Global Financial Trends

VARIOUS NIXON SHOCKS

Freya Beamish / Christopher Granville / Hamzeh Al Gaaod / Global Team

- The US and Chinese growth models cannot continue to coexist within the current international monetary system
- Both currencies are too strong, and FX shocks could trigger a fragmentation of the system, or a shift to something new
- More optimistically, CBDC networks could be a useful release valve for an exorbitant privilege that has become a burden

Summary

The US and Chinese growth models are fundamentally at odds. Rapid US inflation has rendered that tension latent, but it will not remain so for long. In the extreme, this re-emergence of the zero-sum game between middle-income US and China could fragment the international monetary system leaving behind a weaker dollar, and higher average inflation. Currency shocks seem likely, given the extent of diverging aims. But a muddle-through path also still seems possible, where the US accepts some undermining of its exorbitant privilege, which from a popular standpoint, has become an exorbitant burden. Ultimately, we favour returns on US assets over Chinese over the secular term, and this is the secular underpinning to the dollar. But China's RMB internationalisation efforts are receiving support from the deterioration of the geopolitical environment as people search for dollar alternatives. We investigate the broad architecture that China has built, both on the level of counterparts to existing international monetary technologies, and on the level of new technologies, which China has been developing for over a decade, with international institutions also treading into new technology.

FX shocks

The Chinese authorities are very cautious about their currency, particularly since the 2015 debacle. And RMB internationalisation and strength have the all-important backing of Xi Jinping. That is all very well, but China's "new" growth model, in which it directs funds in large quantities towards green sectors, may involve new sectors, but it is simply the same old model of excess production and therefore supply far in excess of domestic needs. The RMB is plagued by opposing forces arising from the integration of a fundamentally Communist country into a would-be Capitalist system. The pressure on the currency from trade flows is towards strength, but the RMB remains under depreciation pressure because excess production is depressive of returns, subsequently keeping Chinese *capital* fleeing and keeping Chinese households from deriving the full currency appreciation and wealth they deserve. In turn, this keeps excess savings in place as people endeavour to save their way to wealth.

China cannot have its cake and eat it all in one go. We have always been sceptical of RMB internationalisation because the Chinese economy lacks the backstop of voracious consumers amid a deep financial market. But innovation can open up new options, and shocks, such as those hitting the global economy in recent years, war among them, are just the thing to catalyse change.

China's economic need, in order to get onto a path of private consumption-led growth, is to allow failures to fail, issue a lot of government bonds to recapitalise the banks, issue a lot of RMB to provide the liquidity to buy those bonds and in so doing devalue the RMB.

Currently, it purports to be focusing on forging agreements, tacitly or behind closed doors or otherwise, for the RMB to take a more international role, and stockpiling of commodities, not least gold, but also more broadly. Internationalisation requires stability, which would be rocked by a maxi-deval. But the longer-term aims of generating demand for the RMB through pricing of commodities and desire to circumvent US surveillance, could provide a handy backstop, differentiating the RMB from the yen at its concurrent peaks in private sector debt ratios and the REER.

- CHN - DEU - FRA - GBR - ITA - USA 160 140 120 100 80 Relative Unit Labour Costs 60 2011 = 100 1976 1980 1984 1988 1992 1996 2000 2004 2008 2012 2016 2020

The two poles of the global economy are uncompetitive

Source: GlobalData TS Lombard, OECD

Of course, a maxi deval would be a seismic shock rippling through the global real and financial economy incurring all sorts of unexpected results. Not least, it would invoke the wrath of any US president let alone Trump. We would have to throw in the additional elements of how the EA, which is currently "enjoying" undervaluation against both the RMB and the dollar, would respond. It has to be said, however, that lingering US inflation might make the US a little more amenable now than at the point where they have already tackled the inflation problem. Granted, we think inflation will anyway settle in the 3% range rather than the 4% range and that 3% is ultimately acceptable to the Fed, against the backdrop of any electable administration. But this last mile of above-target inflation would be the least disruptive time for China to unleash its deflationary devaluation.

China would then have every incentive to try to stabilise and support its currency going forward, with the political aims of RMB internationalisation but also from an economic standpoint, in that China's key imbalance is one of paucity of income in the household sector, while currency appreciation tends to re-orient income flows at the margin away from corporates and towards households. A strong RMB, therefore, makes sense, but only if the debts are first cleared through some combination of default and devaluation, rather than the slowburn demand deflation of

wage compression endemic in trying to repair balance sheets through running internal surpluses, requiring an ever-larger surplus with the rest of the world.

How might it all go horribly pear shaped?

In any number of ways. Most obviously, Trump, were he to gain office might initially exacerbate RMB weakness with tariffs but then respond with cries of manipulation, in the most seismic case, responding with a devaluation of his own. Globally, it is both the dollar and the RMB that look overvalued on a Unit Labour Cost basis. A true currency war would be the path in which 1970s inflation problems really might stage a comeback.

The US benefits from being the world's reserve currency with inflows keeping borrowing costs low, greater possibility of seigniorage, simplified global trade and expanded economic and financial influence. This 'exorbitant privilege' also comes at a cost, as the US found in 2008, when it turned out that low interest rates also generate unsustainable borrowing patterns. Sustained dollar strength and the lack of currency depreciation in times of weakness – the dollar rallies in a global recession – has likely been partly responsible for the hollowing out of the middle-income section of the distribution, though bad management of China's entrance into the WTO at very undervalued rates is largely to blame, alongside technological developments. The global reserve currency, simplistically, tends to operate on a current account deficit, where low interest rates facilitate borrowing from the rest of the world, with foreign entities willing to lend into deep capital markets, though the gross flows that are masked by the netted balance are a much bigger part of the overall use of the currency. In short, that current account deficit which comes hand-in-hand with the dollar standard since the Nixon shock in 1971, has become a symbol of popular discontent.

Rebuilding middle income, probably does require that efforts to run a high-pressure economy are not continuously thwarted by pressure leaking abroad due to an overvalued dollar, such that resilient domestic demand is met by foreign supply. The two direct policy responses are tariffs, which would probably be the first impact, were Trump to be re-elected, and devaluation, which might then follow. Tariffs are an immediate threat to the RMB in particular, but as we suggested above, Trump's response to previous rounds of tariff-generated currency weakness would be to point to manipulation. We refrain here from speculating how far he might go in pushing back against that, but we note that Trump's advisers have not been idle during his time out of office.

Four new Bretton woods moments?

The "dollar standard" has had its pros and cons. As my colleague, Dario Perkins, highlighted in 2020, the system has many flaws, including:

- 1 A dangerous feedback loop between low interest rates and rising debt levels, since leverage makes the system more unstable, increasing demand for safe assets and keeping rates low
- 2 An amplifier of macro divergences between the US and the rest of the world
- 3 A coordination problem by which the Fed has only a domestic mandate, but the dollar has global implications "It's our currency but your problem."
- 4 US financial dominance goes hand in hand with current account deficits, but these are associated with hollowing out middle income and generating populism

These problems have been known for years, but the dollar system was another that appeared to be the worst "apart from all the rest". It takes a major catalyst to disrupt a convenient status quo. Generally, currencies rise and fall with empires. The transfer of reserve currency status tends to be triggered by wars or major shocks. As it happens, the events of the past few years could fall into that category, and EM central banks are hard at work devising new technologies to bypass the dollar system.

Underlying drivers of dollar discontent from both sides

In 2020, even the <u>IMF</u> itself suggested that a new Bretton Woods moment may be upon us. Struggles and shocks create change and the past several years has been full of such drivers and catalyst.

- The main underlying driver, as we see it, is that the two poles of the global economy, the US and China, operate divergent economic growth models. The US model is a profit-oriented model, whereas China is a market-share-driven model. The RMB is continuously pulled in different directions, therefore, as excess production swells the trade balance but also depresses returns, dissolving the interest differential finally into complete reversal. Far from being able to transition to an international currency by natural means, even the Chinese do not want to hold RMB, hence the newfound penchant for gold beans. China's growth model has left it with a pile of debt which can be escaped either by demand deflation - the current method, involving wage compression and attempted real effective depreciation - default, or devaluation, which are intimately linked. In short, escaping a debt pile implies real effective devaluation of some kind. At the same time, the US has been left with a hollowed-out manufacturing sector and a severely aggravated middle-income section of the distribution. Hence the rise of populism and the increasing pressure on the Chinese Communist Party. What cannot last, does not last. A world in which the US and China are battling to depreciate would give rise to a new international monetary system, not least because export lobbies in the rest of the world would have something to say about such actions.
- 2 The pandemic was a catalyst for many of the secular drivers we have been writing about. It has exposed the fragility of global supply chains; and re-ordering and duplicating supply chains may well speed the development of parallel payments systems. Brad Setser asserts that "financial friendshoring isn't an option". While supply chains may be re-drawn, the current profile of current account balances leaves the surpluses in one block let's call it the China block and the deficits in the other let's call it the democratic block. Europe used to be in the surplus block but the new energy map has deteriorated the surplus, while the changed relationship with China, in which it has become a competitor rather than an export destination, also implies structural deterioration in the EA current account balance.
- 3 The classic catalyst of new currency regimes is war. Russia's invasion of Ukraine, therefore, is right on cue, with rising Middle Eastern tensions serving as an acute reminder of the ongoing incentives. The "Western" response taking the form of financial sanctions is a clear catalyst of fragmentation of the international monetary system.
- 4 The major real economic effort of the next decade will be the greening of the economy. This includes a shift away from fossil fuels that will redraw the map of the dollar demand, ultimately undermining the petrodollar flows. New ubiquitous commodities are emerging, from copper to semiconductors and batteries. The battle to price these all-important commodities in dollars or RMB has long-since begun but it will only become hotter from here.

Triggers

Beyond the drivers and the catalysts, there are the triggers. Beyond those discussed in the US and Chinese case, the yen's 40% depreciation, if it continues, could be another cat among the pigeons, precipitating change.

Options - new technology and geopolitics

War and technology, like it or not, occupy a symbiotic relationship. Technological development is always ongoing but war and shocks such as the pandemic spur the process along as resources become focused on meeting a universal threat.

The technology of the tally sticks

Money is a technology, which changes over time. A clear example of the roots of modern money is found in the innovation of tally sticks. These were literal sticks, often hazel or willow, divided in half lengthways. The stick formed a record of a debt owed, with the debtor retaining the "foil" half and the creditor retaining the "stock" half. Due to the grain in the wood, the two halves would match. Kings used these sticks to pay for goods and services and then required taxes to be paid in them. The sticks would then circulate as money because anybody could pay their taxes in them. The King's representative would come to the village, "spread the cloth on the ground, and [match] the stock and the stub."

The requirement to pay taxes and the acceptance of the state's own liabilities in payment for tax liabilities (the liabilities cancel) is the basis of money. A tally stick is a simple but smart technology for achieving that. Because it is simple, it facilitated trade that otherwise might not have happened due to a lack in a double coincidence of wants.

Tally sticks were the height of monetary technology in medieval times





Source: GlobalData TS Lombard, Wikimedia Commons

Tally sticks had their flaws, though. They don't look particularly easy to carry so one might be out in a field and come across a traveller but not have any "money" on one. They also had the unfortunate drawback of being a fire hazard. Similarly, coins, are heavy, and easily stolen.

The flaws of a currency are tolerated due to the opportunity cost of spending time developing and establishing something new. But when a shock comes along, the incentives can suddenly change.

Fiat currencies and dollar hegemony

Skipping a few years of monetary history, the dollar standard started with 1944, with the decision to put the currency at the centre of international trade. The dollar because the world's reserve currency under the Bretton Woods system, with fixed exchange rates and full convertibility into gold. At the time, the US was running a trade surplus, creating a "shortage" of USD. The solution was generous grants to fund reconstruction in the 1947 Marshal Plan. By the 60s, however, some economists, notably Robert Triffin, after whom the 'Triffin Dilemma' is named, saw the writing on the wall. Triffin suggested that the US would eventually need to run persistent current-account deficits to provide dollars to meet global demand. Stubborn dollar strength made the Bretton Woods system unsustainable, with European countries draining US gold reserves. President Nixon ended the system with a unilateral decision to suspend convertibility of the dollar into gold. The US trade deficit continued to grow, however, and the world moved to a pure dollar standard, though commodities remained intimately linked into the picture.

Blockchain and de-fi

Blockchain technology offers new monetary technology. What does blockchain do that "traditional" money does not? Supporters emphasize that it allows for non-reversable transactions getting rid of the need to pay someone for trust, with which economic rents are associated. It provides a "solution to the double-spending problem using a peer-to-peer distributed timestamp server to generate computational proof of the chronological order of transactions." 'Old' money technology requires a trusted central authority or mint that "checks every transaction for double spending. After each transaction, the coin must be returned to the mint to issue a new coin, and only coins issued directly from the mint are trusted not to be double-spent", though policymakers argue that a trusted central authority is still useful. More broadly, these technologies could significantly reduce transaction costs.

The technology allows for the unification of messaging and settlement, alongside opening up potential for smart contracts, such as those built on the Ethereum platform or Neo, the Chinese counterpart. For example, in trade finance, payments could be made dependent on GPS data, tracking the delivery of goods, where the interest rate declines, the closer the goods are to the destination. Lower interest rates facilitated by technological advance could conceivably support trend growth rates in the real economy.

It is still not clear that de-centralised crypto currencies really have the potential to circulate as money. As we saw with the tally sticks. Money is not just based on trust that a greater fool will take it from you, or even to put it more positively, that someone else will have a greater demand for money than you in future. The value of money is found in its ultimate backstop, which is the creditworthiness of the borrower being so incontrovertible that anyone is willing to hold it because they will be able to find someone else willing to hold it but also that the borrower is someone to whom the vast majority of people owe a separate liability – in this case tax – and that this liability is payable in the currency. The point is that there is a very large pool of people that will always need the currency for this specific reason of clearing their own liability. The central authority's liability – the circulating money - can then be cancelled with the tax liability using that currency. This is the importance of the centralisation. Commercial banks are given the authority to print money in this currency, but their money also derives its value from the backing of the requirement to pay taxes in that currency.

Nevertheless, these new technologies offer the potential to improve the existing centralised monetary systems through for instance programmable Know Your Customer; see Project Agora below. Insight could be gleaned here from technologies surrounding XRP on Ripple – a real time

network for global payments, across multiple currencies or even assets, recording transactions orders in a distributed ledger technology used by banks - and Stellar – an offshoot of Ripple, for transactions between people instead of banks. The benefit of XRP technologies being that it works between banks, as policymakers are adamant that these developments should not undermine the global banking system.

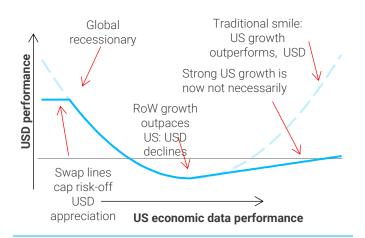
Problems with the new de-centralised technology

Beyond questions about their use as a circulating currency, de-centralised technologies still have their flaws. It is not abundantly clear that the system is secure, though we know we are liable to be cancelled in certain quarters for such a statement. From an individual standpoint, it seems strange that one might be responsible for the security of one's private key, which at the very least seems inconvenient if not catastrophic. Equally, if a public key somehow becomes known then one's entire transaction history is also known. Even the concept of blockchain itself depends upon more than 50% of node being honest. Developers are working on making this feature quantum-proof, but advancements in quantum computing, for example, must at least be acknowledged as a known unknown. Finally, the entire project is built upon dubious foundations from an environmental standpoint. Raising a tally may have required cutting some willow trees back, but data storage issues are on a whole different scale in terms of environmental impact.

From dollar smile to smirk, with CBDC undermining

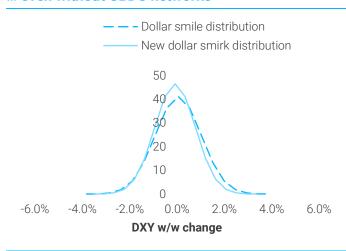
While the dollar and government-back fiat currency has its own special place in circulation, the development of a network of non-dollar CBDCs would undermine a part of transactions demand for the dollar. Bear in mind, however, that demand for settlement of cross border trade is just one part of the overall demand for the dollar. Whether countries want to hold reserves in a currency depends upon its use as a store of value. The dollar holds a special place in that it rallies both when the US outperforms, but also when global recession risks rise. Again, taking the GFC as an extreme, despite the fact that souring assets in US subprime were at the centre of the crisis, because global financial institutions had funded their purchases of these assets in dollars, the primary concern, in the moment of crisis was to close down dollar debts.

Dollar smile already undermined



Source: GlobalData TS Lombard Strategy team

... even without CBDC networks



Source: GlobalData TS Lombard Strategy team

Depth of capital-raising abilities in a currency, therefore, are critical to its attractiveness in times of crisis and as a reserve currency. And that depth and willingness to borrow in a currency is related in part to the question of what is going to be bought with the proceeds. If there is plenty priced in dollars that borrowing entities might want to buy, both in the real and financial investment economies, then borrowing in that currency is a naturally hedged position. The result is that we are left with the underlying driver being strong final demand and good prospects for assets in that currency. Beyond that, borrowing in a currency may come down to availability, which again depends on what currency the lenders themselves want transact in.

The smile, however, is fraying at the edges, even before we approach the question of CBDC, with the Fed gradually diluting from exorbitant-privilege policy. On the left side, the immediate provision of dollars in risk-off events through the Fed swap lines caps the dollar squeeze, where previously, entities would have been scrabbling for the dollar to pay down short-term debts. The promise of Average Inflation Targeting somewhat weakens the right side of the smile, as US policymakers would be accepting, at least initially, the prospect of higher inflation versus interest rates, though we believe the resultant high-pressure economy would then also lift growth. In the first instance, however, this dollar smirk could come back into play if and when US inflation comes back into range of the 2% target in a sustainable fashion, even without contemplating lower transactions demand for the dollar, for cross border trade. To be clear, we think 3% inflation would be acceptable in the US, and eventually modestly higher inflation may be tolerated out of necessity in Europe, but the shift in that direction will be more gradual, with central banks lacking a dual mandate. Any productivity growth gains from high pressure policymaking, in real time, would be contested as cyclical rather than structural, keeping markets guessing about the longer-term strength of the dollar.

China's optionality

Replicating the old system but outside of the dollar

China and the rest of the BRICS have been busy at work sounding out non-dollar systems and measures that might support the gravitas of such a system for years. The BRIC nations began to take the costs of the dollar system in the wake of the Global Financial Crisis, and also looked with envy upon the appreciation of the dollar despite the fact that the crisis appeared to be centred in the US.

These various developments remain small in their dollar amounts but the networks are diverse, and building them has allowed these nations enhance expertise.

China has made various developments within the old/current international and monetary system as well as what are coming to be seen as the "canar[ies" in the coal mine" in de-dollarisation, drawing upon the phrase used by Zongyuan Zeo Liu and Mihaela Papa <u>Can BRICS de-dollarize the global financial system.</u>

Bank of Kunlun

The firewalled Chinese bank is owned by the Chinese state energy group CNPC and used for transactions with Iran, though these are not necessarily RMB payments, and the bank suspended payments in 2017. Payments starting in 2019 were reportedly in RMB.

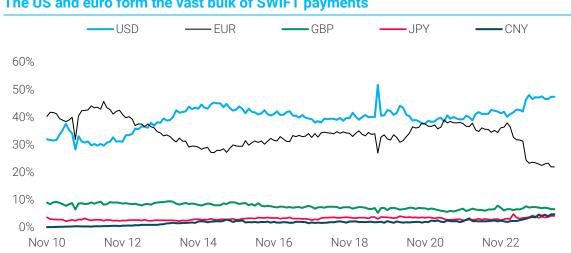


China International Payments System vs SWIFT/Fedwire/CHIPS

A payments system, with an associated messaging system, supervised by the PBoC, allowing gross cross-border transactions in RMB. The concern for various EMs is that SWIFT data can be accessed by the US authorities, while CHIPS/Fedwire is under the supervision of the Fed. SWIFT vielded its proprietary data to the US authorities after 9/11, when Congress threatened to sanction the society, while two of its data centres are based in US territory. It is a cooperative and banks can be excluded by a shareholder vote compelling the board to take action. For now, China continues to use SWIFT for cross border messaging, even within its own banks to foreign branches, and SWIFT now supports Chinese characters. Barry Eichengreen describes China's endeavours to build an alternative as a "field of dreams" problem. If you build it... they won't necessarily come. Equally, willingness to hold in RMB is necessary for a Chinese rival to the CHIPS system (clearing of large-value payments either directly among the 50 or so participants or directly). Would Saudi Arabia, for instance, see value in diversifying a large portion of its reserves to Chinese bonds? At current hedging rates, why not. But over time, the likelihood is for RMB depreciation, and a devaluation would rock confidence.

Nevertheless, China's direct participants, who must be incorporated in China, number in the same range as that of CHIPS, though indirect participants and transaction volumes in the latter are much more numerous. They are mainly overseas branches of Chinese banks, and the geographic reach is global excepting Latin America. Reportedly, participants include several major global banks. In short, it is more than well on its way to being "built". As of 2022, however, 80% of payments through CIPS still use SWIFT messaging, seemingly because many non-Chinese institutions simply do not have the translating capacity for CIPS messaging. The growth rate of CIPS reportedly is rapid though we found it hard to corroborate sources.

CBDC, however, eliminates the need for all of these processes, reducing the frictions to entry for China, though it is not clear what CBDC offers in respect of circumventing sanctions over the CIPS. The PBoC is the sole viewer of transactions in either eCNY, for example, or CIPS. Eichengreen suggests that a transaction through eCNY might make possible a more limited retaliation, against a Chinese bank as opposed to the Chinese government.



The US and euro form the vast bulk of SWIFT payments

Source: GlobalData TS Lombard, BBG

New Development Bank -

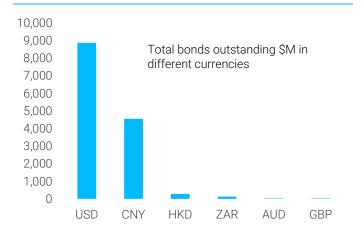
The NDB was formed in the early 2010s by the BRICS. Presidents are elected on a rotational basis from one of the founding members, with four vice presidents, one from each of the other four. Membership has since expanded to include, the UAE, Bangladesh and Egypt, with Uruguay listed as a prospective member. All new transactions with Russia were put on hold owing to the requirement of "sound banking principles", though ratings agencies still chose to downgrade the bank on long-term issuer default scales.

Links with commodity-producing economies are especially important. Articles were circulating around summer of 2023, with a big focus on Saudi Arabia joining BRICS, and the NDB. Officially, the Saudis are expected to join the BRICS as an observer, but no further comments were made about officially joining the NDB. However, although we know countries like Egypt and the UAE are involved, Saudi involvement is as straightforward as simply becoming a member – a recent news press release from NDB shows the creation of a joint working group to develop cooperation between the Islamic Development Bank (IsDB) and NDB. The Islamic development bank is based in Jeddah, Saudi Arabia, and is a AAA rated Saudi bank, established 50 years ago as a multilateral development bank of the global south. The partnership between NDB and IsDB gives the BRICS access to various more Arabic/Islamic economies involved with the IsDB, and provides those countries with an Islamic Banking framework to carry out projects.

Initial subscribed capital in NDB was \$50B, equally distributed among the founding members and initial authorised capital of \$100B. Each member cannot increase share of capital without unanimous agreement from the other four, and while new members can join, the BRICS' share must be at least 55%. By way of comparison, the WB and EIB at the time of NDB set up had capital bases five to six times larger, with the African Development Bank also twice the size. World bank financial reserves come from several funds raised in the financial markets, from earnings on investments, and fees paid in by member countries, and contributions made by particularly by members.

Once again, the overall scale of projects is relatively small. NDB annual reports reveal 14 projects approved in 2022, for a total value of \$2.71B, with 85 projects in the portfolio at the end of the year, with the amount of financing approved for projects in the portfolio at end-22 equalling \$30.23B. 4/5th were sovereign loans in 2022, with nearly 90% are sovereign loans in the overall portfolio.

NDB bond issuance is relatively small



Source: GlobalData TS Lombard, Bloomberg

Project approvals also find it hard to avoid USD



Source: GlobalData TS Lombard, Bloomberg

While small, this once again sets up architecture for controlled channels out of China as the NDB issues bonds – green bonds and in the Chinese interbank bond market – in Chinese onshore markets with proceeds used for infrastructure and sustainable development projects in member countries. The projects are undertaken on the insistence on using local FX finance rather than relying on solely on the dollar.

Similarly Belt and Road projects are strongly encouraged to invoice in RMB, though similarly the Asian Infrastructure Investment Bank's capital is relatively small compared to the Asia Development Bank and World Bank.

Contingent Reserve Arrangement and PBOC swaps-

This architecture was formed shortly after taper tantrum, by the BRICS, when the Fed raised interest rates and EM currencies were destabilised, partly due to large dollar debts. It was set up with \$100B of currency swaps, with China contributing \$41B.

While the Fed has its network of CB swaps, so too does the PBoC. Zoltan Poszar that this network is geographically far more diverse than that of the Fed, including mostly EMs though also including the ECB, BoJ and BoE. At the same time, these channels go beyond merely aiming to deal with plumbing issues as the dollar system creaks and also aim to foster trade and real economic activity.

Once again, in terms of the (ironically) dollar amount, use of these swap lines are constrained by willingness to hold the RMB, but they have become sizeable, at above RMB3.5T in total.

New systems - BRICS CBDCs and DM responses

Writers such as Zoltan Pozsar of *Ex uno plures* fear that CBDCs are bringing together BRICS central banks in a replication of the correspondent banking system on which the dollar standard runs. Others have claimed it will end monetary privacy and destroy the traditional banking system by eliminating their middle-man rents. Policymakers hope it will unlock new methods of policymaking, allowing them to differentiate between borrowers and savers and fine tune interest rates for different sectors. Detractors worry that it would enable central banks to push policy rates deeply negative. Again, policymakers may be enticed by the ability fully to integrate parts of monetary and fiscal policy, allowing, for instance, 'helicopter' transfers, bypassing the financial sector and providing money directly to the real economy in times of economic weakness.

What appears really to have spurred on development in the past few years, however, is deterioration in the geopolitical environment and the idea of a replacement for the SWIFT/Fedwire/CHAPS nexus, allowing countries worried about US sanctions to bypass the dollar system altogether. A firm in one EM, for instance could obtain money in the currency of another, without having to touch the dollar system, merely running transactions from one corporate wallet directly through the central banks to another corporate, though policymakers may choose to set up systems that preserve the two tiers of central and commercial banks.

CBDC do not solve the problems with fiat currency identified by the decentralised crypto crowd. Governments would still control the printing presses and if anything, are more able to generate inflation, as they can bypass the banking system to provide funds, directly generating "money". Often in episodes of QE the impact on prices is muted because the bonds are purchased simply from financial institutions, with narrow onward channels into the real economy, or within that, banks, meaning that "money", known as deposit liabilities, does not change at all.

eCNY and mBridge

The PBoC began researching CBDC as far back as 2014. eCNY was launched as a pilot in 2020. It is fully backed by the PBoC and treated as cash in circulation. The PBoC operates a two tier system, probably wary of undermining its banking system, where it issues eCNY and the large state-owned banks and internet banks operate wallets, while other banks and payment service providers then manage services to businesses and consumers, who are able to undertake peer-to-peer transfers.

For now, eCNY does not offer interest payments, the idea being that it should replace cash but not bank deposits. Indeed, the banks responsible for customer privacy, and Know Your Customer duties – providing a line of defence between sanctions and the PBoC itself – and are also responsible for creating the retail infrastructure. The benefit of taking on those costs is that these banks are given a slice of the payments business, which typically is dominated by internet companies.

Beyond the potential lures for DM central banks, a CBDC provides special benefits to policymakers in a system such as China's. It could potentially allow for controlled capital account opening, where the PBoC could create a closed loop under its surveillance. For China, a CBDC critically also offers a sanctions hedge, and begins to create demand for its currency from other EMs looking to do the same. eCNY, at this stage, is officially targeted at domestic retail payments rather than cross border payments.

In any case, mBridge already provides an experiment with a multi-CBDC common platform for wholesale cross-border payments, built upon a "custom-built distributed ledger technology". The Digital currency institute of the PBoC is among the five founding members, which also include the HKMA, Central bank of the UAE, and the Bank of Thailand. Note that the UAE also has a separate project with Saudi Arabia, known as Project Aber; see below.

Russia-spurred CBDCs for cross-border trade

"Necessity is the mother of invention." Russia, having invaded Ukraine, being cut out of the US dollar system has proved a de-dollarization catalyst in the specific area of international trade settlement. During the first year of the war, this effect became apparent in the switch from the USD and EUR to RUB and CNY denomination of most settlement of Russia's external trade transactions. This is shown in the chart below, which is also shows the dip in the CNY share at the start of this year. This latest development reflects the power of the US Treasury even over non-US transactions, as these still involve banks in China and Russia's other trading partners (led by India and Turkey), virtually all of which need to make use of the dollar in their international operations make no use of the dollar. Being sanctioned by the US would therefore undermine their business.

USD EUR **RUB** Other CNY share (RHS) CNY 60 45% 40% 50 35% 40 30% **USD** bn 25% 30 20% 20 15% 10% 10 5% 0 0% Feb-23 Mar-23 Oct-22 Nov-22 Dec-22 Jan-23

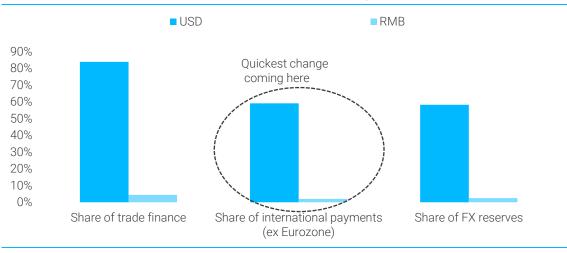
Currencies' shares in Russian imports since the invasion of Ukraine

Source: CBR

A Biden Executive Order last December widened this sanctions net by authorizing the Treasury to sanction financial institutions in any country not only for dealing with Russian sanctioned persons/entities but also for "conducting or facilitating any significant transaction or providing any service involving Russia's military industrial base". This second sanctions criterion may have been kept intentionally vague and would appear to have had the desired effect. The fall-off in CNY payments has been mirrored by Russian companies' reports of payments interruptions with Turkish and Indian banks.

Russia and its trading partners plan to counter this sanctions threat by resort to CBDCs for direct settlement of commercial invoices and FX trades on a peer-to-peer basis – i.e. avoiding banks and their correspondent accounts. The blockchain ledger will mask the transactions and counterparties involved from US scrutiny. To the extent that formidable American intelligence capabilities enable the US authorities to identify some counterparties, the fact that these will no longer be banks weakens the impact of any new sanctions. It is simpler and quicker to replace a sanctioned commercial (non-financial) counterparty than a newly sanctioned bank.

The Russian foreign minister Sergey Lavrov indicated in an interview last month that this will be Russia's top priority when it hosts the annual summit of the (now expanded) BRICS grouping next October – that is, agreement on activating what the Russian director in the New Development Bank describes as "a multilateral clearing and settlement system in national currencies that participating countries' CBDC platforms could plug into." While uniquely urgent for Russia, this US-insulated CBDC-based cross-border trade payment system should also suit China and major 'Global South' players. This interest starts with the value of trade with Russia, import of needed commodities (with a discount bonus) and export of manufactures, but the clinching factor may be the attraction of a pre-emptive hedge against being on the receiving end in the future of the kind of US sanctions now imposed on Russia.



Dollar dominance: Less impregnable in international payments

Source: IMF, SWIFT, GlobalData TS Lombard

Here, then, we have what may be the world's first clear-cut use case for CBDCs – as a defensive mechanism against US sanctions impairing trade. As and when this initiative gathers steam (and there will surely be 'teething problems' even assuming political agreement is reached later this year), this will remain a far cry from radical de-dollarization. Cross-border trade settlements are arguably less important for global dollar dominance than the dollar accounting for the bulk of countries' international reserves and its use as the currency of international lending and capital raising. On the other hand, the emergence of a non-dollar 'global current account' – analogous to the original post-war Bretton Woods set-up with currencies convertible on the current account of the balance of payments but not the capital account – will boost the status and, at the margin, the relative value of the RMB. For it seems reasonable to suppose that the RMB will be the most popular choice for participating counterparties to hold in their digital wallets held in their national central banks

Gold and commodity-based currencies

While the world left the gold standard in 1971, the commodity has experienced a resurgence recently, with the PBoC seemingly in the vanguard. Alongside apparent stockpiling of industrial commodities, this has led to speculation that something is afoot in China, with the prospect of a devaluation. While this makes sense from a longer-term perspective, we note, however, that gold remains tiny as a percentage of China's total central bank reserve holdings, not to mention the unofficial reserves held in State-owned banks. Bringing in commodities is undoubtedly part of the overall plan but this part of the plan seems likely to take years and gold prices would need to rise massively to form a substantial part of overall reserves.

Nevertheless, PBoC gold purchases have formed a useful bailout, helping support the price of the commodity for which Chinese people are dumping RMB. At the same time, we note fringe developments that show further cracks appearing in the dollar system, with Russia directly swapping oil for gold with Ghana.

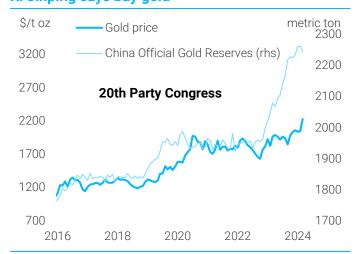
Ö GlobalData.TS Lombard

Gold bugs in China



Sources: BBG, TS Lombard.

Xi Jinping says buy gold



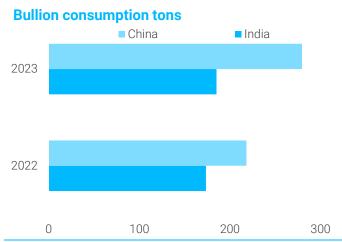
Sources: BBG, PBoC, TS Lombard.

But Gold is still a small percentage for PBOC



Source: World Gold Council, IMF, JP Morgan

Though consumption has shot up



Source: GlobalData TS Lombard, BBG

The ubiquitous commodity

The interaction between fiat currencies and commodities, whether they be precious/industrial metals, energy, or commoditizable goods is an intricate one. Part of the shift in the dollar standard away from gold involved agreements to invoice oil in dollars, providing a constant demand, tied to real economy demand, for dollar reserves to purchase oil. We may not know about the intricacies of these deals for years. Details on the 1974, deal allowing Saudi Arabia to but UST outside of public auctions by creating "add-ons", thus masking Saudi purchases of USTs, took decades to surface. The deal involved a promise from Saudi Arabia to price oil in dollars, in return for security support.

Chinese aims to entice various economies into pricing their commodities in RMB are not a new thing, but, given the new voracious appetite for copper in the greening of the economy and China's ongoing need for an outlet for excess savings in exports, the economy seems likely to

stay near the heart of the global commodity trade. Once again, writers such as Zoltan Pozsar suggest that a new commodity-oriented system could develop, with a shift from "It's our currency but your problem" to "It's our commodity but your problem". Once again, however, this relies on the overall end demand for RMB and willingness to accept the currency.

Similarly, the race for semiconductor self-sufficiency and battery supremacy is not just about securing supply chains but about raising the ability to price such a ubiquitous good/commodity in RMB. China has developed dominant positions all along the supply chain for the components necessary for the green revolution.

In the meantime, Russian oil sales to China also have increased invoicing in RMB.

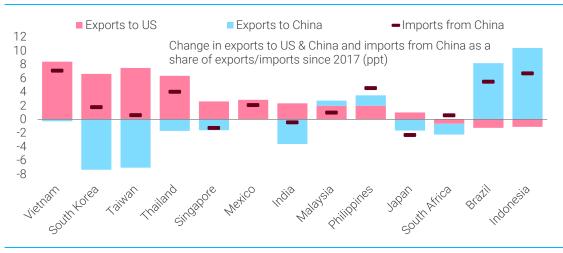
PetroCBDC

Project Aber is a joint initiative between the Saudi and Emirati central banks, commencing in 2019, to develop and test the usage of CBDCs for cross border instant, block chain payment systems. Initial reports touted high levels of technical advancements and success in initial testing, with positive conclusions being drawn from the digital currency experiment between the Saudis and Emiratis, who have seen a wide adoption of block chain currency and technology in the region. The media coverage for this has dwindled down with official communications stating the project is now undergoing further testing phases with commercial banks in Saudi Arabia and the UAE to test efficiency of cross border payments for consumer spending as well as B2B transactions, and the project seems to continue running and testing, in preparation for the launch of a CBDC project.

How far can the RMB get?

Inter-BRICSpanded trade is becoming a significant chunk of the global share. The figures in the chart below from my colleague Jon Harrison, however, are plumped up by the legacy of overinvestment and fresh overinvestment in green goods, for much of which, the final demand is in DMs, where politicians are starting to fight back against dumping. Similarly, the massive expansion of China's current account surplus and bilateral trade in the pandemic reflects abnormal circumstances, where China was the only economy able to respond at scale to a major re-orientation in the composition of demand towards goods, as well as US cyclical overheating and Chinese secular demand deflation. More broadly, as China is now debt saturated, it will be looking for final demand abroad rather than supporting EMs through rapid infrastructure growth.

The additional demand for a non-dollar currency, circumventing US surveillance, however, is an unknown quantity and will rise with geopolitical deterioration and global fragmentation.



Inter-BRICS trade has is sizeable but interlinked with DM demand and overinvestment

Source: GlobalData TS Lombard, CEIC

DM central bank response: Agora

How are DMs and global institutions responding? Initially, the plan seemed to be to ignore CBDC, which was not the worst idea in the world for the US, given that CBDC networks pose a threat to US dollar dominance and one shouldn't look a gift horse in the mouth. But, whether because of fear of being left behind on genuine technological improvements, or through endeavours to provide these technologies on a platform to rival that between the BRICS, or perhaps even because the US is done with the burdens associated with the exorbitant privilege, the US appears now at least to be making a more serious attempt to investigate the options. Not least with the recently announced Agora project.

This project is presented by the BIS as an endeavour to reduce transactions costs, while keeping banks in the loop. It is another two-tiered system but brings together central banks and commercial banks on one platform, with programmable KYC and the possibility of advances in smart contracts. Rather than stable coins, the process is one of tokenisation, representing claims digitally on a programmable platform. The stated aim here is to gain the benefits of technological advancements, in particular, to lower the burden on banks, assuming that KYC checks against money laundering and sanctions violations have created a low return high risk environment for banks, limiting transactions in the real economy.

This type of technology aims to take the best of the old system, and bring in the benefits of new technologies, without rocking the entire banking system and potentially also raising concerns about policy over-reach. The BIS emphasises the singleness of money, coming back to the idea of why money circulates. The singleness of money holds because of the settlement function of the central bank. Private entities acquire claims their own bank, not the sender's bank and the central bank sits between, the point being that transactions are settled at par even if different forms of privately and publicly issued money are used. In contrast, stable coins, are always tagged with the name of the issuer.

Having tokenised deposits and tokenised central bank money on a unified ledger cuts out all sorts of transaction costs and hopefully allows all sorts of new types of transactions to take place. Payment chains can be very long, running through multiple time zones and legal systems. Tokenisation combines messaging and settlement into one unified transaction, with the payment

path mapped on a unified ledger. The goal is to address the decline of correspondent banking in all but the largest corridors.

It is impossible to know what innovations might occur, otherwise they wouldn't be innovations. We do, however, continue to think that this type of platform, facilitating transactions directly between currencies and bypassing the dollar, must reduce transactions demand for the dollar. But as we suggested, outside of the current inflation battle, most US administrations would probably accept that.

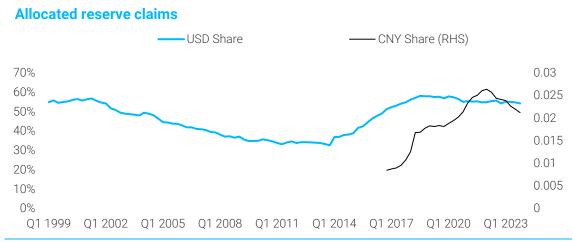
Velocity?

A future topic of investigation for us, given the high priority we place on analysing money trends, is what effect this will have on velocity. If it generates a new wave of financialisation, it could result in downward pressure on velocity.

Bottom line

Ultimately, the outlook for the current international monetary system seems increasingly perilous. De-globalisation and deteriorating geopolitics suggest a more fragmented currency system, where the RMB could start to gain traction at the margin due to demand for a non-dollar currency, though would be hobbled by the low likelihood of active transition to private consumption-led growth. Optimistically, the US and China could learn to live with each other in this environment, with the US rebuilding middle income by escaping the extremes of the exorbitant burden. What is harder to square is that China's own currency policy and aspirations to internationalisation run counter to their plans to continue relying on excess production of green goods. The path of FX shocks from the dollar and the RMB, both of which are overvalued compared with the rest of the world is not so far into the tais of the distribution.

Reserves allocated to CNY have grown but remain very small



Source: GlobalData TS Lombard, Datastream



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