



For an African Liquidity and Stability Mechanism

Addressing financial vulnerabilities to
unlock Africa's potential

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Policy note No. 01

June 2022

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For an African Liquidity and Stability Mechanism[†]

African countries are now under the threat of a new debt crisis whilst access to international capital markets is becoming increasingly difficult for many issuers across the continent. At the same time, financing needs for investments in education, health and infrastructure require more external financing. This dilemma cannot be solved without a more stable and liquid market in African government bonds. This policy brief argues that such a market can be achieved by combining specific tools under a regional African financial arrangement. This toolbox would need to adapt to the diversity of needs of each of the countries. One such tool is the Liquidity and Sustainability Facility (LSF) which supports the liquidity of African bonds by providing a repurchase agreement facility. The second applies to commodity exporters, who have a fundamental problem of illiquidity leading to boom-bust cycles. A Commodity Hedging Facility (CHF) would provide a stabilization mechanism by supporting their intervention on futures markets. Third, a Credit Enhancement Facility (CEF) which would provide a rolling guarantee on new issuances, and fourth a Debt Restructuring Financing Facility (DRFF) would help reduce debt in a market-friendly approach when needed. The facility would require a capital base provided by African countries themselves, akin to other RFAs, complemented by donor resources, possibly including a reallocation of Special Drawing Rights. We estimate that about \$40 to 80 billion of callable capital would be sufficient to make it sustainable.

[†] This report, the first by the Finance for Development Lab, is the responsibility of its authors. It also received inputs from a working group with several FDL partners: Edward Brown and Rob Floyd (ACET), Rabah Arezki, Homi Kharas (Brookings Institution) and Vera Songwe (UNECA). We thank them for their insightful comments and suggestions. Dalil Youcefi provided excellent research assistance.

Introduction

Debt risks for African countries are at their highest since the HIPC initiative. Financing needs are large, and countries with market access are suffering from high and volatile yields. The war in Ukraine is adding to the existing constraints by threatening African countries' food security, increasing inflation, and weakening their external situation. This comes in addition to the investment needed to meet the Sustainable Development Goals and allow widespread access to health, education and sustainable infrastructure in general. A central issue is that when African countries graduate from official development assistance, they often struggle to obtain affordable financing from capital markets. In addition, they operate in illiquid markets: by raising the costs of external finance, liquidity risks turn into solvency concerns.

Long-run challenges faced by countries require access to capital at affordable rates and thus a stable, liquid financial market, which is now disappearing. They also require policy space, both monetary and fiscal, to stabilize economies in times of crises. The ability of governments in low and middle income economies to provide those policy tools is shrinking². Heterogeneous and segmented banking systems, credit rationing, limited range and quantity of available financial assets impair monetary policy transmission. In frontier markets, investors overreact to risks, preventing governments from borrowing during downturns. As debt is issued at shorter maturities, governments are exposed to heightened liquidity and rollover risks. This environment deepens the solvency issues of African countries as debt stocks are on the rise³.

In June 2022, whilst the Fed and the ECB were raising their interest rates, those shocks were transmitted globally, and in particular to "emerging" and "frontier" assets. Risk premiums increased, and market yields for African sovereigns now reach often above 10 percent. In turn, concerns about the solvency of African countries are increasing⁴. For good cause: among Sub-Saharan Low- and Lower-Middle Income countries, 23 countries are in or at high-risk of debt distress in mid-2022, against 8 in 2015. While only three countries have already applied to the G20 Common Framework for Debt Treatment beyond the DSSI, 73 of them were deemed eligible to the initiative. However, while insolvency is a threat in many cases, with high deficits and difficulties to raise revenues, high premia have also other causes, including the lack of a robust market infrastructure.

Limited financing sources for the development of African economies

African financial markets remain shallow: as financial crises are costly, and financial regulation sometimes lagging, the pace of credit expansion is constrained⁵. Due to a relatively low level of liquidity, capitalization, and a low number of listed companies, African bond markets lag behind the average level of development that is seen in Asian or Latin American emerging countries⁶. Sovereign securities

² Imam, (2018)

³ Atingi-Ego, Timuno and Makuve (2021), Songwe and Awiti (2021)

⁴ <https://theconversation.com/triple-punch-of-shocks-threatens-to-upend-debt-sustainability-and-recovery-in-africa-184931>

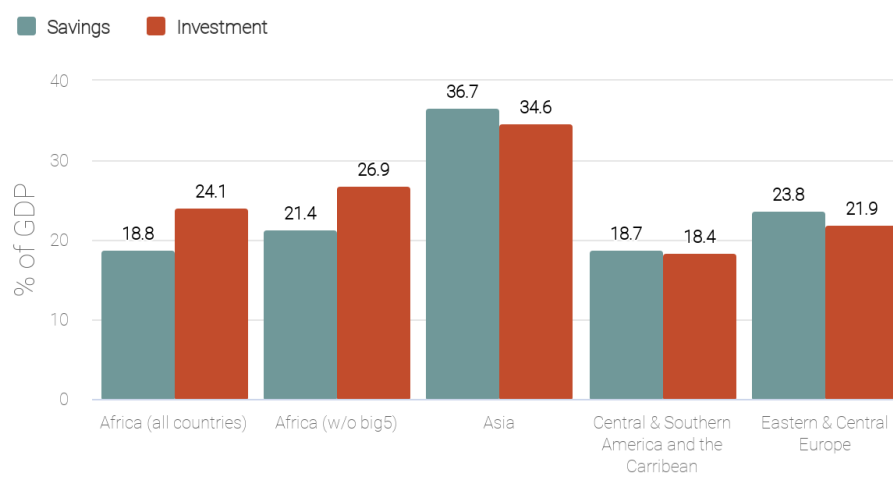
⁵ Griffith-Jones, (2016)

⁶ Smaoui, Grandes and Akindele, (2017)

markets often fail to mobilize domestic investors⁷. With thin domestic financial markets, African countries are also exposed to greater risks of cross-market contagions and doom loops. As a result, solvency and liquidity issues are important constraints on their economic growth.

At the same time, the continent's investment needs are large. Domestic saving rates are relatively low compared to investments, and to other regions of the developing world (Figure 1). External financing plays a major role for the region's development. A large share of those needs are financed by official sources, and especially multilateral lenders, often on a concessional basis. At the same time, bond issuances have emerged as one of the main sources of financing for governments on the continent.

Foreign financing is needed to fund investment



Average savings/investment rates over 2016-2020; GDP-weighted average per region. 5 biggest African economies are Algeria, Egypt, Morocco, Nigeria, and South Africa.

Source: IMF WEQ, April 2022 ; Eritrea, Liberia, Libya, Somalia, South-Sudan, and Sudan removed for missing data.

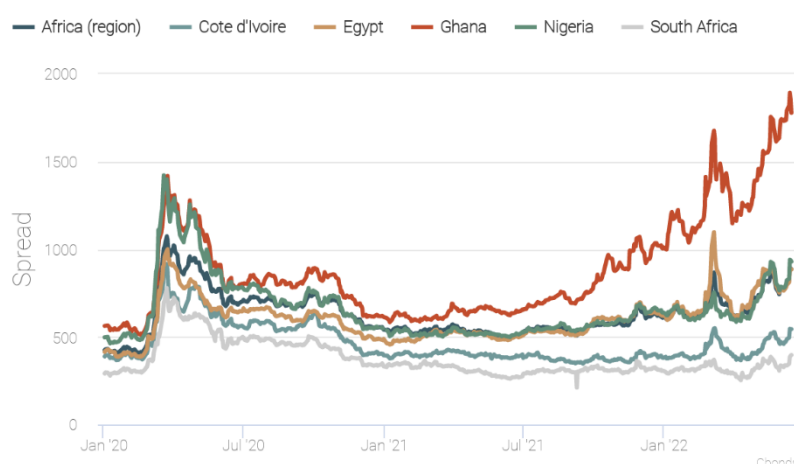
For Sub-Saharan Africa, external borrowings reached a total of \$88 billion in 2019, of which \$62 billion by governments, slightly over half of which were provided by the private sector (\$34 billion) and the rest by the official sector (\$28 billion). The rise of the bond market has been one of the major evolutions in the recent past: from a trickle in the early 2000s, it reached \$10 billion per year in 2013-2016 and rose to more than \$25 billion in 2018-2019, half of which by relatively new issuers. Yet, for many, the novelty of the bond market can be dangerous, especially in times of crisis. Indeed, those flows are volatile: in 2020, private sector lending to governments in Sub-Saharan Africa shrunk by half to \$15 billion. It is also risky: a default could lead to durable market exclusion, while costly new issuances can exacerbate financial vulnerabilities.

⁷ See, for example, AfDB (2021) on Central Africa.

Real interest rates on bonds are high, and spreads over safe assets have been increasing across emerging markets but especially for Sub-Saharan issuers. Since February 2022, yields on long-dated bonds have increased by 300 to 1000 basis points depending on the countries, at levels which prevent new issuances. The early days of the COVID-19 pandemic also triggered a few months of market exclusion (Figure 2). They are now reaching levels not seen since the burst of the Covid-19 pandemics in early 2020. As a result, debt service costs have ballooned, threatening fiscal sustainability. In periods of crisis, such as those triggered by the pandemic and the Russian invasion of Ukraine, spreads rise more in so-called frontier markets, and especially for Sub-Saharan borrowers. In addition, exchange rates tend to depreciate during risk-off period, creating additional pressures on foreign currency borrowing.

2 Spreads remain high and on the rise again

Cbonds Sovereign USD T-spread Index



Higher financing costs also reflect limited creditworthiness and structural solvency problems. Fiscal revenues are low, and borrowing has often financed consumption – such as a high wage bill – rather than growth-enhancing investments. Fiscal rules – one possible option to limit debt build-ups have been moderately successful: only 11 countries have committed to national rules⁸, and rules linked to monetary unions are not always applied. Improving the quality of fiscal institutions in general is an important imperative. Structural improvements, from raising African countries' saving rates and reducing fiscal deficits for current expenditure are important priorities.

Those high financing costs have other causes as well: poverty traps imply an equilibrium of low savings, investments and growth, a situation amplified by the lack of financial market development⁹. Importantly, several researchers and practitioners see African high financing costs as mispriced sovereign risks¹⁰, or misplaced *perception premiums*¹¹. At equivalent macroeconomic fundamentals (debt to GDP ratio, debt service, indicators of debt management capacity, etc.), bonds of African governments tend to have lower credit ratings and higher financing costs.

⁸ Davoodi et al (2022) WEAMU imposes all three fiscal rules, whereas CEMAC and EAMU impose budget balance- and debt- rules only.

⁹ Sachs et al. (2004), Lopez and Servén (2009)

¹⁰ Morsy and Moustafa, (2020)

¹¹ Fofack (2021)

Commodity exposures and financial risk

In a volatile environment, borrowing costs tend to be higher to compensate investors for the risk. This is especially the case for commodity exporting countries, and in particular on the African continent. Exports tend to be concentrated on a few commodities per country: agricultural products in the East of Africa and few Western countries, mining products in the West and Southern regions and energy in the Gulf of Guinea. In aggregate, the share of commodity exports is the highest worldwide (Figure 3). Given the stark volatility of commodity prices and the onerous costs of commodity hedging, this comes with drastic consequences for economic growth and financial stability¹². Commodity prices also appear as a significant determinant for sovereign risk premium in African countries¹³. Heightened commodity exposure is a primary reason for increasing risks of debt distress in African countries¹⁴. Volatility due to commodity prices changes is also amplified when governance indicators are lower: commodity windfalls lead to procyclical government expenditures in authoritarian states, but less so in democracies. Well-managed, commodity booms allow countries to reduce external debt stocks and obtain better interest spreads¹⁵.

Liquidity costs directly affect long-term sustainability for commodity exporting countries. Indeed, their ability to hedge against commodity price fluctuations is limited in thin financial markets. Countries can purchase financial protection products, for instance by buying options on their exports. This policy is unfortunately costly: usually, options need to be far out-of-the-money to be affordable, thus only protecting against tail risks. A second possibility is to sell their commodities on the forward markets, thus stabilizing the price and the revenues in their budget. This second option comes at the cost of margin calls. Should commodity prices increase – a situation to the advantage of the commodity exporter – every single period they are above the price set, the country is required to post liquid collateral. What was meant as a hedging mechanism becomes a source of liquidity constraints. Overall, this endangers these countries' external revenues at a time when they should benefit from global conditions. These liquidity exposures prevent the decoupling of economic growth from commodity prices movements. At a time when numerous African governments struggle with rising debt vulnerabilities, and with volatile commodity prices, there is a need to ensure that African countries have the means to hedge against liquidity shocks.

¹² See Mupunga and Ngundu (2020) for Southern Africa

¹³ Mpapalika and Malikane, (2019)

¹⁴ Ndulu and O'Connell, (2021)

¹⁵ Arezki and Bruckner (2012a, 2012b)

Four instruments to enable more affordable private sector financing for the development of Africa

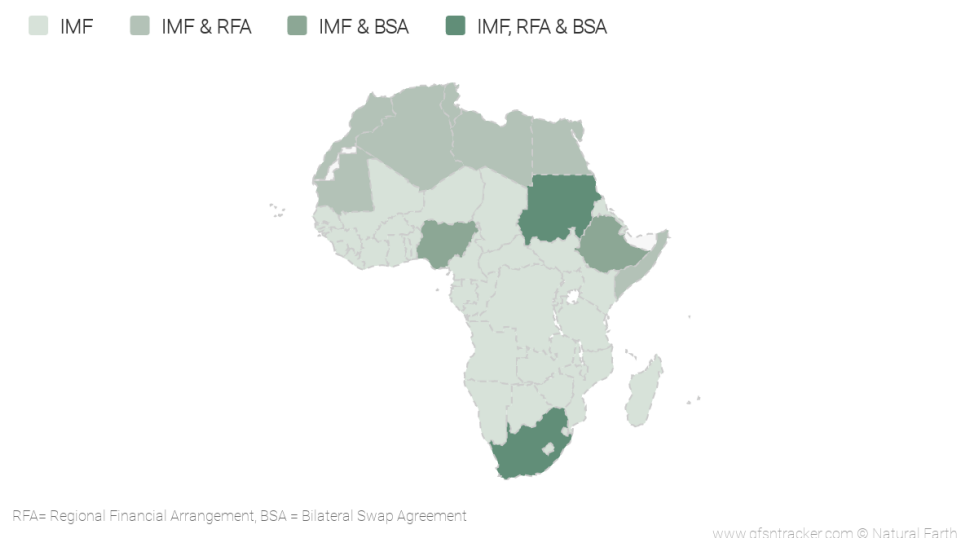
Shielding countries from liquidity vulnerabilities will expand these countries' policy space and in turn improve overall debt sustainability. As of today, the African continent remains vastly under-protected by the global financial safety net (see annex 1). Over 2020-2021¹⁶, three countries had access to bilateral swap agreements and ten to a regional financial

Regional Financial Arrangements are agreements among a group of countries to provide each other with short-term financial support in case of external financial problems ranging from liquidity support to exchange rate arrangements.

arrangement (North African countries through the Arab Monetary Fund and South Africa through the BRICS Contingent Reserve Arrangement). The remaining 43 countries only had access to the IMF for liquidity provision to stabilize financial and external conditions (Figure 4). The IMF plays an important role. It lends under so-called "upper credit tranche" programme to 19 countries in Africa and has offered much needed support during the COVID-19 crisis to 41 countries in total through its emergency lending programs. At the same time, onerous conditionality and the stigma associated with them often means that countries postpone their request for assistance.

Given the current risks of multiple crises faced by African countries, this proposal advocates for the

4. Africa and the limited protection of the Global Financial Safety Net in 2021



creation of a new Regional Financial Arrangement, tentatively called the African Liquidity & Stability Mechanism (ALSM), to alleviate countries short-term liquidity constraints. While recent pushes have been made by the African Development Bank and the African Union in favour of such a mechanism inspired by other existing Regional Financial Arrangement with the aim of tackling rising debt risks, this proposal offers additional innovative ideas that could complement and reinforce ongoing initiatives.

¹⁶ Kring et al, (2021)

Hosting the ALSM within an institution, pan-African preferably, with a preferred creditor status would ensure that the liquidity provided by the arrangement will not be diverted to private creditors: the seniority of the ALSM's lending would ensure that, should a default occur, the institution gets reimbursed, thus ensuring its financial stability. It would also imply that its tools would not bail out the private sector. Alleviating African countries' liquidity constraints will lower the cost of borrowing to allow higher debt levels at a given sustainable debt service level thus unlocking potential for much needed investment. It will also reduce the risks for investors of increasing their exposure to African countries and should thus unlock more funds.

In practice, we argue the ALSM should rely upon four facilities: (1) UNECA's Liquidity and Sustainability Facility, a special purpose vehicle that subsidizes, through repo loans, private sector investments in African sovereign debt, (2) a Commodity Hedging Facility that offers guarantees on margin calls, (3) a Credit Enhancement Facility that offers rolling interest payment guarantees to reduce market financing costs and (4) a Debt Restructuring Facilitation Facility that would introduce a cash element in sovereign debt restructurings to facilitate discussions and help avoid deadlocks and protracted negotiations.

In the next section, we present the liquidity lines that our proposed African Liquidity and Stability Mechanism entails. The final section focuses on the institutional design to ensure appropriate ownership, credibility, and independent governance.

"It is high time that we set up a homegrown financial stability mechanism where we work together to mutualize our funds and ensure we avoid the spillover effects that come from global pandemics or any external shocks. [...] We must start by making sure that we carry out the macroeconomic policy reforms and the fiscal policy reforms that we need to get done," [... Africa] "is not looking for a free pass. We are just looking for an equitable way in which Africa's fiscal space gets dealt with."

Akinwumi Adesina, President of the African Development Bank (2021)

1. Financial tools for an ALSM

RFAs mainly include two types of instruments: crisis prevention and crisis resolution tools. The former aims to incentivize countries to develop and maintain sustainable policies in normal times by creating an insurance contract against potential crises – including by targeting specific sectors¹⁷. The latter provides loans or credit lines that countries can call upon when faced with a balance of payment shock or budget finance issue. (Annex 1 provides a description of various arrangements).

An African RFA should offer instruments dedicated specifically to the risks faced by African governments as financial market pressures and costs remain high, as debt stocks are rising, and as commodity price volatility risks deteriorate exporters' liquidity. The African Liquidity & Stability Mechanism should therefore entail two instruments preventing liquidity shortages' implications: (a) one that reduces mispriced borrowing costs on sovereign debt markets to attract new investors, and (b) one that decreases the liquidity exposure stemming from higher commodity dependence; and two instruments that aim at facilitating the resolution of over-indebtedness situations: (c) one that enhances the quality of debt to attract new investors and (d) one that facilitates debt restructuring by increasing creditor participation.

1.1. Liquidity and Sustainability Facility

The Liquidity and Sustainability Facility (LSF) is a mechanism that the UN-ECA introduced in November 2021¹⁸. The recent Conference of Ministers hosted in May 2022 by UN-ECA in Kigali reiterated the continent's support for the initiative and invited pursuit in its advancement. The LSF is a Special Purpose Vehicle that subsidizes private sector investment in African sovereign debt. It should target around 20 Middle Income Countries on the continent having tapped international capital markets¹⁹. UN-ECA plans on between \$3bn and \$30bn SDRs rechanneling for initial funding. The LSF aims at diminishing misperceptions about the liquidity risk of African sovereigns, with the objective of introducing greater liquidity and competitive tension on pricing and therefore trimming down government borrowing costs across the continent.

To that end, it provides 'concessional' repo loans to private investors that would pledge African sovereign debt – Eurobonds or local currency bonds – as collaterals. The LSF subsidies entails repo haircuts, which constitute safety cushions supporting lenders in case there is a need to liquidate collateral when the borrower defaults. This 'concessional' approach to repo incentivizes the private sector to increase their portfolio investments on the continent. Cheaper loan terms are expected to stimulate market demand for African sovereign debt and therefore limit state's borrowing costs. UN-ECA estimates that the LSF could generate up to \$50bn savings on interest costs over the next five years. Over the longer term, the facility also aims to mobilize finance for the SDGs. Notably, it would encourage the issuance of green or sustainability-linked bonds by African governments, that could be used by private investors as collateral in repo transactions at favorable terms.

¹⁷ The Arab Monetary Fund has a dedicated Oil Facility while the European Stability Mechanism has Banking Sector support instruments (see annex 2).

¹⁸ ECA, (2021)

¹⁹ <https://www.uneca.org/sites/default/files/documents/UN%20launches%20African%20repo%20market%20in%20bid%20to%20lower%20borrowing%20costs%20-%20Financial%20Times.pdf>

The LSF alleviates one source of liquidity shortage in the bond market, and other instruments can work to extend its objectives to other sources of liquidity shortages.

1.2. Commodity Hedging Facility

Commodity risks are well-known, and several policy initiatives have been advanced to alleviate them. The most famous are the ones adopted by Chile and Mexico. In Chile, income streams from copper revenues are saved in a sovereign wealth fund called the Economic and Social Stabilization Fund (ESSF) which acts counter cyclically as a rainy-day fund. Its reserves were used during the Great Financial Crisis of 2008-09, minimizing the economic consequences of the crisis. In Mexico, oil price risk is hedged by the Ministry of Finance by large purchases of put options. They protected the country against revenues short fall when spot prices declined, such as during the COVID-19 crisis. In both cases, strong institutional support (and the political power of the Minister of Finance at the time) allowed these mechanisms to operate, but those examples are difficult to generalize. Indeed, political pressures to spend rainy-day funds are hard to resist in most countries and were successful in Chile under very specific conditions. Similarly, the success of the Mexican hedge hinges on a complex political equilibrium: it is an annual direct financial cost in the budget, which can be politically damaging to governments in good times, although they obtain benefits in bad times.

Commodity exporters have various possibilities to hedge against price volatility: they can use over-the-counter swaps; or commodity-linked loans and bonds. The downside of those instruments is their illiquidity, which generates large premiums. In addition, long-term contracts with fixed prices or forward contracts augment exposure to counterparty risks. On the other hand, market-based futures and options are more common operations but not always tailored to the needs of sovereigns. Put options give the right and not the obligation to sell commodities at predetermined price. Options thus offer the potential to both benefit from any price increase and to hedge against any costly fall. The downside is that they remain costly, especially close to the spot price ("near the money") limiting the range of affordable protection to put options hedging against extreme price risks.

An alternative (and more natural) route would be to sell commodity futures on the markets. This freezes income received by the sovereign at predetermined prices in the budget. Those future contracts can then be rolled over in perpetuity to smooth the guaranteed prices. However, commodity futures contracts come with a price: sellers must post margin calls, which ensure that they will have the ability to provide the buyers with quantities needed. Margin calls can be expensive, and more importantly they depend on the difference between the spot and future prices. When prices increase above the predetermined level – a situation a priori beneficial to the commodity exporter – the country's position on future markets comes at a loss which generates a margin call. The country thus has to provide further capital to replenish the account to the minimum margin requirements.

This is the major negative feature: the price of hedges becomes expensive when prices rise. Considering potential mismatches between price volatility in actual income flows, margin calls can therefore result in liquidity crunches for countries. Margin deposits are the major barrier to the use of futures markets by developing countries²⁰ as the size of the margin during the life of the contract calls for extremely liquid financial resources for the holder.

²⁰ Kuwayama (1994)

To alleviate this constraint, a Commodity Hedging Facility (CHF) would avoid the need for margin calls. This could take the form of covering rolling forwards over a period between 12 to 18 months. For instance, countries would sell the equivalent of a quarter of production on the spot market, and the rest on forward markets at 3, 6 and 9 months. The CHF would guarantee margin calls for this remaining protection.

It is important to stress that such guarantee solves a liquidity issue, not a solvency one. Indeed, it is called upon when the price of the exporter's commodity is high. Although there is a commitment issue, the institution which offers the guarantee must believe that it will be repaid, which is not a problem for PCS institution, it is not a bail out issue, as the exporting country is actually richer when the margin call guarantee is called up.

This is hardly a new idea. In 2011, the President of the Dominican Republic, Leonel Fernandez made a somewhat similar proposal in a speech to the United Nations General Assembly. It suggested that security deposits intended to cover the premiums to be paid on commodity futures contracts²¹. The World Bank also has active operations in a similar vein: it intermediates commodity price risks through its Commodity Price Risk Management Advisory²². In Uruguay, for example, to mitigate the impact of droughts on energy production and revenues, the WB executed a \$450mn insurance transaction for the national energy company over 18 months, which helped strengthen confidence and crowd in market participants²³. As another example, IBRD commodity hedges link repayment obligations on IBRD loans to the commodity price, hence, for an oil-exporter country exposed to the risk of commodity price declines, the commodity swap will be structured such that repayment of the principal and/or interest rate would decrease if commodity prices decreased²⁴. In practice however, margin calls guarantees are counted as another World Bank exposure on the country, which limits their use by clients. They are underutilized, and the CHF would be a general provider of these facilities, only limited by its capital and not by access limits.

1.3. Credit Enhancement Facility

Most African countries gained access to financial markets relatively recently. For a country graduating from access to concessional loans by the World Bank (the International Development Association, IDA), bond markets offered an opportunity to access additional funding, at relatively initially affordable rates. With the COVID-19 crisis, and the tightening monetary cycle in the United States and the Eurozone, it is now obvious that the cost of refinancing debt will become increasingly expensive. Maintaining market access for African issuers can only be achieved by reducing costs of borrowing. One potential task of the ALSM should be to provide such credit enhancements, blending the affordable cost of funding of MDBs and the availability of market resources to generate strong leverage effects. By offering guarantees to countries requesting it, the Credit Enhancement Facility would decrease the risks thus ensuring a higher buy-in by investors.

²¹ https://www.un.int/domrep/statements_speeches/66th-session-United-Nations-General-Assembly

²² <https://treasury.worldbank.org/en/about/unit/treasury/client-services/commodity-price-risk-management-advisory#1>

²³ <https://documents1.worldbank.org/curated/en/510901468142790487/pdf/93908-Uruguay-Weather-Derivative-2015.pdf>

²⁴ <https://thedocs.worldbank.org/en/doc/c76c81a3a7fda8b9cf862fd63aa623d9-0340012021/original/IBRD-Hedging-Products-Product-Note.pdf>

These guarantees shall not be limited to international markets and could cover the refinancing domestic bond market as this instrument can be a vehicle to facilitate access to international markets but in many cases, such as the West-African Economic and Monetary Union, it could also provide liquidity on domestic markets.

Brady Bonds (see annex 4) were created in the 80s as a tool to restructure countries' distressed debt obligations into secured and tradable bonds, providing long-dated US Treasury Zero Coupons as collateral to the new issuances. Rolling interest payment guarantees, covering 12 to 24 months of interest payments using a minima double-A-rated securities, were introduced at the same time. Today, these options (principal and/or interest guarantees) and the foundations they laid for sovereign debt restructurings and cooperation among various stakeholders provide adequate and promising guidelines for tomorrow's instruments. The resulting leverage ratio from providing Zero Coupons as collateral is certainly not as attractive as it used to be in the 80s and the 90s, still the tapering firms the rationale and need for such instruments. The numerous rating downgrades that affected African countries also make Brady specific bond structures and terms more likely to help reverse credit rating trends, reduce issuance costs, and improve tradability²⁵. Eligibility to such guarantees should be limited to countries with sound economic and financial situations that struggle with tapping necessary liquidity on financial markets. They should be provided when market costs are high enough to make a strong case for these guarantees, but low enough so as to not stand in the way of – and add complexity to – a debt restructuring when needed. Countries requesting and obtaining assistance could, for example in the classical Brady type situation, receive a loan by the ALSM to exchange outstanding debt held by a commercial creditor against a secured new stock, the collateral for which could be held in escrow by a partner institution. The ALSM could also directly issue sovereign guarantees for the repayment of the new secured stock.

The economics of these Brady facilities should not be oversold. First, when the guarantee is called upon, the ALSM will pay for its commitment but only by creating a new senior debt that will automatically reduce the market value of private creditors' exposure. From a strict economic point of view, it is as if private creditors were paying themselves for the guarantee. This is only interesting to the extent that the new securities, with a higher rating, can attract new classes of investors. While this type of guarantee should theoretically leave private creditors indifferent as it simply reallocates costs, we argue that, in practice, the guarantee offers an additional bonus. By ensuring a minimum amount of liquidity benefits from higher seniority, it acts as a backstop on recovery and counteracts investors' fears that, should the situation for an African country deteriorates, all will be lost. From this perspective, to ensure the sustainability of this facility, the maximum amount guaranteed should be no higher than 40%, which echoes the average haircut that African countries benefitted from between 1980 and 2013²⁶. To protect ex-ante against possible losses for the ALSM, this tool would entail conditionality rules, including by requesting countries to increase revenues. Such guarantees are complementary to other tools, in particular the LSF, as it adds to the overall liquidity of the market.

²⁵ Qian (2021)

²⁶ Data is taken from the 2014 data update of Cruces and Trebesch (2013). Haircuts are computed based upon the methodology from Sturznegger and Zettlemeyer (2006). We include data on 62 African restructurings over 1980:2013 for an average haircut of 46% (median at 40%).

1.4. Debt Restructuring Facilitation Facility

Debt restructuring negotiations are often complex and time-consuming processes. They coalesce debtor and multiple creditors with differing preferences around the objective of finding an agreement that optimally suits all. When countries enter the difficult process of debt restructuring, they do not necessarily have the financial space and flexibility to navigate the negotiations. Introducing a cash element in sovereign debt restructurings could facilitate discussions and help in avoiding deadlocks and protracted negotiations that allows end up at the disadvantage of debtor countries. Such cash or collateral ‘sweeteners’ often make debt restructuring offers more attractive and help secure higher private investor participation when debtors have little bargaining powers or increase debt relief when creditors are more pessimistic than the debtor²⁷.

When in a situation with high creditor heterogeneity (based upon preferences or bargaining power), ‘sweeteners’ can be targeted directly to specific investors with strong preferences for liquid or short-dated instruments (technically: with a high exit yield). As such, the cash could be used as a standalone option for private creditors willing to leave the market at a steep discount. They should be offered in a way consistent with the DSA parameters and policy commitments that commands the restructuring. As this instrument intervenes when a debt restructuring process is already engaged, access to the facility is conditioned on a country's negotiations for an IMF program and therefore relies upon IMF strong conditionality standards. The ALSM could help support the IMF in its evaluation of specific rules and conditions for the restructuring.

Debt buybacks are not a miraculous solution, they have been successful most notably when governments managed to proceed with their strategy unannounced and unnoticed at first by market participants²⁸. Should market participants anticipate a debt buyback, as history has shown, there would be an increase in the price of bonds and in the price of remaining debt, making creditors (and not the debtor) earn the benefits of the operation. The introduction of cash options can and should therefore be introduced in a way that doesn't affect debt sustainability considerations, reflecting the country fundamentals and avoiding the boondoggle syndrome of previous experiments. The timeliness of this instrument and strict avoidance of collusion are prerequisites to the facility's sustainability as they underpin the possibility for the ALSM to buy bonds at a heavily discounted value on the market, to later roll them over with the next marginal creditor holding out.

Willems (2021) provides an elegant implementation solution which could be used by the DRFF. He suggests an auction could work along these lines and offer the means to define the most appropriate terms by allowing all participants to express their preferences through an adapted and competitive process. Starting from the determination of a sustainable debt service-profile, as in the current framework, the mechanism would then ask of creditors to bid for the restructured bonds entailed in the sustainable plan with information on their preferred yield curve. Haircuts are then determined to ensure market clearing while ensuring that creditor preferences are consistent with the pre-specified repayment profile. Under competitive bidding, the auction would theoretically converge towards an optimal debt restructuring that allows for efficient sorting – allowing creditors to self-select preferred option –, voluntariness and inter-creditor equity – generating *a priori* enhanced creditor support. Reverse

²⁷ IMF (2021)

²⁸ <https://www.creditslips.org/creditslips/2020/01/buybacks-as-a-sovereign-debt-restructuring-strategy-why-the-disfavor.html>

dutch auctions are another way of achieving such a desirable framework as they ensure, as the price increases until its cut-off level, that investors will agree to enter the auction at their most preferred level. As a consequence, creditors above the previously set (and unannounced!) cut-off price would be sure to exchange their holdings at their own optimal price, whereas those above will not enter a transaction against their own preferences.

2. Institutional setting: independence, ownership, and credibility

The idea of an African Regional Financial Arrangement is not new. In 1963, soon after the independencies of many countries, the idea of an African Monetary Fund emerged, later included in the 1980 Lagos Plan of Action for the Economic Development of Africa²⁹. It was first thought of as a mechanism to promote monetary and financial cooperation, enhance currency and external stability, support reform and development, and amplify the continent's voices on international fora. It was meant to be organized around four key tools: (i) a BoP facility addressing exogenous trade shocks for low reserves countries, (ii) Stand-By Financing Arrangements dampening current account deficits stemming from exceptional nonmarket circumstances (e.g. natural disasters), (iii) special arrangements for intra-African trade, and (iv) a special food financing facility. Yet, despite repeated calls by African institutions and researchers³⁰, the creation of a dedicated institution has failed to materialize for two main reasons³¹: scarce political support and lack of country leadership on one hand, lack of financial support for initial paid-in capital on the other.

In March 2021, African Development Bank (AfDB)'s President Akinwumi Adesina launched work within the institution towards the creation of an African Financial Stability Mechanism that would update and overcome the limitation of an African Monetary Fund. Both the President of Ghana, Nana Akufo-Addo in his speech to the UN Assembly in 2021; and the President of Senegal, Macky Sall, when delivering his opening speech as President of the African Union, reiterated their support for the idea. While very few details on the design have been shared so far, the goal would be to set up a new permanent mechanism target African issues with debt and be integrated inside the AfDB, leveraging the already existing institutional setup³². Potential ideas put forward at the moment include setting up a \$100bn mechanism, with instruments inspired by other RFAs: crisis resolution and prevention instruments in the spirit of the CMIM, where conditionality should not be formally linked to IMF conditionality³³. Regarding financial resources, four African finance ministers have urged the G20 leaders to recycle at least \$30bn of their

“Il me paraît nécessaire de mettre en place une task force de l’Union pour étudier la problématique du financement de nos économies, y compris par la réforme des règles de l’OCDE y afférentes, la création d’une Agence panafricaine de notation et la mise en place d’un Mécanisme de stabilité financière sur lequel la Banque Africaine de Développement travaille déjà. [...] Je poursuivrai notre plaidoyer pour la réallocation de 100 milliards de dollars de DTS de pays riches, en faveur des pays africains, selon des modalités à convenir. En plus du FMI, il est important qu’une partie des DTS soit réallouée via la BAD, compte tenu de son expérience pratique et efficace dans le financement du développement en Afrique.”
Macky Sall, inaugural speech as President of the African Union (2022)

²⁹ Organization of African Unity, (1980)

³⁰ African Union 2014, Banque des États de l’Afrique Centrale, 2018, Yacouba Barma 2019, Sylla 2020, Bakkou 2021, Sembene 2021

³¹ Dagah et al. (2019)

³² Cematic-BAD (2021)

³³ <https://www.policycenter.ma/events/debtcon-virtual-session-towards-african-financial-stability-mechanism>

new SDR allocation to the UNECA's Liquidity and Sustainability Facility and to the envisioned African Financial Stability Mechanism³⁴.

2.1. Ownership and governance

The African Liquidity & Stability Mechanism would take the form of a trust-fund hosted by an institution benefitting both from Preferred Creditor Status and Prescribed Holder Status. Preferred Creditor Status is important to ensure that the liquidity provided by the arrangement will not be diverted to private creditors. The seniority of the ALSM's lending would ensure that, should a default occur, the institution gets reimbursed, thus ensuring its financial stability. It would also imply that its tools would not bail out the private sector. SDR Prescribed Holder Status is a preferred prerequisite to enable SDR rechannelling and non-regional countries financial support.

Governance

A strong underlying rationale behind Regional Financial Arrangement is to promote countries' ownership in the Global Financial Safety Net³⁵. Developing a new pan-African Financial Institution would help empower African countries in the GFSN and in international institutions. Given countries' reluctance to suffer a political stigma if solicitating the IMF for a program, this could also ensure a quicker response when faced with liquidity shocks, and avoid regional spill overs³⁶. The African Liquidity & Stability Mechanism could as such be installed as part of the AfDB's galaxy to benefit from its well-established presence in the African continent, its Preferred Creditor Status and its SDR Prescribed Holder Status. If launched within the AfDB, the ALSM should take the form of a strictly independent trust fund, similar in construction to the African Legal Support Facility, with separate legal and operational frameworks. Indeed, the AfDB has a long experience in addressing long-term development projects, but they are different from the ones connected to short-term financial stability issues.

Initial paid-in capital

Initial paid-in capital could be provided by African countries themselves and by advanced economies as ODA or SDR transfers (see below for a discussion of the needs). Indeed, the August 2021 allocation of \$650bn SDRs and G20 countries' commitments to rechannel their SDRs offer the opportunity to reshuffle the cards regarding the financial deadlock that prevented the creation of an African dedicated financial arrangement. SDR financing remains dependent on two conditions: (i) the ALSM must be hosted by a prescribed holder of SDR, and (ii) the ALSM must ensure SDRs can retain their reserve asset status. Four African institutions pass the first criteria, two central banks – the Bank of Central African States and the Central Bank of West African States – the African Development Fund and the African Development Bank. It is interesting to note that other RFAs benefit from the prescribed holder status (the FLAR and the AMF), suggesting that this could be potentially achieved for the ALSM. Yet, this would necessitate a change in the IMF's Article of Agreements, a lengthy and uncertain process. To enable SDR rechannelling, a specific account system could be installed as for the IMF PRGT as a way to maintain reserve asset status³⁷.

Governing board and voting power

To ensure proper accountability and independence, the ALSM should be governed by a board of directors representing member countries and international official financial contributors. Voting powers should

³⁴ Uchechukwumgemezu (2021)

³⁵ Ocampo, (2006)

³⁶ Gallagher et al, (2021)

³⁷ Andrews et al., (2021)

be allocated for African countries as the sum of a fixed number of votes and a number of votes proportional to their financial contribution, and for international contributors as a number of votes proportional to their contribution. As, unlike other RFAs, financial capital should come both from members and foreign national investors. This will open important questions on the share of voting powers allocated to external contributors, with possible trade-offs between buy-in from foreign countries and ownership by African countries. Another question relates to the bargaining power allocated to small contributors (small or lower-income countries). FLAR's experience of identical voting power irrespective of size shows that LICs are more likely to use its facilities. The voting system is thus an important feature for the ASLM as it will anchor its governance and credibility and determine its use.

2.2. Complementarity and credibility

The African Liquidity & Stability Mechanism should not bail out countries in unsustainable macro-financial situations or act as a substitute for a program with the International Monetary Fund. Instead, the ALSM should focus on African specific financial vulnerabilities that are not yet within the toolkits of international financial institutions. To that end, the creation of the ALSM should follow the guidelines for complementarity identified by the G20, the IMF and existing RFAs³⁸.

Access-limits should be pre-determined by type of instrument and by the financial contribution of each member of the ALSM. As in other RFAs, they can be a fixed proportion for all countries or be determined country-wise in a way that can favour lower income countries. Pricing for the facilities could follow AfDB, the IMF, World Bank or other RFA approaches with the base rate picked among LIBOR or SDR interest rate, basic margins taken between 50 and 400bps, surcharges between 100 and 300bps, and commitment and service fees below 60bps.

Enhancing the quality of African debt can only be possible if available liquidity lines are paired with a way of ensuring disciplined fiscal policy. Hence all instruments should be associated with clear qualification criteria and strict safeguard measures. To facilitate adequate discipline and credibility, the African Liquidity & Stability Mechanism should be backed by a dedicated and independent Macroeconomic and Financial Research and Surveillance Office (similar in spirit to CMIM's AMRO, see annex 3). This office should be tasked with following member countries macroeconomic and financial health, recommending policy guidelines, and evaluating countries' states when requesting assistance from an ALSM liquidity line. Given the structural roots of debt issues in several African countries being linked to the difficulties faced by governments in raising revenues, the ALSM MFRSO could be tasked with helping countries devise adequate structural reforms to enhance revenue mobilization and devising adequate safeguard measures to tackle underlying vulnerabilities.

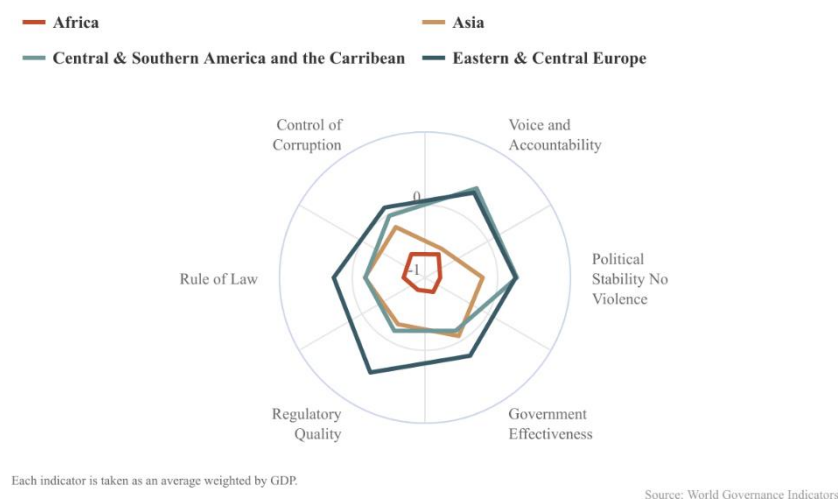
These options should not go without a serious effort to improve the quality of fiscal institutions and governance in general. On average, African countries rank below other regions when considering all categories of the World Governance Indicators (Figure 5.1). A majority of countries have experienced a deterioration of their score across most indicators (Figure 5.2) as is the case for indices of the quality of policies and institutions most relevant for debt and fiscal policies (measured in the CPIA). Those declines in governance indicators coincide with a rise in indebtedness and in the risk of crises³⁹. Corruption perception, high in several African countries, also remains a key limitation to government's tax

³⁸ G20, (2018); IMF, (2017); Cheng et al., (2020)

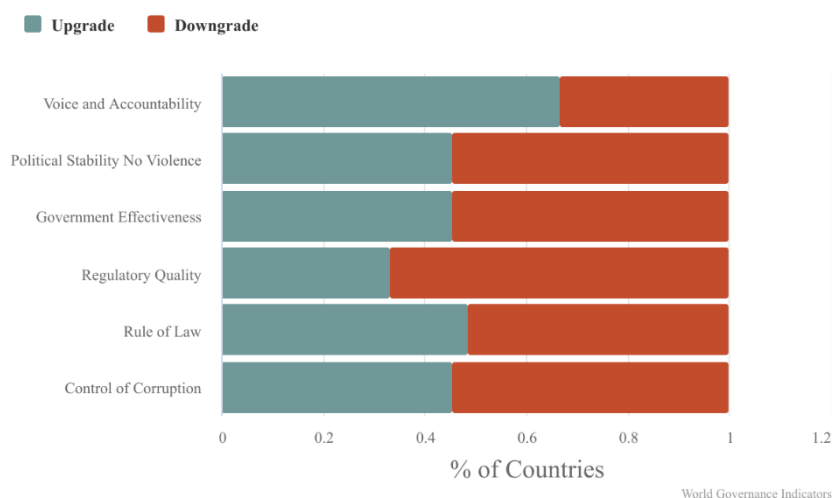
³⁹ Devarajan, Gill and Karakülah (2021)

collection⁴⁰, which endangers countries' fiscal space and capacity to handle shocks and invest in long term public goods.

5.1 Africa's struggling governance



5.2 Evolution of WGI 2010-2020 in Africa



Access to ALSM facilities should therefore be associated with specific safeguard measures and policy recommendations to facilitate progress towards more sustainable management of fiscal and debt policies. Additional focus should be given to debt transparency practices.

2.3. Financing Needs

To capture the order of magnitude for the ALSM' needs, we explore three distinct dimensions: external financing needs, liquidity need to reduce debt service to reserves constraints, and liquidity needs for ensuring risks of debt distress remain constrained. These figures are not meant to provide specific

⁴⁰ Boly, Konte and Shimeles (2021)

figures for the different instruments but offer a broad range for the needs of the mechanism. The overall need is estimated at \$40-80 billion.

First, we consider the annual external financing needs⁴¹ (averaged over 5 years) for various groups of countries (excluding the 5 largest African economies⁴²) representing (i) low income and lower-middle income countries, (ii) S&P rated countries, and (iii) high distress risk countries⁴³. Table 1 below, first column, presents the associated figures, which amount for an average of \$20-30bn needed.

Second, African countries suffer from high debt servicing cost relative to their available liquidity as illustrated by their debt service to reserves ratios. On average over the last 5 years, countries in Asia have debt service to reserves ratios of around 18.1 in 2020 against 38.4 for Africa. Bringing back African ratios to 'reasonable' numbers entails doubling their reserves. We therefore consider for the various country groupings the total stock of liquidity that would be needed for this alleviation. Table 1 below, second column, presents the associated figures, which amount for an average of \$30-45bn needed.

Table 1: External Financing & Reserve Needs

Country Group	External Financing Needs	Reserve Needs
<i>By income group</i>		
Low-Income	12.4	7.2
Lower-Middle Income	14.7	33.8
Total	27.1	41.0
<i>By risk of debt distress</i>		
Medium-high risk	14.0	12.7
High risk	4.5	20.7
Total	18.5	33.4
<i>By credit rating</i>		
CCC- to CCC+	9.2	21.4
BBB- to BB+	19.9	23.1
Total	29.1	44.5

Third, we consider the stock of liquidity required to approximate the needs to decrease countries' risks of debt distress to median levels. Table 2 presents the debt service reductions needed to bring countries ratios back to the median of their income group as well as, conditional on identified debt service reductions, the debt haircuts needed to bring back countries within a medium risk area⁴⁴. Overall, for high-risk African countries, there is a need to be able to provide liquidity between \$30bn and \$50bn. Including medium-high risk countries shifts this range up to \$30-65bn.

⁴¹ External Financing Needs are defined as the difference between the saving and the investment rates.

⁴² Nigeria, South Africa, Egypt, Algeria, and Morocco.

⁴³ High distress risk countries are defined following Cl  rier, Cohen and Harnois-Vannier (2022).

⁴⁴ The rationale behind these assumptions follows from the idea that should a country enter a debt reduction procedure, there is an initial cost carried by creditors, here carried on the debt service ratios, to which additional liquidity is required to ensure debt stocks are taken back to sustainable positions.

Table 2: Debt Exposition & Reduction Needs

Country Group	Debt Service Reduction	Min. Debt Reduction	Max. Debt Reduction
<i>High Risk</i>			
Zambia	2.8	9.6	12.9
Mozambique	1.1	6.1	8.4
Angola	5.4	14.4	22.9
Zimbabwe	0.2	2.9	4.4
Total - High Risk	9.5	33	48.6
<i>Medium-high Risk</i>			
The Gambia	0	0.1	0.2
Liberia	Na	0.2	0.4
Ethiopia	1.1	0	1.7
Kenya	1.3	0	2.5
Cameroon	0.3	0	2.2
Comoros	Na	0	0.1
Mauritania	Na	0.3	1.2
Sao Tome and Principe	Na	0	0.1
Tanzania	0	0.3	4.3
Cabo Verde	na	0	0.3
Total - Medium-High	2.7	0.9	13
Total	12.2	33.9	61.6

Conclusion

An institution such as the African Liquidity and Stability Mechanism should help African countries sail through the difficult times that the combination of the pandemic and the Ukrainian war have brought. While not aiming at solving problems of over-indebtedness, it can provide important services in improving management of liquidity and financial stability.

At a time when interest rates and spreads are rising, it is important to ensure the stability of capital flows. New borrowers are at risk of long-lasting exclusion of financial markets, despite growth potential. The objective of the ALSM, and of various tools proposed here, is to find ways to improve market infrastructure for the challenges ahead.

Annexes

Annex1: Lessons from the GFSN and other RFAs

The Global Financial Safety Net (GFSN) is a set of financial resources and institutional arrangements aimed at providing countries with adequate liquidity for preventing or resolving financial or economic crisis (Hawkins et al. 2014). While incentivizing sound policies, the GFSN provides insurance against idiosyncratic and systemic crises and supplies financing to smooth adjustment to major external shocks (IMF, 2017). Theoretically, the liquidity available throughout the GFSN targets countries facing unstable market expectations and risks of multiple equilibria with the aim of stabilizing expectations on a good equilibrium (Mühlich & Fritz, 2018). The efficiency of such mechanisms hence relies on the need for prompt and high enough reactions, to convince market participants and allow recipient countries to successfully dampen negative shocks. It must also be associated with convincing and specifically tailored conditionality to guarantee that beneficiary countries are not suffering from solvency issues. Inherited from the Bretton Woods building blocks toward financial stability, the Global Financial Safety Net evolved and diversified as the International Financial System globalized, regionalized, polarized, and intensified through time and crises. In itself, the GFSN consists of different intricate mechanisms and tools at the international, regional, bilateral, and national levels.

1.1. Layers, nodes, flows, and buffers within the GFSN

At the global level, the International Monetary Fund long stood as the core and main element of the GFSN. The IMF pools resources from member countries and lends them to those experiencing balance-of-payments problems. Financing is provided through a broad range of programs – concessional or not; adjustment lending facilities or precautionary instruments – which link financing to a set of policy measures intended to achieve certain economic objectives and resolve external issues. Conditionality is a core principle in the IMF's operational processes that governs countries' access to financing – beyond annual and cumulative access limits. It has long taken the form of ex-post conditionality, or 'upper credit tranche conditionality', whereby the disbursement of credit tranches follows from the fulfilment of specific obligations. This approach to conditionality has historically been a source of critics towards the IMF, a situation which culminated in the 80's and 90's as the Fund suffered from an ideological bias coined the 'Washington Consensus' and imposed liberalization and privatization policies. Ever since, governments in many emerging and developing countries have preferred avoiding or delaying requesting assistance from the IMF as it is associated with a political stigma. While the institution's position towards conditionality shifted towards more ex-ante conditionality, that is with accessibility criteria, many countries still postpone requesting assistance from the IMF of fear of the associated costs.

Starting in the 1970's, the multilateral layer was complemented by Regional Financial Arrangements (RFA). RFAs are agreements among a group of countries to provide each other with short-term financial support in case of external financial problems ranging from liquidity support (co-assurance, risk diversification...) to exchange rate arrangements. At first, these institutions aimed at isolating countries from the dangers of irregular capital flows, but they later targeted risks of spillovers and contagion while aiming to avoid inadequate IMF conditionality. The Arab Monetary Fund (AMF) and the Latin American Reserve Fund (FLAR) were instituted in 1976 and 1978 (the latter being later reformed in 1991). In 1988, the European Union merged existing community loan mechanisms into the EU Balance-of-Payment Facility

aimed at providing support for countries facing external problems. It was later restricted to EU countries not members of the Eurozone in 2002. In 1990, the European Union also created the EU Macro Financial Assistance to provide Eastern European countries, susceptible to apply for EU membership, and experiencing external sector problems with macroeconomic support. In 1994, with the creation of the NAFTA, Canada, the USA, and Mexico negotiated a Regional Financial Agreement, the NAFA, which brought together and augmented existing bilateral swap agreements between the three countries. After the Emerging Markets Crisis at the end of the 90's, South-East Asia created the Chiang Mai Initiative Multilateralization (CMIM) in 2000 and later reformed it in 2010 (see annex 2). Eastern and Western Europe equipped themselves with RFAs after the Global Financial Crisis: The Eurasian Fund for Stabilization and Development (EFSD) was created in 2009 and the European Financial Stability Mechanism and Fund (EFSM/EFSF) in 2010, both of which were replaced two years later by the European Stability Mechanism (ESM, see annex 2). Finally, amid troubles on emerging financial markets, the BRICS instituted their own liquidity pooling mechanism in 2014: the BRICS Contingent Reserve Arrangement (BRICS-CRA).

The GFSN is further completed by bilateral currency swaps, through which central banks in two countries agree to provide short-term liquidity to each other. Bilateral Swap Arrangements (BSA) can be instituted with an objective of crisis prevention or resolution but BSAs can have broader purposes (currency internationalization and trade facilitation). When installed, BSAs ensure a quick reaction in face of a shock, often associated with large potential volumes. While these mechanisms long existed, bilateral swaps saw a sharp increase after the Global Financial Crisis as a mean to provide short-term emergency financing. Only advanced economies and selected emerging markets have been offering bilateral swaps. After the 2008 crisis, bilateral swaps replaced RFAs in the GFSN as the most-used option for short-term financing (making up to 94% of total liquidity provision by the IMF, RFAs and BSAs, over 2008:18 ; Mühlich & Fritz, 2018). Yet, while bilateral swaps are associated with important volumes, the network they form is highly irregular. They are mostly provided by and among large, advanced economies' central banks (Fed, ECB, BoE, BoC, BoJ and SwissNB) or between these banks and large emerging markets. Driven by China, bilateral swap increased significantly in South-East Asia among CMIM member countries after 2008. BSAs are highly selective and conditional to the need that 'receiving' country's financial stability is relevant for the stronger 'offering' country. Hence, they make for a tool useful for highly integrated countries and a function of the economic interest of large economies (Mühlich et al. 2021). Furthermore, in many cases, little to no information is publicly available on the terms and conditions, making the lack of transparency another limitation of BSAs (Perks et al. 2021).

At the national level, countries can build up their own stock of foreign exchange reserves, a buffer that gained prominence across emerging and developing markets after the 1990's financial crises. While this national self-assurance reduces the probability of a financial crisis, it remains a costly policy which, taken multilaterally, tends to be globally destabilizing for international monetary and financial stability.

1.2. Rationale and limits of Regional Financial Arrangement

Regional Financial Arrangements aim to bypass some limitations of the other layers of the GFSN: national foreign reserves are costly and globally destabilizing ; bilateral swaps are highly discretionary, asymmetric, not transparent, and offer a poor (inexistent) coverage when considering developing countries ; and the IMF's lending processes, even though modalities evolved, remain slow and are associated with a high reluctance by many countries to abide by stigmatizing conditionality. Historically, countries display a higher willingness to approach RFAs versus the IMF, which, leading to earlier engagement, ensures to deal better with liquidity issues and preventing them from transforming into

solvency issues. As highlighted by Barry Eichengreen (2007) and following the principle of subsidiarity, should a global fund fail to adequately answer insurance issues, there is a need to provide a regional pool of reserves. The theoretical motivation behind RFAs follows two main rationales: on one hand the advantages of regional cooperation to fill the gaps caused by incomplete markets and/or exploit local economies of scale, and on the other hand, the need to remedy incomplete international institutions, which fail to represent and answer smaller countries' needs and voices (Culpeper, 2006). It builds upon four main arguments (Ocampo 2006):

- The globalization and open regionalism that took place since the mid-20th century has increased macroeconomic linkages and externalities on neighbors and magnified the risks of spillovers and contagion. Hence a core rationale for RFAs is to build regional defenses against financial crises to internalize the effects of domestic macro-financial policies on key partners.
- Given the high heterogeneity across the international community, there is a need for complementary regional and global institutions, in accordance with the principle of subsidiarity capable of combining the experience of the IMF with the better refined knowledge that RFAs have of local conditions.
- Higher competition in the provision of financial services is seen as an important defense for small and medium-sized countries, which have often very limited power to negotiate with large organizations.
- Regional and sub-regional institutions enjoy a greater sense of ownership, as member countries feel they have a stronger voice in these institutions. This also underpins a different approach to conditionality through peer-pressure.

Yet, RFAs are not perfect solution and are confronted with several challenges. They depend upon the capacity of countries within the region to supply relevant financial services and initial paid-in capital (Culpeper, 2006). In regions where there is a lot of low-income vulnerable countries (such as Africa), the lack of highly credit-worthy countries proves to be a puzzling deadlock. In South-East Asia or South America, the diversity of countries facilitated the creation and management of RFAs. Second, while 'ownership' provides a strong case for RFAs from an international perspective, it must also be that, within the region considered, there are not too strong power imbalances that could play at the disadvantage of lower income countries. To ensure that RFAs make the most of the 'ownership' rationale, they must thus be matched by strong institution building and ensure that there is an equitable distribution of the benefits of regional integration. Moreover, the higher the region's asymmetry, the more difficult it is to design conditionality and enforcement mechanisms that would satisfy the variety of country's needs. RFAs also tend to struggle combining adequate liquidity provision and adequate conditionality with a, usually, weak economic and financial surveillance capacity. This might diminish countries' incentives to implement policies that would reduce systemic risks while access to a program might simultaneously reassure private creditors through the program's insurance (ECB, 2018). To reduce this moral hazard, ex-ante tools such as macroeconomic surveillance are needed for RFAs to adjust their programs. Ex-post conditionality is also a manner to ensure that a country is adopting the right policy measures. In IMF-RFA co-financed programs, lack of coordination is a potential source of moral hazard, as exemplified by the Greek crisis. Moreover, the difference in objectives and rules between RFAs and the IMF can create a situation of "facility shopping". To avoid this situation, a better consistency of programs' conditionalities is needed.

1.3. Complementarity and the tools for stability

A key challenge in devising appropriate RFAs revolves around the need for complementarity across the different layers of the GFSN and more importantly between the IMF and RFAs. As advocated by Gallagher

et al. (2021), to properly consolidate the GFSN, there is a need to optimize lending toolkits and funding policies to complement the IMF existing instruments. The need for collaboration relies upon key motivations such as (i) the need to augment firepower to tackle large scale crises, (ii) the advantages of combining deeper regional specific knowledge and ownership with global experience and perspective and lower susceptibility to local political factors, (iii) the potential to enhance local ownership while boosting program credibility and limiting moral hazard, and (iv) an increased crisis prevention potential when increasing collaboration on surveillance and capacity development (IMF, 2017). Examining past episodes, IMF (2017) identifies seven key lessons for successful collaboration: (i) strong ownership by the recipient country, (ii) need for early and evolving engagement, (iii) need to respect independence and differing objectives in lending practices and governance structures, (iv) need to foster complementarity along each institution's comparative advantage, such as relying upon the IMF's experience with macroeconomic frameworks, (v) need for a coherent program design, that avoids excessive conditionality and lack of coordination, possibly by anchoring inter-institutional discussions around a conditionality document, (vi) need to resolve differences rapidly to avoid delays, though not at any cost and (vii) need for effective, consistent, and coordinated public communication. In regions with an RFA, complementarity has a practical understanding with larger countries going to the IMF for support, while smaller ones preferably ask RFAs for assistance (Mühlich and Fritz, 2018). For some RFAs, complementarity takes the form of program & conditionality co-design or alignment, with the extreme, in some cases, that member countries must be under IMF conditional program to unlock full RFA liquidity provision. Complementarity also manifests in the lending terms and the maturity of the loans made between the IMF and RFAs, the IMF lending with maturities between 3 to 10 years while some RFAs provide shorter or longer maturities (Cheng et al., 2020).

Given the historical centrality and experience of the IMF in the GFSN, RFA toolkits are inspired in many instances by its own programs, even though differences remain to adapt instruments to specific regional needs and particular institutional settings (Cheng et al., 2020). Three main criteria make for the usefulness of an instrument in the global financial safety net. It must be able to deliver enough liquidity to tone the effect of a shock and convince that countries will have ample policy-space to manage its aftereffects, given other existing constraints and policy challenges. It must be reactive enough to ensure that the shock does not disrupt the financial system to the point that cumulated costs/losses or markets' expectation destabilization endanger countries' solvency and medium/long term stability. It must be associated with appropriate conditionality and enforcement mechanisms (i) to ensure, before the mechanism comes into use, that participating countries are willing to supply initial paid-in capital, and (ii) to ensure its credibility and reduce moral hazard. Overall, instruments must ensure that financial spillovers to other countries within the GFSN are reduced as much as possible to reduce positive feedback mechanisms. RFA toolkits include two main types of mechanisms – crisis resolution and crisis prevention tools – along with other less widespread instruments.

Crisis resolution instruments are loans or credit lines that countries can call upon when faced with shocks that, given current level of policy constraint and underlying structural vulnerabilities, face balance-of-payment or budget finance issues. They are the most common instruments throughout RFAs. Some RFAs also offer concessional versions of the instruments to their Low-Income Countries (AMF, EFSD, EU-MFA). All RFAs offer liquidity support for short to medium term needs aimed at dampening balance-of-payments deficits or pressures or unanticipated increased financing needs or costs that might constrain market access. Some RFAs provide longer horizon support aimed at tackling deeper-rooted structural imbalances and impediments (AMF, EFSD, EFSF, ESM, EU-MFA). Several RFAs

also propose instruments aimed at urgent liquidity provision (AMF, CRA, CMIM, FLAR). Some RFAs also develop sector-specific instruments (AMF, ESM). The AMF has facilities dedicated to reforms and vulnerabilities in the banking and financial sector, public finance, and the oil sector. The ESM also provides an instrument dedicated to banking sector recapitalization to tone down risks of bank-sovereign vicious circles.

Crisis prevention instruments are tools that aim to incentivize countries to develop and maintain sustainable policies in tranquil times by creating insurance contracts against potential crises. They are intended for countries with good policy track records that could be adversely affected by external global or regional shocks. RFAs prevention tools are solely aimed at alleviating potential financing needs. All RFAs but the AMF offer precautionary instruments. CMIM and the ESM both propose precautionary tools with ex-ante conditionality. Access criteria are broadly aligned with usual IMF qualification criteria (external position, fiscal position, monetary policy, financial sector soundness and data transparency and integrity) but they approach qualification differently. The ESM and CMIM tend to follow a bottom-up approach where criteria and experts' judgments justify qualification, whereas the IMF seems to prefer a top-down approach in which criteria support quantitative evidence. The BRICS CRA and the FLAR can provide liquidity based upon precautionary motives to member countries without ex-ante conditionality but provided sufficient safeguards or guarantees are provided. Both the CRA and the FLAR offers contingent loans available for six months, renewable 3 times for the former and once for the latter. For the BRICS CRA and CMIM, the volume of liquidity provided to member countries can overcome 40% of access limits provided a program is agreed with the IMF.

Other tools are also proposed by some RFAs: (i) surveillance, policy advice and capacity development (AMRO at CMIM), (ii) guarantees to facilitate bond issuance on international capital markets (AMF), (iii) sovereign securities purchases on primary or secondary debt markets (ESM), and (iv) grants or investment loans directed to Low-Income member Countries for development purposes.

1.4. The GFSN through crises and African (limited) options

During the most recent crisis-densest episode following the US 2008 Financial Crisis, most elements of the GFSN evolved: expanding their potential volume of liquidity support, creating new instruments for prompter crisis-reaction policies and easing conditionality and access while adapting use-of-instrument design. Between 2008 and 2018, out of \$3.5tn available as lending capacity in the GFSN, \$1tn came through the IMF, \$1.5tn through BSAs, and \$1tn through RFAs (Mühlich, Fritz and Kring, 2021). Yet, out of the \$3.5tn, only one quarter was designated for emerging markets and developing economies. The GFSN underperformed at rechanneling liquidity and providing insurance to where most needed, Africa being the sad proof of this failure. The recent Covid-19 crisis confirms yet again the difficulties of the GFSN to provide ample and diverse enough support to African countries.

A lot of the additional liquidity poured in the GFSN during the Covid-19 crisis came through BSAs. As illustrated before, the BSA club is select and many developing countries, including 91% of Sub-Saharan African countries, are left outside.

During the crisis, the IMF reacted by expanding its facilities and introducing new types of support (Short Term Liquidity Line). Most of the changes took the form of an increase in annual and overall access limits, suspension of limits to the number of disbursements in the Rapid Credit Facility or an expansion of the Catastrophe Containment and Relief Trust to be used for debt relief. Nevertheless, these measures were

not associated with any real increase in the Fund's lending capacity and judged 'underwhelming' (Stubbs et al. 2020). While many voices in the literature pinpoint the fact that the IMF could have done more, it is nevertheless important to point out that it reacted swiftly at the onset of the crisis, with numerous countries requesting assistance, mainly, through the new emergency instruments (RFI and RCF). The bulk of the support towards developing countries came from the IMF. This was Africa's main notable source of external support – if not the only.

RFAs reacted to the Covid-19 crisis in different ways. Most revised their lending toolboxes and policies or accelerated internal processes to respond more effectively and quickly to member requests. The ESM adapted its precautionary line instrument to a Pandemic Crisis Support Instrument, tailored to the needs of sovereigns. FLAR designed a temporary facility for longer term support and increased its leverage. CMIM increased the portion available to countries without IMF supported program from 30 to 40% of their maximum arrangement amount. AMF, EFSD and EU-MFA approved new programs and loan disbursements. Finally, RFAs closely monitored macroeconomic and financial developments and the pandemic impact to help advise member countries and disseminated principles and guidelines for policy actions. While reactions were numerous, only limited additional liquidity was provided. The main reasons behind this RFA under-utilization include the size of available funding, constraints on the fiscal use of financing facilities, efficiency, and conditionality/links to IMF conditionality (Gallagher et al, 2021). Yet, beyond countries in North Africa and Africa's Horn, the vast majority of the continent could not benefit from such support.

Amid the burst of the Covid-19 crisis, national policies were also proactive towards financial stability and governments and central banks took innovative approaches. In the first 6 months of the crisis, 27 EMDE central banks – across income groups and regions – developed new Asset Purchase Programs, 62% of which was aimed at "boosting market confidence and tackling financial market dysfunctionalities" (Fratto, Harnoys-Vannier, Mircheva, de Padua, and Poirson, 2021).

Annex2: The European Stability Mechanism

The European Stability Mechanism (ESM) was created in 2012 to provide stability support to Euro Area member countries that are facing severe financial difficulties. The ESM borrows money on financial markets that is guaranteed by its own authorized capital (around €700bn supported by €80bn paid-in capital). The ESM provides loans based on strict conditionality and the implementation of policy measures. The reform program is defined in a Memorandum of Understanding negotiated by the European Commission, the European Central Bank, the IMF (when applicable) and the beneficiary. The lending instrument and the attached conditions are then approved by the board of Governor, which is composed of the Euro Area Finance Ministers. ESM programs usually expand over 3 years while the maturity of ESM loans is much longer (from 12 to 43 years). ESM lending rates fully cover their funding and operational costs. The ESM lending toolkit includes 6 instruments:

- (1) Stability Support Loans “assist ESM Members in significant need of financing, and which have lost access to the markets, either because they cannot find lenders or because the financing costs would adversely impact the sustainability of public finances”. Loans are backed by strong conditionality programs.
- (2) Precautionary Credit Lines aim at providing funds “to support sound policies and prevent crisis situations from emerging. It aims to help ESM Members whose economic conditions are sound to maintain continuous access to market financing by strengthening the credibility of their macroeconomic performance.” Two credit lines are proposed to member countries: Precautionary Conditioned Credit Lines (PCCL) and Enhanced Conditions Credit Lines (ECCL). PCCL demands that a country respects 6 macro-financial soundness criteria. Should the country demonstrate a sound economic and financial situation but not validate the criteria, they are eligible to the ECCL.
- (3) Primary Market Purchases: “The ESM may engage in primary market purchases of bonds or other debt securities issued by ESM Members at market prices to allow them to maintain or restore their relationship with the investment community and therefore reduce the risk of a failed auction. This can complement the regular loan instrument or a precautionary programme. The purchase is limited to 50% of the final issued amount.”
- (4) Secondary Market Purchases enable the ESM to intervene on secondary markets “to support the sound functioning of the government debt markets when lacking market liquidity threatens financial stability in the context of a loan either with a macroeconomic adjustment programme or without if the Member's economic and financial situation is fundamentally sound.”
- (5) Loans for indirect bank recapitalization: These loans provide support “to preserve the financial stability of the euro area by addressing those cases where the financial sector is primarily at the root of a crisis, rather than fiscal or structural policies.”
- (6) Direct recapitalization of institutions can be implemented “to help remove a serious risk of contagion from the financial sector to the sovereign. The total amount available for this instrument is limited to €60 billion. The instrument is relevant for banks (systemically important credit institutions), financial holding companies, and mixed financial holding companies as defined in relevant EU legislation.”

Annex3: Details on the CMIM

From the Asian Monetary Fund pledge to the CMIM:

In the peak of the Asian monetary crisis in 1997, a meeting was held by the ASEM finance ministers. Japan proposed the creation of an “Asian Monetary Fund” to prevent other monetary crisis for having a lender of last resort at a regional level, considering that the IMF funds for Asian countries were too small given their economic size. IMF and other nations such as United States opposed that proposal due that an Asian Monetary Fund would weaken the existing GFSN. A compromise was agreed by facilitating IMF to allow fund and to conclude borrow agreements. In 1999, Asian Development Bank approved an Asian Currency Crisis Support Facility funded by Japan. We can also notice that in 1997, the “Manilla Framework” was created to explore the idea of a regional financial agreement to ensure stability. It involved ASEAN; Australia; PRC; Hong Kong, China; Japan; Korea; and the United States.

In May 2000, the Chang Mai Initiative was agreed by the ASEAN+3. It was an agreement on expansion of bilateral swap arrangements and ASEAN Swap Arrangement. The initial value of bilateral swap was US\$30 billion. The CMI was more symbolic, noting that the amount drawn without being link to IMF conditionalities was 10%. Over the time the maximum size increased to reach \$120 billion, and the amount unlinked to IMF conditionality reached 20%. Moreover, the urge for liquidity faded, as country began to recover from the crisis. In April 2009, ASEAN+3 Members agreed to multilateralize the CMI. Indeed, after the 2008 financial crisis, country such as Korea or Singapore used US Federal Reserve to secure liquidity instead of the CMI. The Chiang Mai Initiative Multilateralisation (CMIM) was signed in December 2009 and took place in March 2010. In 2012 CMIM reached US\$240 billion and the IMF de-link proportion reached 30% in 2014 and 40% in 2021.

AMRO:

In addition to the CMIM, ASEAN+3 agreed on creating ASEAN+3 Macroeconomic and Research Office or AMRO. It is an “an independent, credible, and professional regional organization acting as a trusted policy advisor to members in the ASEAN+3 region”. It has 3 roles: “conducting macroeconomic surveillance, supporting the implementation of the Chiang Mai Initiative Multilateralisation (CMIM), and providing technical assistance to members.”. However, economic tradition in East Asia prevent country to judge or make commitment on another one’s policies. It produces Research Paper, Regional outlook as well as Annual Reports. Its aim is to be as well “an independent, credible and professional regional organization acting as a trusted policy advisor to members in the ASEAN+3 region. “AMRO is supervised by an Executive Committee consisting of one deputy in charge of finance and one central bank deputy for each member country. The Executive Board nominates an Advisory Panel to provide “timely strategic, technical and professional input to AMRO’s macroeconomic assessments and recommendations to the Director” for a mandate of two years.

CMIM Overview:

The decisions of the CMIM are made by two boards:

- The Ministerial Level Decision Making Body (MLDMB) which consists of ASEAN+3 finance ministers and central bank governors. MLDMB decides on “fundamental issues” of CMIM determined by consensus.

- Executive Level Decision Making Body (ELDMB) for “executive issues”. Its members are deputy-level representatives of ASEAN+3 Finance ministries and central banks in addition with the Hong Kong Monetary Authority.

CMIM toolkit is made of two instruments:

- Stability Facility Resolution (CMIM-SFR): Member country can activate a swap line, either in US dollar or in a local currency of an ASEAN+3 member, for balance of payment or short-term liquidity difficulties. The maximum amount is determined by the country's contribution. Under 40% of the quota, the SFR is not linked to IMF. Drawings can be renewed 3 times with a maturity of 6 months (2 years in total). Above 40% of the Quota a portion is linked to IMF-programs. Each drawing has a 1-year maturation and can be renewed with the ELDMB approval.
- Precautionary Line (CMIM-PL): A swap line can be activated in case of potential balance of payment or short-term liquidity difficulties with the same amount of the SFR. Once the CMIM-PL is approved, it can be accessed up to 6 months. If it is IMF de linked portion (40%), the swap line can be renewed 3 times with a 6-month maturity. For the IMF linked portion, drawing has a 1-year maturity and the number of renew of the line is determined by the Executive Board given its “consistency with the relevant IMF program”.

For the line approval, after requesting analyses from member country, AMRO and “if necessary and available, by third parties such as the Asian Development Bank or the IMF or other similarly competent institutions” the following ex ante and ex post criteria are applied:

- External Position and Market access
- Fiscal Policy
- Monetary Policy
- Financial Sector Soundness and Supervision
- Data adequacy

Both programs cannot be applied at the same time, but the CMIM-PL can be replaced by the CMIM-SFR if the country is experiencing a crisis.

Annex4: Brady Bonds

Historical context and target:

In the 1980s, emerging markets, among which many Latin American countries faced a global debt crisis as poor macroeconomic management failed to tame high inflation and large capital outflows. Aggravated by a drop of commodity prices and increased US interest rates increased, debt repayment induced costs increased drastically. Latin American states were yet not so keen as to sacrifice development for debt reimbursement, spurring a wave of debt crises, starting with Mexico in 1982. In 1985, the Baker Plan was introduced which aimed at restructuring debt through rescheduling and facilitating IMF's lending to rekindle economic growth, unsuccessfully. In 1989, a new initiative, the Brady Plan, was launched to address sustaining external fragilities. This program, facilitated because private bank creditors had built up provisions against future losses, entailed much needed debt and debt service reduction. Indebted countries could exchange, with a haircut, their commercial bank loans for bonds backed by the US Treasury. Strong political support by advanced economies and international institutions facilitated and accelerated liquidity provision that boosted policy reforms and growth along with voluntary case-by-case debt and debt service reductions.

Brady instruments:

Through the Brady plan, specific Brady bonds were created, that, exchanged on newly created secondary markets, allowed countries to return to the bond markets for new borrowing. Thanks to loans made by international financial institutions and advanced economies, debtors were able to purchase US Treasury Bills usually placed in escrow as guarantees for the newly created debt instruments. These Brady bonds were then offered to bond investors as a menu of options, chosen by countries, that entailed reductions in principal, interest, price, or arrears and/or maturity extension. Brady bonds took many forms, though par bonds and discount bonds were the main common instruments:

- Par Bonds: Fixed rate semi-annual below market coupons with a bullet maturity of 25 to 30 years accompanied by a rolling interest guarantees between 12 and 18 months. Principal is generally collateralized by US treasury zero-coupon bonds.
- Discount bonds: Floating rate semi-annual LIBOR coupon with a maturity of a registered 30-year bullet amortization issued at discount. They're paired with a rolling interest guarantee between 12 and 18 months and no collateralization.
- Front-loaded interest-reduction bonds: 15-to-20-year maturity bonds with amortization features with reduced interest rate for a few years before being raised to LIBOR rates until maturity. They're associated with an average 12 months rolling interest guarantee available for the first 5-6 years.
- Debt Conversion Bonds and New Money Bonds: Bearer bonds issued at par with a 15to-20-year maturity and no collateral. They yield a market rate and coupons are amortized at LIBOR + 7/8.
- Past Due Interest Bonds: Bearer bonds with 10-to-20-year maturity and amortizing semi-annual LIBOR coupons with no associated collateral.
- Capitalization Bonds (Brazil 1994): Registered 20-year amortizing bonds initially offered at par with fixed below market coupon rate stepping up to 8% during the first 6 years and holding until maturity. Both capitalized interest and principal payments are made after a 10-year grace period.

Widespread use and Brady bonds' successes:

In 1989, Mexico, Costa Rica, and the Philippines signed an agreement with the IMF for a Brady package. In 1990, Mexico was the first country to implement the plan. Between 1990 and 1992, it allowed a 35% debt reduction, an average reduction of \$1.6 billion per year for interest payments and \$4 billion for external net transfers. In 1996, 17 countries – including 10 Latin American countries such as Argentina, Brazil, and Peru – had subscribed to the plan. For Latin American countries, debt reduction amounted between 30% and 45% and successfully rekindled their economies. The Brady plan also successfully developed secondary debt market in these financially underdeveloped economies. Traded volumes rose from \$1.5 billion in 1985 up to \$200 billion in 1992. Other plans like the Brady Plan were later agreed upon after the 1990s, for instance during the 2011-13 Greek crises which resulted in a 65% debt reduction, or for Ukraine in 2015.

References

- Acemoglu D, Ozdaglar A, and Tahbaz-Salehi A. (2015) Systemic risk and stability in financial networks American Economic Review 105(2): 564-608, <http://dx.doi.org/10.1257/aer.20130456>
- Amadou Boly, Maty Konte, Abebe Shimeles (2021), Corruption Perception and Attitude Towards Taxation in Africa, Journal of African Economies, Volume 30, Issue Supplement_1, November 2021, Pages i140–i157, <https://doi.org/10.1093/jae/ejab024>
- Andrews, D., Hicklin, J. and Plant, M. (2021), “Three ways new SDRs can support the IMF’s lending to low-income countries”, in CGDev Blog Post, 29 April 2021 <https://www.cgdev.org/blog/three-ways-new-sdrs-can-support-imfs-lending-low-income-countries>
- Arezki R, and Bruckner M. (2012a).Commodity Windfalls, Democracy and External Debt. The Economic Journal. 122 (561), pp. 848-866 <https://doi.org/10.1111/j.1468-0297.2012.02508.x>
- Arezki R, and Bruckner M. (2012b). Resource Windfalls and Emerging Market Sovereign Bond Spreads: The Role of Political Institutions. The World Bank Economic Review, Volume 26, Issue 1, 2012, Pages 78–99, <https://doi.org/10.1093/wber/lhr015>
- Atingi-Ego M, Timuno S, and Makuve T. (2021) Public Debt Accumulation in SSA: A Looming Debt Crisis, Journal of African Economies, Volume 30, Issue Supplement_1, November 2021, Pages i103–i139, <https://doi.org/10.1093/jae/ejab023>
- Birdsall, N. (2007) Do No Harm: Aid, Weak Institutions and the Missing Middle in Africa. Development Policy Review. Colume 25, Issue 5. Special Issue; Developmental states in the new millennium. Pp575–598. <https://doi.org/10.1111/j.1467-7679.2007.00386.x>
- Callen M, Imbs J, and Mauro P. (2015) Pooling risk among countries, Journal of International Economics 96:1 pp 88:99, DOI : 10.1016/j.jinteco.2015.01.006
- Cheng, G., Miernik, D. and Turani T. (2020), “Finding complementarities in IMF and RFA toolkits”, in ESM Discussion Paper Series, No. 8, February 2020, p. 1–44. <https://www.esm.europa.eu/publications/finding-complementarities-imf-and-rfa-toolkits>
- Cemac-BAD (2021),Le Mécanisme africain de stabilité financière en discussion, Gabonreview.com | Actualité du Gabon , <https://www.gabonreview.com/cemac-bad-le-mecanisme-africain-de-stabilite-financiere-en-discussion/> (accessed 1.5.22).
- Christensen B., Schanz J. (2018) ‘Central Banks and Debt: Emerging Risks to the Effectiveness of Monetary Policy in Africa?’, BIS Papers No. 99, October, <https://www.bis.org/publ/bppdf/bispap99.htm>
- Cruces J. and Trebesch C. (2013) Sovereign Defaults: the price of haircuts. American Economic Journal: Macroeconomics 5(3): 85–117
- Culpeper R. (2006) Reforming the Global Financial Architecture: The Potential of Regional Institutions. Chapter 2 in ‘Regional Financial Cooperation’ Ed: JA Ocampo, <http://www.nsi-ins.ca/wp-content/uploads/2013/10/Reforming-the-Global-Financial-Architecture-The-Potential-of-Regional-Institutions.pdf>
- Dagah, H.G., Kring, W., Bradlow, D. (2019), Jump-starting the African Monetary Fund,GEGI Policy Brief 008(July 2019), https://www.bu.edu/gdp/files/2019/07/jumpstating_the_african_monetary_fund.pdf
- Davoodi, Hamid, Paul Elger, Alexandra Fotiou, Daniel Garcia-Macia, Andresa Lagerborg, Raphael Lam, and Sharanya Pillai. 2022. "Fiscal Rules Dataset: 1985–2021", International Monetary Fund, Washington, D.C. <https://www.imf.org/external/datamapper/fiscalrules/map/map.htm>

Devarajan, S., S. Gill, I. ans Karakülah, K. (2021), Debt, Growth and Stability in Africa: Speculative Calculations and Policy Responses, Journal of African Economies, 2021, vol. 30, AERC Supplement 1, i74-i102, <https://doi.org/10.1093/jae/ejab022>

ECB (2018) ,Strengthening the Global Financial Safety Net: Moving relations between the IMF and RFAs forward. ECB Occasional Paper Series – IRC Task Force on IMF issues, <https://www.ecb.europa.eu/pub/pdf/scpops/ecb.op207.en.pdf>

Eichengreen B.(2007) Insurance underwriter or financial development fund: what role for reserve pooling in Latin America? Open Economies Review 18:27-52, DOI: 10.1007/s11079-007-9001-4

Fofack H (2021) The ruinous price for Africa of pernicious ‘perception premiums’ Brookings Africa Growth Initiative https://www.brookings.edu/wp-content/uploads/2021/10/21.10.07_Perception-premiums.pdf

G20 EPG.(2018), Making the Global Financial System Work for All. G20 Eminent Persons Group on Global Financial Governance, <https://www.globalfinancialgovernance.org/assets/pdf/G20EPGFull%20Report.pdf>

G20 (2020), “G20 Principles for Cooperation between the IMF and Regional Financing Arrangements” <http://www.g20.utoronto.ca/2011/2011-finance-principles-111015-en.pdf>

Gallagher, K., Gao, H., Kring, W., Ocampo, J. and Volz, V., (2021) “Resetting the Global Financial Safety Net for the Covid-19 recovery”, T20 Policy Brief Task Force 9 (September 2021), https://www.g20-insights.org/policy_briefs/resetting-the-global-financial-safety-net-for-the-covid-19-recovery/

Hall, J. Sobel, R. and Crowley, G. (2010) Institutions, Capital, and Growth. Southern Economic Journal. Volume 77, Issue 2. Pp 385-405. <https://doi.org/10.4284/sej.2010.77.2.385>

Hawkins A, Rahman J, and Williamson T. (2014) Is the global financial safety net at a tipping point to fragmentation? Economic Roundup, The Treasury, Australian Government, issue 1, pages 1-20 (April 2014) <https://treasury.gov.au/publication/economic-roundup-issue-1-2014/economic-roundup-issue-1/is-the-global-financial-safety-net-at-a-tipping-point-to-fragmentation>

IMF (2017), “Cooperation between Regional Financial Arrangements and the IMF”, in IMF Policy Papers, (31 July 2017), p.1-43. <https://www.imf.org/en/Publications/Policy-Papers/Issues/2017/07/31/pp073117-collaboration-between-regional-financing-arrangements-and-the-imf>

IMF (2021) Fund Support for Debt- and Debt-Service- Reduction Operations. IMF Policy Paper. <https://www.imf.org/en/Publications/Policy-Papers/Issues/2021/03/16/Fund-Support-for-Debt-and-Debt-Service-Reduction-Operations-50266>

IPCC (2022), Climate Change 2022: Impacts, Adaptation and Vulnerability, <https://www.ipcc.ch/report/sixth-assessment-report-working-group-ii/>

Fratto, C., Harnois Vannier, B. Mircheva B. ; de Padua, D. ; Poirson H. (January 2021), Unconventional Monetary Policies in Emerging Markets and Frontier Countries in IMF Working Paper No. 2021/014, <https://www.imf.org/en/Publications/WP/Issues/2021/01/22/Unconventional-Monetary-Policies-in-Emerging-Markets-and-Frontier-Countries-50013>

Kring, W.N., L. Mühlich, B. Fritz, K.P. Gallagher, J.D. Pitts, M.Z. Marques, and N. Gaitán (2021), “Global Financial Safety Net Tracker”, Global Development Policy Center, <http://www.gfsntracker.com>

Kuwayama M, (1994) Futures markets as a risk management tool for Latin American commodity exports: some pending issues. Series Históricas 30, Naciones Unidas Comisión Económica para América Latina y el Caribe (CEPAL).

[https://repositorio.cepal.org/bitstream/handle/11362/9607/S9400503_en.pdf?sequence=1&isAllowed=](https://repositorio.cepal.org/bitstream/handle/11362/9607/S9400503_en.pdf?sequence=1&isAllowed=y)

y

Lopez, H. and Servén, L. (2009) Too poor to grow. World bank economic Review. Policy Research Working Paper 5012.

Morsy, H. & Mustafa, E. (2020), Mispricing of Sovereign Risk and Investors Herding in African Debt Markets, African Development Group, Working Paper Series n°331, May 2020, https://www.afdb.org/sites/default/files/documents/publications/wps_no_331_mispricing_of_sovereign_risk_and_investor_herding_in_african_debt_markets.pdf

Mpapalika, J. & Malikane, C. (2019), The Determinants of Sovereign Risk Premium in African Countries, Journal of Risk and Financial Management, DOI: 10.3390/jrfm12010029

Mühlich, L. & Fritz, B. (2018), Safety for Whom? The Scattered Global Financial SafetyNet and the Role of Regional Financial Arrangements, <https://www.afdb.org/fr/documents/working-paper-331-mispricing-sovereign-risk-and-investor-herding-african-debt-markets>

Mühlich L, Fritz B, and Kring W. (2021) Towards the marginalization of multilateral crisis finance? The Global Financial Safety Net and Covid-19. CEGI Policy Brief 015 (April 2021), https://www.researchgate.net/publication/351564360_Towards_the_Marginalization_of_Multilateral_Crisis_Finance_The_Global_Financial_Safety_Net_and_COVID-19

Mupunga, & Ngundu, T. (2020). COMMODITY PRICE SHOCKS AND FINANCIAL SECTOR STABILITY IN COMMODITY DEPENDENT COUNTRIES IN SOUTHERN AFRICA. Studies in Economics and Econometrics, 44(3), 109-137., <https://doi.org/10.1080/03796205.2020.1919427>

Ndulu, B. & O'Connell, S. (2021), Africa's Development Debt, Journal of African Economies, 2021, Vol. 30, AERC Supplement 1, i33-i73 doi: 10.1093/jae/ejab021Article

Ocampo JA. (2001) ,International asymmetries and the design of the international financial system. UN-ECLAC Serie Temas de Coyuntura 15, <https://www.cepal.org/en/publications/7776-international-asymmetries-and-design-international-financial-system>

Ocampo, JA. "Regional Financial Cooperation: experiences and challenges", in Jose Antonio Ocampo (ed.) *Regional Financial Cooperation*, Washington D.C., Brookings Institution Press, 2006, p. 1-39., https://www.brookings.edu/wp-content/uploads/2016/07/regionalfinancialcooperation_chapter.pdf

Perks M, Rao Y, Shin J, and Tokuda K (2021) ,Evolution of Bilateral Swap Lines IMF working paper 2021/210., <https://www.imf.org/en/Publications/WP/Issues/2021/08/06/Evolution-of-Bilateral-Swap-Lines-463358>

Qian Y, (2021) Brady Bonds and the Potential for Debt Restructuring in the Post-Pandemic Era. Boston University Global Development Policy Center, GCI Working Paper 018. 09/2021 https://www.bu.edu/gdp/files/2021/09/GCI_WP_018_FIN.pdf

Sachs, J., McArthur, J.W., Schmidt-Traub, G., Kruk, M., Bahadur, C., Faye, M., and McCord, G. (2004). Ending Africa's Poverty Trap. Brookings Papers on Economic Activity 2004(1), 117-240. doi:10.1353/eca.2004.0018.

Senga C, Cassimon D, and Essers D. (2018), Sub-Saharan African Eurobond yields: What really matters beyond global factors? Review of Development Finance, vol 8 issue 1, pages 49-62, <https://doi.org/10.1016/j.rdf.2018.05.005>

Smaoui, H., Grandes, M. and Akindede, A. (2017), "The determinants of bond market development: further evidence from emerging and developed countries", Emerging Markets Review, Vol. 32 No. 2007, pp. 148-167, <https://doi.org/10.1016/j.ememar.2017.06.003>

Songwe V. and Awiti C. (2021) African Countries' Debt: A Tale of Acceleration at Multiple Speeds and Shades. Journal of African Economies. Vol 30, AERC Supplement 1 i14-i32 <https://doi.org/10.1093/jae/ejab020>

Stubbs T, Kring W, Laskaridis C, Kentikelenis A, and Gallagher K. (2020) Whatever it takes? The global financial safety net, Covid-19 and developing countries. World Development 137, <https://doi.org/10.1016/j.worlddev.2020.105171>

Sturzenegger F. and Zettelmeyer J. (2006) Debt Defaults and Lessons from a Decade of Crises. Cambridge, MA: MIT Press.

Uchechukwumgemezu, C.(2021.) African ministers: Rich nations should put \$30 billion of IMF cash towards Africa investments. TODAY., <https://www.today.ng/news/africa/african-ministers-rich-nations-30-billion-imf-cash-africa-investments-376742> (accessed 1.6.22).

UNECA, "Launch of the Liquidity and Sustainability Facility" (3 November 2021) <https://www.uneca.org/?q=events/launch-of-the-liquidity-and-sustainability-facility>

Willems, T. (2021) ,An Auction-Based Sovereign Debt Restructuring Mechanism, IMF Connect, <https://www.imfconnect.org/content/dam/imf/Spring-Annual%20Meetings/SM21/openevents/An%20Auction-Based%20Sovereign%20Debt%20Restructuring%20Mechanism.pdf>



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