Africa’s financial salvation is on the blockchain

Part I: Holy Ledger

Pentecostal Tokenism

Some say that the world’s largest modern church denomination is the Redeemed Christian Church of God (RCCG) in Nigeria. A megachurch with worship grounds that reputedly stretch for miles on end. It should come as no surprise that it is Nigeria’s largest real estate owner.

The current leader of the Church is a mathematician, which may be relevant in some way to the subject of this short essay. But it was not math that brought him to the attention of the original founder in 1973. Actually, it was his English translation skills.

The Founder could not communicate in other language other than his native Yoruba. To commune with his vast, multiethnic, following, translators were necessary. In time, the current leader will transition from translator to confidant, and eventually successor. A natural progression: bridging gaps leads to power.

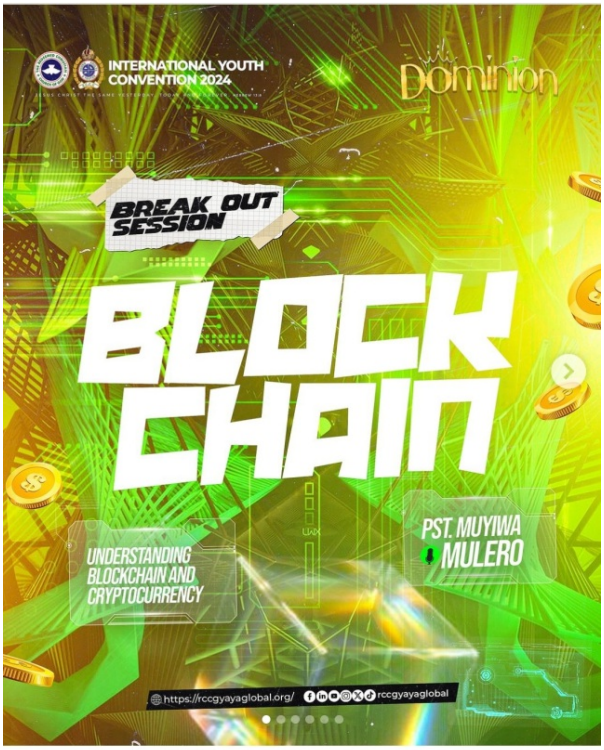
In its current recognisable form, the Church is very much the empire that the current visionary leader built. Only someone ignorant about the Pentecostal movement in Africa would underplay the sheer adaptability and capacity of its churches to sync with the times. RCCG is no different.

The Engineer Pastor

I was thus not too surprised when I saw its youth wing and some of its clergy elevate blockchain and crypto to a matter of salvation for the faithful.

The young in Africa are often estranged from the established order. A smart Church will seek to bridge their world with the Kingdom of God.

The Church has thus created a “syndicate session” to dominate the new technology, and prevent it from distracting its young. RCCG seeks to blend tech and obedience by drawing on spiritual strategies.



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rccgyayaglobal Excerpts from the BlockChain Syndicate Session anchored by Pastor Muyiwa Mulero. He spoke on 'Understanding Blockchain and Cryptocurrency'.

The title of the owner of this strategic initiative in RCCG is “Engineer Pastor in Charge”. He is particularly adept in forex trading, and he offers much by way of mentorship to the flock.

The Engineer Pastor’s sermons on the topics that I have reviewed show a strong commitment to the ideal of blockchain as an economy-wide transformative agent.

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rccgyayaglobal Pastor Muyiwa Mulero anchored the Blockchain session, and he spoke to us insightfully, here are some of the excerpts from the session.

Blockchain is the digital and decentralized legal technology that records all transactions without the financial intermediary of Banks.

Cryptocurrency can be used for:
• Money transfer
• Smart contract
• Media

A blockchain transaction is defined as a small unit of tax that is done in public units. Bitcoin was invented because there was no global validation of transactions. Officially, we have over 5,000 cryptocurrencies right now in this century.

Types of blockchain
1. Public Blockchain
2. Consultium Blockchain
3. Private Blockchain
Blockchain can be applied to;
• Healthcare system
• Financial system
• Retail system
• Real estate
• Transport and tourism

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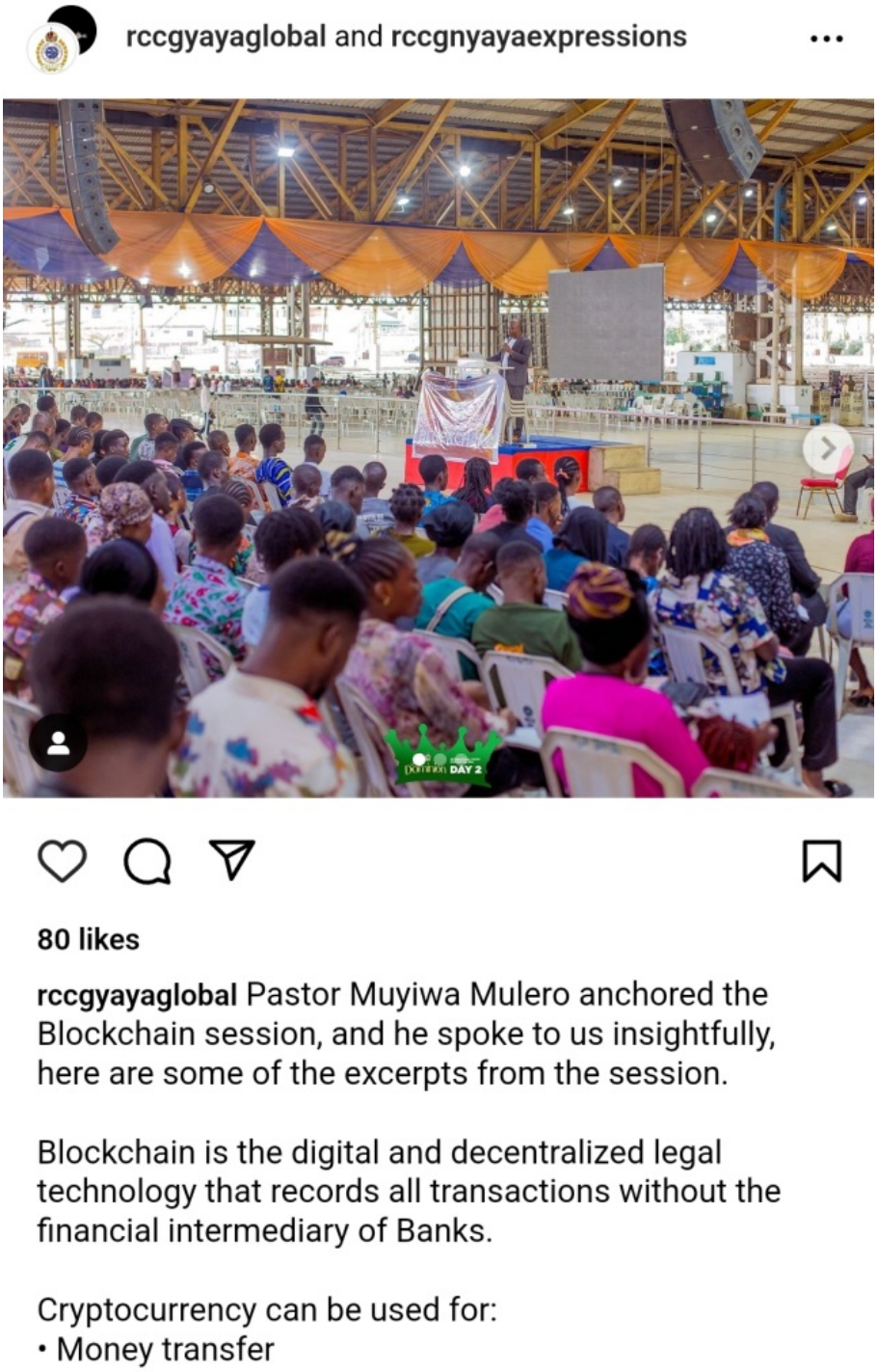
As I said, no one who knows Africa well dismisses the Pentecostal movement as a surfacer of big trends.

African youth pray to crypto and swear by tokens

The urban youth of the continent are restless for tectonic shifts outside the political system. Politics is in their eyes a wholesale failure. A theatre of occasional emotional outbursts rather than the site of serious social engagement.

Crypto and blockchain are seeding seismic vibrations in the youthful underbelly of African society. In the early months of the pandemic, adoption surged 1200%.

When the Engineer Pastor arrives to preach, the auditorium is packed with young people from across the denomination seeking wisdom of the new paths the Lord is paving through this groundbreaking technology.



A cult? Or more like a jam?

Observers call the emerging crypto-salvation movement in Africa a "cult". Newly minted crypto millionaires are endowing new churches in their hometown hamlets. Gigantic ones at that.

One Prophet on record for predicting a 2024 crypto boom says that his 80,000 capacity church was funded from the divine froth of crypto profits.

American business commentators talk about "meme stocks", a phenomenon whereby the sentiments of investors unschooled in finance and lacking much experience in investment drive the value of shares or other financial assets.

Religious passion is a seriously underrated potential driver of retail capital markets in Africa. It is a wonder how poorly studied the phenomenon is.

The founder of the "holy grail of cryptocurrency" is obviously leveraging the high trust that exists in close-knit societies to rack up

value, which can create a bit of a challenge for regulators in more tightly regulated jurisdictions. Sometimes, the blame just has to fall on God.

The more intriguing aspect of the phenomenon, from where I sit, is how prophecies, counselling, visions, revelations, and doctrines can all come together powerfully to boost the value of a crypto token or other digital asset.

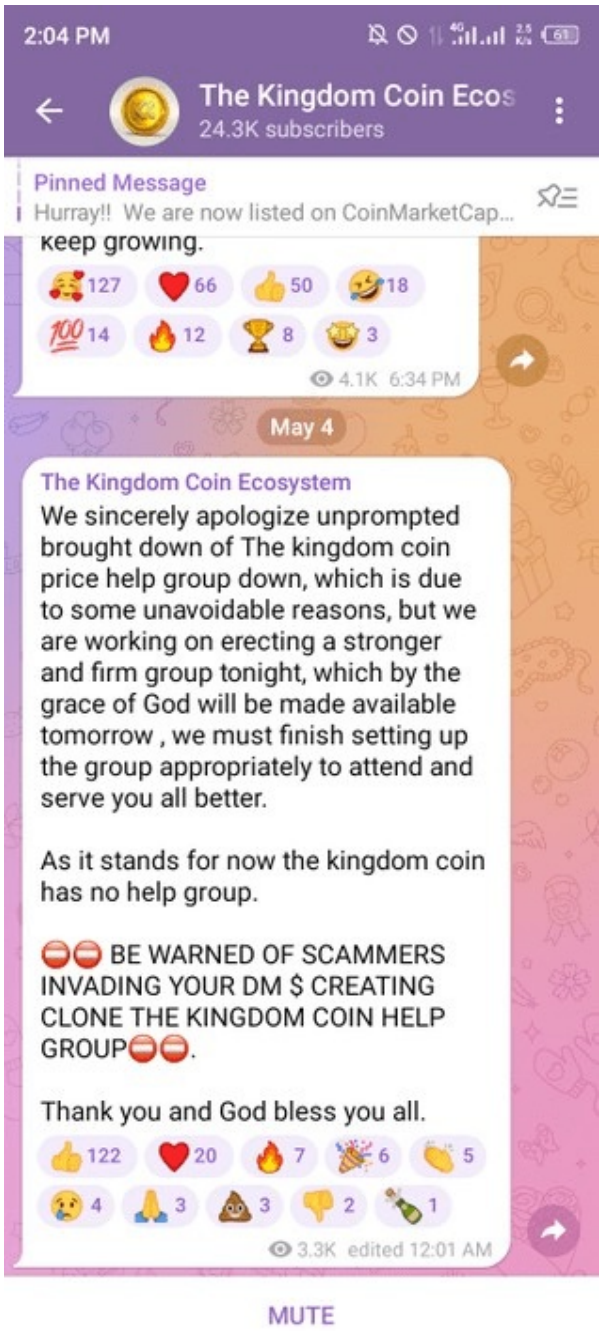
The evidence so far, though, suggests that even with the full weight of collective spiritual passion behind a crypto-project, sometimes momentum can slack, requiring standard crisis communications.

Holy fervour, unfortunately, is not enough, though

Kingdom Coin Ecosystem is a key project of the "Holy Grail of Cryptocurrency".

Kingdom Coin Crypto Launchpad as an arm of the kingdom coin ecosystem is a cutting-edge platform that aims to revolutionize the world of cryptocurrency investments.

Sadly, it has had some "challenges" in recent times forcing its whatsapp admins on the defense as word spread of trouble on the way.



Assurances notwithstanding, the market remains lukewarm about the holy coin.

At the other extreme of the religious passion for profit spectrum is the prospect of blockchain tech helping out hermit Christian communities seeking a return to the historically pure forms of the faith. Some even find that it is only through crypto that they can discover the love and truth of God.

DAOs, a way of structuring organisations using blockchain tech to take away arbitrary power and hierarchies, might offer the perfect tools for running the finances and other administrative formalities of such communities. I encourage readers to explore the wide expanse of these e-religions.

Part II: Bonds away from fiscal bondage

Eurobonds broke Africa's heart

Some of the biggest and most dynamic African economies like Nigeria, Ghana, and Kenya are in the jaws of a tight fiscal crunch that has made it difficult for them to access the international capital markets.

Similar to the plight of African youth, they need a redemptive cure for their disillusion with the international financial system fast!

In the decade and half up to 2021, twenty-one African countries earned the right to borrow internationally from investors without jumping through the hoops that banks, rich countries, and the World Bank/IMF often insisted they do. The name of their breakthrough is: Eurobonds.

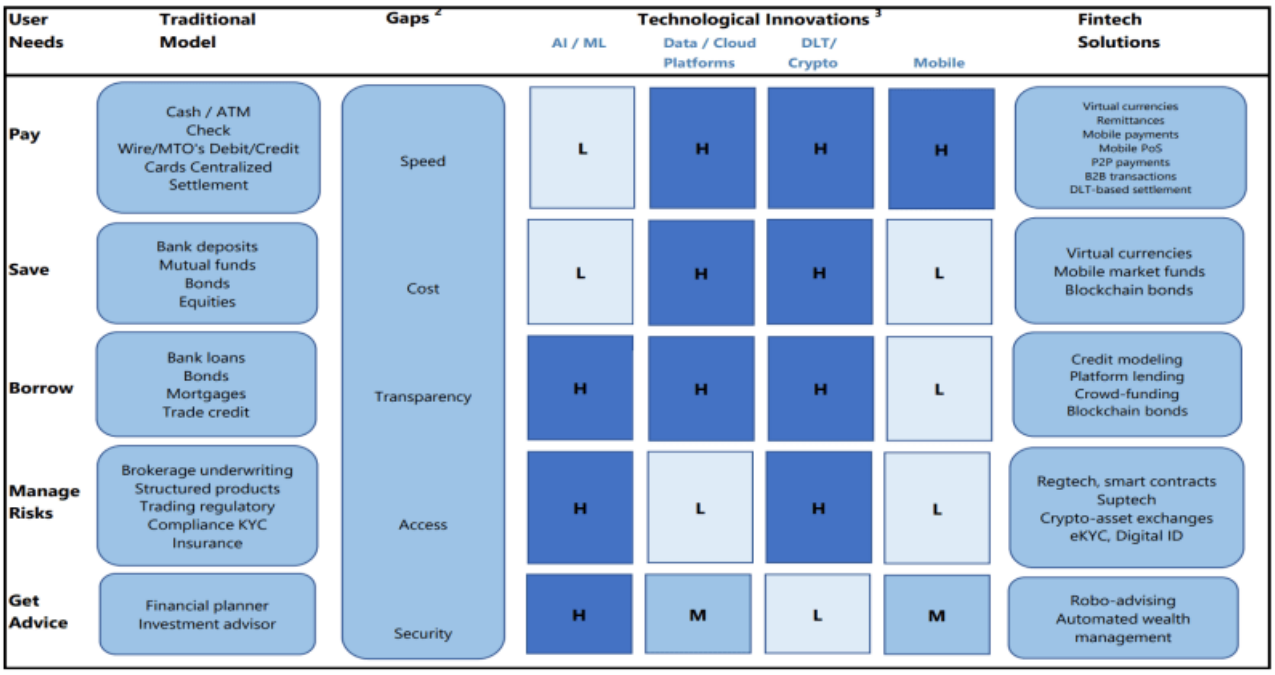
When the pandemic hit, this right was suspended. African countries were shut out of the Eurobond market for most of 2022 and 2024 (globally, Eurobond issuance by emerging markets fell by 70%, anyway).

In early 2024, it seemed as if access would be broadly restored. But to date, only five countries have been able to issue, even though many have been eyeing the market longingly. Some of those five, namely Kenya and Cameroon, had to offer eye-popping rates of above 10% per annum.

Time to ditch Eurobonds for a smarter, less cocky, alternative?

An assorted group of inventors, analysts, visionaries, entrepreneurs, and hustlers, have began to question this "artificial scarcity of hard currency" for government spending in Africa in an age of crypto.

For example, in the Central African Republic, IMF analysts have been documenting thinking and strategies regarding a roadmap to the issuance of "blockchain bonds" since 2017, just around the time that blockchain bonds were gaining attention on the frontiers of high finance globally (UBS AG's 2015 issuance being the first widely reported case).



Source: IMF Policy Paper. Fintech: The Experience So Far. June 2019.

Tokenisation evangelists breathlessly announced the first corporate blockchain bond issuance in Africa in April this year. A private school chain in South Africa raised the money – $5.72 million – to fund expansion.

At a conference in Australia a few months ago, the massive prospects of tokenisation for unchaining Africa from artificial hard currency shortages received enthusiastic attention from attendants.

Traditional development consulting professionals are now beginning to pay attention, suggesting that the idea is entering the dawn of mainstream coverage.

How are smart bonds superior to Eurobonds?

The central argument for smart/tokenised/crypto/blockchain bonds, if I may be allowed to crudely summarise, is that traditional financial instruments continue to fail Africa because they are tied to structures created for a global financial system that inherently marginalises Africa.

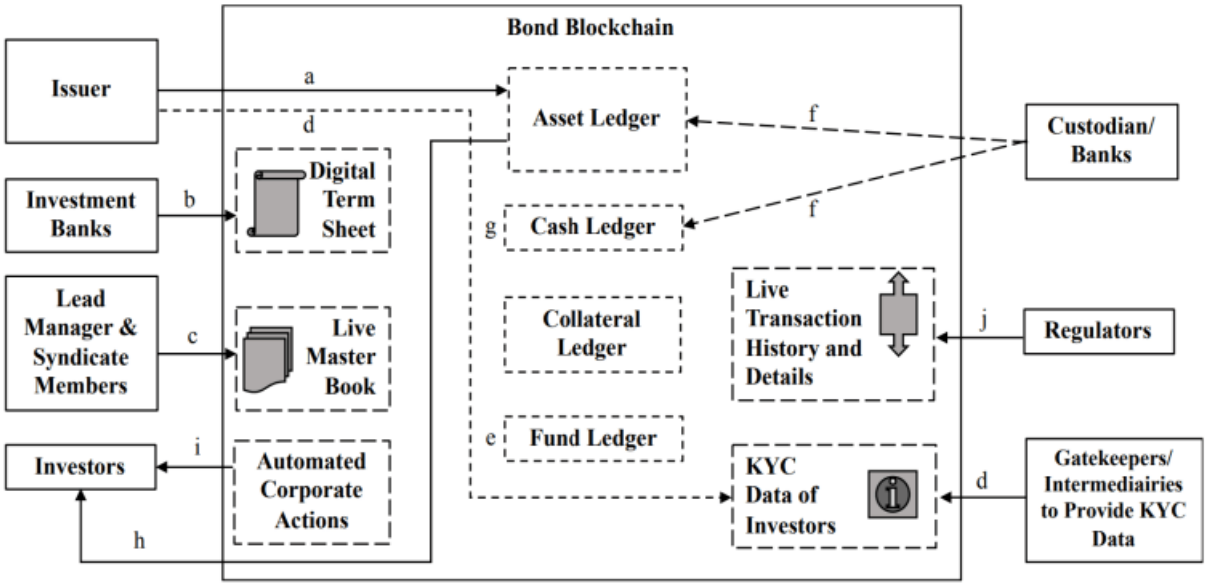
The gatekeepers of international finance, in this telling, are biased, aloof, dismissive about the needs of Africa, and remote from the abundant opportunities on the continent.

Smart bonds and similar instruments might open the door to bypassing these gatekeepers and exposing the African opportunity to large groups of less hidebound, less jaded, and certainly less biased, investors from all over the world.

Removing fatcat intermediaries with their jaundiced eyes and forked tongues while embracing retail investors should not only increase liquidity, enhance price discovery, and increase trading frequencies, it should also deepen efficiencies by eliminating unnecessary fees and commissions, and by tightening ask-bid spreads.

Because blockchain bonds can settle in cash directly into the wallets of market participants, a lot of other *programmable* stuff can happen synchronously, allowing bond-trading to blend into other nifty fintech plays. Simply put, bond trading needs not be boring.

Smalltime traders can even create peer-to-peer smart contracts around their trades that mirror the complex derivatives that, today, only sophisticated players like hedgefunds can manage. Especially so if such retail traders utilise AI such as LLMS to script these smart contracts.



Simplified overview of an intermediary-lite digital bond process map

Diagram Source: Wanli Chen & Qianxia Wang (2019)

How much water do these claims hold?

To test this thinking, I have been reviewing more than a dozen case studies of smart bond issuances dating back to 2015. Readers interested in doing likewise can start with this selection by Sygnum Bank.

Issuer	Date	USD (millions)	Issuance	Technology
Bank of China Investments	Jun 13, 2023	28	1-year bond	Public Ethereum
Hong Kong Monetary Authority	Feb 16, 2023	102	1-year bond	Private GS DAP
Siemens	Feb 14, 2023	65.1	1-year bond	Public Polygon
European Investment Bank	Jan 31, 2023	63.5	3-year bond	Hybrid HSBC Orion
City of Lugano	Jan 13, 2023	111.4	6-year bond	Private Corda
UBS	Nov 03, 2022	370	3-year bond	Private SDX
ABN Amro	Jan 10, 2022	0.45	6-month bond	Public Stellar
European Investment Bank	Apr 27, 2021	121	2-year bond	Public Ethereum
Societe Generale	Apr 15, 2021	6	Autocall, Euro Term Notes	Public Tezos
Vonovia Investment Bank	Jan 13, 2021	24	3-year bond	Public Stellar

I will be honest and admit that I conducted my review with some of my old concerns about the claims made for the revolutionary implications of blockchain at hand.

I was surprised to learn that most of these concerns still apply.

Let me also admit that I have been caught arguing that the age of tech-fueled "disruptive innovation" is over. For now. I am thus a bit cantankerous when it comes to these matters.

The limitations of smart bonds and financial tokenisation, generally speaking, as a savior of African economies are three-fold:

- one set of gatekeepers get replaced by another set,
- the same sprawl of contextual systems being disrupted still need to be plugged in,
- and evangelists always dramatically underplay the costs of assuring against risk and "viscosity".

The painful birth pangs of smart bonds

When the City of Lugano, like a raft of Swiss cities, issued its smart bond, treasurers had to ensure that they were using the DLT services of an established exchange, one that had inherited many of the strictures of the main bourse.

Lugano's treasurers also had to take care to arrange every element to avoid penalties from the credit rating agencies, one of the most entrenched incumbents in the capital markets.

A careful read through how top law firms summarise the "jurisdictional readiness" of various key bond-issuing markets in Europe for the digital transition would show that rather than replacing licensed "central security depositaries", the blockchain *spine* ledgers need to be managed by these same incumbents.

Jurisdiction	Luxembourg	France	Germany	Italy	Spain	Poland
In what form can digital bonds be issued?	As 'dematerialised bonds', a separate and *sui generis* category of securities. The issuance of other forms, such as registered bonds, is not excluded under Luxembourg law but it has not yet been done due to the availability and attractivity of the dematerialised route which is even open to foreign issuers and foreign intermediaries (in the case of the central account keeper).	As 'registered bonds (*au nominatif*)', unless in the context of the EU Pilot Regime where digital bonds can take the form of 'bearer bonds (*au porteur*)'	As 'bearer bonds', without the requirement for a physical global or definitive note.	In "digital form", a new form of security.	As bonds represented by means of DLT systems.	As bonds represented in DLT accounts or in a DLT register.
Have changes to the legal framework been evolution or revolution?	Evolution. Luxembourg law has permitted the issuance of dematerialised securities since 2013 but DLT was only specifically covered, in order to give legal certainty, in 2021.	Evolution. French law has permitted the issuance of dematerialised securities since 1981 and in digital form since 2017.	Evolution. The new electronic securities regime supplements the existing regime for bearer securities by deeming electronic securities to be tangibles – and, therefore, subject to the existing statutory framework for tangibles.	Revolution. Before the changes earlier this year, the consensus in Italy was that it was not possible to issue digital bonds.	Revolution. Before the changes earlier this year, the consensus in Spain was that it was not possible to issue native digital bonds.	Evolution. Since 2019, the general rule is that all securities (including bonds) must be issued in dematerialised form. Exceptions allowing issuances in bearer form apply to some categories of securities.
Key features of the issuance process	The issuance of digital bonds is carried out exclusively by registering them in a single issuance account, which is held with a settlement organisation or a central account keeper. The issuance account may be held, and the digital bonds recorded therein may be effected, within or by virtue of DLT. Once registered into a securities account, the usual regime of transfer of book-entry securities applies. Such regime also includes (under the relevant statute) an express recognition of the use of DLT to operate securities accounts and record transactions.	The issuance of digital bonds is carried out by registering them in a distributed ledger (*dispositif d'enregistrement électronique partagé*) (DEEP). The issuer or the registrar appointed by the issuer as its agent (*mandataire*) has sole responsibility for registering the transfer of ownership of digital bonds in the DEEP.	The issuance of digital bonds is carried out by registering them in a central register or a crypto register. The crypto register may be maintained using DLT but does not have to be – the law refers to a "tamperproof system of record in which data is logged in time sequence and stored in a manner that is protected against unauthorised deletion and subsequent modification".	The issuance of digital bonds is carried out by registering them on a distributed ledger kept by an operator enrolled in a local register maintained by CONSOB (the Italian securities regulator) or, in the context of the EU Pilot Regime, a DLT SS or DLT TSS.	The legal regime for the issuance of digital bonds replicates the existing legal regime for bonds represented by means of book-entries. An entity (or entities) responsible for registering the securities in the relevant DLT (which shall be an entity authorised to provide the service of safekeeping and administration of financial instruments) system needs to be appointed.	The issuance of digital bonds is carried out by registering them in DLT SS or DLT TSS in DLT accounts (*rachunki DLT*) or (if given DLT SS or DLT TSS is exempted from maintaining DLT accounts) in a DLT register (*ewidencja DLT*). Once registered into a DLT account or DLT register, the usual regime of transfer of dematerialised securities applies, with certain exceptions determined mostly by the technical aspects of DLT.

Table Source: Clifford Chance (2023)

No wonder then that it took KFW seven years of preparation and experimentation to launch its $100 million token a few months

ago.

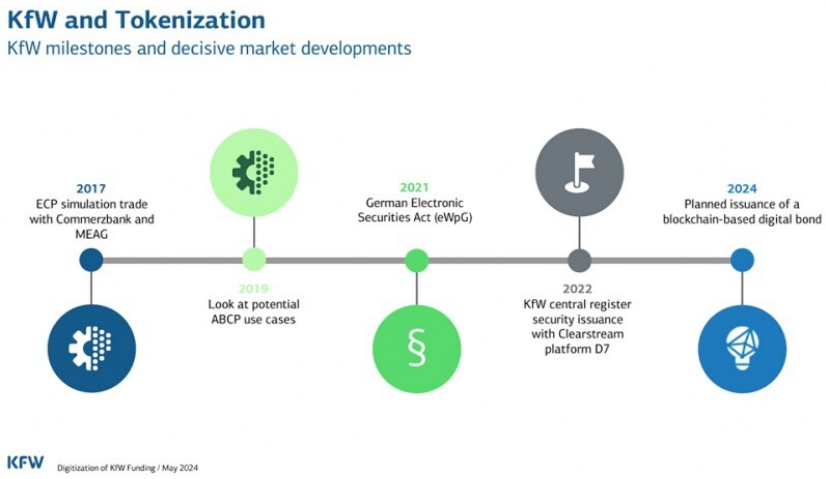


Chart Source: Euromoney

This is an organisation that issues 80 billion Euros in traditional bonds in a good year. And, yet, investor demand for its debut digital/smart bond was so low that in the end just one institutional investor grabbed the whole lot.

A similar thing happened with the World Bank's own digital bond, which also was sold, not to the waiting masses, but a small group of hyper-specialised investors.

Smart bonds in trying to solve for one set of problems often introduce new ones

In every one of the more than dozen issuances I have reviewed, numerous complexities and technical twists and turns needed to be managed by specialised consultants, lawyers, and the like.

None of the issuers will publicly disclose the full set of costs. But from my analysis, those costs may well outstrip traditional issuances when you take into account the sheer amount of time spent on preparation and the limited amounts being raised in these offerings.

Nor is it an established fact in finance that retail investors are cheaper to mobilise. In fact, it is a known problem that retail investors are so hard to mobilise for transactional purposes that specialised consultancies exist for that specific purpose.

Had retail investors constituted more than 30% of the holders of Ghanaian or Zambian Eurobonds, for instance, the costs of handling the recently closed restructuring votes would almost certainly have risen considerably. What, with one high net worth comedian mounting a campaign against Ghana for "diverting" his money to pay the Chinese.

Last, and most interestingly from a theoretical point of view, a blockchain network targeted at retail investors is primarily hype, as I noted in my essay from years ago about blockchain generally.

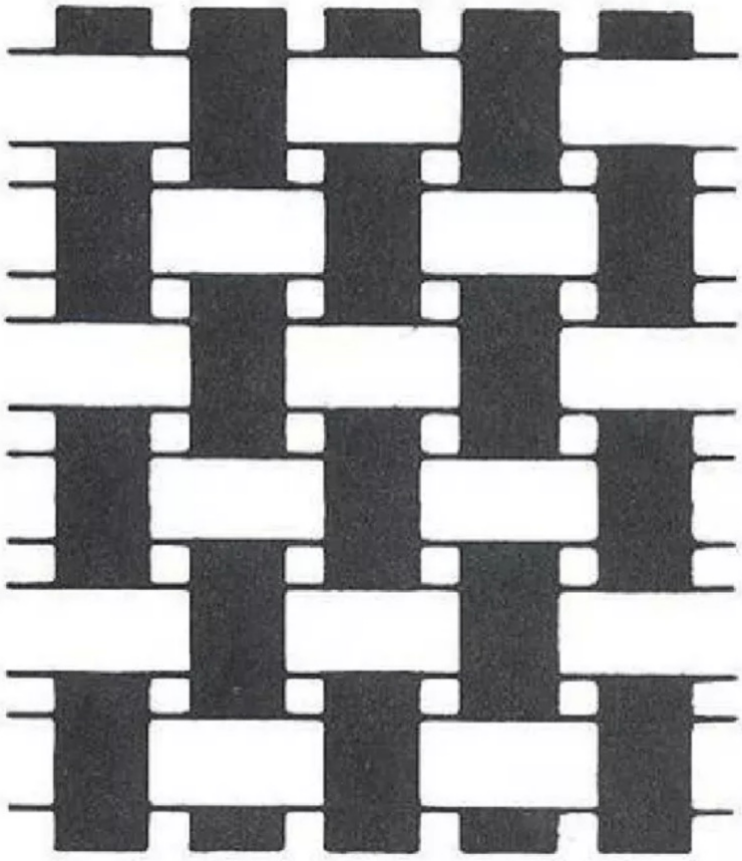
Your average retail, or even small asset management firm, isn't going to set up its own node to participate as an equal signer in some blockchain smart contract – based bond issuance. They will rely on a host of services that will emerge to manage vetting, informational services, data exchanges, backup servers, custody, etc. etc. Of course, in no time, a bunch of firms would offer a "managed package" no different from a Robin Hood account interface.

At any rate, traditional finance players are already breaking bounds by introducing innovations to engage retail-level investors, without involving blockchain.

In one sense, the people most equipped – for reasons of regulation, trust, familiarity, and capacity – to guide market participants in the transition to the new digital bonds reality are also the ones blockchain enthusiasts want "disintermediated" from the chain. Talk of entrenched conflict-of-interest.

That reality leads to the concept of "hyper-integration" that I have talked a lot about

New technologies are rolled out and deployed these days like tangled spaghetti.



A textile metaphor for modern technological deployments

Image Source: University of Alberta (via Heddels)

The wefting and warping of dense, interdependent, services are not evident from the sleek interfaces of these technology products but, behind the sheen, they are bogged down by "viscosity".

Viscosity in turn makes radical, disruptive, changes much more difficult than is described in the breathless portrayals of visionaries.

For example, KfW discovered that to truly achieve the goal of "instant settlement" promised by blockchain bonds, **integration** into a "central bank digital currency" is required. But everyone knows that Central Banks are far from being the most nimble creatures on Earth. In the end, instant settlement had to be abandoned.

My humble view is that the most modern innovations like AI and blockchain are for this reason considerably different from past innovations like electricity, transistors, e-commerce, and the like where groundbreaking "norm shifts" could happen without having to coordinate and synchronise so many "nodes" or service points.

A global digital bond market would be highly complex, defined by layers and layers of interdependency, and won't thus immediately change the game for African sovereign issuers.

The speed with which dreams of crypto-Nirvana floundered in the Central African Republic, the second country in the world to

make bitcoin legal tender, is a cautionary tale for those who want quick fixes.

But that does not mean, however, that there are no hallelujah moments ahead.

Transmediation

Another humble belief of mine is that some of the complexities surrounding innovation in a world of high viscosity can be addressed by seeing the problem as one of bridging "norm gaps".

There is a global retail ecosystem, including in Africa, that could be roped into buying bonds. There are African communities that need capital. Simple enough framing.

Traditionally, the game has been one where governments meet up with institutional investors to borrow on behalf of their countries. They do so by sharing implausible stories of transformative policymaking in sheafs of pages called "prospectuses".

The opportunity is to see that there are separate worlds here. Assume, for instance, that the retail community being discussed is "the African Diaspora" looking for investment options back home. That is one world. Assume again that there are truly great, untapped, opportunities in Africa hidden in plain view. That is another world of facts.

The "transmediation" opportunity then opens up for innovators that can cross boundaries to *synthesise* solutions using the old paradigm of "diaspora bonds" but now imbued with all the prospects of digitalisation.

The transmediary's job here is translating on the go between two worlds where different forces, languages, reference frames, and expectations operate, but two worlds joined nevertheless by certain common threads.

Theirs is not to disrupt some deeply entrenched system but to induce intercourses among systems poles apart to birth something cohesive and viable, yet radically new in important respects.

The right transmediary is unlikely to be the traditional commercial entrepreneur, policymaker, development consultant, multilateral institution bureaucrat, or sharp fund analyst, or their organisations.

Instead, they must be comfortable navigating multiple worlds and willing to use whichever flexible instruments exist without being tied, fanatically, to some ideological concept, whether it is blockchain or revolutionary retail investor networks.

I have written quite extensively about this transmediation-type phenomenon. For the long version, see here. And here for a much shorter overview.

I argue that many of the biggest "disruptive innovation" opportunities in the world can only be unleashed through transmediation. Unfortunately, too few would-be disruptors get this reality and thus fit the bill.

In short, it is less about the raw concepts or technologies, or about specific technical or business models, and more about the willingness to shed or take on a certain *identity* by those in the innovator class.

It is about a mindset for birthing these kinds of potentially radical shifts. It is about recognising the tensions among the cultural norms at play and being open to, and capable of, immersing into a problem space to serve as a bridgehead.

Once in a position to transmediate, the innovator must catalyse solutions by shifting nodes around until a new pattern emerges in the tapestry of possibilities.

That is why, for me, when it comes to “disruptive blockchain” in the real world, outside the virtual casinos, I am more stimulated by the purveyors of the supernatural than by those selling “technology visions”.

If anyone is taking bets, stake my whole stash on the pentecostal gurus.