's engagement on climate change evolved through two parallel channels.** These comprised firstly the establishment of a legal framework, staff guidance and a strategy to implement Fund work on climate change. Collectively these elements set out the overall framework within which staff were authorized to conduct work. Secondly, the substantive research, surveillance, and policy work of the Fund, manifested by a wide range of workstreams that evolved over the evaluation period. This section traces the evolution of Fund engagement through both channels.

A. Evolution of the Legal Framework, Guidance and Strategy

6. **A framework for IMF engagement on climate change, comprising three elements, evolved separately over the evaluation period.** The general legal framework for surveillance elaborated further clarified how to incorporate climate change related issues between 2012–15; a surveillance review incorporating treatment of climate change and a Guidance Note on Bilateral surveillance, both incorporating elements of treatment of climate change, were issued in 2021 and 2022 respectively; and a Climate Strategy was endorsed by the Executive Board in 2021. Each element of the framework is discussed below.

(i) Legal Framework for Surveillance of Climate Change, 2012–15

7. **A framework for Fund surveillance, applicable to its traditional areas of engagement, but also to other areas including climate change, was established between 2012–15.** The framework comprised the Executive Board's 2012 Integrated Surveillance Decision (ISD) (IMF, 2012); the guidance provided in the 2014 Triennial Surveillance Review (IMF, 2014a); and clarifications provided in a 2015 Guidance Note for Surveillance under Article IV Consultations (GNS) (IMF, 2015b).

8. **While the 2007 Decision laid the foundational framework for addressing specific policies, the ISD built upon this by establishing a comprehensive framework and criteria for the Fund's bilateral surveillance. This included surveillance of issues beyond those traditionally deemed central to the Fund's work, such as climate change.** It specified that the Fund would focus on those policies that can significantly influence present or prospective BOP and domestic stability. For this purpose, it identified four policies—exchange rate, monetary, fiscal, and financial sector policies—as always being the subject of Fund bilateral surveillance. At the time, the Executive Board agreed that policies other than the four would be examined in the context of surveillance only if they significantly influenced present or prospective balance of payments or domestic stability, though did not indicate which policies this applied to.

9. **The Triennial Surveillance Review (IMF, 2014a) developed clearer criteria for Fund engagement in policies other than the four policies that had been specifically identified by the ISD.** It required such engagement to be "based on macrocriticality and the Fund's expertise or interest in a "critical mass" of the membership, leveraging the expertise of other international organizations and local experts where possible.

10. **The GNS (IMF, 2015b) further clarified when the criteria of macrocriticality and Fund expertise would apply.** It established that a policy is macrocritical if it significantly affected a country's present or prospective BOP or domestic stability; and that in deciding whether or not an issue is macrocritical, staff should exercise judgement and take into account country circumstances. It also explained that when deemed macrocritical and the Fund had in-house expertise, this expertise should be leveraged; while where such expertise was not present, the Fund would need to determine whether or not to build it, or draw on expertise from other international organizations, including by building partnerships and collaborating with these organizations.

11. **Collectively, the ISD, Triennial Surveillance Review, and Surveillance Guidance Note provided a framework to address climate change in bilateral surveillance**: if climate change policies significantly influenced present or prospective BOP stability, inclusion to be based on macrocriticality and the Funds expertise or interest in a critical mass of the membership, leveraging the expertise of other international organizations; and specifying in what circumstances the criteria of macrocriticality and Fund expertise would apply.

12. **The 2012 ISD made Article IV consultations a vehicle for both bilateral and multilateral surveillance; and effectively introduced several channels through which surveillance would require coverage of climate change.[1]** As noted earlier, in regard to bilateral surveillance, it first provided that exchange rate, monetary, fiscal and financial sector policies would always be covered in bilateral surveillance (IMF, 2012). Consequently, where these policies were being proposed or implemented and they related to climate change, the ISD required that they be discussed. Second, other policies required to be discussed to the extent that they significantly influenced present of prospective balance of payments or domestic stability. Consequently, structural policies related to climate change that had implications for stability would require to be discussed in bilateral surveillance, where these implications were deemed to be macrocritical in a country-specific context. Thirdly, bilateral surveillance was required to assess inward spillovers, comprising the actual or potential impacts of global developments and policy actions in other countries on a member's economic and financial stability and the appropriate policy response (IMF, 2012; 2015b). As part of multilateral surveillance, the ISD also required Article IV consultations to include a discussion of the spillover effects of a members' exchange rate and domestic economic and financial policies that may significantly influence the effective operation of the International Monetary System, for example by undermining global economic and financial stability.

---

[1] IMF (2021b), Annex I provides a detailed overview on the Legal Framework for Article IV Consultations as it pertains to the coverage of climate change.

(ii) Review and Guidance, 2021–22

13. **The Board completed the Comprehensive Surveillance Review (CSR) in May 2021; and a GNS (IMF, 2022a) was sent for information in June 2022.** Both documents drew attention to Fund surveillance of climate change.

14. **The CSR provided considerable attention to Fund engagement on climate change.** It affirmed that climate change and climate change policy can be macrocritical, that climate change can be an "existential threat with significant macroeconomic and financial implications" and that neither is adequately reflected in IMF forecasts and analysis (IMF, 2021a). The paper also included a detailed background paper specifically assessing how climate change would be integrated into Article IV consultations, with clear commitment to cover climate change adaptation and the management of the transition to a low-carbon economy in Article IV reports, wherever the associated policy challenges are macrocritical. Issues related to global mitigation of climate change, as a global policy challenge, would be covered in multilateral surveillance activities, including encouraging voluntary discussions in Article IV consultations for the 20 largest emitters, while adaptation issues, as a domestic policy challenge, would be integrated into bilateral surveillance activities.

15. **A GNS was issued in June 2022, which provided scant guidance for surveillance of climate change (IMF, 2022a).** The note covers five policies (fiscal policy, macrofinancial analysis and financial policies, monetary policy, external sector policies and macrostructural policies), three "applications," covering Integrated Policy Framework, climate change and gender. Covering just over four pages of climate change, it provides advice to staff on policy challenges, coverage and topics.

16. **Climate work was operationalized into the existing organizational structure.** Underpinning the CSR, the Climate Strategy and the GNS have all treated climate change as pervasively macrocritical across the areas identified in the ISD as central to the IMF's mandate, including monetary fiscal policy and financial sector policy issues. The 2022 GNS explicitly adopts this approach. A consequence of this has been that in operationalizing the climate work, the Fund has chosen to attempt to integrate climate across all departments. Interviewees for this evaluation considered that the mainstreaming of climate in existing departments has the potential to create coordination problems across staff and potential struggles for decision-making power and resources moving forward.

(iii) Climate Strategy, 2021

17. **A Climate Strategy was approved in July 2021 (IMF, 2021c).** The Climate Strategy reiterated that climate change is macrocritical, provided detail on the nature and extent to which climate change and climate policy would be incorporated into multilateral and bilateral surveillance activities, and discussed the human and financial resource needs for the Fund to engage in climate change. The paper concluded: "For the IMF to live up to its mandate, it needs

to assist its membership with addressing these challenges, from building resilience against climate change over climate change mitigation to managing the transition to a low-carbon economy. The IMF can also play a useful role in assisting with coordinating the global macroeconomic policy response to climate change, given the global public good character of climate change mitigation."

18. **The Summing Up of the Board Discussion emphasises several aspects of concurrence among Executive Directors.** It noted that they agreed that climate change poses critical macroeconomic and financial policy challenges for the whole Fund membership in the coming years and decades; and agreed that the Fund has an important role to play, within its mandate, in supporting members' efforts to address climate change related challenges through its surveillance, when macrocritical, and through its capacity development (CD) activities**.**

19. **The IMF Climate Strategy set out several targeted outputs.** Key tenets of the IMF Climate Strategy, for bilateral and multilateral surveillance, CD, lending, debt issues, budget and human resources and collaboration with other international financial institutions, are detailed in Box 1.

Box 1. Key Tenets of the IMF Strategy to Help Members Address Climate Change-Related Policy Challenges

Direct Country Engagement	In line with the CSR, cover the mitigation policies of 20 Largest Emitters of greenhouse gases every 3 years, with in-depth coverage of 6-7 per year in Article IVs on a voluntary basis.
	Article IVs will cover the macrocritical aspects of transition management to a low-carbon economy, covering all countries every 5-6 years; with in-depth coverage of 8-9 countries per year; and more standardized coverage for 25 countries per year.
	Article IVs will cover adaptation and resilience building for 60 climate vulnerable countries every three years; with 10 CMAPs per year supporting these Article IVs and 10 other Article IVs per year.
	All FSAPs will cover climate change and climate change policy, depending on an assessment of the materiality of climate risk.
	DSAs will integrate exposure to climate risk and policy options to manage such risks.
Multilateral Surveillance	Address climate in flagship assessments in WEOs, GFSRs, Fiscal Monitor: 1-2 chapters per year; REOs: 1-2 chapters per year; 1-3 Policy Papers per year; 3-7 Staff Climate Notes per year.
Capacity Development	Prepare 10 CMAP Reports per year; 87 Single-Country CD per year, covering fiscal issues (10) financial sector issues (30), climate data (20) macro modelling (15) and legal and financial integrity issues (12); external training, including an online course on the macroeconomics of climate change 5-6 times per year; micro-learning interactive videos (10 per year).
Lending toolkit	Emphasizes existence of the RFI, RCF and CCRT.
	Emphasizes need to expand "green fiscal adjustment" through energy subsidy reform and new green taxes in IMF-supported programs.
Debt	Emphasizes that members can include natural disaster clauses in new borrowing contracts during sovereign debt restructuring.
Budget and Human Resources	Baseline budgeting was roughly the equivalent of 60 FTEs. Staff requested an additional 95 FTEs.
Collaboration with other IOs	CD conducted with WB, OECD, and IEA, as well as bilateral donors Germany and UK.
	Developing Climate Change Indicators Dashboard with OECD, WB, UN, EUROSTAT, FAO, IEA, and NOAA.
	Co-chair NGFS workstream on data gaps and co-hosts CFMCA.
	Dialogues with NGOs, academics, and private sector.

Source: Authors' assessment, and IMF, 2021c.

20. **The Climate Strategy included a single paragraph related to IMF lending.** It noted that IMF lending could be aligned with climate goals when climate-related measures are seen as crucial to solve BOP problems. It also reiterated the Rapid Credit Facility (RCF) and the Rapid Financing Instrument (RFI)'s role in supporting member states struck by natural disasters, as well as the Catastrophe Containment and Relief Trust (CCRT), suggesting that extreme climate shocks could be covered by these programs. In addition, the Strategy noted that the IMF would work to incorporate climate considerations into fiscal consolidation efforts through reducing subsidies and raising taxes on carbon-intensive activity (IMF, 2021c).

21. **In April 2022 the IMF Executive Board approved a Resilience and Sustainability Trust (RST) and Resilience and Sustainability Facility (RSF) (IMF, 2022b).** The resources of the RST are used to support Fund financing of RSF programs, providing longer-term financing to member countries to reduce risks to prospective BOP problems from climate change and climate change policy, and pandemics. Resources for the RST are drawn largely from re-channelled Special Drawing Rights (SDR) contributions from an allocation of IMF members' $650 billion SDR, agreed by the membership in 2021. The Trust, which will be a source of financing for the RSF, had received USD $40 billion (roughly SDR 30 billion) as of March 2024. The final Executive Board-approved RST is available to PRGT-eligible members and small developing states (SDS) with a population of under 1.5 million and a per capita gross national income below 25 times the 2021 International Development Association (IDA) threshold and middle-income countries with per capita incomes below ten times the IDA threshold. Importantly, to access the RSF, member states must have an upper credit tranche (UCT) IMF-supported program in place. Members can access RST financing at a norm of 75 percent of quota and capped at the lower of up to 150 percent of their IMF quota, or SDR 1 billion. Unlike other IMF-supported programs, RSF loans have 20-year maturities with a 10.5-year grace period with a tiered rate structure, with poorer countries receiving the most favourable terms (IMF, 2022b).

Assessment

22. **The ISD proved relevant at the start of the evaluation period, but its effectiveness was more limited.** The ISD proved relevant, as it provided a framework to incorporate climate change issues in Fund surveillance under Article IV consultations. But its effectiveness was diminished, with criteria of macrocriticality and availability of Fund expertise only established by 2015, echoing insights from interviewees who noted that for some time, in the early stages of the evaluation period, coverage of climate change in bilateral surveillance was largely due to the interest of a small number of individual staff who proceeded with little guidance on the application of these surveillance criteria to climate change.

23. **The relevance of the ISD was brought into question at the end of the evaluation period, when differences emerged among the membership on treatment of climate mitigation of the large emitters**. Staff sought pathways to discuss the mitigation policies of these members in Article IV consultations. And while staff assessed that climate change mitigation is a theme for multilateral rather than bilateral surveillance (IMF, 2021b), and should be discussed

in the context of the ISD's spillover provision,[2] staff also acknowledged that establishing which countries contribute "significantly" to the risk of undermining global economic and financial stability is not straightforward; and noted that "the implications of the ISD for the coverage of climate mitigation—or more precisely a country's contribution to the global mitigation effort—in Article IV consultations are somewhat indeterminate." Limitations in the provisions of the ISD and legal constraints in the Articles of Agreement have resulted in staff proposals to strongly encourage coverage of the contributions of the 20 largest emitters of GHGs to the global mitigation effort.

24. **Guidance on surveillance of climate change was minimal and provided only from 2021.** The 2015 GNS made four passing references to climate change; a background paper for the 2021 CSR provided more detailed coverage, including guidance on what climate-related topics to cover, specificity of advice; while the 2022 GNS made little improvement on its 2015 predecessor, providing highly abbreviated discussion of policy challenges, coverage and topics.

25. **The absence of a Climate Strategy until 2021 reflects the considerable challenges and difficulties confronted by the IMF, in seeking to establish the conditions needed to formally engage in a newer policy area.** By this time, the Fund had tallied several years of experience in engaging on climate issues, including a reservoir of research and analytical work, modelling capacity, country engagement, collaboration with external partners, and pilots with the World Bank (Stedman, Abrams, and Kell, 2020); and mainly since 2015 had gained growing international recognition of its work on the economic and financial aspects of climate adaptation, mitigation and transition risks. In developing its Climate Strategy, the Fund also took longer than the World Bank. The Bank approved a Climate Change Action Plan in 2016 (World Bank, 2016) which was updated in 2021 (World Bank, 2021). In addition, the World Bank also established official climate policies dating back to the early 2000s (IEG, 2009), while later, the World Bank and other Multilateral Development Banks (MDBs) officially pledged to align all of their financing operations with the goal of the Paris Agreement in 2018 (World Bank, 2023).

26. **Overall, the effectiveness of the IMF in establishing the climate agenda ebbed and flowed. In further clarifying the legal framework for Fund surveillance at the beginning of the evaluation period, the IMF enhanced its relevance, ensuring that the application of the Fund's mandate to climate change remained within the legal framework and providing the opportunity for the Fund to respond to the memberships' needs and priorities.** Yet, in catalyzing action to implement Fund engagement on climate issues, the Fund proved less effective, approving a climate strategy in 2021, fully a decade after the ISD, notwithstanding the increasing urgency of Fund engagement and attention to climate change.

---

[2] The provision stipulates that as part of multilateral surveillance, Article IV consultations "shall include a discussion of the spillover effects of a member's exchange rate and domestic economic and financial policies that may significantly influence the effective operation of the international monetary system, for example by undermining global economic and financial stability" (IMF, 2012).

B. Evolution of Climate Work, 2012–22

27. **The Fund's climate work advanced in parallel to the evolution of the legal framework, guidance, and strategy on climate change.** While the previous section reviewed and assessed the legal framework, Fund surveillance reviews and guidance, as well as the Fund's Climate Strategy, this section traces how the Fund's climate work evolved over the evaluation period.

28. **Prior to the evaluation period, IMF engagement on climate issues evolved over an extended period of three decades.** Between 1990–2011, Fund engagement on climate change comprised an extended period of exploration, with often ad hoc initiatives and occasional research. Coverage in bilateral surveillance was limited; and the Fund participated opportunistically in international environmental and climate-related conferences. This period was marked by the absence of a clearly articulated framework for Fund engagement in surveillance.

29. **Between 2012–14, modest progress was made in Fund engagement on climate change.** During this period, FAD began conducting work on designing tools to quantify and assess the environmental, fiscal, and economic benefits of global fossil fuel subsidies and carbon pricing, generating initial guidance on mitigation policies. A 2012 report, which included a foreword by MD Lagarde, provided guidance to policymakers on the design of fiscal instruments to implement climate mitigation policies (Mooij and others, 2012). Further work provided carbon pricing quantitative assessments of over 150 member countries.[3] Several Working Papers and policy papers, issued between 2012–14, provided a basis for later Fund initiatives to support members facing acute adaptation challenges. A policy paper on Macroeconomic Management in SDS (IMF, 2013a), together with region-specific background papers[4] drew attention to the fiscal, debt and other long-term macroeconomic challenges brought about by climate change and natural disasters, and to work by the World Bank, the UN, and other multilateral institutions that recommended policy frameworks in the areas of preparedness, resilience-building, contingency planning, and risk reduction for addressing climate change and natural disasters in SDS. Subsequently, a Staff Guidance Note for SDS (IMF, 2014b) drew attention to the particular vulnerabilities of small states to climate change and natural disasters and proposed augmenting the Fund's traditional toolkits, including Debt Sustainability Analyses, to include small state specific issues, include climate change scenarios or stress tests calibrated to typical natural disasters.

30. **Shortly following the 2015 Guidance Note on Bilateral Surveillance, MD Christine Lagarde reaffirmed the macrocriticality of climate change**, in a speech regarding energy subsidy reform and carbon taxation, noting that "We all know that "the time is right to price it right"—and this can help us to "get it right" on climate change" (Lagarde, 2015). The MD also issued a statement noting that "climate change poses significant risks for macroeconomic

[3] Parry and others (2014).

[4] "Macroeconomic Issues in Small States and Implications for Fund Engagement;" "Asia and Pacific Small States—Raising Potential Growth and Enhancing Resilience to Shocks;" and "Caribbean Small States—Challenges of High Debt and Low Growth."

performance and several of the appropriate policy responses lie within the Fund's expertise" (IMF, 2015a). This document appears to be the first time that the phrase "macrocritical" was attributed to climate change by the IMF, noting that "where macrocritical, the fiscal costs of adaptation, and the effective use of climate related financial flows, will need to be integrated in sustainable medium-term fiscal frameworks" (IMF, 2015a).

31. **In the run-up to the December 2015 UNCCC Conference, the IMF Executive Board held two informal board discussions on climate change.** These discussions, in September and November, respectively, fed into "The Managing Director's Statement on the Role of the Fund in Addressing Climate Change" (IMF, 2015a). The statement reiterated that carbon pricing should form the centrepiece of global climate mitigation strategies, but also for the first time inferred that climate change and climate change policy may be "macrocritical" and therefore the subject of bilateral surveillance.

32. **Engagement on climate change at the IMF began to accelerate in the lead up to and following the 2015 agreements at the United Nations—in the Sustainable Development Goals and the Paris Climate agreement.** Attention to climate change surged across the IMF's flagship reports, including the World Economic Outlook (October 2017 and 2020, April and October 2022); Regional Economic Outlooks, Fiscal Monitors, the Global Financial Stability Report (April 2020, October 2019, 2021, and 2022) and the 2022 External Sector Report which covered climate policies and external adjustment. Several papers (Parry and others, 2014; Cabezon, 2015; Gerling, 2017) were prepared for international discussion and use by country teams. Coverage of climate change in Article IV reports expanded, with particular attention to members' adaptation challenges, for example, Maldives (IMF, 2016b), Seychelles (IMF, 2017b), Solomon Islands (IMF, 2016c), Tuvalu (IMF, 2016d).

33. **In addition to attention to the macroeconomics of climate mitigation policies such as carbon taxes and subsidy reduction, IMF consideration of climate change also began to focus on the macroeconomic aspects of "physical risk" or climate shocks.** Fund work on both mitigation and adaptation began to accelerate following the 2015 Paris Agreement. In the first IMF publication on climate change after the agreement, the IMF began to devote greater attention to the most vulnerable countries (Farid and others, 2016). The publication was one of the first to exhibit familiarity with the concepts of physical and transition risks. It recommended the expansion of the Funds' work beyond carbon pricing and subsidy reduction to macroprudential regulations and climate stress testing.

34. **From 2015 the Fund paid detailed attention to the relationship between climate change, natural disasters, and debt sustainability.** Recognizing that low-income countries and SDS are especially vulnerable to increasing risks of extreme weather events, the IMF began piloting debt sustainability analyses (DSAs) with the World Bank that incorporated the fiscal impacts of climate shocks. The IMF also articulated a role for the Fund to assist SDS with resilience to climate change in 2016 (IMF, 2016a). A staff paper discussed by the Executive Board that year recognized that climate-related natural disasters could have macrocritical impacts on countries. It emphasized

that the Fund had an important role to play in helping countries to develop macrocritical policies for climate change mitigation and adaptation, including carbon pricing and energy subsidies; and fiscal, investment and debt management frameworks for climate-related spending. It argued that the RCF and the RFI, which can offer prompt financial assistance to eligible IMF members facing urgent BOP needs, provided insufficient resources to support members facing large natural disasters. Subsequently, the Board agreed to establish two new windows, under the RCF and RFI, respectively, to provide annual access of up to 60 percent of quota for countries experiencing urgent BOP needs arising from large natural disasters (IMF, 2017a).

35. **Since 2015, the Fund has given increasing consideration to climate-related financial risks.** These risks have been covered in Article IV consultations where members face particular climate vulnerabilities and in Financial Sector Assessment Program (FSAP) assessments. Since 2021, climate-related financial risks are expected to be covered in all FSAP assessments where deemed to be of systemic importance (IMF, 2021c), conditional on augmentation resources.[5] In addition, both multilateral surveillance and research have also covered issues such as stress testing financial institutions for climate risk, the pricing of climate-related risks in equity markets, the impact of sustainable finance on financial stability, and the role of financial regulation and monetary policy in promoting climate change mitigation.[6]

36. **For several years, climate policies have been covered in financial sector surveillance and particularly in FSAPs.** MCM incorporated climate change in FSAPs through climate modules which assess the implications of physical and transition risks for the stability of the banking system. These include the diagnosis of climate risk through the Climate Risk Assessment Matrix (C-RAM) that describes key climate risks, their potential macro-financial impact and transmission channels; and design of climate scenarios incorporating both physical and transition risks scenarios. Climate Change Policy Assessments (CCPAs) have also contained in-depth analysis of the financial and investment needs of several climate-vulnerable states. Flagship reports, in particular GFSRs, have included assessments of financial stability due to the prospect of large revaluations in response to physical risks arising from damages to property, infrastructure and land brought about by climate change. In addition, GFSRs have covered transition risks from adjustment to a low-carbon economy.

37. **In 2017, CCPAs were introduced as a collaborative pilot IMF-World Bank initiative, to assess the macroeconomic implications of a member state's policy frameworks to adapt to and mitigate climate change (Stedman, Abrams, and Kell, 2020)**. CCPA's were also intended to offer policy input into their climate strategies and to help improve country prospects for attracting external finance. They assessed the microeconomic and sectoral aspects of climate change policies in countries particularly affected by climate change and contributed to a stocktaking of the macroeconomic and fiscal implications of these policies. They also sought to

[5] Based on the actual resource augmentation for FSAPs, only four FSAPs per year are covered as of now .

[6] Towe (2024).

assist members in establishing policy frameworks to prevent and mitigate physical and transition risks. Six CCPAs were completed, between 2017 and 2020, for SDS—Belize, Grenada, Micronesia, Seychelles, St. Lucia, and Tonga. In May 2021, the IMF undertook a formal review of the CCPAs to draw lessons for small states, and with a broader vision of expanding IMF engagement on climate change in general (IMF, 2021d). In 2020 the joint exercise with the World Bank was terminated when the Bank launched its own assessment, the Country Climate and Development Report.

38. **In 2020, the Statistics Department established a Climate Indicators Dashboard Working Group to develop data related to the economic implications of climate change.** The resulting IMF Climate Change Indicators Dashboard is a tool consisting of indicators related to climate risks and progress towards low carbon and climate resilient growth. The dashboard is composed of indicators which are broadly categorized under two themes: (i) Economic and financial exposure to climate risks, including indicators related to both the physical and transition risks related to climate change; and (ii) Progress towards low carbon and climate resilient growth, which measures to what extent countries and regions have advanced the transition towards a low carbon economy and built resilience to climate related impacts. The data is sourced from internationally recognized sources and is presented in an interactive format. Interviews with both area and functional department staff strongly emphasized the utility of the dashboard, noting that it has facilitated more granular and more directly relevant staff assessments of member countries' progress in addressing macroeconomic, fiscal, and financial challenges associated with climate change; and provided a mechanism for cross-country comparison of the macroeconomic impacts of climate change.

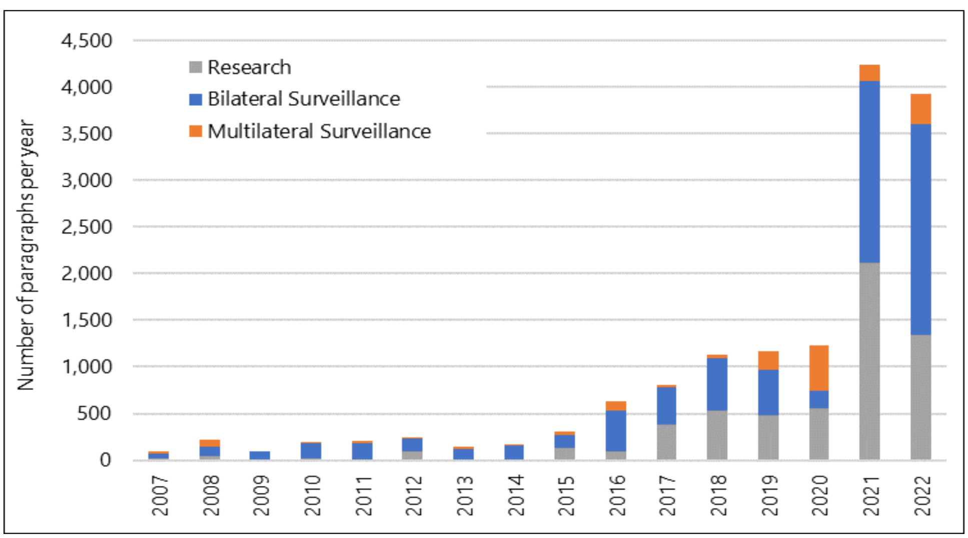
39. **Staff across the Fund, including in the Fiscal Affairs Department (FAD), Monetary and Capital Markets Department (MCM), and Research Department (RES), developed several models and tools to analyze the macrocritical impacts of climate change and climate change policy.** For example, FAD developed a Climate Policy Assessment Tool (CPAT),[7] to analyze the impact of carbon pricing and other policies for Paris pledges and energy subsidies. A "Climate PIMA" (C-PIMA) was developed to assess green infrastructure investment, including a climate dimension into the PIMA framework that evaluates the countries capacity to manage climate-related infrastructure. As previously mentioned, MCM incorporated climate change in FSAPs through climate modules which assess the implications of physical and transition risks for the stability of the banking system. The Fund also developed a Climate Macroeconomic Assessment Program (CMAP), a diagnostic climate assessment building on the experience of the CCPA pilots. RES added climate components to some of their models and developed a Debt-Investment-Growth and Natural Disasters toolkit (DIGNAD) to study the impact of climate risk due to natural

[7] The CPAT is a spreadsheet-based model applicable to over 200 countries, jointly developed by the IMF and World Bank. It helps policymakers assess impacts and design compare and implement policies to achieve their climate mitigation targets including their Nationally Determined Contributions (Paris Agreement) and sustainable development goals. It allows for rapid estimation of effects of climate mitigation policies, including estimation of energy and emissions, macroeconomic impacts, distributional impacts, and development co-benefits.

disasters and how adaptation infrastructure investments can contribute to mitigate these risks. Area departments have also developed analytical tools, for example WHD has developed tools to evaluate the net return of investment in adaptation in LAC countries affected by natural disasters, a tool to quantify disaster insurance needs and the benefits of regional disaster risk pooling in Caribbean countries.

40. **Reflecting the steps taken to step up Fund engagement in climate change since 2012, coverage of climate issues in Fund research and surveillance outputs expanded considerably over the evaluation period.** A text analysis exercise assessed coverage of climate issues, identifying the number of paragraphs contained in IMF research (Working Papers), bilateral surveillance (Article IV reports and SIPS) and multilateral surveillance (WEOs, REOs, Fiscal Monitors, and GFSRs), between 2007–22 (See Figure 1). In the period up to 2015, coverage was limited, as the Fund established the legal framework for engagement, and focused attention elsewhere, particularly in participation in international climate fora. Between 2015–18, coverage in Fund research and surveillance outputs accelerated, notably due to increased attention to the adaptation challenges faced by SDS and other climate vulnerable members; and following limited coverage, notably in bilateral surveillance during the COVID-19 pandemic in 2020, coverage expanded very substantially from 2021.

Figure 1. Climate Change: Relevant Paragraphs in IMF Documents, 2007–12



Source: IEO staff calculations.

41. **Fund treatment of climate issues in research and surveillance transformed.** While approximately 250 paragraphs covered climate policies in 2012, in 2021–22, an average of 4,100 paragraphs referred to and discussed climate change issues.

Assessment

42. **The evolution of the Fund's climate work enabled the Fund to respond to an array of needs and priorities of the Fund's diverse membership in light of increasing climate related shocks and risks, as well as stronger global momentum for climate action following the Paris Agreement**. While there was a lack of a formal framework, staff, guided by management, began to further incorporate macrocritical climate related aspects in the Fund's work through a diversity of research, analytical frameworks, tools, data, models, and products. Climate related outputs produced during this period, within the resources available to staff, such as the CCPAs, were well understood by recipient countries and considered timely and implementable given their needs.

III. DECISION-MAKING PROCESSES—KEY DRIVERS

43. **Several decision-makers and decision-making processes contributed to the evolution of Fund engagement on climate change.** These included the influences of: (i) successive IMF MDs, through specific initiatives taken in their capacity as MD and through those set out in their Global Policy Agendas (GPAs); (ii) initiatives taken by the IMF's membership, as reflected in IMFC Communiques and through initiatives of groups of members; (iii) the role played by the Executive Board and groups within the Board; (iv) the role of Fund staff; and (v) the influence of external actors. The paper considered the role and influence of each in turn.

(i) IMF Managing Directors and IMF Management

44. **Prior to 2012, successive IMF MDs and their teams played notable roles in drawing attention to climate change.** MD Michel Camdessus (1987–2000) oversaw the first IMF assessment and Board decision on the environment (IMF, 1991). He is also credited with articulating a subsequent "High Quality Growth" policy for the IMF that included sustainable growth "that does not wreak havoc with the atmosphere, with the rivers, forests, or oceans, or with any part of mankind's common heritage (Gandhi, 1998)." MD Horst Köhler (2000–04) presided over IMF management during the launch of the United Nations Millennium Development Goals (MDGs), stating that climate change is "a major threat to sustainable development" that threatened the MDGs (IMF, 2009). And MD Dominique Strauss-Kahn (2007–11) issued a joint statement with the World Bank, ahead of the Copenhagen Conference of the Parties (COP) in 2009, stating that climate change "necessitates an increased emphasis on integration of climate change prevention in development strategies" (Lindenthal and Koch, 2013). After the Copenhagen Summit, advanced economies agreed to channel $100 billion annually to developing countries in climate finance and drawing on IMF staff research, MD Strauss-Kahn proposed new issuances of SDRs to help catalyze the finance agreed upon at Copenhagen (Bredenkamp and Pattillo, 2010; IMF, 2010).

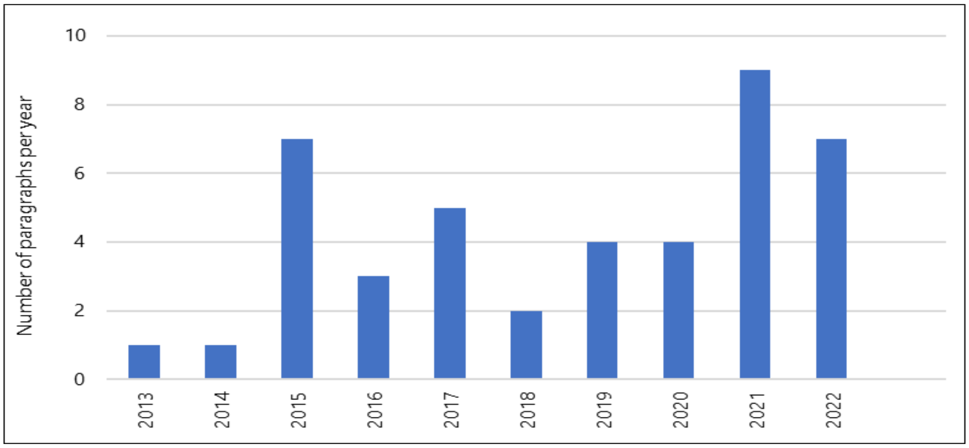
45. **During the evaluation period, MD Christine Lagarde played a critical role in supporting early staff engagement on climate change**. She supported staff work on climate change and was the first MD to identify climate change as macrocritical. With the MD taking a more prominent role in the Paris Climate summit, the IMF started to work more extensively on climate change. The MD wrote a memorandum to staff on climate in 2015, encouraged staff to work more extensively on climate policy issues, and drew on staff inputs to prepare her Paris and subsequent speeches. She supported efforts at the Executive Board to improve surveillance for small states (IMF, 2016a), and to introduce a Large Natural Disaster window of the RCF and RFI in 2017 (IMF, 2017a); and encouraged staff research on climate change. Interviewees for the evaluation noted that while she did not substantially further expand the application of the IMF's mandate on climate change, for example by proposing a climate strategy, her support was key to enable staff's work and experimentation into newer issues, with the introduction of pilots for workstreams that went beyond the traditional core.

46. **Following the appointment of MD Georgieva in 2019, support for Fund engagement on climate change accelerated substantially.** A number of interviewees emphasized four initiatives and approaches driven and sustained by the MD. Firstly, a stronger willingness than her predecessors to engage with the Executive Board, including early and extensive engagement with Board members supportive of an expanded application of the Fund's mandate to climate change. Secondly, a clear determination to establish a Fund Climate Strategy, consistent with the Fund's mandate, at an early stage; to convince the Executive Board to approve the necessary budgetary resources and expertise to implement the strategy; and to effect changes in institutional structure to achieve this, including establishing a stronger centralized coordinating role for the Fund's work within the Strategy, Policy, and Review Department (SPR). Thirdly, encouragement to Fund staff who had previously engaged on climate change to expand their efforts. In the period following the MD's appointment, for example, members of the grassroots group working on climate change took up these opportunities and several assumed leading roles in forging inter-departmental efforts to develop the Climate Strategy in 2021 and the RST in 2022. Fourthly, a substantially more assertive approach to external advocacy of the critical global challenges brought about by climate change.

47. **The MD's GPAs served as the primary catalyst for Fund engagement on climate issues, with actions proposed in GPAs taken up in subsequent annual work programs (Figure 2).** Starting in 2013, the GPA began to signal a need to explore and reflect on the implications of long-term trends, such as climate change, for the Fund, and how these would be integrated in the strategic planning. In the following years, the GPAs became more explicit in detailing how the IMF could support its members, within its mandate, including by building expertise and providing policy advice on emerging macrocritical issues like climate change. The steps proposed in GPAs were later considered in several annual Work Programs. These documents specifically referenced work on climate change, such as assessing of fiscal costs, pilots to integrate the Fund's work in emerging issues, and improving resilience to natural disasters and climate change, among other initiatives. In 2015, the Work Program stated that

Article IV consultations would feature, where relevant, work on inequality, gender, energy pricing, and climate change. This declaration was followed by references in upcoming years to the integration of climate change in bilateral surveillance where macrocritical.

Figure 2. Climate Change: Relevant Paragraphs in Global Policy Agendas, 2013–22



Source; IEO staff calculations.

48. **Public pronouncements of IMF MDs have been found to have impact on external sentiment and perception of the IMF.**[8] The evaluation conducted a Natural Language Processing (NLP) exercise to analyze external stakeholders' sentiment about the IMF. Drawing on the information contained in approximately 200,000 English-speaking news articles, that covered the IMF during the evaluation period, it isolated and reviewed external sentiment about the Fund's engagement in its traditional core areas and in more recent areas of focus, including gender, digital money and climate change. External perception of the Fund's engagement on climate issues were drawn from a more limited subset of 2,000 news articles covering climate issues.

49. **The NLP study identified several factors contributing to positive and negative sentiment about the IMF; and highlighted the perception among external stakeholders, of the influence of IMF MDs.** Positive factors included perceptions of the Fund's increasingly proactive stance, which was seen to be aligning with broader societal expectations; the Fund's emphasis on fiscal and macroeconomic policies and their contribution to supporting environmental policies; public expectation that the Fund's global stature and capacity can exert influence in the global pursuit of environmental sustainability; recognition of the Fund as a cooperative and collaborative globally-relevant institution, engaged in the global fight against climate change; and the Fund's long-term commitment to climate-related initiatives and its consistency in its messaging. Negative factors included association of the Fund with uncertainty, disappointment, and persistent challenges in achieving global agreements on climate change, notably in the context of decarbonization and carbon emissions; criticism of climate financing

---

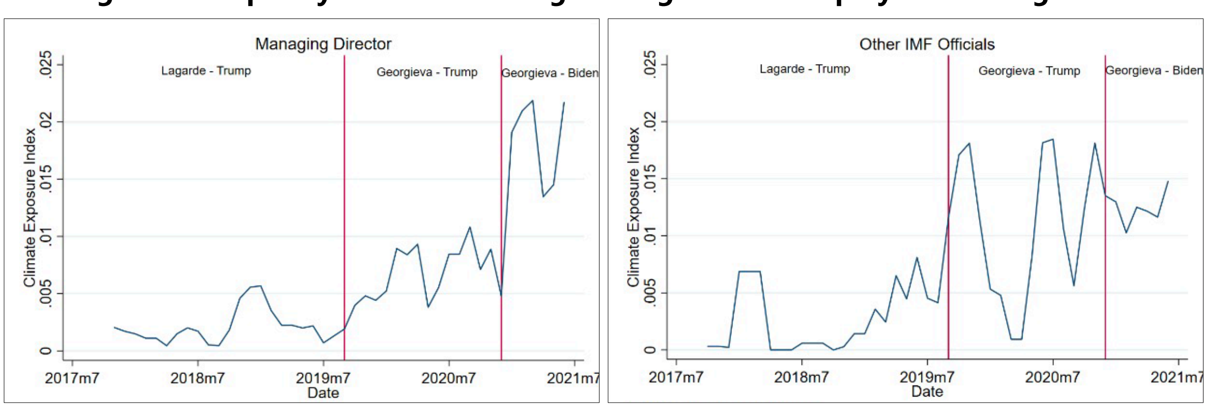
[8] See Xu (2024; unpublished).

initiatives, in particular the lack of global financing for green finance. The study also highlighted the role of IMF MDs, in influencing external sentiment about the Fund's engagement on climate change. It found that external stakeholders, primarily journalists, increasingly framed the IMF's climate policy as being directly influenced or guided by the MD.

50. **The assessment also found that external sentiment about the Fund's engagement shifted over the evaluation period.** Between 2012–15, external stakeholders perceived Fund engagement as having been limited, and were critical of the Fund for not prioritizing environmental concerns in its policy agenda. Between 2016–18, stakeholder perceptions shifted, recognizing the Fund as becoming more aware of the economic risks of climate change, and more often incorporating climate considerations into its economic assessments and showing greater recognition of the interconnectedness between environmental and economic stability. From 2019, external sentiment shifted further, characterizing the Fund as taking a more proactive stance, comprehensively integrating and mainstreaming climate-related factors in Fund analyses.

51. **Elsewhere, Ramos and others (2022), found that overall, MD Georgieva's team had a statistically significant increase in mentions of climate (Figure 3).** They created an algorithm to examine the frequency of IMF management's engagement on climate change, from 2017 to the formation of the CSR and IMF Climate Strategy in 2021. The authors found that 45.8 percent of the speeches made by MD Lagarde had significant mention of climate change. The overall frequency for MD Georgieva during the period was 59.7 percent. From early-2021, her rate increased substantially to 73.9 percent. Using an index of the frequency of climate mentions as a share of total words in a speech, the authors found a significant uptick for each MD, with MD Georgieva actively discussing climate change. Tracing the role of Fund management, the authors also found that overall, MD Georgieva's team had a statistically significant increase, in comparison with mentions of climate change by MD Lagarde's team. Further, whereas management discussed climate change more frequently as MD Lagarde's term evolved, the frequency of their mentions of climate change were dwarfed by those of MD Georgieva's team, once she took office.

Figure 3. Frequency of Climate Change Thought Leadership by IMF Management



Source: Ramos and others (2022).
Note: Three-month moving average.

(ii) Influence of IMF Membership

(a) IMFC

52. **The IMFC played a limited role in the evolution of the Fund's engagement on climate change, addressing climate change only from 2015 and signalling member's commitments only from 2021.** Communiques in 2015 asked the Fund to contribute actively to attain positive outcomes in several international conferences, including the COP 21 in Paris, specifying that Fund contributions included "the assessment of macroeconomic implications of climate change," and noting that this would be consistent with the Funds' mandate. From 2016 Communiques made more frequent references to climate change, encouraging countries to build resilience and face the macroeconomic consequences of global challenges, including climate change; alluding to Fund guidance since 2018—in line with its mandate—on members implementation of climate change mitigation and adaptation strategies; and in 2021, including more specific commitments to accelerate climate action, both in terms of countries' actions and Fund work, with explicit support for the establishment of the RST.

(b) Executive Board

53. **Until 2015 the Executive Board was largely silent on the role of the IMF in climate change during the study period.** Prior to the evaluation period, the Executive Board held a seminar on "The Fiscal Implications of Climate Change" in 2008. The paper prepared by FAD discussed mitigation and adaptation related to fiscal aspects and the potential role for the Fund in addressing them (IMF, 2008). However, subsequent to this and in the period up to 2015, Board meetings typically did not cover climate policy issues; and where policy issues relevant to climate change, including the ISD, were discussed, no reference was made to the broader role of the Fund in climate change.

54. **From 2015, Executive Board attention to climate change began to increase.** In the lead up to the Paris Agreement, the Board discussed the MD's statement and supported Fund engagement in the United Nations Framework Convention on Climate Change (UNFCCC) process. In 2016, the Board considered the Fund's role in surveillance of climate change, when Executive Directors representing small states drew attention to the macroeconomic impacts of climate change for those members and to the role of the Fund in supporting adaptation to climate change. In 2017, the Board discussed a paper on "Large Natural Disasters – Enhancing the Financial Safety Net for Developing Countries" (IMF, 2017a). In 2021, the Board discussed and approved both the 2021 CSR and 2021 Climate Strategy.

55. **The Board largely approved management proposals contained in the Board papers with minimal substantive disagreement or divergence of views.** Between 2015–20, summaries of Directors questions and issues for discussion largely sought clarification of the content of Board documents; and the Summings Up did not underscore specific policies or issues on which fundamental disagreement had arisen. However, discussions on the CSR and Climate

Strategy, both in 2021, highlighted a division among Board members on the Fund's approach to covering the mitigation policies of the largest emitters in Article IV consultations. While there was a majority support, a number of Directors qualified their support for the Fund's approach.

56. **From 2017 groups of Executive Board members began to exert influence in encouraging deeper Fund engagement on climate change**. These groups mobilized Board and management attention to climate change; and encouraged accelerated Fund engagement. A case in point was when the NGFS had recently formed, initially consisting of Central Banks from the EU, China, Indonesia, Mexico, and many other developing countries. With the level of work and ambition at the NGFS in stark contrast to efforts at the IMF, Directors from the EU Executive Board constituencies worked to form a group, including several emerging and developing countries that were part of the NGFS, to encourage more extensive Fund work on climate change issues. The group began meeting to form joint positions on the enhanced role that management and IMF staff could take on climate change.

57. **Interviews for this paper highlighted that the formation of groups of Executive Directors who coalesced in promoting the climate agenda within the Fund was met with significant internal resistance and that several efforts were made to address management concerns.** In reflecting on the proposed enhanced role, management and SPR urged that the Fund should not stray too far into climate change because it was not one of the four traditional core policies identified in the ISD and because there was not widespread support across the Executive Board on climate change. Members participating in the climate group and those participating in the Board's Small States Working Group, including representatives of many small islands in the Caribbean and Pacific that suffered from the consequences from climate change, coordinated their inputs. Steps included crafting joint statements, ensuring that different Board interventions echoed each other, meeting as a group with management and SPR, to accelerate Fund work and attention to climate change, and coordinating with capitals to ensure these issues would be raised in bilateral meetings with Management and Senior staff to press on climate change.

58. **While developing countries formed part of an EU-formed climate grouping of Executive Directors supporting the climate agenda, they also exerted their own efforts, in other multilateral fora, to influence the Fund's attention to climate change.** The Intergovernmental Group of 24 (G24) began to call for action in their communiques in the early 2000s as well. The G24 had long included in their communiques a call for the advanced economies to deliver on their pledge to deliver $100 billion annually to climate finance and had also long called on the World Bank to invest more in sustainable infrastructure. A new grouping of developing countries was formed after the Paris Agreement was signed. In 2015 a "Vulnerable Group of Twenty Finance Ministers for Climate Action" (V20, now however with more than 60 members) was established, focusing on the G20, G7, IMF, and World Bank, seeking official recognition at the IMF and the World Bank. In 2021, it began organizing its Finance Ministers and their Executive Director representatives to push for more climate ambition especially in the

context of the RST, debt sustainability, and debt for climate change swaps. Both the G24 and the V20, albeit with little voice and representation at the IMF, have played an important role in building and sustaining consensus at the board level (Volz and Ahmed, 2020; Merling, 2022).

(c) The Role of IMF Staff

59. **The Fund started engaging on climate change issues in the late 1990s, albeit with significant internal resistance.** The Fund held its first major symposium on the IMF and the environment where some IMF staff voiced significant objections to fully engaging on environmental issues (Gandhi, 1996; 1998). IMF staff at the conference argued that member countries would not want to discuss these issues with staff, that climate and environment would distract the Fund from issues of monetary policy and stability which were considered central to the Fund's mandate, that the IMF did not have the staff or competency to appropriately engage on these issues and the World Bank should focus on the issue, that the IMF time horizon is short term, and addressing climate change is long term.[9] In the late 1990s, management agreed to allocate a dedicated full-time equivalent (FTE) staff resource to the FAD budget. Several staff interviewed for this paper emphasized that while this represented a very modest improvement in resourcing, the decision was a critical catalyst for the Fund's pioneering analytical and modelling work on the macroeconomic aspects of carbon taxes and pricing, and the level and need for reduction of fossil fuel subsidies.

60. **The staff work on climate change was led by small groups.** While Fund staff broadly expressed some reluctance to engage in bilateral and multilateral climate work, in the first half of the evaluation period, small groups of staff across the IMF, including in FAD, RES, SPR and some country teams created what they called a "grassroots group" to inform themselves and other staff on the macrocriticality of climate change, its relevance to the Fund's financial, fiscal and monetary policy work, and to encourage more attention to climate change at the IMF. Evaluation interviews highlighted that these Fund staff were early pioneers because their training in environmental economics was consistent with the general frame held by IMF economists working on more traditional IMF subjects. Neo-classical economic prescriptions for climate change are to reduce fossil fuel subsidies and to raise taxes on the price of carbon—which in general, by cutting spending and increasing taxes, is consistent with IMF policy advice over time (Skovgaard, 2021). Moreover, with the macrocritical impacts of climate change itself, unexpected external shocks fit well into the IMF's workhorse models of uncertainty and shocks that can cause BOP crises such as climate-related natural disasters (Task Force on Climate, Development and the IMF, 2023).

---

[9] The Executive Board also signaled reluctance to engage, with one Executive Director said to comment "today you come with the environment, tomorrow you might come with the right of women, the next week with the aged, and still the next week with children. In other words, where do we draw the line? Why should the Fund get involved in the environment and not in the rights of women, or the rights of children, or something as important?" (Gandhi, 1996).

61. **For much of the evaluation period, coordination of the Fund's work on climate change occurred through informal processes; and formal organizational mechanisms for coordination and monitoring were established at the end of the period.** For several years, the sole FAD staff member dedicated to climate work supported development of Fund policy advice on the fiscal costs of climate change and implications for fiscal policy adjustment, particularly in small states; and over time provided some support for intra-departmental coordination of climate-related work. Over time, staff with an interest in climate policy established informal mechanisms for intra- and inter-departmental collaboration. Interview evidence suggested that the pool of staff with interest in working on climate issues remained small for several years, due to limited catalytic support from senior managers and a lack of encouragement from Management, beyond requirements to prepare briefings and material in preparation for Fund participation in major international conferences.

62. **Informal mechanisms, enhanced by the creation of several Working Groups, persisted for several years; and a formal coordination and monitoring system was established in 2021.** A Growth and Resilience Working Group was established in 2016 (IMF, 2016a); and a Climate Policy Group in FAD (IMF, 2021c) followed later. Over time, a Climate Change Knowledge Hub has evolved, bringing together ongoing work on climate change risks, climate policies, country case studies, tools and data and training. The Hub also supports collaboration among staff working on economic and analytical work in functional and area departments. Since 2021 and following the CSR, Climate Strategy and implementation of a Budget Augmentation process (see De Lannoy, 2024), dedicated climate units have been established in FAD, MCM, and RES, coordinated by SPR (IMF, 2021c), providing for cross-departmental coordination and monitoring. A climate division was also created in SPR in 2023.

63. **Staff's rapidly escalating contributions to Fund engagement on climate change occurred largely through reprioritization and with few dedicated resources for most of the evaluation period.** Until 2020, staff efforts were achieved in the absence of any significant additional staff resources and through departmental reprioritization. Interviewees emphasized that in the early part of the evaluation period, very few staff had actively worked on climate issues in bilateral surveillance and no dedicated resources were made available. When doing so, they had proceeded based on their general research interest in the topic and the extent of interest expressed by country authorities. Some had seen opportunities since several members seemed to face similar climate-related challenges; and others emphasized that climate-related work had depended strongly on the willingness of senior managers to allow time to be devoted to this work. While their work had been fulfilling, it was clear that the work would be sporadic, was not viewed as a mainstream element of bilateral surveillance and that, in the early part of the evaluation period, there was no clear guidance for bilateral surveillance in this area.

64. **After the establishment of the RST in 2022 a number of staff across departments were deployed to help design climate-related work in RST programs.** While a guidance note on the RST/RSF was published in November 2023, in the interviews for this paper staff expressed

that they were "learning by doing." In some cases, the member country had a specific plan, in others IMF staff have had to carry the burden of designing the plan. Staff expressed that there is a steep learning curve for the design of RST programs that is beyond the expertise of IMF staff, even the new climate specialists who are being pulled from surveillance activity—and collaboration with the World Bank has been limited since the two institutions parted ways on the CCPAs. However, the IMF and the World Bank worked closely to develop broad principles for coordination in RST operations (IMF, 2022b).

(d) Partners and External Events

65. **Both external events, as well as IMF partner institutions, played an important role in the evolution of IMF work on climate change.** Climate events and the regular global attention brought to climate change at the United Nations culminating with the globally ratified Paris Agreement, all contributed to expanding the Fund's research and analytical work; and to its status as a significant contributor to global efforts to address the impacts of climate change. Until recently the IMF collaborated with the World Bank on the CCPAs. Over time intergovernmental groupings such as the G20 and G7 have tasked the IMF to play an elevated role on climate change, as have interactions with academia and different waves of civil society engagement on the IMF and climate.

66. **Climate change itself and the regular COP meetings of the UNFCCC have been a key external driver of the Fund's evolving engagement on climate change.** Extreme weather events that created very large BOP crises in small states were "demand led" instances where membership needed the IMF's help to respond to climate related BOP events. Climate policy has also been a trigger. IMF MDs are regularly asked to speak at these events which has triggered flurries of research and memos across the IMF.

67. **The ratification of the 2015 Paris Agreement played an important role in galvanizing Fund work.** Shortly after the agreement was ratified, member states began approaching IMF country teams particularly in Europe and in small states, to support their efforts to mobilize financing and create economic incentives to meet their Nationally Determined Contributions to combating climate change. Interviews showed that these requests accelerated internal learning on climate change and climate policy, to help meet the needs of the membership.

68. **Starting in 2011, the G20 has been a major external driver of Fund work.** In 2011, the G20 tasked the World Bank, working with Regional Development Banks, and the IMF, in coordination with other relevant organizations, to conduct the analysis on mobilizing sources of climate change financing, including public and private bilateral and multilateral as well as innovative sources (G20, 2011). The request from the G20 yielded two papers and input into a broader G20 report on the subject. The policy instruments analyzed and recommended by the IMF were carbon taxes and emissions trading—with the IMF leaning strongly in favor of carbon taxes as a source of resource mobilization (Skovgaard, 2021). The G7 and the G20 each endorsed the RST and tasked the IMF to establish the RST with re-channelled SDRs.

69. **The NGFS, World Bank, G7, OECD, and G20 climate activities now regularly invite or require IMF participation and input.** RES, FAD, MCM and other departments are now often asked to participate. In 2021, the G7 created a climate change mitigation working group for Central Bank and Finance Ministry staff. RES now presents regularly to the group and the G7 has organized a modelling network in which the IMF participate. In 2022, at the request of the G7, RES and FAD wrote a report jointly with the OECD on delivering on climate mitigation under various policy scenarios. At the G20, RES staff are part of the "Framework Working Group (of) Finance Ministries and Central Banks on Climate Change" and regularly present research on the macro impacts of climate and on transition risk.

70. **The IMF collaborated with the World Bank in the context of jointly prepared CCPAs until 2021, while other aspects of collaboration have continued.** Evaluation interviews indicated the staff-level collaboration was generally effective, although there were tensions over culture, division of labor, and attribution on certain knowledge products. Discontinuation of collaboration is understood to have been due to tensions at higher managerial level. Separately, the IMF and the World Bank serve as the co-hosts of the Secretariat of the Coalition of Finance Ministers for Climate Action. The Coalition's goal is to bring collective action and the sharing of best practices on climate change across countries, especially with respect to public finance and fiscal policy (Abrams, 2020). Engagement with the World Bank has also continued in the context of RSF arrangements, round tables and working groups on climate finance and reports and organizing conferences.

71. **Fund engagement with CSOs on climate policy issues has expanded in recent years, while CSO impact on the design of IMF policy has been limited.** Aside from its engagement with the UN and its agencies, the longest and most continuous IMF engagement with external stakeholders has been with CSOs which has been continuous since the early 1990s, both constructive and confrontational. In the early 2000s and earlier in the evaluation period, CSOs devoted less attention to the IMF and climate change. While there was greater attention from 2015 it is not clear that CSOs have had a significant impact on IMF approaches to climate change. The IMF has held regular "Civil Society Policy Forums" (CSPFs) on the side lines of IMF annual and spring meetings for decades, including panel discussions on the IMF and climate change with IMF assigned commentors. However, in a recent study of the impact of CSOs on IMF policy by Oxfam, the authors found that CSOs have had limited impact on the design of IMF policy (Oxfam, 2023).

Assessment

72. **Successive IMF MDs have played several crucial roles in the evolution of the Fund's work on climate change,** including in bringing international attention to the global risks posed by climate change, highlighting, and helping define the contours and the limits of the Fund's engagement on climate change, supporting development of the Fund's expertise within the remit of its mandate. From MD Michael Camdessus (1987–2000) to MD Christine Lagarde (2011–18), management became more demonstrably supportive of climate change, yet a full application

of the Fund's mandate to climate change was not achieved. The appointment of MD Kristalina Georgieva in 2019 saw a much more significant, concerted, and strategic acceleration of attention and ambition on climate change.

73. **The Board only began to have a more relevant role in effectively influencing the speed and direction of evolution of the Fund's work on climate from 2017 through Board members who coalesced as a group to promote climate change initiatives.** Initially, Board members made a modest contribution to driving decision-making on the scope and ambition of the Fund's engagement on climate change with Executive Directors largely endorsing management's proposals in formal Board meetings. From 2017, the emergence of Executive Board members who coalesced as a group effectively accelerated and contributed to steering the Fund's involvement in climate issues reflecting the needs and priorities of its heterogeneous membership.

74. **Staff were a critical catalyst and driver of the Fund's work on climate change despite a lack of formal institutional support for most of the evaluation period.** The Fund relied on the entrepreneurship, foresight, and personal dedication of a relatively small group of staff to build its capacity to engage on climate policy. The Fund's early international engagement and exposure can also be ascribed to the work of a few individuals. Institutional attention was limited, illustrated by the absence of any guidance on bilateral surveillance and the lack of a climate strategy until 2021, and as illustrated later in this paper by the absence of resources and staffing for climate work. Consequences were that the Fund's work was often siloed, sporadic and driven by pooled research time and common interest, compromising the relevance of staff work and limiting efficiency in expanding exposure and application of work and tools across Fund.

IV. DECISION-MAKING PROCESSES—DIVISIONS AND IMPASSES

75. **While the Executive Board discussed climate change on several occasions and approved a Climate Strategy in 2021, decision-making processes proved unable to resolve important differences of perspective on the scope of the Fund's surveillance remit; and uncertainty and disagreement have remained.** Between 2015–22, the Board had several opportunities to discuss Fund engagement on climate change, including seven informal and three formal Board meetings. Yet minutes of Executive Board meetings and Summings Up, as well as interview evidence, suggest that there remain important areas of disagreement and a lack of common understanding on the scope of the Fund's remit to conduct surveillance of members' mitigation policies. Notably, differences have arisen regarding expectations of coverage of climate mitigation in Article IV consultations of the largest emitters of GHGs; and the criteria to determine the "largest" emitters.

76. **A case in point is the IMF treatment of climate change issues in the 20 largest emitters.** The 2021 CSR included a background paper on integrating climate change into Article IV consultations (IMF, 2021b), which specified the expectation that coverage of a country's contribution to the global mitigation effort will be strongly encouraged for the 20 largest

emitters of GHGs. For these countries, it indicated the expectation that Article IV consultations would include a discussion of mitigation policies and their adequacy at least every three years. The Background Paper specified the countries to be included as the 20 largest emitters, indicated that these countries accounted for more than 80 percent of all GHG emissions and noted that the approach proposed reflected the global public goods character of mitigation, with no country able to mitigate climate change on its own, and with success requiring a collective effort, with the largest impact triggered by the mitigation policies of the largest emitters.

77. **Differences on how these members' mitigation policies are to be covered were highlighted during discussion of the CSR.** Minutes of this meeting show that some Directors considered that coverage should be mandatory for the 20 largest emitters, while others emphasised that coverage is voluntary, based on the members' consent to include it in Article IV consultations. Interviews for this evaluation found that these differences persisted, both during discussion of the Climate Strategy (IMF, 2021c) and beyond. In advance of the CSR discussion, in responses to technical questions posed by Executive Directors,[10] staff clarified that for the 20 largest emitters of GHGs, macrocriticality is presumed due to the spillovers that insufficient mitigation policies could trigger for global macroeconomic and financial stability. As a result, staff noted, "periodic coverage of these countries' mitigation policies is strongly encouraged;" and the Acting Chair's Summing Up of the 2021 CSR discussion stated that Directors "generally agreed that coverage of climate change mitigation in Article IV consultations would be strongly encouraged for the largest emitters of greenhouse gases." The Summing Up did not include mention of the suggestion, included in the CSR Background Paper (IMF, 2021b) of an expectation of coverage.[11]

78. **The IMF's Climate Strategy indicated that the CSR had "set forth the expectation that mitigation policies of the 20 largest emitters of GHGs would be covered every 3 years or so," but it did not get full Board support (IMF, 2021c).** Evaluation interviews highlighted that a number of Directors challenged the inclusion, in the 2021 Climate Strategy, of an expectation of coverage in surveillance, emphasizing that ultimately coverage of mitigation issues would be voluntary, with some even noting the coverage should remain demand driven. Accordingly, the Summing Up of the 2021 Climate Strategy, while noting coverage would be "strongly encouraged," also highlighted reference to the fact that some Board members understood this to mean that coverage would be voluntary.[12]

79. **The outcome of this decision-making process has not been optimal, with some recent instances suggesting some uncertainty in the manner in which staff are expected to conduct surveillance.** Two subsequent instances of coverage of the mitigation policies of two members are illustrative. In one instance, coverage of mitigation policies in a member's 2021

---

[10] Responses to Technical Questions Posed by Executive Directors in Advance of EBM/21/45.

[11] IMF (2021e).

[12] IMF (2021e).

Article IV consultation, management is understood to have adjusted final language to ensure both preservation of the integrity of staff's work while seeking to understand the authorities' concerns; and in coverage of another member's mitigation policies, in its 2022 Article IV consultation, some language is understood to have been adjusted for similar reasons. Subsequently, the 2022 Surveillance Guidance Note (IMF, 2022a) clarified that "discussion of the multilateral component of mitigation policies is voluntary but strongly encouraged. Therefore, while Article IV consultations should cover policies related to adaptation and transition management if staff considers those policies macrocritical, including for the largest 20 emitters of GHGs, country authorities have no obligation to discuss the multilateral component of mitigation policies."

80. **Further, differing views have also been expressed on the criteria to determine the 20 "largest" emitters of GHGs.** The CSR Background paper on Climate Change (IMF, 2021b) established the link between GHG emissions and global warming as the rationale for using a list of large emitters, indicating that the share of a country's current contributions to global emissions would be used as an indicator for "significance." The paper included a Figure depicting the "Largest 20 Greenhouse Gas Emitters," drawing on data from the World Resources Institute. In discussing the CSR, a number of Directors argued that a more balanced and objective approach was needed in determining the composition of the 20 largest emitters; and proposed using "country shares of the cumulative stock of emissions" rather than "the largest emitters", as the latter ignored the carbon space already used by advanced economies and thus limited scope of low per capita income developing countries to grow; and to define the largest emitters using both historical and present per capita emissions. Staff recognized that "large emitters" could be measured in different ways and acknowledged that alternative measures could include past emissions or per-capita emissions, if an equity or fairness perspective was considered, while emphasizing that the use of current emissions requires the fewest assumptions and identifies the 20 countries that accounted for more than 80 percent of GHG emissions. Subsequently, however, neither the 2021 Climate Strategy, nor coverage of climate issues in the 2022 Surveillance Guidance Note provided any further guidance on this issue, leaving unclear whether the concerns addressed by a number of Directors to utilize a more balanced and objective approach to determining the composition of the 20 largest emitters would be addressed.

81. **Interviews for this evaluation also emphasised interest in minimizing the uncertainty on the coverage of climate and improving understanding of past decision-making processes that have resulted in transition from voluntary to mandatory coverage in Article IV consultations.** Here, an important precedent is the Fund's experience in the creation and evolution of the FSAP, which evolved over an 11-year period from a voluntary basis into a mandatory format.[13] Interviewees emphasized the importance of clarifying this process in a context where the Fund is strongly signalling the macrocriticality of climate change drawing attention to the IMF's Climate Strategy, which describes climate change as "one of the most

[13] See IEO (2019) and Towe (2024) for a detailed analysis of this process.

critical macroeconomic and financial policy challenges that the IMF's membership will face in coming years and decades;" and that "climate change is a global public good and requires an unprecedented level of cross-country policy cooperation and coordination (IMF, 2021c);" to the MD's description of climate change as an "existential threat (Georgieva, 2023);" and the identification of the existential nature of the threat in several recent Article IV consultations for fragile and small state members.

82. **While staff provided clear background information, the decision-making process seeking to enable coverage of the multilateral component of members' mitigation policies in Article IV consultations was inefficient and remains unresolved.** The CSR Background Paper on Climate Change identified two key elements anchoring the Fund's involvement in mitigation policies: (i) the mandate afforded by the provisions of the ISD, proposing to address climate change mitigation as a theme for multilateral rather than bilateral surveillance, that should be discussed in the context of the ISD's spillover provision; and (ii) the paper offered what it termed a "pragmatic approach" to covering climate change mitigation in Article IV consultations. However, the paper served as a background paper to the CSR, not allowing for a more thorough and dedicated discussion on an issue known to be of critical concern to and impact on many members. A more effective decision-making processes would have been to hold an informal session of the Executive Board to discuss the paper, seek Executive Directors' views, highlight limitations to room for maneuver and where possible identify alternatives. The process eventually worked against forging a clear understanding within the Executive Board and among staff, of how this component can be covered within the provisions of the ISD. The Climate Strategy, just two months later, left this uncertainty unresolved resulting in at least two demonstrated examples in which staff were uncertain on how to address climate mitigation in Article IV consultations.

V. HUMAN RESOURCES, BUDGET, AND RISK

(i) Human Resources and Budget

83. **As elaborated previously in Section III (e), the evolution of the Fund's climate work started with minimal staff resources and through informal, staff-led initiatives later enhanced by the creation of several Working Groups.** For several years, a single FTE staff resource was formally allocated to work on climate change. Initiatives were typically led by staff on the basis of their general research interest in climate, through informal collaboration and largely without broader institutional support and without guidance for bilateral surveillance in this area. To sustain climate work, several staff initiated informal intra- or cross-departmental collaboration in areas of mutual interest; others dedicated their allocation of up to 20 percent of individual time to research and analysis on independent projects. From 2016 a number of inter- and intra-departmental working groups were created, including a Growth and Resilience Working Group (IMF, 2016a); and a Climate Advisory Group (IMF, 2021c), a Climate Policy Group in FAD (IMF, 2021c). The Climate Change Knowledge Hub established in 2021 also supports collaboration among staff working on economic and analytical work in functional and area departments.

84. **The practice of ad hoc, temporary, resource staffing for climate work was eventually recognized in the Climate Strategy, leading to a formal coordination and monitoring system starting in 2021.** The Strategy acknowledged that the institution's response to rising members' demands for climate work had been to rededicate resources, often on a provisional, temporary basis, and by increasing demands on staff. It also noted that the approach had reached its limits and could not deliver the comprehensive engagement on climate needed to meet the needs of the membership (IMF, 2021c). Since 2021, and following the CSR, Climate Strategy and implementation of the Budget Augmentation process, dedicated climate units have been established in FAD, MCM, RES and SPR. Departmental climate units are coordinated by a B4-level staff in SPR, with responsibility for coordinating climate policy across the IMF. The allocation of climate resources across departments is undertaken as part of the annual budget process, drawing on inputs from management, strategy teams, departments' own requests and coordination between these groups. Supplementing this process and following the budget augmentation, HRD has provided regular updates to management and departments, on the Fund's external hiring of climate economists.

85. **Notwithstanding this, following the establishment of the RST in 2022, many staff with climate policy experience, across Area and Functional departments, were deployed to help design climate-related work in RST programs.** Interviewees considered this step, which closely followed on from the 2021 CSR and the 2021 Climate Strategy, to have perpetuated the temporary and ad hoc approach that had prevailed over the first decade of the evaluation period. They noted that in the absence of Staff Guidance Notes on Climate Change, staff were "learning by doing;" that design of RST programs represented a steep learning curve which some considered beyond the expertise of IMF staff, including recently-appointed climate specialists who had been pulled from surveillance activity; and that challenges had increased due to more limited collaboration with the World Bank, following the Bank's decision to no longer work jointly with the Fund on CCPAs.

86. **Challenges in equipping the Fund to deliver on its climate work have been augmented by the absence of granular information particularly in the earlier part of the evaluation period, on numbers of staff working on climate change.** This information is derived from periodic staff surveys. For much of the evaluation period, this limited human resource planning and stocktaking for climate work. More recently however, comprehensive surveys have been conducted bi-annually, led by departmental budget teams working directly with country teams to estimate overall climate work, climate work on CD and climate work supported by IMF02 funding. These steps have begun to provide a clearer picture of the number of staff working on climate policy issues. In addition, the IMF's Office of Budget and Planning (OBP) uses a Time Reporting and Analytic Costing and Estimation System (TRACES), to calculate the percentage of time each staff member dedicates to priority areas. This time reporting system provides important information using a relatively simple interface. Aggregating these data provides an overall estimate of numbers of staff, or "FTE" staff, working on a particular area. However, as priority areas can vary from survey to survey, tracking of the numbers of staff working on climate policy issues has been limited thus far. Steps taken by OBP to stabilize the set

of priority areas, including climate change, offers an opportunity to strengthen estimates of numbers of staff working on climate change. Further strengthening of the TRACES to achieve a more complex multidimensional reporting, for example by output, broader topic and by priority, could further improve tracking of resources for priority areas, although this would likely be complex, necessitate trade-offs between cost and level of granularity and might require significant costs and change management requirements to achieve robust data.

87. **The Climate Strategy, discussed on July 16, 2021, provided for the first time an estimate of the Fund staff dedicated to climate change efforts, amounting to 60 FTEs.** The figure was based on departmental estimates of their spending on climate work in 2021, and imputing the corresponding number of FTEs working on climate (IMF, 2021c). The Climate Strategy noted that the 60 FTEs reflected not only staff that would be working full time on climate, but also staff reporting only partial time to climate; that climate change issues were additional to country teams' current work, to ensure that other priority topics were not crowded out; and that integrating climate issues would require country teams to look into all aspects of macroeconomic policies—in the fiscal, monetary and financial sectors. On this basis, and drawing on the findings of a detailed bottom-up resource exercise, the Climate Strategy indicated that an additional budget of $36 million, representing a cost of about 95 FTEs, would be needed to ensure that the Fund could cover most macrocritical aspects in its climate work in a steady state. About 60 percent of additional resources would work on direct country engagement, 37 percent to enhanced regional surveillance, policy development and other tools to support country engagement, with a small share to support activities. In concluding discussion on the Climate Strategy, Directors approved the Strategy. However, they only took note of the proposed budget increase and the need for additional full-time equivalent (FTE) staff to implement the Climate Strategy, deciding to further explore this matter during the Budget Augmentation discussions.

88. **On July 30, 2021, a first informal Executive Board meeting discussed the contours of a Budget Augmentation.** Staff presented an initial framework for augmentation, outlining the expectations for the Fund's climate initiatives. The discussion detailed the estimated need for an additional $36 million and approximately 95 FTE staff to effectively address climate change efforts. Directors agreed in principle with the need for a budget augmentation, however many expressed concerns about the scale of increase and asked for further detailed information and alternative options. Between October–December 2021, the Board held three informal and one formal discussion on the framework for a real Fund-wide budget augmentation. During the three informal meetings staff presented alternative scenarios for the potential augmentation.

89. **In December 2021, the Executive Board agreed in principle to a phased budget augmentation to support strengthened Fund capacity in five strategic areas, including climate change (De Lannoy, 2024).**[14] At this meeting, the Board agreed to an allocation of $27 million for the Fund's Climate Strategy. This represented a 25 percent cut in the budgetary resources estimated

[14] Other priorities included digital money, macrofinancial surveillance, fragile and conflict-affected states, and inclusion/gender (EBAP/23/23).

to be required to implement the Climate Strategy, equivalent, on a linear basis, to a reduction in the originally proposed 95 additional FTEs required to deliver the Climate Strategy, to about 71 FTEs. The augmentation was implemented in FY2023, with real direct spending on climate change of $44 million, inclusive of the augmentation, supporting coverage of in-depth climate change issues country consultations and in other workstreams.[15] The gap between the required resources and the actual allocation necessitated a reduction in the scope of the previously endorsed strategy, following its formal approval by the Board and external communication.

90. **In regard to reporting budgetary spending on climate change, information appeared for the first time in Fund budget documents in May 2018; and prior documents assumed climate work to have been mainstreamed.** A review of Medium-Term Budget (MTB) documents since 2012 show no distinct reporting line or reference to IMF spending on climate change between 2012–17. In May 2018, the FY2019–21 MTB identified estimated spending of $2.5 million in FY2017, on a pilot initiative on Climate and Energy, while providing a more detailed costing exercise for four other pilots.[16] It recognized that the Fund had engaged in other prior climate-related work, as part of ongoing Fund bilateral and multilateral surveillance, noting that the pilot "…would be concluded with traditional work on energy prices and subsidies continuing across the membership, and with policy and analytical work continuing as part of multilateral surveillance." The MTB concluded that for this reason the climate pilot had been excluded from coverage in a larger budget costing exercise pertaining to the four other pilots.

91. **Subsequent MTBs have provided further background and budgetary information on Fund engagement on climate change**, The FY2022-24 MTB (IMF, 2021f) described key elements of the Fund's ongoing climate work, highlighted that previous budgets have allocated available resources to support initial strengthening of climate-related capacity, and that departments had reallocated fungible economist time to climate issues. Estimating spending on climate-related work, based on initial departmental estimates, it noted that spending on climate work had increased from $16 million in FY2020, and to an estimated $24 million in FY2021, including $4.5 million in externally funded CD resources in FY2020 and FY2021 earmarked for climate-related work.

(ii) Risk

92. **Risk reports noted the tensions arising from integrating "emerging issues," in terms of human capital, budget and quality of policy and technical advice in a flat-budget environment.** Since 2016, Risk Reports have highlighted departments' concerns about maintaining a flat budget while addressing "emerging issues," and the potential for these topics to overshadow "traditional" Fund activities. The 2017 Risk Report acknowledged the significance

---

[15] Augmented resources enabled coverage of climate issues in 15 Article IV consultations, including 5 discussing mitigation policies for large emitters and 10 addressing adaptation and/or transition management; 4 FSAPS with a climate component; and 5 RSF arrangements.

[16] These covered Fund work on gender, inequality/inclusion, fiscal space, and macrostructural issues.

of emerging issues for macroeconomic stability while pointing out the dangers of neglecting traditional Fund work. It also noted the risks associated with staff offering advice in areas beyond the Fund's core expertise—which could affect the quality and impact of the advice, and potentially harm the Fund's reputation (IMF, 2017c). Furthermore, these reports emphasized the necessity for investment in new areas where the Fund's expertise was limited. This investment was deemed as crucial for providing meaningful advice to members and safeguarding the Fund's reputation and effectiveness, especially as the budgetary flexibility to incorporate new areas was decreasing.

93. **A review of reports prepared by the Office of Risk Management over the period 2012–22 showed that coverage of climate change related risks was uneven.** Initially, these risks were briefly considered as potential governance and operational risks for the Fund. However, they were later recognized as key global risks, with their implications for the Fund's operations no longer being the primary focus. A departmental survey in 2013 highlighted concerns that failing to adjust the governance structure could limit the Fund's ability to evolve its mandate and capacity in response to the changing dynamics of international economic challenges. These challenges include financial sector interconnectedness, the economic risks posed by climate change, and inadequate job growth (IMF, 2013b). The Risk Reports of 2017 and 2018 underscored a significant risk in Fund surveillance: the potential failure to accurately identify critical aspects of global or member economies' conditions. This includes not foreseeing the macrocritical implications of newer policy areas like climate change (IMF 2017b, 2018). In later reports, climate change was again categorized solely as a global risk, without examining its specific impact on Fund operations.

94. **The Climate strategy paper covered the risk assessment in one paragraph.** It emphasized the need to step up the Fund’s engagement on climate change to help mitigate reputational and strategic risks to the Fund and deemed climate change as one of the most critical macroeconomic and financial policy challenges of the coming years and decades. However, it also recognized that the proposal would create new risks, including the Fund “overstepping its mandate”, and the risk of not properly endowing the new climate mandate could ultimately generate reputational risks given reduced quality and traction of Fund advice. This is closely aligned with the findings in De Lannoy (2024), highlighting that the discussion of risks when engaging in other recent topical areas such as gender, governance and digital money, was very limited.

95. **In interviews, some noted the potential risks of the Fund action or in-action in this area.** As established in the Summing Up of the Climate Strategy, the Executive Board agreed that climate change is a global existential threat that poses critical macroeconomic and financial policy challenges for the whole Fund membership, hence signalling the reputational risk of inaction. Views were also expressed on the potential risk of duplication of efforts at the international level, the perception of the Fund potentially overstepping its mandate and unrealistic expectations about its role given the risk of covering more than was possible. Some views also emphasized the different time spans of the usual short-to-medium term risks considered in bilateral surveillance and how longer-term climate change risks would fit in this horizon.

Assessment

96. **Decision-making processes, to develop, incentivize and support the human resources needed to deliver the Fund's work on climate change were weak, particularly in in the earlier part of the evaluation period.** In this period, support for the limited number of Fund staff working on climate policy was modest, and staff often worked on climate policy in an informal, collaborative manner with likeminded staff and with modest managerial support. In fact, no formal processes existed for much of the evaluation period. Until 2021, the allocation of resources for climate policy issues was relatively modest and not separately monitored, resulting in the Fund having limited detailed insight into the number of resources dedicated to climate policy matters.

97. **Later in the evaluation period, weaknesses in decision-making processes created an important gap between the level of institutional ambition and the human resources to deliver.** Notwithstanding recognition in the background paper to the April 2021 CSR of the shortcomings in the Funds' approach, the Budget augmentation framework agreed in December 2021 (IMF, 2022c), resulted in a 25 percent reduction of the budget set out in the Climate Strategy which had been agreed five months earlier. While the Budget Augmentation Framework recognized that the lower resourcing levels would have an impact on the deliverables, there was an important difference between the final allocation of resources and the level of ambition of the scope of the climate strategy that was previously agreed and communicated externally. Staff interviewed for the evaluation felt that this compounded perception that the Fund had limited knowledge, interest and appreciation of the role played by staff in delivering its climate agenda.

VI. KEY FINDINGS AND CONCLUSIONS

98. **IMF engagement on climate change evolved considerably over the evaluation period and coverage of climate issues in Fund research and surveillance outputs expanded rapidly, notably at the end of the period.** Climate change is an escalating global policy challenge and a wide range of policies necessary to address climate change are within the IMF's remit and areas of expertise. Several factors contributed to the evolution of this work, including the establishment of the legal framework for surveillance of its traditional core areas of engagement but also to other newer policy areas including climate change; periodic surveillance reviews and guidance; and the establishment of a Climate Strategy in 2021. Several decision-makers, in different measure, drove the evolution of Fund engagement, including successive IMF MDs, staff, the Executive Board and external actors.

99. **The paper concludes that although a cohesive approach to integrating climate change-related policies into IMF surveillance evolved over the evaluation period, marked by the establishment of a legal framework, guidance, and a Climate Strategy, the decision-making processes lacked coherence and effectiveness.** The Fund was slow to act in establishing a Climate Strategy; human resource decisions were ad hoc for much of the evaluation period; and the Fund was unable to account for staff time spent on climate work and for the

numbers of staff working on climate change. Overall, there is substantial scope to strengthen and improve coherence of the institutional approach to delivering IMF surveillance of climate change.

Legal Framework, Guidance, and Strategy

100. **The ISD provided a framework in 2012 to enable treatment of Fund surveillance of climate change in Article IV consultations, but its effectiveness was compromised.** Criteria of macrocriticality and availability of Fund expertise were only established by 2015; and the ISD's ability to address the global spillover effects of members' domestic policies in Fund surveillance, was brought into question at the end of the evaluation period, when differences emerged among the membership and with staff, on treatment of climate mitigation of the large emitters of GHGs.[17]

101. **While the CSR provided attention to climate change, guidance on bilateral surveillance of climate change was minimal throughout the evaluation period; and provided only until 2021.** While the CSR and accompanying background paper explained the scope of coverage of climate policies across bilateral and multilateral surveillance, scant guidance has been provided on how to apply surveillance in country-specific settings.

102. **While a Climate Strategy was introduced in 2021, its introduction almost a decade after the ISD and several years following the Fund's identification of the macrocriticality of climate change, reflects the array of challenges faced by the Fund in ensuring broad support for and the necessary resources when establishing formal strategies in newer areas.** By 2021, the Fund already had a long-established catalogue of research, modelling capacity, had built an array of toolkits and had extensive experience in covering the economic and financial aspects of climate adaptation, mitigation and transition risks in bilateral surveillance and multilateral surveillance. Several factors influenced the pace of evolution in the application of the mandate to this newer area: these included the modest scale of budgetary resources allocated to climate work; the dearth of staff who were open to working on the topic; hesitancy and lack of consensus within the institution as well as differences of view within the Executive Board on the relevance of climate change to the Fund's work and the risk of crowding out other areas of Fund work, including in traditional areas; the need to adopt a variety of tools, including use of pilots and experimental approaches to evolve experience and build consensus; the need to locate climate work within a steadily expanding array of other newer topical areas; and the absence of a multi-dimensional, yet cost-effective talent inventory or tracking system, other than TRACES, that could provide information on resources expended across a growing range of issues and workstreams. All of these offer useful lessons for the Fund, as newer policy areas emerge in the future.

[17] See Bossone (2024) for a further discussion of the treatment of spillovers in the ISD.

Key Drivers of the Decision-Making Process

103. **Successive MDs were key drivers of the Fund's work on climate issues.** All MDs added impetus to Fund engagement, each with escalating impact. The public statements of the MDs, when related to climate change, are broadly seen to evoke a positive external sentiment about the IMF and its role in combatting climate change.

104. **Fund staff were a critical catalyst for Fund engagement on climate policy issues but lacked cohesive institutional support for most of the evaluation period.** This paper found that staff initially contributed as individuals with an interest in the economic and financial impacts of climate change and with little managerial and budgetary support; that these efforts were the precursor to later evolution of a plethora of Fund initiatives, including climate modelling, surveillance, and CD-related toolkits. Nevertheless, the paper found that staff lacked cohesive institutional support for most of the evaluation period.

105. **The Executive Board played a more modest role,** largely endorsing management proposals until 2017, when the influence of groups of Board members who coalesced to promote the climate agenda appear to have influenced the pace and direction of evolution of the Fund engagement on climate change.

Human Resources, Budget and Risk

106. **The paper found that granular information on the number of staff working on climate change has not been available on an ongoing basis.** Finding cost-effective and practical ways to strengthen the Fund's capacity to trace and assess where staff working on climate change are located, on what aspects of climate change and for what share of their overall work could help address this challenge, although this would require a careful assessment of the practical challenges, trade-offs, and potential costs and benefits in establishing a cost-effective system to do so. The paper also found that for most of the evaluation period, a practice of ad hoc, temporary resourcing was applied to address particular institutional needs, and that this approach began to be replaced in 2021 with a more formal coordination mechanism.

107. **There is scope to strengthen the budgetary process and to strengthen strategic decision-making.** Splitting decisions taken on principles of the Climate Strategy and those related to the budgetary resources to implement the strategy reflected an inefficient decision-making process, creating a large gap between the level of institutional ambition and the human resources to deliver the climate strategy. Moreover, compilation of the information on Fund-wide spending on climate change could be improved.

108. **Little attention was paid to risk factors.** In the Climate Strategy, no substantive treatment was provided in regard either to the risks of Fund engagement, or absence of engagement, in surveillance of climate change. In the IMF's Risk Reports, similarly, minimal attention was paid to either the operational or institutional risks arising from the Fund's engagement on climate issues and from the escalating risks posed by climate change itself.

REFERENCES

Abrams, Alisa, 2020, "Selected Collaboration Initiatives Between the IMF and Multilateral Partners," IEO Background Paper No. BP/20-01/03 (Washington: International Monetary Fund).

Bredenkamp, Hugh, and Catherine Pattillo, 2010, "Financing the Response to Climate Change," IMF Staff Position Note (Washington: International Monetary Fund).

Cabezon, E., L. Hunter, P. Tumbarello, K. Washimi, and Y. Wu, 2015, "Enhancing Macroeconomic Resilience to Natural Disasters and Climate Change in the Small States of the Pacific," IMF Working Paper 15/125 (Washington: International Monetary Fund).

De Lannoy, 2024, "Applying the IMF's Mandate—The Decision-Making Process," IEO Background Paper No. BP/24-01/02 (Washington: International Monetary Fund).

Farid, Mai, Michael Keen, Michael Papaioannou, Ian Parry, and Catherine Pattillo, Anna Ter-Martirosyan, and IMF Staff, 2015. "After Paris: Fiscal, Macroeconomic and Financial Aspects of Global Warming." Staff Discussion Note (Washington: International Monetary Fund).

Gandhi, Ved P., 1996, *Macroeconomics and the Environment* (Washington: International Monetary Fund).

__________, 1998, "The IMF and the Environment," July (Washington: International Monetary Fund).

Georgieva, Kristalina, 2023, "Building Bridges to Future Growth," 2023 Annual Meetings Curtain Raiser Speech by the Managing Director at Abidjan, Côte d'Ivoire, October 5.

Gerling, Kerstin, 2017, "The Macro-Fiscal Aftermath of Weather-Related Disasters: Do Loss Dimensions Matter?" IMF Working Paper 17/235 (Washington: International Monetary Fund).

G20 Finance Ministers and Central Bank Governors, 2011, Communique, April 14-15, 2011, Washington D.C.

Independent Evaluation Group, 2009, Climate Change and the World Bank Group: Phase One—An Evaluation of World Bank Win-Win Energy Policy Reforms (Washington: World Bank).

Independent Evaluation Office of the International Monetary Fund (IEO), 2011, *IMF Performance in the Run-Up to the Financial and Economic Crisis* (Washington: International Monetary Fund).

__________, 2022, *IMF Engagement with Small Developing States* (Washington: International Monetary Fund).

__________, 2023, *The Evolving Application of the IMF's Mandate*, Draft Issues Paper, (Washington: International Monetary Fund).

International Monetary Fund, 1991, "IMF Reviews Its Approach to Environmental Issues," IMF Survey, Vol. 20, April 15, 1991 (Washington).

__________, 2008, "The Fiscal Implications of Climate Change," February (Washington).

__________, 2009, Joint IMF, Multilateral Development Banks statement ahead of the UN Climate Change Conference in Copenhagen (Washington).

__________, 2010, "IMF Survey: IMF Proposes "Green Fund" for Climate Change Financing, IMF Survey Online." Available at https://www.imf.org/en/News/Articles/2015/09/28/04/53/sonew013010a.

__________, 2011, "Promising Domestic Fiscal Instruments for Climate Finance" (Washington).

__________, 2012, "Modernizing the Legal Framework for Surveillance—An Integrated Surveillance Decision," July (Washington).

__________, 2013a, "Macroeconomic Issues in Small States and Implications for Fund Engagement," IMF Policy Paper (Washington).

__________, 2013b, "2013 Report on Risk Management," (Washington) (unpublished).

__________, 2014a, "2014 Triennial Surveillance Review—Overview Paper," IMF Policy Paper (Washington).

__________, 2014b, "Staff Guidance Note on the Fund's Engagement with Small Developing States," IMF Policy Paper (Washington).

__________, 2015a, "The Managing Director's Statement on the Role of the Fund in Addressing Climate Change" (Washington).

__________, 2015b, "Guidance Note for Surveillance under Article IV Consultation," IMF Policy Paper (Washington).

__________, 2016a, "Small States' Resilience to Natural Disasters and Climate Change—Role for the IMF" (Washington).

__________, 2016b, "Maldives: 2016 Article IV Consultation-Press Release; Staff Report; and Statement by the Executive Director for Maldives," IMF Staff Country Report (Washington).

__________, 2016c, “Solomon Islands: 2016 Article IV Consultation and Fifth and Sixth Reviews Under the Extended Credit Facility Arrangement-Press Release; Staff Report; and Statement by the Executive Director for Solomon Islands,” IMF Staff Country Report (Washington).

__________, 2016d, “Tuvalu: 2016 Article IV Consultation-Press Release; Staff Report; and Statement by the Executive Director for Tuvalu,” IMF Staff Country Report (Washington).

__________, 2017a, " Large Natural Disasters – Enhancing the Financial Safety Net for Developing Countries," IMF Policy Paper, May (Washington).

__________, 2017b, “Seychelles: 2017 Article IV Consultation and Sixth Review Under the Extended Arrangement-Press Release; Staff Report; and Statement by the Executive Director for Seychelles,” IMF Staff Country Report, June (Washington).

__________, 2017c, “2017 Risk Report – Advancing Risk Management at the Fund’” (Washington) (unpublished).

__________, 2018, “2018 Risk Report” (Washington) (unpublished).

__________, 2021a, “2021 Comprehensive Surveillance Review—Overview Paper” (Washington)

__________, 2021b, “Comprehensive Surveillance Review**—**Background Paper on Integrating Climate Change into Article IV Consultations” (Washington).

__________, 2021c, “IMF Strategy to Help Members Address Climate Change Related Policy Challenges—Priorities, Modes of Delivery, and Budget Implications” (Washington).

__________, 2021d, “Review of the Climate Change Policy Assessment Pilots—Update, Document presented by FAD and SPR to an Informal Board Meeting,” May 26 (Washington).

__________, 2021e, "The Chair’s Summing Up - IMF Strategy to Help Members Address Climate Change Related Policy - Challenges - Priorities, Modes of Delivery, and Budget Implications," SU/21/108, July 21 (internal, Washington).

__________, 2021f, “FY2022-FY2024 Medium-Term Budget” (Washington).

__________, 2022a, “Guidance Note for Surveillance Under Article IV Consultations" (Washington).

__________, 2022b, "Proposal to establish a Resilience and Sustainability Trust," IMF Policy paper No. 2022/013 (Washington).

__________, 2022c, “Budget Augmentation Framework” May (Washington).

__________, 2023, "Benefits of Accelerating the Climate Transition Outweigh the Costs," IMF Blog, December 5.

Lagarde, Christine, 2015, "Lift Growth Today, Tomorrow, Together," speech delivered by the Managing Director at the Atlantic Council, Washington, DC, April 9.

Lindenthal, Alexandra and Martin Koch, 2013, The Bretton Woods Institutions and the Environment: Organizational Learning within the World Bank and the International Monetary Fund (IMF), Administrative Sciences, 3, issue 4, p. 1-36.

Merling, Lara, 2020, "No Voice for the Vulnerable: Climate Change and the Need for Quota Reform at the IMF," Boston University Global Development Policy Center.

Mooij, R. A. d., Keen, M., and Parry, I. W., 2012, *Fiscal Policy to Mitigate Climate Change,* (Washington: International Monetary Fund).

Oxfam, 2023, "From Stunt to Substance: An assessment of IMF engagement with civil society" (Washington, Oxfam).

United Nations, 2015, " Report of the Conference of the Parties on its Twenty-First Session, held in Paris from November 30 to December 11 (The Paris Agreement)." Available at https://unfccc.int/sites/default/files/resource/parisagreement_publication.pdf.

Parry, Ian W.H., Chandara Veung and Dirk Heine, 2014. "How Much Carbon Pricing is in Countries Own Interests? The Critical Role of Co-Benefits." Working paper 14/174 (Washington: International Monetary Fund).

Ramos, Luma, Kevin P. Gallagher, William N. Kring, Franco Maldonado Carlin, 2022, "The IMF and Climate Change Tracking the IMF's engagement and leadership," Boston University Global Development Policy Center, April.

Skovgaard, Jakob, 2021, "The Economisation of Climate Change," Cambridge Books, Cambridge University Press.

Stedman, Louellen, Alisa Abrams, and Michael Kell, 2020, "IMF Collaboration with the World Bank on Macro-Structural Issues: Experience with the Pilot Programs", IEO Background Paper No. BP/20-01/01, (Washington: International Monetary Fund).

Task Force on Climate, Development and the IMF, 2023, *The International Monetary Fund, Climate Change and Development: A Preliminary Assessment*, R. R. Bhandary and M. Uy, Eds. (Boston: Boston University Global Development Policy Center).

Towe, Christopher, 2024, "The IMF and Its Mandate—Financial Sector Surveillance," IEO Background Paper No. BP/24-01/07 (Washington: International Monetary Fund).

Volz, Uli, and Sara Jane Ahmed, 2020, "Macrofinancial Risks in Climate Vulnerable Developing Countries and the Role of the IMF," SOAS London Center for Sustainable Finance.

Weitzman, Martin, L., 2007, "A Review of the Stern Review on the Economics of Climate Change," Journal of Economic Literature, 45 (3): 703-724.

Winter, David, and Manuela Kiehl, 2022, The global economic costs of climate change inaction. Oxford Economics, December 20.

World Bank, 2016, "World Bank Group Climate Change Action Plan, 2016–2020" (Washington: World Bank).

World Bank, 2021, "World Bank Group Climate Change Action Plan 2021–2025: Supporting Green, Resilient, and Inclusive Development" (Washington: World Bank).

World Bank, 2023, The World Bank and Paris Alignment (Washington: World Bank).

Xu, Richard, 2024, "Evolution of the IMF's Mandate – External Perspectives," IEO Background Paper (unpublished).