



Introducing BONDCOINS, Bonds without Borders' multi-currency public & sovereign stable coins in both traditional fiat and digital formats

Traditional Finance or Crypto?

Irrelevant question, as long as it provides sustainable financing of public goods.

From Bonds without Borders, an impact fintech providing a unique global e-money solution using Bondcoins cash to Save, Send and Spend. In both traditional and digital formats.

The Traditional Finance Context of Government Bonds

Developed, Emerging and Frontier Markets are facing unprecedented sovereign debt management challenges: \$ 90 trillions of global public sector debtⁱ, the majority of which being government bonds, at interdependent risk of rollover uncertainty; dystopian hourly volatility for the so-called credit-risk-free financial assets of the world; significant interest rate duration risk marked to market losses; occasional failed settlements that predate the Covid-19 pandemic. In this lingering context of higher nominal rates, national fiscal challenges, elevated worldwide costs of living, climate change disasters, and polarized geopolitical lenses, how will public goods be financed across the globe? The recycling of trade surplus countries' windfall savings into government bonds financing public deficits across borders might be at a new junction.

Traditional finance like its crypto cousins, prone to endogenous instability, have all failed not only dramatically to accelerate the financial integration of peopleⁱⁱ, but also to give a direct fiscal voice to citizens and/or government bondholders. There is still no order to prioritize current and future emergency budgeted expenses, whether or not these address sustainability goals. Moreover, the Sovereign Debt Management Offices of countries all mostly rely on weekly general obligation auction fundraising

ⁱ According to the IMF 2022 Global Debt Monitor, public sector debt represented 96% of the \$ 94 tn 2021 world output.

ⁱⁱ According to the World Bank 2021 Findex Report, there would still be 1.4 billion unbanked adults worldwide.

<https://www.worldbank.org/en/publication/globalindex>



exercises, with no direct matching of government debt issuances with approved fiscal expenses, let alone with some form of sustainability targets.

Yet, rather than being victims of potential sovereign defaults or of unsustainable national fiscal frameworks -just like when facing epidemics, floods, droughts, wildfires, earthquakes- each of us can play our part. We can make our cash, when at all available, simply more responsible, and hold national government bonds more accountable for their harnessing and spending of people's money, whether taxpayers or government bond investors.

The domestic and x-border financing of national public goods conundrum requires pragmatism. It is about **how fast, how trustworthily** and **how sustainably** global sovereign debt can be financed. Two low-hanging fruits seem to bring immediate answers: i) working with the existing domestic operational and regulatory frameworks of national foreign exchange & fixed income markets; and ii) fostering the use of existing sovereign fiat currencies for saving, transfer and payment purposes. Bonds without Borders, an x-border global clearing platform dealing solely in foreign exchange and government bonds can help.

The financial regulatory barriers to entry exist, rightly so, within and across national borders, to solidify the trust of people in the national financial infrastructures and their respective sovereign fiat or digital currencies in the making (CBDCs). Stringent KYC/AML protocols can co-exist with seamless x-border fiat and digital payments or investments.

Crowdfunding countries for recovery following apocalyptic floods or earthquakes has been made possible only through individuals' and countries' generosity (i.e. donations, not investments), and through non-for-profit associations, international organizations, and volunteers, beyond the diasporas, across the globe. At no point in time, nonetheless, are there disintermediated operational financial bridges between people and the national governments of the countries affected. Moreover, the impact voice of donors is undefined (e.g., via preferred priority to health services, food supply, schooling continuity, sheltering, and infrastructure rebuilding). Yet, the social returns of making such investments in local currency government bonds across the globe could only foster fiscal sustainability. Unlike donations, investments call for a new long-term structural fiscal pact between people and governments. Unlike donations, investments call for transparency, accountability, traceability, and responsibility. Like donations, investments might become worthless as soon as made. However, it's the reputation of countries entrusted by government bondholders that is at stake, to deliver on budgeted items and people' fiscal voice, and to serve their respective national economy. This would be the beginning of a virtuous, not virtual, cycle.



The Blockchain Ambitions for Government Bonds

At the outset of the so called 'Crypto winter' lies a fundamental question perhaps: **Why blockchain?** Or more precisely for which purpose(s) is blockchain technology probably a brilliant innovation? And isn't this fundamental '**Why?**' question as necessary as the '**How?**', i.e. the question of ultimately **which universal Web3 standard** will be commonly accepted, globally interoperable, and actually used across 8 billion people and rising?

Big-and-Disruptive Technology seems to have recently shifted towards largely unregulated monopolistic, endogenously and dangerously inter-connected behaviors. Food scarcityⁱⁱⁱ, the acute endemic of our time, has been magnified by the Covid-19 pandemic supply chain disruptions, by the war, by the exchange rates pass-through effect onto domestic energy and food import prices. Global climate change has had negative externalities on low-CO2 emitting poor countries affected by floods & droughts. Why has blockchain seemingly barely alleviated these multi-faceted plagues? Do marginal gains in x-border payment operational efficiencies lead to social benefits? Are financial literacy and financial integration not the first pillars of self-insured individual existences?

Can multi-currency public and sovereign stable coins contribute to financial integration? Sovereign debt reprofiling or restructuring for Low Income Economies alone do not bring the deeply needed new and sustainable capital to finance the Balances of Payment and Fiscal Deficits of 2023 and subsequent years. The current sovereign debt crisis calls for new ways of financing fiscal deficits. Financial innovation is hastily needed at this junction.

The recent experiments in the digitization of bonds, so-called bond tokens, are excellent developments. Yet, they do not seem to bring new and sustainable capital, let alone actual secondary market trading liquidity. Moreover, these blockchain experiments of digital bond tokens seem to ignore the fact that there are already existing fiat government bond markets that can trade in micro denominations, with a UBO/stake proof, or settle x-border at T+0, seamlessly. If so, what is the actual rational of such tokenization experiments? Isn't the fundraising exercise necessity the very reason **why** government bonds exist in the first place? In other words, what is the point of tokenizing bonds if the **how** does not bring new sources of sustainable financing and trading liquidity improvements in the process? Certainly, Blockchain brings programmability of money, a key benefit for all financial services primitives (e.g. borrowing, lending, rolling government bond maturities, and the like).

ⁱⁱⁱ In Fall'22, the IMF and the World Food Program estimated that about 830 million people were under-nourished.

The global multi-currency crowdfunding platform for sovereigns



Blockchain is not the goal, blockchain is the means. So, **when it comes to government bond tokens, Web3 shall serve the fundamental purpose of raising new and sustainable capital for the financing of public goods and fast-tracking the programmability of money.**



Introducing BONDCOINS, the multi-currency public & sovereign stable coins on Bonds without Borders (BwB)

The coin is the asset itself (government bond). It can be used to Save, Send and Spend, while having a fiscal voice.

Bondcoins are multi-currency public & sovereign stable coins. They exhibit the narrow definition of money: i) unit of account; ii) store of value; and iii) legal tender for payments, under the strict national regulatory oversight of national monetary authorities across countries. They clear on Bonds without Borders platform. Bondcoins also empower people with a fiscal voice tag (NFT).

Let's define the basic principles and characteristics of what multi-currency public and sovereign stable coins shall be. Let's also envisage a globally interoperable financial architecture which would validate the actual use of existing fiat and sovereign currencies across the globe.

Basic Principles of BONDCOINS, the Multi-Currency Public & Sovereign Stable Coins on BwB

- Whether fiat or digital, its currencies of denomination shall remain those of existing national economies which are minted by their respective Central Banks.
- No Defi wheel reinvention; the innovation is in the following features: i) the x-border clearing platform, connecting the existing national payment and savings infrastructures between one another; ii) an indivisible government bond, merging the collateral asset and the legal tender functions in the same coin, trading in minimal denominations and x-border already; iii) the direct ultimate beneficiary ownership, a disintermediated stake on government liabilities; iv) the Central Ledger, which is that of the respective governments issuing the bonds.
- Stringent KYC/AML compliance checks shall apply under the guidance of the CFA Code of Ethics implementing the most stringent of national regulations on the platform.
- X-border market-determined foreign exchange convertibility for proper interoperability.
- Carrying the three traditional features of money mentioned above.
- Empowering cash with a fiscal voice and programmability of money.



Main Characteristics of BONDCOINS

Functions:	Sovereignty	Operating Model	Issuance	Distribution	Validation	Transference
Assumed by:	Bondcoin = Public & Sovereign stable coin	Intermediated CBDC	Ministries of Finance or Central Banks	Primary Dealers, Broker-Dealers	BwB + local CSDs	On and beyond BwB
	Bondcoins are public & sovereign stable coins, in each existing fiat currency across the globe, i.e. local currency government or monetary bills and bonds tokens transacted over BwB's permissioned and decentralized ledger proving the Ultimate Beneficial Owner's stake at any point in time	Bondcoins are issued by Ministries of Finance or Central Banks themselves but the KYC/AML monitoring of Bondcoin holders and other functions (transaction, taxation, fx conversion,...) are delegated to BwB	Ministries of Finance or Central Banks, as the sole authorities in charge of managing the finite supply of the local currency digital cash, are the issuers of local currency government or monetary bills and bonds, i.e. Bondcoins, in accordance to the fiscal and monetary policies of each country	-Existing Primary Dealers on the primary market of regular auctions of local currency government or monetary bills and bonds led by Central Banks -Existing Broker-Dealers on the secondary market -BwB is in charge of channeling the Bondcoins to their Ultimate Beneficial Owners, wholesale or retail, in accordance to the most stringent national regulations	BwB, in reconciliation with the local Central Securities Depositories (CSDs), which can be the Central Bank, a local Exchange or local financial institutions offering custody services, acts as a mirror sub-ledger, while the Central Ledger is the privilege of Ministries of Finance and Central Banks	Bondcoins are easily transferred, i.e. used for payment between people or between people and corporate entities, on and beyond BwB, domestically and across borders, instantaneously in certain countries or up to T+2 across borders

Functions:	Ledger Update	KYC-AML	User Interface	User Data	Customer Service
Assumed by:	Central Ledgers of Ministries of Finance or Central Banks + Mirror sub-ledgers of BwB & local CSDs	BwB	BwB	BwB	BwB
	The Central Ledgers held by Ministries of Finance or Central Banks are being updated, Close of Business every day at the very least, while some domestic fixed income architectures enable this reconciliation between parties already several times a day	Performed by BwB, as the Sphinx of the Bondcoins Network, in protecting Ultimate Beneficial Owners of Bondcoins and the sovereignty of existing fiat currencies	Performed by BwB, following the most stringent national regulations worldwide	The Ultimate Beneficial Owners' data is the property of the users, as well as BwB. The data can be shared with any national regulator, upon request and in accordance with the most stringent privacy rights worldwide	Performed by BwB

Bondcoins are local currency government or monetary bills and bonds tokens, de facto public & sovereign digital stable coins issued by the Ministries of Finance or Central Banks of countries, in each respective national fiat currency, exchangeable and convertible on the Bonds without Borders platform. De facto, Bondcoins are embedding multi-currency cash + carry.

Since many Central Banks match part of their liabilities with assets in the form of national local currency government bonds already, any future CBDCs issued by Central Banks would be de facto partly collateralized by national local currency government bonds on Central Banks' balance sheets, in a non-segregated/mutualized manner.

Bondcoins leapfrog this notary and collateral management functions of Central Banks. They use local currency government or monetary bills and bonds as digital cash, directly in the hands of their ultimate



beneficial owners, in a disintermediated manner. Bondcoins are natural units of account, means of wealth storage, and can be used for payment by wholesale and retail alike. Ministries of Finance are the Central Ledgers of local currency government bills and bonds already. Central Banks are the Central Ledgers & custodians of monetary bills, and, in many cases, of local currency government bills and bonds too. Bondcoins have the same finality as money already. Bondcoins rely on the existing domestic financial architectures, specific to each country, and can be exchanged across borders.

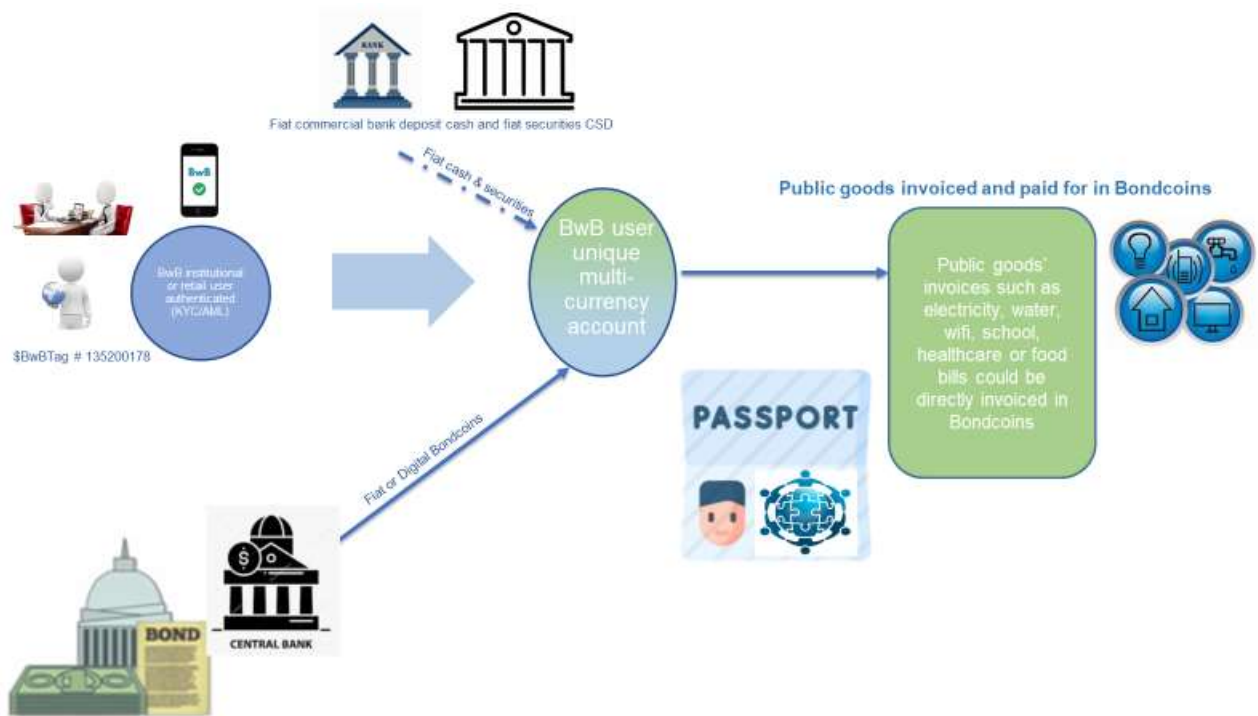
Bondcoins could also be programmable digital money which can be used, for instance, to pay for the public goods provided by state-owned companies (e.g. electricity, water, internet, education, health bills, and more). Governments could also reciprocally and directly donate Bondcoins to any chosen beneficiary, even if unbanked, as social benefits, directly out of the national budgets.

As a Non-Fungible Token (NFT), each Bondcoin is tagged with the preferred fiscal choice of its ultimate beneficial owner and bearer, which gives a responsible fiscal voice to any Bondcoin holder, and transforms the fiscal dialogue between governments and people.

Bonds without Borders is a multi-currency platform dealing solely in Bondcoins across the globe (see broad architecture below for a single currency Bondcoin example).

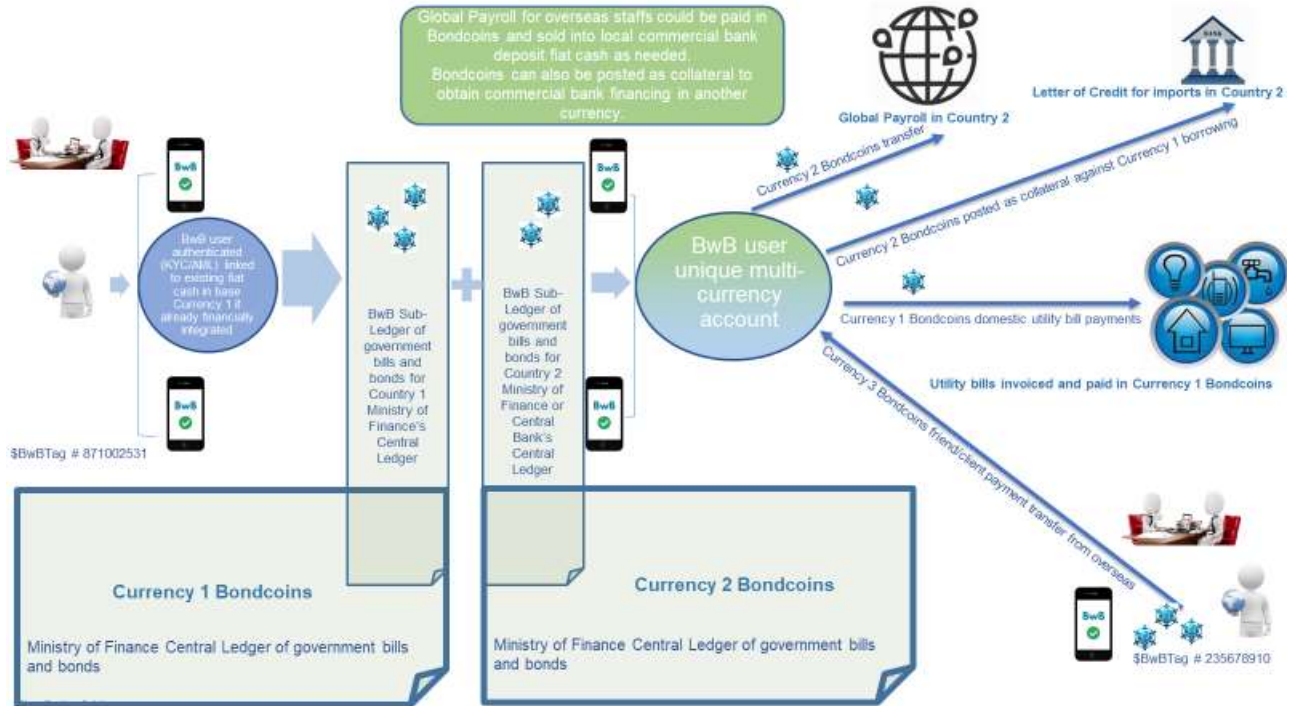


Currency 1 BONDCOINS broad architecture





The natural global transference of multi-currency BONDCOINS



Comments welcome at info@bondswithoutborders.com

Thank you!

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Mike Novogratz @ Galaxy; Jeremy Allaire @ Circle; Joseph Lubin @ Consensys; Umar Farooq @ JP Onyx;...