

# After the Allocation: What Role for the Special Drawing Rights System?

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## ABSTRACT

In August 2021, the IMF made a new SDR allocation to help ease pandemic-induced financial strains in the Global South. This paper assesses the potential of the SDR system to address debt-related problems in global finance. We analyze the SDR system as a web of interlocking balance sheets whose members can use SDR holdings—the system’s tradable assets—for conversion into usable currency as a perpetual low-interest loan or to make payments to each other. Using original IMF data, we study how the system has been practically used since 1990. Though widely perceived as a solution in search of a problem in the post-Bretton Woods era, we find that the SDR system provides three mechanisms through which IMF members borrow and lend usable currency to each other, with different strings attached: first, transactions by agreement; second, the IMF’s core lending facilities for which the SDR system offers additional resources; and third, IMF-sponsored Trusts which seek to harness the SDR system for development purposes and are the basis for the current idea of ‘voluntary channeling’. Overall, given the SDR system’s idiosyncratic accounting rules, the new allocation can improve the liquidity position of a country and offer some limited avenues for sovereign debt restructuring but comes with new interest and exchange rate risks. Voluntary channeling cannot happen without a wealth transfer, neither the SDR allocation nor the

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use of Trusts can overcome this problem. Still, Trusts can be a useful instrument to help with debt forgiveness and to ensure that borrowed funds are used for their intended purpose.

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## 1. Introduction

The Covid-19 pandemic has induced new financial strains for Emerging Market Economies (EMEs) and Low-Income Developing Countries (LDCs). The Institute of International Finance (IIF) has gone so far as to speak of a looming ‘attack of a debt tsunami’, as global public and private debt increased by over 15 trillion US-Dollar (USD) by the third quarter in 2020, hitting a new record of 272 trillion USD (IIF 2020). Cumulative issuance of sovereign bonds by 62 EMEs and LDCs from 2000 to 2019 amounted to 37.4 trillion USD, 90 percent of which was denominated in domestic currency, eight percent in USD, and the remaining two percent in other foreign currencies (OECD 2020). With the outstanding nominal value of these bonds at 691 billion (bn) USD as of January 2021 (Munevar 2021), there have been increasing concerns that the economic fallout of the Covid-19 pandemic will make it difficult for EMEs and LDCs to refinance their sovereign debt in the coming years (Laskaridis 2021) and pay for Covid-19 related expenses to tackle costs for health care and vaccination, as well as distorted supply chains and unemployment (Tooze 2021).

As a remedy to those strains on EMEs and LDCs, the International Monetary Fund (IMF) has carried out a new allocation of Special Drawing Rights (SDRs) amounting to 650 bn USD on 23 August 2021—the largest allocation so far (IMF 2021d). Calls for such a new allocation had been voiced soon after the outbreak of the pandemic in 2020 by scholars (Collins and Truman 2020; Gallagher, Ocampo, and Volz 2020) and non-governmental organizations (Oxfam International 2020). The proposal found support in the Biden Administration, which assumed office in January 2021, in particular by the new Secretary of the Treasury, Janet Yellen (Department of the Treasury 2021), and was endorsed by the finance ministers and central bank governors of the G20 (G20 2021). Recent IMF communications give evidence of the ongoing attempt to revamp SDRs into a mechanism capable of addressing contemporary problems of the global financial system, for instance through a ‘voluntary channeling’ of SDRs from Advanced Economies (AEs) to EMEs and LDCs (Georgieva 2021). This article sets out to analyze the potential of the new SDR allocation to play an important role in this regard.

A renewal of interest in SDRs emerges periodically after financial turmoil. In reaction to the 2007-9 Financial Crisis, the IMF decided in favor of a new SDR allocation (IMF 2018). The crisis also triggered proposals for SDR reform. For instance, calls for making SDRs marketable beyond their current constraints were voiced by both Governor Zhou of the People’s Bank of China (Zhou 2009) and a UN Commission led by Joseph Stiglitz (Stiglitz 2009), leading to a proliferation of academic research on the potential of SDRs to be turned into a world currency (Cooper 2010; Helleiner 2010; Kenen 2010; Williamson 2009; Wilkie 2011). Other proposals involved revamping an older idea of setting up a USD-SDR substitution account at the IMF for non-US central banks (McCauley and Schenk 2012) or an SDR-USD swap line between the Federal Reserve and the IMF (Truman 2008). These suggestions were revived during the Covid-19 crisis (Brown and Summers 2020).

Amid the periodically recurring interest in SDRs, however, substantial confusion remains about the nature of SDRs. This problem also stems from the fact that the label ‘SDR’ has different meanings: It simultaneously denotes two types of *financial instruments* and *a unit of account*. The instruments are properly called ‘SDR holdings’ (a tradable asset) and ‘SDR allocation’ (a non-tradable liability) which can be held by a narrowly circumscribed group of institutions. These instruments are denominated in SDR as a *unit of account*, which is defined as a currency basket whose exchange rate fluctuates against some of the world’s major currencies—the USD, the Euro (EUR), the Japanese Yen (JPY), the British Pound (GBP), and the Chinese Renminbi (RMB)—which are called ‘basket currencies’ or ‘usable currencies’. We use the international ISO 4217 currency code ‘XDR’ when we refer to the SDR as unit of account.

The appropriate object of analysis, we contend, are neither the instruments nor the unit of account by themselves but the overall *SDR system*. This is an analytical category that the literature on SDRs usually misses out on. Drawing on the emerging literature of critical macro-finance (CMF) (Gabor 2020; Dutta et al. 2020; Murau and Pforr 2020; Murau, Pape, and Pforr 2021) and the Money View (Mehrling 2011), we understand the SDR system as a *web of interlocking balance sheets*—a small public payment community with exactly 206 members—in which SDR instruments denominated in XDR are held and traded. The SDR system has idiosyncratic accounting rules that were originally conceived as a mechanism to redistribute currency held in central banks’ foreign exchange (FX) reserves to stabilize the Bretton Woods System. Yet soon after its inception, the problem of reserve insufficiency vanished as the fixed exchange rate system collapsed and private international capital flows came to dominate the international monetary system. In the post-Bretton Woods era, scholars usually discuss SDR instruments as a global ‘reserve asset’ and tend to either regard them as a relics with little use or project the hope on them that they could be the root for a better and more equitable global financial architecture. However, there is little focus in the literature on how the SDR system has actually been practically used in the last few decades, even though this is what determines the potential of the new SDR allocation to tackle the economic problems caused by the Covid-19 pandemic for EMEs and LDCs.

To assess the role the SDR system can play after the new allocation—for instance in addressing sovereign debt problems of EMEs and LDCs—we scrutinize how the SDR system has historically emerged and evolved, how its accounting rules work, and how it has been used in practice over recent decades. We base our analysis on four different types of sources: first, audited Financial Statements of the IMF; second, the IMF’s financial data query tool; third, IMF research and staff reports, especially the IMF Financial Operations Series; and fourth, various central banks reports on how they interact with the IMF and the SDR system. This analysis is complicated by the fact that the SDR system suffers from a severe lack of transparency which introduces various data limitations. The IMF neither releases regular transaction data by country nor is there any data on how individual countries use SDR holdings. This makes it impossible to pinpoint the exact usage of the SDR system. The only option is to study the system in the aggregate.

We find that the SDR system is based on idiosyncratic accounting rules—made for a different era and for a different purpose—offering two complementary *transaction types* that can be carried out with SDR holdings: conversion into usable currency, which has been created outside of the SDR system, and making payments with SDR holdings within the SDR system. Any transaction that leads to an outflow of SDR holdings entails future interest payments. In its practical usage, the SDR system uses combinations of both transaction types that result in three *mechanisms* through which IMF members borrow and lend usable currency to each other, but with different strings attached: First, IMF member states can use ‘transactions by agreement’ to directly exchange SDR holdings at a low interest rate for the currencies of other member states, mostly to obtain USD or EUR which they are free to use at their discretion. Second, IMF member states can pay SDR holdings—for instance in discharge of quota debt—as a direct contribution to the IMF, which in turn might lend these on in separate transactions through its traditional lending facilities at market rates and with conditionalities. Third, AEs can contribute SDR holdings to various IMF-sponsored Trusts, which lend them on to EMEs and LDCs at a zero-interest rate for poverty alleviation or disaster relief. Through all three mechanisms, the SDR system offers *de facto* credit lines for usable currency to IMF members where interest payments need to be made as soon as SDR holdings are actually transferred.

Against this backdrop, we provide three arguments about the potential role of the SDR system after the new SDR allocation. First, as the allocation increases the limit of the credit lines offered by the SDR system, it may to some extent help highly indebted EMEs and LDCs whose central banks have liquidity problems or whose treasuries seek to restructure their public debts. However, the available funding is more limited than it may seem, and while countries can borrow at a currently very favorable rate via a perpetual loan, this comes with serious interest and exchange rate risks. Second, due to the SDR system’s idiosyncratic accounting rules, voluntarily channeling SDR holdings from AEs to EMEs or LDCs cannot happen without a wealth transfer. Yet, the new SDR allocation by itself does not provide the necessary financing, and the idea to use existing or new Trusts does not fundamentally alter this problem. We argue that if a solution can be found to cover the financing gaps, it would be most beneficial to use Trusts for debt forgiveness. Finally, we hypothesize that the new SDR allocation will lead to a shift within the IMF towards more concessionary lending without conditionalities. To ensure that the funds are used according to their intended purpose, we believe it is preferable to organize lending via Trusts rather than to rely on transactions by agreement.

The remainder of this paper is organized as follows. Section 2 analyzes from a CMF perspective how the accounting rules of the SDR system work. Drawing on the limited available primary data, Section 3 explains how the SDR system has actually been used in the last three decades. Section 4 assesses the possibilities and the limitations that the new SDR allocation offers to EMEs and LDCs for dealing with increased government borrowing levels and expenditure needs after the Covid-19 pandemic. Section 5 concludes.

## 2. How do the accounting rules of the SDR system work?

The SDR system was created in 1969 to supply supplementary international reserve assets in the later years of the crisis-ridden Bretton Woods System. The express goal was to provide an accounting mechanism between the IMF and its member states that would correct some of the inherent shortcomings of the USD-gold standard as it would redistribute currency reserves and enhance the lending capacity of the IMF by economizing on gold and USD-denominated instruments.

Under fixed exchange rates, countries with a current account surplus accumulate foreign currency in their FX reserves as they export more than they import. Conversely, countries with a current account deficit lose foreign currency, putting pressure on the exchange rates of the surplus countries' currencies to appreciate, and on deficit countries' currencies to depreciate. To defend the fixed exchange rate system, the central banks of the deficit countries were required to intervene in the FX market by selling foreign currency held in their FX reserves. By increasing the supply of domestic currency, this mitigates the pressure to depreciate. However, as FX reserves flow to the surplus country, deficit countries were chronically short of foreign currency. FX reserves structurally ended up on the 'wrong' balance sheets, posing a structural problem to the fixed exchange rate system.

The IMF was designed in 1944 as a remedy to this structural problem. Countries paid a certain amount of their domestic currency or gold as their 'quota' to the Fund so that they could borrow non-domestic currency from the IMF once they had a balance of payment deficit and needed to temporarily replenish their FX reserves to carry out FX interventions (IMF 1946, 13). Initially, a member could pay with its own currency to borrow foreign currencies from other members. The credit character of those transactions remained largely concealed as the maturities were only loosely defined (De Vries 1986, 18). This changed in 1952 when the IMF decided, in view of its deteriorating holdings of USD, that members should begin repayments within three to five years (IMF 1952, 39). To expand on its financing volume, it introduced stand-by credit arrangements (SBAs), which were akin to a standing credit line at a bank. Rather than having to request a currency exchange from the Fund when needed, SBAs guarantee that the IMF would make available a particular amount of a specific currency for a certain duration, whenever a country requested it (IMF 1952, 95). To complementarily increase its borrowing capacity, the IMF set up the General Agreement to Borrow (GAB) in 1962. Up to that date, the IMF had to rely exclusively on the quotas of members as resources that it could lend out. The GAB gave the IMF a *de facto* credit line to borrow a maximum of the equivalent of six billion USD from a group of countries that would become known as the Group of Ten (G-10). Despite this expansion of the IMF's borrowing and lending capabilities, there was a widespread belief in the 1960s that the Bretton Woods System suffered from a shortage of USD-denominated instruments and that a new reserve asset was needed that would neither depend on gold nor USD but would expand the world's total liquidity (Triffin 1960; critical: Despres, Kindleberger, and Salant 1966). This gave rise to the process of developing the SDR system.

The accounting rules for the SDR system were negotiated in the G-10's *Study Group on the Creation of Reserve Assets*, which took up work in May 1964. There were four main conflict lines: first, whether the scheme to create new reserve assets should have global scope or be restricted to the G-10; second, whether the reserve assets were supposed to be created inside or outside of the IMF; third, how the reserve assets should be connected to gold; and fourth, what rules were supposed to be adopted for reserve creation. The French went into the negotiations with a proposal for a "Collective Reserve Unit" (CRU) which was supposed to be tied to gold and created outside of the IMF by the G-10 members. The US initially preferred a "drawing right" solution constructed as a credit line to the IMF to avoid weakening the USD. In 1965-66, under the chairmanship of Otmar Emminger of Deutsche Bundesbank, the US and the French changed positions. The French abandoned the idea of a pure asset token and called for the introduction of a credit instrument, whereas the US position now shifted to the introduction of a new reserve asset as they came to perceive the to-be-developed instrument as a way to economize on gold holdings rather than as a substitute for the USD. In March 1966, two opposing proposals were on the table—one based on drawing rights, the other one on units available to all Fund members. To overcome the standstill, the European Economic Community coordinated a joint position, agreeing that the initiative of a new reserve creation should come from the IMF. In the ensuing G-10 meetings, the working term "Reserve Drawing Rights" was changed into "Special Drawing Rights" upon French initiative, who wanted to strengthen the credit nature of the scheme. The final mechanism was agreed upon in G-10 ministerial meetings in summer 1967 (De Vries 1976, Ch. 1-9; Solomon 1996, 30–36).

As a result, the SDR system was designed as a closely circumscribed payment system organized around the IMF and open to all member states, not just the G-10. To manage the newly established SDR system, a new sub-balance sheet was added to the IMF—the SDR Department. The core of the Fund which operates the traditional quota system, the SBAs, as well as the GAB, was renamed as the "General Resource Account" (GRA) and positioned as a balance sheet next to the SDR Department. Taking the IMF's established accounting practices further, the SDR system was constructed around idiosyncratic accounting rules which—based on the French-American compromise—may legitimately be called 'financial engineering', long before the term became fashionable. SDR instruments were neither non-interest bearing 'outside money', such as gold, nor were they interest-bearing credit or 'inside money', such as drawings under IMF quotas (Kindleberger 1975). The accounting rules that were adopted are the attempt to provide a mix of both. Otmar Emminger compared the mechanism to a zebra, which could be either seen as a black animal with white stripes or a white animal with black stripes (Solomon 1996, 34). Despite some minor reforms, the SDR system uses the same idiosyncratic accounting rules today. To make sense of them, we must distinguish between allocations and transactions.

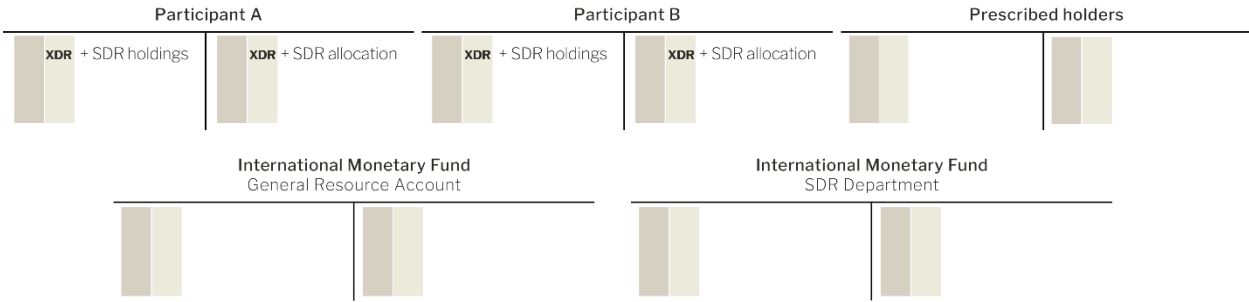
## **2.1. Allocations in the SDR system**

Figure 1 uses stylized balance sheets to show how an SDR allocation takes place within the SDR system. The SDR system is a small payment community that comprises three types of member balance sheets: first, one institution of each IMF member state, called 'Participant'; second, the

IMF itself, represented by the GRA; and third, a group of fifteen ‘Prescribed Holders’ including multilateral development banks and intergovernmental monetary institutions such as the Bank for International Settlement (BIS) and the European Central Bank (ECB). For most IMF members states, the central bank is the balance sheet that acts as Participant in the SDR system (Ocampo 2017, 61); in some cases, it is the treasury or an ‘off-balance-sheet fiscal agency’ (Guter-Sandu and Murau 2022). The most important example of a non-central bank participant is the US Exchange Stabilization Fund (ESF) (Henning 1999).

In a new SDR allocation, the balance sheets of all Participants expand symmetrically on both sides by creating ‘SDR holdings’ as an asset (indicated on the left-hand side of the balance sheets) and ‘SDR allocation’ as a liability (indicated on the right-hand side). Importantly, all other balance sheets that are part of the SDR system remain unaffected by the SDR allocation (Galicia-Escotto 2005; Ruhlmann and Holmberg 2017). Once an allocation is approved, the total amount is divided among the Participants according to their quota shares. Hence, IMF members with the greatest quota will expand their balance sheets the most. After an SDR allocation, the amount of SDR holdings and SDR allocation is fully inelastic in the SDR system, unless a new allocation is agreed upon.

Figure 1—Balance sheet mechanics for SDR allocation



The explicit distinction of the SDR into two instruments—an asset and a liability—is relatively new. It was only introduced with the 2008 version of the System of National Accounts (SNA), the authoritative manual for international accounting standards. Originally published in 1953, its first revision of 1968 already occurred before the SDR system had become effective. In its second revision of 1993, “SDRs” were treated as an asset without a corresponding liability, the argument being that for members “there is no actual (unconditional) liability to repay their SDR allocations” (IMF 1993, §440). This accounting practice had caused substantial criticism—for example, Erb (2004) argued that SDR are not only a reserve asset but also a reserve liability—and had occupied expert committees for a considerable time (Galicia-Escotto 2005). In the SNA’s third revision of 2008, the liability-less asset called “SDR” was abandoned in favor of a distinction between *SDR holdings* and *SDR allocation* (IMF 2009a; Hume McIntosh and Holmquist 2011).

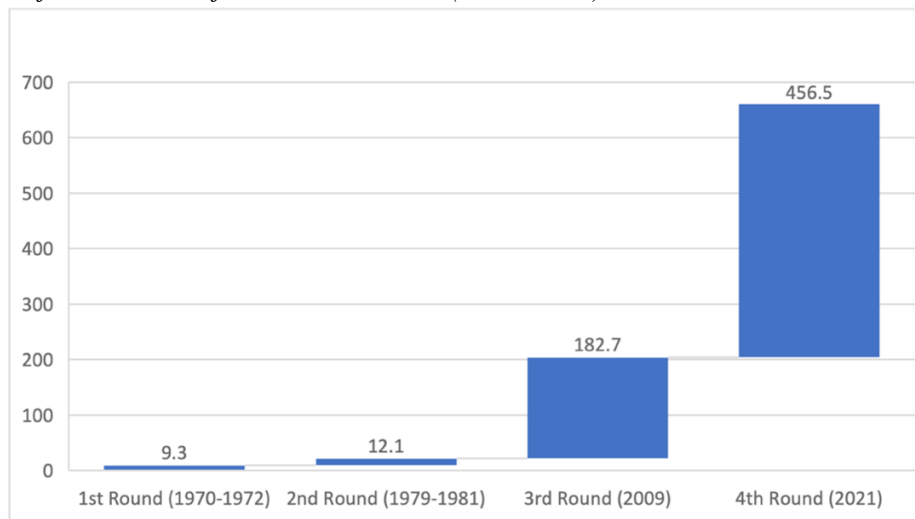


Both SDR holdings and SDR allocation are denominated in XDR. In our style of notation, the unit of account is displayed in the columns to the left of each instrument. Upon introduction of the SDR system in 1969, the SDR instruments (“SDR”) were denominated in USD. This corresponds to the goal of maintaining a fixed price relationship between the three reserve assets of the Bretton Woods System—gold, USD-denominated instruments issued by the Federal Reserves (such as notes and reserves), and the new SDRs. Only in 1974, after the collapse of the Bretton Woods System, did the XDR become a unit of account of its own whose value was determined via a currency basket that fluctuates against other units of account, including the USD (Kindleberger 1975). The XDR exchange rate is determined by the weighted exchange rates of a basket of currencies. Currently, 1 XDR is composed of 0.583 USD, 0.387 EUR, 1.02 RMB, 11.9 JPY, and 0.086 GBP (IMF 2018, 88). The composition of this basket is normally adjusted every five years. The next adjustment was meant to take place in 2020 but has been moved to 31 July 2022 (IMF 2021h).

Once an SDR allocation has been carried out, interest payments are received on *SDR holdings* (assets) and paid on the *SDR allocation* (liabilities) at the same rate of interest. Thus, as long as the volume of SDR holdings held by a Participant is equal to its SDR allocation, both payments will net to zero and no interest has to be paid. Interest will only accrue once a transaction with SDR holdings has occurred. The role of the SDR Department in the SDR system is to account for the individual positions of the participating balance sheets, recording both *holdings above allocations* and *allocations above holdings* and to administer the relevant interest rate and charge payments. Initially, the SDR interest rate was set at the fixed level of 1.5 percent, but later was changed into a market-based rate that is calculated as a blended average of the key interest rates of the basket currencies (IMF 2018, 86).

Historically, there have only been four rounds of SDR allocation (see Figure 2). A new round must be agreed upon by least 85 percent of all voting rights in the IMF Board of Governors, which also stipulates the total amount of the SDR allocation. The first round took place from 1970 to 1972, immediately after the establishment of the SDR system. The second round occurred over three annual installments between 1979 and 1981, amounting to a total of 12.1 bn XDR (Clark and Polak 2004). After the 2007-9 Financial Crisis, the total volume of SDR holdings and allocation was raised to 204 bn XDR. The latest SDR allocation in response to the fallout of the Covid-19 pandemic occurred on 23 August 2021, at 650 bn USD (456 bn XDR), an amount just below which would require special approval by the US Senate (US Congress, Special Drawing Rights Act of 1968, Section 3a). The largest share of this allocation went to the United States, hence the ESF balance sheet expanded by 79.55 bn XDR in SDR holdings and SDR allocation. The smallest portions went to Nauru and Tuvalu whose central bank balance sheets expanded by 2.69 million XDR and 2.37 million XDR, respectively (data based on IMF 2020).

Figure 2—The four rounds of SDR allocations (in bn XDR)



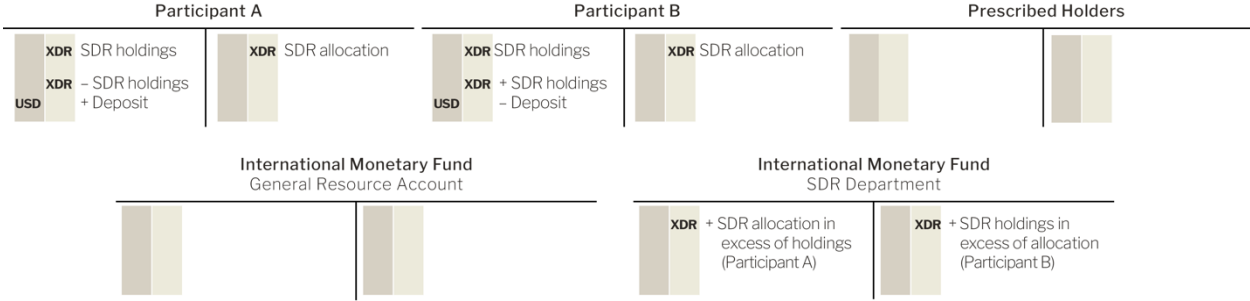
Source: International Monetary Fund

## 2.2. Transactions in the SDR system

Once an SDR allocation has taken place, two different types of transactions are possible within the SDR system: member balance sheets can exchange SDR holdings into usable currency or directly use SDR holdings as a means of payment.

The first transaction type allows a member to sell its SDR holdings to another member and receive an instrument denominated in usable currency. The most sought-after usable currency is the USD, followed by the EUR. The member which initiates the exchange can be either a Participant, the GRA, or a Prescribed Holder. Figure 3 demonstrates the mechanics for this first transaction type, using the USD as an example. Participant A decides to sell some of its SDR holdings in exchange for USD-denominated instruments (deposits) which it adds to its existing FX reserves. The counterparty to this transaction is Participant B which sells the USD-denominated deposit from its FX reserves and receives SDR holdings instead.

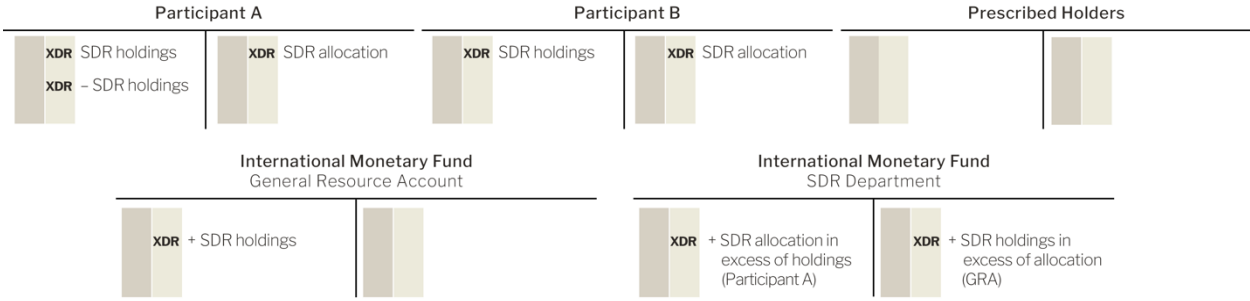
Figure 3—Transaction type 1: Exchange of SDR holdings into usable currency



While the transaction is formally and legally constructed as a sale and a purchase of SDR holdings and usable currency, functionally it is equivalent to a loan (IMF 2018) because Participant A will have to pay interest on its *SDR allocation in excess of holdings*. This position is recorded on the balance sheet of the SDR Department, which thus coordinates and collects future interest payments. It is also expected that Participant A will at some point return the usable currency it has received, even though the loan is technically in perpetuity. To conceptualize the credit nature of this transaction type, we can assume that Participant A simply borrows a USD deposit from Participant B by issuing a loan as a liability, i.e. a promise to repay the USD deposit in the future, which Participant B holds as an asset. This demonstrates that via the first transaction type, the SDR system *de facto* offers a credit line that Participants have with other Participants for usable currency, which has been created outside of the SDR system, albeit organized through the SDR system. The maximum theoretical limit of the credit line is the volume of a Participant’s SDR allocation, and the remaining SDR holdings determine the portion of the credit line that has not been used.

The second transaction type within the SDR system is that a member uses its stock of SDR holdings to make direct payments to other members. Figure 4 shows the example of how Participant A pays SDR holdings to the GRA. Just as for transaction type 1, this induces an increase in the position *SDR allocation in excess of holdings* for Participant A and of *SDR holdings in excess of allocation* for the GRA on the SDR Department’s balance sheet. It is only through this second transaction type that the GRA and Prescribed Holders—as member balance sheets which do not receive an original SDR allocation—can attain SDR holdings. As they do not have an SDR allocation, any position in SDR holdings will always lead to an inflow of interest payments to them.

Figure 4—Transaction type 2: Payment with SDR holdings



There are three different ways in which the second transaction type can be used (see Figure 5). First, it may be seen as the discharge of a debt that has previously been incurred with another member balance sheet. One of the original purposes of the SDR system was to allow IMF members to pay a portion of their quota in SDR holdings, which they owed to the Fund. When the IMF was founded in 1944, member states could pay 75 percent of their initial quota contributions and all future quota increases in domestic currency, but the remaining 25 percent—called ‘gold tranche’—had to be paid in gold. Later, the choice of eligible assets was expanded, and the tranche renamed into ‘reserve asset tranche’. Member states could now also cover this tranche with usable currency and—upon the inception of the SDR system—with SDR holdings (then still called SDRs). The demand for an additional quota contribution is a debt that the GRA holds against the Participants. Second, the transaction may be seen as loan if Participant A expects to be repaid. Third, the transaction may be constructed as a gift if Participant A neither owes to the counterparty nor expects a future repayment.

Figure 5—Different uses of transaction type 2 as a discharge of a debt, loan, or gift



For the second transaction type, SDR holdings function as genuine means of payment, albeit only within the narrow constraints of the SDR system. The main reason why SDR holdings are an acceptable means of payment is because the IMF has created an elaborate mechanism that guarantees conversion of SDR holdings into usable currency on demand. Hence, the use of SDR holdings in the second transaction type can be seen as a corollary of the first transaction type. Before the XDR was defined as a currency basket, SDR holdings (then only SDRs) were unambiguously tied to USD-denominated instruments. Today, this relationship is more ambiguous as SDR holdings—with the XDR now defined as a currency basket—can also be converted into EUR, RMB, JPY, or GBP. Still, given the paramount importance of the USD as the global key currency (BIS 2020), it does not go too far to think of SDR holdings as a credit line for USD-denominated instruments.

### **3. How has the SDR system been used in practice?**

The idiosyncratic accounting rules of the SDR system—Otmar Emminger’s zebra—were originally meant to provide a mechanism for efficiently redistributing currency held in the FX reserves of surplus countries to deficit countries in a fixed exchange rate system. However, following the end of the Bretton Woods system, the need to redistribute FX reserves for FX interventions became obsolete. In the post-Bretton Woods world, the SDR system became—as Clark and Polak (2004) argue—a solution in search of a problem.

Nevertheless, the SDR system had its very own evolutionary trajectory post-1973. First of all, it increased in scope (Mussa, Boughton, and Isard 1996, 427–35). As participation was voluntary from 1969 onward, it took until 1980s when Kuwait became a Participant that all IMF members were part of the SDR system. After 1990, the number of Participants increased by 42, as the former Soviet States joined after the end of the Cold War (IMF 2021e). Today, it has 190 Participants. Moreover, the emergence of Prescribed Holders is a post-Bretton Woods innovation. The BIS joined the SDR system as the first Prescribed Holder only in January 1974, five additional ones followed in 1980. Currently, the 15 Prescribed Holders comprise regional monetary funds, development institutions such as the World Bank and regional development banks, and regional central banks (IMF 2018, 91). The most recent Prescribed Holder to join was the ECB in 2000 (IMF 2000).

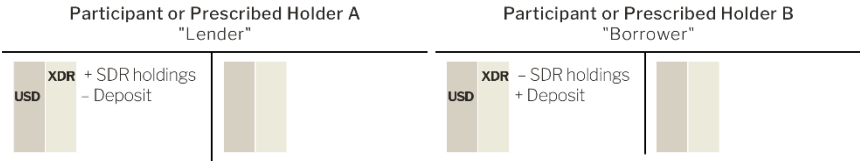
Second, despite the alleged obsolescence, the SDR system has continued to functionally evolve. After the end of the Bretton Woods system, the IMF substantially reworked its 1944 Articles of Agreement and turned itself from a provider of short-term loans to defend the fixed exchange rate system into an institution for last-resort loans to overindebted countries and, to a lesser extent, development finance to support EMEs and LDCs (Gold 1980). The SDR system participated in this transformation to some extent as the IMF set up Trusts connected to development finance, even though the SDR system was originally not considered suitable for it (Park 1973).

Drawing on an analysis of data provided by the IMF and other central banks, we show that—on an aggregate level—the main purpose for which the SDR system has been used in the post-Bretton Woods era is to lend currency, which has been created *outside* of the SDR system, from one member of the system to another. To achieve this, the SDR system uses combinations of the two transaction types incorporated in the accounting rules to offer three different mechanisms: transactions by agreement (Mechanism I), the GRA's lending facilities financed by quota contributions (Mechanism II), and IMF-sponsored Trusts (Mechanism III). These mechanisms vary regarding the conditions they offer—whether the rates are concessionary or non-concessionary; what the maturities for repayment of the principal are; whether Participants interact directly or intermediated via an IMF-related balance sheet; and whether borrowers can use the attained funds at their discretion or not.

**3.1. Transactions by agreement (Mechanism I)**

The first lending mechanism, called ‘transactions by agreement’, allows Participants and Prescribed Holders to borrow usable currency through a direct exchange of SDR holdings into usable currency (Figure 6). This mechanism is identical with transaction type 1 depicted in Figure 3. If Participant B is an EME or LDC, the mechanism is concessionary as the SDR interest rate is a weighted average of those paid by treasuries of AEs and therefore likely to be lower than their usual market rate. As there is no set repurchase date for SDR holdings, i.e. repaying the principal of the loan, the borrowing has a perpetual maturity and only interest payments will accrue. Participant B faces no limitations on how to use the borrowed currency and there is no conditionality attached. Overall, the credit conditions of this mechanism are highly advantageous to the Borrower.

*Figure 6—Direct borrowing and lending via transactions by agreement (Mechanism I)*

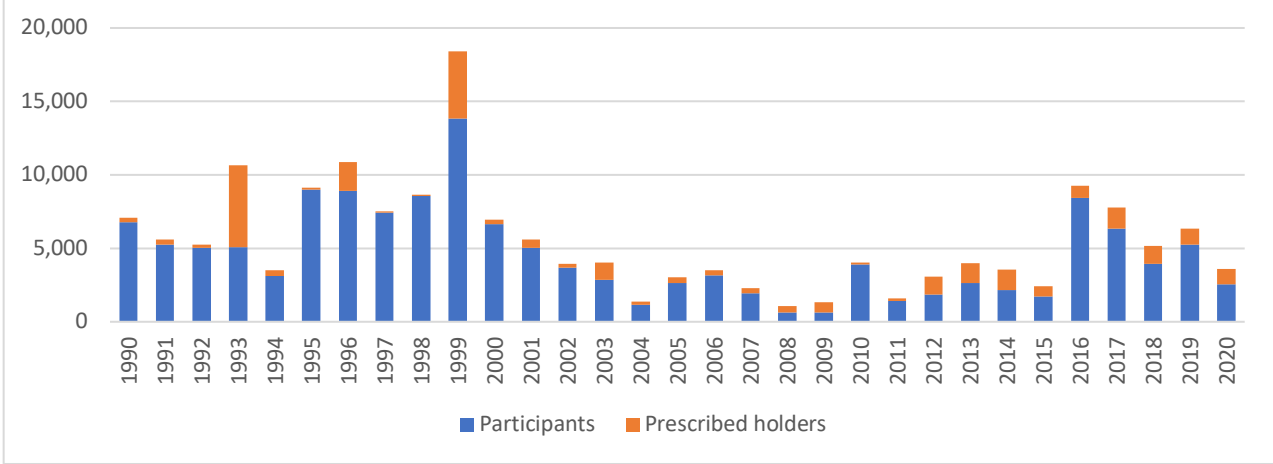


In the early years of the SDR system, there was no formalized process for exchanging SDRs into usable currency. Whenever a Participant or Prescribed Holder wanted to sell them, the SDR Department designated another Participant to act as the counterparty. This ‘designation mechanism’ was reformed in 1986 when the central banks of Austria and Belgium entered into a ‘Voluntary Trading Arrangement’ (VTA) with the SDR Department. VTAs are non-public contracts which stipulate that a country agrees to convert specific currencies up to an agreed limit against SDR holdings upon the request of the SDR Department. Participants with a VTA are now called ‘market makers’. Today, there are 34 market makers: 33 Participants (mainly AEs) and a Prescribed Holder—the ECB. Prior to the 2021 allocation, VTAs guaranteed cumulative access to 72 bn XDR for the purchase and 34 bn XDR for the sale of SDR holdings. After the allocation,

this was increased to about 234.1 bn XDR and 109.0 bn XDR, respectively (IMF 2021a). Should no member country agree to provide currency, the SDR Department still has the right to demand currency via the designation mechanism up to a specific amount. According to Gislén and Kangas (2020), this stood at a cumulative total of three bn XDR prior to the allocation. No information has been released to date as to whether this limit has also been expanded after the allocation. In any case, this mechanism has not been used since 1989 (Gislén and Kangas 2020).

Figure 7 presents an overview of the total volume of transactions by agreement that took place from 1990 to 2020. It shows the annual total volume of SDR holdings sold, i.e. usable currency borrowed, in the fiscal year from 1 May until 30 April. More detailed transaction data—notably which Participants or Prescribed Holders were the borrower and the lender and what usable currencies were borrowed—are confidential and not publicly available. Despite favorable borrowing conditions, the total volume of borrowing through this channel is low compared to lending in the global financial system. Among the main reasons for this is that EMEs and LDCs—those who have the greatest need to borrow through this mechanism—receive only small SDR allocations. The largest SDR allocations go to AEs for whom the mechanism offers little, if any, advantage compared to other ways to attain usable currency.

Figure 7—Sales of SDR holdings via transactions of agreement (1990-2020), in million XDR



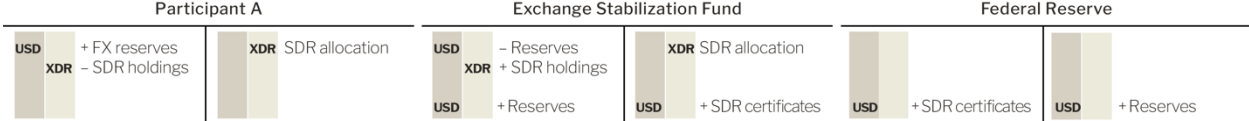
Source: International Monetary Fund, Annual Reports 1990-2020

Borrowing via transactions by agreement has parallels to central bank swap lines as Participants, mostly central banks, are able to borrow usable currency from each other (Gislén and Kangas 2020; Ruhlmann and Holmberg 2017). However, there are important differences. First, while swap lines allow instant access to foreign currency and can be unlimited in volume, borrowing via transactions of agreement is limited—for an individual balance sheet by the remaining SDR holdings, and for the entire system by the limits of the VTAs or, as last resort, the designation mechanism. Moreover, it involves an administrative process that takes around eleven workdays from the original expression of interest to the actual transfer (IMF 2018, 104). Using transactions by agreement is attractive to countries with liquidity needs that do not have access to central bank swap lines, typically EMEs and

LDCs (Murau, Pape, and Pforr 2021). Second, while the use of genuine swap lines involves central banks which lend out their own currency, thereby creating *new* money in the process, borrowing usable currency through the SDR system does not normally imply the creation of new usable currency. Rather, the usable currency has been accumulated in the Participants’ FX reserves beforehand.

That said, though uncommon, borrowing via transactions by agreement can include the creation of new usable currency in the case where that currency is lent by the Participant of the country which issues that currency. Figure 8 demonstrates how this exception works in the US case. The lender, Participant A, is the US’s Participant, the ESF. While the ESF is not able to issue USD-denominated currency itself, it can—as an additional step after purchasing SDR holdings from Participant B—issue another type of instrument called ‘SDR Certificates’ as its liabilities and require the Federal Reserve to buy it. If this happens, the Fed—which is not a member balance sheet of the SDR system—expands its balance sheet on both sides and creates new USD liquidity which it channels into the SDR system mediated by the ESF. The maximum volume of SDR Certificates that can be issued through this mechanism equals the ESF’s SDR holdings (Special Drawing Rights Act of 1968, Sec. 4a). While this mechanism has been used quite extensively during the 1980s and 1990s, the issuance of SDR Certificates occurs at a comparatively low level since the 2000s. Currently, the Federal Reserve holds 5.2 bn USD of SDR Certificates, which is a comparatively small fraction in relation to the ESF’s 163.6 bn USD of SDR holdings (FRED 2022). Given that the Fed can always sterilize the acquisition of SDR Certificates by selling US treasury securities, these operations do not necessarily affect the size of the Fed’s balance sheet.

Figure 8—Supply of fresh USD to the SDR System via the ESF issuing SDR Certificates



Even though the Articles of Agreement stipulate in Art. XIX, Section 3a that a Participant should use SDR holdings only for needs related to its balance of payments or reserve position, the IMF appears to have become more accommodating over time in how countries may use their SDR holdings, culminating in an August 2021 memo which states: “The SDR is an unconditional reserve asset, which means that the decision on how to utilize the SDRs rests with each member country” (IMF 2021g; also see 2021b, 39). While there is no official data available on the purposes for which usable currency borrowed via transactions by agreement have been employed, the Department of the Treasury (2010) has published some non-verifiable examples. Accordingly, after the SDR allocation in 2009, SDR holdings were sold for usable currency by Bosnia and Herzegovina, Mauritania, Moldova, Serbia, and Zimbabwe to finance budget deficits; by Malawi to replenish its FX reserves; and by Ukraine to pay obligations to natural gas suppliers.



### 3.2. The GRA’s lending facilities (Mechanism II)

The second lending mechanism of the SDR system operates through a network of payments of SDR holdings between the GRA and the Participants. The GRA uses the SDR system both to obtain parts of the IMF members’ quota contributions in SDR holdings and to administer its lending facilities. At the same time, the GRA allows Participants to pay charges and interest in SDR holdings and, conversely, pays out interest to the Participants, while sometimes even purchasing and repurchasing currency from them. In this way, the SDR system allows the GRA and member countries to economize on chronically scarce usable currency and to support the non-concessionary lending activities of the GRA. Figure 9 demonstrates the balance sheet dynamics of these processes via three separate transactions. In the example of a quota payment in SDR holdings, Participant A moves its SDR holdings to the GRA's account. Unless the GRA decides to simply hold the SDR holdings it has acquired to supplement its capital base of usable currency, it has two options. It can either lend these SDR holdings to Participant B as a direct payment (who can also either lend them on to yet another participant or convert them into usable currency via transactions by agreement) or the GRA can first convert its SDR holdings into usable currency (say USD) with Participant C and then lend out the usable currency via a transaction that is not recorded in the SDR system. Taken together, once the GRA transacts its SDR holdings, it acts as an intermediary that facilitates lending of usable currency among Participants.

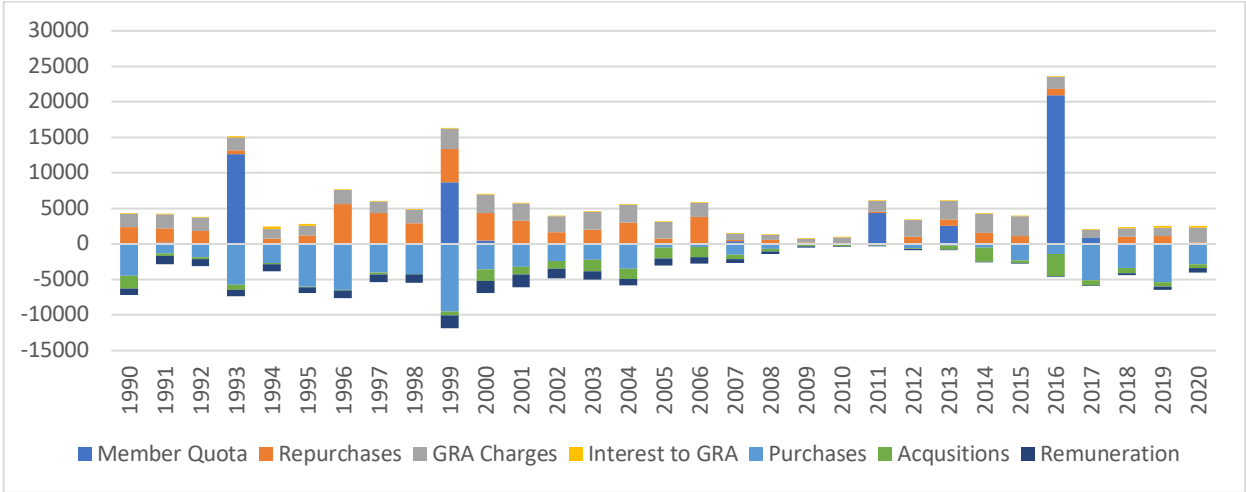
Figure 9—Borrowing and lending mechanism between Participants mediated by the GRA

Participant A "Contributor"		International Monetary Fund General Resource Account		Participant B "Borrower"	
XDR - SDR holdings	XDR - Quota debt	XDR + SDR holdings XDR - Quota debt			
Participant C		XDR - SDR holdings XDR + Loan		XDR + SDR holdings XDR - SDR holdings USD + Deposit	XDR + Loan
XDR + SDR holdings USD - Deposit					
XDR + SDR holdings USD - Deposit		XDR - SDR holdings USD + Deposit USD - Deposit XDR + Loan		USD + Deposit	XDR + Loan

Figure 10 visualizes the inflows and outflows of SDR holdings to the GRA from 1990 to 2020. Inflows are depicted as positive numbers, outflows as negative numbers. It shows four categories of operations that were carried out between the GRA and Participants via the SDR system (IMF 2018): First, Participants use SDR holdings to pay for the reserve asset tranche of their quota. Second, the GRA loans out some of its SDR holdings to Participants in need of financial assistance. When the Fund makes a loan to a Participant, it is called a ‘purchase’. The Participant’s repayment of the principal of the loan is a ‘repurchase’. Third, GRA and Participants pay each other interest charges in SDR holdings. ‘GRA charges’ refers to interest payments made by participants to the GRA for using the lending facilities of the GRA. ‘Interest to GRA’ occurs for the GRA’s SDR holdings. Vice versa, the GRA pays interest to Participants for providing the resources which

finance the GRA’s lending facilities. This position is called ‘remuneration’. Each of these operations corresponds to transaction type 2 as they only involve a payment in SDR holdings within the SDR system. The fourth operation, ‘acquisitions’, corresponds to transaction type 1. If the GRA needs usable currency, it can sell some of its SDR holdings directly to Participants in lieu of usable currency. It does not make use of market makers or the VTAs but rather chooses one of any Participants that is deemed to have a “sufficiently strong external positions to provide usable currencies” (IMF 2021g).

Figure 10—Inflows and outflows of SDR holdings to the GRA (1990-2020), in million XDR



Source: International Monetary Fund, Annual Reports 1990-2020

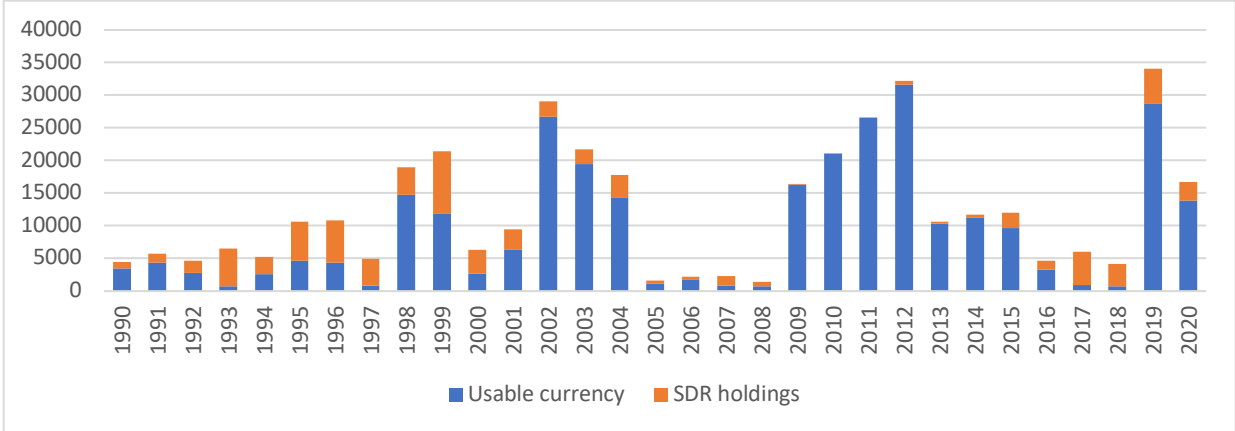
It is especially attractive for IMF members whose central banks do not issue a usable currency to pay their reserve asset tranche with SDR holdings. As they are not able to create usable currency themselves to fulfill a quota payment, they would first need to obtain usable currency or gold in order to subsequently pay the GRA. Using SDR holdings is a more convenient alternative that helps Participants economize on their own reserves of usable currency. Hence, it is not surprising that the second mechanism of the SDR system, which is connected to the GRA, has in general higher transaction volumes than the first mechanism, even though the first mechanism usually attracts more attention and is perceived as the primary purpose of the SDR system. This tendency has existed since the birth of the SDR system (De Vries 1986, 234).

The second mechanism brings a substantial net inflow of SDR holdings to the GRA. Between 1990 and 2020, as Figure 10 indicates, the GRA had cumulative inflow of SDR holdings of 162 bn XDR and a cumulative outflow of 129.9 bn XDR. Moreover, as *GRA charges* consistently exceed *remuneration*, the GRA's lending activities systematically increase its resources. From 1990 to 2020, the GRA had a cumulative net inflow of SDR holdings of 35 bn XDR. As the GRA does not have any SDR allocations, the SDR system is constructed such that the GRA always holds positive

*holdings above allocation* and thus receives an inflow of SDR holdings via interest payments. These amount to a cumulative 2.5 bn XDR from 1990 to 2020.

The GRA uses the resources attained via the SDR system to support its lending programs. Except for the years 2007 to 2014, the GRA made substantial loans to Participants in SDR holdings, ranging from 10 bn XDR in 1999 to a more regular 5 bn XDR in 2019. Currently, the IMF has five different lending facilities, operated by the GRA, through which member states can borrow from the Fund: Stand-by Credit Arrangements (SBA), the Extended Fund Facility (EFF), the Rapid Financing Instrument (RFI), the Flexible Credit Line (FCL), and the Precautionary and Liquidity Line (PLL). Through all these facilities combined, IMF members can borrow annually up to 145 percent of their quota. This has been increased to 245 percent in response to the Covid-19 crisis. Additionally, countries can apply for exceptional access (IMF 2018, 126). This borrowing can either be carried out in usable currency or in SDR holdings. Figure 11 juxtaposes the volume of SDR holdings and usable currency used in GRA lending in all facilities. It shows that in the period from 1990 to 2020, only 27.7 percent of total GRA lending was done in SDR holdings. For each facility, the GRA requests a commitment fee, a service fee, and interest which will lead to an inflow of SDR holdings via *GRA charges*.

Figure 11—Loans of the GRA to member states (1990-2020), in million XDR



Source: International Monetary Fund

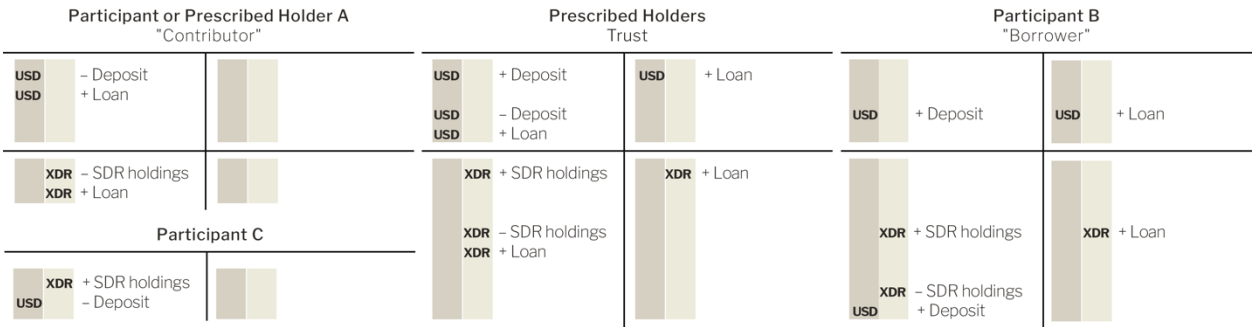
In aggregate, the operations of the second mechanism are functionally equivalent to those in the first mechanism insofar as they entail Participant A lending to Participant B. However, Participants A and B receive varying interest rates, depending on the facilities used. As the borrowers pay their market rates, this is non-concessionary lending. The positive interest differential flows to the Participants that finance the lending facilities, but the GRA—which is now involved as an intermediary—keeps some fees to cover its administrative expenses. Depending on the lending facility, the loan duration is typically between one and five years but loans can be extended. The GRA stipulates explicitly how the provided funds must be used and Participant B will be additionally subject to conditionalities.

### 3.3. IMF-sponsored Trusts (Mechanism III)

The third lending mechanism involves IMF-sponsored Trusts. Financially well-off Participants, typically AEs, and Prescribed Holders (IMF 2021c, 97) lend currency or SDR holdings to Trusts which then provide concessionary lending or debt relief to EMEs and LDCs. Such Trusts are conceptually and functionally sub-balance sheets of the IMF (who is the ‘trustee’), but legally different entities. As they are not themselves member balance sheets of the SDR system, their participation is facilitated by the BIS as a Prescribed Holder (IMF 2018, 95). The aim of these Trusts is to assist “eligible countries in achieving and maintaining a stable and sustainable macroeconomic position consistent with strong and durable poverty reduction and growth” (IMF 2018, 47). In IMF language, the provision of SDR holdings or currency to the Trust is called ‘contribution’ or ‘borrowing’. The Trusts’ lending activities are a ‘disbursement’, and servicing the debt is called ‘repayment’.

Figure 12 shows how the Contributor—Participant or Prescribed Holder A—lends to the Trust, while the Borrower—Participant B—receives a loan from it. This procedure can be both carried out outside or within the SDR system. In the first scenario, the Trust operates outside of the SDR system. Participant A provides a USD-denominated deposit to the Trust, which it passes on to Participant B as another USD-denominated loan. In the second scenario, this operation does involve the SDR system. Participant A provides SDR holdings to the Trust as a loan via transaction type 2. The Trust issues the loan as its liability and promises to repay the SDR holdings in the future at the SDR interest rate. The Trust then passes on the SDR holdings to Participant B as part of another loan, currently at a zero interest rate (IMF 2021c, 82). Finally, Participant B can convert these SDR holdings into usable currency via a transaction by agreement (transaction type 1) with Participant C, should this be required (IMF 2021f).

Figure 12—Contribution and disbursement mechanism intermediated by Trusts



Currently, the GRA operates three main Trusts from which, as of 2017, 70 countries were eligible to borrow (IMF 2018, 53). These Trusts belong to two different categories. First, the *Poverty Reduction and Growth Trust* (PRGT) provides concessionary lending to eligible EMEs and LDCs. It uses the SDR system for collecting contributions and disbursements, as well as repayment. Originally set up in December 1987, the PRGT held 21.1 bn XDR in assets as of April 2021 (IMF

2021c, 86). It provides concessionary loans via three facilities: the *Extended Credit Facility* meant for protracted balance of payment needs; the *Stand-by Credit Facility* for short-term and precautionary balance of payment needs; and the *Rapid Credit Facility* for fast access with limited conditionality (IMF 2018, 48).

Second, two smaller Trusts provide debt relief and use the SDR system for collecting contributions. The *Trust for Special Poverty Reduction and Growth Operations for the Heavily Indebted Poor Countries* (PRG-HIPC) Initiative was launched as a collaboration between the IMF and the World Bank in 1996. In April 2021, it held assets of 0.3 bn XDR. The *Catastrophe Containment and Relief Trust* (CCRT) was created in 2015 as a response to the Ebola outbreak in West Africa and replaced the *Post-Catastrophe Debt Relief Trust*, which had been set up in 2010 after the Haiti Earthquake. With a funding volume of 0.1 bn XDR, the CCRT has recently provided debt service relief to 29 of the poorest countries. In response to the Covid-19 pandemic, the IMF has tried to fundraise 1.4 bn USD to widen the scope of CCRT activities (IMF 2021c, 86). As of August 2019, the PRG-HIPC has been confronted with a total of 17 lawsuits by hedge funds and international asset managers who oppose their attempts to provide debt relief (IMF 2019a).

The rationale of all three Trusts is to redistribute resources from rich IMF members to alleviate poverty. This is partly done in currency, but an important component is to tap unused SDR holdings of AEs. All three Trusts are constructed to have a structural funding gap and make losses (IMF 2022). As a concessionary lending tool, the PRGT pays a higher interest rate to the Contributors than it collects from the Borrowers. The PRG-HIPC and CCRT as debt relief tools borrow money without receiving any repayment. To cover the losses, the GRA makes regular transfers in both currency and SDR holdings to the Trusts to keep them operational. One funding source of those transfers were gold sales which benefited the original *Trust Fund* in 1977. This has served as the prototype for the newer trusts. Another funding source is an extra fee called *SCA-I* that the GRA can levy on GRA loans in SDR holdings and currency. Here, Mechanism II as described above subsidizes Mechanism III (IMF 2018, 136). Hence, even though all Trusts help to fund developmental objectives, the SDR system cannot itself provide the financing that is necessary to operate such programs. Instead, that financing always needs to come from other sources.

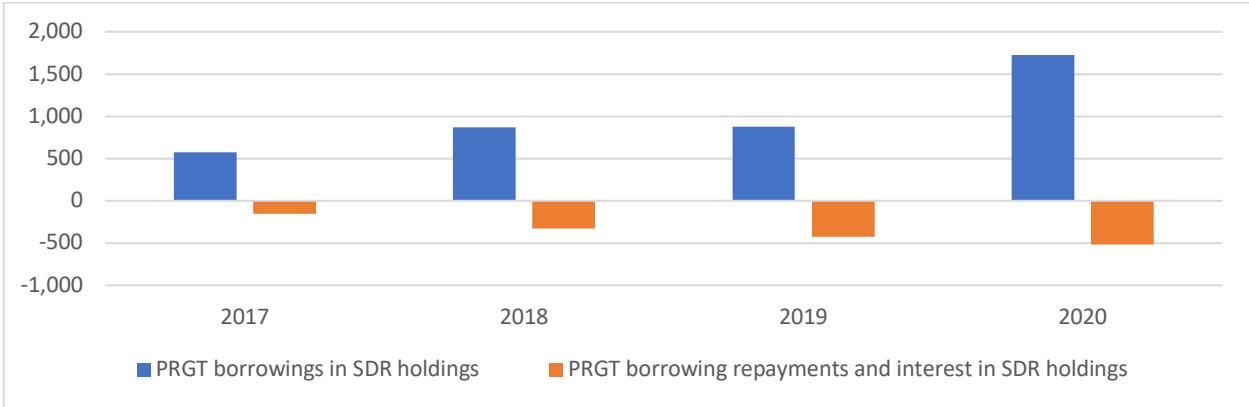
Due to gaps and flaws in the available data, it is not possible to provide a complete picture of the role which the SDR system plays in the financing of Trusts. However, a number of different data points do allow some insights. For example, Figure 13 shows that in the years 2017 to 2020, countries have provided a larger contribution in SDR holdings to the PRGT than they have received as repayments from the Trust.<sup>1</sup> As of August 2021, the PRGT had been promised additional funding of 19.6 bn XDR in loans. Seven of these loans were made in SDR holdings,

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<sup>1</sup> Sufficiently detailed and granular data about the contributions to the Trusts is only available from 2017. It is often difficult to distinguish which of the three Trusts received contributions. The information published on the IMF data query tool is partly contradictory to the information published in Staff Reports such as IMF (2021f) regarding the actual volumes of contributions collected by the Trusts and the instruments used—whether in currency or SDR holdings.

eight in currency (IMF 2021f). While the PRG-HIPC and CCRT had not received any contributions in SDR holdings in 2017-19, the CCRT received 147 million XDR and the PRG-HIPC 3 million XDR, but the available data does not state whether this was in currency or SDR holdings. Moreover, the GRA used the SDR system in 2019 to make transfers of 240 million XDR in SDR holdings to the Trusts (IMF 2021c). Overall, these numbers show that the SDR system plays a small but considerable role for financing the Trusts. Their relevance increased sharply with the Covid-19 pandemic when Contributors mobilized unprecedented numbers of SDR holdings for the PRGT to help mitigate the pandemic impact.

Figure 13—PRGT borrowings and borrowing repayments and interest (2017-2020), in million XDR

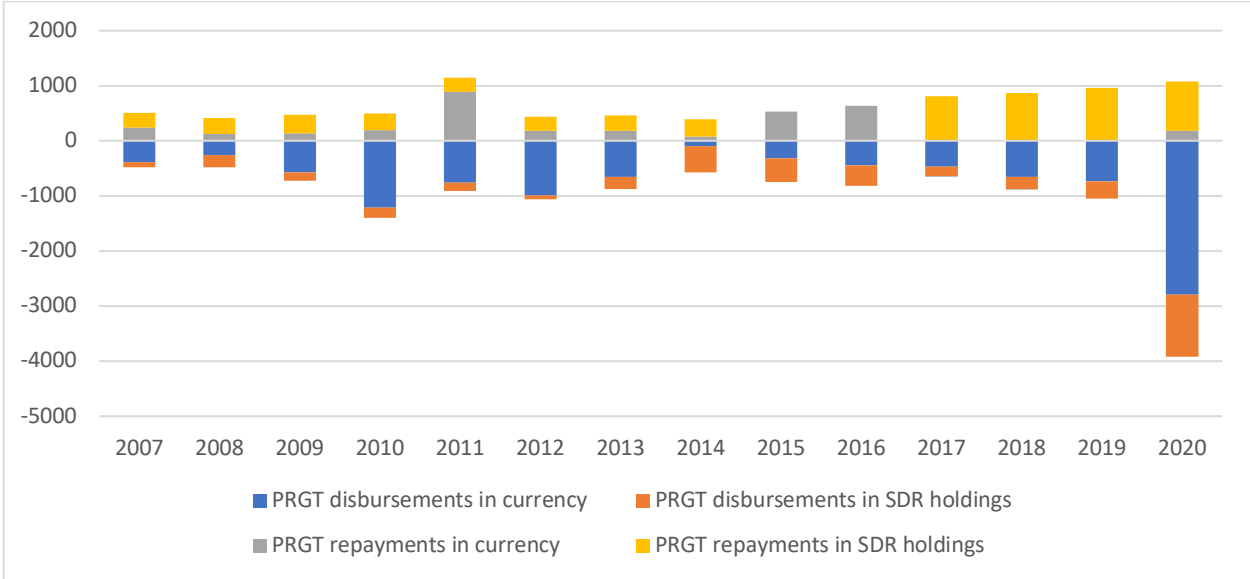


Source: International Monetary Fund, Annual Reports.

Figure 14 shows the quantitative role that the SDR system played between Trusts and Borrowers for disbursement and repayment. The only relevant case is the PRGT as SDR holdings are not used by the other Trusts to finance debt relief. The best available data quality is for the period 2007 to 2020.<sup>2</sup> The data indicates a spike in PRGT disbursements in 2020 due to the Covid-19 pandemic. Across the time period, borrowers received cumulative loans in SDR holdings amounting to 4.2 bn XDR (compared to 10.3 bn XDR in currency) and made cumulative repayments in SDR holdings of 5.8 bn XDR (compared to 3.3 bn XDR in currency). This shows that countries tend to receive their PRGT loans in currency but repay them in SDR holdings, which implies that Trusts contribute to a conversion of SDR holdings into currency besides transactions by agreement. If lending in the PRGT facilities was to be increased substantially, the new allocation would allow countries to use these new resources to make future repayments under these programs.

<sup>2</sup> Before 2007, there are inconsistencies in the data of the IMF Data Query Tool and the data published in the Annual Reports. Therefore, we have chosen to omit earlier data.

Figure 14—PRGT disbursement and repayment (2007-2020), in million XDR



Source: International Monetary Fund, Annual Reports

The Trusts are a relatively new tool to provide help to LDCs and some EMEs via concessionary financing and debt relief. The SDR system is one piece of the puzzle in this endeavor as the Trusts offer a way to harness unused SDR holdings of AEs. This third mechanism is similar to the first two mechanisms insofar as it entails Participants lending to each other, but it comes with important differences. First, contributions of SDR holdings to the Trusts are fully voluntary, whilst in the second mechanism they are part of the mandatory quota payment. Second, Trusts are unusual vehicles as they are designed to make losses. The PRGT offers concessionary lending conditions that are even more favorable than the SDR interest rate —since 2009 the PRGT has offered an interest rate at zero percent (IMF 2019b). The PRG-HIPC and CCRT even offer the possibility of debt forgiveness on older loans. Third, as the Trusts are not actually members of the SDR system, they are in a hybrid position between the IMF and the BIS, and effectively attribute a role in development finance to the BIS. *De facto*, Trusts are an attempt to repurpose the SDR system for development finance without changing its basic accounting rules.

**4. What role for the SDR system after the new allocation?**

With the emergence of the Trusts, the SDR system has undergone a degree of institutional transformation. Considering these changes, an important question is whether the new SDR allocation of August 2021 can help address the financial consequences of the Covid-19 pandemic. In a statement accompanying the new allocation, IMF Managing Director Kristalina Georgieva (2021) calls it “a critical component of the IMF’s broader effort to support countries through the pandemic”. Drawing on our analysis of the SDR system's idiosyncratic accounting rules and of the SDR system's past empirical usage, we focus on three aspects to discuss the role that the SDR system can play after the new allocation: first, the potential and pitfalls for EME and LDC borrowing via the SDR system;

second, the possibilities that come with voluntary channeling and Trusts; and third, changes in the relative weight of the different terms for IMF lending.

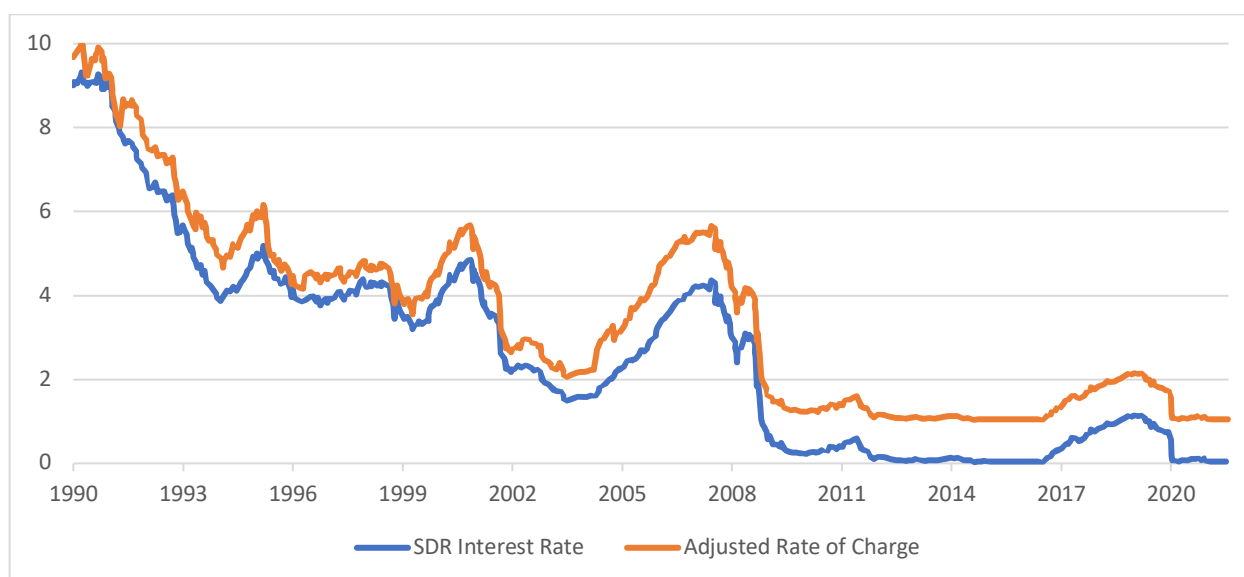
#### **4.1 Borrowing via the SDR system—potential and pitfalls for EMEs and LDCs**

Due to the SDR system’s idiosyncratic accounting rules, a new SDR allocation may look like a form of money creation as Participants’ balance sheets expand. However, as any transaction of SDR holdings leads to future interest payments, any usage of SDR holdings is just a special type of loan. It can never by itself decrease the total indebtedness of a country. Whether Participants convert their SDR holdings into currency (first transaction type) or use them as a direct form of payment (second transaction type), their reduction of SDR holdings entails a future cash outflow via interest payments if their holdings drop below allocation or, if their holdings remain above allocation, leads to a reduction in cash inflow because their received interest payments decrease. A new SDR allocation therefore can never be a direct way to reduce a state’s aggregate debt burden.

That said, the ability to borrow usable currencies via the SDR system can to some extent help EMEs and LDCs confronted with post-pandemic debt sustainability problems and economic fallout. The reason is that the SDR interest rate—determined as the weighted average interest rate of the basket currencies—is substantially lower than the rates EMEs and LDCs would typically face on private markets. Figure 15 shows the level of the SDR interest rate, which dropped from around nine percent in 1990 to close to zero percent in 2021. Moreover, the figure depicts the adjusted rate of charge, which includes the additional charges that Participants have to pay when they use the GRA facilities by borrowing from the GRA via Mechanism II. It currently stands at the SDR interest rate plus 100 bps. This extra margin is meant to cover the cost of financing, add to reserves, cover administrative expenses, and further compensate arrears (IMF 2020). From this perspective, the new SDR allocation does provide some breathing room for financially strained EMEs and LDCs.



Figure 15—SDR interest rate and adjusted rate of charge (in percent)



Source: International Monetary Fund

On the one hand, the SDR system can help EME and LDC central banks that have acute liquidity problems in their FX reserves but do not have access to other emergency liquidity arrangements such as central bank swap lines. The SDR system represents a last-resort mechanism to replenish depleted FX reserves with key currencies, first and foremost the USD (Murau, Pape, and Pforr 2021). However, given that it normally takes eleven working days for SDR holdings to be converted into usable currency, borrowing via the SDR system is a very slow process, especially in comparison to the speed at which worldwide financial markets move.

On the other hand, given currently low interest rates, EMEs and LDCs can potentially use the SDR system to restructure their public debts. Different ways of proceeding are conceivable. First, the increase in the volume of FX reserves held by EMEs and LDCs caused by the SDR allocation may lead to a higher confidence of private investors about the sustainability of their debt position (S&P Global Ratings 2021). In this case, the SDR allocation has by itself a beneficial effects for EMEs and LCDs by lowering sovereign borrowing costs and crowding in private sector investments while helping with ‘market re-entry’ (Songwe 2021). Second, EME or LDC central banks can convert SDR holdings into usable currency to either refinance sovereign debt that is becoming due or purchase previously issued sovereign debt on the secondary market, potentially even at a discount to face value. This would require the cooperation of some commercial banking institution, due to access and pricing dynamics. Third, some EME or LDC central banks may even be in the position to sell SDR holdings and pass on the newly acquired usable currency to the treasury department, which can use these funds instead of issuing new sovereign bonds.

At the same time, borrowing usable currency via the SDR system comes with interest rate and exchange rate risks. Key AEs such as the US and the EU are experiencing historically low interest rates for the last 15 years. If these were to rise again in the future, EMEs and LDCs that have used the SDR system to get a perpetual maturity loan as a cheap financing tool will likely find themselves once again trapped by rising interest expenditures. This will subject them once again to the global financial cycle rather than shield them from private market dynamics. In addition, any repayments of SDR holdings must occur in usable currencies. If the exchange rate of a country's currency vis-à-vis the USD or other basket currencies depreciates, the refinancing will become more difficult.

In general, the extent to which the SDR system can provide usable currency to EMEs and LDCs is more limited than may appear at first sight. Even though there are now nearly 1 trillion USD of SDR holdings available, the IMF cannot demand rich countries to provide anything near that in usable currency, as both VTAs and the residual designation mechanism have a ceiling. While this ceiling has been increased to from 100 bn USD to 328bn USD with the new allocation, the difference between the total SDR allocation and the amount that can be converted into usable currency remains substantial. This limitation to usable currency available in the system is further exacerbated by the fact that usable currency borrowed via the SDR system must be accumulated in the FX reserves beforehand and—some minor exceptions notwithstanding—cannot be created on the spot.

#### **4.2 An expanded role for Trusts? The voluntary channeling of SDR holdings**

Together with the new SDR allocation, the idea of 'voluntary channeling' has gained traction. Voluntary channeling is meant to remedy the problem that AEs receive the majority of any allocation while only a small fraction goes to EMEs and LDCs (Georgieva 2021). However, given the SDR system's idiosyncratic accounting rules, voluntary channeling is an intricate concept. As the transfer of Participants' SDR allocation (a liability) is not possible under current rules, a possibility within the existing accounting rules could be for AEs to pass on SDR holdings as a gift to LDCs. Yet, this would entail a real wealth transfer as the AE would face perpetual future interest outflows and the LDC corresponding future interest inflows. It would not be correct to assume that the large SDR allocations to AEs only "lie idle" on their balance sheets and could be harnessed without actual cost. This problem has long been well understood by the IMF (cf. IMF 2009b), and frequently been restated (cf. Plant 2021).

Instead, current discussions about voluntary channeling focus on ways for AEs to shift parts of their SDR holdings to EMEs and LDCs via Trusts (Jones and Shalal 2021). Some proposals focus on the PRGT and suggest expanding its lending power (Georgieva 2021). More specifically, the IMF calculates that the new SDR allocation should be followed by a 45 percent increase in the normal limits on access to concessionary financing, which would necessitate an additional 2.8 bn XDR in subsidy resources and a further 12.6 bn XDR in PRGT loan resources (IMF 2021i). Other suggestions foresee the creation of a new Resilience and Sustainability Trust (RST)—according to preliminary

comments a facility similar to the PGRT but with longer maturities (Georgieva 2021)—which could not only tackle post-pandemic debt problems but also contribute to financing the Green Transition (Bhandary and Gallogly-Swan 2022).

In any of those cases, however, the crux of the matter will remain the same: To offer concessionary financing via Trusts, someone must bear the losses. As the SDR system itself cannot provide this financing, the increased SDR allocation is not in itself a step forward to solve the problem. If the losses are not borne by AEs which lend out SDR holdings at reduced interest rates or even gift them after all, the GRA can provide it with the SCA-1 fee, which means subsidizing Mechanism III by charging more from Participants borrowing via Mechanism II. This is not an ideal solution as it implies taking away from the poor to give to the even poorer (Stiglitz and Gallagher 2022), and the volume of cross-subsidization that can be obtained via this channel is limited. Other proposals to close the financing gap involve gold sales, as in the original Trust Fund (Elliot 2020), or a further expansion on the subsidy fund to which AEs donate (IMF 2021i). Andrews (2021) discusses a further idea that multilateral development banks could play a larger role in the SDR system. As Prescribed Holders, they could receive SDR holdings as ‘capital contributions’ and use these to lever up their lending capacity by borrowing in private markets—but there remain substantial legal questions surrounding the practice of using SDR holdings as equity capital.

To wit, in all of these considerations, the SDR system is not a necessary ingredient to provide financing for EMEs and LDCs. What is necessary is that an AE can be found to make a wealth transfer, whether within the SDR system or outside of it. One advantage of the new SDR allocation may be of political rather than financial nature: Shifting the issue of a wealth transfer into the realm of the SDR system frames the problem as a technocratic rather than a political one, which potentially avoids having to go through budgetary processes. Using the balance sheets of central banks may involve less political opposition than transfers via the public budget but it also opens the door to criticisms that central banks are overstepping their mandates.

All the proposals discussed essentially aim at increasing the lending volume of the IMF and thus shift the burden of repayment for EME and LDC debt to an uncertain future. Arguably, the more promising idea would be to use the new SDR allocation for further debt-forgiveness, which has been pursued via the PRG-HIPC Trust. If ways could be found to close the funding gap to Trusts, these could buy up government debt in secondary markets and then cancel it. If successful, this would help EMEs and LDCs reduce their overall debt burden and be a more financially sustainable way than throwing new debt after old. However, the experience of the PRG-HIPC Trust suggests that this process may not be possible at scale as even small interventions have been met with numerous lawsuits by private financial firms (IMF 2019a).

#### **4.3 No strings attached? The impact of the SDR allocation on the IMF's lending apparatus**

Due to asynchronous processes of institutional adaptation, there are different terms available today under which an EME or LDC can borrow within the structures of the IMF. These different terms

encompass the question of whether to offer concessionary rates, whether to make stipulations on how to use the borrowed funds, and whether to require EMEs and LDCs to submit to cumbersome, if not painful, conditionalities as a prerequisite for receiving funds. Let us take the example of an LDC that requires a loan. If it borrows through Mechanism I, by selling SDR holdings via transactions by agreement, it will receive a concessionary rate without any stipulations on how to use the borrowed funds and without conditionalities. If the LDC were to borrow via Mechanism III, the Trusts, it would also receive a loan at a concessionary rate without conditionalities but there will be some stipulations attached on how to use the proceeds. These options stand in stark contrast to borrowing from the GRA via Mechanism II. In this case, the LDC will have to accept a non-concessionary rate including fees to cross-subsidize other lending programs, stipulations how to use the money, and conditionalities.

As the new SDR allocation has more than tripled the volume of total SDR holdings from 204 bn XDR to 660 bn XDR, it is likely to lead to a shift of borrowing activities away from Mechanisms II towards the two others that would offer concessionary rates without conditionalities. Traditionally, the total available funds for concessionary borrowing without conditionalities have always been a smaller proportion than those for non-concessionary borrowing with conditionalities. For comparison, the total lending capacity of the GRA stands at 707 bn XDR, of which 316 bn XDR come from quotas, 285 bn XDR from New Agreements to Borrow, and 106 bn XDR come from Bilateral Borrowing Agreements (IMF 2021j). This sum was 3.5 times as large as the theoretical maximum level of concessionary conditionality-free financing available through the SDR system prior to the 2021 allocation. Now the difference has largely been levelled. The implications of this remain to be seen, but they may influence the wider lending policies and strategies of the Fund.

Even though the new allocation is meant to provide relief against the consequences of the pandemic, there is no way to make sure that usable currency attained by EMEs and LDCs through the sale of SDR holdings via transactions by agreements is actually used for this purpose (IMF 2021b). The money may equally well be used for pet projects or disappear in various government channels. This danger may be less prevalent if the funds are lent out via Trusts as these provide at least a minimum level of stipulations on how this money is to be used. In order to ensure a greater degree of accountability, it may make sense to foster the usage of Trusts for the financing of EMEs and LDCs rather than relying on transactions by agreements.

## **5. Conclusion**

This paper has provided a detailed analysis of the SDR system as a web of interlocking balance sheets from a CMF perspective. We have traced its evolution from the original foundational rationale and the idiosyncratic accounting rules chosen over its empirical usage in the post-Bretton Woods era to current plans for its role after the 2021 SDR allocation.

Our analysis yields that the new SDR allocation can improve the liquidity position of a country and offer some limited avenues for sovereign debt restructuring but comes with new interest and exchange rate risks. Voluntary channeling cannot happen without a wealth transfer, neither the SDR

allocation nor the use of Trusts can overcome this problem by themselves. As such, the SDR system remains limited by its founding logic—that it is essentially a payment infrastructure for countries to temporarily lend and borrow FX reserves.

A sustainable long-term solution for the entire global financial architecture would require mechanisms that more strongly emphasize non-market, concessionary elements in combination with actual debt-forgiveness. Trusts are vehicles that have been developed to attempt this, but they face multiple obstacles and have only played a marginal role on a global scale. Ongoing discussions at the G-20 level reveal that the questions of how Trusts should be financed remains unsolved. To the extent that funding can be guaranteed, they can be a useful instrument to help with debt forgiveness and to ensure that borrowed funds are used for their intended purpose.

Hence, the new SDR allocation has only provided the foundation on which future IMF programs can potentially be built. Currently, the SDR system is not able to accommodate the significant financial resources needed to tackle increased government refinancing costs and expenditure needs of EMEs and LDCs after the Covid-19 pandemic. Any solution to these problems would require a structural change of the SDR system's accounting rules. It remains to be seen if the zebra-like SDR system can eventually become a solution to the problems of our age.

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