

## **RETHINKING CURRENCY INTERNATIONALISATION FOR SUSTAINABLE FINANCE: SYSTEMIC AND GEOECONOMIC PERSPECTIVES ON GLOBAL MONETARY TRANSFORMATION**

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### **INTRODUCTION**

Financing the ambitious 2030 Agenda for Sustainable Development requires unprecedented mobilisation of capital across the globe. Yet this challenge unfolds in a period of rapid monetary transformation, characterised by the advent of digital currencies, shifts in global financial power, and mounting environmental constraints. In this context, understanding the strategic nexus between currency internationalisation and sustainable development finance is crucial. The international monetary and financial system (IMFS) underpins how and where capital flows, who bears financial risks, and ultimately whether investments align with the Sustainable Development Goals (SDGs). However, today's IMFS remains dominated by a unipolar hierarchy of currencies centred on the United States dollar, a structure established in the mid-20th century and only partially modified after the end of Bretton Woods. This configuration has proven resilient but is increasingly acknowledged as misaligned with the needs of a sustainable and inclusive global economy<sup>1</sup>. Indeed, United Nations leaders have recently warned that the “global financial system” is “broken” for developing countries and must be transformed to meet the SDGs. The reliance on one or few nations' currencies for international reserves, trade, and finance creates inherent asymmetries and fragilities that can undermine development efforts. At the same time, new developments – from central bank digital currencies to regional financial arrangements – signal potential shifts toward a more multipolar and perhaps more equitable monetary order.

Yet these transformations unfold within a highly stratified global monetary landscape. Peripheral and emerging economies continue to face structural disadvantages, including limited currency convertibility, procyclical capital inflows, and external debt vulnerabilities. These constraints not only reflect historical patterns of financial dependency but also reproduce conditions of macroeconomic fragility that are inimical to sustained, climate-resilient development. Currency internationalisation – whether through dominant

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<sup>1</sup> Aglietta M., Coudert V. The dollar and the transition to sustainable development: From key currency to multilateralism. Policy Brief. 2019. No. 26. *CEPII*. URL: [https://cepii.fr/PDF\\_PUB/pb/2019/pb2019-26.pdf](https://cepii.fr/PDF_PUB/pb/2019/pb2019-26.pdf) (date of access: 10.06.2025).

reserve currencies or regional alternatives – thus intersects with questions of global liquidity governance, sovereign monetary space, and distributive justice in international finance. While dominant currencies such as the US dollar, euro, and renminbi structure the terms of access to global capital, they also mediate the risks and costs of development financing, particularly under volatile geopolitical and ecological conditions<sup>2</sup>. It is within this context that the present study interrogates the evolving role of international currencies, central bank innovations, and systemic asymmetries in shaping sustainable development finance. Through the lenses of institutional design, geoeconomic power dynamics, and systemic liquidity structures, it aims to assess how global monetary transformation might constrain or enable more just and ecologically coherent development pathways.

## **1. Geoeconomic Implications of Internationalised Currencies for Global Liquidity Distribution, Sustainable Investment Patterns, and Systemic Financial Stability**

In today's international financial landscape, a few advanced-economy currencies command outsized roles as mediums of exchange, units of account, and stores of value across borders. Chief among these is the U.S. dollar, which by various measures dominates international finance. As of the early 2020s, the dollar accounted for over half of global foreign exchange reserve holdings (around 55% in 2020<sup>3</sup>) and an even greater share of key transaction domains – for example, nearly ~87% of global trade finance and about 38% of international payments by value<sup>4</sup>. The euro, Japanese yen, and British pound comprise the next tier, collectively making up much of the remainder of official reserves and international invoices, while emerging market currencies play only minor roles. Notably, the Chinese renminbi – despite China's position as the world's largest trading nation and second-largest economy – has until recently remained underrepresented, constituting barely 2–3% of international reserves and payments in the 2020–2021 period.

This disparity reflects a central characteristic of the IMFS: a hierarchical structure in which a few “core” currencies issued by advanced economies are widely used and trusted globally, while most “peripheral” currencies remain

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<sup>2</sup> Jothr O. A., Jummaa A. I., Didik Kusno Aji. N. The impact of monetary policy instruments on sustainable development. *Revenue Journal: Management and Entrepreneurship*. 2023. Vol. 1, no. 1. P. 22–26. DOI: <https://doi.org/10.61650/rjme.v1i1.178> (date of access: 11.06.2025).

<sup>3</sup> International Monetary Fund. Currency Composition of Official Foreign Exchange Reserves (COFER). Washington, D.C.: *IMF*. 2020. URL: <https://data.imf.org/?sk=E6A5F467-C14B-4AA8-9F6D-5A09EC4E62A4> (date of access: 04.06.2025).

<sup>4</sup> SWIFT. RMB Tracker Monthly Report. Brussels: *SWIFT*. 2020. URL: <https://www.swift.com/our-solutions/compliance-and-shared-services/business-intelligence/renminbi/rmb-tracker> (date of access: 07.06.2025).

non-convertible and marginalised in cross-border finance. This asymmetry, both a cause and a consequence of capital flow patterns, results in a persistent preference among international investors, financial institutions, and governments for transacting in dominant currencies perceived as safe and liquid. Consequently, capital inflows to developing countries – whether as foreign direct investment, portfolio flows, or loans – are overwhelmingly denominated in core currencies, leaving these economies highly exposed to exchange rate volatility and external shocks. Currency depreciation against the dollar or euro can rapidly inflate the local cost of debt servicing and imports, forcing countries to redirect scarce fiscal resources away from sustainable development priorities. This structural constraint is encapsulated in the concept of “original sin,” and more recently, its evolved form, “original sin redux,” which underscores the enduring inability of many emerging and developing countries to borrow internationally in their own currencies – even amid improved macroeconomic fundamentals<sup>5</sup>. The result is a chronic mismatch between the denomination of external liabilities and domestic revenue, which undermines fiscal sovereignty and impedes long-term, climate-resilient investment. Compounded by underdeveloped capital markets and unstable macroeconomic conditions, these systemic disadvantages perpetuate financial dependency and hinder efforts to align development finance with the SDGs.

Researchers have identified multiple channels through which the current currency order affects global capital allocation for development. A stable and widely accepted international currency can, in principle, reduce transaction costs and uncertainties, thereby facilitating cross-border investment, including into development projects. For example, the prevalence of the dollar and euro provides deep and liquid financial markets that investors rely on for security, thus helping channel global savings into emerging markets (often via dollar-denominated bonds or loans). However, these benefits are coupled with significant drawbacks. Capital flow volatility is a primary concern: when financing is denominated in a foreign international currency, sudden shifts in investor sentiment or monetary policy in the currency-issuing country can trigger destabilising outflows from developing markets. A classic pattern is that tightening of U.S. monetary policy (e.g. rising Federal Reserve interest rates) leads to capital flight from emerging economies, currency depreciations, and crises, as seen in episodes from the 1980s Latin American debt crisis to the 1997 Asian financial crisis and beyond. The speed and scale of such spillovers are amplified by financial globalisation. Indeed, analysts caution that more efficient global financial networks may further intensify these

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<sup>5</sup> Bertaut C. C., Bruno V. G., Shin H. S. Original Sin Redux. *SSRN Electronic Journal*. 2021. URL: <https://doi.org/10.2139/ssrn.3820755> (date of access: 20.06.2025).

“global financial cycles,” transmitting shocks even more rapidly across borders. Such volatility is inimical to sustainable development, which depends on patient long-term capital.

Empirical studies affirm that exchange rate instability deters green investment and undermines progress on SDGs: for instance, a recent literature review concluded that high currency volatility creates economic uncertainty, reducing investor confidence and hindering long-term development goals<sup>6</sup>, whereas stable exchange rates encourage foreign direct investment and the adoption of renewable energy technologies by mitigating currency risk for international investors<sup>7</sup>. In low-income and climate-vulnerable countries, currency instability and external debt form a vicious cycle: climate-related disasters often lead to sharp currency depreciations in small states, which then inflate the local cost of servicing external debt, diverting funds from sustainable development and resilience investments<sup>8</sup>. Over time, repeated bouts of capital flight and currency crises can severely impair a country’s development trajectory, as hard-won gains in poverty reduction or infrastructure investment are reversed by financial turmoil.

Achieving the SDGs – from infrastructure for clean energy and water, to health and education – requires steady, long-term financing on concessional terms<sup>9</sup>. Yet many developing economies struggle to access affordable finance, partly due to currency-related factors. When loans or bonds are in a foreign currency, borrowers face exchange rate risk that often necessitates higher interest rates as a risk premium. Local-currency financing, by contrast, avoids that currency mismatch, but international investors have shown limited appetite for local-currency bonds of most developing nations (with a few exceptions, such as some larger emerging markets). As a result, crucial sustainable development projects often either go unfunded or rely on external funding that can be unpredictable and costly. The current system’s bias toward a few currencies also concentrates financial resources in countries that issue those currencies. For example, the United States’ ability to supply the world’s

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<sup>6</sup> Ismail S. H., Yuliadi I., Berliana A. The Relationship Between Exchange Rates and Sustainable Development: A Literature Review. *Journal of Economics Research and Social Sciences*. 2025. Vol. 9, no. 1. P. 65–78. URL: <https://doi.org/10.18196/jerss.v9i1.25801> (date of access: 12.06.2025).

<sup>7</sup> Ariff M., Zarei A. Sustainable Development and Currency Exchange Rate Behavior. *Asian Economic Papers*. 2018. Vol. 17, no. 3. P. 148–173. DOI: [https://doi.org/10.1162/asep\\_a\\_00644](https://doi.org/10.1162/asep_a_00644) (date of access: 18.06.2025).

<sup>8</sup> Bharadwaj R., Karthikeyan N., Ananda Kumar B. Currencies under pressure: How currency fluctuations and climate risks impact debt sustainability in SIDS and LDCs. *IIED*. 2025. URL: <https://www.iied.org/sites/default/files/pdfs/2025-04/22626iied.pdf> (date of access: 30.05.2025).

<sup>9</sup> Vorisek D., Yu S. Understanding the cost of achieving the Sustainable Development Goals. *Policy Research Working Paper*. 2020. No. 9164. Washington, DC: World Bank. URL: <http://hdl.handle.net/10986/33407> (date of access: 02.06.2025).

reserve assets (dollar-denominated Treasuries) at low cost gives it an “exorbitant privilege” – it can run external deficits and borrow cheaply to finance domestic priorities, effectively drawing net resources from the rest of the world.

Meanwhile, many developing countries pay a premium on foreign-currency borrowing or must accumulate costly reserves as self-insurance. This asymmetry implies that global savings are not allocated purely by developmental need or investment opportunity, but also by the strategic convenience of holding certain currencies. Some critics argue that under these conditions, surplus capital flows “downhill” in inefficient ways: for instance, emerging economies collectively hold trillions of dollars in low-yield official reserves (invested in U.S. or European safe assets) as a buffer, even as their own infrastructure and social sectors are under-financed. This was starkly observed after the 1997 Asian crisis, when many Asian countries sharply increased reserve holdings (often over 20% of GDP) to avoid needing IMF assistance again – a strategy that stabilises currencies but effectively recycles domestic savings into advanced economy debt rather than local development<sup>10</sup>. In ecological terms, the current arrangement can also encourage unsustainable consumption patterns in reserve-issuing countries (financed by foreign capital inflows) while squeezing fiscal space for green investment in debtor countries. Modern Monetary Theory (MMT) scholars emphasise that only “monetary sovereigns” – nations able to borrow in their own free-floating currency with no foreign debt – have full policy space to fund public investment for long-term development. In practice, very few developing countries enjoy this status. Most face what ecological economist Herman Daly termed “dual deficits”: a shortage of environmental space and a shortage of financial liquidity, both of which are exacerbated by an unequal global monetary order.

The structural limitations of the unipolar currency system have prompted calls for reform to better support sustainable development finance. After the global financial crisis of 2008, which originated in the U.S. yet wreaked havoc worldwide, many countries voiced interest in a more multipolar monetary system less reliant on the U.S. dollar. Diversification of reserve currencies is one aspect: the International Monetary Fund (IMF) added the Chinese RMB to its Special Drawing Rights basket in 2016, acknowledging the RMB’s growing role. Bilateral arrangements have also proliferated – for example, over 30 central banks have signed currency swap agreements with China, allowing them to access RMB liquidity and settle trade in RMB instead of

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<sup>10</sup> Aizenman J., Lee J. International Reserves: Precautionary Versus Mercantilist Views, Theory and Evidence. *Open Economies Review*. 2007. Vol. 18, no. 2. P. 191–214. DOI: <https://doi.org/10.1007/s11079-007-9030-z> (date of access: 18.06.2025).

dollars. These steps aim to reduce vulnerability to dollar funding shocks and to foster South-South capital flows. Indeed, the RMB is increasingly used in development finance, such as through China's Belt and Road Initiative projects, and some observers consider it a "safe-haven alternative" for countries facing sanctions or political strains with Western lenders.

The evidence so far suggests that a more diversified currency system could distribute risks more evenly: for instance, during recent crises, countries with greater access to non-dollar financing (e.g. via regional development banks or swaps) had additional buffers. Moreover, if multiple currencies compete, reserve issuers may have stronger incentives to maintain stability and confidence (disciplining their policies to retain reserve status). However, diversification alone is not a panacea; it may introduce new complexities, and smaller currencies can inherit the same issues on a regional scale. A broader proposal coming from development and ecological economics is to create new international instruments specifically for sustainable development – for example, expanding the issuance of SDRs and channelling them to finance climate and SDG projects. SDRs, being a basket of major currencies, dilute single-currency dependence. Following the COVID-19 crisis, a \$650 billion SDR allocation in 2021 provided liquidity to many countries; calls have been made for regular SDR allocations or a "green SDR" mechanism to fund climate action, reflecting the idea that global liquidity creation should be tied directly to global public goods. Likewise, proposals for "debt-for-climate" swaps or foreign exchange guarantees for green investments have gained traction, aiming to ease currency risk for sustainability projects (e.g. a Climate Policy Initiative paper in 2023 explores a partial FX guarantee to unlock green transformation investment<sup>11</sup>). All these initiatives recognise that without adjusting the currency dimension, the cost of capital will remain highest where development needs are greatest.

The stability of the international financial system is a foundational prerequisite for sustainable development. Sudden financial crises can wipe out years of progress on poverty alleviation, health, and education. Unfortunately, the current pattern of currency internationalisation contains inherent instabilities. As Belgian-American economist Robert Triffin observed in the 1960s, a reserve-currency issuing country faces a dilemma: meeting global demand for its currency (to serve as reserves and liquidity) may require it to run large external deficits, which over time can undermine confidence in that

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<sup>11</sup> Persaud A. Unblocking the Green Transformation in Developing Countries with a Partial Foreign Exchange Guarantee. *Climate Policy Initiative*. 2023. URL: <https://www.climatepolicyinitiative.org/wp-content/uploads/2023/06/An-FX-Guarantee-Mechanism-for-the-Green-Transformation-in-Developing-Countries.pdf> (date of access: 15.06.2025).

currency's value. This Triffin dilemma remains relevant: the U.S. dollar's global role creates a tension between short-term U.S. domestic policy goals and long-term global stability<sup>12</sup>. For instance, U.S. expansionary fiscal and monetary policies (while beneficial domestically) can lead to excess dollar liquidity worldwide, fuelling asset bubbles or inflationary pressures abroad. Conversely, if the U.S. suddenly tightens policy to address domestic issues, it can precipitate recessions in dollar-dependent economies. The 2008 crisis illustrated how “the system remains highly dependent on individual countries’ decisions”, in Triffin’s words – the U.S. housing crash and the Federal Reserve’s responses reverberated through the global credit system built on dollar assets.

From the perspective of emerging economies, this amounts to an externally imposed instability: their economic fate can swing with policy shifts in Washington or Brussels, over which they have no control. It also perpetuates a pro-cyclical pattern: capital floods into emerging markets during boom times (often leading to credit booms and currency appreciation), then suddenly reverses during stress, just when those economies most need financing. Such whiplash effects are fundamentally at odds with the kind of steady, counter-cyclical investment required to achieve SDGs, which demand resilience against shocks. As climate change intensifies physical shocks (storms, floods, etc.), the overlay of financial shocks via currency and capital flow volatility becomes even more damaging for vulnerable nations.

To mitigate these risks, several strategies have been pursued internationally. One is strengthening the global financial safety net – e.g. larger IMF rapid credit lines, regional reserve pooling arrangements (like the Chiang Mai Initiative Multilateralisation in Asia), and central bank swap lines among major currencies – to provide emergency liquidity and stabilise exchange rates during crises. Another approach is promoting local-currency bond markets in emerging economies, so that governments can borrow in domestic currency from local investors, reducing external mismatches. Progress has been made here (many countries have grown local pension and insurance sectors to absorb government bonds), but foreign investors still tend to exit these markets in crises, causing local yields to spike. A complementary idea is the creation of an international clearing union or global currency – a concept rooted in John Maynard Keynes’ proposal of a supranational “bancor” currency. In modern guise, researchers have floated the notion of a green international monetary system whereby a new reserve asset is issued explicitly to finance sustainability. One proposal envisions a “Global Green

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<sup>12</sup> Barredo-Zuriarrain J. The inherent instability of national monetary power in the 21st century: the Triffin dilemma revisited. *Research in Political Economy*. 2016. Vol. 30B. P. 23–52. DOI: <https://doi.org/10.1108/S0161-72302015000030B002> (date of access: 15.06.2025).

Central Bank” creating a special currency (nicknamed the “ecor”) to pay for imports of climate mitigation goods for developing countries<sup>13</sup>.

The ecor, akin to a global bancor, would be issued in exchange for nations’ commitments to use it on approved green projects, thereby bypassing the need for developing countries to earn or borrow dollars for crucial imports like renewable energy technology. Such ecor’s could only be used within the system (for trade between participating countries or repayments to the Green Central Bank), preventing them from simply becoming another speculative asset. In theory, this would allow global liquidity to expand elastically to meet sustainability needs, rather than being restricted by the Federal Reserve’s policy or private capital’s risk appetite. While still hypothetical, this bold idea underscores the growing recognition that monetary reform is intertwined with achieving sustainable development. In summary, the nature of currency internationalisation profoundly influences where money flows and how stable those flows are. An IMFS conducive to sustainable development would ideally provide abundant, long-term, and stable financing to all countries for SDG priorities, while minimising destructive volatility. The current system only partially meets that ideal.

## **2. Central Bank Digital Currencies and Transnational Monetary Connectivity as Instruments of Equitable Development Finance**

The rapid advancement of financial technology – especially the rise of digital currencies and real-time payment networks – is transforming how money moves within and between countries. These innovations have significant implications for sustainable development finance. In particular, central bank digital currencies (CBDCs) and enhanced cross-border payment systems promise to reduce frictions and inequalities in the financial system, potentially enabling more efficient and inclusive financing for SDGs. A core feature of many CBDC initiatives is the drive to modernise payments for greater speed, lower cost, and broader access. Emerging markets and developing economies stand to benefit disproportionately from such improvements, as they currently face some of the highest transaction costs and largest “access gaps” in finance. For example, remittances – the money migrant workers send home – are a critical source of income and development finance in many low-income countries, often exceeding official aid. Yet average remittance fees remain around 6–7%, meaning tens of billions of dollars are effectively lost to intermediaries annually<sup>14</sup>. By offering official

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<sup>13</sup> Aguila N., Haufe P., Wullweber J. The ecor as global special purpose money: towards a green international monetary system to finance sustainable and just transformation. *Sustainability Science*. 2024. DOI: <https://doi.org/10.1007/s11625-024-01484-8> (date of access: 11.06.2025).

<sup>14</sup> World Bank. Remittance Prices Worldwide. Washington, D.C.: *World Bank*. 2025. URL: <https://remittanceprices.worldbank.org/> (date of access: 18.06.2025).



digital currencies and linking national payment systems, central banks could drastically cut remittance costs (SDG target 10.c aims for <3% fees) and increase the flow of funds available for families' education, health, and small business investments. Indeed, new financial technologies enable almost instantaneous settlement of cross-border payments at very low cost.

For instance, blockchain-based payment infrastructure or multi-CBDC platforms can bypass the multilayered correspondent banking networks that currently make transfers slow and expensive. The Asian Development Bank Institute notes that digital finance could deliver “quicker and cheaper cross-border remittances” and broader financial inclusion for developing economies, which is essential for inclusive growth<sup>15</sup>. In practical terms, a migrant in Europe might one day use a digital euro wallet to send money directly to a mobile wallet tied to a digital currency issued by an African central bank, with the conversion happening seamlessly at the market exchange rate – a process now being trialled in various corridors. The BIS “Project mBridge” and other multi-country CBDC experiments have already demonstrated the technical feasibility of real-time cross-currency transactions among central banks, hinting at a future global network of CBDCs that cuts out correspondent bank intermediaries. By democratising access to international payments infrastructure, smaller economies and even individuals could transact globally on more equal footing.

Beyond remittances, CBDCs may help mobilise domestic resources for sustainable development by bringing more people into the formal financial system. Roughly a quarter of the world's adults remain unbanked, and even those with access often face high fees or unreliable services, especially in rural areas. Retail CBDCs – essentially a digital form of cash accessible via mobile phone – could offer a safe, zero-fee savings and payment instrument provided by the central bank, encouraging unbanked populations to save and transact digitally. Nigeria's eNaira and the Bahamas' Sand Dollar (two early CBDCs) explicitly target financial inclusion outcomes. Greater inclusion means more households and small businesses can build financial histories and eventually access credit for productive activities, amplifying economic development. Moreover, with appropriate regulation, the data from digital transactions can help lenders better assess credit risk, potentially unlocking lending for underserved communities or green small enterprises that currently lack collateral. Some economists emphasise the synergy between digital ID systems and CBDCs: for instance, India's Aadhaar ID and UPI payment interface have dramatically lowered the cost of delivering government

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<sup>15</sup> Asian Development Bank. Financial inclusion in the digital economy. October 2016. URL: <https://www.adb.org/publications/financial-inclusion-digital-economy> (date of access: 20.06.2025).

payments and subsidies, reducing leakages and ensuring benefits (like cooking gas subsidies or COVID relief) reach the intended recipients instantly. Similarly, a CBDC could be programmed for “direct benefit transfers” – governments or international agencies could airdrop digital cash to citizens’ wallets for specific purposes (e.g. a climate disaster relief payment or an agricultural grant), with far less overhead than traditional aid or banking channels<sup>16</sup>. This kind of targeted, transparent use of public funds directly supports SDGs like poverty alleviation and disaster resilience. Recent studies confirm that the global rise in CBDC interest is significantly shaped by both sustainability imperatives and the evolving role of cryptocurrencies<sup>17</sup>.

The UN ESCAP has highlighted how digital and virtual currencies, if inclusively governed, can enhance financial access and resilience in developing regions<sup>18</sup>. The current cross-border payment system, run through networks like SWIFT and correspondent banks, tends to favour major currencies and large financial institutions. Smaller countries often struggle with limited correspondent banking relationships, which can cut off their access to global finance (a phenomenon known as “de-risking,” where big banks withdraw from certain markets perceived as high risk or low profit). This particularly hurts least developed countries (LDCs) and small island developing states (SIDS), impeding trade and raising costs for entrepreneurs. By contrast, a future system of interconnected CBDCs or regional payment platforms could provide more direct and secure channels between central banks, reducing reliance on the goodwill of a few dominant banking hubs. For example, the African Union’s new Pan-African Payment and Settlement System (PAPSS) aims to enable payments in local African currencies across borders, netting out obligations multilaterally – essentially creating a continent-wide clearing mechanism to avoid using dollar or euro intermediaries. This should make intra-African trade (much of which relates to food security and industrialisation goals) more affordable and resilient. At the global level, if multiple CBDCs become interoperable, an exporter in country A could be paid in its home CBDC by an importer using another CBDC, with FX conversion done either by the central bank or via

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<sup>16</sup> Ozili P. K. Using central bank digital currency to achieve the Sustainable Development Goals. 2023. *Munich Personal RePEc Archive (MPRA)*. URL: <https://mpra.ub.uni-muenchen.de/id/eprint/118806> (date of access: 08.06.2025).

<sup>17</sup> Ozili P. K. Determinants of global interest in central bank digital currency: The role of sustainable development and cryptocurrency. *Digital Transformation and Society*. 2023. DOI: <https://doi.org/10.1108/dts-04-2023-0020> (date of access: 13.06.2025).

<sup>18</sup> The Economic and Social Commission for Asia and the Pacific (ESCAP). Digital and virtual currencies for Sustainable Development. URL: <https://repository.unescap.org/server/api/core/bitstreams/f773f428-a27e-41be-bb37-d91ca20d930f/content> (date of access: 20.05.2025).

a decentralised marketplace. This reduces the default need to route transactions through New York or London, thereby decentralising liquidity. Additionally, wider use of currencies like the Chinese RMB in digital form could give developing nations an alternative to the dollar in international settlements. Already, China's e-CNY (digital yuan) has been used in pilot cross-border transactions, and China has arrangements to settle oil and commodity trades with partners in RMB. A more multipolar currency usage supported by CBDC technology might mitigate some inequities of the current system (where, for instance, U.S. sanctions or banking restrictions can sever entire countries from dollar-based finance). In sum, enhanced cross-border systems promise a more inclusive globalisation – one where payments flow freely to wherever they are needed for development, rather than being bottlenecked by geopolitical or commercial considerations.

One novel feature of CBDCs and some private digital currencies is programmability – the ability to embed rules or attributes into money itself. This raises intriguing possibilities for directing finance toward sustainable outcomes. For instance, a central bank or government could program a portion of its digital currency to be used only for certain green purposes or to carry incentives for sustainable behaviour. China has already experimented with using its digital RMB (e-CNY) to promote environmental objectives, such as giving consumers “green vouchers” or monitoring the carbon footprint of purchases. A CBDC-based system could, in theory, implement differentiated interest rates or rewards: imagine a lower interest rate on a digital loan token that is used for a renewable energy project versus a conventional loan. Similarly, “smart” carbon credits could be tokenised and integrated with payment systems, allowing automatic charging of a carbon fee in transactions involving fossil fuels – this would directly link currency flows to sustainability metrics. Modern proposals for “green bonds” or sustainable finance taxonomies could be bolstered by digital currency infrastructure, ensuring funds raised are tracked and spent on the declared SDG projects, with real-time transparency to investors and stakeholders. Such capabilities could increase trust and participation in sustainable development finance, attracting private capital by reducing concerns of greenwashing or misallocation.

While the potential is enormous, harnessing digital currencies for equitable SDG finance comes with challenges that must be managed through sound governance. One set of concerns is technological and environmental. Some forms of digital currency (notably certain cryptocurrencies) have been notoriously energy-intensive – e.g. Bitcoin's proof-of-work mining consumes more electricity than many countries, clashing with climate goals. CBDCs,

however, need not use such wasteful mechanisms<sup>19</sup>; most are designed with efficient consensus or simply operate on conventional databases. Still, policymakers must ensure that as digitalisation proceeds, it does not inadvertently increase carbon emissions or electronic waste. Central banks are aware of this: for example, Sweden's e-krona project and others explicitly evaluate the environmental footprint of various technology choices<sup>20</sup>. The governance paradigm of "adaptive governance" has been suggested as a way to continually align digital currency deployment with sustainability targets. This means creating flexible regulatory frameworks, involving multi-stakeholder input (tech industry, environmental experts, community voices), and emphasising learning and iteration.

Given that CBDCs are largely at pilot stages, now is the window to build in sustainability principles (e.g. requiring that any distributed ledger for a CBDC meets certain energy efficiency standards, or that e-waste from hardware is recycled). A related governance issue is the coordination between financial authorities and environmental authorities<sup>21</sup>. Currently, central banks and environment ministries operate separately, often with minimal interaction<sup>22</sup>. The rise of digital finance for sustainability demands breaking these silos. If a central bank is designing a CBDC, it should consult climate policymakers on how it could support climate finance, and vice versa. The Network for Greening the Financial System (NGFS), a coalition of over 100 central banks and supervisors, is a promising platform that could integrate such discussions, ensuring central bankers consider climate risks and opportunities as they modernise money.

Another major concern is financial stability and capital flow volatility. Ironically, while digital innovation can reduce some risks, it may increase others. Easy cross-border transfers could exacerbate sudden capital movements if not properly mitigated. For instance, if investors can convert local currency into a major CBDC and move it abroad in seconds via a multi-

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<sup>19</sup> Alonso S. L. N. Can Central Bank Digital Currencies be green and sustainable?. *Green Finance*. 2023. Vol. 5, no. 4. P. 603–623. DOI: <https://doi.org/10.3934/gf.2023023> (date of access: 02.06.2025).

<sup>20</sup> Lee S., Park J. Environmental implications of a central bank digital currency (CBDC). *World Bank Group Korea Office Innovation and Technology Note Series*. 2022. No. 8. URL: <https://openknowledge.worldbank.org/server/api/core/bitstreams/04c9c983-32f7-5519-9890-4981ea46b4d7/content> (date of access: 02.06.2025).

<sup>21</sup> Wang H. Addressing governance challenges of digitalisation and sustainability: The case of central bank digital currency. *Review of European, Comparative & International Environmental Law*. 2024. DOI: <https://doi.org/10.1111/reel.12571> (date of access: 17.06.2025).

<sup>22</sup> Monnin P. Monetary policy and Sustainable Development Goals: What can central banks do? What should they do? *Council on Economic Policies*. April 2023. URL: [https://www.un.org/development/desa/dpad/wp-content/uploads/sites/45/WSR\\_BP\\_2.pdf](https://www.un.org/development/desa/dpad/wp-content/uploads/sites/45/WSR_BP_2.pdf) (date of access: 05.06.2025).

CBDC network, a panic could lead to digital bank runs from weaker economies. Prasad (2021) cautions that such efficient conduits for capital might “intensify global financial cycles,” requiring careful regulatory oversight<sup>23</sup>. Capital flow management tools (like limits on large FX transfers or circuit-breakers in crisis times) might need to be embedded in the design of cross-border CBDC systems to prevent instability. Additionally, there is the risk of currency substitution: if a foreign CBDC (say a digital dollar or euro) becomes easily accessible and trusted, residents in countries with unstable currencies might start using it widely, potentially undermining the local currency and the central bank’s control (a digital form of “dollarisation”). Such outcomes could harm development if they destabilise domestic banking or reduce the efficacy of local monetary policy. Therefore, central banks in emerging markets are weighing these factors; many are proceeding cautiously on retail CBDCs in particular, often focusing first on wholesale CBDCs for interbank use to improve settlement efficiency without immediately touching the general public’s holdings.

Finally, international cooperation is essential to unlock the full benefits of CBDCs for sustainable development. If each country develops its digital currency in isolation with incompatible technical standards, we lose the opportunity for seamless global integration. Efforts under the BIS and the IMF are ongoing to set common principles and encourage interoperability. For example, the BIS 2022 survey found over 80% of central banks are engaging in or planning CBDC work, and many see cross-border functionality as a key motivation<sup>24</sup>. Multilateral development institutions could play a coordinating role – perhaps helping smaller nations acquire the technology and capacity to join global digital networks, so they are not left behind. We might envision, in a few years, a secure cross-border payment corridor linking, say, a Caribbean CBDC with an African CBDC via a common platform, enabling climate funds or diaspora investments to flow directly with minimal loss. Provided there is prudent regulation and collaboration, CBDCs and digital finance could become powerful enablers of equitable development finance, lowering costs, empowering communities, and granting developing nations more monetary autonomy in the global arena. As one empirical example, a recent study of the Aber Project (a joint Saudi–UAE blockchain-based CBDC pilot) found that the CBDC initiative positively impacted SDG-related

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<sup>23</sup> Prasad E. New financial technologies, sustainable development, and the international monetary system. *ADBI Working Paper*. 2021. No. 1277. Tokyo: Asian Development Bank Institute. URL: <https://www.adb.org/publications/new-financial-technologies-sustainable-development-international-monetary-system> (date of access: 19.06.2025).

<sup>24</sup> Bank for International Settlements. Results of the 2022 BIS survey on central bank digital currencies. *BIS Paper No. 136*. 10 July 2023. URL: <https://www.bis.org/publ/bppdf/bispap136.htm> (date of access: 11.06.2025).

corporate activities in those Gulf countries, spurring firms to engage more with sustainability targets<sup>25</sup>. Such early evidence suggests that well-designed CBDC projects can foster an innovation ecosystem aligned with sustainable development by improving trust in digital finance and encouraging multi-sector collaboration. In conclusion, digital currencies are not a silver bullet for the challenges of development finance – issues of political will, economic structure, and global inequities remain. But they are a novel tool that, if guided by inclusive and green-oriented governance, could help rewire the financial circulatory system of the world in a way that better serves our collective development aspirations.

### **3. Systemic Monetary Asymmetries Amid Emerging Currency Orders under Persisting Triffin-Type Constraints**

Despite gradual changes, the international monetary system continues to exhibit structural asymmetries that favour certain countries and regions over others. These asymmetries are rooted in history and power relations – for example, the legacy of Bretton Woods institutions, the network externalities of established currencies, and the economic might of reserve-issuer nations. As noted, the United States enjoys an “exorbitant privilege” in having the primary global reserve currency. This privilege means the U.S. can finance deficits by printing currency that others willingly hold, and can borrow at lower costs. France’s Valéry Giscard d’Estaing famously coined the term in the 1960s, and it remains apt: to this day, the dollar’s centrality allows the U.S. to sustain levels of external debt and consumption that would likely be impossible without reserve-currency status. For the U.S., and to a lesser extent other core-currency issuers (Eurozone, Japan, UK), this provides more fiscal and policy space – they can run expansionary policies or large stimulus packages (as seen in the COVID-19 pandemic) without sharply spooking investors or causing a currency crisis for themselves. By contrast, most developing countries face a much tighter external constraint. If they pursue expansionary fiscal/monetary policy beyond a certain point, they risk currency depreciation and capital flight, as foreign investors worry about inflation or default; this often forces austerity policies that undermine development. Modern Monetary Theory (MMT) articulates this disparity clearly: only countries that issue their non-pegged currency and have negligible foreign currency debt – i.e. “full monetary sovereignty” – can use monetary financing

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<sup>25</sup> Hasan R., Ashfaq M., Hassan M. K. Central bank digital currency (CBDC) for sustainable development in the Gulf region: A closer inspection of Project Aber. *SSRN*. 2023. DOI: <https://doi.org/10.2139/ssrn.4581338> (date of access: 01.06.2025).

freely for public objectives. Practically, this group includes the U.S., Japan, the UK, Canada, Australia, and a few others.

Emerging economies, even large ones like Brazil or India, usually have some foreign debt or need to defend their exchange rate to curb import price spikes; smaller, low-income countries often borrow heavily in dollars and thus have very limited sovereignty. The result is a systemic bias: global liquidity tends to flow from the periphery to the centre (through reserve accumulation, capital flight to “safe havens” in times of stress, etc.), whereas risks flow outward (e.g. when the centre’s policies change or crises originate there, the periphery suffers contagion). This pattern has been criticised as a form of “monetary colonialism” or unfair burden-sharing, especially in the context of climate change – poor countries that did little to cause global warming are forced to pay high interest to finance adaptation, partly because their currencies are seen as risky. A recent working paper by the International Institute for Environment and Development (IIED) highlights how climate-vulnerable countries (like SIDS and LDCs) face rising debt burdens due to currency fluctuations triggered by climate shocks, and advocates solutions like local currency financing and global financial reforms to break this vicious cycle.

One significant trend in response to these asymmetries is the formation of regional currency arrangements or blocs. The classic example is the Eurozone – 20+ European countries sharing a single currency, the euro. The euro was partly motivated by a desire to create a counterweight to the dollar and eliminate intra-Europe exchange rate issues. While the euro has certainly become the second-most important currency, the Eurozone’s experience also exposed difficulties: member countries gave up independent monetary sovereignty and came under a supra-national central bank. This yielded low transaction costs and stable exchange rates within Europe, aiding trade and integration, but also introduced rigidities (as seen in the Eurozone debt crisis post-2010, where countries like Greece couldn’t devalue their currency to adjust). Nonetheless, Europe can be seen as a currency bloc with significant influence on international finance. In recent years, hints of other currency blocs have emerged. The Gulf Cooperation Council long discussed a common currency (though it has not materialised, partly due to political differences). In Africa, the Economic Community of West African States (ECOWAS) has floated plans for a shared currency (the “eco”) to integrate the region and reduce reliance on former colonial currencies like the French-backed CFA franc.

In Asia, while a single currency is unlikely, there is a de facto RMB bloc developing: several Asian economies (e.g. Mongolia, Cambodia) have currencies informally pegged or closely correlated to the Chinese yuan, and

trade in RMB is growing in the East Asian region. If U.S.–China geopolitical rivalry persists, we could envision a bifurcated system where a China-centred bloc of countries uses the RMB for trade/finance among themselves, while a U.S.-centred bloc continues with the dollar, with others like the EU, India, etc. maintaining strategic non-alignment or their spheres. Such a scenario of competing currency blocs raises complex questions. On one hand, it could mean greater monetary policy autonomy for regional powers and clients (a country heavily tied to China might be less affected by U.S. Fed policy, and vice versa). On the other hand, it might increase fragmentation: cross-bloc financial flows might become more costly or politicised, potentially reducing the global pool of capital available for development in any given country (depending on its affiliations). A multipolar world of currency blocs could enhance stability if blocs provide mutual support internally (like the EU does via structural funds or the European Stability Mechanism), but it could also introduce new instabilities at the interfaces between blocs.

International financial governance has been slowly shifting to address new priorities and players. The Bretton Woods twins – the IMF and World Bank – have been under pressure to adapt: for instance, the IMF in 2021 created the Resilience and Sustainability Trust (RST) specifically to provide long-term concessional financing for climate and sustainability projects, funded by rechannelled SDRs. This is a recognition that sustainable development needs are now central to financial stability (e.g. unchecked climate change is a systemic financial risk). Similarly, the World Bank is undergoing reform debates to expand its lending capacity for climate and infrastructure, possibly by taking more risk onto its balance sheet to crowd in private finance. Outside of these, new development banks like the Asian Infrastructure Investment Bank (AIIB) and the New Development Bank (NDB, set up by BRICS countries) have gained prominence. These banks often lend in dollars, but their existence hints at a desire for a more multipolar financial order not wholly dominated by G7-led institutions<sup>26</sup>. The NDB, for example, has stated an intention to gradually increase local currency lending to its members, which include China, India, Russia, Brazil, and others. In 2019, it issued its first RMB-denominated bonds. Such steps could diminish emerging economies' reliance on the dollar-based system for development finance. Another noteworthy initiative is the Bridgetown Agenda championed by Barbados and other small states, calling for a complete overhaul of global

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<sup>26</sup> Tshikovhi N., Netswera F., De Conti B. De-dollarization, the New Development Bank, and BRICS Trade Currency Changing Multilateralism and Geopolitical Arrangements. *The Multilateralism of the New Development Bank on the Sustainable Economic Growth in BRICS Nations and Beyond*. 2025. P. 65–79. DOI: <https://doi.org/10.1108/978-1-83662-292-520251007> (date of access: 11.06.2025).



finance for climate, including new global mechanisms for liquidity and debt relief in climate disasters (like automatic moratoria on debt after hurricanes). These proposals often involve the IMF and major central banks creating facilities that would have been unthinkable decades ago – effectively socialising certain risks at the global level to protect vulnerable populations. While not yet realised, they reflect a normative shift: sustainable development is no longer seen as peripheral to global finance but as integral to its stability and legitimacy.

A fascinating development in governance is the re-emergence of Keynesian ideas for international money. Keynes's plan in 1944 for an International Clearing Union with a global currency (bancor) was shelved in favour of a dollar-based system<sup>27</sup>. Now, with the climate crisis and inequality glaring, economists like Joseph Stiglitz and others have revived elements of that thinking<sup>28</sup>. We already discussed the “ecor” proposal – a kind of green bancor. There are also discussions about using SDRs more creatively, such as an SDR-based stability fund for emerging markets that could be tapped in emergencies, or allocating SDRs regularly as a global dividend. The 2023 UN Financing for Sustainable Development report explicitly urges exploring SDR reallocation to developing countries and scaling up multilateral development bank finance<sup>29</sup>. These represent incremental governance shifts towards a more cooperative monetary order where liquidity is treated as a global public good rather than a national weapon or privilege.

The Triffin dilemma – originally framed in the context of a dollar-centred monetary system – highlights the fundamental contradiction between supplying global liquidity and preserving confidence in the reserve currency's external position. As Triffin observed, issuing a global reserve currency requires running persistent external deficits, which may ultimately undermine the currency's long-term stability. Although historically associated with the unipolar dominance of the US dollar, this dilemma is evolving: in a gradually multipolar monetary system, the same tensions persist but are now dispersed across multiple actors. The challenge lies in reconciling national monetary policy objectives with the global need for stable and sufficient reserve assets.

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<sup>27</sup> Whyman P. B. Keynes and the International Clearing Union: A Possible Model for Eurozone Reform?. *JCMS: Journal of Common Market Studies*. 2014. Vol. 53, no. 2. P. 399–415. DOI: <https://doi.org/10.1111/jcms.12180> (date of access: 19.06.2025).

<sup>28</sup> Lewis H. Where Keynes went wrong: And why world governments keep creating inflation, bubbles, and busts. Mount Jackson, VA : Axios Press, 2009. 384 p.

<sup>29</sup> United Nations, Inter-agency Task Force on Financing for Development. Financing for Sustainable Development Report 2023: Financing Sustainable Transformations. *United Nations*. April 2023. URL: <https://desapublications.un.org/publications/financing-sustainable-development-report-2023> (date of access: 17.06.2025).

However, subsequent structural evolutions of global finance have revealed at least four distinct facets of this dilemma:

- firstly, the classical version relates to the US’s growing external liabilities incurred from supplying liquidity globally, creating a trade-off between fulfilling international demand for reserves and maintaining the dollar’s value;
- secondly, as articulated by Gourinchas and Rey<sup>30</sup>, the dilemma also reflects the US’s dual role as global banker and insurer: it earns a financial premium in normal times but bears systemic losses during crises, recasting the dilemma as a form of cyclical wealth redistribution;
- thirdly, the Federal Reserve’s policies have systemic spillover effects due to the dollar’s dominance in global banking and cross-border flows – what Triffin termed the system’s “built-in destabiliser”;
- fourthly, a more recent formulation links the dilemma to the structural scarcity of dollar-denominated safe assets, especially in shadow banking and non-bank financial intermediation (NBFI). This shortage perpetuates instability in global liquidity and deepens the incoherence of using a national currency to anchor the supply of global public goods like reserve assets<sup>31</sup>.

Each of these dimensions underscores the systemic fragility and sustainability deficits embedded in the current currency hierarchy, with significant implications for global SDG financing. If the system evolves toward multipolarity, it is conceivable that no single country will have to run persistent deficits to supply liquidity as in classic Triffin – instead, a combined provision could occur. However, coordination problems arise: without explicit cooperation, a shortfall of safe assets or liquidity could occur if each major central bank focuses narrowly on domestic goals. Alternatively, an overabundance of liquidity could flood markets if all issues were freely available, sparking asset bubbles.

This multidimensional reformulation of the Triffin dilemma further exposes the constraints peripheral economies face in accessing stable financing for sustainable development. The absence of a multilateral reserve asset mechanism intensifies asymmetries and dependencies, entrenching a cycle where systemic risks are exported globally via liquidity shocks and

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<sup>30</sup> Gourinchas P.-O., Rey H. From world banker to world venture capitalist: U.S. external adjustment and the exorbitant privilege // *G7 current account imbalances: sustainability and adjustment* / ed. by Clarida R. H. *Chicago : University of Chicago Press*, 2007. P. 11–66. URL: <http://www.nber.org/chapters/c0121> (date of access: 09.06.2025).

<sup>31</sup> Ghymers C. Unveiling the new form of the Triffin Dilemma and its inherent destabiliser: the relative shortage of dollar-safe assets, a critical issue with profound implications for global liquidity. *Robert Triffin International – Centro Studi sul Federalismo*, April 2024. URL: [https://www.triffininternational.eu/images/RTI/articles\\_papers/2024/RTI-CSF\\_Ghymers\\_Unveiling-new-form-TD\\_April2024\\_comp.pdf](https://www.triffininternational.eu/images/RTI/articles_papers/2024/RTI-CSF_Ghymers_Unveiling-new-form-TD_April2024_comp.pdf) (date of access: 17.06.2025).

financial fragmentation. Unless structural reforms are enacted, the reliance on a national currency to fulfil global roles will remain an inherently destabilising feature of the international system. In essence, Triffin's core insight – the tension between national and global interests – still holds, but might need a multilateral solution. Some have proposed an independent international institution to manage global liquidity (e.g. the IMF could be empowered to create SDRs counter-cyclically), thereby relieving national central banks of that burden. Whether major powers will cede any sovereignty to such mechanisms remains doubtful in the near term.

In a world with multiple key currencies (say dollar, euro, RMB, perhaps others like rupee or real in the future), each issuing country would need to consider global liquidity needs alongside domestic conditions. Absent that, we could see a continuation of the current ad-hoc approach: during crises, swap lines and IMF programs patch the leaks, but fundamental imbalances (like large surplus vs. deficit country dynamics) persist. For instance, China has run current account surpluses and the U.S. deficits for years, echoing the “core-periphery” mirror image that Bini Smaghi noted in Triffin's analysis. China's accumulation of trillions in U.S. bonds helped keep U.S. yields low (benefiting U.S. consumers) while contributing to low yields globally and arguably fuelling asset price inflation<sup>32</sup>. This co-dependency is sometimes called “Bretton Woods II.” If it unwinds (say, if China stops buying U.S. debt or significantly reduces its dollar reserves in favour of gold or other currencies), the repercussions for sustainable development financing could be significant, possibly higher global interest rates, and tighter funding for all. On the other hand, if China or other emerging giants step up as alternative liquidity providers (through their currency or via institutions like the Chiang Mai Initiative's pool of reserves), it might smooth the transition.

Recent research underscores that currency internationalisation must be analysed within a multidimensional globalisation framework that includes financial development, money demand, and institutional quality<sup>33</sup>. To address monetary asymmetries in the service of sustainability, experts have outlined several structural reforms. One is debt restructuring mechanisms to prevent debt crises from derailing development, for example, embedding climate-contingent clauses in debt (so payments pause automatically after a disaster)

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<sup>32</sup> Bini Smaghi L. The Triffin dilemma revisited. Speech at the Conference on the International Monetary System: Sustainability and Reform Proposals. *Triffin Foundation*. Brussels. 3 October 2011. URL: <https://www.bis.org/review/r111005a.pdf> (date of access: 13.06.2025).

<sup>33</sup> Wang X., Liu D., Zhang P. Financial Development, Money Demand, and Currency Internationalization: Based on a Multidimensional Globalization Perspective. *Finance Research Letters*. 2024. P. 105830. DOI: <https://doi.org/10.1016/j.frl.2024.105830> (date of access: 05.06.2025).

or establishing a sovereign debt workout institution under the UN. This ties into currency asymmetry since unsustainable foreign debt is often a result of currency shocks; fixing the debt side helps break the cycle. Alternative monetary practices, including community and complementary currencies, have also been explored as bottom-up instruments for sustainable development<sup>34</sup>. Another is promoting greater use of regional currencies and South-South financial arrangements<sup>35</sup>. If developing countries can trade among themselves in local currency (for instance, India paying Brazil in rupees for oil, which then uses rupees to buy Indian pharmaceuticals), they reduce demand for hard currency reserves and build resilience. Blockchain and fintech might facilitate such barter-like multi-country clearing by tracking complex exchange chains. Additionally, strengthening domestic financial systems in developing countries – deepening local capital markets, improving regulatory quality – can attract more stable investment (including ESG-oriented investment) and reduce the reliance on fickle foreign capital. International support can amplify this by credit enhancement (e.g. guarantees from multilateral banks for local-currency green bonds).

In terms of currency blocs, an open question is whether a large economy like China will take on a more explicit “anchor” role akin to the U.S. did post-WWII. If the RMB were to become a major reserve currency, China would need to allow freer capital flows and develop even larger financial markets in yuan. This is gradually happening (the RMB is now in the top 5 traded currencies, and foreign investors are increasing holdings of Chinese bonds), but full convertibility is still limited. The Chinese central bank has to balance international aspirations with domestic control. That balance might shift as China seeks to internationalise the RMB to reflect its economic stature. According to Shen (2022), Chinese policymakers see RMB internationalisation as a contribution to a healthier, more diversified IMFS that can enhance global financial stability<sup>36</sup>. Their progress – including the digital RMB and cross-border pilots – suggests a strategic intent to elevate the RMB’s role. If successful, the result could be a bipolar or multipolar currency world by the 2030s, which might alleviate some systemic pressures but also require new forms of coordination (potentially a return to something like the

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<sup>34</sup> Seyfang G., Longhurst N. Growing green money? Mapping community currencies for sustainable development. *Ecological Economics*. 2013. Vol. 86. P. 65–77. DOI: <https://doi.org/10.1016/j.ecolecon.2012.11.003> (date of access: 05.06.2025).

<sup>35</sup> Konieczna P. Exploring the Relationship Between Complementary Currencies and Sustainable Development: A Comparative Study. *Sustainability*. 2025. Vol. 17, no. 8. P. 3627. DOI: <https://doi.org/10.3390/su17083627> (date of access: 09.06.2025).

<sup>36</sup> Shen C. Digital RMB, RMB Internationalization and Sustainable Development of the International Monetary System. *Sustainability*. 2022. Vol. 14, no. 10. P. 6228. DOI: <https://doi.org/10.3390/su14106228> (date of access: 08.06.2025).

G-20 currency accords, or even a modern equivalent of the gold-standard rules but tailored to fiat multipolarity).

In conclusion, structural asymmetries in the monetary system are deeply entrenched, but the combined forces of technology, geopolitical shifts, and urgent development needs are pressing for change<sup>37</sup>. While a wholesale revolution of the IMFS is unlikely to be sudden, incremental steps, such as expanding the use of SDRs, fostering regional financial cooperation, greening central bank mandates, and integrating digital currencies, point toward an evolving landscape. The ultimate goal from a sustainable development perspective is an international monetary order that is inclusive, stable, and oriented toward long-term human and ecological well-being. This means tempering the excesses of financial globalisation (volatility, inequality) and empowering all countries with the monetary means to invest in their futures. The era of economic transformation we are entering could be an inflexion point towards that vision, provided policymakers seize the strategic opportunities to reform and reinvent institutions accordingly.

## CONCLUSIONS

The era of rapid monetary transformation – marked by the rise of digital currencies, shifting economic power centres, and mounting sustainability imperatives – offers a critical opportunity to realign the international financial system with the goals of sustainable development. The strategic nexus between currency internationalisation and sustainable development finance has been explored, revealing both sobering challenges and promising avenues for progress. The dominance of a single currency (or a narrow set of currencies) in the global system can generate instabilities and inequities that undermine development, from volatile capital flows and exchange rate shocks to structural debt traps for the Global South. At the same time, initiatives to diversify and reform the system – whether through encouraging multiple reserve currencies, deploying central bank digital currencies for more inclusive finance, or instituting new global liquidity mechanisms – are gradually taking shape.

Harnessing these changes for sustainable development will require proactive and coordinated governance. Key priorities include:

(1) enhancing global financial safety nets and reserve-sharing arrangements to protect developing countries from currency crises and free up resources for SDG investment;

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<sup>37</sup> Sustainability and the New Economics / ed. by S. J. Williams, R. Taylor. Cham : Springer International Publishing, 2022. DOI: <https://doi.org/10.1007/978-3-030-78795-0> (date of access: 28.05.2025).

(2) accelerating payment system innovations (like multi-CBDC platforms) that dramatically lower the cost of cross-border transfers, paired with regulations to ensure benefits reach marginalised communities and do not exacerbate volatility;

(3) embedding climate and sustainability considerations into monetary and financial policies – for instance, via green finance taxonomies, climate-adjusted central bank operations, or even the issuance of a new class of green international money as discussed;

(4) reforming the governance of institutions like the IMF, World Bank, and BIS to give greater voice to developing countries and to institutionalise support for global public goods financing; and

(5) fostering regional financial cooperation and South-South currency arrangements as complementary pathways to reduce over-reliance on a few hegemonic currencies.

Ultimately, an equitable and sustainable international monetary system will likely be one that is more multipolar, cooperative, and anchored by common development goals rather than zero-sum national advantage. The transformation will not happen overnight, but the converging pressures of economic inequality, financial instability, and climate change make it increasingly clear that business-as-usual is untenable. As the world approaches critical deadlines for the SDGs and climate targets, monetary and financial strategies will play a decisive role in determining success or failure. Currency internationalisation is not a neutral backdrop to development – it is a dynamic arena of strategic policy choices. By understanding and actively shaping this nexus, policymakers and scholars can help ensure that the ongoing monetary revolution contributes to, rather than detracts from, the shared objective of a sustainable and prosperous future for all nations.

## **ABSTRACT**

The evolving intersection between currency internationalisation and sustainable development finance has become increasingly critical amidst systemic shifts in the global monetary landscape. The structural predominance of a few international currencies – foremost the United States dollar – continues to shape the geography of capital flows, the pricing of sovereign risk, and the distribution of liquidity, often exacerbating developmental asymmetries and financial vulnerabilities in peripheral economies. Among the most salient challenges is the persistent misalignment between global reserve demand and the sustainability of unipolar monetary governance, expressed through phenomena such as the “exorbitant privilege,” Triffin dilemma variations, and currency mismatches linked to “original sin“. The study analyses how innovations in central bank digital currencies (CBDCs), cross-

border payment infrastructures, and multilateral liquidity arrangements could recalibrate these imbalances by expanding access, reducing transaction inefficiencies, and enhancing traceability of green financial flows, provided adequate regulatory, institutional, and ecological safeguards are embedded. Drawing on insights from ecological macroeconomics and Modern Monetary Theory, and informed by policy frameworks of institutions such as the IMF, BIS, World Bank, and UN, the research identifies pathways for systemic reform. Key proposals include restructured global reserve mechanisms, enhanced regional currency cooperation, and integrated green liquidity facilities capable of reconciling monetary sovereignty with planetary boundaries. The results underscore that realigning international monetary frameworks with sustainable development imperatives is both a strategic necessity and a normative obligation in the context of accelerating global transformation.

### References

1. Aglietta M., Coudert V. The dollar and the transition to sustainable development: From key currency to multilateralism. Policy Brief. 2019. No. 26. *CEPII*. URL: [https://cepii.fr/PDF\\_PUB/pb/2019/pb2019-26.pdf](https://cepii.fr/PDF_PUB/pb/2019/pb2019-26.pdf) (date of access: 10.06.2025).
2. Aguila N., Haufe P., Wullweber J. The ecor as global special purpose money: towards a green international monetary system to finance sustainable and just transformation. *Sustainability Science*. 2024. DOI: <https://doi.org/10.1007/s11625-024-01484-8> (date of access: 11.06.2025).
3. Aizenman J., Lee J. International Reserves: Precautionary Versus Mercantilist Views, Theory and Evidence. *Open Economies Review*. 2007. Vol. 18, no. 2. P. 191–214. DOI: <https://doi.org/10.1007/s11079-007-9030-z> (date of access: 18.06.2025).
4. Alonso S. L. N. Can Central Bank Digital Currencies be green and sustainable?. *Green Finance*. 2023. Vol. 5, no. 4. P. 603–623. DOI: <https://doi.org/10.3934/gf.2023023> (date of access: 02.06.2025).
5. Ariff M., Zarei A. Sustainable Development and Currency Exchange Rate Behavior. *Asian Economic Papers*. 2018. Vol. 17, no. 3. P. 148–173. DOI: [https://doi.org/10.1162/asep\\_a\\_00644](https://doi.org/10.1162/asep_a_00644) (date of access: 18.06.2025).
6. Asian Development Bank. Financial inclusion in the digital economy. October 2016. URL: <https://www.adb.org/publications/financial-inclusion-digital-economy> (date of access: 20.06.2025).
7. Barredo-Zuriarrain J. The inherent instability of national monetary power in the 21st century: the Triffin dilemma revisited. *Research in Political Economy*. 2016. Vol. 30B. P. 23–52. DOI: <https://doi.org/10.1108/S0161-72302015000030B002> (date of access: 15.06.2025).

8. Bank for International Settlements. Results of the 2022 BIS survey on central bank digital currencies. *BIS Paper No. 136*. 10 July 2023. URL: <https://www.bis.org/publ/bppdf/bispap136.htm> (date of access: 11.06.2025).

9. Bertaut C. C., Bruno V. G., Shin H. S. Original Sin Redux. *SSRN Electronic Journal*. 2021. DOI: <https://doi.org/10.2139/ssrn.3820755> (date of access: 20.06.2025).

10. Bharadwaj R., Karthikeyan N., Ananda Kumar B. Currencies under pressure: How currency fluctuations and climate risks impact debt sustainability in SIDS and LDCs. *IIED*. 2025. URL: <https://www.iied.org/sites/default/files/pdfs/2025-04/22626iied.pdf> (date of access: 30.05.2025).

11. Bini Smaghi L. The Triffin dilemma revisited. Speech at the Conference on the International Monetary System: Sustainability and Reform Proposals. *Triffin Foundation*. Brussels. 3 October 2011. URL: <https://www.bis.org/review/r111005a.pdf> (date of access: 13.06.2025).

12. Ghymers C. Unveiling the new form of the Triffin Dilemma and its inherent destabiliser: the relative shortage of dollar-safe assets, a critical issue with profound implications for global liquidity. *Robert Triffin International – Centro Studi sul Federalismo*, April 2024. URL: [https://www.triffininternational.eu/images/RTI/articles\\_papers/2024/RTI-CSF\\_Ghymers\\_Unveiling-new-form-TD\\_April2024\\_comp.pdf](https://www.triffininternational.eu/images/RTI/articles_papers/2024/RTI-CSF_Ghymers_Unveiling-new-form-TD_April2024_comp.pdf) (date of access: 17.06.2025).

13. Gourinchas P.-O., Rey H. From world banker to world venture capitalist: U.S. external adjustment and the exorbitant privilege // G7 current account imbalances: sustainability and adjustment / ed. by Clarida R. H. *Chicago : University of Chicago Press*, 2007. P. 11–66. URL: <http://www.nber.org/chapters/c0121> (date of access: 09.06.2025).

14. Hasan R., Ashfaq M., Hassan M. K. Central bank digital currency (CBDC) for sustainable development in the Gulf region: A closer inspection of Project Aber. *SSRN*. 2023. DOI: <https://doi.org/10.2139/ssrn.4581338> (date of access: 01.06.2025).

15. International Monetary Fund. Currency Composition of Official Foreign Exchange Reserves (COFER). Washington, D.C.: *IMF*. 2020. URL: <https://data.imf.org/?sk=E6A5F467-C14B-4AA8-9F6D-5A09EC4E62A4> (date of access: 04.06.2025).

16. Ismail S. H., Yuliadi I., Berliana A. The Relationship Between Exchange Rates and Sustainable Development: A Literature Review. *Journal of Economics Research and Social Sciences*. 2025. Vol. 9, no. 1. P. 65–78. DOI: <https://doi.org/10.18196/jerss.v9i1.25801> (date of access: 12.06.2025).

17. Jothr O. A., Jummaa A. I., Didik Kusno Aji. N. The impact of monetary policy instruments on sustainable development. *Revenue Journal*:



*Management and Entrepreneurship*. 2023. Vol. 1, no. 1. P. 22–26. DOI: <https://doi.org/10.61650/rjme.v1i1.178> (date of access: 11.06.2025).

18. Konieczna P. Exploring the Relationship Between Complementary Currencies and Sustainable Development: A Comparative Study. *Sustainability*. 2025. Vol. 17, no. 8. P. 3627. DOI: <https://doi.org/10.3390/su17083627> (date of access: 09.06.2025).

19. Lee S., Park J. Environmental implications of a central bank digital currency (CBDC). *World Bank Group Korea Office Innovation and Technology Note Series*. 2022. No. 8. URL: <https://openknowledge.worldbank.org/server/api/core/bitstreams/04c9c983-32f7-5519-9890-4981ea46b4d7/content> (date of access: 02.06.2025).

20. Lewis H. Where Keynes went wrong: And why world governments keep creating inflation, bubbles, and busts. Mount Jackson, VA : Axios Press, 2009. 384 p.

21. Monnin P. Monetary policy and Sustainable Development Goals: What can central banks do? What should they do? *Council on Economic Policies*. April 2023. URL: [https://www.un.org/development/desa/dpad/wp-content/uploads/sites/45/WSR\\_BP\\_2.pdf](https://www.un.org/development/desa/dpad/wp-content/uploads/sites/45/WSR_BP_2.pdf) (date of access: 05.06.2025).

22. Ozili P. K. Determinants of global interest in central bank digital currency: The role of sustainable development and cryptocurrency. *Digital Transformation and Society*. 2023. DOI: <https://doi.org/10.1108/dts-04-2023-0020> (date of access: 13.06.2025).

23. Ozili P. K. Using central bank digital currency to achieve the Sustainable Development Goals. 2023. *Munich Personal RePEc Archive (MPRA)*. URL: <https://mpra.ub.uni-muenchen.de/id/eprint/118806> (date of access: 08.06.2025).

24. Persaud A. Unblocking the Green Transformation in Developing Countries with a Partial Foreign Exchange Guarantee. *Climate Policy Initiative*. 2023. URL: <https://www.climatepolicyinitiative.org/wp-content/uploads/2023/06/An-FX-Guarantee-Mechanism-for-the-Green-Transformation-in-Developing-Countries.pdf> (date of access: 15.06.2025).

25. Prasad E. New financial technologies, sustainable development, and the international monetary system. *ADB Working Paper*. 2021. No. 1277. Tokyo: Asian Development Bank Institute. URL: <https://www.adb.org/publications/new-financial-technologies-sustainable-development-international-monetary-system> (date of access: 19.06.2025).

26. Seyfang G., Longhurst N. Growing green money? Mapping community currencies for sustainable development. *Ecological Economics*. 2013. Vol. 86. P. 65–77. DOI: <https://doi.org/10.1016/j.ecolecon.2012.11.003> (date of access: 05.06.2025).

27. Shen C. Digital RMB, RMB Internationalization and Sustainable Development of the International Monetary System. *Sustainability*. 2022. Vol. 14, no. 10. P. 6228. DOI: <https://doi.org/10.3390/su14106228> (date of access: 08.06.2025).

28. Sustainability and the New Economics / ed. by S. J. Williams, R. Taylor. Cham : Springer International Publishing, 2022. DOI: <https://doi.org/10.1007/978-3-030-78795-0> (date of access: 28.05.2025).

29. SWIFT. RMB Tracker Monthly Report. Brussels: *SWIFT*. 2020. URL: <https://www.swift.com/our-solutions/compliance-and-shared-services/business-intelligence/renminbi/rmb-tracker> (date of access: 07.06.2025).

30. The Economic and Social Commission for Asia and the Pacific (ESCAP). Digital and virtual currencies for Sustainable Development. URL: <https://repository.unescap.org/server/api/core/bitstreams/f773f428-a27e-41be-bb37-d91ca20d930f/content> (date of access: 20.05.2025).

31. Tshikovhi N., Netswera F., De Conti B. De-dollarization, the New Development Bank, and BRICS Trade Currency Changing Multilateralism and Geopolitical Arrangements. *The Multilateralism of the New Development Bank on the Sustainable Economic Growth in BRICS Nations and Beyond*. 2025. P. 65–79. DOI: <https://doi.org/10.1108/978-1-83662-292-520251007> (date of access: 11.06.2025).

32. United Nations, Inter-agency Task Force on Financing for Development. Financing for Sustainable Development Report 2023: Financing Sustainable Transformations. *United Nations*. April 2023. URL: <https://desapublications.un.org/publications/financing-sustainable-development-report-2023> (date of access: 17.06.2025).

33. Vorisek D., Yu S. Understanding the cost of achieving the Sustainable Development Goals. *Policy Research Working Paper*. 2020. No. 9164. Washington, DC: World Bank. URL: <http://hdl.handle.net/10986/33407> (date of access: 02.06.2025).

34. Wang H. Addressing governance challenges of digitalisation and sustainability: The case of central bank digital currency. *Review of European, Comparative & International Environmental Law*. 2024. DOI: <https://doi.org/10.1111/reel.12571> (date of access: 17.06.2025).

35. Wang X., Liu D., Zhang P. Financial Development, Money Demand, and Currency Internationalization: Based on a Multidimensional Globalization Perspective. *Finance Research Letters*. 2024. P. 105830. DOI: <https://doi.org/10.1016/j.frl.2024.105830> (date of access: 05.06.2025).

36. Whyman P. B. Keynes and the International Clearing Union: A Possible Model for Eurozone Reform?. *JCMS: Journal of Common Market*

*Studies*. 2014. Vol. 53, no. 2. P. 399–415. DOI: <https://doi.org/10.1111/jcms.12180> (date of access: 19.06.2025).

37. World Bank. Remittance Prices Worldwide. Washington, D.C.: *World Bank*. 2025. URL: <https://remittanceprices.worldbank.org/> (date of access: 18.06.2025).

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