INTERNATIONAL MONETARY FUND

The Fund's Mandate—Future Financing Role: The Current Lending Toolkit and Innovative Reform Options

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List of Abbreviations

ECF	Extended Credit Facility
EFF	Extended Fund Facility
EMBI	J.P. Morgan Emerging Market Bond Index
ENDA	Emergency Natural Disaster Assistance
FCL	Flexible Credit Line
FCT	First Credit Tranche
GRA	General Resources Account
IDA	International Development Association
IFI	International Financial Institution
LIC	Low-income Country
NAB	New Arrangements to Borrow
PRGT	Poverty Reduction and Growth Trust
PSI	Policy Support Instrument
RCF	Rapid Credit Facility
RTP	Reserve Tranche Position
SBA	Stand-By Arrangement
SCF	Standby Credit Facility
SDA	Special Disbursement Account
SDR	Special Drawing Rights
UCT	Upper-credit tranche
VIX	Chicago Board Options Exchange Volatility Index

I. INTRODUCTION[1]

1. **This supplement to the paper "The Fund's Mandate—Future Financing Role" provides background information on the Fund's existing lending instruments, and briefly discusses some of the more radical reforms that commentators have proposed.** The Fund conducts the bulk of its financing role through the General Resource Account (GRA) for nonconcessional financing, and through the Poverty Reduction and Growth Trust (PRGT) for concessional financing. Use of GRA resources is subject to policy conditionality, safeguards and other requirements set out in the Fund's Articles of Agreement, and is structured as a temporary purchase by the borrowing member of the currencies of other members in exchange for its own currency. Thus, the more innovative financing modalities discussed in this paper would require either a change in the Articles, or mobilization of separate resources outside the GRA (including Fund gold-derived Special Disbursement Account (SDA) resources), use of which are subject to fewer constraints. PRGT financing is subject to the terms of that Trust and to the provisions governing use of SDA resources.

II. A SNAPSHOT OF THE FUND'S FINANCING RESOURCES AND LENDING INSTRUMENTS

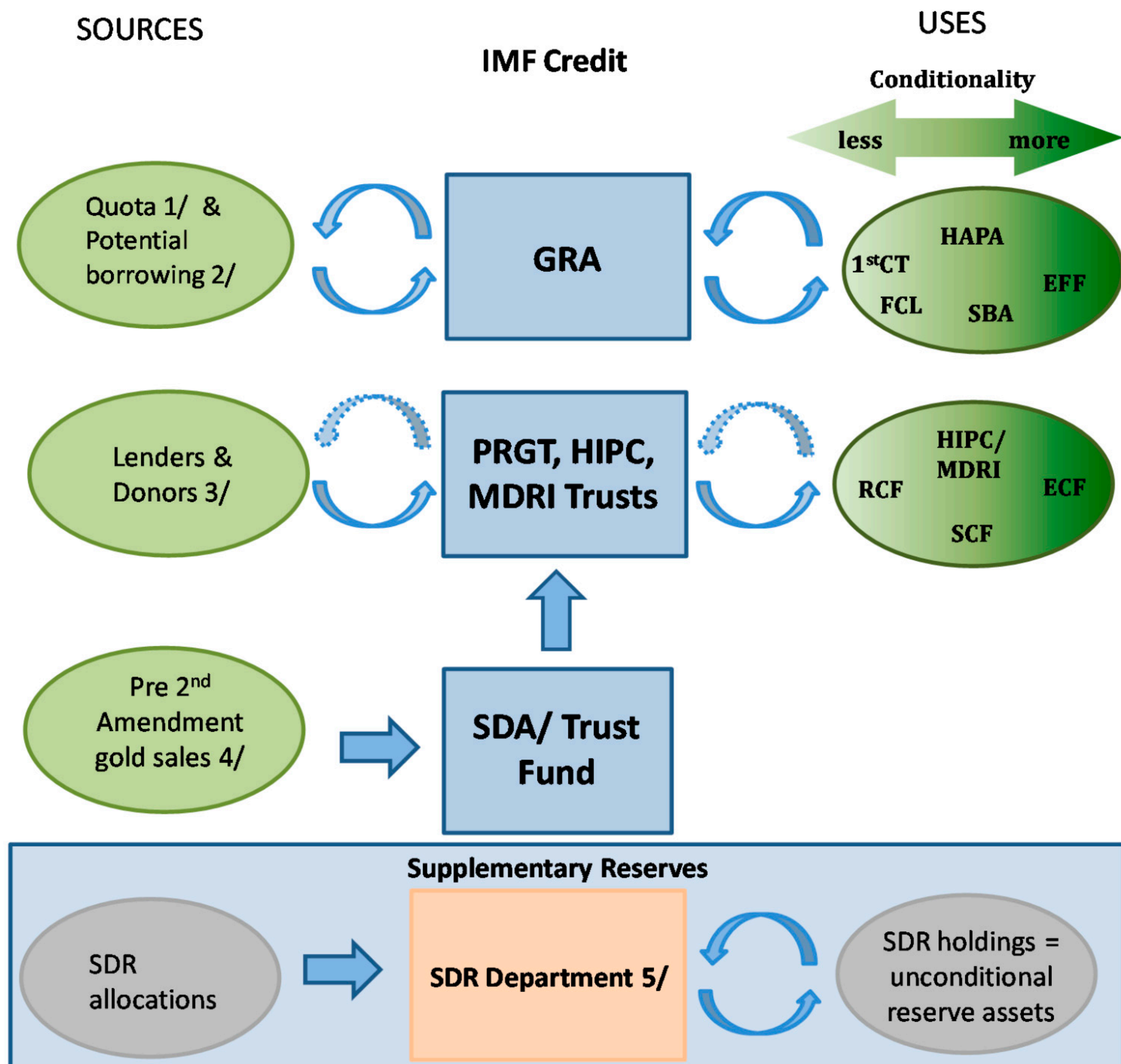
2. **Currently, the Fund provides financial assistance and liquidity to its members from its diverse resource base**. Sources include the GRA, SDA, and resources contributed by donors to be administered by the Fund (Figure 1). The Fund also has the authority to create international reserve assets by allocating Special Drawing Rights (SDRs).

3. ***GRA financing***, which represents the bulk of the Fund's financial assistance to members, is subject to policy conditionality, safeguards, and other requirements—such as access limits, phasing, and surcharges—that aim to preserve the revolving nature of GRA lending consistent with its quota-based source (Article V, Section 3(a)). The GRA comprises mainly currency holdings from members' quotas subscriptions and gold acquired from past quota subscriptions. The Fund is authorized to replenish GRA currencies by borrowing (Article VII, Section 1(i)), which can be done under bilateral loan and note purchase agreements or through multilateral arrangements such as the New Arrangements to Borrow (NAB).

a. The policy conditionality requirement is looser for purchases of the **first credit tranche** (FCT), which is the first 25 percent of the Fund's holdings of a member's currency above its quota: the Fund's attitude to requests for transactions within the FCT "is a liberal one, provided that the member itself is making reasonable efforts to

[1] Paper prepared by an interdepartmental team led by L. Giorgianni (SPR) and comprising C. Beaumont, L. Kohler, M. Rossi, and C. Visconti, (all FIN), W. Bergthaler, D. Eastman, K. Kwak, Y. Liu, C. Ogada, and R. Weeks-Brown (all LEG), M. Anthony, U. Das, C. Mulder, J. Pihlman (all MCM), S. Basu, A. Ghosh, J. Kim, J. Ostry, L. Ricci, and M. Roca (all RES), and G. Adler, M. Goretti, I. Halikias, J. Roaf, and A. Stuart (all SPR).

Figure 1. Fund Financial Instruments: Sources and Uses



1/Quotas of members in the FTP are the main source of GRA's useable resources, currently SDR 180 billion.
2/Borrowing from members is a potential temporary supplementary source of resources for the GRA, it includes NAB/GAB (SDR 34 bn) and bilateral loan and note purchase agreements (SDR 200 bn committed by 03/31/2010). On April 12, 2010 the IMF approved a proposal by which existing and potential NAB participants would expand the NAB to SDR 367.5 billion (about $588.6 billion).
3/ Members provide loans that comprise the principal for concessional lending, and contribute grants to subsidize the interest rate charged to borrowers and to finance debt relief for eligible members.
4/ Profits from gold sales in 1976-80 went to developing members and to the Trust Fund to finance concessional lending. In 1981, the Trust Fund assets were transferred to the SDA. Profits from the 1999-2000 gold sales were transferred to the SDA and the investment income was used to finance concessional lending and HIPC/MDRI debt relief.
5/SDRs currently amount to approximately SDR 204 billion.

solve its problems."[2] The FCT is normally provided through a stand-by arrangement and is subject to normal credit tranche terms for repurchase period and rate of charge. The Fund has on one previous occasion (in the late 1970s) increased the FCT temporarily in response to liquidity pressures.[3]

b. The only truly "unconditional" GRA liquidity device contemplated in the Articles is the **reserve tranche position** (RTP), which originates as the portion of a member's quota that was paid in freely usable currencies or SDRs and is part of the member's own international reserves. A member's RTP changes over time if its currency is used in lending operations—increasing if its currency is used to finance lending, and declining when other members' repurchases increase the Fund's holdings of that member's currency. A reserve tranche purchase does not constitute use of IMF credit and does not cause the Fund's holdings of the member's currency to exceed its quota, subject to exclusions of purchases under qualifying facilities.[4] Reserve tranche purchases can be made based solely on the member's representation of balance of payments need, and the Fund cannot challenge requests for reserve tranche purchases; reserve tranche purchases are not subject to conditionality, repurchase or charges.

4. The Fund can use ***resources held in the SDA*** (SDA), namely profits from sales of gold held at the time of the Second Amendment, for various purposes, including for operations and transactions not specifically authorized by the Articles but consistent with the Fund's purposes (Article V, Section 12(f)(ii)).[5,6] This provision authorizes the Fund to provide balance of payments assistance for the benefit of members in need on a uniform basis (with the authority to provide assistance exclusively to low-income countries being a limited but explicit exception to the normal uniformity requirement). Concessional financing is the most prominent example of this use of SDA resources.

5. Similarly, as part of its authority to perform financial services under Article V, Section 2(b), the Fund can upon request administer ***resources contributed by members and others*** (e.g., under trusts) to finance operations that complement GRA lending. Such operations must be consistent with the purposes of the Fund and cannot expose the Fund to

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[2] See 1963 Annual Report of the Executive Directors, p. 16; cited in *Selected Decisions and Documents of the International Monetary Fund*, Thirty-Third Issue (2008), p. 297. Purchases under an arrangement that are within the first credit tranche are not subject to phasing or performance criteria. Decision No. 12865-(02/102), September 25, 2002.

[3] Specifically, pending the entry into effect of the Second Amendment, the first credit tranche was increased to 36.25 percent of quota. See Decisions No. 4934-(76/5), adopted 1/19/76.

[4] See Article XXX(c) of the Fund's Articles and Decision No. 6830-(81/65), April 1, 1981.

[5] Profits from the sale of 25 million ounces of gold in 1976–80 were used to create the Trust Fund which is the precursor to the PRGT.

[6] The gold being sold through the sales approved by the Executive Board in September 2009 is gold the Fund acquired after the Second Amendment, profits from which accrue to the GRA rather than the SDA.

any risk of losses. The main example of such a trust is the PRGT, which provides concessional lending to low-income members, and is also financed partially by the Fund's SDA resources (in addition to contributors' resources).

6. The Fund has the authority to provide its members with unconditional access to freely usable currencies by ***allocating SDRs***. SDRs must be allocated uniformly across Fund members in proportion to individual quotas. A general SDR allocation requires an assessment that the "long-term global need" standard specified in Article XVIII, Section 1(a) has been met.[7] While the need for a general SDR allocation is reviewed every five years, this authority had not been used for almost three decades prior to the August 2009 allocation. Targeting SDR allocations to selected members for temporary liquidity shortages would require an amendment of the Articles; in that context, to preserve liquidity of the SDR, a parallel cancellation requirement could also be considered.[8]

Nonconcessional Lending Instruments

7. **The Fund provides temporary financial assistance to its members on nonconcessional terms through its general resources**. The GRA lending toolkit is organized around two broad criteria: the nature of the balance of payments problem and the strength of the member's fundamentals and policies (Table 1). Accordingly, conditionality attached to Fund lending can be tailored to countries' varying economic strengths. There are currently three primary vehicles for delivering GRA financing (two of which, the SBA and the FCL, are windows in the general credit tranches): (i) the SBA, the Fund's workhorse instrument for all-purpose adjustment lending, which is subject to ex-post policy conditionality; (ii) the FCL, dedicated to members with very strong policies and fundamentals, which is subject to ex-ante policy conditionality; and (iii) the EFF, a special facility created to deal with balance of payments difficulties of a long-term nature and thus requiring structural policy conditionality. (When all other special facilities were eliminated in 2009, the EFF was retained by the Board mainly because of its usefulness to low income members graduating from concessional lending and not as a vehicle to deliver high-access financing to members.) In addition, the Fund provides emergency financing (with limited outright purchases and no ex-post conditionality), in case of natural disasters or post-conflict situations.

[7] The proposal for a general allocation is made by the Managing Director only after he ascertains there is broad support; it must be concurred in by the Executive Board (majority of the votes cast), and ultimately approved by the Board of Governors by an 85 percent majority of the total voting power.

[8] The forthcoming paper on the International Monetary System will discuss potential measures to enhance the liquidity of the SDR.

Table 1. GRA Lending Toolkit [1/]

		BOP problem	
		Any (“credit tranche lending”)	**Special** (“special Fund facility”)
Policies and fundamentals [2/]	**Any**	*Stand-By Arrangement*	*Extended Fund Facility* • long-term imbalances in production, trade and prices
	Special	*Flexible Credit Line* • very strong policies, fundamentals	

1/ Does not include ENDA/EPCA which provide limited outright purchases in specified circumstances.

2/ As a general safeguard, GRA lending cannot be provided when the member country faces an unsustainable debt burden calling its solvency into question, unless the Fund finds that the member’s policies will allow it to achieve debt sustainability in the medium term. Additional criteria need to be met for exceptional access cases.

8. **GRA resources may be made available on both precautionary and non-precautionary basis to address balance of payments problems**. The Articles establish the requirement that GRA resources be drawn only when there is an actual balance of payments need. As discussed in the Staff Guidance Note on the Use of Fund Resources for Budget Support, this requirement does not preclude programs that allow Fund resources, for example, to finance the budget or bank recapitalization, in the context of an overall framework that addresses the member’s balance of payments problems. GRA resources can be committed flexibly for both crisis prevention and crisis resolution. The SBA and EFF have mostly been used for crisis resolution (non-precautionary basis), and the FCL, to date, exclusively for crisis prevention (precautionary basis).

9. **Financial terms (maturity and cost) can vary across lending instruments, but cannot be differentiated based on member-specific characteristics within a facility**. Consistent with the emphasis on long-term balance of payments problems, arrangements under the EFF have longer duration, grace periods, and repayment terms than SBAs (Table 2). Repayment terms for the FCL are the same as those applying to the SBA, consistent with the fact that these are both arrangements in the credit tranches; however, the arrangement length for FCL arrangements is much shorter than the typical length of SBAs. Borrowing costs are uniform within each GRA lending facility (Box 1); in fact, Article V, Section 8(d) prohibits their differentiation on the basis of member-specific economic policies and fundamentals. Historically, the cost of borrowing from the Fund has been set below the cost of borrowing from private capital markets. The absence of penalty lending rates (differently from other lenders of last resort) essentially reflects the cooperative nature of the institution, the safeguards provided by ex ante and ex post conditionality and other lending policies, and its de facto preferred creditor status.

Table 2. Terms of GRA Lending

	Access	Phasing	Duration	Repayment
SBA (1952)	**No cap**, but subject to exceptional access policy when above 200% of quota annually or 600% of quota cumulatively	A minimum of two purchases and two sets of corresponding performance criteria for each 12-month period (in addition to the initial purchase). Could be quarterly or semi-annual. Frontloading allowed	Up to 3 years	3¼-5 years
FCL (2009)	**Unlimited**, but expectation of not exceeding 1000% of quota	None, all frontloaded	Either 6 or 12 months	3¼-5 years
EFF (1974)	**Expected not to be high** and subject to exceptional access policy when above 200% of quota annually or 600% of quota cumulatively	A minimum of two purchases and two sets of corresponding performance criteria for each 12-month period (in addition to the initial purchase). Could be quarterly or semi-annual. Frontloading allowed	Up to 4 years	4½-10 years

Box 1. The Current Cost Structure of GRA Lending

Borrowing costs comprise:

- A commitment fee on undisbursed resources to cover the cost of arrangements in case purchases are not made, including opportunity costs of committing finite resources (the Fund sets aside 100 percent of committed resources), which increases with the scale of lending;
- A basic rate of charge (currently set at 100 basis points above the SDR interest rate) on the outstanding stock of lending to cover intermediation costs and normal credit risks;
- Service fees, of 50 basis points, payable on each purchase, to also cover intermediation costs;
- Surcharges that increase with the scale and maturity of lending to discourage large and prolonged use of resources and to build reserves to protect against extreme credit events. (Surcharges of 200 basis points are paid on the amount of credit outstanding above 300 percent of quota. If credit outstanding remains above 300 percent of quota after three years, this surcharge rises to 300 basis points.)

Concessional Lending Instruments

10. **While GRA facilities are available to all qualifying members regardless of income, the Fund also makes available concessional lending facilities to address the special needs of LICs**. Members generally become eligible for concessional financing if their annual per capita income is below the IDA threshold, and they do not have substantial and sustained access to international financial markets. They graduate when their income rises substantially above the threshold for a sustained period or when they are deemed to have gained sustained access to international financial markets, and they do not face serious short-term vulnerabilities. Countries with per capita income above the threshold are expected to blend concessional financing with support through GRA facilities.

11. **Under the PRGT, three facilities provide concessional financing, with modalities that are tailored to the increasingly diverse circumstances of LICs** (Table 3). At the heart of the Fund's financing architecture for LICs is the Extended Credit Facility (ECF), to address protracted balance of payments problems. Access can be augmented in case of larger actual financing needs than projected initially. For countries with a short-term balance of payments needs, the Standby Credit Facility (SCF) provides assistance similar to the SBA, including the option of requesting support on a precautionary basis. The Rapid Credit Facility (RCF) provides financial support in a single up-front disbursement to countries facing urgent balance of payments needs, for example in case of shocks, where an upper credit tranche (UCT) quality program is either not necessary or not feasible. While all three instruments have a lower interest rate than GRA lending—ranging from zero to seventy-five basis points depending on the facility and the average SDR rate—SCF terms are somewhat less favorable than those for the ECF and RCF, particularly with regard to maturity (Table 4). In addition, the Policy Support Instrument (PSI) provides non-financial support to countries with upper credit tranche quality economic policies, with the ability for a member to obtain rapid access to SCF or RCF financing if the PSI is on track.

Table 3. Concessional Lending Toolkit

		BOP problem	
		Protracted	**Short-term/Urgent including Shocks**
Policy standard[1/]	UCT-Quality	*Extended Credit Facility* The Fund's main tool for providing medium-term support to LICs with protracted balance of payments problems	*Standby Credit Facility* For short-term balance of payments needs, including precautionary use, similar to the Stand-By Arrangement (SBA) available under the GRA
	UCT-quality not required	*Rapid Credit Facility* Urgent BOP need required but member may also have protracted BOP problem; repeated use possible to build policy track record for UCT facility	*Rapid Credit Facility* Outright disbursement to meet urgent balance of payments need, including through shocks window

1/ Whether or not a member's track record and program meets the Upper Credit Tranche (UCT) quality.

Table 4. Terms of PRGT Lending

	Access[1/]	Phasing	Duration	Repayment
ECF	Norm: 120% of quota if outstanding credit less than 100% of quota (75% of quota otherwise)	Normally semi-annual. Actual balance of payments need over the course of the arrangement, though not necessarily at approval or individual disbursements	3 years (up to 5); repeated use possible	5½–10 years
SCF	Norm: 120% of quota if outstanding credit less than 100% of quota (75% of quota otherwise)	In principle, semi-annual. Potential or actual short-term balance of payments need at approval; actual need required for each disbursement	12–24 months; use limited to 2½ years in any 5 years	4–8 years
RCF	Sublimits: annual 25% of quota (shocks window 50%), and cumulative 75% of quota (shocks window 100%), all net of scheduled repayments	Outright disbursement for urgent balance of payments need when UCT program not feasible or not needed; actual need required for each disbursement	Outright disbursements; limited repeated use possible in some circumstances, subject to access limits and qualifying track record	5½–10 years

1/ For all LIC facilities, an annual limit of 100 percent of quota and a cumulative limit of 300 percent of quota (i.e., total outstanding Fund concessional credit) apply (for exceptional access, these limits are 150 percent and 450 percent of quota respectively).

III. Modernizing the Fund's Financing Role—Innovative Instruments

A. Lending Against Collateral

12. ***Rationale***. It has been argued that establishing a window to lend against collateral could be a useful addition to the Fund's traditional policy-based lending toolkit. Like a true lender of last resort, the Fund could lend against collateral on a temporary basis and at a penalty rate to *solvent* countries. Such an instrument could mitigate stigma associated with Fund lending—although a different form of stigma could be generated if the collateral requirement were perceived as a lack of trust.

13. ***Modality***. Having sufficient amounts of acceptable collateral and the solvency requirement would provide the safeguards that ex-post policy conditionality helps to deliver in traditional Fund arrangements. However, in the absence of policy conditionality (ex ante or ex post), there would not be assurances that Fund financing will help members resolve their balance of payments problems. To mitigate these concerns any lending against collateral could be made available on a short-term basis to countries that face only a liquidity shock, and thus do not need policy adjustment.

14. ***Legal and financial implications.*** The Articles do not allow GRA lending against collateral as a substitute for policy conditionality.[9] Consideration could be given, upon request, to establishing a trust funded with SDA or donor resources that would lend against collateral. Collateral-based lending also involves difficult decisions on the types of collateral to accept, valuation issues, and the haircut to apply. For the window to be useful to borrowers, the trust would need to accept illiquid and somewhat risky assets as collateral, thus requiring a large haircut.[10] Private sector assets owned by the sovereign could instead be considered, although assessing embedded risks in these assets would pose significant challenges to the trust.

B. Instruments for Market Support

Sovereign Guarantees

15. ***Rationale***. Some commentators have suggested that guaranteeing new sovereign debt issuance could be an alternative to traditional loan disbursements by the Fund. Guarantees could be particularly attractive in a systemic stress situation in which governments experience difficulty issuing market debt and face uncertainty from investors. Guarantees may be less subject to stigma than traditional Fund lending and, depending on the financing scheme, may also allow greater leverage of resources than loan disbursements. A parallel of this would be the guarantees of commercial banks' market borrowing provided by the U.S. Federal Reserve, Bank of England and other central banks during the recent crisis.

16. ***Modality***. The guarantees contemplated would involve an irrevocable commitment from the Fund at the time of issuance of the bond that it will make payments to bondholders in the event the sovereign fails to do so. Members would need to meet appropriate qualification requirements to be eligible for such guarantees, and the bond itself may need to meet certain maturity requirements as discussed below. (Ex post conditionality could also be incorporated into the scheme, but this would be a condition for the Fund's guaranteeing of *additional* tranches of bonds by the same sovereign.) These guarantees would be an alternative means by which the Fund could deliver financial support to members, and as such could be used in place of loan disbursements. The member would have an obligation to repay the Fund if the Fund were called upon to make payments to the end-creditors/beneficiaries covered by the guarantee.

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[9] For additional discussion of the legal implications of lending against collateral and some of the other proposals discussed in this supplement, see *The Fund's Mandate—The Legal Framework*.

[10] Pledging specific revenues (such as future commodity revenues) or own sovereign bonds as collateral would not provide additional safeguards to the Fund over current Fund financing. Explicit pledges of commodity revenues may also trigger negative pledge clauses (covenants prohibiting actions that would advantage other lenders) and thereby make it more difficult for the country to receive private financing.

17. ***Operational issues***. A number of operational issues arise with this instrument:

- ***Partial or full guarantees***. To adequately reduce issuance spreads in a crisis, a guarantee would need to cover the full life of the bond, as most of the value of the bond is typically in the final principal payment; however, to reduce the Fund's exposure and address related concerns, qualifying bonds would need to be of relatively short maturity (e.g., three years). As a variant, the guarantee arrangement could be terminated automatically once spreads on unguaranteed debt return to normal levels. This would facilitate guaranteeing of longer-maturity bonds, and also provide a more market-oriented form of Fund support, since the bonds would revert to standard government debt instruments (and avoid fragmenting the bond markets) once the crisis has passed and the guarantee has "floated off".[11]

- ***Stigma could remain***. If guarantee arrangements are subject to traditional Fund program monitoring like phasing and conditionality, they would seem unlikely to address the stigma issues. But if provided to "FCL-qualifiers" under ex ante conditionality, there might be a more positive perception that the Fund is only passively facilitating the country's normal market activities, to overcome a temporary loss of market access.

18. ***Legal and resource implications***. The Fund currently lacks authority to issue guarantees backed by GRA resources, inter alia, due to the design of policy conditionality and safeguards requirements under the Articles, which precludes the Fund from providing medium-term, open-ended financing commitments of the kind that would be required under the guarantees contemplated. Thus sovereign guarantees would require an amendment of the Articles or would need to be backed by SDA resources or by contributor resources administered by the Fund under Article V, Section 2(b). Also, the Fund would need to develop institutional capacity to manage a guarantee portfolio and its associated risks.

Sovereign Debt Market Support

19. ***Rationale***. Automatic secondary market bond purchases by the Fund could help mitigate balance of payments pressures while limiting stigma to the member. At times of international financial distress, the Fund could automatically purchase upon a triggering event a portfolio of bonds of pre-qualified countries facing balance of payments pressures. The mechanism would help alleviate external financing pressures without countries entering into a formal Fund arrangement, thus reducing stigma. Purchases on the secondary market could however create perverse effects by undermining prospects for other creditors being

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[11] Alternative forms of partial guarantee include the Brady bond structure of collateralizing specified elements of the payment stream and the "rolling reinstateable guarantees" offered by the World Bank. However, the former structure is inefficient, as markets have learned to "strip out" the sovereign- and IFI-risk elements and trade them separately; while the latter have fallen into disuse following negative perceptions of investors in the aftermath of the Argentine default, which included a bond with this enhancement.

repaid. There is also a risk that in some circumstances the secondary market purchases may be ineffective in enhancing the member's capacity to issue debt, in which case the resources will have limited benefit. More fundamentally, sovereign debt market support may also be less effective at addressing the country's problems than Fund direct lending to the country. This is because the country benefits from sovereign market support only to the extent that spreads decline for new debt, which may require substantial intervention in secondary debt markets for existing debt by the Fund.

20. ***Modality***. The scheme could be activated for country-specific or systemic shocks. In the first case, as shocks could reflect problems with the country's own fundamentals, pre-qualification would be of critical importance to safeguard Fund resources. A pre-specified schedule would guide sales of debt instruments back to the market. The scheme would need to establish clear triggers for activation (e.g., jumps in the VIX or EMBI Global indices).

21. ***Legal and resource implications***. As GRA resources could not be used for such a vehicle, its feasibility rests either on an amendment to the Articles or the use of donor or SDA resources (the latter if the market purchases are designed as a means to provide balance of payments assistance on a uniform basis to members with balance of payments needs).

C. Country Insurance Instruments

22. ***Rationale***. Another gap in the global financial architecture is the lack of markets for pure sovereign insurance.[12] Pure insurance involves the payment of a premium during normal times, against a promise of an automatic *transfer* if a pre-specified adverse event materializes. Such insurance instruments would be particularly well-suited to emerging market and low income countries with exposure to commodity price volatility, natural disasters, or other exogenous shocks that raise solvency concerns. Insurance instruments would be less relevant for shocks to capital flows. The failure of private markets for sovereign insurance to develop reflects both supply (investor) and demand (country) factors:

- **Supply side** factors include prospective lack of liquidity; lack of natural counterparts for systemic shocks; difficulty in pricing;[13] and legal complications due to the difficulties of measuring or verifying contingencies. Within the official sector, the World Bank is actively developing some of these instruments, but country coverage for sovereign instruments is limited to non-LICs.

- **Demand side**: relevant factors include short-term horizons of policymakers (as insurance involves upfront costs against future payouts); counterparty risk, especially for systemic shocks; and difficulties in enforcing international contracts.

[12] See Becker et al. (2007).

[13] See Chamon and Mauro (2005) and Costa et al. (2008).

23. ***Advantages***. Pure insurance instruments at actuarially fair prices can offer several advantages over financing instruments or self-insurance via reserve accumulation:

- *Automaticity*. The automaticity of transfer payments increases predictability of payments, and lowers any stigma associated with financing instruments.

- *Countercyclical role*. The pattern of insurance premiums during normal times and payouts during crisis periods shares cyclical risks with investors, and helps avoid procyclical policies.

24. ***Limitations***. On the other hand, the range of shocks that can be insured against via pure insurance instruments is more limited than that covered by financing instruments. As the automaticity of transfers rules out ex post conditionality, insurance instruments can be offered in a cost effective manner only for contingencies that are both observable and exogenous to individual country policy actions, for example terms-of-trade shocks. At the same time, insurable shocks need to entail a substantial idiosyncratic or regional component—not even a genuinely global pool can insure against a fully global shock.

25. ***Fund Role***. In addition to providing technical support together with multilateral development banks, the Fund could help catalyze market trading of country insurance instruments. It could, for example, coordinate issuance of terms-of-trade bonds across countries so that countries could achieve risk diversification through pooling (e.g. oil price hedging for both importers and exporters Another option could be to purchase from countries GDP-indexed bonds or GDP-contingent bonds, of which the interest schedule or the principal fluctuates with GDP performance. A number of difficulties would need to be addressed, such as identifying triggers for insurance payouts, and appropriate insurance premiums, as well as ensuring adequate risk pooling.

26. ***Legal implications***. Transactions involving payouts against a stream of insurance premiums are not permissible in the GRA. First, the GRA's ability to provide open-ended, automatic transfers solely upon occurrence of a specified adverse event is limited under the current policy-based lending framework of the Articles which requires conditionality for all GRA transactions other than reserve tranche purchases. Second, any transfers made to a member under the GRA would have to be repaid.[14] SDA resources could in principle be used for insurance payouts (as grants are permissible for the SDA), but the purposes would have to be to provide balance of payments assistance to members with balance of payments needs. There is more flexibility with respect to donor resources, but even in this category, the Fund's administration of these resources must be consistent with the purposes of the Fund. If

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[14] Within the current legal framework, the Fund could in principle establish a special facility with a very low interest rate and longer repurchase period than the 10 years that has been the maximum repurchase period authorized to date for GRA transactions, in order to deliver some transfer element inherent to an insurance scheme. However, there are limits on the length of GRA repurchase periods, as GRA resources may only be made "temporarily" available to members, and only for use for balance of payments purposes.

the Fund's support is limited to providing technical support in helping to develop a market for insurance instruments, it could be treated as Fund technical assistance (which too must be consistent with the purposes of the Fund).

27. ***Resource implications***. An additional complication with the provision of pure insurance instruments is that the level of resources needed can be quite large considering the possibility for systemic shocks and limited diversification of risks, which may depend heavily on a common underlying factor such as global growth. To mobilize resources, one option would be to involve the private sector at the outset. Another option would be to engage with the official sector, particularly regional reserve pools and multilateral development banks. Any financial participation by the Fund in country insurance instruments would require significant capacity development and a reorientation of Fund financial structures (in any case, as noted earlier, these operations could not expose the GRA to any risk of loss).

Contingent Repayment Schedules

28. ***Rationale***. Contingent repayment schedules are an additional form of insurance against exogenous shocks. More flexible repayment terms, with automatic rescheduling, could reduce debt sustainability risks, and smooth fiscal and external adjustment to shocks.

29. ***Modality***. For emerging market countries, the country could delay its interest payment to the future, at an interest rate that would basically preserve the net present value of all payments, upon the occurrence of a special verifiable event (say, a sizable increase in the VIX or in the EMBI spread).[15]

30. ***Legal and resource implications***. Introducing automatic and open-ended contingent repayment reschedules in the GRA would require an amendment of the Articles, as the Articles limit the circumstances under which a member's repurchase obligation may be postponed beyond the maximum repurchase period under the relevant facility, and additionally require that the new repurchase period must be consistent with the "temporary" use of the Fund's general resources (Article V, Section 7 (g)); moreover, the Articles contain no authority for the nonpayment of charges when due.[16] Contingent repayment schedules could, in theory, be used in connection with balance of payments financing provided by the Fund using SDA or donor resources.

[15] For LICs, the approach could be broadly modeled on that introduced by the Agence Française de Développement (AFD), based on proposals by Borensztein et al. (2008). Such a proposal was considered by the Executive Board in the context of the LIC-facilities reform; see *The Fund's Facilities and Financing Framework for Low-Income Countries*.

[16] Article V, Section 8(e) provides limited authority for a member to pay charges in its own currency.

Sovereign Asset and Liability Management as a Form of Insurance

31. ***Rationale and Fund involvement***. Countries can use sovereign asset and liability management techniques to mitigate financial risks and reduce the need for explicit insurance. A country can seek to establish a structure of financial assets that can be used in times of financial stress to lay off associated risks by increasing the value of the reserves or reducing the size of liabilities falling due (Box 2). The Fund could play a useful role here by providing technical assistance on asset and liability management, including the management of contingent risks.

D. Conclusions

32. **Of the innovative reform options considered in this paper, the most attractive seem to be the following** (Table 5): (i) authorizing the Fund to issue guarantees backed by GRA resources; and (ii) permitting contingent repayment schemes within the GRA framework. Countervailing safeguards would need to be an integral element of any such reforms. If there was consensus around these ideas, amending the Articles would provide the most credible signal that these activities are appropriate and permanent elements of the Fund's mandate, helping countries to rely on them to complement the role of precautionary reserves. If the Articles are not amended, some of the innovative reform options contemplated in this paper could still be implemented but would require greater flexibility in mobilizing resources outside the GRA. The Fund could, for example, explore modalities to raise resources contingent on certain extreme events materializing.

Table 5. Summary of Key Innovative Reforms

Instrument	Purpose	Reform Option	Key Legal Implication
Lending against collateral	Alternative mode of financing to reduce stigma	Lend against collateral at penalty rate without policy conditionality	Amend Articles or use SDA or donor resources
Sovereign Guarantees	Alleviate temporarily government rollovers	Provide partial or full guarantees of new external government debt issuances	Amend Articles or use SDA or donor resources
Sovereign debt market support	Supporting confidence when sovereign debt market freezes up	Purchase portfolio of secondary market debt instruments based on trigger (systemic or country specific event; prequalification required for the latter)	Amend Articles or use donor resources; use of SDA resources may also be feasible, depending on design
Country insurance instruments	Provide pure insurance instruments to help countries manage efficiently exposures to shocks	Offer TA to (i) develop insurance instrument market ; (ii) manage sovereign assets and liabilities	No change needed (management can approve TA to members)
		Catalyze trading by issuing insurance contracts	Amend Articles or use SDA or donor resources
		Allow contingent repayment schedules • Repayment terms reset when shock occurs • Use pre-determined trigger	• Amend Articles or use SDA or donor resources • For concessional instruments requires flexibility of resources and maturity of loans to PRGT

Box 2. Sovereign Asset and Liability Management [1/]

Managing financial assets

- *Creating more liquidity insurance by borrowing to finance reserves*. Foreign reserves can be expanded by medium- to long-term external borrowing to increase buffers, as done by the UK, Canada and New Zealand. This approach avoids accumulating net reserves and associated foreign currency risk, while securing foreign currency liquidity that can be used in a crisis. Borrowing reserves does not exacerbate global imbalances as there are no net flows across countries when reserves are built up. This approach clarifies the cost of holding reserves (the country's external borrowing spread).
- *Investing foreign reserves in countercyclical instruments***.** Within an investment tranche of reserves, countries could make greater allocations to assets that tend to perform well in (global) crises, such as longer duration liquid government bonds, a typical safe haven asset in a crisis. This also boosts long-run returns (compared to investing reserves in T-bills), helping improve the solvency of the government on an ongoing basis. At the global level, such an approach would also tend to reduce distortions on the short-end of the debt markets in reserve currencies.
- *Investing foreign currency assets (e.g., in sovereign wealth funds) to manage commodity price risks***.** Foreign assets can also be invested to hedge exposures to price changes of a dominant export commodity. Where markets for direct hedging are not deep enough, indirect hedging can be used by investing in a basket of liquid equities and other assets that are inversely correlated with the commodity price (Claessens et al., 2009).

Debt and liability structures

- *Holding a larger proportion of debt (issued in highly-rated currencies) in floating rate instruments can reduce debt payments during systemic crises.* This is because policy rates are typically lower in systemic crises. However, using this type of insurance needs to be weighed against the risk of debt payments increasing in unfavorable times (notably the upward risks to inflation and policy interest rates).
- *More generally, debt portfolios can be constructed to help mitigate various types of risk taking into account the cost of the instruments.* Domestic currency debt shields sovereign issuers from the direct effects of currency depreciation. Long-term fixed rate bonds protect against rollover and repricing risks. Inflation-linked bonds provide for debt service that is well correlated with government revenue and can reduce rollover risk if used to lengthen maturities.

1/ See Mulder and Bussière (1999); Bussière et al. (2009); Debt and Reserve-related Indicators of External Vulnerability.

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