

GLOBAL ECONOMIC GOVERNANCE INITIATIVE



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Sustainable Future Bonds

BOOSTING MDB LENDING AND IMPROVING THE GLOBAL RESERVE SYSTEM

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EXECUTIVE SUMMARY

Multilateral development banks (MDBs) have a crucial role to play in mobilizing the resources necessary to foster low-carbon, resilient and socially inclusive development trajectories. With levels of debt distress and the cost of private capital at new highs, the unique financial model of MDBs enables them to provide low-cost, transformational long-term investments aligned with the United Nations 2030 Sustainable Development Goals (SDGs) and Paris Climate commitments (UNCTAD 2023, IMF 2022).

At this writing, MDBs are contributing just a small fraction of the financing they need to deploy to fulfill their potential. Moreover, there is a thin level of political support among the major non-borrowing shareholders, and a limited level of financial capacity among the borrowing member states of the MDBs, for major paid-in capital increases (Lawder, Singh and Shalal 2023). While Capital increases are paramount to mobilizing the necessary resources, the G20 led efforts on MDB capital Adequacy Frameworks (CAF) has sparked a variety of proposals for MDBs to explore hybrid capital arrangements. In other words, MDBs could issue fixed-income instruments (like bonds), with equity-like features (perpetual maturity), allowing them to leverage these resources by three to four times to expand lending to their clients (Sala and Plant 2022). Proposals for hybrid capital have thus far largely focused on rechanneling Special Drawing Rights (SDRs) (AfDB 2022, Sala and Plant 2022, Paduano and Setser 2023). Yet, total accumulated SDRs represent only 7 percent of total foreign reserves and rechanneling them outside of the International Monetary Fund (IMF) proves to be difficult.

This policy brief presents a proposal for MDB hybrid capital that is designed to not only boost MDB funding but also supply the international reserve system with a new safe asset. We provide an illustrative example of how such a scheme could work and ultimately show that rechanneling a tiny



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fraction of the global foreign reserves could result in mobilizing at least \$60 billion per year in fresh capital to MDBs. At that pace, by 2030, MDBs will have almost \$500 billion in capital injections—which would result in a loan portfolio of more than \$2.5 trillion. If properly deployed, such a level of financing could enable the MDBs to play a transformational role in a global transition to a low-carbon, resilient and more equal global economy.

The proposal has four steps:

1. **MDBs would issue Sustainable Future Bonds**, a fixed-income instrument with perpetual maturity – or expected to be rolled over into perpetuity – hence considered as a permanent contribution to MDBs resources.
2. **Central banks would use a small fraction of foreign reserves to purchase Sustainable Future Bonds.** If central banks deploy only 0.5 percent of their total foreign reserves for the Sustainable Future Bonds, at least \$60 billion per year in fresh capital to MDBs would be mobilized.
3. **MDBs would leverage their new resources, expand their balance sheet and increase lending to their clients.** As Sustainable Future Bonds would be treated as equity, it would allow MDBs to issue more plain vanilla bonds, expand their balance sheet and finance new green and sustainable investments in emerging market and developing economies. With small commitments by central banks of 0.5 percent of their total foreign reserves, MDBs would be able to issue more plain vanilla and their loan portfolio could reach more than \$2.5 trillion by 2030.
4. **The liquidity of Sustainable Future Bonds would be supported by a mutual agreement between central banks.** To prevent Sustainable Future Bonds from being redeemed, central banks would agree to accept Sustainable Future Bonds to discharge claims among themselves and exchange Sustainable Future Bonds for hard currencies on demand.

Sustainable Future Bonds would not only boost MDBs lending capacity but it would supply the international reserve system with another safe reserve asset, following a nascent trend of central banks diversifying their portfolio (Arslanalp and Simpson- Bell 2021). MDBs' preferred credit status and high rating would ensure the safety of central bank reserves. Moreover, the yields paid by Sustainable Future Bonds could follow the remuneration of World Bank-International Bank for Reconstruction and Development instruments, providing a balance between covering central banks' opportunity costs and offering a cheap funding source for MDBs.

Investing for a sustainable future has never been so urgent. According to the Intergovernmental Panel on Climate Change, it is "now or never" to make the investments necessary to limit warming to 1.5°C and avoid catastrophic human, ecological and economic costs (IPCC 2022). This proposal provides a viable and safe alternative to help put the global economy on track for a more sustainable future. The course of the global economy can be changed in 2023, as policymakers will meet in several important fora – including the Group of 20 (G20) in India, the New Global Financial Pact in Paris and the IMF/World Bank Group 2023 Annual Meetings in Morocco – to discuss the international financial architecture and how to efficiently mobilize sufficient resources for a green transition.

INTRODUCTION

The international financial system is currently characterized by a mismatch. On the one hand, emerging market and developing economies (EMDEs) excluding China need to mobilize \$1 trillion in external resources per year – or 4.2 percent of their gross domestic product (GDP) – to finance a big push of global investment that allows them to meet the United Nations 2030 Sustainable Development



Goals (SDGs) and Paris Climate commitments (Songwe, Stern and Bhattacharya 2022). On the other hand, about 12 percent of global GDP is parked as reserves at central banks from advanced economies and EMDEs. We propose a new instrument, which we will call Sustainable Future Bonds, to help reconcile the mismatch in needs to resources.

The seemingly large, needed investments pale in comparison to the dire consequences of inaction. Unchecked climate change would cost \$2 trillion per year in the United States alone and projected global output could be reduced by at least 10 percent of GDP (Benshoff 2022, Winter and Kiehl 2022). This is not to mention the human toll that climate change can cause directly and indirectly in the coming decades (WHO 2021). If the international community is serious about solving the climate and development crises, it is imperative to match the global balance sheet and guarantee that the investment push is financed by all available resources.

Given the fact that the cost of capital is at new highs and that private capital mobilization for these goals has been very limited (UNCTAD 2023, IMF 2022), it is now beyond question that multilateral development banks (MDBs) are crucial players to finance a green transition. MDBs need to catalyze investments into sustainable energy, infrastructure, manufacturing capabilities, resilience and beyond to support the structural transformation trajectories while reducing poverty and inequality as well as providing global public goods (Gallagher and Bhandary 2023).

To reach their transformative potential, MDBs need sufficient funding. Optimizing MDBs' balance sheet is a welcome step and could increase MDBs collective lending capacity (Shalal 2023, Boosting 2022, Humphrey 2018, Munir and Gallagher 2020),¹ but given the size of the climate challenge, it won't be enough unless MDBs also receive fresh capital from their shareholders. What is more, balance sheet optimization alone will not allow MDBs to offer more concessional and grant financing, which is crucial given the high cost of capital and the level of debt distress in the world economy. It is estimated that the International Bank for Reconstruction and Development (IBRD) alone should triple its annual lending to around \$100 billion per year, with a total loan exposure of \$1 trillion by 2030 (Kharas and Bhattacharya 2023).

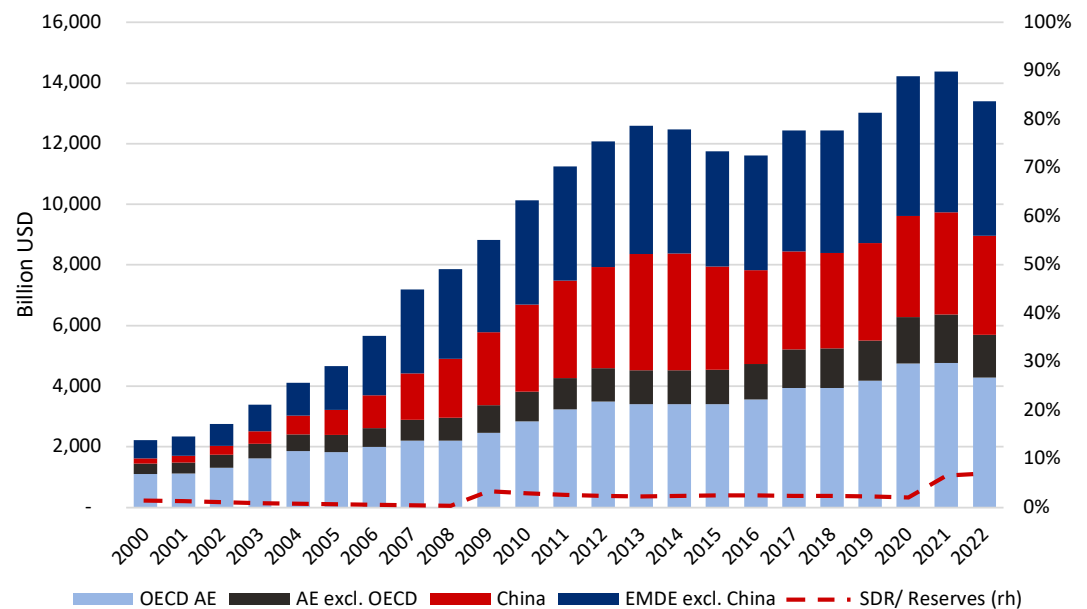
At present, however, the major shareholders of the World Bank (WB) and other MDBs appear reluctant to increase MDB capital (Lawder, Singh and Shalal 2023). For many, the hope lies in hybrid capital arrangements – also known as non-voting capital – which are fixed-income instrument (like a bond), with equity-like properties (has perpetual maturity, or expected to be rolled over into perpetuity) allowing MDBs to leverage these resources by three to four times (Sala and Plant 2022). Implementing hybrid capital arrangements was one of the recommendations in the Group of 20 (G20) Capital Adequacy Framework expert report (Boosting 2022). Although hybrid capital is not a perfect substitute for increasing paid-in capital, it is a feasible, immediate and affordable instrument to expand MDB loans.

Currently, the hybrid capital proposals being discussed focus on the rechanneling of Special Drawing Rights (SDRs). This is the case, for instance, of the African Development Bank proposal, which suggests for developed countries to on-lend their SDRs to MDBs, who would use them as capital and leverage external resources for investments (AfDB 2022). But given concerns from the International Monetary Fund (IMF) and some central banks that this arrangement would not preserve SDRs' reserve asset characteristic (Paduano and Maret 2023), Paduano and Setser (2023) have suggested the creation of SDR-denominated bonds. Under this proposal, countries that lend their SDRs to MDBs would receive in exchange an asset that could be held as foreign reserves (the SDR-denominated bonds).

¹ This also includes MDBs accepting lower credit ratings, which Munir and Gallagher 2020 estimate could generate additional lending capacity up to 127 percent.

SDRs are a formidable liquidity tool, but concentrating hybrid capital arrangements on rechanneling SDRs brings several limitations. First, even accounting for the \$650 billion SDR issuance in 2021, SDRs represent only 7 percent of global reserves (Figure 1), of which less than 1 percent is being considered for rechanneling. So far, of the \$100 billion SDRs that the G20 has pledged to rechannel, countries committed \$55 billion² to IMF internal funds (the Resilience and Sustainability Trust and Poverty Reduction and Growth Trust) (ONE 2023). But SDR rechanneling outside the IMF has proven to be a hurdle. Moreover, if SDR on-lending to MDBs is successful, only a handful of development institutions that are SDR prescribed holders could potentially benefit (IMF 2023). Finally, given the unequal allocation of SDRs in favor of advanced economies, relying on SDRs for backing up MDBs would potentially exclude the participation of some EMDEs that have received rather smaller shares of SDRs.

Figure 1: Total Foreign Exchange Reserves, excl. SDRs (billion USD) and Accumulated SDRs as % of reserves, 2000-2022



Source: IMF International Financial Statistics and IMF Finances.

Note: SDR to USD exchange rate is calculated as 0.7.

Instead, rechanneling foreign reserves can be much more effective funding for MDBs. It would not only avoid bureaucratic hurdles of rechanneling SDRs but could potentially mobilize more resources, more participating countries and canalize resources to a larger number of development institutions.

Between 2000-2022, total reserves increased by ten times for EMDEs and by four times for advanced economies. For many countries, foreign reserve levels are in excess by any metric (Arslan and Cantú 2019). Holding excess reserves carries significant social costs, so by rechanneling excess reserves to MDB funding, countries could not only mitigate these costs but contribute to closing the financing gap in the Global South (Gallagher and Shrestha 2012).

The idea of using foreign reserves for development purposes is not new, and previous IMF balance of payment manuals have suggested that central banks allocate excess reserves on WB bonds (IMF

² This total excludes the US pledge of \$21 billion, which failed to get congressional approval (ONE 2023).



1993). However, given the interest in preserving the liquidity feature of foreign exchange reserves, rechanneling foreign reserves to MDBs requires financial engineering.

SUSTAINABLE FUTURE BONDS

We propose the creation of Sustainable Future Bonds to unleash the potential of foreign reserves for development purposes. This would require four steps. First, MDBs would issue hybrid capital instruments — the Sustainable Future Bonds. Second, central banks from advanced economies and EMDEs would purchase these instruments in exchange for a small portion of their reserves. Third, MDBs would leverage their new resources, expand their balance sheet and increase lending to their clients. Finally, the liquidity of Sustainable Future Bonds would be supported by arrangements among central banks.

The first step is already under way, as the WB and other MDBs are discussing hybrid capital options (WB 2023a, Boosting 2022). The Sustainable Future Bonds would be a non-voting equity instrument that would allow MDBs to issue more plain vanilla bonds and expand their balance sheets. Although investors of Sustainable Future Bonds would not gain commensurable voting power, they would be remunerated, which is an advantage compared to conventional paid-in capital that often does not distribute dividends to shareholders (Humphrey 2023). For hybrid capital, an important consideration is whether instruments are perceived by rating agencies as a permanent contribution to MDBs' resources, a crucial consideration for maintaining a solid credit rating. For this reason, Sustainable Future Bonds would be either perpetual or expected to be rolled over into perpetuity.

Central banks are the natural investors for Sustainable Future Bonds. In fact, central banks and other official institutions already invest in similar instruments, such as WB bonds, and the IMF has suggested this as a way for countries to provide development aid without jeopardizing the reserve asset quality of their portfolio (IMF 1993, WB 2023b). Safety, return and liquidity are the three aspects that central banks often consider when managing their reserve assets (Fender et al. 2019). Investing in Sustainable Future Bonds would respect this triad. Concerning safety, MDBs' preferred credit status and high rating ensure the safety of the central bank's portfolio. Triple A rating is not exclusive to the WB, and currently, more than 16 development institutions are investment graded according to S&P Global Ratings (2022), meaning a central bank's reserves could also be channeled to regional development banks. Moreover, the fact that hybrid capital would rank senior to paid-in capital would reinforce the safety of that asset and further minimize the risks of central banks losing investments on Sustainable Future Bonds. Regarding the remuneration of Sustainable Future Bonds, IBRD instruments could serve as a benchmark for returns of these instruments, which would provide a balance between covering a central bank's opportunity costs and offering a cheap funding source for MDBs. What is more, Sustainable Future Bonds would allow central banks to expand their role in climate objectives, a consideration that has been increasingly important to monetary authorities (Diggle & Bartholomew 2021, Epstein 2019).

The liquidity of the Sustainable Future Bonds would be supported by two arrangements between central banks. First, they would agree to use Sustainable Future Bonds to settle final claims among themselves. Several central banks around the world are experimenting with local currency cross-border payment systems; some examples include the projects under the Innovation Hub from the Bank of International Settlement (BIS), the Local Currency Payment System (SML in the Portuguese acronym) from Brazil, Argentina, Paraguay and Uruguay, as well as the Malaysia-Indonesia-Thailand agreement (BIS 2023, Banco Central do Brasil 2023, Bank Negara Malaysia 2017). Under these arrangements, the central bank of a deficit country would need to settle claims with its counterparty from the surplus economy and the Sustainable Future Bonds could be used for that purpose. In that sense, the Sustainable Future Bonds could become a supranational currency that has been missing.

For the second arrangement, central banks would agree to exchange Sustainable Future Bonds for hard currencies on demand. One may argue that participating in such an agreement would create a potential obligation to liquidate foreign reserves, but given the small volume of Sustainable Future Bonds compared to the total foreign exchange reserves this should not be of concern. Moreover, if more central banks with a strong balance of payment position join the arrangement, the potential demand for hard currency can be better shared among central banks. Finally, several institutional arrangements could further mitigate this exposure; for instance, there could be a cap limiting the possible conversion of Sustainable Future Bonds to hard currencies, the creation of a liquidity pool and even the setup of a repo arrangement that accepts Sustainable Future Bonds as collateral.

The Sustainable Future Bonds are not only a solution for MDBs' scarcity of funding, but also have the potential to improve the international reserve system. The reliance on the dollar as the international reserve currency is widely recognized as a key source of global imbalances (Stiglitz 2010). Although the status of the dollar continues to dominate, there is a growing tendency for countries to diversify their foreign exchange reserves (Arslanalp and Simpson-Bell 2021). Sustainable Future Bonds would supply the international reserve system with one more safe reserve asset.

Some may object to the need to inject capital into MDBs given the calls for MDBs to consider their already existent callable capital – a sovereign guarantee to MDBs bondholders – in risk assessment (Boosting 2022). Yet, it is unclear how much such a policy alone would impact MDBs' lending capacity. Sustainable Future Bonds, instead, would be viewed as a fresh additional commitment from MDBs shareholders, allowing the banks to stretch their balance sheet and undoubtedly increase their lending capacity.

Illustrative Example

To better understand the mechanism behind Sustainable Future Bonds, it may be helpful to rely on a hypothetical example. Let's first consider an initial situation (Table 1, left side) where the WB has a lending portfolio to its clients of \$400, of which \$320 is financed by bonds held by the private sector, and \$80 by equity (including shareholders paid-in capital and retained earnings). Under that situation, leverage is 20 percent (\$400 loans/\$80 equity).

At the same time, Central Bank A is holding \$250 as foreign reserves, and Central Bank B holds \$750 (Table 1, right side). In this example, foreign reserves are invested in US Treasury bills, or other equivalent reserve assets.

Table 1: Initial Hypothetical Situation

WB Clients		WB		Central Bank A		Central Bank B	
Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
\$400 invest-ments	\$400 loans from the WB	\$400 Loans to Clients	\$320 bonds with private sectors \$80 equities	\$250 US treasury Bills		\$750 US treasury Bills	

Source: Compiled by authors.

Now, consider the WB decides to issue \$10 in Sustainable Future Bonds (Table 2), which is a hybrid capital and thus, from an accounting perspective, would be registered as equity. Central Banks A



and B decide to invest 1 percent of their foreign reserves in Sustainable Future Bonds. Hence, Central Bank A purchases \$2.50 of Sustainable Future Bonds and Central Bank B purchases \$7.50. Both Central Banks use US Treasury bills to pay for the Sustainable Future Bonds, which then will compose WB assets as cash holdings.

Table 2: World Bank Issues Sustainable Future Bonds

WB Clients		WB		Central Bank A		Central Bank B	
Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
\$400 investments	\$400 loans from the WB	\$400 Loans to Clients + 10 cash (US Treasury bills)	\$320 bonds with private sectors \$80 equities + \$10 Sustainable Future Bonds	\$250 US treasury Bill - \$2.50 US Treasury bills + \$2.50 Sustainable Future Bonds		\$750 US treasury Bill - \$7.50 US Treasury bills + \$7.50 Sustainable Future Bonds	

Source: Compiled by authors.

Considering the WB maintains the same leverage ratio (20 percent in that example), the \$10 raised with the Sustainable Future Bonds will beget an additional \$40 from capital markets. Followed by that, the WB would be able to increase its lending to clients by up to \$50, which would be translated into new investments in the SDGs and climate goals (Table 3).

Table 3: Expanding the World Bank Balance Sheet

WB Clients		WB		Central Bank A		Central Bank B	
Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
\$400 investments + \$50 investments in SDGs and climate	\$400 loans from the WB + \$50 loans from the WB	\$400 Loans to Clients \$10 cash (US Treasury bills) + 40 cash - \$50 cash + \$50 loans to clients	\$320 bonds with private sectors + \$40 bonds with private sectors \$80 equities \$10 Sustainable Future Bonds	\$247.50 US Treasury bills \$2.50 Sustainable Future Bonds		\$742.50 US Treasury bills \$7.50 Sustainable Future Bonds	

Source: Compiled by authors.

As Sustainable Future Bonds yield a positive return, central banks may choose to keep these assets in their portfolio. Apart from serving as an additional reserve asset to central banks, Sustainable Future Bonds could also serve as a medium of exchange between them. Consider that Central Banks A and B have a bilateral arrangement to make trade and investment payments in local currencies – like the SML in South America (Banco Central do Brasil 2023). After a given period, the central bank from the surplus economy (Table 4, Central Bank A) will accumulate net claims on the central bank from the deficit economy (Central Bank B). Sustainable Future Bonds could serve as a supranational medium of exchange and be used to settle this obligation between central banks. As Table 4 shows, in this specific example, Central Bank B paid \$1 to Central Bank A, clearing the net claims.

Table 4: Sustainable Future Bonds as Medium of Exchange Among Central Banks

WB Clients		WB		Central Bank A		Central Bank B	
Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
\$450 investments	\$450 loans from the WB	\$450 Loans to Clients	\$360 bonds with private sectors \$80 equities \$10 Sustainable Future Bonds	\$247.50 US Treasury bills \$2.50 Sustainable Future Bonds + \$1 Sustainable Future Bonds - Claims on Central Bank B		\$742.50 US Treasury bills \$7.50 Sustainable Future Bonds - \$1 Sustainable Future Bonds	- 1 Central Bank A debt

Source: Compiled by authors.

Big Changes Start Small

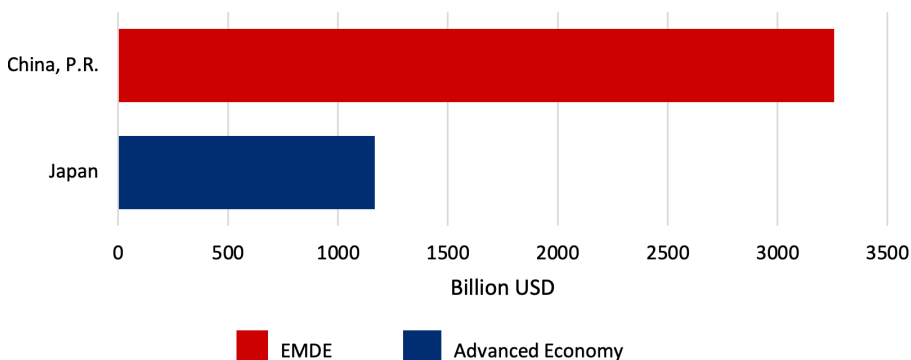
If central banks deploy just 0.5 percent of their total foreign reserves for the Sustainable Future Bonds, at least \$60 billion per year in fresh capital to MDBs would be mobilized in the form of equity. At that pace, by 2030, MDBs will have almost \$500 billion in capital injections. Considering a leverage ratio of 20 percent (equity-to-loans), similar to current levels of the WB, this would result in an additional capacity to issue plain vanilla bonds up to \$2 trillion, hence MDBs lending portfolio would reach \$2.5 trillion by 2030.

Under this proposal, advanced economies as well as EMDEs can contribute. China and Japan’s hold the largest volumes of foreign reserves – \$3.3 trillion and \$1.2 trillion, respectively – and they are not the only economies holding large volumes of reserves. Apart from China and Japan, as of December 2022, 21 economies have total reserves above \$100 billion, of which 11 are EMDEs (like India, Brazil, Saudi Arabia, Korea and others, see Figure 2). Moreover, if more central banks join the initiative, more liquidity will be generated for the Sustainable Future Bonds, increasing their role as an international reserve asset.

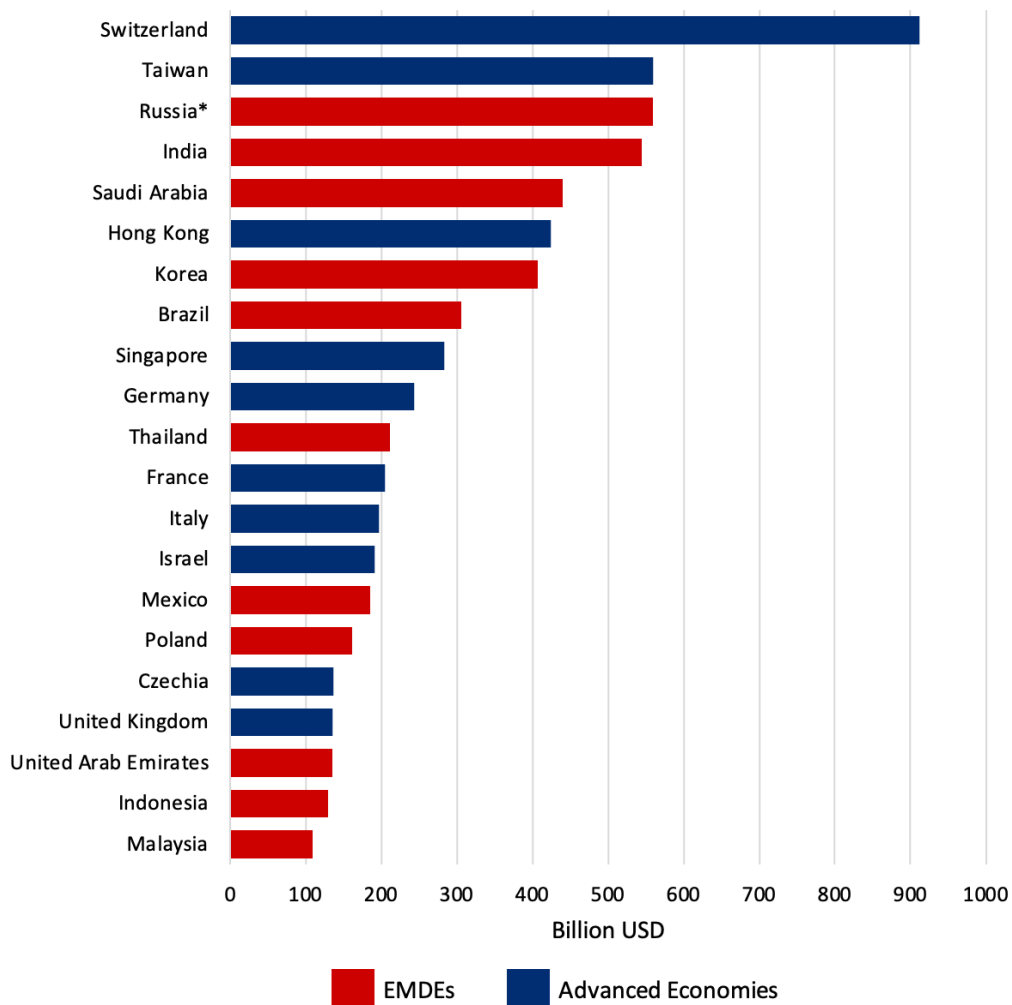
This proposal leverages small foreign exchange commitments by central banks in order to open a new and more sustainable global investment climate while improving the international reserve system by supplying a true supranational currency.

Figure 2: Top Holders of Total Foreign Exchange Reserves (excluding SDRs) as of Dec. 2022

a. Holders with over \$1 trillion



b. Holders with over \$100 billion



Source: IMF International Financial Statistics.

Note: Part of Russian reserves are currently under sanctions.

CONCLUSION

MDBs have a crucial role to play in mobilizing the resources necessary to foster low-carbon, resilient and socially inclusive development trajectories. More than ever, it is fundamental to boost MDBs' funding and enable them to fulfill their transformative potential.

Sustainable Future Bonds offer a timely, viable and safe alternative for investing in a sustainable future. Rechanneling just 0.5 percent of global foreign reserves could result in a mobilization of at least \$60 billion per year in fresh capital to MDBs. At that pace, by 2030, MDBs loan portfolio could reach \$2.5 trillion, a substantial number at a critical global moment. What is more, Sustainable Future Bonds would strengthen the international reserve system once it supplies central banks with an additional safe asset for their portfolios and allow monetary authorities to increase their contribution to climate objectives.

2023 presents a window of opportunity to put the global economy on track for a more sustainable future. The G20 is kicking off a critical three-year window of developing country leadership as India's

presidency will be succeeded by Brazil and South Africa. Prime Minister of Barbados Mia Mottley's Bridgetown Initiative is gaining substantial traction to address immediate financing needs, particularly of climate vulnerable countries, and generally reform the global financial architecture. Perhaps most critically, the World Bank itself is facing a crucial inflection point as Ajay Banga steps in as the new World Bank President, and the institution moves forward with undertaking vital reform through its Evolution Roadmap.

The price of climate action is tremendous, but the cost of inaction would be catastrophic. With the future hanging in the balance, Sustainable Future Bonds are one piece of the equation to financing a new avenue for vital green and inclusive development.

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GLOBAL ECONOMIC GOVERNANCE INITIATIVE

The Global Economic Governance Initiative (GEGI) is a research initiative at Boston University Global Development Policy Center. The GDP Center is a University wide center in partnership with the Frederick S. Pardee School for Global Studies. The Center's mission is to advance policy-oriented research for financial stability, human wellbeing, and environmental sustainability.

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