IMF POLICY PAPER

INTERIM REVIEW OF THE ADEQUACY OF THE FUND'S PRECAUTIONARY BALANCES

December 2021

IMF staff regularly produces papers proposing new IMF policies, exploring options for reform, or reviewing existing IMF policies and operations. The following documents have been released and are included in this package:

- A **Press Release**.
- The **Staff Report**, prepared by IMF staff and completed on November 12, 2021 for the Executive Board's consideration on December 13, 2021.

The IMF's transparency policy allows for the deletion of market-sensitive information and premature disclosure of the authorities' policy intentions in published staff reports and other documents.

Electronic copies of IMF Policy Papers
are available to the public from
http://www.imf.org/external/pp/ppindex.aspx

International Monetary Fund
Washington, D.C.

PRESS RELEASE

PR21382

IMF Executive Board Discusses the Adequacy of the Fund's Precautionary Balances

FOR IMMEDIATE RELEASE

WASHINGTON, DC – December 16, 2021 The Executive Board of the International Monetary Fund (IMF) concluded the *Interim Review of the Adequacy of the Fund's Precautionary Balances*.[1]

Precautionary balances currently comprise the Fund's general and special reserves.[2]. They are a key element of the IMF's multi-layered framework for managing financial risks. Precautionary balances provide a buffer to protect the Fund against potential losses, resulting from credit, income, and other financial risks. For this reason, they also help protect the value of reserve assets represented by member countries' positions in the Fund and underpin the exchange of assets through which the Fund provides financial assistance to countries with balance of payments needs.

This interim review of the adequacy of the Fund's precautionary balances took place ahead of the standard two-year cycle given the need for close monitoring due to the heightened uncertainty in the global economy linked to the pandemic and the path and timing of the recovery.[3]

In conducting the interim review, the Executive Board applied the rules-based framework agreed in 2010. The framework uses an indicative range for precautionary balances, linked to a forward-looking measure of total IMF credit, to guide decisions on adjusting the target for precautionary balances over time. The framework also allows for judgement in setting the target, considering a broad range of factors that affect the adequacy of precautionary balances.

In the context of this interim review, the Board also took the opportunity to further discuss other issues that affect the level and accumulation of reserves, namely the First Special Contingent Account (SCA-1), after its full distribution; IFRS 9 credit impairment provisioning; the income volatility created by accounting for pensions revaluations under IAS 19. The Board also discussed the role of surcharges as part of the Fund's risk management framework and the merits of a review of the surcharge policy.

---

[1] This press release summarizes the views of the Executive Board as expressed during the December 13, 2021 Executive Board discussion based on the paper entitled "Interim Review of the Adequacy of the Fund's Precautionary Balances."

[2] Except the portion of the Special Reserve attributed to gold sales profits. Prior to its full disbursement in the context of the Sudan arrears clearance operation, balances in the First Special Contingent Account (SCA-1) were also included in precautionary balances.

[3] Reviews of the adequacy of precautionary balances have been on a two-year cycle since 2002 but can be brought forward by the Executive Board if needed.

Executive Board Assessment[4]

Executive Directors welcomed the opportunity to review the adequacy of the Fund's precautionary balances ahead of the standard two-year cycle. They generally emphasized the importance of maintaining an adequate level of precautionary balances to mitigate financial risks, safeguard the strength of the Fund's balance sheet, and protect the value of members' reserve positions in the Fund. An adequate level of precautionary balances would thus continue to play an integral part of the Fund's ability to lend.

Directors generally noted that overall financial risks remain elevated but have not increased significantly since the last review. In particular, credit risks are driven by a combination of historically high exposure, significant loan concentration toward the largest borrower, whose repurchases schedule is bunched in the near future, as well as a sizable share of emergency financing without ex-post conditionality in the lending portfolio.

In light of this, Directors broadly agreed to leave the medium-term target of SDR 25 billion, and the minimum floor of SDR 15 billion, unchanged at this time. Taking into account the expected new demand for Fund lending, the current target for precautionary balances of SDR 25 billion would remain within the indicative range of the forward-looking measure of average credit outstanding. Directors broadly noted that other qualitative considerations, while pointing to elevated risk, do not suggest a significant deterioration compared to the last review. A few Directors felt that raising the medium-term target would have been justified, while a few others thought that the level could be reduced if appropriate once the crisis abates. Against the backdrop of continued uncertainty about the global recovery, Directors noted that the target will need to be reassessed at the next regular review in about a year's time. The minimum floor could be revisited after the review of the Investment Account.

Directors broadly considered that with the projected increase in lending income, the pace of precautionary balances accumulation is expected to remain adequate relative to the medium-term indicative target. Even after factoring in the proposed budget augmentation, the SDR 25 billion target would be reached in early Fiscal Year 2025 under the desk survey scenario for future lending—one year earlier than projected at the 2020 review. A few Directors stressed the importance of avoiding delays in the pace of accumulation, and a few others felt that it could be strengthened. Directors asked staff to closely monitor risks.

Directors welcomed the analysis provided by staff on the role of surcharges as part of the Fund's risk management framework and their financial implications on members. Some

Directors were open to exploring temporary surcharge relief to help borrowing members free up resources to address the health and economic challenges posed by the pandemic. Some suggested reflecting on how best to implement surcharges during pandemic situations. A number of Directors did not see a need to review the policies on surcharges or change their design at this stage, given overall low total cost of borrowing from the Fund and noting the critical role of surcharge income in ensuring an adequate build-up of risk buffers. Most other Directors expressed openness to an appropriately-timed, more holistic review of surcharge policies in the context of the Fund's income model and overall financial outlook.

[4] At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: http://www.IMF.org/external/np/sec/misc/qualifiers.htm.

Directors also broadly supported the measures proposed by staff to mitigate the volatility of precautionary balances created by the accounting treatment of pension revaluations under IAS 19. While recognizing that income volatility stemming from the pension-related gains and losses cannot be eliminated for financial reporting under International Financial Reporting Standards, the new approach for determining precautionary balances seeks to reflect their role as a long-term buffer for economic and financial risks. It aims to achieve this by replacing the accounting valuation of the net pension-related assets and liabilities with a more long-term economic measure, and taking a more prudent stance on any economic gains. The transition to the new approach would be applied prospectively, commencing in FY 2022.

Directors broadly supported keeping the SCA-1 open with a zero balance for the time being. Staff should monitor the need, and opportunities, for further SCA-1 funding, and engage the Executive Board on developments as warranted. Some Directors encouraged staff to explore further options for providing funding for the SCA-1. A few Directors highlighted the importance of the burden-sharing mechanism and the timely completion of the

16th General Review of Quotas. Some Directors noted that with the SCA-1 balance depleted, a need to book a provision for credit impairment could potentially arise and emphasized that the Executive Board should be informed ex-ante.

November 12, 2021

INTERIM REVIEW OF THE ADEQUACY OF THE FUND'S PRECAUTIONARY BALANCES

EXECUTIVE SUMMARY

Precautionary balances are a key element of the Fund's multilayered framework to mitigate financial risks. They currently consist of the balances in the general and special reserves, totaling SDR 19.3 billion as of end-July 2021, and provide buffers to absorb losses, should these arise as a result of credit, income, and other financial risks. At the last bi-annual review, completed on October 30, 2020, the Board decided to raise the indicative medium-term target for precautionary balances to SDR 25 billion and, in light of heightened pandemic-related uncertainty, called for a reassessment of the adequacy of precautionary balances before the next regular review.

Overall financial risks remain elevated but have not increased significantly since the last review. In particular, credit risks are driven by a combination of historically high exposure, significant loan concentration toward the largest borrower, whose repurchases schedule is bunched in the near future, as well as a sizable share of emergency financing without ex-post conditionality in the lending portfolio. Market-based indicators and ratings suggest that the perceived credit quality of sovereign debt issued by the Fund's borrowers remains weak.

Staff proposes to leave the medium-term target of SDR 25 billion, and the minimum floor of SDR 15 billion, unchanged at this time. Taking into account the expected new demand for Fund lending, the current target for precautionary balances of SDR 25 billion would remain within the indicative range of the forward-looking measure of average credit outstanding. Other qualitative considerations, while pointing to elevated risk, do not suggest a significant deterioration compared to the last review. The target will need to be reassessed at the next regular review in about a year's time.

With the projected increase in lending income, the pace of reserve accumulation is expected to remain adequate relative to the medium-term indicative target. Even after factoring in the proposed budget augmentation, the SDR 25 billion target would be reached in early Fiscal Year (FY) 2025 under the desk survey scenario—one year earlier than projected at the 2020 review.

The paper also reviews policy factors discussed in recent Board meetings that affect the level and accumulation of reserves. These include the role of the First Special Contingent Account (SCA-1), after its full distribution in the context of Sudan's arrears clearance; IFRS 9 credit impairment provisioning; the income volatility created by accounting for pensions revaluations under IAS 19; and surcharge policies.

Approved By
Bernard Lauwers (FIN)

Prepared by Finance Department

CONTENTS

TABLES

ANNEXES

Glossary

BOP	Balance of Payments
EA	Endowment Subaccount
EFF	Extended Fund Facility
FA	Fixed-Income Subaccount
FCL	Flexible Credit Line
FTSE	Financial Times Stock Exchange
FY	Fiscal Year
GRA	General Resources Account
IAS 19	International Accounting Standards
IFRS 9	International Financial Reporting Standards
OPP	Outlook-for-Potential-Programs
PLL	Precautionary Liquidity Line
RFI	Rapid Financing Instrument
RSBIA	Retired Staff Benefits Investment Account
SBA	Stand-By Arrangements
SCA-1	Special Contingent Account 1
SDR	Special Drawing Rights
SRF	Supplemental Reserve Facility
SRP	Staff Retirement Plan
TBRE	Time Based Repurchases Expectation Policy
UCT	Upper-Credit Tranche
WEO	World Economic Outlook

INTRODUCTION[1]

1. **Precautionary balances are a key element of the Fund's multilayered framework to mitigate financial risks and safeguard members' resources.** They provide a buffer against potential losses resulting from credit, income, and other financial risks. They currently consist of balances in the general and special reserves (excluding gold sales profits). Prior to its full disbursement in the context of the Sudan arrears clearance operation, balances in the First Special Contingent Account (SCA-1) were also included in precautionary balances.

2. **This paper provides an interim review of the adequacy of the Fund's precautionary balances ahead of the standard two-year cycle.** At the 2020 review the Board raised the indicative medium-term target for precautionary balances from SDR 20 billion to SDR 25 billion and kept the minimum floor unchanged at SDR 15 billion.[2] Given the uncertainty from the pandemic, Directors underscored the need for close monitoring and agreed that they would reassess the adequacy of precautionary balances before the next regular review.[3] The review still takes place against a backdrop of uncertainty regarding the unfolding of the pandemic as well as the path and timing of the global economic recovery.

3. **The interim review uses the transparent and rules-based framework that has been employed since 2010 to guide the assessment while also allowing room for judgement.[4]** No changes to the broad framework of assessing the adequacy of precautionary balances are proposed.

4. **The paper also analyzes a number of policy and financial issues that are closely related to the Fund's precautionary balances.** In particular, the paper complements and follows-up on issues discussed in recent meetings with Executive Directors that affect the level and accumulation of reserves. Specifically:

- The informal session on March 8, 2021 to engage Executive Directors on the interim update of the Fund's income position for FY 2021, where staff discussed possible options for the treatment of IAS 19 remeasurement gains and losses, to better isolate their volatility.

[1] Prepared by a team led by Edda Zoli comprising Qianying Chen, Marco Cobanera, Shan He, Tetsuya Konuki, Flavien Moreau, Joel Chiedu Okwuokei, with contributions from Emer Fleming, Diviesh Nana, Amadou Ndiaye, Enosa Okosodo Odibo, Breno Oliveira, Victoria Nichipurenko, Vidhya A. Rustaman, Jesse Yang, Jessie Yang, and Vera Zolotarskaya, under the guidance of Christian Mumssen, Andreas Bauer and Olaf Unteroberdoerster (all FIN).

[2] See *Review of the Adequacy of the Fund's Precautionary Balances* (SM/20/159, 10/8/20).

[3] Reviews of the adequacy of precautionary balances have been on a two-year cycle since 2002 but can be brought forward by the Executive Board if needed.

[4] The quantification of potential loss from operational risks is not included in the current assessment framework. Such assessment will be feasible only after the Risk Control Self-Assessment is conducted and other relevant tools are available in the future.

- The annual Review of the Fund's Income Position for FY 2021 and FY 2022, discussed by the Board on April 27, 2021.[5] On that occasion the Board agreed to maintain the margin for the rate of charge at 100 basis points over the SDR interest rate for FY 2022.

- The informal discussion to engage the Board on the role of the SCA-1 on March 31, 2021, as well as the Board decision on the modalities of clearance of Sudan's arrears on April 30, 2021.

- The informal engagement with the Board on the role of surcharges on September 17, 2021.

5. This paper is organized as follows. The first section reviews the evolution of precautionary balances and financial risk since the last review, including those resulting in recent months from the still unfolding COVID-19 pandemic. The paper then assesses the adequacy of the current medium-term target of SDR 25 billion, and the minimum floor. The next section of the paper discusses the projected pace of accumulation of precautionary balances under different demand scenarios and provides further analysis of the role of surcharges in reserve accumulation. The final sections discuss the role of the SCA-1 and credit impairment provisioning as well as proposals to mitigate the volatility of precautionary balances created by the accounting treatment of pensions revaluations under IAS 19. Enterprise risks assessing staff's proposals are summarized at the end of the paper (Box 2).

DEVELOPMENTS SINCE THE LAST REVIEW

Precautionary balances have increased since the 2020 review and coverage ratios have improved, despite the full distribution of the SCA-1. Credit risks remain elevated due to a combination of historically high exposure, significant loan concentration toward the largest borrower (whose repurchases schedule is bunched in the near future), as well as a sizable share of emergency financing in the lending portfolio. The Fund's near-term income risks remain moderate, but subject to increased concentration risks. Investment risks are high since expected returns across all asset classes are lower than in the past.

6. The Fund faces a range of financial risks in fulfilling its mandate.[6] Credit risk is inherent in the Fund's unique role in the international financial architecture, and is typically the predominant risk. The Fund also faces risks to liquidity and adequacy of funds, risks to income, market risks, and risks of financial loss in operations.[7]

[5] See *Review of the Fund's Income Position for FY 2021 and FY 2022* (EBS/21/35, 4/12/21).

[6] Financial risks are a component of the large set of enterprise risks that the Fund faces. Other enterprise risks include reputational risk, strategic risk, business risk, environmental, social and governance risk and operational risk.

[7] The Fund has no exposure to exchange rate risk on its holdings of member currencies as Fund credit and borrowings are all denominated in SDRs, and members are required to maintain the SDR value of the Fund's holdings of their currencies. The Fund does not incur interest rate risk on its credit as the rate of charge is linked by means of a fixed margin to the cost of financing (the SDR interest rate).

7. Maintaining an adequate level of precautionary balances is a key element of the Fund's multi-layered risk management framework.[8] Precautionary balances provide buffers to absorb losses, should they arise as a result of credit, income, and other financial risks.[9] In this way, they play an important role in seeking to protect the value of reserve assets that members place with the Fund and underpin the exchange of international assets through which the Fund provides assistance to members with financing needs.[10]

A. Precautionary Balances Composition, Size and Coverage

8. Precautionary balances currently comprise the Fund's general and special reserves.[11]

- *Special reserve* – established as a first line to absorb administrative losses. It was funded initially by the proceeds from a gold investment program, and later with net income allocations. Under the Fund's Articles, no distributions (dividends) can be made from the special reserve.
- *General reserve* – established to absorb capital losses and meet administrative losses. It has been funded through income allocations. Reserves accumulated in the general reserve may be distributed to members, in proportion to their quota, if the Board approves such decision by a 70 percent majority of the total voting power.

The *SCA-1*—a special contingent account established in 1987 to absorb ultimate credit losses—was fully distributed to contributors in June 2021 in the context of Sudan's arrears clearance and debt relief, and has currently zero balances (see Section below).

9. Precautionary balances have increased since the 2020 review. They stood at SDR 20.0 billion at end-FY 2021, compared to SDR 16.0 billion at end-FY 2020 (Figure 1). Precautionary balances were at SDR 19.3 billion at end-July 2021, after taking into account the SCA-1 distribution of SDR 1.1 billion and SDR 0.3 billion net operational income in FY 2022 through July 2021. The general reserves are estimated to have increased from SDR 10.8 billion in FY 2020 to SDR 12.2 billion, and the special reserves from SDR 4.2 billion in FY 2020 to SDR 7.1 billion at end-July 2021.[12] The general and special reserve accumulation reflects a General Resource Account (GRA) net income of SDR 4.0 billion in FY 2021, stemming mainly from large pension related (IAS19)

[8] Other important components of the multi-layered risk management framework are Fund policies on access, program design and conditionality, safeguards assessments, post-program monitoring, the de-facto preferred creditor status, the cooperative arrears management strategy, and the burden sharing mechanism.

[9] For instance, the Fund drew on its precautionary balances during FY 2007–08, and more recently in FY 2020 to cover income losses.

[10] Although the Fund's gold holdings are another important factor of strength in the Fund's financial position, they are not included in the Fund's precautionary balances given the limitations and restrictions on their use.

[11] Precautionary balances do not include that portion of the special reserve attributed to the gold profits and invested in the endowment as, in setting up the endowment, the Board recognized that its sole purpose would be to generate income. On the asset side, the Fund's reserves treated as precautionary balances are either invested in the Fixed-Income subaccount or held in SDRs and currencies.

[12] Assumes equal allocation of income earned through end-July.

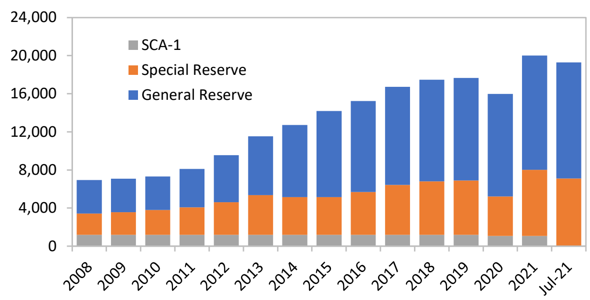
gains (SDR 3.2 billion), as well as SDR 0.3 billion net operational income this fiscal year through July 2021.

10. As a result, precautionary balance coverage ratios have improved since the last review. Coverage relative to lending capacity has increased from 2.2 percent at the time of the last review to 2.7 percent—the highest since 2009 (Figure 1). Despite additional lending, the ratio of precautionary balances to credit outstanding has risen to about 21 percent at end-July 2021 from about 19 percent in August last year. The ratio of precautionary balances to commitments has also improved, reaching 10.5 percent. Precautionary balances' coverage relative to outstanding credit and commitments remains nevertheless lower than before the pandemic.

Figure 1. Precautionary Balances Composition, Accumulation, and Coverage

A. Composition, 2008–July 2021

(In millions of SDRs, end of financial year)



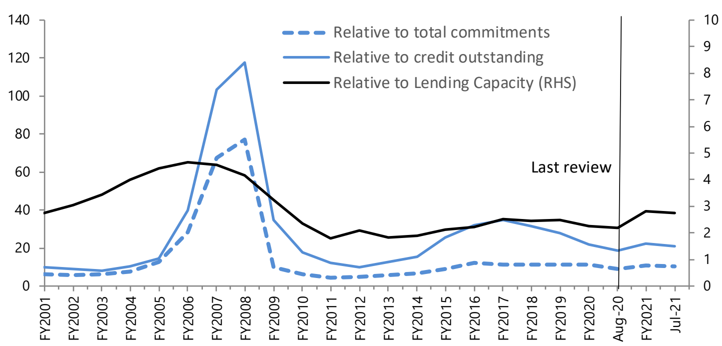
B. Accumulation[1]

(In billions of SDR)

	FY 2020	FY 2021	FY 2022 (End-July)
I. PB - beginning of period	17.7	16.0	20.0
II. Operational income	2.3	2.1	0.7
lending income incl. surcharges	1.9	2.0	0.7
non-lending income	0.4	0.1	0.0
III. Admin expenses	-0.9	-1.2	-0.3
IV. Net operational income	1.4	0.9	0.3
V. IAS19 gain/loss	-3.0	3.2	0.0
VI. Distribution of SCA-1			-1.1
VI. PB - end of period	16.0	20.0	19.3

C. Coverage Ratios: 2001–July 2021

(In percent, end of financial year, unless otherwise specified)



Source: IMF Finance Department.

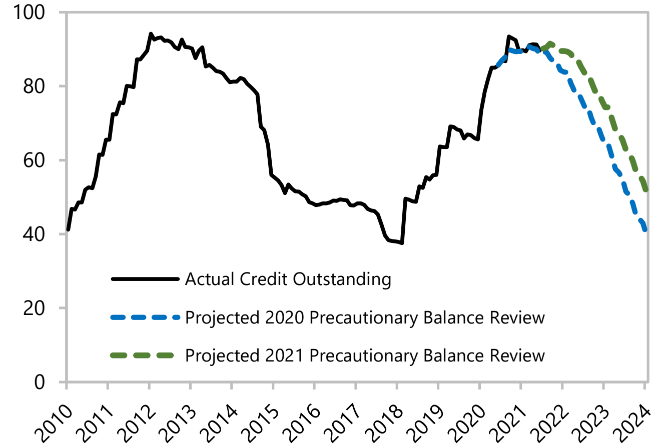
[1] Includes SCA-1.

B. Credit Risk

Prospective Credit Outstanding Based on Existing Arrangements at Precautionary Balance Reviews

in 2020 and 2021[1]

(In billions of SDRs)



Source: IMF Finance Department.

[1] This figure shows actual credit outstanding through September 2021 and projected credit outstanding at each precautionary balance review date.

11. Credit outstanding has nearly matched the previous peak following the global financial crisis. Fund credit outstanding reached nearly SDR 90 billion in September 2021, close to the maximum levels reached during FY 2012–13. It increased by SDR 4.1 billion (4.8 percent) compared to the time of the 2020 review, driven mostly by disbursements under upper credit tranche programs. Only two new Rapid Financial Instrument (RFI) and three RFI blends with the Rapid Credit Facility were approved after October 2020, with total GRA disbursements of SDR 0.6 billion.[13] The rise in new financing has more than offset some sizable early repurchases by Greece and Morocco.[14]

12. Based on current arrangements as of end-September 2021, credit outstanding would peak in FY 2022 at about SDR 92.8 billion.[15] Without new demand, Fund credit is expected to fall below SDR 90 billion by the end of FY 2022. Compared to the 2020 review, the projected credit path has increased by an average of about SDR 7 billion over the period FY 2022–24.

13. Total commitments also remain elevated at nearly SDR 182 billion at end-September 2021, close to the level at the time of the last review (Figure 3). This includes undrawn balances under existing arrangements as well as commitments under precautionary arrangements, including the Flexible Credit Line (FCL) arrangements for Chile, Colombia, Mexico and Peru, and the Precautionary Liquidity Line (PLL) for Panama.

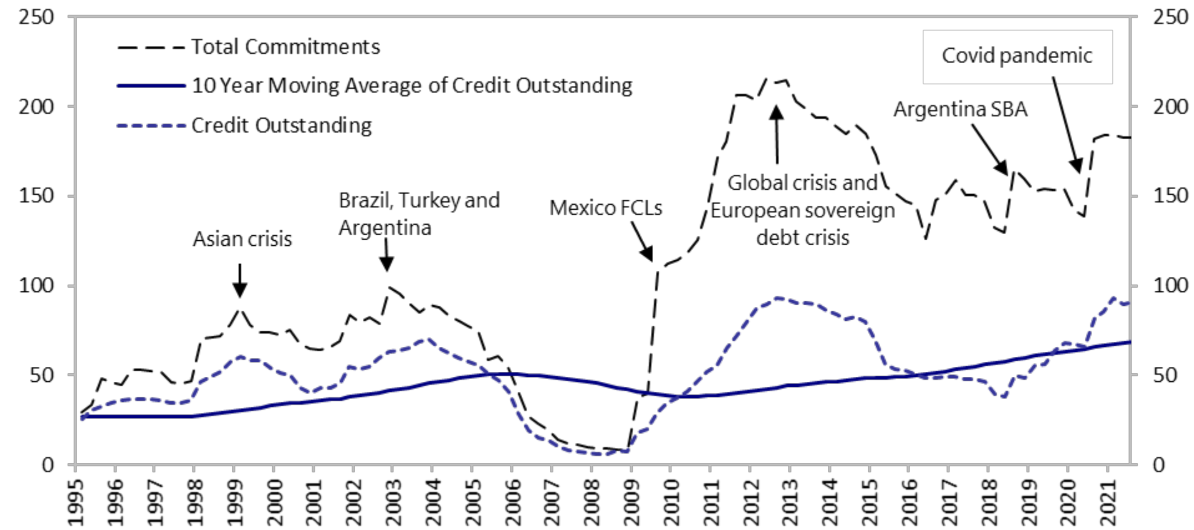
Figure 2. Total Commitments and Credit Outstanding: January 1995–September 2021[1/]

[13] These figures exclude the RFI disbursement for Tanzania on September 9, 2021, which was repurchased.

[14] Fund credit outstanding to Greece declined from SDR 4.6 billion at end-August 2020 to SDR 1.5 billion at end-September 2021. Fund credit to Morocco, which stood at SDR 2.1 billion in August 2020, fell to SDR 1.5 billion at end-September 2021.

[15] Throughout the paper—unless otherwise indicated—baseline projections for credit, income, precautionary balances, and other relevant variables are based on the assumption that purchases and repurchases under existing active non precautionary arrangements will take place as scheduled.

(In billions of SDR)



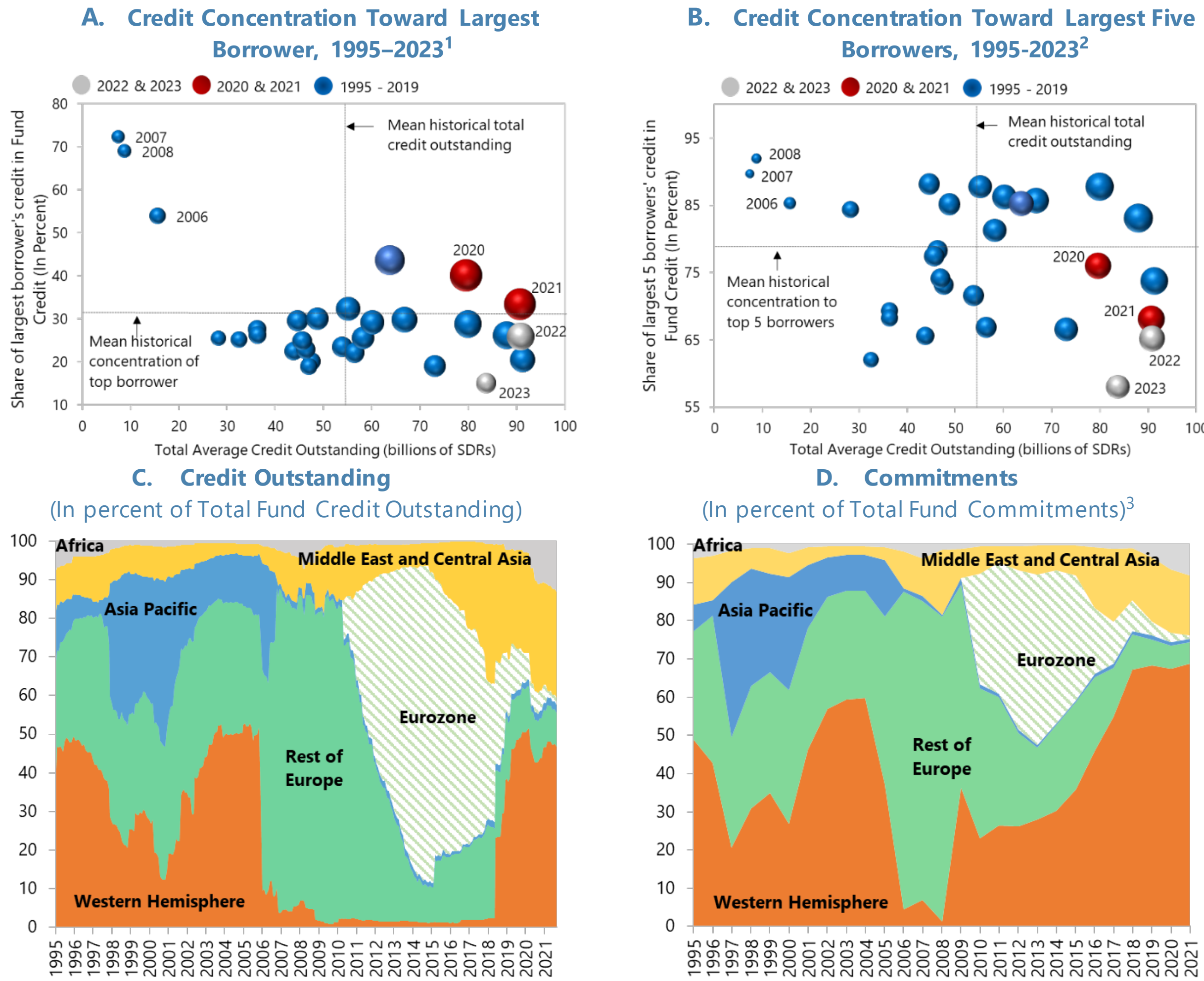
Source: IMF Finance Department.

[1] Total commitments equal GRA credit outstanding plus undrawn balances.

14. **Elevated credit exposure is combined with a heavy, albeit declining, concentration of the loan portfolio toward the largest borrower.** Credit concentration to the largest borrower has somewhat declined with the expansion in Fund credit, reaching about 34 percent as of end-September 2021, down from the most recent peak of 48 percent at end-2019, and nearly 38 percent at the time of the last review (Figure 3, panel A). However, concentration to a single borrower has never been so high in recent peaks of the credit cycle. The share of outstanding Fund credit toward the five largest borrowers (currently, Argentina, Egypt, Ukraine, Pakistan and Ecuador) stood at 68 percent as of end-September 2021, close to the historical average (Figure 3, panel B).[16] Regional concentration remains tilted toward the Western Hemisphere reflecting sizable outstanding credit from Argentina and significant exposure on a commitment basis through FCL arrangements with Chile, Mexico, Colombia, and Peru and the PLL to Panama.

[16] At end-September 2021 the Fund's exposure to Argentina amounted to SDR 30.6 billion. Exposure to Egypt was SDR 14.2 billion. The other three largest exposures include SDR 6.7 billion to Ukraine; SDR 5.0 billion to Pakistan; and SDR 4.3 billion to Ecuador.

Figure 3. Credit Concentration Toward Largest Borrowers and Regional Concentration



Source: IMF Finance Department.

[1] The relative size of the bubbles reflects the amount of Fund credit outstanding to the largest borrower.

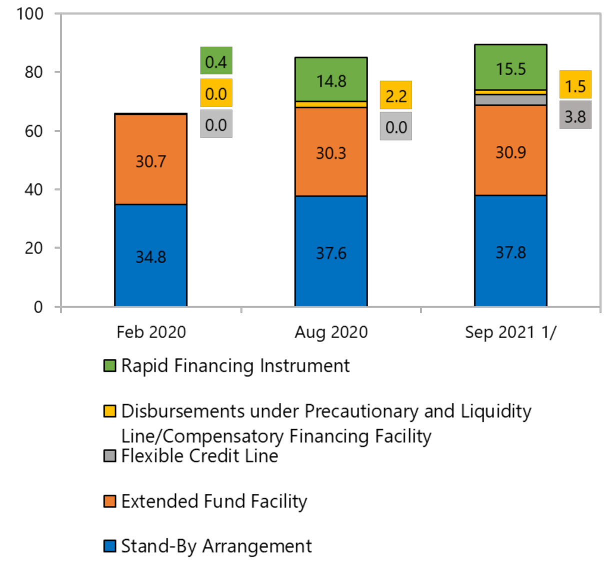
[2] The relative size of the bubbles reflects the amount of Fund credit outstanding to the five largest borrowers.

[3] GRA credit outstanding plus undrawn balances by region as a share of total GRA balances and total GRA undrawn balances. The latter include undrawn balances under existing arrangements as well as commitments under precautionary arrangements.

15. The share of the credit portfolio accounted for by emergency financing instruments without ex-post conditionality remains elevated. As of end-September 2021, the share of outstanding RFIs was about 17 percent of the Fund's outstanding lending portfolio, significantly higher than before the pandemic, but just slightly above the share at the time of the last review. As noted, GRA disbursements under the RFI and RFI blends since the last review amounted to SDR 0.6 billion.

Credit Outstanding by Facility

(SDR billion)

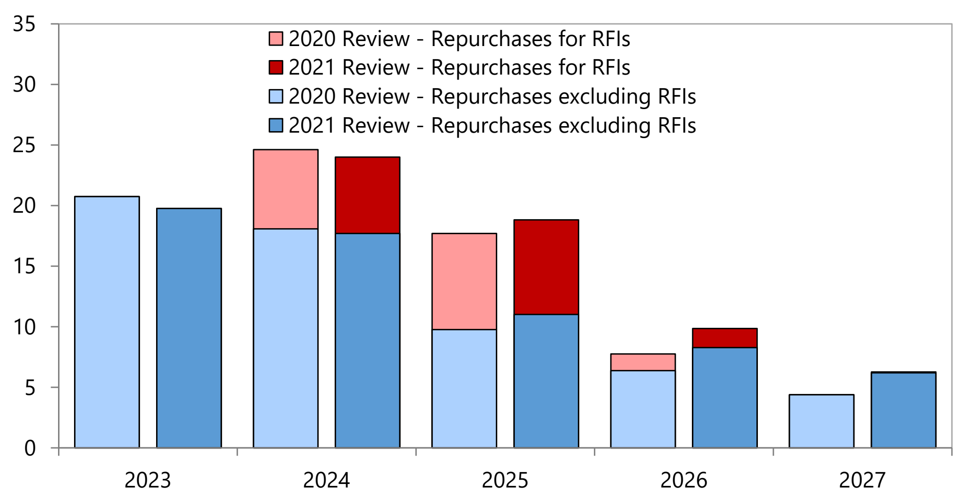


1/ Exluding RFI disburement for Tanzania on September 9, 2021 which was subsequently repurchased.

16. Credit concentration risks continue to be heightened by the heavy bunching of repurchases in FY2023–25 (Figure 4). Total scheduled repurchases over that period amount to nearly SDR 63 billion—an average of SDR 21 billion per year. This reflects both scheduled repurchases by Argentina and repurchases associated with the recent surge in one-off RFI disbursements. Argentina's repurchases alone account for SDR 15.5 billion and SDR 10.3 billion in FY 2023 and FY 2024, respectively. Relative to the country's economic size, as proxied by quota, Argentina's scheduled repurchases for FY 2023–24 are also large (peaking at 486 percent of quota in FY 2023). Repurchases of single tranche RFIs disbursements account for about SDR 15.8 billion, with the bulk scheduled in FY 2024–25.

Figure 4. Scheduled Repurchases: FY 2023–27

(In billions of SDRs)



Source: IMF Finance Department.

17. Perceived credit risks reflected by sovereign credit ratings and spreads of the Fund's borrowers remain elevated and largely unchanged from the previous review.[17]

- The average sovereign credit rating of the Fund's borrowers, weighted by Fund outstanding credit in each rating category, remains at levels last observed in the early 2000s following several major crises in emerging market economies (Figure 5, top left panel).[18] Compared to previous peaks in Fund credit, currently the share of Fund lending to member countries rated CCC to CC and SD is particularly elevated, representing over 40 percent of total Fund credit at end-September 2021, up from an average 30 percent in 2002–03, and 21 percent in 2012.

- The number of Fund borrowers rated less than BB continues to remain at historical highs, after the sharp increase in emergency lending and the broader unfolding of the pandemic crisis (Figure 5, top right panel).

- The weighted average of the sovereign spreads of the Fund's largest five borrowers peaked in the spring of 2020 amid the coronavirus outbreak. Spreads have declined through early-September 2020 as Argentina restructured its FX denominated debt with private creditors, but remain relatively high and have risen some since then (Figure 5, bottom panel).

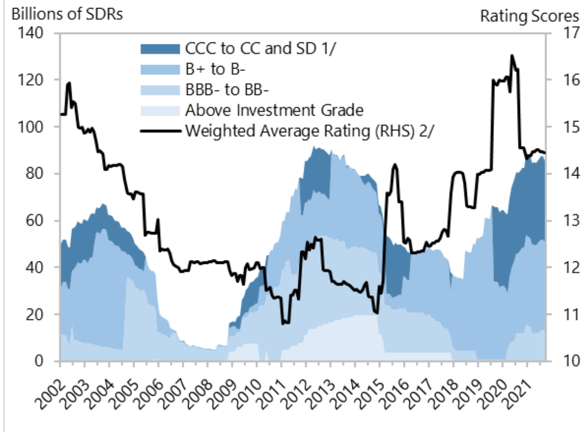
[17] In line with previous Board guidance, staff does not apply internal credit ratings for the purpose of assessing the adequacy of precautionary balances. Rather, the framework provides room for Board judgment on the level of risk embodied in the current loan portfolio when determining the precautionary balances' target. To help inform this judgment, staff has analyzed publicly available sovereign credit ratings and market-based indicators such as sovereign bond spreads. Such indicators reflect perceptions of risks facing private investors, which cannot be translated directly to assess credit risk faced by the Fund given its unique role.

[18] Figure 5 shows the weighted average rating of Fund credit by sovereign rating category based on Standard & Poor's ratings.

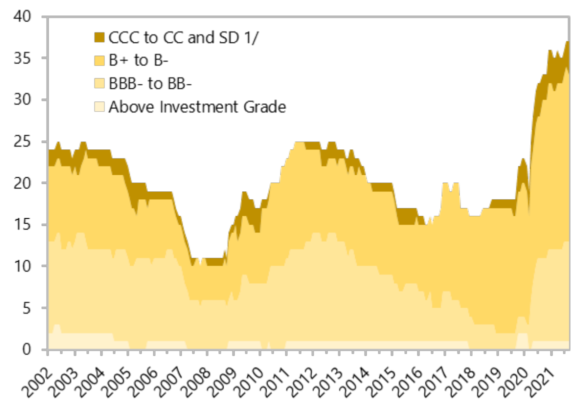
Figure 5. Fund Borrowers: Sovereign Ratings and Spreads

A. Fund Credit by Sovereign Rating Category

(In billions of SDRs)

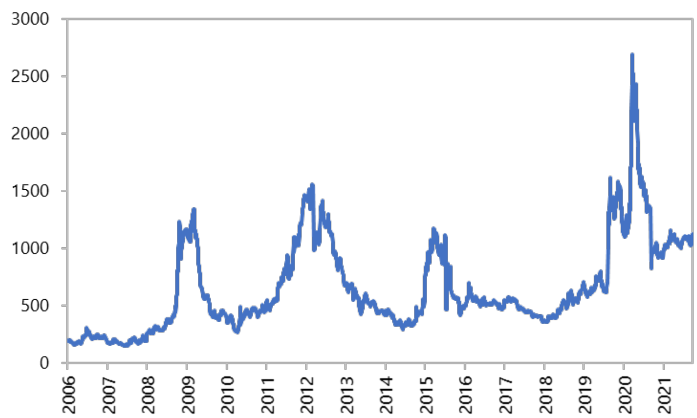


B. Number of Fund Borrowers by Sovereign Rating Category



C. Sovereign Spreads of Largest Five Borrowers[3]

(Basis points)



Source: Bloomberg, Standard & Poor's, and staff calculations.

[1] SD stands for "selective default".

[2] To construct the weighted average rating, worse sovereign credit ratings are assigned higher numerical scores, so a higher weighted average rating indicates a deterioration in ratings.

[3] Sovereign spreads weighted by respective shares in Fund credit to largest 5 borrowers. Sovereign spreads are measured by the EMBI spreads for emerging economies, and by the 10-year government bond spreads over the German bonds for the euro area members.

C. Income Risks

18. While the projected operating income margin remains strong, it continues to be subject to increased concentration risks.

- Even assuming no additional arrangements, staff projections suggest that total operational income, excluding the impact of any pension-related (IAS 19) gains or losses, would exceed total expenditures by a wide margin, averaging about SDR 1.2 billion annually in the three-year period through FY 2024 (Figure 6).

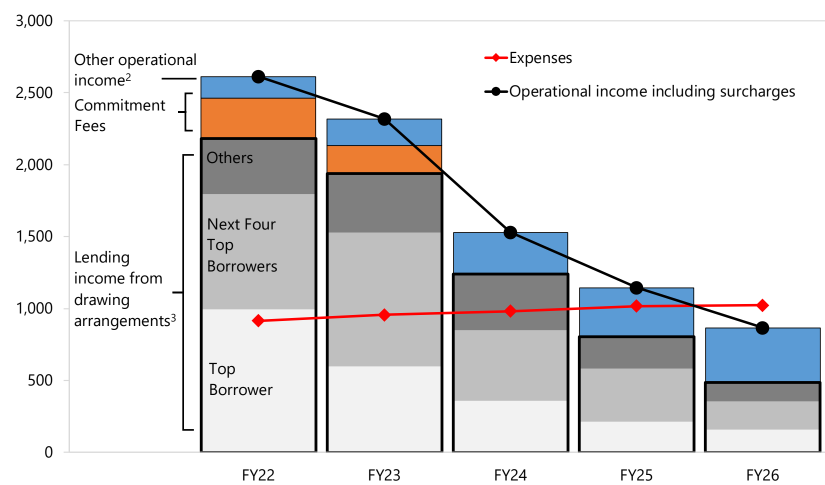
- Projected lending income is higher over the medium term than in the last review reflecting mainly new GRA arrangements approved since then. The higher projected lending income and moderately higher projections for investment income over the medium term, mainly reflecting the larger-than-anticipated build-up of reserves invested since the last review, are offset only partly by the suspension of PRGT reimbursements from FY 2022 to FY 2026.[19]

- At the same time, expenses are projected to be higher, reflecting the proposed structural augmentation of 6 percent of the net administrative budget in real U.S. dollar terms, which would be phased in over FY 2023–25. The augmentation framework paper will be discussed by the Board in December.

- Of the average lending income projected through FY 2023, about 34 percent is accounted for by the Fund's largest borrower and another almost 38 percent by the next four largest borrowers. Additional risks to income continue to include i) cancellations and changes in the timing of purchases under existing arrangements; (ii) uncertainties around the global interest rate environment and U.S. dollar/SDR exchange rate path; and (iii) the potential need for impairment recognition under IFRS 9 (see below). No provisions for impairment have been recognized to date.

Figure 6. Medium-Term Projected Operational Income and Expenses: FY 2022–26[1]

(In millions of SDRs, end of financial year)



Source: IMF Finance Department.

[1] Operational income including surcharges excludes IAS 19 gains and losses and includes investment income from the Fixed-Income Subaccount and payouts from the Endowment Subaccount, assuming no new arrangements. The endowment payout projection assumes a constant payout of the net asset value (in US$) starting in FY 2022, adjusted for inflation in the following years.

[2] The item "other operational income" includes investment income, interest free resources, and reimbursements related to the SDR Department.

[3] Includes margin income, service charges, and surcharges.

[19] See *The Fund's Income Position for FY 2021 – Actual Outcome* (EBAP/21/42, 9/9/21).

D. Financial Risks Related to Investments

19. Financial risks related to the investment assets of the Endowment Subaccount (EA) and the Fixed-Income Subaccount (FI) remain elevated. The EA and the FI have distinct investment objectives and pursue different strategies accordingly. The Board's 5-yearly review of the investment strategies is underway and planned for January 2022. As discussed with Directors during the June 2021 informal Board meeting, the investment strategies have performed well, however, financial risks remain elevated since expected returns across all asset classes are lower than in the past, which could result in investment income falling below target for an equivalent level of risk. Additional highlights follow below:

- **FI investments.** The FI's expanded investment strategy has performed well in achieving its investment objective, generating a return consistently in excess of the SDR interest rate even during challenging market conditions. With its two-tranche structure, the FI strategy has demonstrated resilience during marked shifts in interest rates and through the recent COVID-19 crisis. While estimated downside risk remains limited—as envisaged for this strategy—lower fixed-income returns will also provide limited protection if and when rates increase. Refinements to the FI strategy may be considered in the context of the current investment strategy review to improve the outlook for the return margin without materially increasing risk.

- **EA investments.** The EA investment strategy has benefitted from strong market performance and performed better than expected—exceeding its long-term return target of 3 percent real in US dollars. This includes the impact of the long-run decline in developed market bond yields to historic lows and the exceptionally strong recovery in the performance of equities and other risk assets following the COVID-19 market crash. Going forward, risks to the return outlook are greater than in the past given historically low yield levels, elevated equity valuations (for some markets) and high inflation uncertainty. As a result, the EA strategy would need to evolve to mitigate the key risk of erosion of the real value of its capital and also improve the probability of achieving its return target in the future.

ASSESSMENT OF THE ADEQUACY OF PRECAUTIONARY BALANCES

Credit exposures and associated risks remain elevated. Taking into account the expected increase in demand for Fund lending, the current target for precautionary balances of SDR 25 billion is expected to remain within the indicative range, and higher than its mid-point. Other qualitative considerations, while pointing to elevated risk, do not suggest a significant deterioration compared to the last review, in October 2020 when the indicative target was raised to SDR 25 billion. Hence, staff proposes to leave the medium-term target unchanged. The target will be reassessed at the next regular review in about a year. With the projected increase in lending income, the pace of reserve accumulation is expected to remain adequate. Income from surcharges, a main driver of reserve accumulation, would remain sensitive to the demand for Fund lending.

A. Indicative Precautionary Balances Target

20. The assessment of the adequacy of precautionary balances is anchored in a transparent and rules-based framework adopted in 2010 which also allows for judgement (see Annex I). Under the agreed framework, the starting point for assessing precautionary balances is a forward-looking measure of average credit outstanding over three years.[20]

21. Under the baseline scenario based solely on existing arrangements, the current target for precautionary balances of SDR 25 billion would continue to exceed the forward-looking indicative range. The forward-looking measure of credit outstanding would peak at about SDR 79 billion in FY 2022.[21] This is some SDR 7 billion higher than projected at the time of the previous review (Table 1, column 1). In this scenario, the current target exceeds the calculated indicative range of about SDR 16 to nearly 24 billion in FY 2022, with the midpoint at nearly SDR 20 billion, up by nearly SDR 2 billion since the last review (Table 1, columns 2–4).

22. Taking into account the impact of expected new demand for Fund programs, the target would remain within the indicative range in this fiscal year. As in the previous review, staff has considered three additional scenarios envisaging additional demand for non-precautionary Fund programs:[22]

- The ***desk survey* of expected demand for Fund lending** reflects desk assessments of the likelihood of a program request based on knowledge of member countries' economic outlook, financing needs, and political landscape[23]. Under this scenario, 13 countries (of which 8 have received emergency financing) would enter a new Fund-supported program in FY 2022–23 for a total of about SDR 45 billion. In line with the projections at the time of the last review, the indicative range would increase to between nearly SDR 20 billion and 29 billion, with the current target for precautionary balances near the mid-point of the indicative range.

- Under another scenario, using model-based estimates consistent with the ***October 2021 World Economic Outlook (WEO) baseline***, new demand for Fund programs, including successor arrangements, could reach nearly SDR 148 billion over FY 2022–23 and could raise the indicative range to between about SDR 24 billion and SDR 35 billion in FY 2022 (see Annex II for details). Reflecting in part the recovery from the pandemic, the forward-looking credit measure in FY 2022 is anticipated to be nearly SDR 23 billion lower than projected at the time of the last

[20] Such measure calculates the average of credit outstanding over the past 12 months and projections over the next 24 months.

[21] This scenario assumes no new arrangements in addition to those approved as of end-September 2021; purchases and repurchases are made as scheduled; and there are no drawings under existing precautionary arrangements.

[22] The latest actual data used for all the scenarios is end-September 2021.

[23] The desk survey builds on the results of the Fall 2021 Vulnerability Exercise (VE) and reflects detailed discussions with country teams.

review. The current indicative target of SDR 25 billion would remain within the indicative range in FY 2022, although significantly below its mid-point.

- Under a more ***adverse scenario***, which could be illustrative of the impact of a more protracted pandemic due to the emergence of new variants, or a sudden tightening of global financial conditions, new demand for Fund programs could reach nearly SDR 213 billion (see Annex II for details)[24]. In addition, all FCL and PLL arrangements are assumed to be fully drawn, for a total of around SDR 72 billion in disbursements. In this scenario the forward-looking credit measure in FY2022 would remain nearly SDR 81 billion lower than projected at the last review. However, the indicative range would rise to between around SDR 36 billion and SDR 53 billion in FY 2022, significantly above the SDR 25 billion target.

Table 1. Forward Looking Credit Measure and Calculated Range for Precautionary Balances: 2020–2023[1]

(In billions of SDRs, end of financial year)

	Forward-looking Credit Measure [2/]		Coverage: Lower Bound 20%		Coverage: Upper Bound 30%		Mid-point of bounds		Precautionary Balances Target [3/]
	(1)		(2)		(3)		(4)		(5)
Aug. 2020	82.2		16.4		24.6		20.5		20
Sept. 2021	88.3		17.7		26.5		22.1		25
1. Baseline with current arrangements									
FY2022	79.3	[71.9]	15.9	[14.4]	23.8	[21.6]	19.8	[18.0]	
FY2023	63.2		12.6		19.0		15.8		
2. Desk survey									
FY2022	97.7	[96.6]	19.5	[19.3]	29.3	[29.0]	24.4	[24.1]	
FY2023	95.1		19.0		28.5		23.8		
3. WEO model-based scenario									
FY2022	117.7	[140.4]	23.5	[28.1]	35.3	[42.1]	29.4	[35.1]	
FY2023	140.7		28.1		42.2		35.2		
4. Adverse scenario									
FY2022	177.6	[258.3]	35.5	[51.7]	53.3	[77.5]	44.4	[64.6]	
FY2023	238.6		47.7		71.6		59.6		

Source: IMF Finance Department.
[1] Figures in brackets represent projections at the time of the last review (see Review of the Adequacy of the Fund's Precautionary Balances SM/20/159, 10/08/2020). Figures for August 2020 reflect calculations at the time of last review, assuming no new arrangements (ibid). Figures for FY 2022–23 are based on projections.
[2] Three-year average of past 12 months average and projections 2 years forward.
[3] Before review completion.

23. Other relevant risk factors, discussed in the previous review, remain elevated, but have not increased significantly compared to the last review:

- ***Credit and concentration risks***: As at the time of the last review, sizable total credit is combined with a heavy concentration of the loan portfolio toward the largest borrower. The

[24] The analysis focuses on near-term demand and does not cover more extreme tail risks that are relevant to assess the adequacy of Fund resources over the medium term in the context of the 16th General Review of Quotas.

risks are compounded by a heavy bunching of scheduled repurchases in FY 2023–25 as well as significant challenges facing Argentina, which have been exacerbated by the COVID-19 crisis.[25] Market-based indicators suggest that the perceived average credit quality of the sovereign debt issued by the Fund's borrowers is weak, but do not point to a further deterioration compared to the last review. Regional concentration has increased only slightly since the last review.

- ***Share of RFIs in loan portfolio***: As noted above, the share of the credit portfolio accounted for by emergency financing instruments remains elevated, but has risen only marginally since the last review. Given that repurchases are bunched in FY 2024–25, that RFIs are not subject to ex-post/upper credit tranche (UCT) conditionality, and that the fallout from COVID-19 still remains uncertain, associated risks remain high.

- ***Global outlook and COVID-19 related uncertainty***: The economic fundamentals of many Fund borrowers deteriorated with the pandemic. In this environment balance of payments financing may become challenging for several Fund borrowers. Nevertheless, the risks and vulnerabilities highlighted at the time of the past review have not worsened, as discussed in the October 2021 Global Financial Stability Report and Fiscal Monitor.

- ***Level and concentration of precautionary arrangements***: Commitments under the Fund's precautionary arrangements remain elevated at about SDR 84 billion as of end-September 2021, but are only slightly higher than the SDR 82 billion at the last review.[26] All four FCL arrangements and the only outstanding PLL arrangement are now concentrated in one region, suggesting that the probability of significant correlated drawdowns can no longer be deemed as small as before the COVID-19 pandemic.[27] That said, the probability of further drawings under these precautionary arrangements appears relatively low at this juncture.

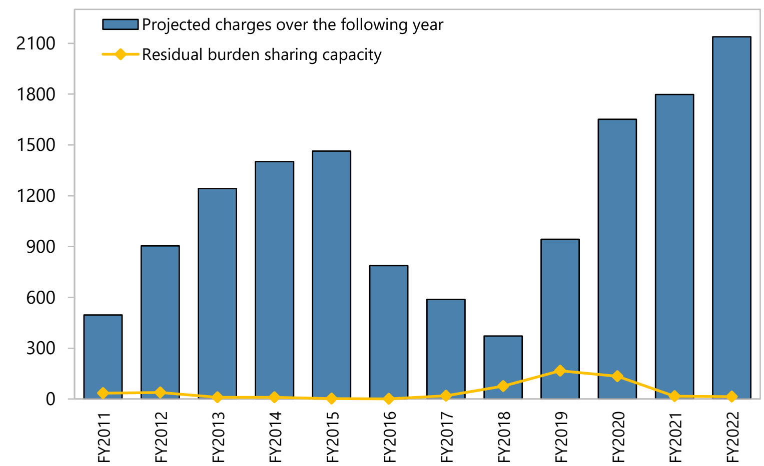
[25] Argentina's social, economic, and financial situation remains very fragile. The authorities have maintained an active policy dialogue with Fund staff and made explicit their intention to seek a new Fund-supported program (IMF Press release 20/287, https://www.imf.org/en/News/Articles/2020/08/26/pr20287-argentina-argentine-government-notifies-imf-request-new-fund-arrangement). The authorities have also committed to continue to honor Argentina's obligations to the Fund.

[26] Under the framework, these commitments are not included in the calculation of the forward-looking credit measure, but are taken into account judgmentally when setting the precautionary balances target.

[27] Historically, the incidence of drawings has been low (see Annex V in *Review of the Adequacy of the Fund's Precautionary Balances* (SM/16/21, 1/26/16) for a detailed discussion). One PLL arrangement was fully drawn, and one FCL arrangement was partially drawn in 2020.

- ***Very low burden sharing capacity***: With the SDR interest rate at the minimum threshold of 0.050 percent, the Fund's burden sharing capacity remains very compressed, at about SDR 15 million as of September 2021, compared to SDR 23 million at the time of the last review (Annex III).[28] The current burden sharing capacity is very low relative to projected charges coming due over the coming year. The emergence of new unpaid charges could thus have a sizeable negative impact on Fund income.

Residual Burden Sharing Capacity and Projected Charges, FY 2011–22
(In millions of SDRs)



Source: IMF Finance Department.

- ***Continued large lending capacity***: While not formally part of the framework for setting the indicative target, the Executive Board has in past reviews discussed a precautionary balances target to credit capacity ratio of 6 percent.[29] Applying this ratio to the Fund's current credit capacity of US$1 trillion—unchanged from the last review—would yield an indicative target of more than SDR 40 billion, 60 percent higher than the current target.[30]

24. Given these considerations, staff proposes to maintain the indicative medium-term target for precautionary balances at SDR 25 billion. The current target is close to the midpoint of the indicative range under the desk survey scenario, which staff continues to consider the most plausible scenario for demand of new Fund programs. By contrast, an increase in the target would be predicated on the assumption of significant additional lending, which desk surveys currently do

[28] Currently, the burden sharing capacity and the residual burden sharing capacity are the same, given that there are no outstanding arrears.

[29] At the 2002 Review, before the current framework for the adequacy for precautionary balances was adopted, staff had argued that the assessment of the adequacy of the Fund's precautionary balances should be geared primarily to the Fund's credit capacity because of the Fund's ability to lend to individual members in large absolute amounts, cumulatively up to its credit capacity. At that time staff had proposed to aim for a ratio of precautionary balances to credit capacity of 6 percent (*The Fund's Policy on Precautionary Financial Balances*, EBS/02/185, 11/01/2002). The Board urged staff to develop a more comprehensive analytical framework to take into account credit capacity, credit concentration, and credit outstanding.

[30] The Fund's lending capacity consists of the Fund's total usable resources, before any lending, less relevant prudential balances, and currently amounts to close to US$1 trillion. The doubling of the NAB to a total of credit arrangements of SDR 285 billion and a new round of bilateral borrowing became effective on January 1, 2021.

not anticipate and may not materialize. Moreover, the other qualitative considerations discussed above, while pointing to elevated risk, do not suggest a significant overall risk deterioration compared to the last review, when the indicative target for precautionary balances was raised to SDR 25 billion.

B. Minimum Floor

25. The minimum floor was left unchanged at SDR 15 billion at the 2020 review. Both income and credit risk considerations need to be taken into account when assessing the adequacy of the minimum floor. With the bulk of precautionary balances invested, they represent an important source of Fund income, so a certain minimum level of precautionary balances is important for a sustainable income position under the new income model. Also, Fund credit can be highly volatile and increase sharply with little notice, while it can take time to build precautionary balances. Thus, the Fund needs to maintain an adequate minimum level of reserves to protect against an unexpected rise or deterioration in credit risks. Under the framework the floor is expected to be changed only occasionally, as it is based on longer-term considerations.

26. Staff proposes that the floor be kept at SDR 15 billion for now. If the outlook for longer-term investment returns were to deteriorate, there could be a case for raising the floor at some point to help strengthen the Fund's medium to longer-term income position in a future low credit environment. However, there is no immediate operational consequence of maintaining the floor at its current level, and therefore it may be preferable to revisit the case for an increase in the floor after the ongoing Review of the Investment Account, planned for January 2022.

C. The Pace of Accumulation and Analysis of Surcharges

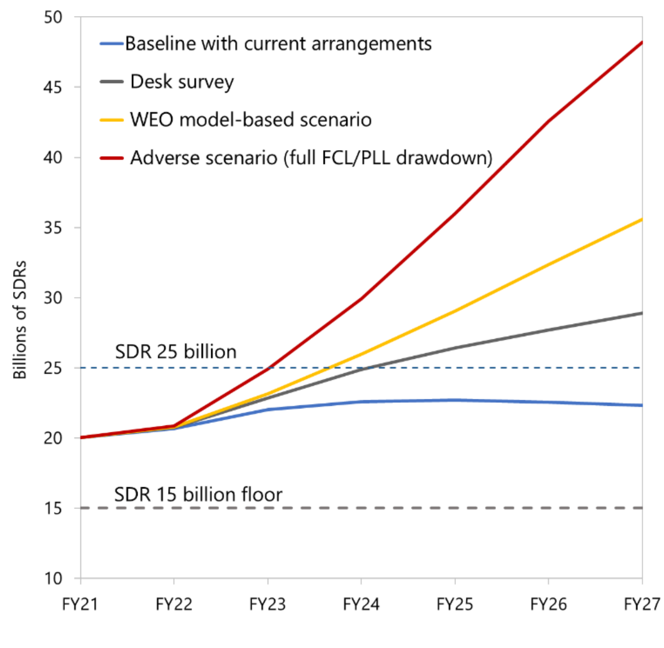
27. The SDR 25 billion target would be reached in early FY 2025 under the desk survey scenario and even after factoring in the proposed budget augmentation. This is a year earlier than projected at the 2020 review. Approval of new financing beyond the desk survey would result in higher lending income and a faster accumulation of precautionary balances: the target of SDR 25 billion would be exceeded by the end of FY 2024 under such scenario consistent with the October 2021 WEO baseline and nearly achieved in FY 2023 in the more adverse scenario, which also assumes full drawdown of existing FCL and PLL arrangements. Under the baseline with no new arrangements, precautionary balances would not reach the SDR 25 billion target within the forecasting period of FY 2022–26.[31]

[31] All projections of precautionary balances take into account the full SCA-1 distribution, the additional five-year suspension of the PRGT reimbursement of expenses for the FY 2022–26 approved by the Board in July 2021, a 6 percent budget augmentation starting in FY 2023 and phased-in in three equal increments before commencing full augmentation in FY 2025, and unchanged levels of charges, surcharges and fees.

28. The projected path of precautionary balances is subject to significant uncertainty. Projections are sensitive to assumptions about potential new programs, and timely completion of program reviews. Weaker program performance that affects scheduled purchases and charges could slow the accumulation of precautionary balances. Further uncertainty arises from the heightened credit risks noted above and their potential impact on income.

Projected Precautionary Balances under Alternative Scenarios: FY 2021–27

(In billions of SDRs, end of financial year)



Source: IMF Finance Department.

29. On balance, staff believe that no additional steps are needed at this point to speed up accumulation. Notwithstanding the continued uncertainties, a target of SDR 25 billion would be reached over the medium term under the scenarios that allow for new demand for Fund programs beyond current arrangements. Given significant uncertainties, the pace of accumulation should continue to be monitored closely, and will be discussed with the Board at the time of the next regular review, in about a year.

Analysis of Surcharges

30. The pace of reserve accumulation is closely linked to income from surcharges. In light of the ongoing economic challenges posed by the global pandemic, the role of surcharges paid by Fund borrowers and their effectiveness as a risk management tool have come under increased scrutiny.

31. Surcharges are an integral part of the Fund's multi-layered risk management framework. They are designed to provide incentives for members to limit exposures to Fund credit and encourage timely repurchases. At the same time, they also help strengthen the Fund's balance sheet by allowing accumulation of precautionary balances when its credit exposures grow. The current framework of level and time-based surcharges was introduced in 2009, simplifying the previous Time Based Repurchases Expectation Policy (TBRE) which had multiple thresholds and rates (Box 1).[32] Since then a level-based surcharge of 200 basis points has been in effect for total GRA credit outstanding exceeding a certain threshold, which was set at 187.5 percent of quota in 2016. An additional time-based surcharge of 100 basis points is broadly aligned with the maturity profile

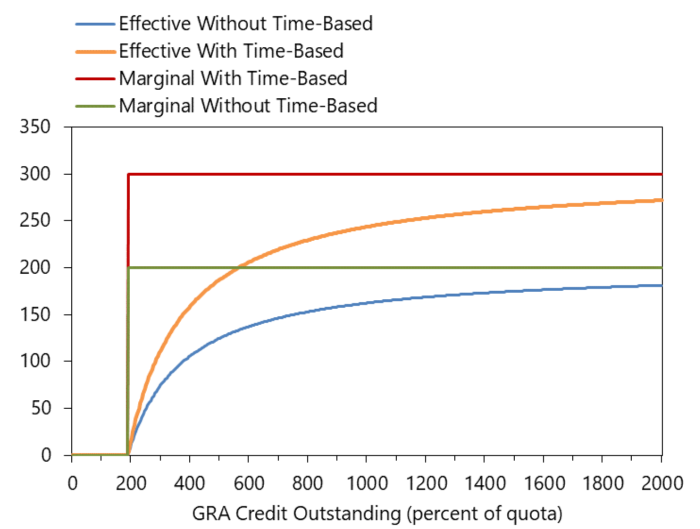
[32] Surcharges reviews are conducted on an as-needed basis and the last review of surcharges in 2016 followed the doubling of quotas under the 14th General Review of Quotas.

of GRA facilities and applies when credit exceeds the threshold for more than three years (or 51 months in case of Extended Arrangements).

32. While primarily a risk management tool, surcharges can also significantly contribute to the Fund's lending and operational income. Broadly following the Fund's lending cycle, surcharge income peaked in FY 2015 at SDR 1,463 million and fell to SDR 371 million in FY 2018, before rising to SDR 931 million in FY 2021. Over the same period, the share of surcharge income in total lending income fell from 53 percent in FY 2015 to 32 percent in FY 2018 and then rose to 47 percent in FY 2021. In FY 2021, 53 borrowing members were subject to basic charges,[33] of which 16 were also subject to surcharges, compared with 29 borrowing members (10 surcharge paying members) in FY 2015, and 27 borrowing members (9 surcharge paying members) in FY2018, respectively (Table 2).

33. Surcharges enable the Fund to effectively play its role of global lender of last resort. Surcharges are critical for building precautionary balances, which, as noted above, help protect the value of reserve assets that members place with the Fund. In turn, this enables the Fund to provide financial assistance to members with financing needs at low cost. In general, the average effective surcharge rate (for total credit outstanding) is substantially lower than the marginal surcharge rate, with the former approaching the latter asymptotically only for very large exposures. Even when the market rates for countries with large BOP needs spiked at times of global market distress, the effective cost of borrowing from the Fund for such countries remained relatively low and stable (Figure 7, top panel).[34] At the same time, with the Fund's lending capacity limited, surcharges help preserve the revolving nature of Fund resources as they provide incentives to limit the size of arrangements and encourage members to make repurchases when they regain market access or when their spreads tighten.

Current Surcharge Schedule
(Basis Points)



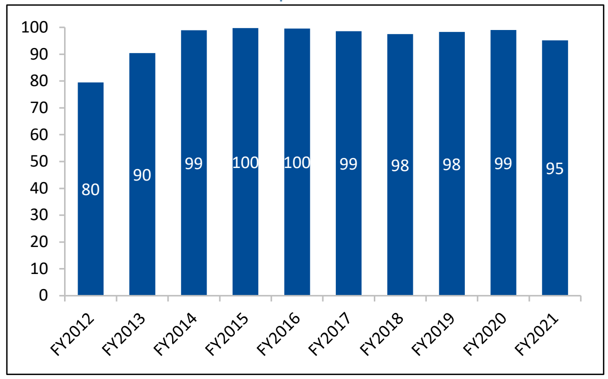
Source: IMF Finance Department.

[33]All borrowers from the GRA are subject to basic charges, which are composed of the SDR rate plus a margin, currently set at 100 bps and reviewed regularly based on a number of factors including the need to cover the Fund's intermediation costs (see *Review of the Fund's Income Position for FY2021 and FY2022* (April 2021).

[34] To the extent that members lost market access for new issuance while pricing in secondary market remained available, the median adjusted yield may be an underestimate of market borrowing cost.

34. Historically, the number of members paying surcharges has fluctuated over economic cycles, but the heaviest users of Fund resources have consistently accounted for the bulk of the Fund's total surcharges income. The number of surcharge-paying members tended to increase and subsequently ebb with major economic crises, from the global financial crisis to the current pandemic (Table 2). However, throughout the cycles, the heaviest users of Fund resources have consistently accounted for the bulk of the Fund's total surcharges income (text chart). In FY 2021, the top five surcharge payers from the Fund—Argentina, Egypt, Ukraine, Pakistan, and Ecuador—accounted for 95 percent of the Fund's total surcharges income of SDR 931 million. Surcharge income represented about 45 percent of operational income. At the previous peak in 2015, surcharge income amounted to SDR 1,463 million, paid for almost entirely by the top five surcharge payers at the time.

Share of Top 5 Surcharges Payers in Total Surcharges (FY2012–FY2021)
(in percent)



Source: IMF Finance Department.

35. How does the current level of surcharges affect the cost of borrowing from the Fund relative to market developments? In past surcharges reviews, a comparison of the cost of borrowing from the Fund versus borrowing from the market played an important role in assessing whether surcharges created a disincentive to seek assistance from the Fund or were too low to encourage early repayment.[35]

- Regarding countries potentially seeking assistance from the Fund or in a Fund program, the cost of Fund credit has remained well below market rates for most users of GRA financing as noted above. Specifically, the unweighted average of effective cost of borrowing from the Fund for the top five surcharge-paying members has remained significantly lower compared to the unweighted average market rate for these members (Figure 7, bottom left-side panel).

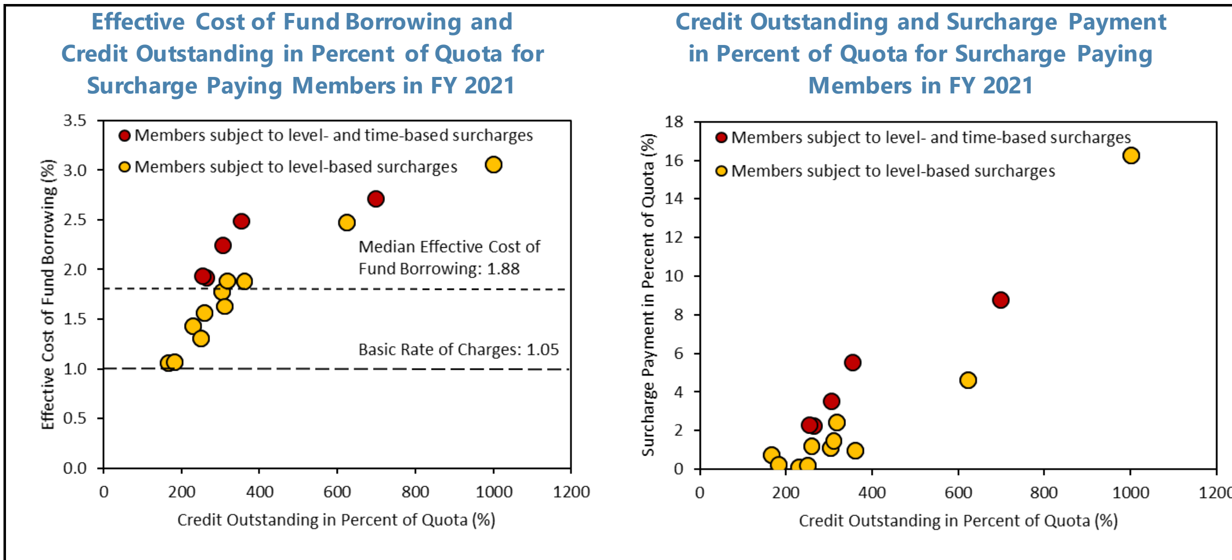
- Regarding borrowing members that have regained market access, many borrowers with credit outstanding exceeding the surcharge threshold made early repayments before the pandemic, in particular after time-based surcharges became effective.[36] Even since the onset of the pandemic, there were two large early repurchases: Morocco in January 2021 and Greece in March 2021, although the latter was already below the level-based surcharge threshold at the onset of the pandemic. Nevertheless, it should also be noted that for some members subject to time-based

[35] It is recognized that other members/organizations of the international community that provide additional financing to members implementing Fund-supported programs may face different constraints and have somewhat different objectives. A direct comparison with the financing terms offered by such sources, which may involve some combination of longer maturities and lower costs than those associated with Fund credit (indeed, in some cases such support is provided in the form of grants) is unwarranted and not conducted here.

[36] See Review of Access Limits and Surcharge Policies (April, 2016).

surcharges market access remains limited or very costly at the current juncture (Figure 7, bottom right-side panel).

- During FY 2021, out of 53 members borrowing from the GRA, 37 members paid no surcharges. For 16 members that paid surcharges in FY 2021, the median effective cost of borrowing was around 1.9 percent, implying an effective surcharge of 0.83 percent (net of the basic rate of charge). For most surcharge-paying members, surcharge payments amounted to less than 5 percent of quota. Nevertheless, the largest borrowers paid a relatively high share of surcharges (in percent of their quotas), reflecting their exceptionally high level and/or duration of exposure.[37]



Source: IMF Finance Department.

36. The projected amount of surcharge income, its impact across the membership, and its contribution to the Fund's operational income are sensitive to future demand for GRA resources. Based on the scenarios discussed above, the main findings are as follows (Table 3):

- *Under the baseline (without new arrangements)*, the number of surcharge-paying members would steadily decline to ten (about half of the current level) by FY 2027. As a result, total surcharge income, its share in operational income, and lending income's share in operational income would also decline significantly over the medium term. The contribution of the five largest surcharge payers to total surcharge income would remain elevated and in line with the historical trend, and the share of time-based surcharges in total surcharge income would fluctuate around 25 percent during FY 2022–25 before rising to about 33 percent by FY 2027.

- *Under the desk survey*, the number of surcharge-paying members would gradually increase to 22 by FY 2024 before declining again to 19 by FY 2027. Total surcharge income is projected to peak at about SDR 1.5 billion by FY 2023. Its share in operational income would hover around

[37] Projected surcharge payments by members during FY 2022 show a similar pattern of distribution as that during FY 2021.

50 percent for the next several years, while lending income's share in operational income would decline gradually from around 94 percent in FY 2022 to around 75 percent by FY 2027. As in the baseline scenario, the five largest surcharge payers would account for the bulk of total surcharge income (above 90 percent), and the share of time-based surcharges would fluctuate around ¼ to ⅓.

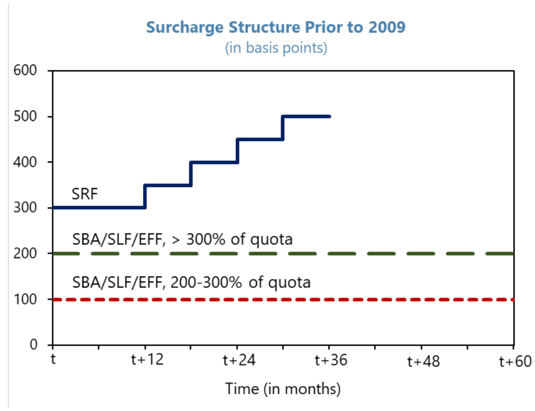
- *Under the model-based WEO scenario*, the number of surcharge-paying members would increase to 38 in FY 2024 and FY 2025, more than double the current level, and total surcharge income would increase by 50 percent to exceed SDR 2 billion during FY 2026–27. Its share in operational income would stay in the range of 46 to 49 percent for the next several years, while lending income's share in operational income would decline at a slower pace than in the desk survey, from around 95 percent in FY 2022 to 85 percent in FY 2027. Contribution of the largest five surcharge payers to total surcharge income would decline to the range of 72–74 percent during FY 2025–27 from around 94 percent in FY 2022, as the pool of surcharge paying members is projected to expand significantly. Similarly, the share of time-based surcharges in total surcharge income is projected to decline from about 25 percent in FY 2022 to about 17 percent by FY 2026, before returning to about 25 percent by FY 2027.

- *Under the adverse scenario*, the number of surcharge-paying members and the amount of surcharge income would increase even more sharply.

37. A number of Executive Directors have inquired about the possibility of providing some degree of surcharge relief during the pandemic. Assuming a hypothetical two-year suspension of surcharges during FY 2023–24 under the desk survey scenario, a negative impact of SDR 3 billion is expected on cumulative net operational income and reserves accumulation as well as on the precautionary balances level. As a result, precautionary balances would be projected to reach the target level of SDR 25 billion by FY 2027 only, or about two years later than currently projected under the desk survey scenario.

Box 1. Evolution of Surcharges

Surcharges were introduced in 1997 with the establishment of the Supplemental Reserve Facility (SRF).[1, 2] In 2000, level-based surcharges were introduced on purchases in the credit tranches and under extended arrangements, starting at 200 percent of quota with a two-step increase to discourage unduly high access requests. At the same time a schedule of repurchase expectations policy (TBRE) was introduced, from which, however, a member could request an extension to the maximum allowed under the repurchase obligation schedule. This resulted in a complicated system of surcharges and maturities (see figure and table below).



In 2009, surcharges were streamlined and aligned across all GRA facilities to simplify the structure of charges and to eliminate sources of misalignment of terms across facilities.[3] At the same time, the TBRE was eliminated and replaced by applying time-based surcharges on credit outstanding under all GRA facilities, which was deemed more effective and transparent. At the 2016 review, the threshold for level-based surcharges was changed from 200 percent of (13th review) quota to 187.5 percent of (14th review) quota and the trigger for time-based surcharges for credit under the Extended Fund Facility (EFF) was moved from 36 months to 51 months.

Repurchase Expectations Policy

Facility	Repayment period (in years)	
	Expectations basis	Obligation basis 1/ 2/
Credit tranches	2 1/4 - 4	3 1/4 - 5
EFF	4 1/2 - 7	4 1/2 - 10
SRF	2 - 2 1/2	2 1/2 - 3
SLF	n.a.	3, 6, or 9 months

1/ For the credit tranches and the EFF, a member whose external position has not improved sufficiently to meet the expectations schedule without undue hardship or risk could request an extension to the obligation schedule.
2/ For the SRF, extensions provided if: (i) the member is unable to meet the repurchase expectation without undue hardship; and (ii) the member is taking actions to strengthen its balance of payments.

----

[1] See Annex I of Review of Charges and Maturities: Policies Supporting the Revolving Nature of Fund Resources (imf.org) (5/24/2005).

[2] Prior to 1981 when a flat rate of charge for all Fund credit financed with ordinary resources was introduced, the Fund operated a graduated structure of charges based on the level and duration of credit outstanding. Different rates of charge continued to apply on financing from borrowed resources until 1993.

[3] See GRA Lending Toolkit and Conditionality: Reform Proposals; March 13, 2009 (imf.org) (3/13/2009) and Charges and Maturities—Proposals for Reform; December 12, 2008 (imf.org) (12/12/2008).

Table 2. Basic Information on Level and Time-Based Surcharges

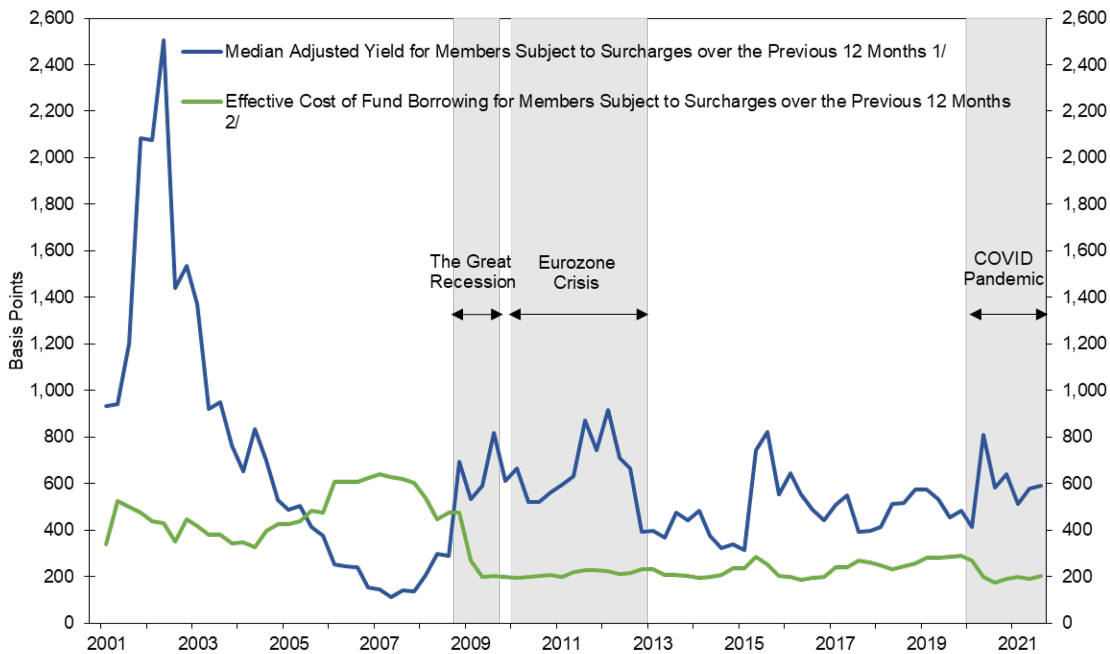
(as of the end of the fiscal year—April 30, in SDR millions)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Number of member countries										
with GRA credit outstanding	37	34	32	29	25	27	27	29	38	53
subject to level-based surcharges	15	16	14	10	10	8	9	9	10	16
subject to time-based surcharges	-	6	7	5	3	3	4	3	5	5
Total Fund credit outstanding at year-end (SDR millions)	94,182	90,182	81,238	55,228	47,798	48,300	37,884	63,694	73,575	89,788
o/w subject to level-based surcharges	87,303	80,923	69,813	43,742	39,838	38,321	28,126	56,238	57,694	69,621
o/w subject to time-based surcharges	-	19,787	45,398	35,329	37,392	22,537	18,697	15,252	20,881	42,046
Amount of Surcharge Income Collected (SDR millions, by year)	907	1,241	1,398	1,463	787	583	371	419	752	931
from level-based surcharges	907	1,151	1,126	991	554	424	284	374	709	863
from time-based surcharges	-	89	272	473	233	159	87	45	43	68

Source: IMF Finance Department.

Figure 7. Market Rates and Cost of Fund Borrowing

Market Rates and Cost of Fund Borrowing for Surcharge-paying Members Since 2001 (in basis points)

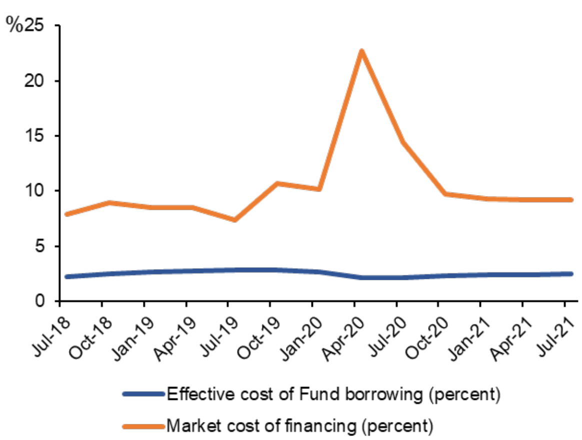


Sources: Bloomberg and Finance Department

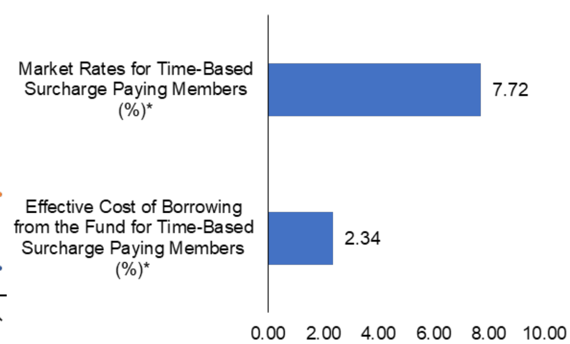
1/ For simplicity, the sample includes yields for members whose credit outstanding exceeded 300 percent of quota in the previous 12 months (the higher level-based surcharge threshold before the 2009 reform) until 2015. From 2016 the threshold is updated to 187.5 percent of quota in the previous 12 months. Adjusted yields for emerging market countries are calculated using country-specific EMBIG yields net of the rate of charge, subject to data availability. The adjusted yields for Greece, Ireland and Portugal are calculated using sovereign five-year euro bond yields. The sample size is limited by data availability in periods of low number of high access arrangements.

2/ The unweighted average of effective cost of Fund borrowing for members in the sample.

Cost of Fund Borrowing and Market Borrowing (Unweighted average of top five surcharge-paying members in FY2021, in percent)



Cost of Fund Borrowing and Market Borrowing for Time-based Surcharge Paying Members in FY2021 (in percent)



*As of July 31, 2021, unweighted average of time-based surcharge paying members in FY2021, excluding Albania (due to lack of data on market cost of financing in recent months).

Source: IMF Finance Department.

Table 3. Medium-term Projections on Surcharges Income and Precautionary Balances under Various Scenarios

Baseline with current arrangements

	FY22	FY23	FY24	FY25	FY26	FY27
Number of member countries with GRA credit outstanding	53	53	52	52	43	28
subject to level-based surcharges	18	17	18	16	12	10
subject to time-based surcharges	7	8	11	15	11	9
Total Fund credit outstanding at year-end (SDR millions)	89,486	74,315	51,421	32,757	22,888	16,609
o/w subject to level-based surcharges	69,709	54,283	38,170	28,194	19,584	13,311
o/w subject to time-based surcharges	55,478	40,032	30,669	26,945	18,376	12,193
Amount of surcharges income collected (SDR millions, by year)	1,231	1,078	598	379	219	144
from level-based surcharges	922	775	456	280	152	97
from time-based surcharges	309	303	142	99	67	47
Share in total surcharge income (percent)						
Level-based	74.9	71.8	76.3	73.8	69.3	67.5
Time-based	25.1	28.2	23.7	26.2	30.7	32.5
Share of top 5 surcharge-paying members in total surcharges income (percent)	94.2	91.2	84.2	88.0	89.1	95.0
Precautionary Balances (SDR billions, end of year)	20.7	22.0	22.6	22.7	22.6	22.4
Share of surcharge income in operational income (percent)	47.1	46.5	39.1	33.1	25.3	17.2
Share of lending income in operational income (percent)	94.3	92.1	81.0	70.1	56.2	40.4

Desk survey

	FY22	FY23	FY24	FY25	FY26	FY27
Number of member countries with GRA credit outstanding	56	56	56	56	51	37
subject to level-based surcharges	18	19	22	21	20	19
subject to time-based surcharges	7	8	12	16	14	14
Total Fund credit outstanding at year-end (SDR millions)	96,979	102,677	92,355	76,391	67,041	57,828
o/w subject to level-based surcharges	75,886	81,082	76,494	67,914	63,447	54,578
o/w subject to time-based surcharges	61,637	65,114	66,954	63,657	57,352	49,526
Amount of surcharges income collected (SDR millions, by year)	1,261	1,521	1,485	1,309	1,161	1,057
from level-based surcharges	950	1,092	1,052	908	787	710
from time-based surcharges	312	429	433	401	374	347
Share in total surcharge income (percent)						
Level-based	75.3	71.8	70.8	69.4	67.8	67.2
Time-based	24.7	28.2	29.2	30.6	32.2	32.8
Share of top 5 surcharge-paying members in total surcharges income (percent)	94.3	93.2	91.3	91.8	92.4	95.1
Precautionary Balances (SDR billions, end of year)	20.8	22.8	24.9	26.4	27.7	28.9
Share of surcharge income in operational income (percent)	46.8	49.9	49.0	51.5	50.3	47.0
Share of lending income in operational income (percent)	94.4	93.9	90.0	85.4	81.3	74.8

WEO model-based scenario

	FY22	FY23	FY24	FY25	FY26	FY27
Number of member countries with GRA credit outstanding	61	68	68	68	63	51
subject to level-based surcharges	19	23	38	38	36	34
subject to time-based surcharges	7	8	11	18	18	25
Total Fund credit outstanding at year-end (SDR millions)	102,122	134,785	156,472	167,843	161,666	136,521
o/w subject to level-based surcharges	77,763	85,753	144,739	159,236	157,153	131,720
o/w subject to time-based surcharges	61,670	65,063	66,215	65,367	61,536	102,996
Amount of surcharges income collected (SDR millions, by year)	1,263	1,531	1,633	1,958	2,132	2,081
from level-based surcharges	951	1,102	1,201	1,560	1,764	1,567
from time-based surcharges	312	428	432	397	368	513
Share in total surcharge income (percent)						
Level-based	75.3	72.0	73.6	79.7	82.7	75.3
Time-based	24.7	28.0	26.4	20.3	17.3	24.7
Share of top 5 surcharge-paying members in total surcharges income (percent)	94.3	92.6	83.0	72.1	72.6	73.6
Precautionary Balances (SDR billions, end of year)	20.8	23.2	26.0	29.1	32.4	35.6
Share of surcharge income in operational income (percent)	46.3	45.9	43.1	47.6	49.4	48.9
Share of lending income in operational income (percent)	94.5	94.4	91.9	90.6	89.1	85.1

Adverse Scenario

	FY22	FY23	FY24	FY25	FY26	FY27
Number of member countries with GRA credit outstanding	65	75	75	75	70	60
subject to level-based surcharges	22	36	47	50	47	45
subject to time-based surcharges	7	8	11	21	27	36
Total Fund credit outstanding at year-end (SDR millions)	150,351	226,095	266,707	297,632	267,662	198,106
o/w subject to level-based surcharges	127,032	188,651	257,010	294,522	264,406	194,540
o/w subject to time-based surcharges	61,670	65,063	66,215	114,980	132,128	158,372
Amount of surcharges income collected (SDR millions, by year)	1,314	2,454	2,899	3,592	4,069	3,516
from level-based surcharges	1,002	2,026	2,467	3,172	3,402	2,679
from time-based surcharges	312	428	432	420	668	838
Share in total surcharge income (percent)						
Level-based	76.3	82.5	85.1	88.3	83.6	76.2
Time-based	23.7	17.5	14.9	11.7	16.4	23.8
Share of top 5 surcharge-paying members in total surcharges income (percent)	90.5	79.8	67.6	55.1	52.6	58.8
Precautionary Balances (SDR billions, end of year)	20.8	24.9	29.9	36.0	42.6	48.2
Share of surcharge income in operational income (percent)	47.1	48.8	48.4	50.7	53.5	52.6
Share of lending income in operational income (percent)	94.6	96.3	94.5	93.8	92.5	88.5

Source: IMF Finance Department.

ISSUES RELATED TO SCA-1 AND ACCOUNTING TREATMENT OF PENSIONS VALUATIONS

A. Issues Related to the SCA-1 Account and IFRS 9 Credit Impairment Provisioning

The SCA-1

37. Prior to its full disbursement in the context of Sudan's arrears clearance, precautionary balances also included balances in the SCA-1. This account held contributions by members that were explicitly targeted to protect the Fund against potential credit losses resulting from an ultimate failure of members to settle overdue financial obligations to the GRA.[38] Notwithstanding the original purpose of funds in the SCA-1, distributions of SCA-1 balances have been used to facilitate the provision of debt relief for three protracted arrears cases (Liberia, Somalia, and Sudan). On May 10, 2021 the Board approved the distribution of the full remaining amount of resources in the SCA-1 of SDR 1,066 million in the context of Sudan's arrears clearance and debt relief.

38. The most recent discussions on the future of the SCA-1 have indicated mixed views among Directors on the merits of a successor account. While there was broad recognition that the SCA-1 has served the Fund well over the past three decades in protecting the Fund against the need for provisioning for impairment losses, views were mixed on the merits of establishing a successor SCA, and Directors indicated a preference to prioritize Sudan's arrears clearance over any discussion of a successor SCA.[39]

39. At the same time, funding options for a successor SCA remain limited. The burden sharing capacity—the main source of SCA-1 accumulation in the past—is currently extremely low (see Annex III). Using a distribution of GRA income or reserves to fund a successor SCA would only amount to a redistribution of balances between components of precautionary balances, while likely reducing their overall level due to leakage, if not all members commit their share of the distribution to the successor SCA. Other options considered by staff in this context raised a number of potential issues related to members' willingness to provide funding for a successor SCA and/or make contingent pledges; timing of domestic approval processes, and other operational questions.

Impact on Provisioning

[38] The SCA-1 was funded during the period 1987–2006 mainly through the burden sharing mechanism by equal contributions from borrowing and creditor member countries via adjustments to the rates of charge and remuneration, respectively.

[39] Executive Directors held informal discussions on the role of the SCA-1 at the January 13 and March 15, 2021 meetings, in the context of discussing financing modalities for the Sudan's arrears clearance and debt relief.

40. The balances in the SCA-1 have played an important role in protecting the Fund against the need for provisioning for impairment losses.[40] The SCA-1 has allowed the Fund to record loans in arrears at full face value, to the extent that SCA-1 balances have covered or exceeded the amount of principal arrears (with charges in arrears covered by the deferred charges burden sharing mechanism).

41. While the absence of the SCA-1 does not have an immediate effect on the need to provision for credit impairment, it could again become relevant in case of new arrears in the future. For large exposures, the existence of an SCA-1 account could reduce, but would not eliminate, the need for provisioning if such borrowers fall into arrears. However, a provision could be avoided in cases of arrears for exposures where the principal amount is less than the SCA-1 balance. For example, at end-September 2021, out of the 53 GRA credit exposures, the Fund had 41 individual exposures that were smaller than SDR 1 billion. An SCA-1 balance of SDR 0.5 billion, would cover more than 35 individual exposures, still providing significant protection.

42. Absent the SCA-1, the Fund will be more likely to record a provision should new arrears arise. Going forward and as the Board has now formally endorsed the provisioning policy, [41] if new arrears emerge there would be no SCA-1 to cover potential cash shortfalls in an ultimate loss scenario. As such, the key consideration would be if the calculated expected credit losses (taking into account the probability of the ultimate loss scenario) were material enough to be recognized as an impairment loss provision. The Executive Board would be consulted before any impairment loss was recorded.

43. While a provision for impairment losses would reduce precautionary balances, the indicative target range based on credit outstanding would also be lower. A provision is charged against income, thus reducing the amount allocated to the Fund’s reserves (or resulting in a net loss charged against the Fund’s reserves). Such a reduction in the Fund’s income due to impairment provisions would decrease the Fund’s accumulation of precautionary balances by the same amount. At the same time, the balance of credit outstanding would be reduced by the amount of the provision, which means that the indicative range for the precautionary balances target would be computed using the lower amount of credit outstanding (net of the recorded impairment provision) (see Table 4).[42] This treatment would be consistent with the different roles of provisions and reserves, the former intended to cover for expected losses, while the latter are accumulated to

---

[40] For more background, see ”First Special Contingent Account—Role and Possible Successor Account” (FO/DIS/21/34, 3/5/21).

[41] See “The Acting Chair’s Summing Up Review of the Fund’s Income Position for FY 2021 and FY 2022” (SU/21/55, 5/3/21)

[42] The decrease in the target will likely be less than the amount of any recorded provision since the indicative range is calculated applying percentages to the measures of credit outstanding.

protect against unexpected losses. This treatment would also be consistent with the current practice applied by some international financial institutions.[43]

Table 4. Effect on the Precautionary Balances of a Hypothetical Loan Loss Provision[1]
(In billions of SDRs)

	Before provision (end-FY 2021)	Effect of a hypothetical provision of SDR 2 billion	After a hypothetical provision
Credit outstanding	89.8	(2.0)	87.8
Precautionary balances	20.0	(2.0)	18.0
Indicative range for precautionary balances:			
Lower bound (20%)	18.0	(0.4)	17.6
Higher bound (30%)	26.9	(0.6)	26.3

Source: IMF Finance Department.
1/ This is for illustration purposes only as the Fund has never recorded a provision.

Merits of Leaving The SCA-1 Account Open

44. Staff proposes to keep the SCA-1 open with a zero balance for the time being. Should new arrears arise, it may again prove useful to replenish the account and reduce the need for provisioning. The policy and operations of the SCA-1 are well established and have been tested in practice and agreeing on a framework and implementing a new account may be challenging and time consuming. While currently very limited, options for resuming accumulation in the SCA-1 could be reviewed periodically in the context of evolving circumstances. Staff could continue to monitor the need for further SCA funding and the viability of different funding options, and engage with the Executive Board as necessary

B. Treatment of Pensions Net Asset/(Liability) Under IAS 19 And Impact on Precautionary Balances[44]

45. Managing the volatility within precautionary balances arising from pension revaluation losses and gains also remains important. Since the adoption of the amended IAS 19

[43] For example, the International Bank for Reconstruction and Development, the African Development Bank, and the European Bank for Reconstruction and Development all allow their measures of capital for capital adequacy assessment to be reduced by the amount of specific provisions, while at the same time reducing the measure of credit exposure by the amount of specific provisions. However, the International Development Agency and the International Finance Corporation add back cumulative provisions to their measure of capital and comparing to the unimpaired loan portfolio.

[44] IAS 19 is the International Financial Reporting Standard that deals with accounting for pension and other employee benefits. For further discussion, see *Review of the Fund's Income Position for FY 2021 and FY 2022* (EBS/21/35, 4/12/2021).

in FY 2014 the Fund's annual income has been subject to significant volatility that has been subsequently reflected in the special and general reserves and precautionary balances. The pension-related (IAS 19) gains or losses are mainly driven by the periodic remeasurement of the defined benefit obligation and the revaluation of plan assets.[45]

46. While recognizing that income volatility cannot be eliminated due to requirements under International Financial Reporting Standards, some Directors have questioned the merits of including the pension-related (IAS 19) gains and losses in the computation of precautionary balances as a buffer for economic risks. The practice so far has been to include the impact of the pension related risk based on IAS 19 in line with the accounting treatment.[46] Since it is calculated using actuarial assumptions at a point in time (i.e., the reporting date), this has resulted in ongoing volatility.[47] In particular, the measurement of the defined benefit obligation (DBO) under IAS 19 is sensitive to the fluctuation of the nominal discount rate that is determined by reference to market yields, on "high quality corporate bonds" at the end of a reporting period.[48] While appropriate for financial reporting, this approach indicates the funding status of the pension and other employee benefits using discount rates reflecting a settlement of the pension liabilities at one point in time, and does not fully reflect how the Plans' assets are economically managed on a long-term basis.

47. An alternative approach would be for precautionary balances to reflect how plan assets are invested and managed. This would potentially be more representative of expected long-term asset returns and the related ability to meet the defined benefit obligations, i.e., the obligations to pay future pension-related liabilities to Fund retirees based on the pension assets investment strategies. Using a measure that is more representative of the real long-term risk of the Fund's pension and other employee benefits, on the precautionary balances' accumulation would better reflect the role of precautionary balances as a buffer for economic and financial risks. Operationally, this could be achieved by adding back to/ (deducting from) Fund reserves the net defined benefit liability/(asset) before adjusting for the long-term or economic basis.[49]

[45] In March 2021, staff presented options to isolate the pension related volatility in the Fund's reserves, and also proposed some presentational changes to the financial statements and income paper. Directors broadly supported the presentational changes which have been implemented in the FY 2021 financial statements. These changes have also been recognized as enhancing disclosures of the pension related volatility, including by the Fund's External Audit Committee.

[46] IAS 19 pension-related gains or losses in the income statement comprise two components: (i) annual pension expense, and (ii) actuarial remeasurement.

[47] The key drivers of volatility are the discount rate and asset returns. The defined benefit obligation valuation is very sensitive to changes in the discount rate – a 50bps change in the rate can change the valuation by approximately SDR 1 billion. The asset returns are also volatile as they are driven by financial market conditions and this can have a significant impact on the remeasurement amount.

[48] For this purpose, the Fund uses the Financial Times Stock Exchange (FTSE) discount curve which comprises a set of yields on hypothetical AA zero coupon bonds whose maturities range from 6 months up to 30 years.

[49] The net defined benefit asset or liability is the difference between the Fund's defined benefit obligations and the fair value of plan assets.

48. On an economic basis, the assets are expected to generate, in the long-term, at least a 3 percent real rate of return to meet future pension and other employee benefits obligations.[50] A 3 percent real return assumes a 5 percent nominal expected return on assets based on an expected 2 percent rate of inflation.[51] The assumed nominal return reflects the Pension Committee's (modest) estimate of future experience for plan asset returns, reflecting the plan's current asset allocation and any expected changes during the current plan year, current market conditions and the Fund's expectations for future market conditions based on an experience study conducted in 2020. The over- or underfunded position of the plans could thus be re-computed using the long-term discount rate which has always been assumed to equate to the expected return on assets.

49. Table 5 illustrates the impact on precautionary balances of replacing the accounting pension-related gains and losses with a measure that seeks to reflect their role as a long-term buffer for economic and financial risks, on a retrospective basis. Precautionary balances currently represent the Fund's special and general reserves (excluding gold sales profits). The reserves reflect the accounting valuation of the net pension-related assets and liabilities and are calculated under IAS 19 using actuarial assumptions determined at a 'point in time' such as the discount rate; and have fluctuated over the years (Line C, Table 5), resulting in liabilities not being fully funded at the end of certain years. By contrast, the long-term or economic basis uses the 5 percent long-term nominal rate of return and has the effect of 'smoothing-out' any fluctuations in the DBO associated with the market-based discount rate used under IAS 19.[52] While the net asset position has also fluctuated over the years (Line F, Table 5) it has maintained a consistently stronger funded position year-on-year compared with the accounting valuation.

[50] The actual real return on assets has consistently exceeded the expected 3 percent real return in the short, medium, and long term. See *Report on Investment Performance and Policy for 2020* prepared by the Investment Committee of the SRP.

[51] Inflation over the past 20 years has averaged 2.2 percent. Willis Towers Watson forecasting tools predict 2.0 percent inflation over the next 10 years, and the current 2.0 percent is in line with the Federal Reserve's target rate for inflation. See *Staff Retirement Plan and Retired Staff Benefits Investment Account—Five-Year Review and Staff Retirement Plan Reforms* (RP/CP/21/3, 4/5/21).

[52] Using the 3 percent real rate of return (5 percent nominal), defined benefit obligations would be lower than those calculated using AA corporate bond rates.

Table 5. Pensions-related Impact on Precautionary Balances - Accounting vs. Economic Basis

(In SDR millions, unless otherwise stated)

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020[1]	FY 2021[1]
Accounting basis:						
A] Defined Benefit Obligations	-8,068	-8,433	-8,625	-9,596	-12,018	-11,425
- DBO based on IAS 19 Discount Rate (Nominal AA Corporate Bond Rate)	*3.75%*	*3.97%*	*4.05%*	*3.86%*	*2.73%*	*3.02%*
B] Plan Assets	7,560	8,645	9,077	9,559	9,010	11,220
C] Net Asset/(Liability) Pension & Other Employee Benefits (B - A)[2]	**-508**	**212**	**452**	**-37**	**-3,008**	**-205**
IAS 19 basis ('point in time') Funding Ratio (B/A)	94%	103%	105%	100%	75%	98%
Economic basis: [3]						
D] Defined Benefit Obligations	-6,571	-7,139	-7,377	-7,975	-8,278	-8,259
- Long-term Discount Rate (3% real return + inflation) [4]	*5%*	*5%*	*5%*	*5%*	*5%*	*5%*
E] Plan Assets	7,560	8,645	9,077	9,559	9,010	11,220
F] Net Asset/(Liability) Pension & Other Employee Benefits (E - D)	**989**	**1,506**	**1,700**	**1,584**	**732**	**2,961**
3% real basis (long-term basis) Funding Ratio (E/D)	115%	121%	123%	120%	109%	136%
Precautionary Balances (Accounting basis)	**15,223**	**16,713**	**17,469**	**17,656**	**15,984**	**20,013**
Adjustments:						
- Add/(Subtract): IAS 19 Net Asset/(Liability) (line C)	508	-212	-452	37	3,008	205
- Replace on prudent basis with Long-Term Net Liability (if line F is negative)	0	0	0	0	0	0
Precautionary Balances (Retrospective Economic Basis)	**15,731**	**16,501**	**17,017**	**17,693**	**18,992**	**20,218**

Source: IMF Finance Department.

1/ Precautionary balances also adjusted for distribution of SCA-1 (SDR 188 million in FY 2020 and SDR 1,066 million in FY 2022) as part of the Somalia and Sudan debt relief exercise.

2/ Per Audited Annual Financial Statements. https://www.imf.org/external/pubs/ft/quart/index.htm

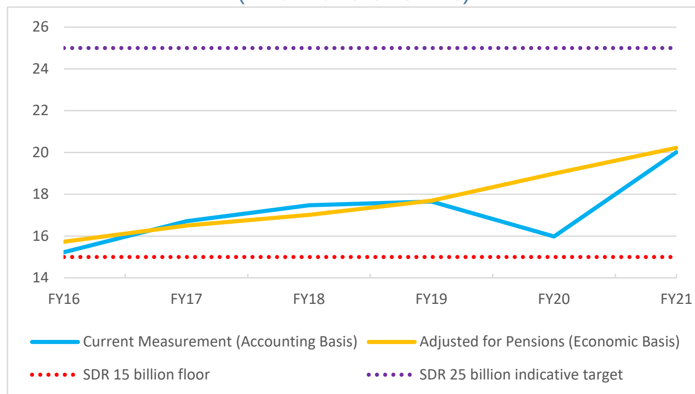
3/ Assumes that net asset position in one Plan can be netted with the net liability position in another Plan compared with each Plan's net asset or liability being accounted for separately in the financial statements.

4/ See Staff Retirement Plan and Retired Staff Benefits Investment Account— Five-Year Review and Staff Retirement Plan Reforms (RP/CP/21/3, 4/5/21).

Totals may not add due to rounding.

50. Replacing the accounting valuation of the net pension-related assets and liabilities with a more long-term economic measure, and taking a more prudent stance on any economic gains, results in a more gradual and less volatile path of accumulation of precautionary balances (Text Figure and Table 5). If the revised funding ratio based on the 3 percent long-term real rate of return (or 5 percent nominal) is above 100 percent (i.e., represented by a net asset position) (Line F, Table 5), consideration could be given to not making any further changes to precautionary balances after adjusting for the accounting net asset/(liability) position. This prudent treatment would be consistent with the plan assets being dedicated to future benefit payments and with the assets being held 'in trust' and not available for Fund operations. In keeping with this conservative approach, if the revised funding ratio is below 100 percent, the precautionary balances could be adjusted by the re-computed underfunded position to reflect the long-term economic risk. Recent history does not indicate an underfunded position when applying the long-term funding ratio as the Plan assets have generated cumulative real returns well above 3 percent, or nominal returns well above 5 percent. However, a potential underfunded position cannot be ruled out if certain adverse market conditions were to materialize.

Precautionary Balances – Current vs. Adjusted
(In billions of SDRs)



Source: Finance Department Calculations

51. The Fund's annual funding valuation exercise for the Staff Retirement Plan (SRP) and the Retired Staff Benefits Investment Account (RSBIA) would help further substantiate this approach. The funding valuation is a separate valuation technique used specifically for determining the Fund's annual contribution rate for the SRP and RSBIA. It takes a longer-term view of the funded status reflecting the Fund's contribution needs over the life of the pension and other employment benefits scheme. Based on the FY 2022 actuarial projections and assuming a contribution rate of 14 percent of pensionable gross remuneration over the medium term, and after taking into account the contributions in the SRP reserves, the SRP is adequately funded over the medium to long term (average funded term for last five years is 15 years) and the long-term economic risk is zero. The RSBIA has also been adequately funded over the medium term, based on recent actuarial projections.

52. Practices among comparator institutions vary widely. Based on a review by staff, capital adequacy measures include designating a separate measurement similar to precautionary balances and complying with capital adequacy requirements issued by the Basel Committee on Banking Supervision (BCBS). Treatment of pension related gains and losses within the respective frameworks was not clearly denoted by most of the institutions surveyed and varied from no mention of pension risks, to referencing that pension risks are considered, and to disclosing that pension risks were measured based on funding methodologies approved by the Pension Committee.

53. If Directors see merit in pursuing this approach, it is anticipated that the transition to the new approach should commence in FY 2022. This entails adding back SDR 205 million (see Table 5) to the opening (end-FY 2021) precautionary balances and would have the effect of raising the current precautionary balances path under the various scenarios by the same amount from FY 2022 onwards, provided the Plan's funding ratio is projected to remain above 100 percent on an economic basis. As such any change would be applied prospectively and going forward, staff will monitor the economic impact for potential material underfunded positions.

Box 2. Enterprise Risk Implications of Staff Proposal

The proposals of this paper respond to the Fund's evolving enterprise risk profile by mitigating financial, business, income, and reputational risks.

Financial risks. Keeping the current medium-term target and floor for precautionary balances is expected to maintain the Fund's credit risk buffers. This is a crucial mitigation against risk amid large credit exposures and concentration, as well as a deteriorated debt and growth outlook for many current and potential borrowers, given the Fund's lending mandate. Adjustments to address the accounting volatility due to IAS 19 would make precautionary balances a more stable measure for financial risk mitigation.

Business, income, and reputational risks. Maintaining the medium-term target and floor for precautionary balances would also better position the Fund in its efforts to step up engagement with members affected by the pandemic, thus mitigating business and reputational risks. Furthermore, adequate precautionary balances would mitigate potential risks to the Fund's income position related to both portfolio and operational risks, reducing risks to the medium-term budget. Keeping the SCA-1 account with a zero balance for the time being would prove useful. Should new arrears arise, it could be replenished, thus reducing the need for provisioning. The approach to address the accounting volatility due to IAS 19 would be more reflective of the business risks and reduce relevant reputational risks.

Residual risks remain. In particular, residual financial risks could stem from the concentrations of the loan portfolio, continued uncertainty in the global outlook, challenges faced by Fund's borrowers, and the limits and risks to accelerating the pace of the reserve accumulation, such as potential weak program performance. Adjustments to incorporate operational risks, which the Precautionary Balances are not aimed to address now, could also be considered. Close monitoring of risks, including those affecting the target, the floor, and the pace of accumulation of the precautionary balances, and the next regular review in about a year remain key mitigations should residual risks materialize. The ongoing work on the methodologies to assess the potential impact of the above risks more specifically should be resourced appropriately.

ISSUES FOR DISCUSSION

54. Directors may wish to comment on the following issues:

- Do Directors agree with staff's assessment of the credit risks facing the Fund?

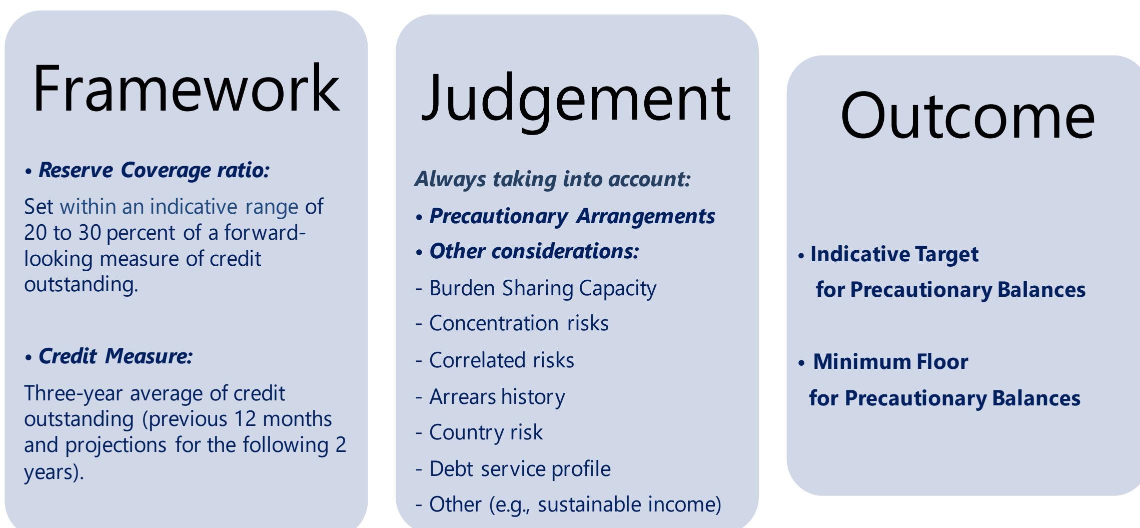
- Do Directors agree that the indicative medium-term target for precautionary balances should be maintained at SDR 25 billion while being monitored closely in light of large exposures and pandemic-related evolving credit risks?
- Do Directors see merit that the minimum floor for precautionary balances be kept unchanged at SDR 15 billion, but be revisited after the next review of the Investment Account?
- Do Directors agree that it would not appear necessary at this point to take additional steps to accelerate the pace of precautionary balance accumulation?
- Do Directors consider that the role of surcharges and their design remain broadly appropriate?
- Do directors see merit in reflecting further on the role of surcharges in the Fund financing model?
- Do Directors see merit in maintaining the SCA-1 account with a zero balance?
- Do Directors see merit in adjusting the measurement of precautionary balances to address accounting volatility due to IAS 19?
- Do Directors consider appropriate an adjustment for a potential underfunded position of the pension Fund that would reflect the long-term economic risk of the plan?

Annex I. Framework for Assessing Precautionary Balances

This annex outlines the basic framework used to set the indicative target and floor for precautionary balances.

1. The current rules-based framework for assessing precautionary balances was adopted in 2010.[1] Under this framework, the target for precautionary balances is to be broadly maintained within an indicative range linked to a forward-looking measure of credit outstanding. At the same time, the Board retains flexibility to determine where the target should be set based on a comprehensive assessment of the risks facing the Fund. While it is generally envisaged that the target will be maintained within the indicative range, there could be circumstances where the Board would decide to set or maintain a target outside the range, as was the case at the 2016 and 2018 reviews, if this is warranted by a broader assessment of financial risks. In this context, the Board has repeatedly stressed the importance of judgment.

Figure 1. Framework to Determine the Indicative Target and the Minimum Floor for Precautionary Balances



Source: IMF Finance Department.

2. The framework entails several elements (Figure 1): (i) an indicative range for the *reserve coverage ratio*, set at 20 to 30 percent of a forward-looking measure of credit outstanding. This element draws on approaches in other IFIs, adapted to the specific circumstances of the Fund (in particular the highly concentrated and demand-driven nature of its

[1] See Public Information Notice: IMF Board discusses the Adequacy of the Fund's Precautionary Balances (9/22/10), Review of the Adequacy of the Fund's Precautionary Balances (EBS/10/161, 8/25/10).

lending portfolio);[2] (ii) a specific *forward-looking credit measure* to anchor the range—the three-year average of credit outstanding covering the past twelve months and projections for the next two years—which helps smooth year-to-year volatility of credit movements.[3] Commitments under precautionary arrangements are excluded from the credit measure used to derive the indicative range, but are considered by the Board in setting the target; and (iii) a *minimum floor* to protect against an unexpected increase in credit risks, particularly after periods of low credit, and ensure a sustainable income position.[4] The framework applies to precautionary balances as a whole. The Board has not adopted separate targets for the sub-components.

3. Based on this framework, the Board has increased the target for precautionary balances three times and the minimum floor once. The Board agreed to raise the indicative medium-term target in 2012, 2018 and 2020, when it was set at SDR 25 billion. A minimum floor of SDR 10 billion for precautionary balances was agreed in 2010 and increased to SDR 15 billion in 2016. The floor was reaffirmed in 2020.

The Floor and Target Agreed at Each Review, 2010–20

(In billions of SDRs)

Review year	Floor	Target
Before 2010 review	-	10
2010	10	15
2012	10	20
2014	10	20
2016	15	20
2018	15	20
2020	15	25

Source: IMF Finance Department.

[2] The framework also has elements in common with the methodologies used by rating agencies in assessing capital adequacy in supranational lending institutions (see Annex II in *Review of the Adequacy of the Fund's Precautionary Balances* (SM/16/21, 1/26/16)).

[3] The two-year projection is based on scheduled net disbursements under existing non-precautionary arrangements. The methodology does not require an explicit analysis of possible future arrangements or for delays in scheduled disbursements or early repurchases. Scenario analysis can be used to indicate how the indicative range would be affected by different projections, which in turn can inform Board judgment.

[4] While Fund credit is highly volatile and can increase sharply, it takes a considerable time to rebuild precautionary balances. Thus, the floor provides a buffer in the face of an unexpected increase in credit risks. The floor is kept under review in light of changing conditions and longer-term trends in Fund lending.

Annex II. Demand for New Programs

This annex explains the methodology used in the 2020 review to estimate the potential demand for new Fund credit under various scenarios and updates the analysis with the October 2021 WEO data. The updated analysis shows that under the baseline global outlook, new programs would add around SDR 76 billion to credit outstanding at its peak to the projected stock of credit outstanding from existing arrangements. As a result, precautionary balances could surpass the current indicative target in FY 2024, and could reach nearly SDR 36 billion over the medium term, higher than the assessment at the last review.

1. **The analysis uses a panel logit regression to identify countries that are likely to tap IMF resources under the General Resources Account (GRA).**[1] Drawing from the literature, the model relates the probability of entering a new Fund arrangement to global and country–specific determinants. The sample covers 96 advanced, emerging and frontier market economies over the period 1992–2019, and 104 GRA arrangements. Estimated results suggest that the probability of a country requesting Fund support increases with higher external financing needs, higher financial market volatility, tighter global financial conditions, and lower GDP growth, among other factors (Table 1). A threshold for the probability of entering a program is then determined by minimizing the weighted average of missed new programs (Type I error) and false alarms (Type II error) for the in–sample forecasts. Under the assumption of equal weights for Type I and Type II errors (i.e., a 1:1 ratio), the threshold is found at 3.9 percent.[2] Using this threshold, the model correctly identifies 88 percent of new programs over the period 1992–2019.

2. **Estimated results are then used to predict the probability of sample countries entering an IMF program in FY 2022 and FY 2023.** The analysis uses the October 2021 WEO baseline data for each sample country for the next two years, and the 2021 year-to-date average VIX level of 19.8 to reflect the global economic outlook and financial market conditions. A country is assumed to enter into a new IMF program if its predicted probability exceeds the 3.9 percent threshold in a given year. Under this approach, 47 countries are predicted to enter a new Fund-supported program, of which 28 are assumed to come forward in FY 2022–23, based on staff analysis.[3]

[1] Based on an update of the Outlook-for-Potential-Programs (OPP) exercise used for the 2020 precautionary balance review (SM/20/159).

[2] Type I error represents the ratio of actual new programs that the model failed to predict to total new program observations, while Type II error refers to the ratio of predicted programs that did not occur to total non-program observations. Higher thresholds of 14.4 and 16.4 percent are identified when Type I and Type II errors are minimized in the ratios of 2:1 and 3:1, respectively, as such an approach penalizes false alarms more and flags fewer countries requesting Fund's program.

[3] Staff assessed members' probability to request Fund financial support, taking into account whether potential borrowers had already active precautionary and non-precautionary arrangements with the Fund, whether they had access to markets or other financing sources (e.g., through regional facilities), and whether they were eligible to obtain Fund credit under current policies.

3. The potential call on Fund resources would be high consistent with the severe economic fallout from the COVID-19 Pandemic. Access is calculated using the average size of Fund programs (excluding precautionary arrangements as they are not part of the forward-looking credit measure for the indicative target range) in the past decade of about 5 percent of GDP, and in each identified case adjusting for outstanding Fund credit, projected disbursements and repurchases consistent with applicable exceptional access limits. On this basis, aggregate new demand for IMF financing under 28 arrangements could reach about SDR 148 billion over FY 2022–23. This compares with a projection of 29 new arrangements totaling SDR 138 billion over FY 2021–22 at the previous review.

4. Under this WEO model-based scenario, the outstanding stock of Fund credit is projected to increase over the stock resulting from existing arrangements by about SDR 76 billion at the peak in FY 2026. A combination of 11 Stand–By Arrangements (SBAs), 16 arrangements under the Extended Fund Facilities (EFFs), and a Precautionary Liquidity Line (PLL) is assumed, with even phasing over three years for SBAs and four years for EFF arrangement. The average outstanding stock of Fund credit is projected to rise from about SDR 86.7 billion in FY 2021 to a peak of SDR 166.7 billion in FY 2026 (Figure 1), including existing arrangements and prospective arrangements under this baseline scenario. This compares with a peak of SDR 90.7 billion if only existing arrangements are taken into account.

5. As a result of projected new arrangements, precautionary balance would surpass the indicative target by FY 2024, and reach nearly SDR 36 billion over the medium term. This is higher than projections based only on existing arrangements, where precautionary balances would not reach the indicative target over the medium term.

6. Additional demand for Fund resources over this baseline could materialize in a more adverse scenario, illustrative of a resurging pandemic.[4] Given concerns that the emergence of new more aggressive COVID19 variants and uneven vaccine rollout could derail the global recovery, staff considered, as in the previous review, an adverse scenario where the projected growth for 2021–22 for a country is assumed to fall by ½ standard deviation of its historical values relative to the October 2021 WEO baseline. The growth shock is combined with a high financial market shock (VIX level of 40). In addition, it is assumed that (i) average access per arrangement is significantly higher than under the baseline, about 7 percent of GDP (excluding precautionary arrangements) and that (ii) all current FCL/PLL arrangements are drawn. As a result, the outstanding stock of Fund credit is projected to increase by about SDR 121.5 billion above the peak under the WEO model-based scenario. The impact on Fund credit could thus be illustrative of a resurging pandemic. In this scenario, precautionary balances would increase to SDR 48 billion over the medium term.

[4] Additional demand could also materialize if a faster-than-anticipated monetary normalization in advanced economies leads to a sudden tightening of global financial conditions.

Figure 1. Projected Precautionary Balances and Credit Path under Alternative Scenarios
(in SDR billions)

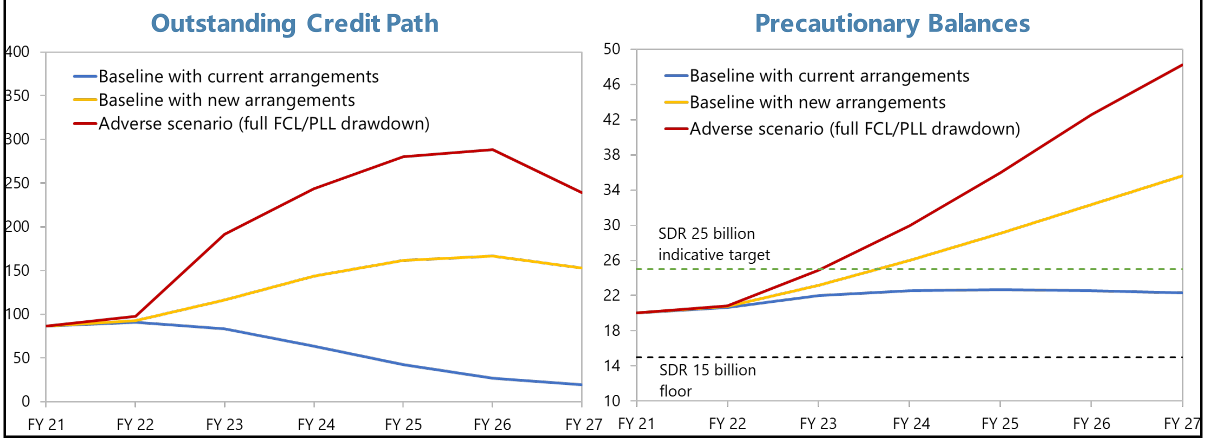


Table 1. Model Output

Logit Estimation Results

Dependent variable: Start of a GRA Arrangement (dummy)

Independent Variables	dy/dx	Robust SE	P-value
Past program (dummy)	0.419***	0.064	0.000
Reserve accumulation	-0.0469*	0.026	0.071
External Financing Needs	0.684**	0.293	0.020
GDP growth	-0.0951***	0.026	0.000
GDP per capita	-0.965***	0.179	0.000
GDP	-0.0511	0.097	0.599
Credit gap	0.0229**	0.009	0.012
Exchange rate variation	-0.165	0.246	0.503
Government stability	-0.330***	0.074	0.000
3M US int. rate variation	0.0748	0.124	0.547
Import coverage	0.00896	0.009	0.344
VIX	0.0700***	0.026	0.008
Oil price	-0.00712	0.006	0.245
Access to RFA (dummy)	0.189	0.288	0.512
Pseudo R2	0.440		
Observations	2,113		
Countries	96		
GRA Arrangements	138		
Likelihood ratio (p-value)	0.002		

Notes: the table reports the coefficients of the panel logit estimation using random effects. A constant is estimated but not reported.
***, **, and * denote significance at the 1, 5, and 10 percent levels, respectively.

Annex III. Burden Sharing Capacity

This annex discusses the role of the Fund's burden sharing mechanism as well as the factors that determine its capacity. It observes that since the last review in 2020, the current burden sharing capacity has weakened further and provides only a limited buffer relative to scheduled charges falling due under the Fund's exposures.

Role of the Burden Sharing Mechanism

1. **The burden sharing mechanism was established in 1986 to compensate the Fund for any unpaid charges by members in arrears ("deferred charges"), and in so doing, to offset the impact of unpaid charges on Fund income.** Under burden sharing, the Fund's creditor and debtor members contribute temporary financing in equal amounts to cover the amount of unpaid charges. This is achieved through increases in the rate of charge paid by debtor members and reductions in the rate of remuneration to creditor members.[1]

2. **The burden sharing mechanism has proven important in protecting the Fund's income position and in enabling the Fund to recognize no impairment for its credit outstanding under International Financial Reporting Standards (IFRS).** Specifically, even though a member may not be meeting its obligation to pay charges, the collection of an equivalent amount from other members through the burden sharing mechanism enables the Fund to demonstrate that, on a net present value basis, there is no impairment of outstanding credit under IFRS.

3. **Should the loss of income from deferred charges exceed the capacity of the mechanism, the carrying value of the asset in arrears on the Fund's balance sheet may need to be reduced.** The deferred charges in excess of the burden sharing capacity would reduce the Fund's annual lending income and reduce the pace of accumulation of precautionary balances accordingly. Moreover, future cash flows due from members in arrears would not be expected to be collected in full, which could undermine the Fund's ability to demonstrate that the carrying value of credit outstanding has not been impaired, giving rise to the possibility of an impairment loss.[2] Recognition of an impairment loss arising from deferred charges would need to consider a variety of factors, including the unique nature of the Fund's financing mechanism, but could have a further negative impact on the Fund's net income and precautionary balances.[3]

---

[1] These adjustments are currently set to match charges in arrears but could also include the possible accumulation of balances in the SCA-1, which are part of precautionary balances. Accumulations to the SCA-1 were suspended effective on November 1, 2006, due to high projected adjustments to the rates of charge and remuneration in a low and concentrated credit environment.

[2] Under IFRS, the amount of the loss is measured as the difference between an asset's carrying amount and the present value of estimated future cash flows.

[3] Recognition of an impairment loss is not equivalent to writing off the outstanding claims against the member in arrears, since it does not relieve the member of its obligations to the Fund. The impairment loss may be reversed in future years as the arrears are cleared.

Capacity of the Burden Sharing Mechanism

4. The total capacity of the burden sharing mechanism to cover unpaid charges is the sum of the maximum feasible reduction in remuneration expenses and the maximum feasible increase in income from charges:

- Article V, Section 9 (a) of the Fund's Articles of Agreement states that the rate of remuneration shall be no less than four-fifths (80 percent) of the SDR interest rate, limiting the maximum reduction in remuneration expenses to: *0.2 * SDR Interest Rate * Remunerated Reserve Tranche Positions*. The Board has set the current floor for remuneration at 85 percent of the SDR interest rate, which may be changed with a 70 percent majority of the total voting power.[4]

- The maximum capacity of a symmetrical burden sharing mechanism is simply twice the above amount, because debtors and creditors contribute equally.[5] However, the contributing debtor base declines in the event of arrears, which may in practice limit the maximum feasible adjustment to the rate of charge without overburdening these members.

5. The burden sharing capacity depends on the following factors:[6]

- **Quota payments:** quota increases typically result in higher reserve tranche positions, as members acquire additional liquid claims on the IMF as part of their quota payments.[7] As reserve tranche positions increase, the remunerated portion also increases, thus allowing for a larger maximum reduction in remunerated expenses and higher burden sharing capacity.

- **Outstanding credit and borrowing by the Fund:** Reserve tranche positions also move in tandem with changes in outstanding credit financed from quota resources. Remunerated reserve tranche positions have increased from about SDR 40 billion at the end of 2017 to about SDR 101 billion at the end of September 2021.However, no burden sharing adjustment is made to the interest paid to creditors on borrowed resources (New Arrangements to Borrow and bilateral loan or note purchase agreements). Therefore, outstanding credit financed by borrowed resources would not affect the Fund's burden sharing capacity.

---

[4] See Decision No. 12189-(00/45), April 28, 2000, as amended.

[5] Under the terms of the burden sharing Decision No. 11945-(99/49), adopted on April 30, 1999, the operation of the mechanism would need to be reviewed if the adjustment in the rate of remuneration falls below the agreed floor of 85 percent of the SDR interest rate. Absent any Executive Board decisions at such a review, debtor members would be required to cover any remaining amounts of unpaid charges through further (uncapped) adjustments to the rate of charge, and burden sharing would become asymmetric.

[6] Burden sharing capacity can also be affected by other Fund operations and transactions involving changes in the GRA currency holdings, such as transfer of currencies to the Investment Account and sales of SDRs to members in exchange for currencies.

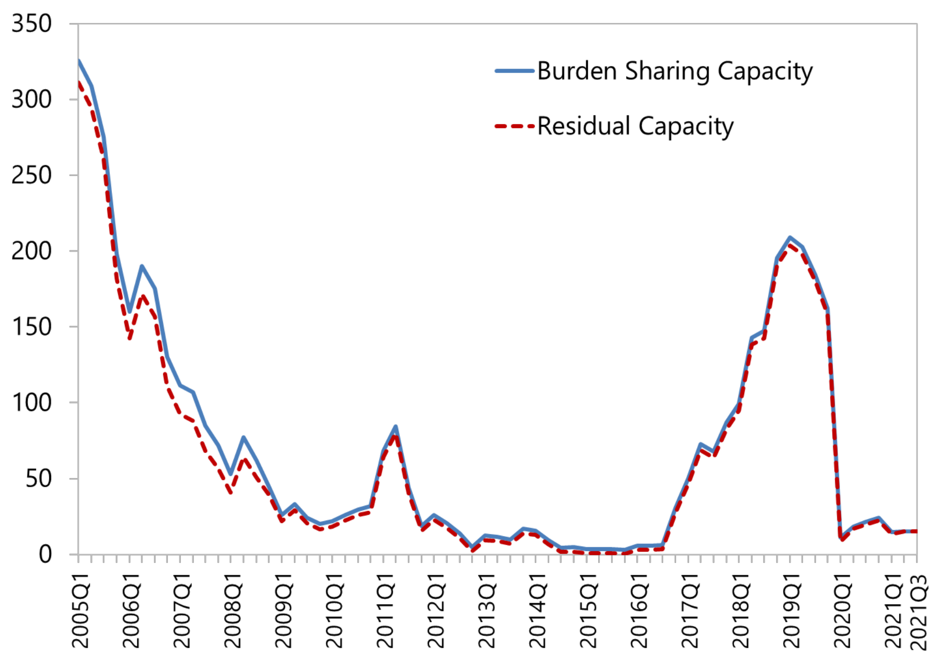
[7] Quota increases paid in currencies do not affect members' aggregate RTP positions.

- **SDR interest rate:** as the burden sharing adjustment to the rates of remuneration is set as a proportion of the SDR interest rate, a higher SDR interest rate increases the total burden sharing capacity. As of end-September 2021, the SDR interest rate was at its floor of 0.050 percent, compared to the 0.733 percent SDR interest rate as of end-November 2017.

6. The burden sharing capacity has decreased further since the last precautionary balance review primarily owing to the drop in the SDR rate. As of end-September 2021, the annual burden sharing capacity (based on the current floor for remuneration at 85 percent of the SDR interest rate) was about SDR 15 million, compared to over SDR 86 million at the end of 2017, and SDR 23 billion at the time of the last review in 2020. The residual burden sharing capacity is the same as the burden sharing capacity as there are no outstanding overdue charges.

Figure 1. Burden Sharing Capacity 2005-2021[1/]

(In millions of SDRs)

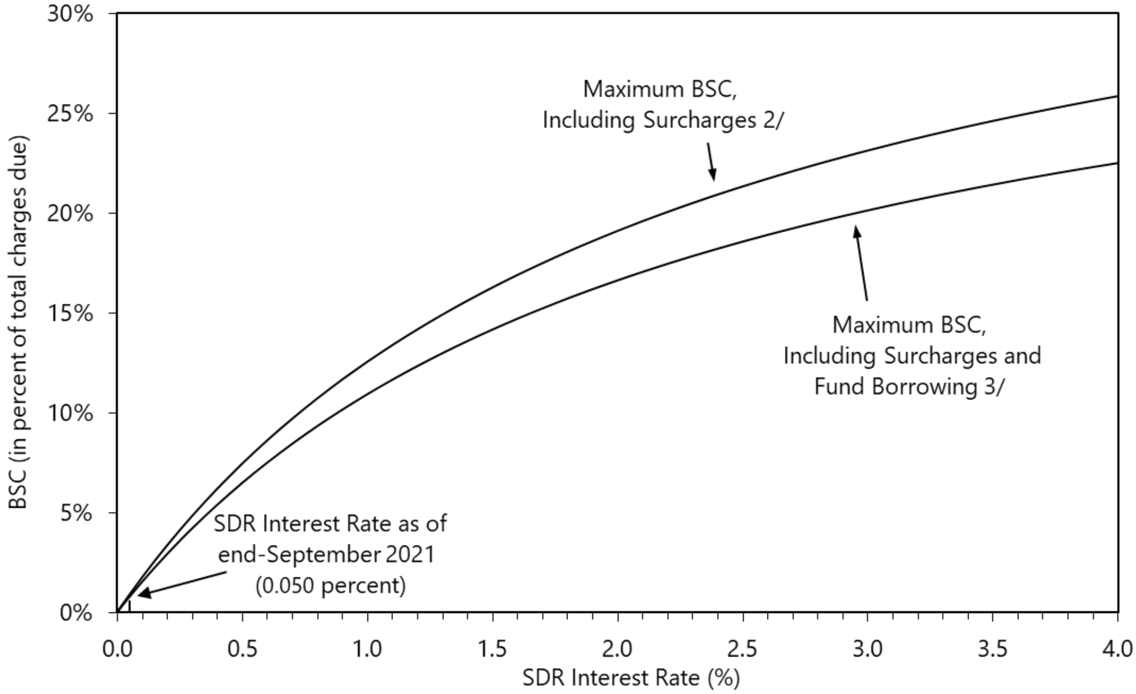


Source: Finance Department.

[1] Under a floor for remuneration of 85 percent of the SDR interest rate.

Figure 2. Burden Sharing Capacity at Different Levels of the SDR Interest Rate[1/]

(In percent of total charges)



Source: Finance Department.

[1] The figure assumes a floor for remuneration of 80 percent of the SDR interest rate.

[2] A basic margin of 100 basis points plus average surcharges of about 119 basis points for the credit outstanding (based on FY 2020–22 projected average). Assuming that creditors and debtors contribute equally, and the remunerated reserve tranche positions (RRTP) equal credit outstanding, i.e., no borrowing by the Fund.

[3] As footnote 2 but assuming borrowing share at 15 percent of total credit.