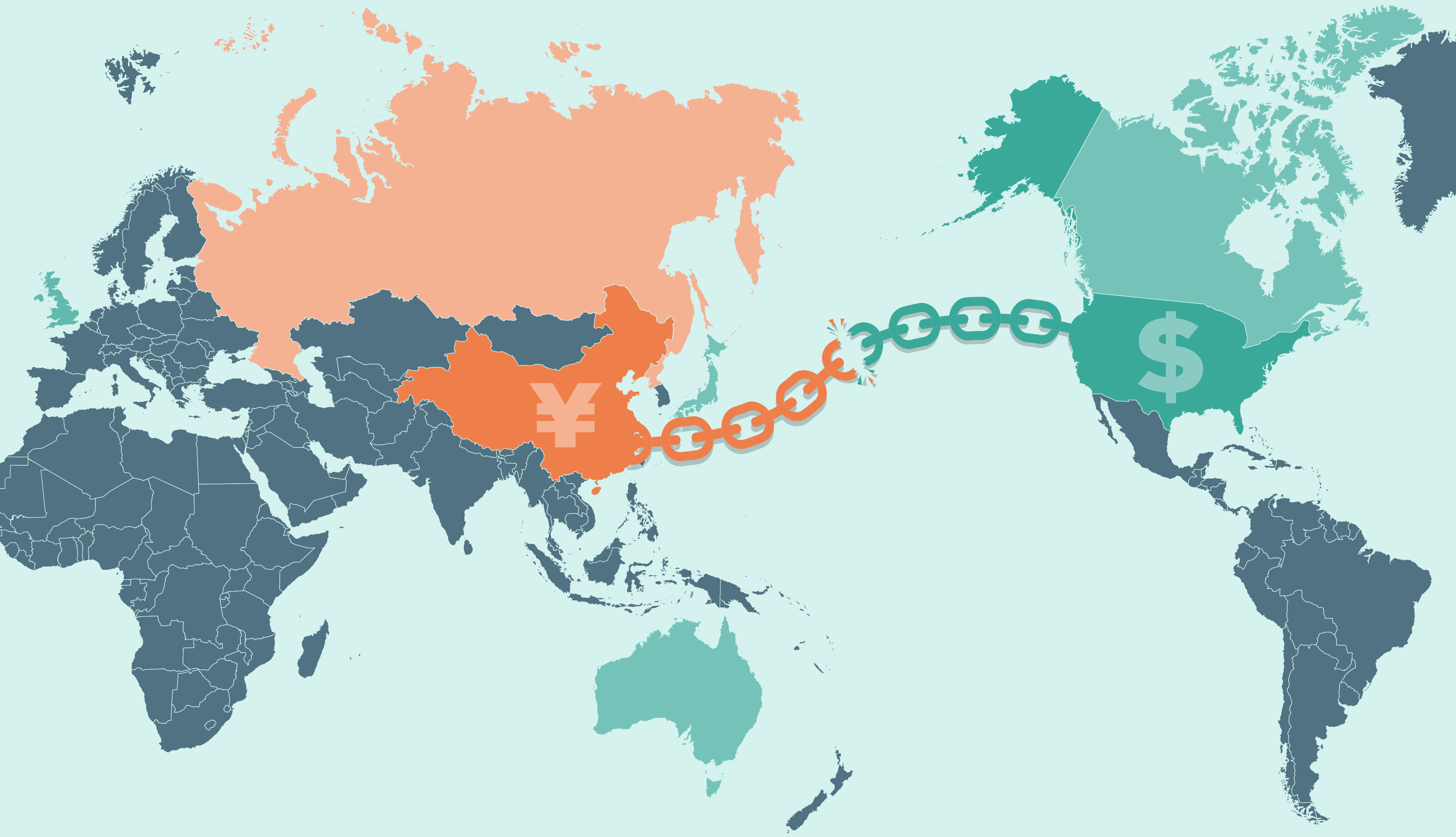
Diana Choyleva & Dinny McMahon

CHINA'S QUEST FOR FINANCIAL SELF-RELIANCE

How Beijing Plans to Decouple from the Dollar-Based Global Trading and Financial System



Enodo Economics
Wilson Center

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Enodo Economics

About Enodo Economics

Enodo Economics is an independent macroeconomic, political and geopolitical forecasting company that focuses on China and its global impact. The company was founded in 2016 by Diana Choyleva and is based in London. Its team of researchers has over 250 years of combined experience in analyzing China's economy and politics. They are spread around the world, from London to Sofia to Hong Kong.

Our clients are typically struggling to interpret economic or political developments in China. We help by presenting in-depth analysis with clear conclusions to guide investment, business and policy decisions. We advise asset managers who invest a total of more than 10 trillion dollars of assets under management and cover five continents.

We have helped raise £395,704 for Cardboard Citizens, a London charity making life-changing theatre, with and for homeless people for more than 25 years.

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Diana Choyleva & Dinny McMahon

Text Boxes

Infographics

Abbreviations

ABS	Asset-backed Securities
ADB	Asian Development Bank
ASEAN	Association of Southeast Asian Nations
AUKUS	Australia, the United Kingdom, and the United States
BIS	Bank for International Settlements
BOC	Bank of China
BoCom	Bank of Communications
BoE	Bank of England
BRI	Belt and Road Initiative
CASS	China Academy of Social Sciences
CBDC	Central Bank Digital Currencies
CBIRC	China Banking and Insurance Regulatory Commission
CBOT	Chicago Board of Trade
CBR	Correspondent Banking Relationships
CBRC	China Banking Regulatory Commission
CCB	China Construction Bank
CCP	Chinese Communist Party
CDB	China Development Bank
CDOs	Collateralized debt obligations
CDRs	Chinese Depository Receipts
CFETS	China Foreign Exchange Trading System
CGBs	Chinese government bonds
CHAPS	Clearing House Automated Payment System
ChiNext	Shenzhen Stock Exchange's tech board
CHIPS	Clearing House Interbank Payments System
CIBM	China's Interbank Bond Market
CIPS	China Interbank Payment System
CISA	China Iron and Steel Association
CME	Chicago Mercantile Exchange
CNAPS	China National Advanced Payment System
CNH	Offshore yuan
CNY	Onshore yuan
COMEX	Commodity Exchange
CPPCC	Chinese People's Political Consultative Conference's
CSRC	China Securities Regulatory Commission
DLT	Distributed Ledger Technologies
EMS	European Monetary System
ETFs	Exchange-traded funds
Exim Bank	China Export-Import Bank
FIMA	Foreign and International Monetary Authorities
Five Eyes	Five Eyes intelligence grouping of the US, Canada, the UK, Australia, and New Zealand
FSDC	Financial Stability and Development Committee
FT	Financial Times
FTZ	Shanghai Free Trade Zone
GBA	Greater Bay Area
GFC	Global Financial Crisis
GPIF	Government Pension Investment Fund
HKEX	Hong Kong Exchanges and Clearing Limited
HKMA	Hong Kong Monetary Authority
ICBC	Industrial and Commercial Bank of China
IFCs	International Financial Centers
IMF	International Monetary Fund
IRS	Interest rate swaps
JGB	Japanese government bonds
LME	London Metal Exchange
LPR	Loan Prime Rate
MBS	Mortgage-backed securities
M-CBDC	Multiple CBDC
MoF	Ministry of Finance
MPA	Macroprudential assessment
MRF	Mutual Recognition of Funds
NDRC	National Development and Reform Commission
NYMEX	New York Mercantile Exchange
OMFIF	Official Monetary and Financial Institutions Forum
PBoC	People's Bank of China
QDII	Qualified Domestic Institutional Investor
QE	Quantitative easing
QFII	Qualified Foreign Institutional Investor
RCEP	Regional Comprehensive Economic Partnership
RQFII	Renminbi QFII
RQFII	Renminbi Qualified Foreign Institutional Investors
RTGS	Real Time Gross Settlement
SAFE	State Administration of Foreign Exchange
SCMP	South China Morning Post
SCO	Shanghai Cooperation Organization
SDR	Special Drawing Right
SGEI	Shanghai International Gold Exchange
SIFMA	Securities Industry and Financial Markets Association
SMEs	Small and medium-sized firms
SOEs	State-owned enterprises
STAR	Shanghai's technology board for innovative firms
SWIFT	Society for Worldwide Interbank Financial Telecommunications
UNCTAD	United Nations Conference on Trade and Development
WMPs	Wealth management products
WSJ	Wall Street Journal
WTO	World Trade Organization

Executive Summary

China has been trying for more than a decade to carve out a bigger global role for the yuan, or renminbi (RMB). Beijing initially had little to show for its toil.

However, in recent years, it has changed its approach and stepped up its efforts, driven by concerns that dependence on the dollar – and the dollar-based global financial system – is a strategic vulnerability that stands in the way of China's geopolitical ambitions.

This report charts the most recent phase of this campaign. It sets out the rationale behind why Beijing wants to transform the yuan into an international currency, how it's striving to make that transformation, why it might prove unattainable, and what progress we can expect over the next five years. It also discusses how US policymakers should respond to the challenge.

The Chinese Communist Party is pursuing RMB internationalization for four main reasons:

- **To shield China from the fallout of what Beijing judges to be damaging US economic policies.** China views America's deteriorating fiscal conditions, the rapid expansion of the Fed's balance sheet, and the unrestrained money printing in response to the Covid-19 outbreak as evidence that the US exercises monetary policy solely in its own interests. In doing so, Beijing believes, the US risks undermining the legitimacy of the dollar, the world's principal reserve currency.
- **To insulate China from the potential weaponization of the dollar.** The US has been increasingly willing to sanction foreign individuals and institutions by denying them access to US financial markets and dollar payments networks, the fulcrum of the international financial system. China is aware that one day it could be on the receiving end of the same sort of punitive financial sanctions that Washington has imposed on Russia in response to its invasion of Ukraine.
- **To support efforts to build a geopolitical sphere of influence.** Bringing other countries into China's economic orbit requires financial integration, and that is only possible once they start using the yuan.
- **To help realize Beijing's great power ambitions.** China wants to change the global governance infrastructure to better accommodate China's interests. A globally accepted yuan could bolster its claim to represent a viable alternative order to the one led by the US.

At its core, China's goal is fairly simple. It wants to be able to purchase what it needs from other countries using its own currency and its own payments systems. It wants to reduce its dependence on the dollar and achieve greater financial self-reliance.

But China does not necessarily want the RMB to supplant the dollar as the dominant global currency. Rather, Beijing envisions a multi-currency order, one where the yuan co-exists alongside the dollar and the euro as a regional currency. It's unlikely that China can realize any of its goals within a decade.

China launched its RMB internationalization effort in response to what it saw as the West's bungled response to the Global Financial Crisis.

Stage 1 of its campaign (2009 – mid-2015) laid the foundations, making it possible to transact in yuan overseas and creating opportunities for foreigners to use the currency. During Stage 2 (mid-2015 – mid-2017), it became clear that the yuan's progress over the previous period was the result of firms taking advantage of the yuan's appreciation against the dollar, and arbitrage opportunities arising from differences between onshore and offshore yuan markets. During these two years the yuan's cross-border use declined, prompting Beijing to reassess how to proceed.

The result is the current phase – Stage 3 (mid-2017 – present). It is focused on giving foreigners reasons for using the yuan that are based on its merits as a medium of exchange, store of value, and unit of account – the characteristics of a global reserve currency.

> At its most basic, Beijing is trying to create a permanent and sustainable cycle of yuan flowing out of China into the global economy, then flowing back in again. Beijing is trying to ramp up outflows by concentrating its efforts on trade. Meanwhile, the main channel for inflows is investment into China's financial markets.

However, there are deeply entrenched barriers that stand in the way of foreigners embracing the yuan. The dollar is cheaper than the yuan to obtain globally - and more readily accessible - because of the huge pools of dollars that exist outside of the US.

The yuan is not going to be able to close the gap until it becomes an international currency. Consequently, Beijing is exploring ways to get foreigners to use yuan regardless of transaction costs.

Outflows – payments and pricing

Beijing is trying to institutionalize yuan outflows by changing the underlying factors that determine the currency used for cross-border trade. We've identified four areas that Beijing is targeting:

1. **Commodities:** Futures exchanges in the US and London set the benchmark prices for most of the world's commodities. Consequently, global trade in commodities is almost entirely carried out in dollars. Beijing hopes to be able to shift the epicenter of global commodity futures trading to China in order to make the yuan the dominant currency for settling commodity transactions.

2 **Industrial/processed goods:** China's economy is running up against a number of constraints – labor has grown expensive, water is scarce, energy demands huge, agricultural land limited. Beijing hopes to use Chinese capital to build factories in BRI countries that will produce goods that will be sold to China. The hope is that those goods will be priced and settled in yuan.

3 **Supply chains:** Asian supply chains usually transact in dollars. That's because the end consumer of the components they produce is the US and other developed economies. Beijing wants to make yuan the settlement and invoicing currency of choice by transforming China from a processor of goods produced in Asia into a consumer. In short, Beijing wants to establish China as the economic anchor of an Asian trade bloc, thereby giving it greater say over what currency is used throughout the region.

4 **E-commerce:** Beijing hopes that it can circumvent traditional trade settlement patterns by using new technology and processes to increase the yuan's use.

Inflows – financial markets

Beijing is trying to increase inflows of yuan by encouraging foreign investment into China's financial markets. Its strategy has two prongs.

1 **Capital account liberalization:** Beijing is gradually removing curbs on foreign investment. There is no longer a limit on how much foreign investment Beijing is willing to accept, although there are still restrictions on who can invest.

Crucially, most of that investment has to enter China using the yuan. In recent years, Beijing has established multiple channels through which foreigners can invest in stocks, bonds, and a range of other financial products, but almost all of them require that the investments be made in yuan sourced from outside of China.

2 **Financial market reform:** To increase yuan inflows, it's not enough to remove restrictions on foreign investment. Beijing also needs to give foreigners a reason to invest in China's financial markets. Those markets are currently underdeveloped. To enable RMB internationalization, they eventually need to display many of the qualities that make US financial markets so dominant. Specifically, China's markets need to provide investment opportunities that aren't available to people in their home economies.

To create a more favorable investment environment, Beijing is striving to make China's capital markets deeper, broader, and more liquid.

- To make them deeper, the rate at which companies are going public on the Shenzhen and Shanghai stock exchanges has accelerated. Moreover, new exchanges have been launched catering to small companies and tech firms in order to broaden the range of firms able to list.
- To make them broader, Beijing is introducing a wider range of financial products that span the spectrum of risk-return.
- And to increase liquidity, Beijing is using reforms to pensions, the housing sector, and wealth management products to direct more funds into the equity and bond markets.

Financial infrastructure

In an effort to make the yuan cheaper and more convenient to use, Beijing is improving the payments system used to transact in yuan. The two main elements of its efforts are the launch of a digital currency – the e-CNY – and the development of CIPS, China's cross-border trade settlement and communications platform.

The e-CNY has fanned talk that Beijing wants the yuan to leapfrog the dollar by harnessing new technology, thereby burnishing the currency's global credentials. Meanwhile, there's been speculation that Western financial sanctions against Russia will give the yuan a boost as Russian firms turn to CIPS as an alternative to SWIFT.

> Both the e-CNY and CIPS will be useful tools to support RMB internationalization, but neither is capable of driving the process. Their value is dependent on the success of the type of reforms outlined in this report.

But if China manages to deploy the e-CNY for cross-border payments successfully in coming years, this could promote RMB internationalization by making Beijing more willing to open China's capital account.

Barriers to RMB internationalization

There are reasons to believe that Beijing's goals may prove unachievable. There are significant – potentially insurmountable – barriers in the way of the yuan being adopted as an international currency.

- **China may struggle to maintain robust economic growth.** China's population is aging rapidly and is about to start shrinking, constituting a major drag on growth. Meanwhile, Beijing is trying to restructure the economy so that it's no longer dependent on housing and infrastructure, but rather on domestic consumption, tech innovation, and advanced manufacturing. There are no guarantees that the transition will be successful.
- **The culture of the Chinese Communist Party may stand in the way of necessary reform.** The Party is willing to tolerate free markets up to the point where it's happy with the outcome. At that point it intervenes, often in ways that ignore the interests of foreigners and investors. Over the past couple of years, China has been labeled "uninvestable" by some in the globally investment community, specifically for this reason.
- **Geopolitically, China may struggle to find countries willing to join its sphere of influence.** China has a track record of using economic coercion against trading partners that cause offense. Were the yuan to become a regional currency, that would give China additional tools to wield against its neighbors. While large Asian economies will want to maintain their trade relationship with China, they may prove reluctant to commit to overly-restrictive financial links.

The next five years

Regardless of whether Beijing is able to achieve its goals, RMB internationalization will undoubtedly make progress over the next five years. We anticipate further relaxation on investment into China, and more reform of China's financial markets.

Some of China's biggest ambitions will take longer than our five-year window to gain traction, specifically changing the way global commodities are priced, and changing the invoicing habits of Asian supply chains. However, we expect China will make progress in new areas – areas that haven't been important to Beijing's RMB internationalization strategy until now.

We expect Beijing to make progress in three main fields:

1. **Offshore market:** The flow of Chinese savings into Hong Kong's financial markets will increase significantly, resulting in the issuance of more yuan-denominated securities in Hong Kong and attracting foreign firms and institutions to raise capital there – in yuan.
2. **Safe assets:** Beijing will make the technical adjustments necessary for Chinese government bonds to be used as collateral for cross-border financial transactions, sparking a surge of global demand for those instruments.
3. **Financial services:** As part of their ambitions to become international financial centers, Shanghai, the Greater Bay Area along the Pearl River, and Chongqing will develop financial services industries that start to generate demand from companies in BRI countries.

Policy implications

Incremental increases in the yuan's cross-border use don't threaten US interests. Both the yen and pound are used far more globally than the yuan, and their relatively prominent role hasn't translated into geopolitical influence for Japan or the UK. It will be some time before the yuan's global use exceeds that of either currency.

> The US shouldn't try to prevent minor progress in the yuan's global use – which won't translate into geopolitical gains any time soon – but rather should focus on ensuring that the dollar order serves the interests of those countries that share US principles.

If the US wants to retain its geopolitical role in the Indo-Pacific it needs to maintain its military presence throughout the region and deepen its economic ties. In particular, the Federal Reserve could extend dollar swap lines with the countries that the White House has labeled "leading regional partners" in its Indo-Pacific strategy paper, thereby helping minimize any damage caused by US monetary policy.

Additionally, the US should strive to minimize the degree to which its own financial system is intertwined with that of China, perhaps by disincentivizing US financial firms from investing in China.

Substituting the dollar for yuan in ways that bolster China's economic security and regional influence will require fairly radical changes to the way China's economy operates. But even then, it's not enough for Beijing to simply implement all the right reforms. Success depends on whether attitudes toward the dollar among foreign companies, financial institutions, and central banks change in ways that allow the yuan's share of cross-border transactions to increase.

> Whether the yuan is capable of becoming a truly international currency is a question that will be settled years in the future. In the meantime – and certainly over the next five years – we expect Beijing to remain committed to the macroeconomic and microeconomic reforms outlined in this report.

Not only are many of those reforms necessary to achieve yuan internationalization, they are also needed to address pressing domestic challenges: accommodating China's aging population, developing a vibrant tech sector, and supporting more equitable wealth distribution.

Regardless of whether the yuan eventually becomes an international currency, the changes that Beijing is pursuing will resonate globally, alter the functioning of trade and markets, and create new challenges for policymakers in the US and other developed nations.

Enodo Economics

1 Intro-duction

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Could the Chinese yuan one day become an international currency? Could it challenge the US dollar as the dominant global reserve currency? Events of the past year have re-opened these questions.

The launch of China's digital currency – the e-CNY – has fanned talk that Beijing might try to catapult the yuan up the global currency rankings with the help of new technology. Meanwhile, Russia's invasion of Ukraine has raised the prospect that Moscow might be able to evade US sanctions by transacting in yuan using China's homegrown alternative to the SWIFT global interbank messaging network.

The irony is that, until recent events, RMB internationalization was widely regarded as being a dead letter. Beijing formally launched its drive to make the yuan an international currency in 2009, and yet, despite China's status as the world's second-largest economy and the largest trading nation, its currency lags not just the dollar and the euro in terms of global usage, but the pound and the yen as well.

> Unquestionably, serious challenges stand in the way of the yuan becoming widely used for cross-border trade and investment. That said, Beijing is increasingly committed to making it happen.

China's authorities have come to see their country's reliance on the dollar and the global financial system it dominates as a strategic vulnerability that threatens China's security and economic stability. Additionally, an internationally accepted yuan could help bolster China's great power ambitions. Consequently, over the last few years Beijing's efforts to promote RMB internationalization have accelerated even as its approach has changed.

The change in tack hasn't been clearly articulated by China's leaders. The central government hasn't published a blueprint, and senior officials typically speak about RMB internationalization in broad terms only. But by drawing on government policy documents and reports, speeches and articles by serving and former officials, the observations of Chinese academics and government advisors, and interviews with financial sector executives, we've pieced together a picture of how Beijing's approach to RMB internationalization has evolved and what it is attempting to achieve.

What we've found is that since mid-2017 officials have come to realize that earlier efforts to pursue RMB internationalization fell far short of China's ambitions. Those attempts focused on giving foreigners ways in which they could use the yuan, but left it up to market forces to drive demand.

What little demand emerged was fueled by opportunities to benefit from the yuan's appreciation and from arbitrage opened up by divergences between the onshore and offshore yuan markets. Without such incentives, foreigners have been reluctant to turn to the yuan, largely because it is far cheaper and more convenient to use dollars for cross-border transactions, be it for trade, lending, or investing.

> Beijing has subsequently developed a new approach, one aimed at getting around the entrenched advantages of the dollar by creating reasons for foreigners to use the yuan regardless of transaction costs.

China is trying to accelerate the net outflow of yuan from the country by transforming the way certain types of global trade currently function. Specifically, it's seeking to promote the use of yuan by changing how commodities are priced, how Asian supply chains are invoiced, and how foreign exporters use technology for payments.

Meanwhile, officials want to increase the net inflow of yuan into China's financial markets by relaxing the capital controls that have traditionally limited foreign investors' access, but also by overhauling China's financial markets to make them globally appealing.

China's digital currency and cross-border payments system are unquestionably part of Beijing's efforts to promote the RMB's internationalization as well. However, they're not driving the process. At best, they play a supporting role.

Some of the strategies Beijing is pursuing may seem unattainable – and indeed they might be. Substituting the dollar for the yuan in ways that bolster China's economic security and regional influence will require fairly radical changes to the way China's economy operates. Beijing itself could potentially sabotage the yuan's success, not least because of the Chinese Communist Party's reservations about fully relinquishing control over the flow of money in and out of China.

Even then, it's not enough for Beijing to simply implement all the right reforms. Success depends on whether attitudes toward the dollar among foreign companies, financial institutions, and central banks change in ways that allow the yuan's share of cross-border transactions to increase.

Assuming RMB internationalization is achievable, it's likely to take at least a decade to realize. Success will require layer upon layer of reform, which will require time and political will. Consequently, this report doesn't attempt to predict the likelihood of the yuan becoming an international currency. Its fate will be shaped by geopolitical forces that are hard to anticipate.

> Rather, our report is an attempt to outline the measures Beijing is pursuing to make the yuan an international currency – one initially used widely throughout Asia or in a nascent sphere of Chinese economic influence among beneficiaries of the Belt and Road Initiative – and how we expect Beijing will try to advance the cause over the next five years.

Regardless of whether the yuan eventually becomes an international currency, the changes that Beijing is making will resonate globally, alter the way trade and markets function, and confront policymakers in the US and other developed nations with new challenges.

By outlining what Beijing is attempting to do, this report aims to help policymakers prepare for those challenges.

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2

Why does China want to decouple from the dollar?

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2.1 Introduction

China is the world's biggest trading nation and second-largest economy, and yet the yuan is used little beyond China's borders. That's by design. For most of the reform era Beijing pursued a development model that stunted its financial system and shunned an international role for the yuan.

However, the failure of China's global financial influence to keep pace with its economic strength is increasingly seen by Beijing as a liability.

If a country has...no financial strength, no monetary strength, it cannot guarantee the safety of its own economic entities," Zhu Min, former deputy managing director of the International Monetary Fund (IMF) and former deputy governor of the People's Bank of China (PBoC), said in June 2020. ***"It is precisely because the international status of China's currency is far lower than that of China's economy that it is so urgent to internationalize the renminbi."***[1]

> The existing global monetary and financial regime is no longer in China's interests.

Increasingly, Beijing sees its dependence on the dollar-led financial order as a strategic vulnerability. Moreover, China envisions a greater role for itself in the global order, something it can't achieve as long as it remains dependent on the dollar to transact with the rest of the world.

China first started working toward internationalizing the RMB in 2009, but in recent years the project has taken on new urgency. Today, Beijing is pursuing RMB internationalization in order to:

- **Shield itself from the negative consequences of US economic policies**
- **Insulate itself from the weaponization of the dollar**
- **Consolidate efforts to ensure economic security**
- **Support its ambitions to assert itself as a great power**

2.2 US Economic Stewardship

Beijing has grown increasingly frustrated with the US's role as steward of the global economy. The Global Financial Crisis (GFC) delivered the initial wake-up call.

At the end of 2008 and the beginning of 2009, there were problems with US dollar trade financing and settlement," former PBoC Governor Zhou Xiaochuan wrote in August 2018.[2] ***"Some imports and exports were halted at ports, especially in Brazil, Argentina and other places in South America, because there was no money. There was no problem with the goods, but with the liquidity of the dollar."***

With the collapse of Lehman Brothers, global dollar liquidity dried up and dollars were sucked back to the US. Consequently, US banks were no longer willing to provide trade finance, the lifeblood of the global economy. A big chunk of global trade stalled simply because there were insufficient dollars available.

At the time, Zhou wrote a paper[3] recommending an overhaul of the global monetary system, one that would take the key role played by the dollar in settling trade between nations and replace it with the Special Drawing Right (SDR), a synthetic currency created by the IMF. Nothing came of it as China did not find support in the US or among other industrialized countries, but it was the first clear indication that Beijing wasn't happy with US economic governance.

China's critique has since evolved beyond its initial complaints – and is shared by many other countries.

Since the beginning of this century, in order to get rid of economic and social difficulties, the United States and Europe have continuously expanded their fiscal expenditures, loosened their money supply, accumulated huge debts and inflated asset bubbles, which eventually led to the subprime mortgage crisis and the European debt crisis," Guo Shuqing, chairman of the China Banking and Insurance Regulatory Commission (CBIRC), wrote in August 2021.[4] ***"The negative impact of quantitative easing policies adopted since then has not yet been fully realized."***

Guo's critique is that the US and EU were profligate and irresponsible, and that their response to the ensuing crises has stored up problems for the future.

> The irony is that China is in large part responsible for what it sees as US mismanagement.

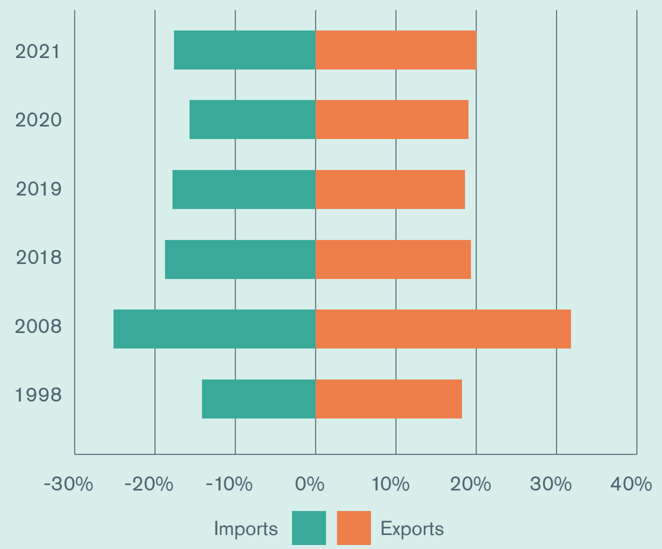
The implications of excessive Chinese savings

From the beginning of this century until about mid-2014, China's demand for safe US assets – and US Treasuries in particular – expanded rapidly. That was because, in the wake of China's accession to the World Trade Organization (WTO) in 2001, China exported far more than it imported. That wasn't happenstance. China's economy is deliberately structured in a way that suppresses consumer demand.

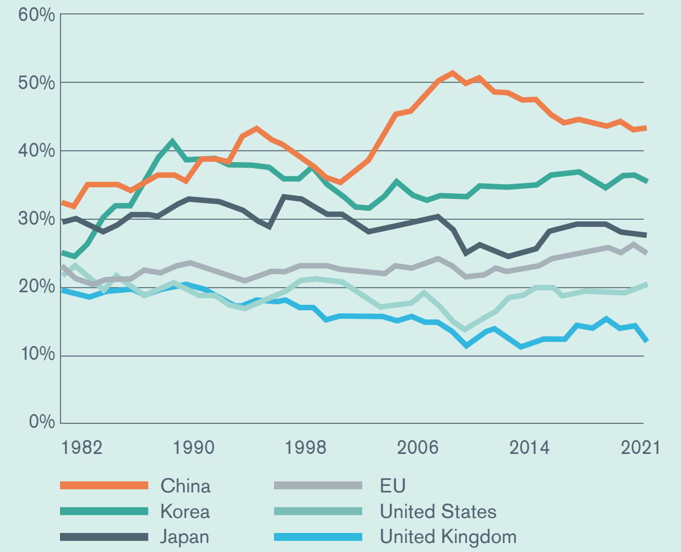
For most of its opening up and reform period Beijing kept domestic interest rates artificially low, used capital controls to prevent capital fleeing abroad and kept its currency undervalued. The consequence of these policies was that households, businesses and the public sector all saved at elevated levels. The flipside was that consumer demand was kept artificially low. The result is that China's large economy produced – and continues to produce – far more than it has been capable of consuming, and the excess was sold to the rest of the world.

Initially, the high domestic savings rate benefited China because it provided the funds to invest in industrial capacity and infrastructure. But by 2004-5 the economy had run into physical shortages of energy and transport, and domestic demand growth slowed sharply. China's current account surplus, of which the bulk was the trade sur-

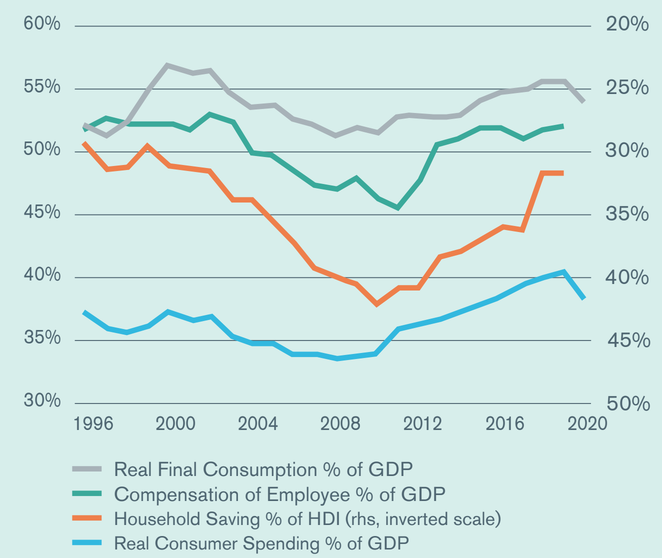
Imports and Exports as % of GDP
Nominal



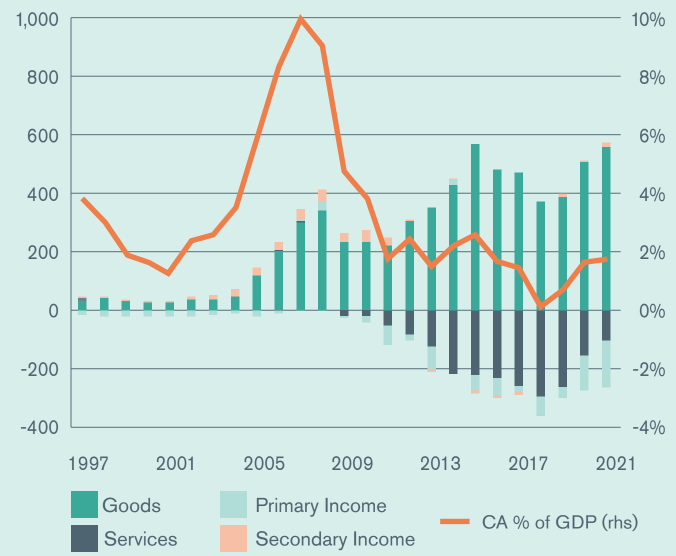
Total Economy Savings as a % of GDP



Wages, Savings and Consumer Spending
% of GDP and household disposable income (HDI)



Current Account by Item
CA as % of GDP, others $ bn



Source: Enodo Economics, CEIC

plus - the excess of exports over imports - exploded. In 2005 the authorities allowed the yuan to start appreciating, but not fast enough. The exchange rate remained undervalued, while the capital account remained largely closed.

The current account surplus meant that China ended up with significant savings earned in foreign currency. Chinese exporters were required to hand over most of their dollar earnings to the central bank, where they accumulated as foreign exchange reserves. Central banks typically invest most of their reserves in safe assets, such as government bonds. China did the same, primarily buying US Treasuries because it pegged its currency to the dollar.

The US never asked or induced China to increase its purchases of Treasuries. If that had been the case, the US would have had to raise interest rates as an incentive for

BOX 2.1

Why Chinese Households Saved a Lot and Why They Save Less Now

Household savings as a percentage of household disposable income soared to more than 40% in the run up to the GFC and for a couple of years afterwards. But by 2019 the share had fallen to just above 30%. But structural factors persist that make China's household savings rate still higher than is optimal.

- China's economic planners hold interest rates down in order to provide state-owned enterprises with cheap credit. This financial repression means households – largely prevented from investing abroad in search of higher yields – have to squirrel away even more money to meet their savings targets. The Chinese Communist Party (CCP) hopes efforts to professionalize China's capital markets will improve returns on investment products, reducing the need to save.
- In the absence of a strong welfare safety net, Chinese typically save for a rainy day – for unexpected illness, an accident at work – and to pay for their children's education and for their own retirement. The state has boosted social security spending and by cracking down on the private tutoring sector lowered the price of education, but the safety net is still not strong or comprehensive enough to obviate the need to save for emergencies.
- Migrant workers in major cities have had to save particularly hard because they have long been denied the household registration permit, or hukou, that grants access to local schools and government services. The CCP is relaxing hukou rules in smaller cities and migrant access to social services. Over time, this will give China's 300 million or so migrant workers a greater sense of security and encourage them to spend more and save less.
- China's one-child policy prompted parents unsure about who would care for them in their old age to save more than they otherwise would. The controversial policy has now been scrapped, but old habits die hard. A sense of insecurity means that China's fast-ageing population might not dissave as much as economic textbooks would anticipate.
- Young Chinese used to save a lot to get on the property ladder and buy consumer goods because banks prioritised lending to industry not households. But things have changed. Mortgage borrowing in China as a percentage of GDP is now close to US levels and young Chinese, unlike their parents, are quite happy to borrow to finance current consumption.
- An important reason why rural Chinese residents tended to save excessively, despite low incomes, is that they had scant access to consumer goods. But the spread of e-commerce to the Chinese countryside is unleashing spending potential and changing the saving calculus.
- Despite these and other fast-moving structural changes, the cultural bias of Chinese to save remains deep-rooted. In other countries, Chinese diasporas typically save more out of income than locals do. Recent developments, notably uncertainty spawned by pandemic lockdowns and Xi Jinping's assault on housing wealth and income redistribution drive, may well reinforce the saving habit.

China to reallocate savings from elsewhere to meet US demand. Instead, US interest rates declined in order to accommodate the need from China – and a handful of other countries – to buy ever more safe US assets. Regardless of how low US interest rates fell, Beijing kept buying.

At the time this seemed like a mutually beneficial arrangement. China had a safe haven for its savings. The US government obtained cheap finance, which enabled it to keep taxation low. And American households had access to cheap credit to finance their purchases of cheap Chinese-made consumer goods.

But US consumers could borrow and spend only so much. When they finally reached their limit, what had looked to some like a symbiotic Sino-US relationship unraveled. And the Goldilocks global economy it was supporting crumbled.

One consequence of low bond yields was that institutions that usually buy Treasuries but require a reasonable return – like pension funds and insurance companies – went looking for safe assets that could offer higher interest rates than were now on offer from Treasuries. Wall Street obliged by ramping up issuance of AAA-rated mortgage backed securities (MBS) and collateralized debt obligations (CDOs). Some of those proved to be far less safe than advertised and rated, resulting in the US subprime crisis.

> By taking advantage of the open US financial system, China pushed upon the US far more debt than the US actually needed. This could have been avoided if China hadn't suppressed the value of the yuan and distorted the global price of capital.

Allowing freer capital flows and letting the yuan rise faster would have boosted domestic demand in China by lowering the price of imports, thereby allowing ordinary Chinese households to buy more than their earnings would otherwise permit.

It would also have raised domestic interest rates, increasing the income households got from their bank accounts where they kept the bulk of their financial wealth. Until only a few years ago Chinese households borrowed very little from banks. But it would also have raised the cost of borrowing for state-owned enterprises and reduced exports, thereby eroding the income of China's industrial sector – something Beijing balked at doing.

The financial crisis hit China hard as Western demand for its manufactures collapsed. Overnight, entire Chinese cities lost their economic raison d'etre. Many millions of workers lost their jobs and at the end of 2008 the government unveiled a record Rmb4 trillion (14% of GDP) stimulus package and expanded broad money to the tune of an extra 48% of GDP in 2009, to cushion the immediate blow.

> Overlooking their own role in the crisis, China's leaders started questioning the US reputation for economic and financial competence. It seemed incomprehensible to them that the US and other Western governments had not done more to pre-empt the crisis.

They determined that China would never again be caught out by events so far beyond their control. That meant reshaping the international order in ways more favorable to China's interests. The way China sees it today, the biggest challenges facing the global economy are born from the US and EU response to the GFC, the eurozone crisis, and COVID-19 – specifically, quantitative easing.

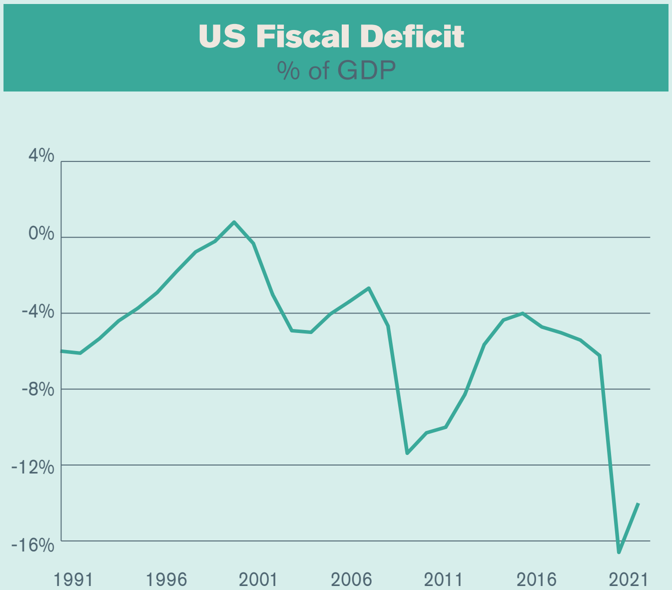
Beijing's view of America's quantitative easing (QE)

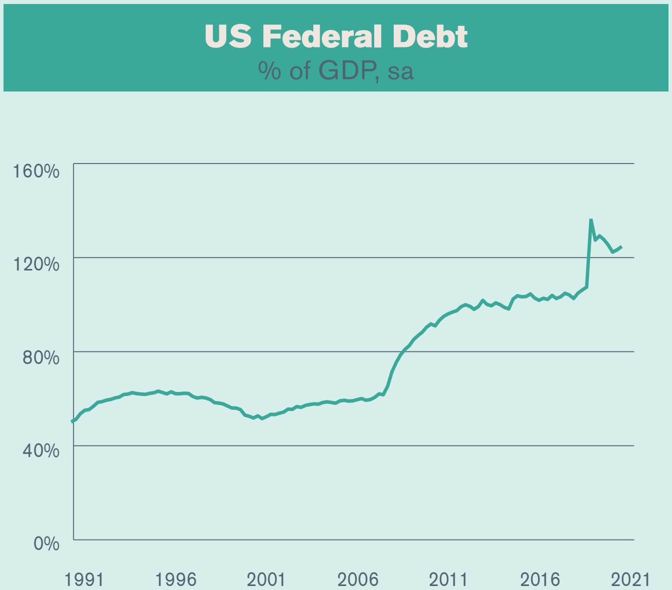
The dollar's role as the global reserve currency means that changes to the Federal Reserve's monetary policy reverberate globally. This has been the case for decades. For much of that period China has perceived US monetary policy broadly as having a stabilizing effect on global economic conditions. But Beijing also saw itself in no position to challenge the dollar's global reserve currency status either. That's no longer the case.

"In the past, the dollar was a global public good with the ability to stabilize the values of various currencies, just like gold. But the US has allowed its currency to stop playing this role and has begun to prioritize domestic policy challenges," Fudan University finance professor Sun Lijian said in a 2021 interview.[5] ***"Changes in the value of the dollar could damage the interests of other countries. China wants to avoid such damage to its national interests."***

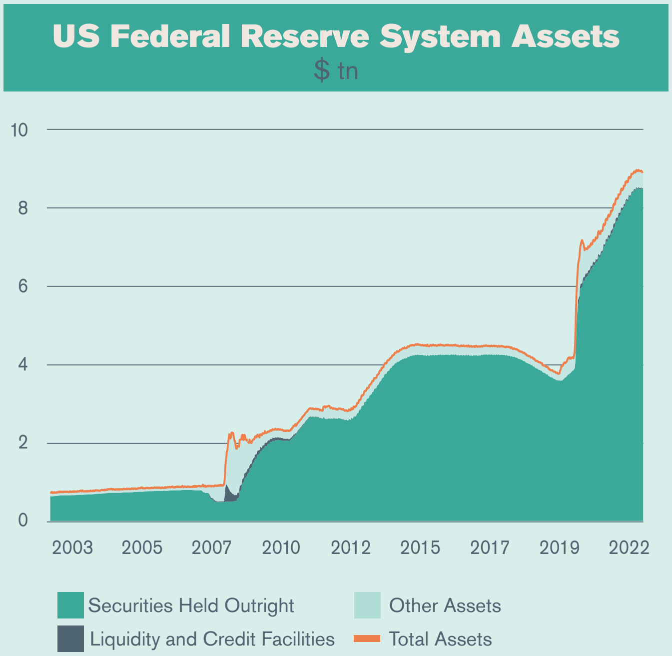
Beijing sees massive US monetary creation – initially following the GFC, then more recently in response to the COVID-19 pandemic – as well as the huge amounts borrowed by the US government to fund its budget, as evidence that the US now exercises monetary policy solely in its own interests, without any consideration of how its actions will affect other nations.

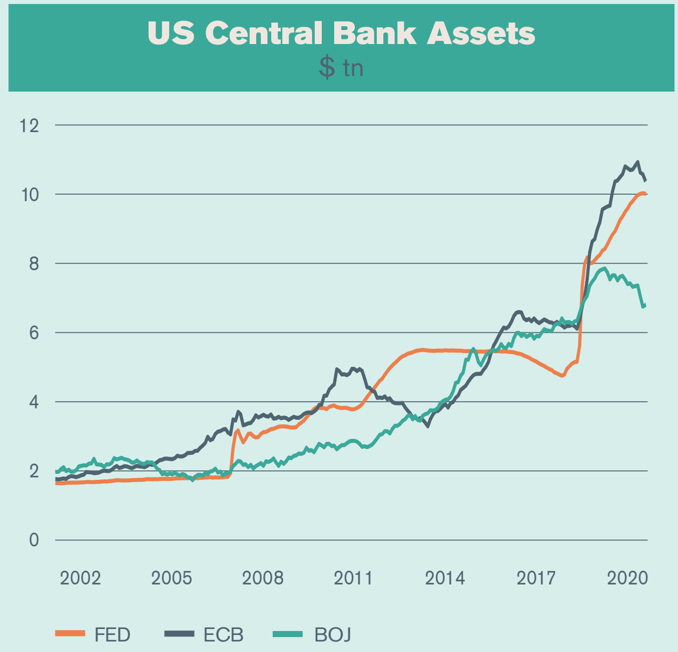
The critique of Guo Shuqing, the CBIRC chairman, is representative of Chinese thinking:





Source: Enodo Economics, CEIC





Source: Enodo Economics, CEIC

"In an international monetary system dominated by the dollar, the current unprecedented unlimited quantitative easing policy of the United States...erodes the foundation of global financial stability, and will have unimaginable negative effects," he wrote in August 2020.[6] ***"Emerging economies may face multiple pressures such as imported inflation, shrinking foreign currency assets, and exchange rate and capital market volatility. Worse yet, the world may once again be on the brink of a global financial crisis."***

Guo's concern is that the US has created so much new money that even relatively small adjustments by the Federal Reserve trigger the movement of huge volumes of funds – and that's disruptive, and potentially devastating, to other countries.

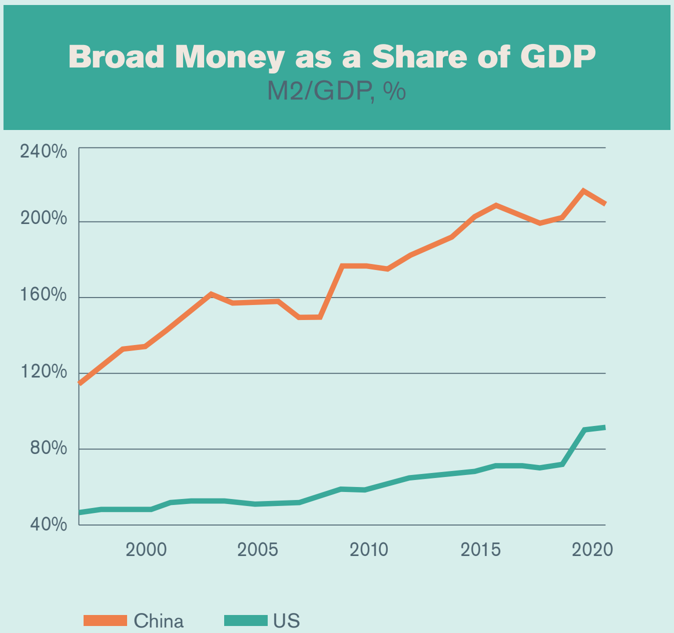
The problem with China's view that US quantitative easing has resulted in excessive monetary expansion is that it is only true for the last bout of QE, initiated to counter COVID-19. Before the pandemic, QE helped the US avoid a depression as it allowed the Fed to bypass the banks and inject money directly into the economy. This helped offset the destruction of money as defaults surged, debt was paid down and banks were unwilling to lend amid a regulatory push to replenish their capital.

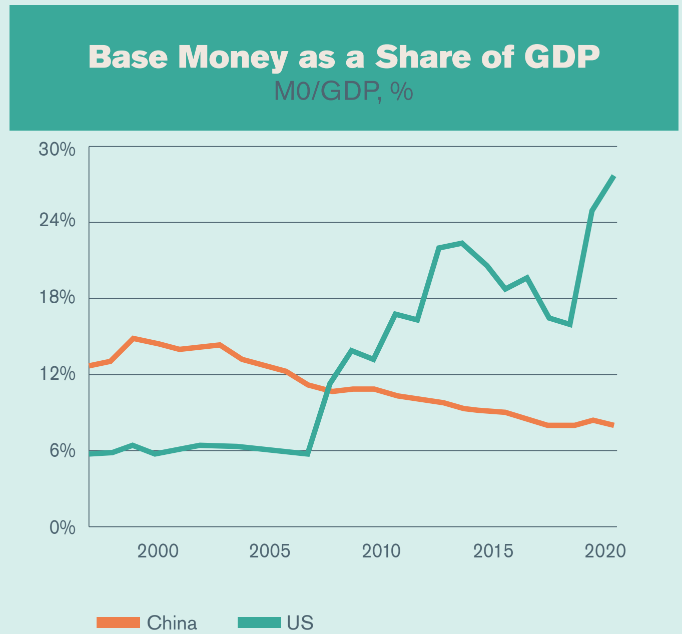
> Meanwhile, Beijing seems oblivious not only of its role in precipitating the global financial crisis, but also of the scale of its post-COVID monetary expansion, which dwarfs that of the US.

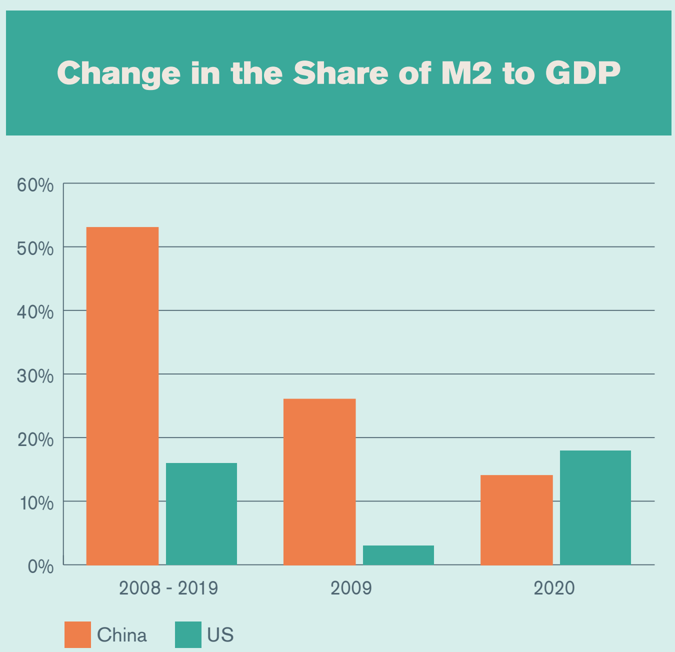
China's money supply (M2) as a share of GDP rose by 53% between 2008 and 2019, while the US equivalent rose by only 16% over the same period.

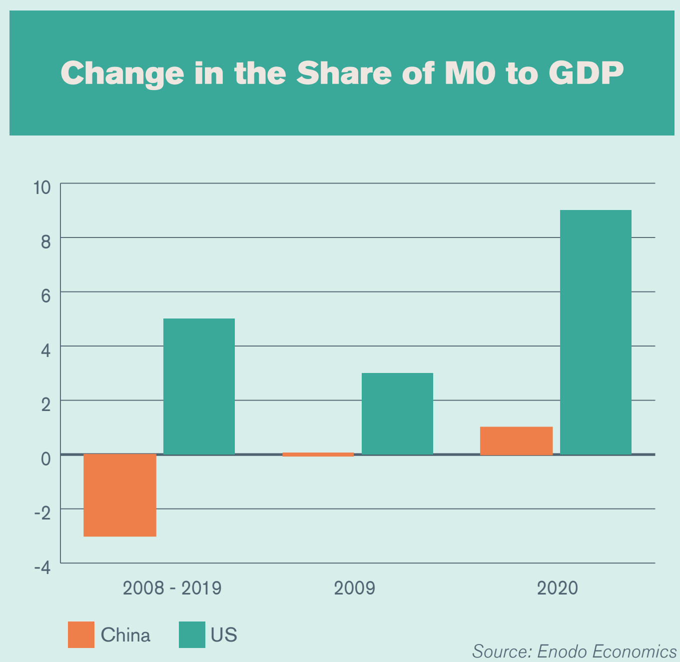
However, China's alarm at the the unprecedented expansion of US money in 2020 is legitmate. US M2 relative to the size of the country's GDP rose 18% in 2020, compared with just 3% in 2009. The problem is that when the Fed creates new money, some of it flows into the global economy in search of better investment returns than are available in the US. That's always been the case, but as the volume of money creation exploded, so did the amount that escaped overseas.

Comparison between Chinese and US Monetary Developments









Source: Enodo Economics

That's had a disproportionately large impact on developing economies, which are ill-equipped to absorb the torrent of funds unleashed by the Fed from even minor adjustments in monetary policy. Smaller economies fare the worst, but economic management for large countries like China also becomes more complicated. Beijing has been particularly worried about the impact US monetary easing has had on global food price inflation.

When the Fed's policy spills over, it not only spills over to bulk basic commodities, but also gives a relatively large boost to the prices of soybeans, grains, wheat, and food," Yu Ze, a professor at Renmin University, wrote in 2021.[7] ***"The Fed's policy will push up food prices, and the increase in food prices will push up inflation in low-income countries and emerging market countries."***

US monetary policy tightening acts in the opposite direction, raising the cost of doing business globally. A 2017 research paper[8] found that a 1% rise in the dollar against all other currencies in the world leads to a 0.6-0.8% decline in global trade within a year, controlling for the business cycle.

> China has not only been concerned with the unwanted side-effects of US monetary policy, but has also been vocal in expressing its worries, and has juxtaposed its own restraint as an example of superior monetary governance.

China's leadership is clearly frustrated with the outsized influence American monetary policy has on China's economy. But for Beijing, Washington's increasing use of financial and economic sanctions, taking advantage of the dollar's unique role in global financial markets, is an even bigger threat.

2.3 Weaponization of the Dollar

Traditionally, relatively unfettered access to the US-led global financial system was a key part of the Pax Americana. But since launching its Global War on Terror, the US has been increasingly willing to sanction foreign individuals and institutions by denying them access to US financial markets, the lynchpin of that system. In response to Russia's invasion of Ukraine, the US has elevated the stakes further, weaponizing the dollar to lock a G20 economy out of global markets.

> Beijing is acutely aware that China could be on the receiving end of similar treatment – as could any other country that runs afoul of US interests – and that its dependence on the dollar-led global financial order is a strategic vulnerability.

In the wake of September 11, provisions in the Patriot Act gave the US government the authority to punish money laundering and terrorist financing by denying financial institutions access to the US financial system. Since then, the scope of financial sanctions has broadened to encompass a far wider range of geopolitical goals, and sanctions have been deployed against institutions from Iran, Venezuela, North Korea, Russia, Syria, and Afghanistan.

Sanctions include denying central banks access to any foreign exchange reserves they hold in dollars; barring foreign companies and governments from using US capital markets to raise funds; and denying financial institutions access to the SWIFT global interbank messaging network.

> However, the most powerful weapon the US has at its disposal is its ability to cut off financial institutions from accessing the US banking and payment system, thereby denying them use of the dollar.

Every transaction involving dollars – regardless of where in the world it takes place – at some point involves the US banking system in some way. For foreign banks to transact in dollars, they need a "correspondent banking" relationship with a bank inside the US financial system, either directly or through third parties. Without such relationships, banks outside of the US are unable to transfer dollars. Consequently, through its regulation of US-based financial institutions, America can deny foreign individuals, companies, institutions, and governments the ability to use dollars.

The US has proven willing to use secondary sanctions in order to cut off that access to institutions that engage with entities on US sanctions lists. It is able to monitor such activity – to see which banks are dealing with which companies – via its access to data on transactions carried out over SWIFT, the platform used by banks the world over to communicate with each other. Given the importance of dollars to global trade, finance and investment, US financial sanctions can be debilitating and all but prevent a financial institution from functioning properly.

China's experience with US financial sanctions

China has had two direct encounters with US financial sanctions. In September 2005, the US accused Banco Delta Asia, a small, family-run bank in Macau, of facilitating transactions for North Korean front companies involved in counterfeiting currency, drugs, and other illegal activity.[9] US authorities said they were considering barring US banks from doing any business with the Macau bank, but didn't impose sanctions.

Still, the threat alone was enough to spark a run on the bank. Two days later the Macau Banking Authority took over the bank and froze 50 North Korean accounts. Bank of China, one of China's four biggest commercial banks, also froze the Macau accounts of its North Korean clients, as a precaution against the US potentially casting a wider net.[10]

Then in 2012, the US Treasury imposed secondary sanctions on the Bank of Kunlun, a small Chinese lender, effectively cutting off its direct access to the US financial system by prohibiting US banks from opening and maintaining correspondent accounts on its behalf.

Treasury found that the bank had provided hundreds of millions of dollars in financial services to Iranian banks that had been blacklisted by the US for links to international terrorism or for supporting the development of weapons of mass destruction.[11]

However, the bank continues to function and has been the main conduit through which China pays for energy imports from Iran. Beijing may have made a deliberate decision to make the Bank of Kunlun the sole contact point for dealing with Iran, thereby ring-fencing the rest of China's financial system from the threat of US sanctions. But it also means that the bank must avoid transacting in dollars.

> But, arguably, China's indirect experience with the power of US financial sanctions has shaken up the leadership in Beijing more.

Two instances stand out - the arrest of Meng Wanzhou, Huawei's chief financial officer and daughter of the firm's founder, Ren Zhengfei, in late 2018; and the financial sanctions the US imposed on Hong Kong's former Chief Executive, Carrie Lam, current Chief Executive John Lee Ka-chiu, and other top officials from Hong Kong and Beijing in 2020.

Meng was arrested by Canadian police in response to an extradition request from the US, which accused Meng of covering up attempts by Huawei-linked companies to sell equipment to Iran, thereby breaking US sanctions.[12] The US Department of Justice pinned its case on documents obtained from HSBC. The documents showed that Meng had misled the bank about the nature of Huawei's relationship with the companies dealing in Iran. That put HSBC at risk of violating US sanctions for facilitating dollar-denominated transactions involving Huawei's Iran-linked businesses.[13]

After three years, Meng Wanzhou reached a settlement with the US government and went home, hailed as a hero upon her arrival. But for China's top leadership this high-profile case was a painful example of the power the US has over China through its ability to control the global financial system and exert extraterritorial jurisdiction.

In 2020, another high-profile imposition of US sanctions hit home. Donald Trump signed the executive order for sanctions against 11 top officials from Hong Kong and Beijing to punish China for its moves against dissent in Hong Kong and the imposition of "draconian" national security legislation that undermined Hong Kong's autonomy. Under the economic sanctions, individuals or entities targeted by the US Treasury Department's Office of Foreign Assets Control are blocked from accessing their US-based assets and American businesses are generally prohibited from dealing with them.

On the face of it, it might appear that the sanctions would not matter much if the individuals have no US assets. But the dominance of the dollar in global payments means that Hong Kong officials have been locked out of accessing any banking services. Consequently, Carrie Lam, who retired as chief executive in 2022, had to receive her salary in cash. Hong Kong's current administration includes four senior officials under US sanctions.

Guarding against dollar weaponization

While the consequences of US financial sanctions have so far been limited, Beijing is aware that the fallout could be far greater if the US targeted larger institutions, or even China's economy as a whole. The draconian sanctions the US and its allies imposed on Russia following its invasion of Ukraine have shaken up Beijing and brought further urgency.

If the United States and Europe want to sanction China like North Korea, Iran, and Russia, or freeze or confiscate China's official reserve assets, it would be tantamount to launching economic war against China," Wang Yongli, former vice president of Bank of China and a former board member of SWIFT, wrote in March 2022.[14]

> But imposing on China a similar suite of sanctions as it did on Russia would be a much harder decision for the US. Given the importance of China to the global economy, the consequences for the US and the world would be huge.

The US may find it difficult to put together the same coalition. Moreover, while China might not be able to respond in kind, it could potentially retaliate with other economic measures, making the exchange mutually unsustainable for both countries.

Still, there's not much China can do to mitigate the impact of financial sanctions. In 2021, China introduced an Anti-Foreign Sanctions Law, designed to give Chinese officials the authority to prevent companies from complying with US efforts to impose US law on firms in China. Still, Chinese institutions are exposed to the risk of being cut off from the US financial system.

In March, the Chinese Communist Party's powerful Central Organization Department issued a notice prohibiting senior officials and their immediate families from owning - directly or indirectly—any real estate abroad or shares in entities registered overseas, and from setting up accounts with overseas financial institutions unless they are strictly needed.[15]

In late April 2022, officials from the PBoC and Ministry of Finance (MoF) met with executives from a dozen banks in China to discuss ways in which they might protect China's overseas assets from US-led sanctions. No one had any suggestions.[16] At the same time, Chinese insurance giant Ping An, HSBC's largest shareholder, proposed a plan to the bank's board to split its Chinese operations from the rest of the bank.[17]

> Long term, the only way China can protect itself effectively against US financial sanctions is to reduce its use of dollars.

"The settlement, clearing, and trade of every US dollar must be in the interests of the United States, otherwise you should not use US dollars," Zhou Chengjun, director of the PBoC's Institute of Finance, wrote in a May 2021 essay.[18] He anticipates that other countries will also become increasingly wary of using dollars. ***"When Americans... frequently use sanctions and overemphasize the interests of the United States while ignoring its international responsibilities, more and more nations hope to reduce their reliance on the dollar."***

At the bare minimum, China needs to ensure that the US can't disrupt essential purchases. That means convincing trade partners to accept payment in yuan channeled through China's payment system, thereby ensuring that the US has no oversight over the transactions. Only then will Beijing be able to lessen the destructive potential of US financial sanctions.

2.4 Economic Security

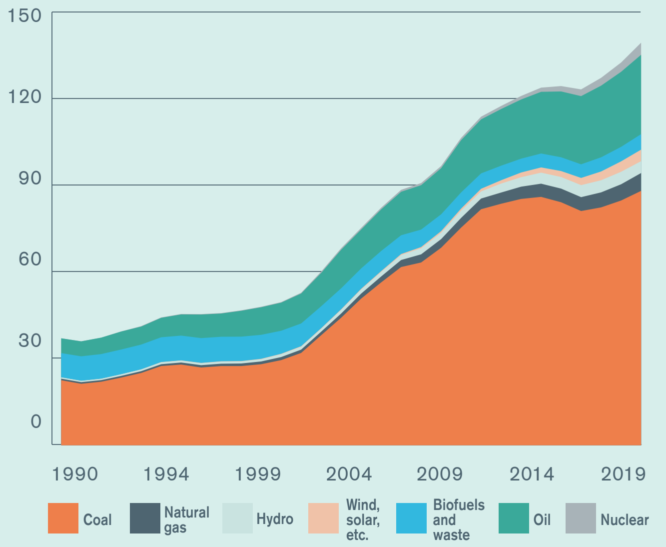
China is striving to achieve economic security by sourcing key commodities from friendly nations. But consolidating those relationships will require financial integration, which is only possible through greater use of the yuan.

China currently depends on imports in order to satisfy demand for many of the commodities essential to feeding its population and running its economy. In the absence of greater self-sufficiency, that requires being able to rely on importing things from nations outside of the US alliance network that are friendly to China.

It's analogous to what Biden administration officials have labelled "friend-shoring" – sourcing goods from countries that share US liberal values.

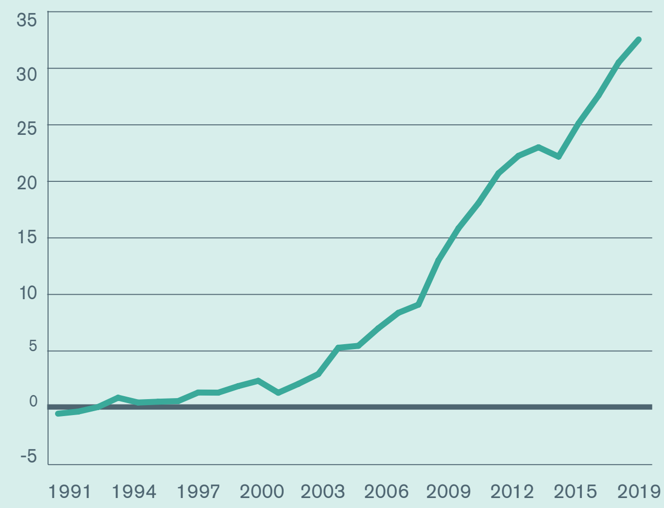
China's Total Energy Supply by Source

TJ mil



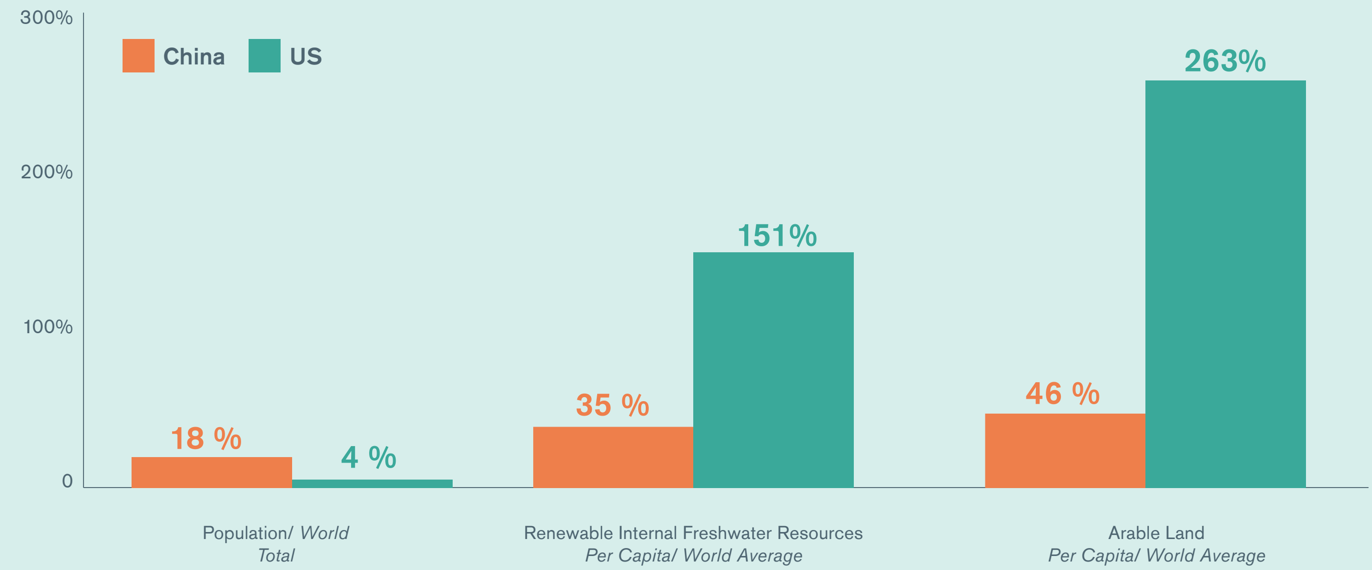
China's Net Energy Imports

TJ thou



Source: IEA, Enodo Economics

US-China Resource Comparison



Source: Enodo, Economics, WB

"Our objective should be to achieve free but secure trade," US Treasury Secretary Janet Yellen said in April 2022.[19] ***"We cannot allow countries to use their market position in key raw materials, technologies, or products to have the power to disrupt our economy or exercise unwanted geopolitical leverage...Favoring the "friend-shoring" of supply chains...will lower the risks to our economy. "***

The US is concerned that it is overly dependent on China for the production of certain goods – rare earths, pharmaceuticals, and a slew of manufactured products. It is also dependent on Taiwan, which China regards as a renegade province, for the supply of advanced semiconductors.

> China, however, is concerned that it's overly reliant on commodity, food and advanced technology imports from the US and its allies, and that in a period of conflict it would be vulnerable to supplies being cut off.

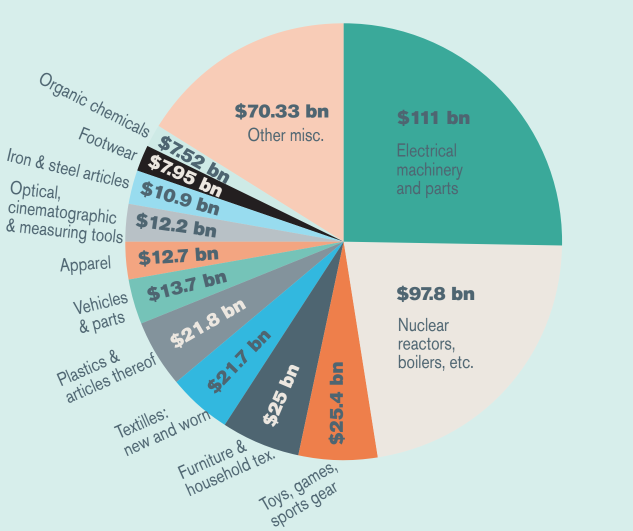
The US already restricts China's ability to source advanced microchip technology. Beijing is also wary that even imports from friendly nations might be liable to disruption if they're transported to China via sea lanes controlled by the US or paid for in dollars.

"It is necessary to optimize the ability to guarantee overseas resources," China's top leader Xi Jinping said in a speech to the Central Economic Work Conference in December 2021.[20] ***"It is necessary to...strengthen energy and resource cooperation with countries on the premise of effectively preventing foreign investment risks, and expand our interests in high-quality overseas resources."***

The need to buy key commodities from politically reliable sources has taken on additional significance following Russia's invasion of Ukraine. As a result of Western sanctions – as well as decisions made by individual Western firms – Russia has been cut off from many of the imports its economy needs to function. Notably, Australia banned sales of alumina to Russia, having been the source of almost a third of Russia's alumina imports in 2021. Meanwhile, Anglo-Australian miner Rio Tinto said that it would no longer provide bauxite to its refinery in Ireland, a joint venture it has with Russian aluminium giant Rusal.[21]

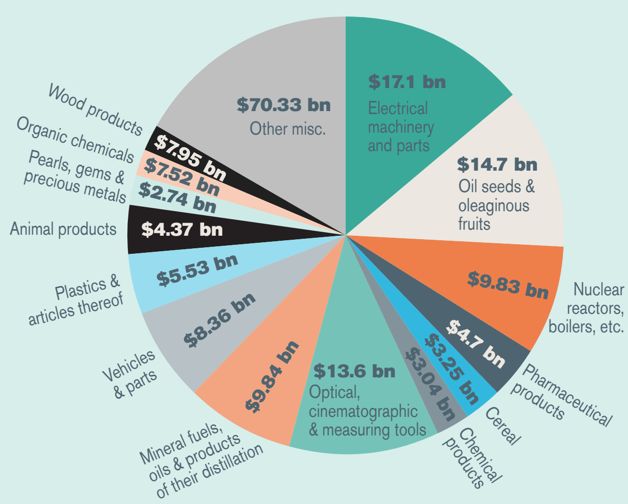
China is wary that one day it might be cut off from resource imports from countries like Australia, with potentially devastating effects. For example, China imported 76%

Exports from China to US, 2020



Total: $438 bn

Exports from US to China, 2020

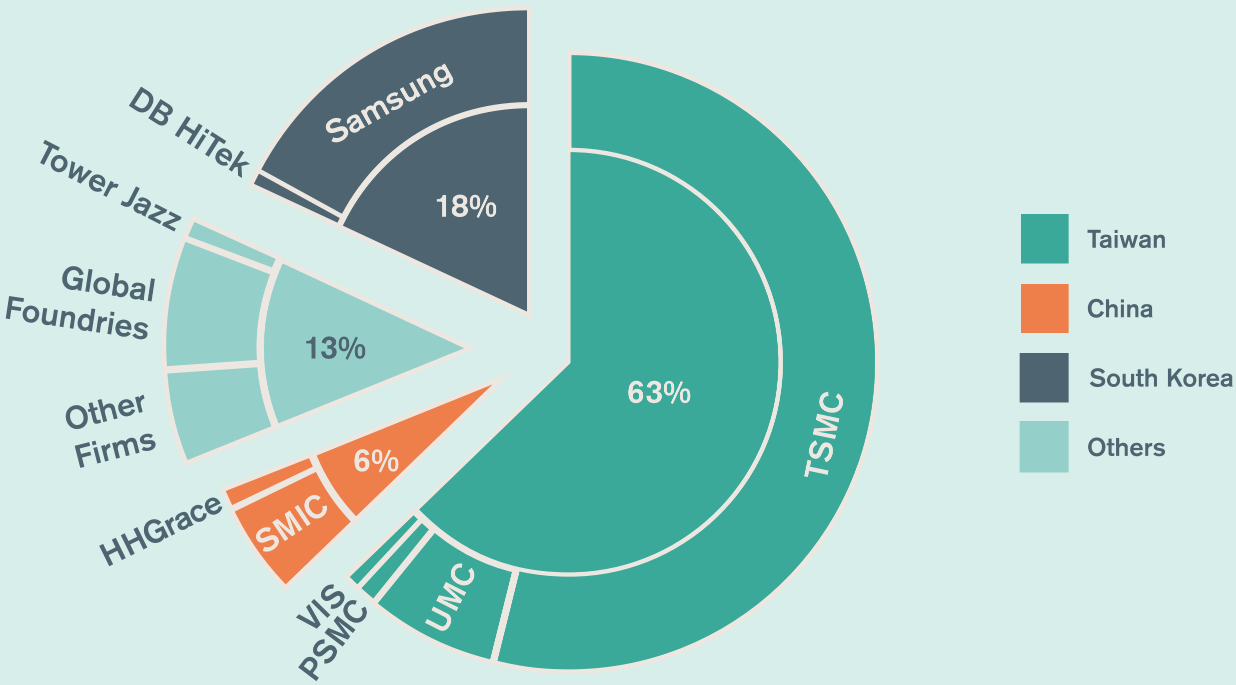


Total: $122 bn

Source: oec.world

Semiconductor Contract Manufacturers by Market Share

Total foundry revenue stood at $85 bn in 2020



of its iron ore needs in 2021, amounting to more than 1.12 billion tonnes. Almost all of that came from two countries – Brazil and Australia – and Australia is a key part of the US alliance system.

In June 2022, the China Iron and Steel Association (CISA) said that it wanted to roughly quadruple the amount of iron ore produced domestically, and quadruple the amount of scrap steel recycled each year by 2025.[22] But additionally, it wants to double to 200 million tonnes the amount of iron ore sourced from overseas mines in which Chinese companies hold equity, the richest of which are in Africa.

The desire to secure supply applies to food and energy as well as metals. Whether China is able to realize such goals remains to be seen.

Freeing BRI from dollars

However, ensuring the security of imports requires more than just investment in mines. Rather, it needs China to build relationships with other countries that can endure periods of stress. In essence, it requires an economic sphere of influence. Ultimately, it may require a military sphere of influence as well, but for now China does not envisage providing its partners with security guarantees.

> China's main tool for building a sphere of influence is the Belt and Road Initiative (BRI).

While infrastructure investment gets most of the attention in discussions about the BRI, China's efforts to build closer industrial and trade relationships with BRI member countries go far further than that. Matters under the BRI umbrella include the promise of free trade agreements, central bank currency swaps, access to China's satellite and submarine cable networks, student exchanges, and professional training.

All of these things can occur without RMB internationalization.

> But China's engagement in the region would be far more sustainable and effective if BRI countries were willing to transact in yuan.

BRI porjects have primarily been funded with dollars, but in recent years Beijing has become wary of deploying foreign currency resources for overseas infrastructure investments. Foreign currency loans made by China Development Bank – which initially led funding efforts for BRI projects – peaked in 2016, then declined.

Funding BRI projects with dollars – a currency over which Beijing has no control and can't issue – is unsustainable for Beijing. Only once BRI nations are willing to accept yuan will China have the freedom to deploy resources on projects without having to worry about the availability of dollars, the Fed's monetary policy decisions and US oversight.

Additionally, truly bringing other countries into China's economic orbit requires financial integration, and that is only possible once they start using yuan. If the yuan becomes Asia's regional currency, countries that use it will find their interests are more closely tied to China's.

Were the yuan to become Asia's reserve currency, with firms not only using the yuan for trade but also borrowing in it, Beijing would be responsible for providing a public good – i.e. for maintaining a stable currency zone, and for administering monetary policy in the interests of the region. Foreign firms would turn to Shanghai and the Greater Bay Area in southern China as places to raise money – by issuing bonds and selling shares – and for financial services like trade finance, insurance, and wealth management. And it would make Beijing – rather than Washington DC or Tokyo – the capital to which a government in financial distress would turn for support.

For China to realize greater economic security, the yuan needs to play a far greater international role. The yuan can't drive the process – China also needs to achieve much closer economic and financial integration with BRI countries. However, it's essential for the long-term success of China's geopolitical ambitions.

2.5 Great Power Ambitions

At the heart of Xi Jinping's "China Dream" is a vision of the great rejuvenation of the Chinese nation, one that leads to China reclaiming what it sees as its rightful place at the top of the global order. Beijing believes that the economic and political difficulties currently facing the US present an ideal opportunity for China to realize its great power ambitions and shape the world according to its values.

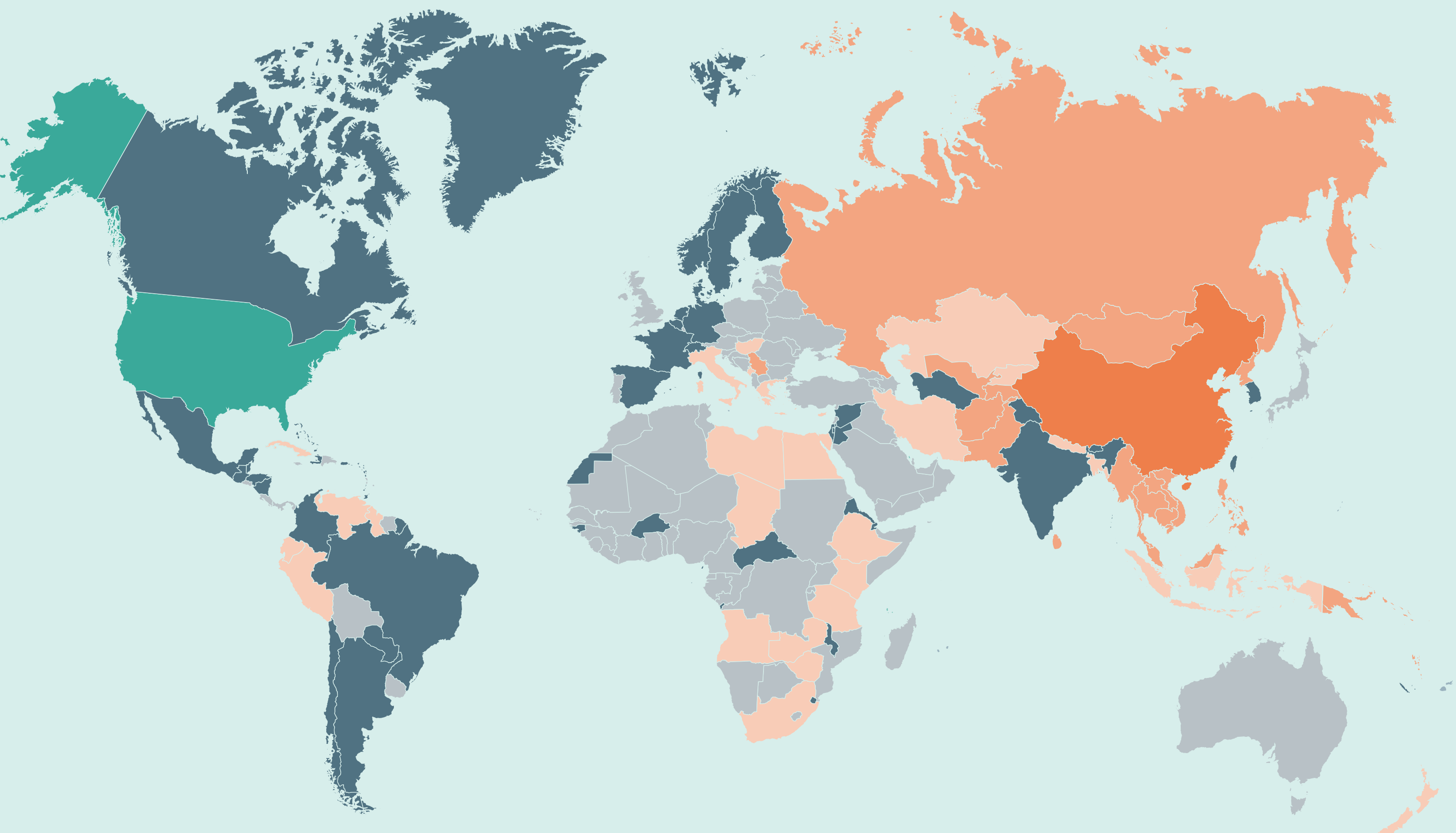
The Belt and Road Initiative

The Belt and Road Initiative (BRI) seeks to forge a global network of physical, digital and trading links with China at its centre.

149 Countries

BRI
41% of world GDP in 2021
64% of world population in 2021
67% of world population forecast for 2050

BRI ex-China
18% of world GDP in 2021
46% of world population in 2021
53% of world population forecast for 2050



Enodo Economics has assessed the likelihood of each BRI country joining China's sphere of influence and divided them into three groups: high, medium and low.

High
4.8% of world GDP in 2021
12% of world population in 2021
12% of world population forecast for 2050

Medium
9.8% of world GDP in 2021
17% of world population in 2021
19% of world population forecast for 2050

Low
8% of world GDP in 2021
17% of world population in 2021
23% of world population forecast for 2050

Non-BRI countries

US

Source: China Belt and Road Network

Beijing sees the US in the past few years as being in terminal decline, the result of excessive debt, economic mismanagement, costly military adventurism, a dysfunctional political system, and social unrest.

That makes the global status quo inherently unsustainable, thereby creating the conditions under which the world will be willing to accept alternatives to the dollar-led order.

The idea is best encapsulated by a phrase that's gained currency in official circles in recent years: the East is rising, and the West is in decline.

China feels that the US is deliberately working to prevent it from assuming influence comparable to its size and material wealth – by excluding it from the Trans-Pacific Partnership (which the US eventually declined to join as well); by barring some Chinese tech firms from buying US components; and by threatening to evict Chinese firms from US stock markets.

Furthermore, the US pivot to Asia, and institutions like the Quad – a loose security arrangement between the US, Japan, India, and Australia – and AUKUS – a trilateral security pact between Australia, the United Kingdom, and the United States – are viewed in Beijing as explicit measures to contain China.

Importantly, China believes that the US will never accept its communist system as being on an equal footing with that of America and other liberal democracies.

“***Against the backdrop of the decline of the West and the rise of the East, confrontation between major powers is unprecedented and we need to focus on responding to containment and suppression from the outside,”*** General Wei Fenghe, China's defense minister, said in March 2022.[23]

Competing visions of a global order

China wants to change the global governance infrastructure so that it better accommodates China's interests. To that end, it's pitching the developing world on the idea that there is an alternative to the US-led order. In the words of US Secretary of State Antony Blinken, the US order is a:

“***Rules-based international order – the system of laws, agreements, principles, and institutions that the world came together to build after two world wars to manage relations between states, to prevent conflict, to uphold the rights of all people. Its founding documents include the UN Charter and the Universal Declaration of Human Rights, which enshrined concepts like self-determination, sovereignty, the peaceful settlement of disputes. These are not Western constructs. They are reflections of the world's shared aspirations.”***[24]

Beijing's critique is that this order has failed developing nations, many of which were colonial possessions when it was put in place. Its focus on human rights and democrat-

BOX 2.2

The Community of Common Destiny for Mankind

The Community of Common Destiny for Mankind (人类命运共同体) is billed as an alternative to a US-led global order in which a handful of states take decisions affecting the whole world based on Western values, ignoring alternatives. As such, it is an order that in Beijing's eyes is unfit for purpose.

The "Community of Common Destiny for Mankind", by contrast, is a model that is inclusive and tolerant of political and cultural diversity. It abjures hegemonism, colonialism and interference in the internal affairs of other states. It rejects the imposition of political and ideological systems or the establishment of spheres of influence.

Shunning the proposition that globalization and modernization must equate with Westernization, it offers the Chinese way of development as something for others to consider while emphasizing that each state should develop in accordance with its own national conditions.

The "Community of Common Destiny for Mankind" depicts a world in which the legitimacy of China's political system is accepted and its core interests respected. However, the idea is not a recipe for global Chinese hegemony along US lines.

It assumes China to be a morally superior country concerned about the well-being of all but with no aspirations to be the world's policeman. Instead other states are expected to manage their own security with technical and other assistance from China. Critical in this context is the Belt and Road Initiative, which is designed to forge a global network of physical, digital and trading links with China at its centre.

Xi Jinping used the phrase in his speech to mark the opening of Belt and Road forum in 2017, and in 2018 the concept was added to the Constitution of the People's Republic of China, as a core value driving the CCP's international relations.

ic governance means that countries with different systems of governance – and different priorities – don't have an equal voice. The US is depicted as being motivated by narrow, selfish concerns, its politics dominated by special-interest groups.

China's alternative is what Xi calls the Community of Common Destiny for Mankind, which envisions a global order that is tolerant of political cultural diversity, abjures interference in the internal affairs of other states, rejects the primacy of any given ideological system, and recognizes that the path of economic development is dependent on national conditions. It is a world in which the legitimacy of China's political system will be accepted, and others will respect Chinese core interests, which will take precedence over customary international law.

Under Xi's leadership, China's Communist Party has abandoned Deng Xiaoping's dictum to "hide its strength and bide its time". At the 19th Party congress in 2017, Xi heralded the dawn of a "new era" for China.[25]

> ***The Chinese nation … has stood up, grown rich, and become strong – and it now embraces the brilliant prospects of rejuvenation … It will be an era that sees China moving closer to center stage and making greater contributions to mankind."***

In official Chinese circles there's a widely held belief in the inevitability of China's rise.

> ***Today's world is going through great changes unseen in a century,"*** Chen Yixin, secretary-general of the Central Political and Legal Committee, said in January 2021.[26] ***"But the times and trends are on our side."***

Xi sees himself as destined for greatness. Moreover, he is on the cusp of securing an unprecedented third term as general secretary of the Chinese Communist Part (CCP) in the fall of 2022. However, bipartisan political support in the US to counter China's great power ambitions have contributed a sense of urgency to Xi's ambitions.

"China's re-ascendance to the top of the pyramid of world power seems a more pressing goal under Xi than ever before," Nadege Rolland, senior fellow for political and security affairs at the National Bureau of Asian Research, wrote in her January 2020 report, China's Vision for a New World.[27] ***"The regime's growing impatience about the gap between China's material power and its authority in and control over international affairs is palpable."***

The Taiwan conundrum

Decoupling from the dollar is made more urgent by Russia's invasion of Ukraine, and the potential for the US to deploy financial sanctions against China over Taiwan. Were it not for Taiwan it would be easier to envisage a peaceful Sino-US contest. Taiwan makes it more likely that the struggle will result in a Thucydides Trap – the historical tendency towards war, first identified by the Greek historian and general, when an emerging challenger threatens to displace the incumbent great power as international hegemon.

Rational counsels will argue against a hot war, as neither China nor Taiwan has a devastating military advantage and the practicalities of invading the island are daunting. But the risks are not just a matter of logical calculation: as Thucydides also observed, the drivers of war are fear, honor and advantage.

> For China the recovery of Taiwan is as much as anything a question of morality and national prestige, while for the US its willingness and ability to defend Taiwan are critical to maintaining its status as the leading global superpower.

The US has made it clear that any attempt by China to change Taiwan's status quo by force will have severe repercussions and that it will continue a close engagement that includes the provision of weapons, military training and diplomatic support. Xi Jinping, while maintaining the position that China aspires to peaceful reunification, has also made clear that the great rejuvenation of the Chinese nation cannot be completed until Taiwan has been reunified with the mainland.[28]

What does this mean for the yuan?

Ultimately, China's efforts to forge a new order that better accommodates its interests must involve decoupling from the dollar and establishing an alternative monetary regime and financial system. By definition, China can't claim to be a great power – or to claim independence from the US-led order – if it continues to rely on the dollar for trade, foreign borrowing, and the pricing of energy and commodities. Still, greater use of the yuan will, by necessity, accompany greater Chinese influence.

Currency internationalization is to a large extent the result of the rise of great powers rather than the core tool in their rise," Liu Yuanchun, vice president of Renmin University of China and academic advisor to the State Council, wrote in July 2021.[29] ***"Changes in international politics, military and world order are often more influential than changes in economics and trade."***

Chinese officials generally don't talk about China's currency ambitions in the context of challenging the prevailing global order. That could be a deliberate decision to keep a low profile given the issue's sensitivity.

Former PBoC governor Zhou Xiaochuan said as much in fairly cryptic remarks he made about RMB internationalization in August 2018.

"First, keep a low profile. The internationalization of the renminbi is not our own decision. The key is whether market participants are willing to use the renminbi," he said.[30] ***"Hence, I think that the tune should not be sung too high…If the tune is sung too high it will cause unnecessary speculation."***

The currency and national pride are inextricably linked.

Popular nationalist sentiment has enabled China's push for RMB internationalization. As Di Dongsheng of Renmin University in Beijing puts it in a chapter in the book The Power of Currencies and Currencies of Power:

Great powers have great currencies, and a solid currency helps to build up power. The People's Republic of China is gradually becoming a great power and the renminbi is part of the grand strategy to accomplish this rise…On systemically important matters such as the currency, China's policies are not a function of short-term, purely economic interests; they are the result of a series of long-term political and strategic considerations that aim to protect and expand the power of the ruling party." [31]

The PBoC's focus on RMB internationalization allowed the discussion about currency reform to be framed in the context of aspirational political goals, such as power and prestige. At home strong vested interests opposed exchange and interest rate reform in favor of the status quo of financial repression we described earlier. As you will see later, this strategy was to a significant extent successful. It also explains why China's turn inwards towards industrial self-sufficiency under Xi Jinping has also coincided with unprecedented financial sector opening up.

Importantly, Xi has redefined overall economic development within an all-encompassing concept of national security which trumps all other considerations, including growth.

His focus has been on pre-empting security challenges rather than dealing with them once they arise. He is looking to national security and ideology, not growth and pragmatism, to realize his "China Dream".

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3 What does China want to achieve with RMB internation-alization?

Wilson Center

3.1 Introduction

China's aim in internationalizing the yuan is not to dethrone the dollar as the main global reserve currency but to help bring about a more diverse – and hence more stable – international monetary system.

> But the Communist Party has a further goal: a yuan that is widely used outside China for trade and investment will help Beijing carve out its own geopolitical sphere of influence in Asia and beyond.

And because the yuan would be the pre-eminent currency in that bloc, just as the dollar dominates America's sphere of influence, China's monetary policy and financial system would carry great regional clout.

However, establishing the yuan as a regional reserve currency, let alone as a global currency, is easier said than done. It is a task that will take decades, not a few years. Chinese officials themselves have never expected progress to be smooth.

Sure enough, internationalization has at times taken a back seat to other policy considerations, such as domestic economic and financial stability. As a result, the yuan's share of international payments and central bank reserves is still small. But there are signs that shifts in Beijing's approach to internationalization might speed up the process in the near future.

3.2 The Goal

Given the various motivations driving China to decouple from the dollar, it's necessary to ask: what is Beijing's ultimate goal? Assuming Beijing is one day able to realize its ambitions fully, what would the global financial and monetary landscape look like?

"Expanding the cross-border use of RMB" has been state policy since its inclusion in the 12th (2011-2015) five-year plan. However, China has never articulated a clear vision for the end goal of RMB internationalization. It's widely supposed – particularly in the US – that China's ultimate ambition is to displace the dollar as the leading global currency. Chinese officials and commentators routinely deny that is the aim.

> ***We do not believe at all that the renminbi will someday replace the dollar as the predominant world currency,"*** Fudan University professor Sun Lijian said in 2021. ***"If the dollar alone cannot perform the role of an anchor, the renminbi, along with the Japanese yen, can also do the job, acting as a stabilizing factor in the international currency system."*** [1]

Policymakers present RMB internationalization as a global good which will help correct the current imbalance in the world economy whereby in 2021 the US accounted for 24% of nominal output but provided 60% of reserve assets.

RMB Internationalization Through China's Five Year Plans 2011 to 2025

	12th Five Year Plan (2011–2015)	13th Five Year Plan (2015–2020)	14th Five Year Plan (2021–2025)
RMB Internationalization	**Expand** the cross-border use of RMB	**Steadily promote** RMB internationalization	**Cautiously promote** RMB internationalization
Capital account liberalization	**Gradually** realize RMB convertibility under the capital account	Realize RMB convertibility under the capital account in an **orderly manner.**	Create **mutually beneficial** cooperation based on free use of RMB
Other key aspects	**Interest and exchange rate** reform	**Capital market** opening and reform	**Payment and financial system** security

"The internationalization of the renminbi can help diversify the international monetary system and can help reduce the dollar's burden as the major international reserve currency," the PBoC's Zhou Chengjun wrote in March 2021. ***"The provision of more diversified international reserve assets can better support…[monetary authorities] to achieve their goals."*** [2]

> It is reasonable at this stage to take at face value China's denial that it wants the RMB to become the apex currency.

But the same is not true when it says its purpose is to achieve a better-run global monetary system. For all its grand statements defending globalization, including Xi Jinping's speech at the Davos gathering in 2017, Beijing is squarely focused on carving out its own financial sphere of influence, prioritizing its own national interests to the detriment of others where necessary.[3]

China's own financial sphere of influence

At present, Beijing envisions a multi-currency order in which the yuan is a global currency alongside the dollar and the euro. But importantly, it also sees the yuan as a dominant currency that anchors a currency bloc. Such a bloc wouldn't necessarily be geographically contiguous, but a grouping of countries that fall under China's strategic influence and are capable of supplying China with what it needs to be independent from the US-led Western sphere of influence.

> China views Asia as its natural sphere of geopolitical influence. But Asia is crucial, too, in the context of the Sino-US

contest in the financial arena, as it holds a sizable part of the global savings pool.

On the surface, China does not need to attract foreign savings. It has a domestic savings rate of about 45% of GDP. As we explained in Section 2.2, China's high savings rate – the result of financial repression at home and other factors – was initially a good thing. It enabled China to expand its economy rapidly, increase its share of global exports and boost national wealth, without running into balance-of-payment crises.

But a new consensus has emerged since the GFC which holds that China's economic future lies in greater consumption, and so savings must decline as a share of national income. Moreover, the country's financial markets must be overhauled so they are better able to intermediate not only China's savings but also those of countries in its sphere of influence. We will expand on this in Chapter 7.

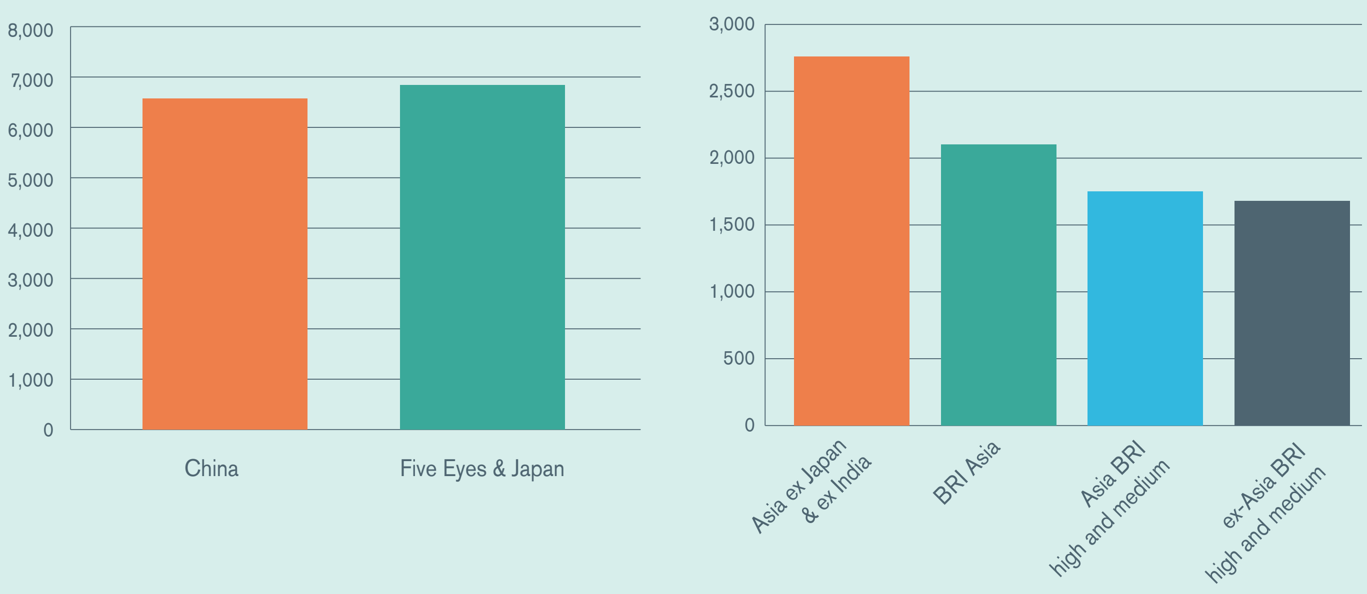
China and the core of the US alliance network (which we take to include Japan plus the members of the Five Eyes intelligence grouping of the US, Canada, the UK, Australia, and New Zealand) have roughly equal annual flows of gross savings. So, in order to have a financial sphere of influence with the heft that could counter the dollar-led one, China has to focus on areas in which the US alliance carries less clout, specifically Asia ex-Japan and ex-India.

Our analysis suggests that those Asian countries which are members of the BRI and have a high and medium probability of being in China's sphere of influence have annual gross savings flows that account for almost two-thirds of the Asian total.

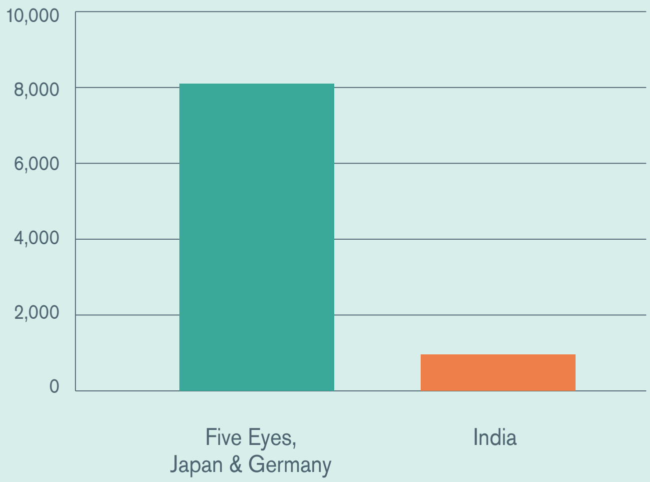
Ideally, Beijing would like to have all of Europe in its geopolitical sphere of influence too. The key country in the euro area for China, both from a geopolitical perspective but also as the biggest economy with a sizable savings pool, is Germany. Moreover, Chi-

The Battle for Global Savings

Gross domestic savings, $ bn



Source: Enodo Economics, CEIC



Source: Enodo Economics, CEIC

The Five Eyes is an intelligence grouping of the US, Canada, the UK, Australia, and New Zealand. Enodo Economics has assessed the likelihood of each BRI country joining China's sphere of influence and divided the BRI countries into three groups: high, medium and low.

na has been Germany's biggest trade partner for years, and German firms are heavily invested in China. During the era of former chancellor Angela Merkel both China and Germany invested deeply in forging close economic ties, underpinned by strong political support. Merkel visited China 12 times during her time in office. No other Western leader nurtured such a close relationship with Beijing.

> Before the Ukraine war, China would have had a reasonable chance of winning Germany over to its side, but this seems extremely unlikely now.

Russia's invasion of Ukraine has pushed Berlin's new coalition to take a firm stance against President Vladimir Putin, despite Germany's reliance on Russian energy. Germany is also slowly but surely realizing that a national industrial strategy based on synergy with China is headed toward a dead-end as Germany has lost out to China's manufacturing prowess. This points to a Germany now more willing to stand up to China.

Latin America and Africa are important for Beijing because they provide energy, metals and food that China needs to forge a self-sufficient sphere of influence. But they offer very little from a financial point of view. The significance of the Middle East – Saudi Arabia and the UAE – is, of course, oil and, to a smaller extent, saving flows.

China's vision of a stable monetary order

Assuming the yuan rises to become an anchor currency within its sphere of influence, China's monetary policy and financial system will dominate. Europe experienced a similar development when, after the end of dollar–gold convertibility in the early 1970s, the Deutsche Mark started to act as the region's anchor currency and the Bundesbank took the upper hand in European monetary policy.

Understanding how China intends to run its monetary policy and financial system is important not only to identify which countries might find them appealing, but also to figure out how they will impact the dollar-led sphere of influence and interact with the rest of the world.

> The institutional design of China's monetary policy in the context of the Party-state is very different from that of developed economies.

The institution that has ultimate authority to determine China's exchange rate and interest rate policies is the State Council, or cabinet. The PBoC executes monetary policy but, unlike Western central banks, it's not independent.

The high-level objectives of monetary policy in China are set out in the founding legislation of the PBoC, ratified by the National People's Congress. The PBoC Law prescribes that the ***"aim of monetary policies shall be to maintain the stability of the value of the currency and thereby promote economic growth"***.[4]

The law also states: ***"The People's Bank of China shall report its decisions to the State Council for approval concerning the annual money supply, interest rates, foreign exchange rates and other important matters specified by the State Council before they are implemented."***

The State Council and the PBoC have a mutual understanding as to how this arrangement works, although these details are not made public. In short, the PBoC is the conduit for monetary policy, but doesn't determine it. As the central bank, it does, of course, have more influence on monetary matters in the State Council than other organs of state.

Another key aspect is that because the overall macroeconomic stance is set by the State Council, monetary policy is more closely coordinated and enmeshed with fiscal policy than is usual in the West.

> As Yi Gang, the current governor of the PBoC, explained, ***"To maintain currency stability has two meanings – internally, to keep prices stable; and externally, to keep the exchange rate stable, at an adaptive and equilibrium level."*** [5]

But that's certainly not the only monetary policy mandate or the PBoC's only responsibility. The bank has multiple objectives. The goals change over time, and the changes are not necessarily announced as they happen.

During its 2017 Work Conference, for instance, the PBoC called for monetary policy to strike a balance among different policy objectives—stabilizing economic growth, promoting economic reform, adjusting economic structure, improving household welfare, and preventing financial risks. [6]

In 2018, in his speech commemorating the 40th anniversary of China's reform and opening up, Yi stated that, ***"Safeguarding economic and financial stability shall be deemed as an important target at all times."***[7]

China has no intention of changing this set-up, which implies that ultimately the credibility of its financial and monetary system rests on the credibility of the Chinese Communist Party to deliver stability and growth.

The Party is pitching its system as an alternative to the US-led global financial order, discredited by the GFC. It hopes that by providing economic and financial stability it will appeal to those countries disappointed with America's leadership.

China's current monetary policy framework, like the economy overall, could best be described as hybrid - a hybrid quantity and price system, but one in which administrative guidance remains key. Just as the PBoC has multiple objectives, it has multiple instruments – both quantity-based and price-based – to execute monetary policy. We will trace Beijing's progress towards market-based interest rates in Chapter 5.

Importantly, the Chinese authorities have been pragmatic in their approach to policymaking. As Yi Gang said, ***"Price control sounds like a fine tool, but sometimes its efficiency is unsatisfactory and may not achieve regulatory goals."*** [8] Consequently, since the GFC, the PBoC has conducted monetary policy through quantity and price controls, while simultaneously deploying macroprudential policy to maintain financial stability and forestall systematic financial risks.

Macroprudential policy has become a focus for many economies and multinational organizations in the wake of the GFC. Beijing's approach differs in its centralization of power, wide scope of activities, determination to identify financial risks, and its bold use of regulation to pre-empt those risks from precipitating a crisis.

China's financial markets were supervised for a long time by a multitude of regulators, which used to lead to turf wars and regulatory arbitrage. But under Xi Jinping, financial policymaking has become increasingly integrated and directly subordinate to the Party.

The Hierarchy of Financial Market Supervision in China

Enodo Economics

In July 2017, the State Council set up the Financial Stability and Development Committee (FSDC) to enhance the PBoC's responsibilities concerning macroprudential management and prevention of systematic risks. The committee is also tasked with ensuring inter-agency coordination and a better alignment of monetary, fiscal, and financial policies. The FSDC is chaired by Xi Jinping's top advisor on economic and financial issues.

In March 2018, the China Banking Regulatory Commission (CBRC) and the insurance regulator were merged into the CBIRC. In the reorganization, the PBoC largely regained control of financial regulation as the CBIRC's role was narrowed to that of a supervisor of banks and insurance companies.

In 2018, as part of reforms to Party and state institutions, the third plenary session of the 19th CCP Central Committee stipulated that the PBoC should be responsible for drafting important laws and regulations concerning the banking and insurance sectors and designing the system of prudential regulation.

BOX 3.1

The Scope of the PBoC's Macroprudential Policy

Beijing began studying measures to strengthen macroprudential management in 2009. The construction of a macroprudential policy framework was included in the 12th Five-Year plan (2011-2015).

Initially, there was a narrow focus on curbing a boom in bank loans and on slowing house price rises. But the scope of macroprudential policy – the requirements, indicators and methods the PBoC uses to enforce discipline – has expanded and evolved over time.

In 2015, the central bank brought foreign exchange liquidity and cross-border capital flows under the umbrella of macroprudential management to guard against attendant risks.

In 2016 the PBoC established a macroprudential assessment (MPA) framework to monitor financial risk systemically; financial institutions must meet a range of requirements, including capital adequacy ratios, asset quality indicators, and measures of liquidity.

And the PBoC has zoomed out from what was a narrow focus on bank loans to monitor credit more broadly. Over time it has incorporated off-balance sheet financing, interbank negotiable certificates of deposit, and green finance into the MPA. The central bank has also included the payment and clearing system in its macroprudential policy framework.

The PBoC uses the MPA to implement its financial sector reforms. For example, in August 2019 it replaced its lending benchmark with the Loan Prime Rate (LPR), giving the market a bigger role in setting lending rates. To ensure its lead is followed, the PBoC said it would include in the MPA an assessment of how banks apply its LPR guidelines .

The central bank assigns a score to each financial institution based on a formal evaluation of its compliance with MPA requirements every quarter. Banks which fail to meet the PBoC's MPA standard may face penalties, while those that perform well can be rewarded with preferential treatment.

For example, the central bank can charge higher interest rates to banks with inadequate MPA scores when they borrow from the central bank's short-term or medium-term lending facilities, or it can lower rates on the reserves these banks hold with the central bank. The PBoC can also deny these banks access to specific funding for a period of time or withdraw their primary dealer status.

> Since the GFC, once Chinese policymakers have identified financial risks, they have taken bold, pre-emptive actions, albeit with mixed results.

Their measures ranged from reining in the proliferation of shadow banking, which started in 2010, to stemming the explosion of margin finance that led to the equity market debacle in 2015. The PBoC also acted to limit access to finance by real estate developers, with the introduction of the "three red lines" in 2020.

This determination to tackle risks head-on comes from the very top. In the report to the 19th CCP congress, General Secretary Xi Jinping noted that China must fight three critical battles, the first of which is to take tough steps to forestall and defuse major risks. The Party believes that if financial imbalances are left unchecked they would pose not only an economic but also a political threat.

"If these problems had been left unattended, they would certainly have bred systemic risks, produced disruptive effects and severely endangered the sustainable economic development and China's political security," said Guo Shuqing in 2020.[9]

3.3 The Approach and Pace

Achieving the goal of a regional reserve currency is a long-term project. There's no tried-and-tested roadmap that can assure success. China is the first country to pursue an active, consistent state strategy to internationalize its currency, so there is no precedent that it can follow.

"There are actually no clear rules for currency internationalization," PBoC Governor Zhou Xiaochuan wrote in 2018.[10] ***"The internationalization of the renminbi is not going in a straight line, but sometimes it goes faster and sometimes it goes slower."***

Some context is useful. Germany and Japan had resisted the internationalization of their currencies until the mid-80s, viewing it more as a ***"burden to be avoided than a privilege to be sought".***[11] As both countries' financial markets developed, policymakers began to regard internationalization more positively. In the mid-80s Japan was also under US pressure to liberalize its financial sector and internationalize the yen to correct for yen undervaluation and rebalance its economy.

China's situation today may be different, but Chinese academics have looked at Japan's experience for relevant lessons to help them craft a strategy that suits China's economic and political conditions. They have also commonly blamed forced liberalization of the yen for Japan's bubble and its subsequent bursting, which brought on decades of stagnation. But there's a big difference: while Japan and the US have been allies since WWII, China has always perceived the US as a strategic adversary.

This fact, together with using the external commitment of RMB internationalization to overcome domestic resistance to financial reforms, as we discussed in Chapter 2, has been a powerful driver shaping Beijing's approach.

BOX 3.2

Lessons for China From Japan's Internationalization of the Yen

Japan tried and ultimately failed to turn the yen into a major global currency. As China so far has largely followed Japan's route map in its own currency internationalization quest, a closer look at its neighbour's experience is instructive.

As in China today, financial repression was at the heart of Japan's development model. Banks, under the thumb of the Ministry of Finance, could not freely set interest rates on deposits. And if they had had the choice, many Japanese would have invested part of their savings overseas. Under pressure from the US, which was concerned by its widening current account deficit with Japan, Tokyo set out to internationalize the yen in the 1980s by first liberalizing the country's financial sector and opening the capital account. China is taking similar, halting steps on both fronts, but is making slower progress than Japan had made by the mid-1980s.

To take advantage of the liberalization, foreign banks and securities houses rushed to set up shop in Japan, as they have done in China, while Japan's banks expanded massively abroad. By the early 1990s the world's five biggest banks were Japanese. Today the five largest are Chinese. By 1990 Japan was the world's second-largest economy. Today China ranks second.

In retrospect, Japan's ambitions to internationalize the yen were doomed by the onset of a long, deep banking crisis triggered at the start of the 1990s by a property market collapse. Japan's share of global output and trade started steadily shrinking, as did the proportion of official currency reserves held in yen and the yen's share of global foreign-exchange transactions.

Is China, facing a property market slump of its own, destined to emulate Japan? What lessons can Beijing learn?

First, an array of conditions necessary for the yen to take off globally were in place. Japan had a big enough economy and trade sector; credible institutions; the rule of law; and an open, diversified financial sector with deep capital markets and ample foreign-exchange liquidity. In more than one of these areas, China has a long way to go to match Japan. And in any case, satisfying those criteria was not enough to turn the yen into a global currency.

Second, capital account liberalization by itself will not magically ensure that a currency is widely used internationally. Inertia is a powerful force. Commodities are still overwhelmingly priced and settled in dollars, as Japan learnt and as China is now battling to change. Japan needed to take more active steps to promote internationalization of the yen, for example by setting up yen swaps with overseas central banks and deepening the Tokyo market for short-term debt instruments favoured by foreign investors. Tellingly, China is undertaking a raft of initiatives to spur use of the yuan beyond its borders, including central bank yuan swaps and the BRI.

Third, the yen might have stood a better chance of becoming an international success if it had first become the dominant regional currency. But the big development gap in the 1980s between Japan and the rest of Asia hampered regional economic integration and hence greater use of the yen. The dollar, the invoicing currency of choice for Asian exports shipped to the US and Europe, remained unchallenged. Conditions today, with China an increasingly important source of final demand as well as being at the heart of dense regional supply chains, are more propitious for the yuan to establish itself as Asia's leading currency.

If Japan and China have one thing in common, it is that their experience underlines the immense difficulty of creating a widely used and trusted international currency.

Two steps forward and one step back; a trial-and-error approach

At the onset China's strategy was an experiment. The authorities did not expect it to progress smoothly. In another of Deng Xiaoping's famous phrases, Beijing advanced by "crossing the river by feeling the stones".

Xi Jinping, following in the footsteps of his father, Xi Zhongxun, who first recommended to Deng the creation of four special economic zones in Shenzhen, Zhuhai, Shantou and Xiamen, has relied on the proliferation of free trade zones as testing grounds for China's progress with RMB internationalization.

For example, in his keynote speech to the China International Import Expo in 2019, Xi said that China would ***"continue to encourage bold trials and experiments in pilot free trade zones… which will be the pacesetters in the opening up of China"***. [12]

> China is moving toward its goal slowly and deliberately.

It is taking its usual trial-and-error approach so that the process is not overly disruptive – and to ensure the authorities are able to maintain sufficient control. But the pace of progress has been driven as much by policy decisions as by market forces and external developments.

As you will see in Chapter 4, during Stage 2 of RMB internationalization (2015-2017), the shortcomings of the initial strategy were exposed. Turbulence roiled China's markets, prompting a pullback and a reassessment of how internationalization might best be achieved. Important though the goal is, internationalization at times takes a back seat to other policy considerations, such as domestic economic and financial stability.

External developments have also helped dictate the pace of Beijing's financial reforms. For over two decades continuous Western pressure on China to open up its financial markets achieved little, but US attitudes hardened markedly after Donald Trump came to power which compelled Beijing to speed up its efforts at achieving financial self-reliance.

> But progress toward internationalization isn't entirely in the hands of Beijing.

China's ability to decouple from the dollar will in large part be dictated by whether other countries become less willing to use the US currency.

Leadership is not something you can obtain by pursuing it. It will come through constant efforts to promote market principles, including the reform and liberalization of financial markets," Fudan University finance professor Sun Lijian said in a 2021 interview.[13] ***"Strong US economic growth and the high liquidity of US government bonds have raised the share of the dollar in international payments, and as a result the US has become the leader in the international financial system. It did not happen because the US desired it."***

Eschewing Western economic advice on the sequence of reform

Western advisors have routinely suggested that in order to promote RMB internationalization, China should first fully liberalize its exchange and interest rates as well as develop its financial markets. Only then should it open up the capital account.

"What is needed is a roadmap with a stronger and more flexible exchange rate, more effective liquidity and monetary management, with higher-quality supervision and regulation, with a more well-developed financial market, with flexible deposit and lending rates, and finally with the opening up of the capital account." That was the policy prescription offered in 2012 by the then head of the IMF, Christine Lagarde.[14]

> However, in defiance of Western economic orthodoxy, China's central bank has from the start held the view that there should be no strict sequence of interest rate reform, exchange rate reform and capital account opening. Progress in all areas should be coordinated and mutually reinforcing.[15]

China's central bankers challenge Robert Mundell's impossible trinity rule, which states that a country cannot have an independent monetary policy, an open capital account, and a fixed exchange rate at the same time. They also see limitations to the covered interest parity condition, which states that the interest rate differential between similar financial assets of the same maturity denominated in different currencies should be equal to the cost of covering the resulting currency risk in the forward market.

The PBoC argues that three factors limit the applicability of the impossible trinity rule: the size of the economy, the unrealistic absolutism of the rule, and a failure to account for macroprudential measures. Indeed, the US itself is arguably a partial exception to Mundell's rule. It sets interest rates independently, has an open capital account and does not officially peg the dollar to any other currency. But the US does work with other countries to allow them to informally peg their currencies to the dollar.

Why does the US not suffer adverse consequences? Because America does not need foreign exchange. The dollar is the leading reserve currency, so America can never run out of foreign exchange to pay for things. It can just print more dollars. This is what the French in the 1960s called the dollar's "exorbitant privilege". China's ambition is to follow in America's footsteps.

China's central bank also sees economies being in constant flux. The reality often is that capital is not completely free or regulated, and the exchange rate is not completely fixed or completely floating. In this way, countries can ensure the effectiveness of monetary policy with innovative control measures. We will explore the significance of this view later on in our discussion of China's e-CNY plans. Finally, the PBoC has argued that macroprudential measures can be used pre-emptively to counter the constraints implied by the impossible trinity.

The limitations of covered interest parity are seen again in the context of a large country like China, whose exchange rate is not determined entirely by the flow of arbitrage funds, but mainly affected by domestic economic and financial conditions. Moreover, Beijing regards the exchange rate that will prevail as a reflection of the power structure of international politics and as a tool to be used in achieving global economic and political arrangements that are beneficial to it.

> China's approach to RMB internationalization has not only been well thought-out, but also confident and pragmatic. Even so, Beijing is far from expecting progress to be fast.

3.4 The Timeframe

How long might RMB internationalization take?

It's impossible to say how long it might take for the yuan to become a regional or international currency, assuming it happens at all. In Chapter 4 we will assess how far the renminbi has to progress - in its share of international payments, its share of foreign reserves, its role as an invoicing and commodity-pricing currency, and so on - before effective internationalization is achieved. We will draw a historical parallel which should help us gauge what a realistic timeframe might look like.

But we end this chapter with a look at what the Chinese expect themselves. Commentary has been scarce to find but all our conversations have confirmed that this is a process expected to last at least a decade, if not much longer.

Zhang Ming, deputy director of the Institute of Finance & Banking at the China Academy of Social Sciences (CASS), expects the yuan to have surpassed the yen and pound to become the world's third most used currency – after the dollar and the euro – somewhere between 2030 and 2035.[16]

That would signal that the yuan was gaining traction. However, according to SWIFT, in June 2022 the pound accounted for only 5.96% of global transactions, and the yen for 3.01% (the yuan's share was 2.17%). All three currencies greatly trailed the dollar (41.16%) and the euro (35.55%).[17]

Hu Xiaolian, former chairman of China Exim Bank and State Administration of Foreign Exchange (SAFE) director, predicts that China will be a fully-fledged international currency by 2050.

By the middle of this century…the renminbi is expected to be widely welcomed and freely used around the world, and become a trusted international currency that serves global trade and investment," she wrote in June 2020.[18]

Wang Yongli, former vice president of Bank of China and a former board member of SWIFT, pointed to what that might mean. "By 2050, the yuan's share of international settlement [will be] 20%, and its share of [central bank] reserve assets should be around 30%, making it one of the most important international currencies," he wrote in February 2021.[19]

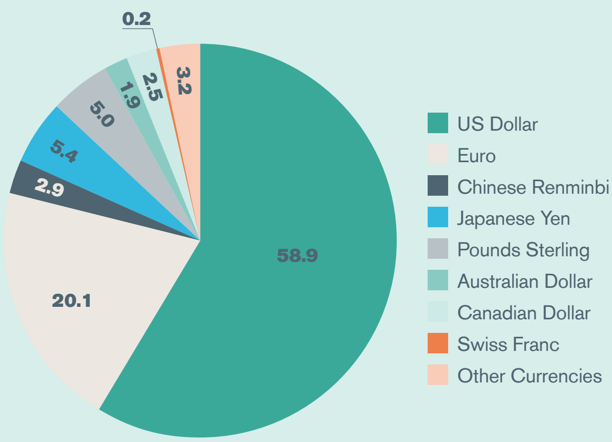
He suggested that by 2031, the yuan's share of global reserves should be more than 10%.

According to the IMF, in the first quarter of 2022 dollar assets accounted for 58.9% of central bank reserves globally, followed by 20.6% for the euro. The yuan's share was 2.9%.

Still, numerical targets don't encompass all that China wants to achieve. At the bare minimum, Beijing wants to be able to purchase key commodities using yuan, on its own payments platform, free from US oversight.

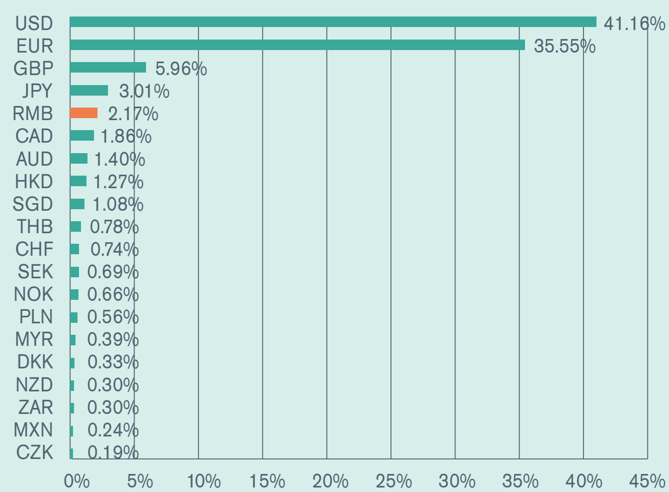
The RMB in Global Foreign Exchange Reserves and Payments

World Currency Composition of Official Foreign Exchange Reserves
Shares of the total, Q1 2022



Source: COFER

RMB's Share as a Global Payments Currency
June 2022



Source: SWIFT

> But it also wants the yuan to help advance its geopolitical ambitions and establish a sphere of economic security independent of the US.

Progress toward those goals has been slow. Beijing has been pursuing RMB internationalization since 2009 and still has little to show for it. However, Beijing's shifting approach might speed things up in the near future.

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4 RMB internationalization stages and progress

4.1 Introduction

Throughout most of China's reform era, there was little scope to use the yuan beyond the country's borders. Trade was denominated in dollars and other foreign currencies, which importers had to purchase from state banks. For everyone else – whether it be an individual or a firm – converting yuan into foreign currency was heavily circumscribed.

Beijing started to relax the restrictions in the late 1990s and early 2000s, when it began to encourage firms to "go out" and invest overseas. Then in 2009, the Party made RMB internationalization an explicit objective and codified "expanding the cross-border use of RMB" as state policy in the 12th five-year plan (2011-2015), as discussed in Chapter 3.

In this chapter we break down China's quest into three stages and take stock of how far the yuan has come in fulfilling the three functions of a reserve currency – as a store of value, as a medium of exchange, and as a unit of account.

> Progress has been patchy. That's not surprising. Achieving reserve currency status is a task for the long haul.

But it is striking that, although China's economy is now much bigger than Germany's, the yuan is used far less as a payment, invoicing and investment currency than the Deutsche Mark was when it established itself as Europe's currency anchor more than four decades ago.

The Party, then, still has a lot of work to do – if it continues to judge that internationalizing the yuan serves its and China's interests.

4.2 The Three Stages of RMB Internationalization

China's path toward RMB internationalization can be divided into three stages. Stage I (2009 – mid-2015) laid the foundations, making it possible to transact in yuan overseas and creating opportunities for foreigners to use the currency. During Stage II (mid-2015 – mid-2017), the shortcomings of the initial strategy were exposed, prompting a pullback and a reassessment of how best to proceed. Stage III (mid-2017-present) – the focus of this report – is oriented towards giving foreigners a reason, and not just the means, to use yuan.

Stage I (2009 – mid-2015): Two steps forward

During the first phase of RMB internationalization, China's authorities:

1. **Permitted RMB use in trade settlement:** In April 2009 Beijing approved a pilot scheme to allow the use of renminbi for invoicing and settling international trade; the program was expanded nationwide in 2011. As China was running a surplus on both the current and capital accounts, it sought to overcome the challenge of providing renminbi liquidity abroad by encouraging its use to settle cross-border trade transactions. It also aimed for imports paid in yuan to exceed exports.

2. **Allowed free RMB use in offshore markets:** Beijing developed an offshore market, initially in Hong Kong but later expanded to other international financial centers like Singapore and London. The offshore market gave foreigners somewhere to hold, buy, and sell renminbi and renminbi-denominated assets without Beijing needing to open up China's immature domestic financial system. Banks were encouraged to provide RMB trade credit overseas to facilitate trade settlement in yuan and help professionalize their development at home in the process.

3. **Promoted RMB inclusion in countries' FX reserves:** The PBoC allowed foreign central banks, sovereign wealth funds, and supranational institutions to hold yuan-denominated assets by granting them access to China's onshore interbank bond market. The PBoC sought to bolster the yuan's status as a reserve currency by lobbying for its inclusion alongside the dollar, euro, pound, and yen in the basket of currencies that make up the IMF's Special Drawing Right (SDR), a type of synthetic reserve asset.

4. **Allowed limited access to onshore markets:** China expanded foreign investors' highly regulated access to its domestic capital markets by launching the Renminbi Qualified Foreign Institutional Investors (RQFII) scheme (2011), and the Stock Connect program (2014). (We discuss both in detail in Chapter 7.) The Shanghai Free Trade Zone (FTZ) was launched in 2013 as a testing ground for capital account opening.

5. **Developed cross-border payments infrastructure:** China put in place the basic financial infrastructure necessary to ease the use of the yuan outside of its borders. Chinese banks built global networks of branches. The PBoC established bilateral currency swaps to supply foreign counterparts with yuan. A global system of RMB clearing banks was created. And the PBoC started developing the China Interbank Payment System (CIPS), which was partially launched in 2015.

> By most measures, as we will see below, the yuan made meaningful – if underwhelming – progress toward internationalization throughout this period.

However, in 2015 things changed, and those initial gains proved to have been built on an unstable foundation.

Stage II (mid-2015 - mid-2017): One step back

On 11 August 2015, the PBoC let the yuan fall by 1.9% against the dollar, followed by a further 1% the next day. The adjustment was part of efforts to introduce greater flexibility into the exchange rate regime, but the PBoC bungled the messaging and markets interpreted the move as a devaluation.

Faith in Beijing's ability to manage the financial system was already wavering. Debt had accumulated quickly since the GFC, fed by an explosion of shadow banking activities that the authorities seemed unable to rein in. Moreover, China's equity market crashed in the summer of 2015, creating a sense of crisis that was fed further by the devaluation.

Up until then, investors globally had anticipated that the yuan, which had appreciated fairly consistently since 2005, would continue to rise against the dollar. Suddenly, expectations reversed. Capital outflows surged and China's foreign exchange reserves declined by nearly $1trn by 2017 as the PBoC intervened to prevent further yuan depreciation.

It became clear that early progress toward RMB internationalization had been driven by foreigners' willingness to hold an appreciating currency and to seize arbitrage opportunities arising from differences between onshore and offshore yuan exchange rates and interest rates. We discuss this more in Chapter 6. As the yuan weakened, the accumulation of RMB assets offshore started to unwind and the volume of trade settled in yuan declined.

RMB internationalization entered Stage II as Beijing scrambled to contain the financial instability. During this phase, the authorities:

1. **Tightened capital controls:** Beijing began to worry that a lot of the money leaving the country as foreign direct investment amounted to capital flight in disguise. Chinese firms were snapping up more and more trophy assets abroad – soccer clubs, five-star hotels, firms in Hollywood – that nominally aligned with Beijing's desire to strengthen China's cultural influence, but clearly didn't serve the national interest.

   Meanwhile, with the yuan falling and the central bank running down its foreign exchange reserves, Beijing moved to limit capital outflows. The authorities restricted outbound direct investment and suspended some portfolio investment in overseas financial markets.

2. **Killed off onshore-offshore arbitrage:** The authorities became concerned that RMB trade settlement and finance were being used to exploit differences between onshore and offshore interest rates. The arbitrage was made possible by China's fast-growing shadow banking system. At the end of 2016, Beijing launched what it called a deleveraging campaign, which became a multi-year effort to de-risk China's financial system. Shadow banking shrivelled as a result of the campaign, thereby eliminating the conditions that had allowed the onshore-offshore arbitrage to develop.

Despite the crackdown, RMB internationalization still made some progress during the period. The IMF included the yuan in its SDR basket in 2016, giving central banks the green light to add yuan-denominated assets to their reserves. There was some incremental opening of China's financial markets to foreign investment. And the PBoC continued working on CIPS.

> However, the main legacy of the period is that it prompted Beijing to recalibrate its approach to RMB internationalization.

Stage III (mid-2017 – present): A new paradigm

In 2017, RMB internationalization assumed new urgency. Soon after President Trump took office in 2017, US policy on China became far more confrontational. Also that year Xi Jinping consolidated his power at the CCP's 19th Party congress, giving him the authority to make bolder policy choices. Meanwhile, the financial turmoil of 2015 and 2016 had passed, and Beijing was in a position to move forward with RMB internationalization.

The authorities realized that, while they'd given foreigners the opportunity and means to use the yuan during the earlier stages of internationalization, they hadn't given them a reason to do so. In the words of Zhang Ming, deputy director of the Institute of Finance & Banking at the China Academy of Social Sciences (CASS), "the yuan lacked a base of solid demand." He believes that's still the case.

> ***Whether it be trade settlement, financial transactions, or national reserves, there is not yet sufficient real demand for the yuan to support the sustainable development of its internationalization."*** [1]

Beijing's current strategy is oriented toward redressing that shortcoming. But before we look at Beijing's new paradigm for the promotion of the yuan as a global reserve currency in Chapters 5, 6, 7 and 8, we will evaluate the progress China has made so far.

4.3 RMB Progress 2009-2021: The Role of Money and Areas of Development

A global reserve currency is one that satisfies three conditions. It must be used internationally as:

1. A store of value
2. A medium of exchange
3. A unit of account

BOX 4.1

Different Definitions of an International Currency

We use the terms global currency, international currency and reserve currency interchangeably to mean a currency that is held in significant quantities by governments and the private sector and is commonly used in international transactions, investments and all aspects of the global economy.

We use the term anchor currency to distinguish a reserve currency to which other countries' currencies are managed or pegged. But a reserve currency and an anchor currency are also typically used interchangeably.

A vehicle currency is a third-country currency used as a unit of account and medium of exchange between two other countries. For example, when trade between South Korea and China is denominated and settled in dollars, the dollar is the vehicle currency.

The first is straightforward: for the yuan to be an international store of value, foreigners must be willing to invest their savings in yuan-denominated assets. On one level it means that central banks are prepared to hold Chinese government bonds – and other safe yuan assets – as part of their foreign exchange reserves. But it also means that ordinary households, companies, and investors are ready to invest in shares listed on China's stock exchanges, in bonds issued by Chinese companies and central and local governments, and in various other yuan-denominated financial products.

For the yuan to become a medium of exchange, foreigners must be willing to transact using the currency. That means that firms are ready to pay for imports – and be paid for exports – in yuan. It means that companies and governments are willing to borrow in yuan – and in the case of governments, receive foreign aid in yuan – as well as to make loans to others in yuan. And it means firms are willing to accept investment denominated in yuan.

BOX 4.2

Reserve Currencies' Role as an International Unit of Account

When comparing two countries' GDP, people typically do the tally in dollars. Even though all countries transact in their own currencies, the dollar is the standard unit used to establish a basis for comparison.

Similarly, the prices for gold, oil, and most other commodities are denominated in dollars. Commodities are constantly being bought and sold all over the world. Rather than price a commodity in dozens of different currencies that are constantly moving against each other, it's far easier to have one, globally accepted price denominated in a globally accepted currency.

In both cases – pricing commodities and comparing GDP – the dollar is used as a unit of account.

At the next level, for the yuan to become an internationally accepted currency, firms, governments, and individuals must be willing to use it as a neutral basis of comparison. At one extreme that might one day involve benchmarking commodity prices in yuan (which we discuss in Chapter 6). More immediately, it requires foreigners to be ready to fix their prices or invoice their sales in yuan, even when their counterparties aren't from China.

Meanwhile, a government's use of the yuan as a unit of account typically involves anchoring its own currency against China's. The aim is to keep that currency's value basically stable when measured against the yuan.

> These three functions are interrelated – developing one helps with progress toward the others. The yuan clearly doesn't satisfy any of these conditions yet, but it has made progress since 2009.

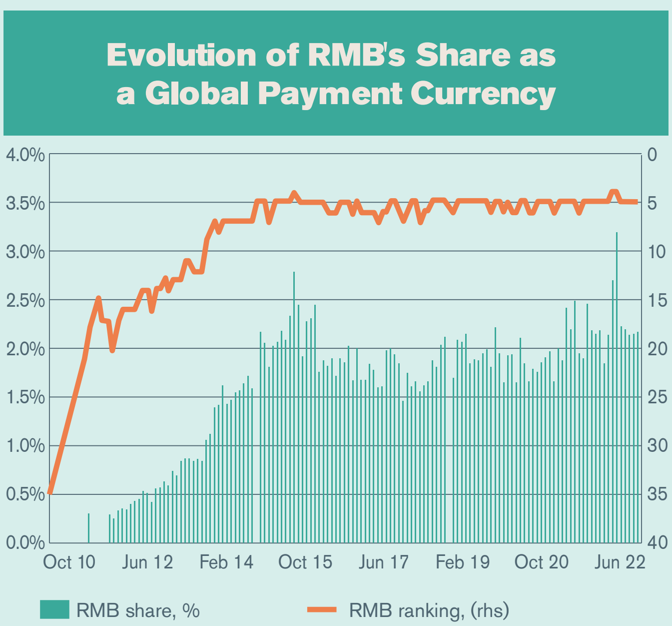
Medium of exchange

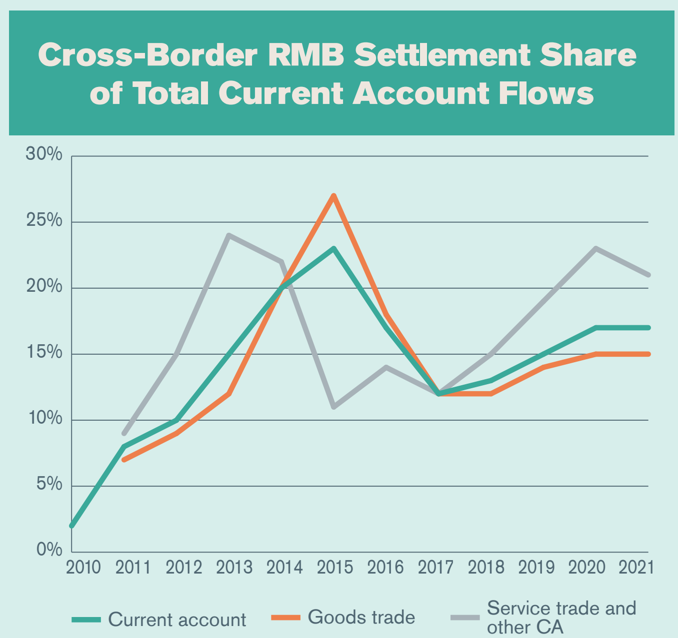
Progress as a medium of exchange was made during the first stage of internationalization but has since retreated. PBoC data shows that cross-border settlement as a share of total flows under the current account peaked at 23.3% in 2015. However, the proportion declined precipitously during the second phase of RMB internationalization. While the figure has rebounded a little, at the end of 2021 it was still only 16.5%. It's notable that cross-border settlement under the capital account, however, has increased considerably since 2018. It is now nearly three times bigger in absolute terms than that under the current account.

SWIFT data shows that in the first stage of RMB internationalization the yuan quickly gained traction as a global payments currency. It became the fifth most used currency by the end of the period, having been ranked only 35th in October 2010. But progress since then has stalled. The RMB was still ranked fifth in June 2022, accounting for only 2.17% of SWIFT payments, trailing behind the dollar (41.16%), euro (35.55%), pound (5.96%) and yen (3.01%).

At the time of writing (July 2022), the most recent data on global turnover data for the over-the-counter foreign exchange market was from the 2019 BIS Triennial Survey. According to the survey, the share of RMB in global FX turnover rose to 4% in 2019 from 0.5% in 2010. In 2019, the dollar was on the other side of 95% of all renminbi transactions.

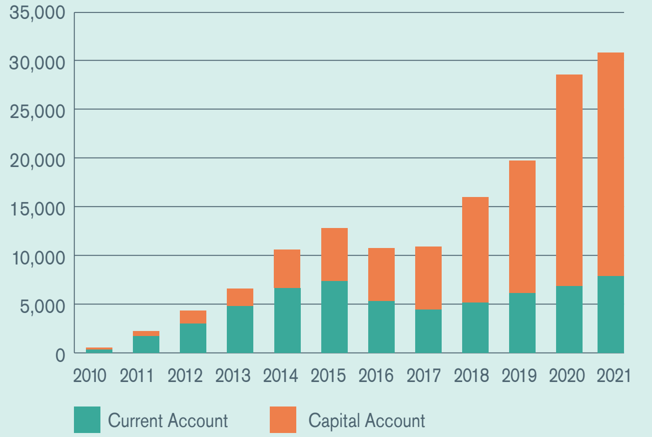
Progress in the Use of the RMB as Means of Payment





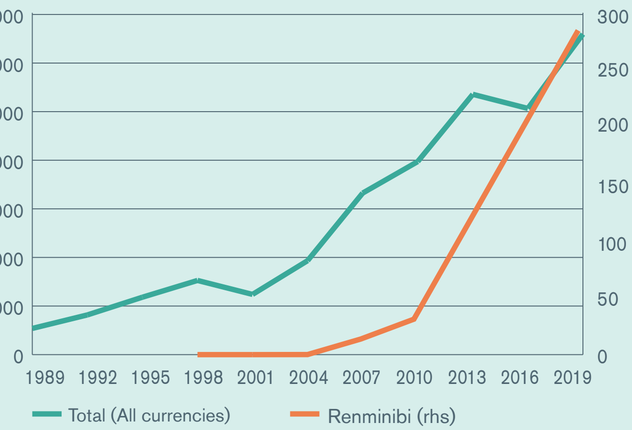
Source: Enodo Economnics, SWIFT, PBoC

Yearly Cross-Border RMB Settlement During 2010-2020
Rmb, bn

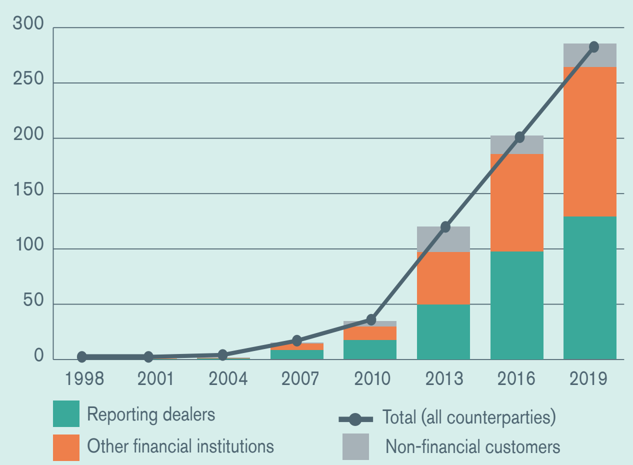


Source: PBoC, Central Banks & Monetary Authorities

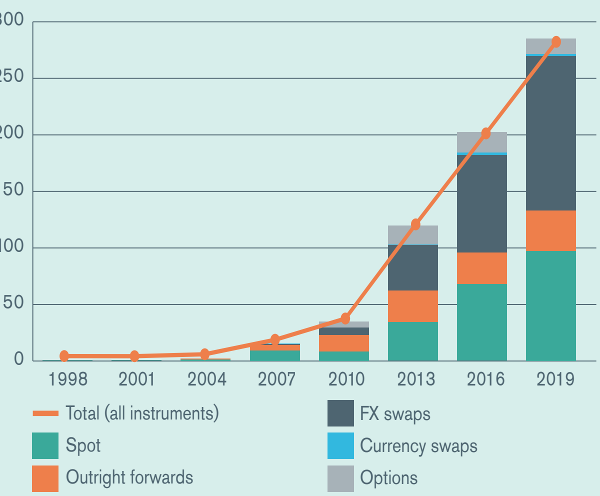
Global Foreign Exchange Market Turnover
Daily averages in USD bn, Net-net basis



Renminbi Foreign Exchange Market Turnover by Counterparty
Daily averages in USD bn, Net-net basis



Renminbi Foreign Exchange Market Turnover by Instrument
Daily averages in USD bn, Net-net basis



Source: Enodo Economics, BIS

Store of value

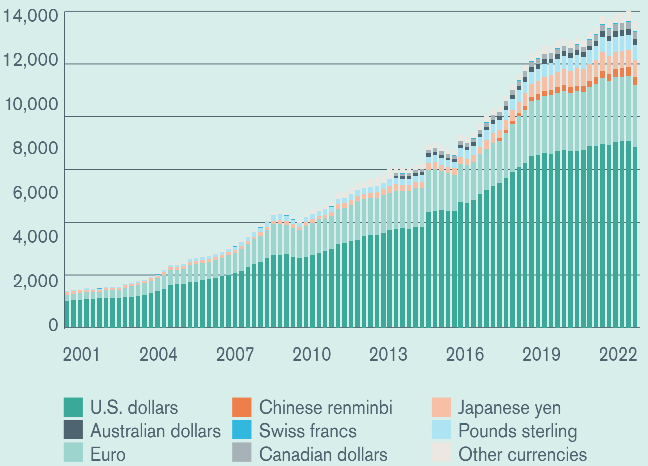
As we discuss in Sections 3.6 and 7.6, since 2016 central banks around the world have been increasingly willing to include yuan-denominated assets in their foreign exchange reserves. Still, the RMB remains far behind the dollar.

Investors' enthusiasm for the yuan has been growing as well. Foreign ownership of Chinese bonds and stocks increased gradually from mid-2017 and then accelerated with the start of the pandemic. However, willingness to hold yuan-denominated deposits has waned since the long-term structural appreciation of the currency stopped. Offshore yuan deposits have been rising over the last couple of years but are still down from their 2015 peak.

Progress in the Use of the RMB as Store of Value

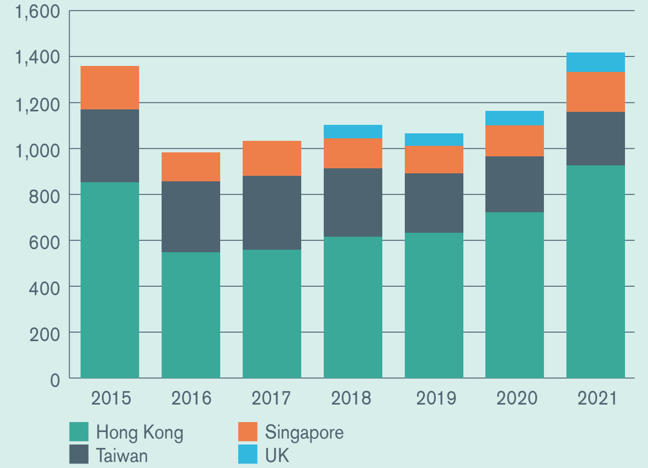
Official Foreign Exchange Reserves by Currency

USD, bn



Offshore RMB-Denominated Deposits

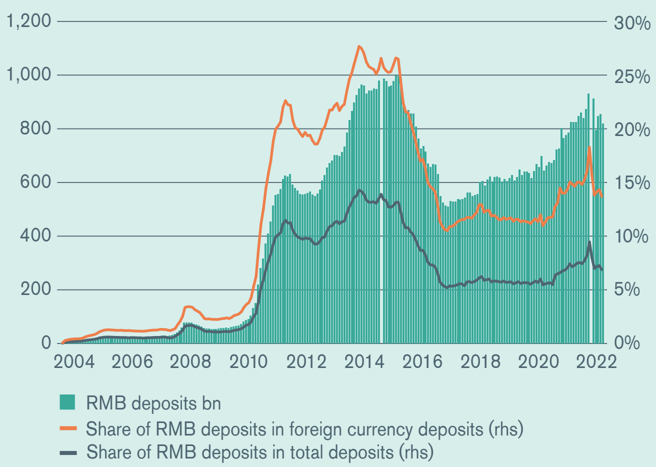
Rmb, bn



Source: Central Banks & Monetary Authorities

RMB Deposits in Hong Kong

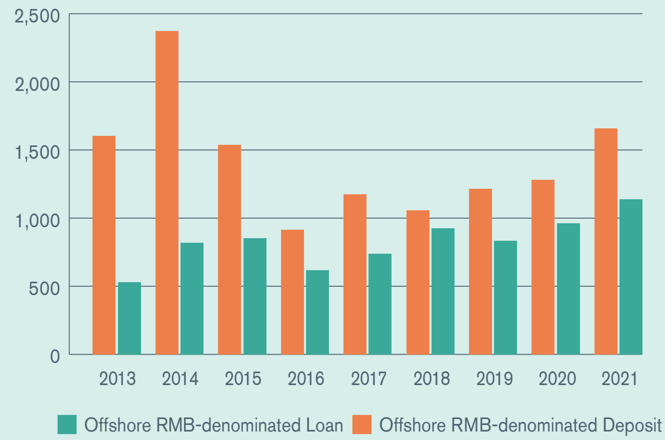
Rmb, bn



Source: HKMA

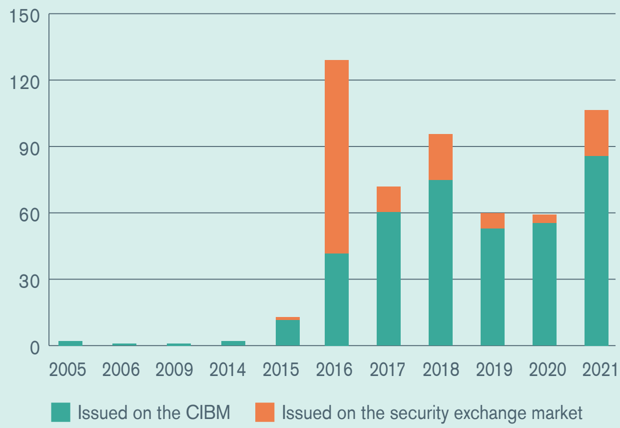
Offshore RMB-Denominated Deposits & Loans

Rmb, bn



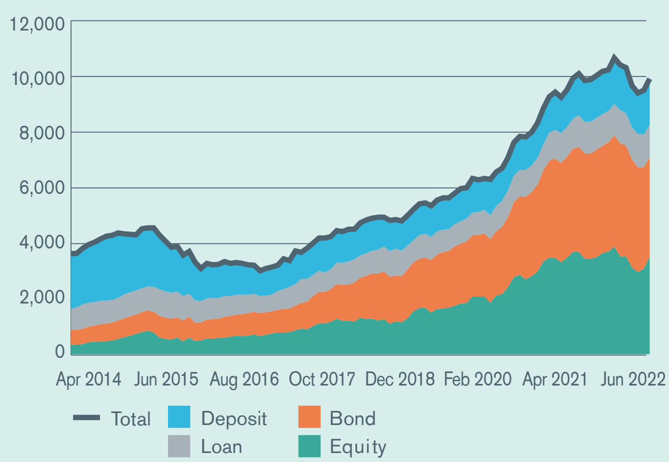
The Issuance of Panda Bonds

Rmb, bn



Foreign Holdings of Onshore Yuan Assets

Rmb, bn



Source: PBoC

Unit of account

Gauging the yuan's progress as a unit of account is far more difficult. Sadly, we don't have data on the yuan's role as an anchor currency, or as a component of the currency baskets central banks use as an anchor. What's more, China doesn't share data on trade invoicing and did not participate in the most recent comprehensive research effort to track patterns in global trade invoicing. Our own investigations suggest that the dollar remains China's main invoicing currency, likely accounting for about 75% of its cross-border trade in goods in 2021.

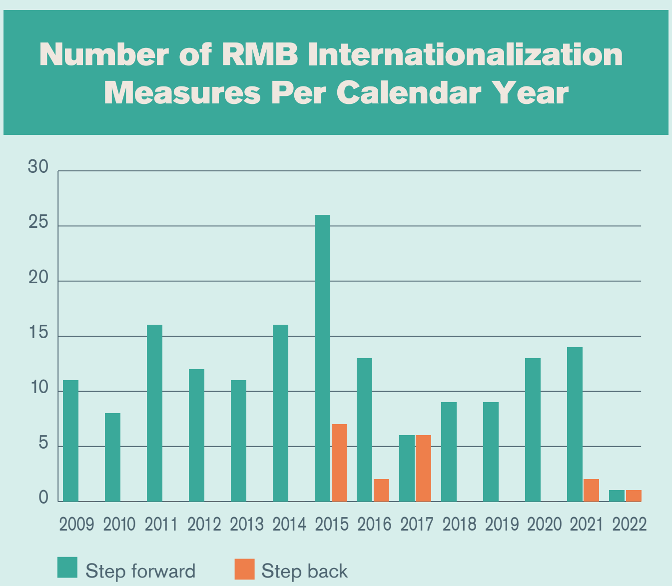
Areas of development

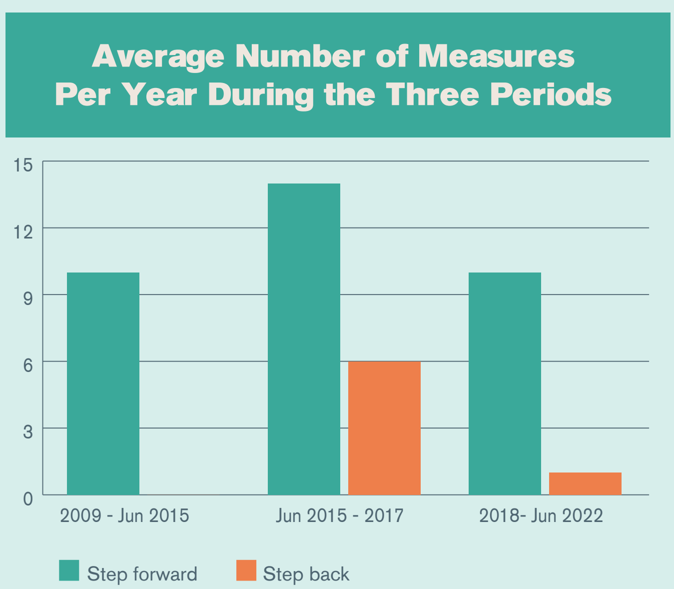
We have identified more than 180 significant policy measures and events since 2009 that we believe have significantly affected the yuan's progress toward becoming a global currency. We have sorted those measures and events into three categories:

- Those that represent a step forward or backward for RMB internationalization
- Those that promote each function of a global reserve currency
- Those that contributed toward necessary areas of development

Each measure/event is categorized across all three functions and could have an impact on multiple uses and development areas.

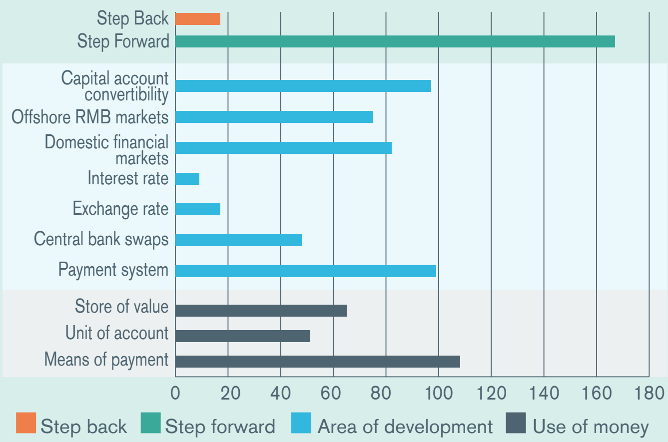
Overall Progress of RMB Internationalization, 2009 - June 2022



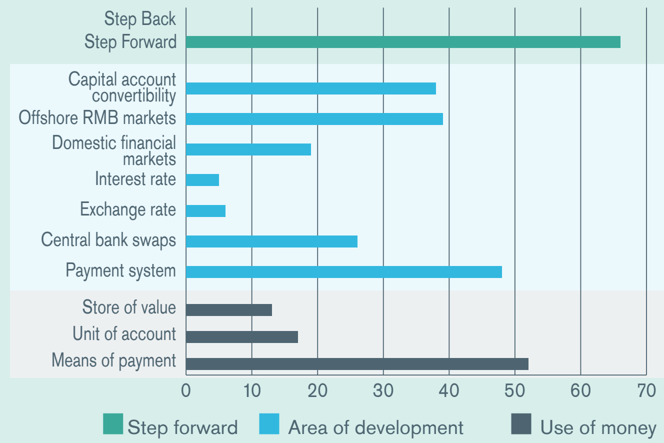


Source: Enodo Economics

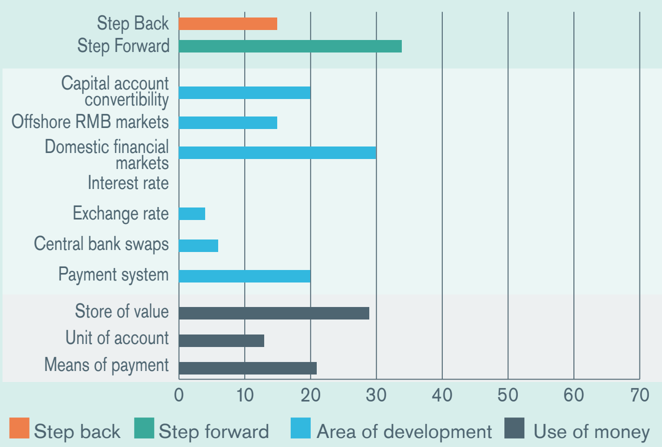
Total Number of Measures by Each Indicator for the Whole Period (2009-2022)



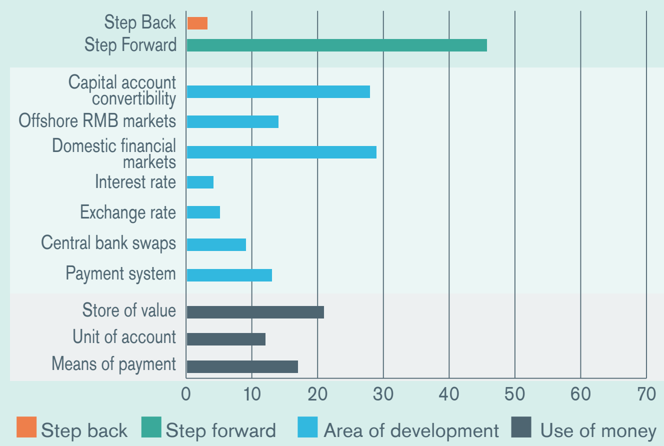
Total Number of Measures by Each Indicator During 2009 - Jun 2015



Total Number of Measures by Each Indicator During Jul 2015 - 2017



Total Number of Measures by Each Indicator During 2018 - 2022



Source: Enodo Economics

Our main finding is that Beijing has consistently pushed ahead with RMB internationalization, even when it encountered setbacks during stage two and the yuan surrendered some of its gains. It has put the most cumulative effort into promoting the yuan as means of payment, although the progress, chalked up thanks to these measures, was mainly achieved during the first phase.

During the second and third stages of internationalization, Beijing has switched its focus to promoting the yuan as a store of value. We can observe that in the past few years the RMB has been gaining traction as a currency global investors want to hold. Unsurprisingly, China has struggled the most with finding effective ways to put the yuan forward as a unit of account. Little progress has been made in this area over the past 13 years.

The areas of reform that saw the biggest policy push were the creation of a cross-border payments system and preparations for capital account convertibility. Development of both offshore and onshore financial markets trailed close behind and are picking up speed now. Onshore markets in particular became Beijing's focus during the second and third stages of RMB internationalization.

However, it's impossible to fully gauge progress toward achieving the three functions of a reserve currency simply by drawing on usage data or trying to assess the impact of various reforms.

> Forging ahead with internationalization requires extensive changes to the way an economy works. These changes might not immediately translate into higher yuan transaction volumes or greater investment in yuan assets by foreigners, but they are necessary preconditions for long-term progress.

We address the changes Beijing is pursuing in detail throughout this report. They include:

- Enacting interest rate and exchange rate reforms to ensure stability of both the currency and economy (Chapter 5)
- Ensuring that there is sufficient yuan liquidity to meet the needs of foreign firms and governments, during normal times and times of crisis (Chapter 5)
- Developing new ways of creating offshore liquidity, so there is more yuan circulating abroad (Chapter 6)
- Promoting capital account convertibility so that cross-border transactions become easier and more trustworthy (Chapter 7)
- Cultivating the offshore and onshore financial markets to ensure the availability of a far wider range of yuan-denominated assets (Chapter 7 and Chapter 10)
- Developing payments infrastructure to improve the yuan's ease of use (Chapter 8)

In the section that follows, we seek to give an answer to the question of how far the yuan still has to go to become a regional currency anchor.

4.4 How Much Progress Does the RMB Have to Make?

There is no formula which can help us answer the question of how far the renminbi needs to progress - in its share of international payments, its share of foreign reserves, its role as an invoicing currency or store of value - before effective internationalization can be claimed. But it is instructive to compare where the RMB stands today with the experience of the Deutsche Mark in becoming the unofficial anchor and benchmark currency in the European Monetary System (EMS).

In the spring of 1972, the governments of Belgium, France, Germany, Italy, Luxembourg, and the Netherlands set up an exchange rate arrangement known as the snake. Under this mechanism, the exchange rates of the participating currencies were not allowed to deviate from agreed central rates by more than 2.25%. The snake was replaced in 1979 by the EMS, which eventually metamorphosed into the European single currency.

The mark continued to gain status throughout the 1980s. The trend took hold not because of policy, but in spite of it. It was a side effect of the growing size of the German economy, especially its powerful trade performance, and the impeccable reputation that the Bundesbank had established for keeping the value of the mark strong, whether measured by inflation or the exchange rate. The mark's share of global foreign exchange reserves reached almost 20% in 1989.

In the tables below we have pulled together data on the relevant metrics available for Germany then and China now. Unsurprisingly, when it comes to the size of the economy and its global export-market share, China has already surpassed Germany.

In terms of trade shares by major partner group, Chinese trade is less concentrated within the Asian free trade zone – the Regional Comprehensive Economic Partnership (RCEP) (discussed in Chapter 6) and those countries within the BRI that we judge are likely to fall within China's sphere of influence (see Chapter 3). But given that global supply chains are much more integrated now than in the 1980s, China arguably doesn't have much further to progress.

Looking at the effectiveness of its monetary policy in keeping inflation and the yuan stable, one could also argue that China is already more or less there. However, the fact that the PBoC has presided over more than a decade of low inflation and low exchange rate volatility does not necessarily mean that its monetary policy is perceived as credible. Moreover, China's authorities are suspected of massaging some headline economic data, such as GDP growth and CPI inflation.

But when it comes to the yuan as a payment, invoicing and investment currency, the gap with Germany when the snake was set up and during the days of the EMS is sizeable. The key metric Beijing needs to track is how trade is invoiced. In 1980, Germany invoiced 83% of its exports and 43% of its imports in marks. China, by contrast, has made little headway in invoicing its foreign trade in yuan.

> But we recognize that China's goals are political. Ultimately, how far the CCP pushes RMB internationalization will depend on whether the process contributes to the security and influence the Party craves.

Export Market Share (%)

Germany			
Exporters and Markets	1980	1984	1989
Germany			
World	9.9	9.3	11.4
Industrial countries	10.5	10.0	13.1
Developing countries	7.5	6.6	6.5
United States			
World	11.3	11.8	12.1
Industrial countries	9.2	10.0	10.3
Developing countries	15.7	15.2	16.8
United Kingdom			
World	5.7	5.1	5.1
Industrial countries	5.6	5.4	5.4
Developing countries	5.6	4.2	3.9
Japan			
World	6.7	9.2	9.2
Industrial countries	4.3	7.2	7.4
Developing countries	11.0	12.7	13.7

China							
Exporters and Markets	2009	2012	2015	2018	2019	2020	2021
China							
World	9.7	11.2	13.9	13.0	13.4	15.0	15.3
BRI High & Medium	8.7	9.7	13.5	12.4	13.6	14.9	14.9
Emerging and Developing Asia	6.7	7.6	11.1	10.6	11.9	13.0	13.1
RCEP	10.9	11.0	14.7	13.6	14.8	16.4	16.0
CPTPP	13.5	14.3	18.0	17.8	19.0	22.3	21.9
USMCA	12.6	13.9	16.3	16.8	15.2	17.5	18.1
EU	5.0	5.5	6.4	6.2	6.6	7.7	7.9
United States							
World	8.5	8.4	9.2	8.6	8.8	8.2	8.0
BRI High & Medium	6.8	6.4	7.0	6.4	6.3	6.4	6.1
Emerging and Developing Asia	6.9	5.9	6.7	5.9	5.8	6.3	5.9
RCEP	8.5	7.3	8.2	7.7	7.7	7.9	7.5
CPTPP	27.6	26.0	28.6	27.3	27.3	25.9	25.4
USMCA	16.7	17.3	17.7	16.9	16.7	15.2	15.2
EU	4.3	4.1	4.7	4.4	4.8	4.5	4.2

Source: Enodo Economics, IMF

USMCA							
World	12.9	12.9	14.0	13.3	13.6	12.9	12.5
BRI High & Medium	7.8	7.5	8.1	7.5	7.3	7.6	7.1
Emerging and Developing Asia	8.0	7.1	7.8	7.1	6.9	7.5	7.0
RCEP	9.7	8.5	9.5	9.0	9.0	9.3	8.8
CPTPP	29.3	27.5	30.2	29.0	29.0	27.5	27.0
USMCA	-	-	-	-	-	-	-
EU	4.9	4.8	5.4	5.2	5.6	5.3	4.9

Trade Share By Major Partner Group (% of country total)

Germany

Exported and Partner Group	1980		1984		1989	
	Exports	**Imports**	**Exports**	**Imports**	**Exports**	**Imports**
Germany						
Industrial countries	74.4	71.3	76.4	74.3	82.8	79.9
Developing countries	25.6	28.7	23.6	25.7	17.2	20.1
United States						
Industrial countries	56.8	49.2	59.9	59.8	63.2	60.0
Developing countries	43.2	50.8	40.1	40.2	36.8	40.0
United Kingdom						
Industrial countries	69.6	75.0	75.0	80.4	78.5	84.2
Developing countries	30.4	25.0	25.0	19.6	21.5	15.8
Japan						
Industrial countries	45.3	33.6	55.3	38.8	60.3	50.0
Developing countries	54.7	66.4	44.7	61.2	39.7	50.0

China

Exported and Partner Group	2009		2012		2015		2018		2019		2020	
	Exports	**Imports**	**Exports**	**Imports**	**Exports**	**Imports**	**Exports**	**Imports**	**Exports**	**Imports**	**Exports**	**Imports**
China												
BRI High & Medium	23.4	31.1	24.5	33.2	26.8	32.0	27.4	33.2	29.0	33.1	28.7	32.5
Emerging and Developing Asia	9.6	10.4	11.2	10.6	13.6	11.3	15.1	12.5	16.4	13.4	16.2	14.6
RCEP	25.8	39.4	26.0	35.4	27.2	36.7	28.4	36.9	29.7	37.5	29.5	38.8
CPTPP	18.6	25.9	18.5	23.5	18.8	23.3	19.5	25.4	20.4	27.0	20.9	27.7
USMCA	20.9	9.3	19.9	8.8	20.8	10.8	22.4	9.3	20.1	8.0	20.8	8.4
EU	17.2	12.0	14.1	10.8	13.0	11.9	14.2	11.7	14.6	12.2	15.1	12.6

Exported and Partner Group	2009		2012		2015		2018		2019		2020	
	Ex-ports	Im-ports	Ex-ports	Im-ports	Ex-ports	Im-ports	Ex-ports	Im-ports	Ex-ports	Im-ports	Ex-ports	Im-ports
United States												
BRI High & Medium	20.7	35.8	21.4	34.4	21.1	37.4	21.3	37.4	20.4	35.1	22.6	37.1
Emerging and Developing Asia	11.3	26.0	11.7	25.3	12.4	29.9	12.6	30.0	12.2	28.0	14.3	29.8
RCEP	22.8	36.0	23.0	35.5	23.1	40.0	24.1	39.8	23.7	38.1	25.9	39.9
CPTPP	43.2	36.2	44.6	37.1	45.2	37.5	45.0	37.6	44.8	39.5	43.9	38.7
USMCA	31.6	25.4	32.9	26.5	34.3	26.3	33.9	26.2	33.5	27.1	32.7	25.5
EU	16.6	14.9	13.7	14.4	14.5	16.4	15.2	16.8	16.2	18.1	16.3	17.8
USMCA												
BRI High & Medium	15.7	32.2	16.3	31.0	16.0	33.9	16.2	34.1	15.3	32.7	16.9	34.8
Emerging and Developing Asia	8.6	23.2	9.2	22.9	9.5	27.0	9.9	27.4	9.3	26.2	10.8	28.0
RCEP	17.2	32.6	17.5	32.1	17.4	36.2	18.3	36.2	17.8	35.3	19.4	37.1
CPTPP	30.3	29.5	30.8	29.8	31.3	30.2	31.1	30.2	30.6	31.7	29.8	31.6
USMCA	-	-	-	-	-	-	-	-	-	-	-	-
EU	12.6	13.7	10.6	13.1	10.9	14.7	11.6	15.1	12.1	16.1	12.1	15.9

Source: Enodo Economics, IMF

Inflation and Inflation Variability, (%)

Germany							
Period	Germany	United States	United Kingdom	Japan	France	Switzer-land	Italy
Average Inflation Rate							
1970-74	5.6	6.1	9.6	10.7	7.7	7.1	9.1
1975-79	4.2	8.1	15.7	7.5	10.2	2.9	15.9
1980-84	4.5	7.5	9.6	3.9	11.2	4.4	16.6
1985-89	1.3	3.6	5.3	1.2	3.6	2.1	6.2
1970-89	3.9	6.3	10	5.8	8.1	4.1	11.9
Inflation Volatility (standard deviation)							
1970-74	1.3	2.8	3.6	6.8	3.2	2.3	5.8
1975-79	1.2	2.2	5.8	3.3	1.2	2.4	3.5
1980-84	1.5	3.9	5.2	2.2	2.4	1.6	3.8
1985-89	1.2	1.1	1.7	1.0	1.3	1.1	1.7
1970-89	2.1	3.2	5.7	5.4	3.6	2.7	5.9

Note: Variability is based on quarterly data for indicated periods

China			
Period	China	Euro area	US
Average Inflation Rate			
2009-2015	2.4	1.3	1.3
2015-2017	1.7	0.7	1.0
2018-now	2.1	2.1	2.6
2009-now	2.2	1.5	1.8
Inflation Volatility (standard deviation)			
2009-2015	1.9	1.0	1.0
2015-2017	0.4	0.7	0.7
2018-now	1.3	2.1	1.8
2009-now	1.6	1.5	1.4

Note: CPI used for China, HICP for the Euro area and PCE for the US. Variability is based on monthly data for indicated periods

China				
Period	CPI	PPI	GDP Deflator	
Average Inflation Rate				
2009-2015	2.4	-0.6	2.9	
2015-2017	1.7	-0.1	1.9	
2018-now	2.1	2.7	2.6	
2009-now	2.2	0.9	2.8	
Inflation Volatility (standard deviation)				
2009-2015	1.8	4.5	3.2	
2015-2017	0.3	5.1	1.9	
2018-now	1.6	4.3	1.7	
2009-now	1.6	4.7	2.6	

Note: Variability is based on quarterly data for indicated periods as the GDP deflator is published on a quarterly basis

Exchange Rate Volatility, (%)

Germany							
Period	Germany	United States	United Kingdom	Japan	France	Switzer-land	Italy
1975-79	1.1	1.3	1.9	2.2	1.2	1.8	1.8
1980-84	1.0	2.0	1.8	2.2	1.1	1.6	0.7
1985-89	0.8	2.2	2.0	2.1	0.7	1.3	0.7
1975-89	1.0	2.0	1.9	2.2	1.1	1.6	1.2
Average Real Effective Echange Rate (1975 = 100)							
1989	109.0	91.9	134.2	122.0	81.8	98.7	103.7

Note: Calculated as standard deviation of monthly percentage changes in the nominal MERM rate

Source: IMF

China Based on NEER

Period	RMB	EURO	USD
2009-2015	1.1	0.8	1.1
2015-2017	0.8	0.9	0.8
2018-now	1.0	0.5	1.0
2009-now	1.0	0.7	1.0
Average Real Effective Exchange Rate			
(2009 = 100)			
2022	125.7	90.1	121.9

Note 1: Calculated as standard deviation of monthly percentage changes in the nominal effective exchange rate (based on BIS data, broad definition)

Note 2: Exchange-rate volatility of the euro is based on the NEER for Germany

China Based on Bilateral Exchange Rates Against USD

Period	RMB	EURO
2009-2015	0.6	2.3
2015-2017	1.1	2.1
2018-now	1.4	1.5
2009-now	1.0	2.0

Note: Calculated as standard deviation of monthly percentage change in the bilateral exchange rate against USD

Currencies and Weights in the SDR Basket (%)

Germany

Currency/Weight	1981-85	1986-90	1991-95
U.S. dollar	42	42	40
Deutsche mark	19	19	21
Yen	13	15	17
French franc	13	13	11
Pound sterling	13	13	11

China

Currency/Weight	2011-16	2016-22	2022-27
U.S. dollar	41.9	41.7	43.4
Euro	37.4	30.9	29.3
Chinese yuan		10.9	12.3
Yen	9.4	8.3	7.6
Pound sterling	11.3	8.1	7.4

Note: Weights determined in the 2022 Review

Source: IMF

Currency Invoicing of German Foreign Trade (% of total exports or imports)

Germany									
Currency	1980	1981	1982	1983	1984	1985	1986	1987	1988
Exports									
Deutsche mark	82.5	82.2	83.2	82.6	79.4	79.5	81.5	81.5	n.a.
U.S. dollar	7.2	7.8	6.7	7.0	9.7	9.5	7.7	7.4	n.a.
Pound sterling	1.4	1.3	1.3	1.5	1.7	1.8	1.7	1.8	n.a.
Yen	0.0	0.0	0.0	0.0	0.3	0.4	0.4	0.5	n.a.
French franc	2.8	2.8	2.8	2.8	2.8	2.7	2.7	2.5	n.a.
Swiss franc	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	n.a.
Other	5.6	5.6	5.5	5.8	5.7	5.7	5.5	5.7	n.a.
Imports									
Deutsche mark	43.0	43.0	44.6	46.1	47.0	47.8	51.7	52.7	52.6
U.S. dollar	32.2	32.2	31.3	28.8	29.2	28.1	23.1	22.0	21.6
Pound sterling	3.4	3.7	2.5	2.7	2.4	3.0	2.3	2.5	2.4
Yen	0.0	0.0	0.0	0.0	0.0	1.8	2.6	2.5	2.5
French franc	3.3	3.0	3.4	3.5	3.6	3.8	4.1	3.9	3.6
Swiss franc	1.6	1.6	1.6	1.5	1.5	1.5	1.7	1.8	1.7
Other	15.4	16.4	16.6	17.4	16.5	14.0	14.5	14.9	15.6

Source: Deutsche Bundesbank

Currency Composition of Turnover in Major Foreign-Exchange Markets (% of total turnover)

Germany								
Currency	**New York**				**London**		**Tokyo**	
	March 1980	April 1983	March 1986	April 1989	March 1986	April 1989	March 1986	April 1989
Against U.S. dollar								
Deutsche mark	31.8	32.5	34.2	32.9	28.0	22.0	10.4	9.7
Pound sterling	22.7	16.6	18.6	14.6	30.0	27.0	3.0	4.3
Yen	10.2	22.0	23.0	25.2	14.0	15.0	77.0	72.1
French franc	6.9	4.4	3.6	3.2	4.0	4.0	0.3	0.2
Swiss franc	10.1	12.2	9.7	11.8	9.0	10.0	5.6	4.4
Canadian dollar	12.2	7.5	5.2	4.0	2.0	2.0	0.0	0.0
Other	6.1	4.6	5.8	8.3	10.0	11.0	3.3	3.2
Cross-Currency	n.a.	0.2	n.a.	n.a.	3.0	9.0	0.0	6.1

Source: Federal Reserve Bank, Bundesbank, Bank of England, Bank of Japan

Intervention in the EMS Using Deutsche Marks (purchases/sales in DM bn)

Germany			
Year	Obligatory	Intramarginal	Total
1979	3.6	10.8	14.4
1980	5.9	6.9	12.8
1981	19.6	20.9	40.5
1982	3.0	22.2	25.2
1983	25.0	32.0	57.0
1984	4.7	37.8	42.5
1985	0.4	60.4	60.7
1986	23.1	109.6	132.7
1987	15.0	109.5	124.5
1988	0.0	43.1	43.1
1989	10.0	29.0	39.0

Source: Bundesbank

The Deutsche Mark and the Yuan as Investment Currencies

Germany Currency Distribution of Foreign-Exchange Intervention (% of total intervention)			
Currency	Intervention in the EMS		
	1979-82	**1983-85**	**1986-87**
U.S. dollars	71.5	53.7	26.3
EMS currencies	27.2	43.5	71.7
[Deutsche marks]	[23.7]	[39.4]	[59.0]
Others	1.3	2.8	2.0
	U.S. Federal Reserve and Treasury Intervention		
	1979-82	**1983-85**	**1986-88**
Deutsche marks	89.7	67.9	57.5
Yen	10.3	32.1	42.5

Source: Bundesbank, Federal Reserve

Foreign Deutsche-Mark Claims (billions of DM and % of category)						
Type of Claim	1980	1982	1984	1986	1988	1989
Held in Germany on:						
German banking system	106.0	121.0	143.0	178.0	195.0	222.0
Enterprises and individuals	69.0	86.0	107.0	164.0	149.0	165.0
Public sector	31.0	85.0	109.0	166.0	192.0	198.0
Total	**206.0**	**292.0**	**359.0**	**508.0**	**536.0**	**585.0**

Percent long-term	61.8	60.3	64.2	75.7	75.0	72.0
Percent short-term	38.2	39.7	35.8	24.3	25.0	28.0
Held outside Germany	266.0	303.0	376.0	383.0	516.0	599.0
Held as external deutsche-mark bonds	57.0	61.0	71.0	102.0	124.0	128.0

Source: Deutsche Bundesbank

Relative Currency Share of External Assets (in %)

Asset Type and Currency	1981-84 (average)	1985	1986	1987	1988	1989
Share of external bank loans*						
Deutsche mark	1.7	2.1	3.0	2.4	2.2	3.2
U.S. dollar	83.3	62.5	67.0	65.1	69.9	77.0
Pound sterling	3.1	3.4	6.4	14.7	14.1	6.4
Yen	5.9	18.5	16.1	10.8	5.6	5.3
Swiss franc	1.2	3.0	2.1	0.7	0.3	0.4
ECU	1.3	7.1	2.2	2.4	2.8	4.6
Other	3.5	3.4	3.2	3.9	5.1	3.1
Denomination of external bond issues**						
Deutsche mark	6.3	8.5	8.0	8.0	10.1	6.4
U.S. dollar	63.2	54.0	53.9	38.8	41.2	51.9
Pound sterling	3.4	4.0	4.6	7.8	9.4	6.8
Yen	5.7	9.1	10.4	13.7	8.4	8.3
Swiss franc	14.7	11.3	10.7	12.9	11.1	7.5
ECU	1.7	5.2	3.4	4.0	4.9	5.2
Other	6.7	7.9	9.0	14.8	14.9	13.9
Denomination of Eurocurrency deposits						
Deutsche mark	11.4	11.4	12.8	14.2	13.3	13.9
U.S. dollar	74.0	67.9	63.5	58.2	60.1	59.7
Pound sterling	1.4	2.0	2.1	2.8	3.4	3.1
Yen	1.8	3.4	4.5	5.8	5.5	5.5
Swiss franc	5.8	6.4	7.2	7.7	5.4	4.9
ECU	0.5	2.6	2.6	2.8	3.0	3.2
Other	5.2	6.2	7.2	8.4	9.2	9.7

** Foreign and international bank loans, excluding loans renegotiated*

*** Includes international issues, foreign, and special placements*

Source: OECD, BIS

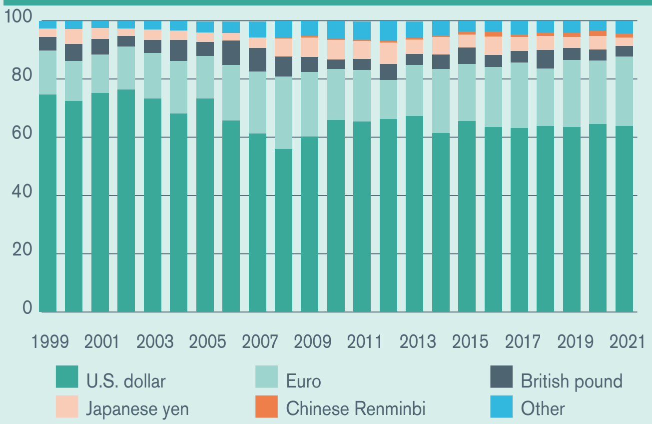
Currency Share of Official Foreign-Exchange Holdings, 1980-89 (in %)

Asset Type and Currency	1980	1982	1984	1986	1988	1989
	All countries					
Deutsche mark	14.9	11.7	11.6	13.7	16.0	19.6
U.S. dollar	68.6	70.4	69.3	66.0	63.8	59.2
Pound sterling	2.9	2.3	2.9	2.6	2.8	2.8
Yen	4.3	4.6	5.5	7.5	7.7	8.1
French franc	1.7	1.1	0.8	0.9	1.2	1.2
Swiss franc	3.2	2.4	2.0	1.9	2.0	2.0
Netherlands guilder	1.3	1.1	0.7	1.0	1.1	1.0
Unspecified	3.1	6.1	7.0	6.4	5.4	6.0

Source: IMF

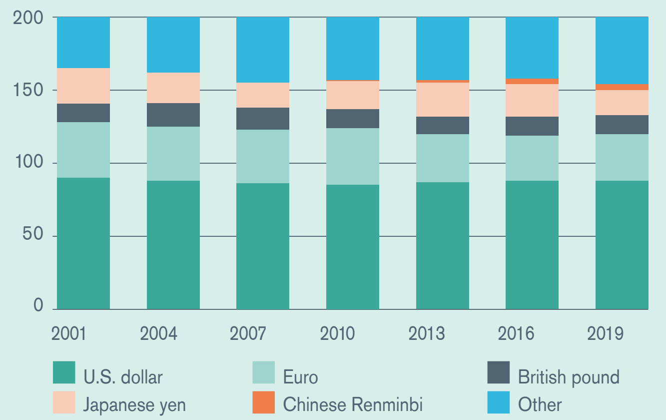
China

Share of Foreign Currency Debt Issuance (%)



Note: Foreign currency debt is denominated in a foreign currency relative to the country of the issuing firm (not the location of issuance). At current exchange rates. Data are annual and extend from 1999 through 2021. 2021 is 2021-H1. Legend entries appear in graph order from top to bottom. Chinese renminbi is 0 until 2008

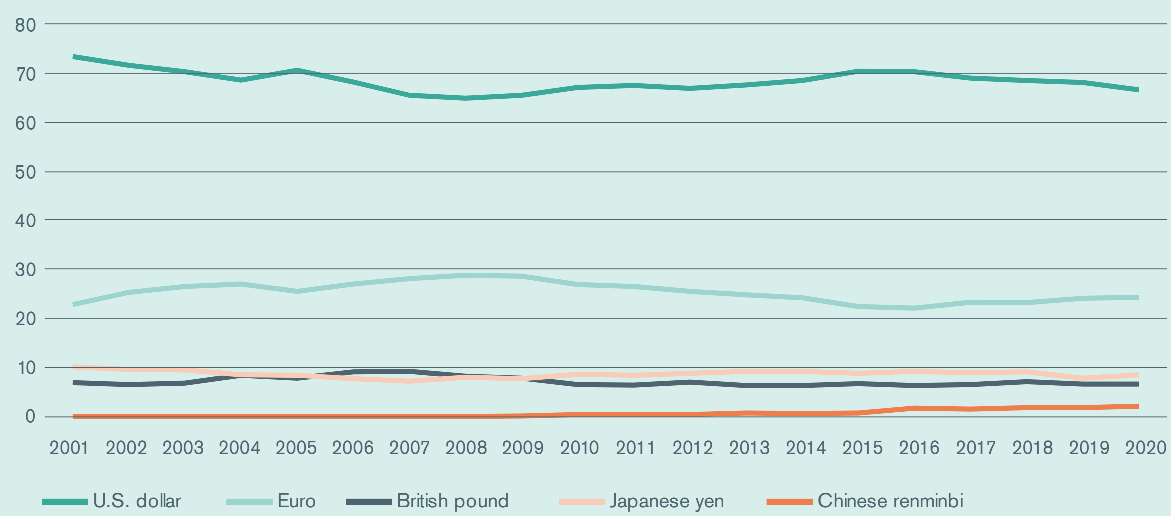
Share of Over-the-Counter Foreign Exchange Transactions (%)



Note: On a net-net basis at current exchange rates. Percentages sum to 200 percent because every FX transaction includes two currencies. Legend entries appear in graph order from top to bottom. Chinese renminbi is 0 until 2013

Source: BIS, FED

Index of International Currency Usage



Note: The index is a weighted average of each currency's share of globally disclosed FX reserves (25% weight), FX transaction volume (25%), foreign currency debt issuance (25%), foreign currency and international banking claims (12.5%), and foreign currency and international banking liabilities (12.5%)

Source: IMF COFER; BIS Triennial Central Bank Survey of FX and OTC Derivatives Market; Dealogic; Refinitiv; BIS locational banking statistics; FED Board staff calculations

Endnotes

1 Zhang Ming, "人民币国际化：成就、问题与前景" [RMB Internationalization: Achievements, Problems and Prospects], Caixin, July 1, 2021, http://zhang-ming.blog.caixin.com/archives/247558

Enodo Economics

5 The new approach: an overview

5.1 Introduction

During the first stage of RMB internationalization, Beijing made it possible for foreigners to use the yuan. However, it didn't give them a reason to do so. To the extent the yuan was used, it was for arbitrage and to realize the benefits of holding an appreciating currency.

> Stage III of RMB internationalization is focused on giving foreigners reasons for using the yuan – for accepting it as payment, using it for invoices, holding it as an investment asset – that are based on the yuan's merits as a medium of exchange, store of value, and unit of account.

Ultimately, Beijing is striving to develop permanent, sustainable demand for yuan beyond China's borders, such that it can start replicating some of the conditions that make the dollar the global currency of choice.

Generating that demand primarily requires changes to the way that China's economy functions domestically.

5.2 Swap Line Strategy Falls Short

At its most basic, for the RMB to be an international currency yuan needs to cycle out of China's economy and then to cycle back in again. Pan Gongsheng, the director of SAFE, put it like this in a July 2021 essay:

> ***The core of the policy is not to encourage cross-border use of the RMB, but to establish a mechanism for the "orderly return" of RMB."*** [1]

The concept of promoting the yuan's "orderly return" isn't new. Pan says that it's been the goal of RMB internationalization since the GFC. However, little headway has been made. Even when overseas firms want to use yuan, it's often difficult to obtain.

> One of the ways China has tried to get around the problem is with currency swaps.

Since 2009, the PBoC has entered into more than 40 bilateral swaps with central banks around the world. Most of them were put in place before 2016.

Currency swaps aren't unusual. In the wake of the GFC, the US Federal Reserve established swaps with a number of other central banks (although notably not with the PBoC). The Fed swaps are emergency facilities, a mechanism to help ensure that countries are still able to pay for imports and repay dollar-denominated debts in times of crisis. If countries find themselves suddenly short of dollars – much as they did during the GFC – the swaps are a way to provide foreign central banks with dollars that they can then distribute to local banks.

China's multilateral currency swap agreements follow a similar rationale. Take, for instance, the multilateral Chiang Mai Initiative dollar currency swap network set up in 2010 between the members of ASEAN plus Japan, China and South Korea, with a current pool of $240bn. China has since pushed through an amendment to the initiative to institutionalize the use of members' local currencies for the provision of liquidity support, in addition to the dollar. This change took effect in March 2021. [2]

In June 2022, the PBoC, along with the monetary authorities of Chile, Hong Kong, Singapore, Malaysia, and Indonesia, established another emergency facility in yuan. Each country contributed Rmb15bn to a pool of funds in renminbi or dollars, managed by the Bank for International Settlements, that any of the members can borrow from in times of need. [3]

> However, the rationale behind the PBoC's bilateral yuan swap agreements has been different. Although the swaps have at times been tapped during crises to bolster countries' foreign exchange reserves[4], their primary purpose is to provide foreigners with a source of yuan that can be used to pay for routine purchases from China.

For example, in April 2018, the PBoC and the Central Bank of Nigeria signed a three-year bilateral currency swap agreement which saw the PBoC hand over Rmb15bn in exchange for 720 billion naira. At the time, a decline in the price of oil had significantly reduced Nigeria's hard currency earnings. The swap was designed ***"to reduce foreign exchange demand pressure and facilitate investment between Nigeria and China."*** [5] The agreement was renewed when it expired in 2021.

Starting in 2018, the Central Bank of Nigeria has parceled out the yuan at auctions held every two weeks. Local banks bid for the yuan, which they then distribute to local firms that use it to pay for imports from China.

This type of swap agreements impose a cost on China. Swaps are usually perceived as being relatively riskless for central banks. Since the exchange rate at which the two currencies are initially swapped is the same as when they're swapped back, there's no exchange rate risk – the central banks get back exactly the same amount as they originally swapped.

The risk for China is that when the agreement matures, the PBoC's counterparty can't get hold of enough yuan to swap the currencies back. That leaves China holding a currency it doesn't need that has likely declined in value.

The US has avoided this risk by signing swap agreements with countries it considers safe bets. China has sealed swaps with countries that have a record of balance-of-payments strains. Often the swaps are put in place during periods of stress. China is willing to risk losses in order to increase its economic presence and strengthen the role of its currency.

China's Current Bilateral Swap Lines, July 2022

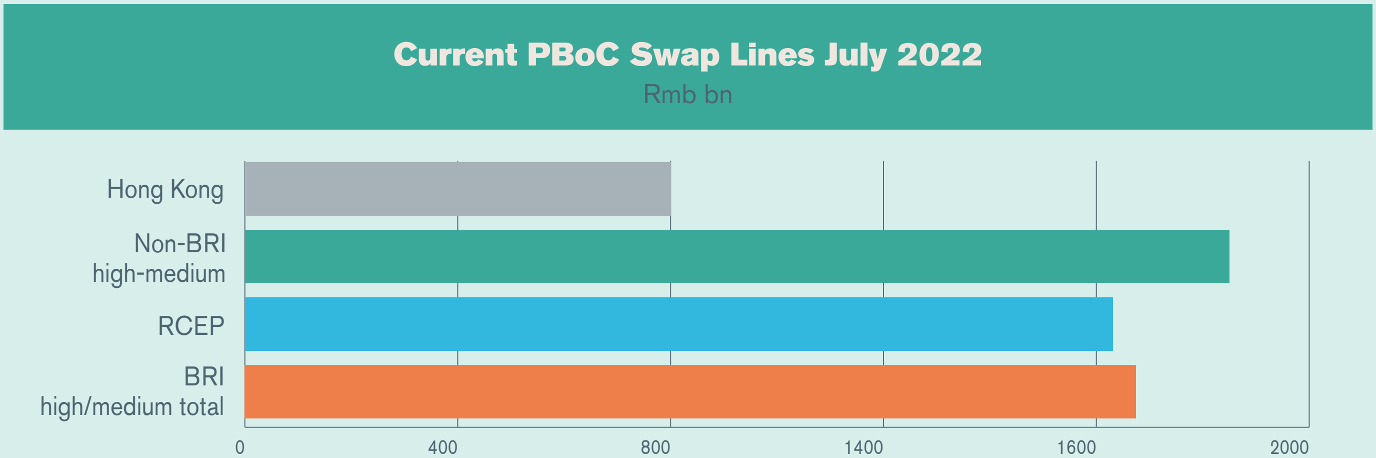
Country	Size of Line (RMB Billion)	Date of Creation
BRI High		
Sinagapore	300	Jun 2010
Malaysia	180	May 2010
Hong Kong	800	Jan 2009
Uzbekistan	0,7	Apr 2011
Mongolia	15	May 2011
Russia	150	Oct 2014
Thailand	70	Dec 2011
Pakistan	30	Dec 2011
Sri Lanka	10	Sept 2014
Tajikistan	3	Sept 2015
Cambodia	n/a	Mar 2021
Macao SAR	30	Dec 2019
Lao P.D.R	6	May 2020

BRI Medium		
South Korea	400	Oct 2020
Argentina	130	Aug 2020
Indonesia	250	Jan 2022
New Zealand	25	Aug 2020
Kazakhstan	7	May 2018
Hungary	20	Jan 2020
Egypt	18	Feb 2020
South Africa	30	Apr 2018
EU*	350	Oct 2013

Not all EU countries are BRI members

Country	Size of Line (RMB Billion)	Date of Creation
Non-BRI		
Belarus	7	Mar 2009
Iceland	3,5	Jun 2010
U.A.E	35	Dec 2015
Turkey	35	Feb 2012
Ukraine	15	Jun 2012
Brazil	190	Mar 2013
United Kingdom	350	Jun 2013
Albania	2	Sept 2013
Canada	200	Nov 2014
Switzerland	150	Jul 2014
Chile	50	May 2015
Qatar	35	Nov 2014
Suriname	1	Mar 2015
Armenia	1	Mar 2015
Georgia	n/a	Sept 2015
Morocco	10	May 2016
Nigeria	15	Apr 2018

Note: Enodo Economics has assessed the likelihood of each BRI country joining China's sphere of influence and divided them into three groups: high, medium and low



Source: Enodo Economics

5.3 Exporting Yuan

The swaps are a useful tool for ensuring that yuan is available overseas, but they're ultimately a stopgap. Beijing shouldn't need to supply foreign central banks with yuan to facilitate ordinary trade.

> Foreign firms and banks need to be able to rely on a sustainable, self-renewing supply of yuan that's market-driven.

"If a country's currency cannot be continuously exported in the process of internationalization, it is likely that the country will remain at a stage where there's only partial settlement of imports and exports for a long time," Sun Guofeng, then head of the PBoC's research institute, wrote in August 2017.[6]

For more cross-border trade to be done in yuan, other currencies – and the dollar in particular – need to be used less. However, one of the reasons the dollar is the global reserve currency is because it's far cheaper and more convenient to do business in dollars than in any other currency.

During the course of our everyday lives, we mostly engage in spot transactions – we go into a supermarket or a department store and we take ownership of a product at the moment we pay for it.

However, global trade is different. Buyers and suppliers enter into long-term contracts. Typically, that involves a supplier delivering a product at some pre-agreed point in the future. Sometimes the buyer pays in advance, then sits back and waits for the product to arrive. Sometimes the buyer pays at some point after taking delivery.

Either way, when a company does a deal – either as buyer or seller – and agrees to use a currency that is not its own, it takes on certain risks.

For one thing, currency values change over time. If a buyer and seller agree on a price today, but payment isn't made until three months from now, during that period the value of the currency in which they're doing business could change relative to the currency of whatever country they're from. If it moves too much in the wrong direction, then the seller – or the buyer – could see their profit on the transaction wiped out.

They can take out insurance against the currency moving the wrong way by hedging – that is by buying a forward contract from a bank. That allows the company to know with certainty just how much they need to pay – or how much they're going to receive – in three months.

Another thing firms need is trade finance. A seller that has signed a three-month contract has lots of expenses to cover before getting paid. It needs to make the product, ship it to the buyer, and pay staff. To cover those costs, it can borrow by tapping a trade finance facility, like a letter of credit or bankers' acceptance draft. Borrowing usually occurs in the same currency in which the seller gets paid.

And finally, when it comes to settling the transaction, firms need to buy the currency in which they're paying, or sell the currency in which they're getting paid. However, that can be expensive. Banks charge a spread for exchanging currency. They charge more to exchange some currencies than others, depending on how actively those currencies are traded. Banks charge more for lightly traded currencies because there's less certainty of finding a buyer or seller in the foreign exchange market at the officially quoted price. However, there's less risk with an actively traded currency because banks can buy it from their customers and be pretty sure they can immediately sell it at a similar price.

> Firms want to transact in a currency that reduces these various costs to a bare minimum. That currency is the dollar.

5.4 Deep, Liquid Offshore Pools

The advantage of the dollar is that there are deep pools of dollars outside of US borders – eurodollars – that are actively traded in the foreign exchange and financial derivative markets.

> As a result, the spread on exchanging the dollar for almost any other currency is narrower than the spread between any other two currencies.

The market for dollar futures contracts is bigger and more active than that for any other currency. That's also the case for dollar-denominated interest rate swaps (IRS), which fixed-income investors use to manage risk. And trade finance in dollars is widely available and cheaper than most currencies.

All these features have enabled the dollar to be more than just a means of exchange. It is also a unit of account. Non-US firms all over the world use the dollar as a vehicle currency when doing business with other non-US firms. When they agree on a transaction, they set the price in dollars because it's cheaper than dealing in their own currencies.

Those conditions don't exist for the yuan. Yuan that exist beyond China's borders are called CNH, distinguishing them from CNY, the designation for onshore yuan. Hong Kong banks complain that there's not enough CNH, and that it takes too long to settle transactions using CNH because there's just not enough to go around.

> Companies typically conduct business with China using a vehicle currency – the dollar – because it's cheaper than using their own currencies.

"Since the renminbi isn't traded directly against many foreign currencies, it needs to be cross-traded through the dollar, so transaction costs are high and efficiency is relatively low," Zhang Liqing, director of the International Financial Research Center of the Central University of Finance and Economics, wrote in May 2021.[7] "In addition, the relative lack of foreign exchange derivatives and inactive market transactions are insufficient to meet the needs of enterprises for hedging exchange rate risks. All these factors have to some extent affected the willingness of enterprises to use RMB in cross-border trade and investment and financing businesses."

BOX 5.1

Offshore Yuan and Foreign Exchange Reform

China's foreign exchange regime isn't yet ready to accommodate a large, vibrant offshore yuan market. But it's moving in the right direction.

As RMB internationalization advances, Beijing will have to change the way it manages China's economy. Specifically, as the volume of yuan accumulating offshore increases, the ability of the PBoC to control the value of the yuan will gradually diminish. Instead, the central bank will have to rely on interest rates to manage both the currency and the broader economy, itself a significant shift. The PBoC has been actively preparing for such a future.

Today, the PBoC manages the value of the yuan over the short term while allowing it to move relatively freely over the long term. That's a huge change from when it first depegged the yuan from the dollar in mid-2005. The new regime is geared to keep the yuan basically stable.

Following that initial reform, the PBoC prioritized gradual appreciation of the yuan against the dollar – a crawling peg. Then in 2015 it introduced more volatility in the yuan's daily exchange rate, moving to an adjustable peg against a basket of currencies. That resulted in the PBoC intervening heavily to stem the yuan's ensuing decline, as we discussed earlier.

However, since 2018 the PBoC's priorities have been different. It has *"withdrawn from normalized intervention in the foreign exchange market"*. Instead, it is now implementing a *"managed floating exchange rate system… based on market supply and demand, adjusted with reference to a basket of currencies"*.

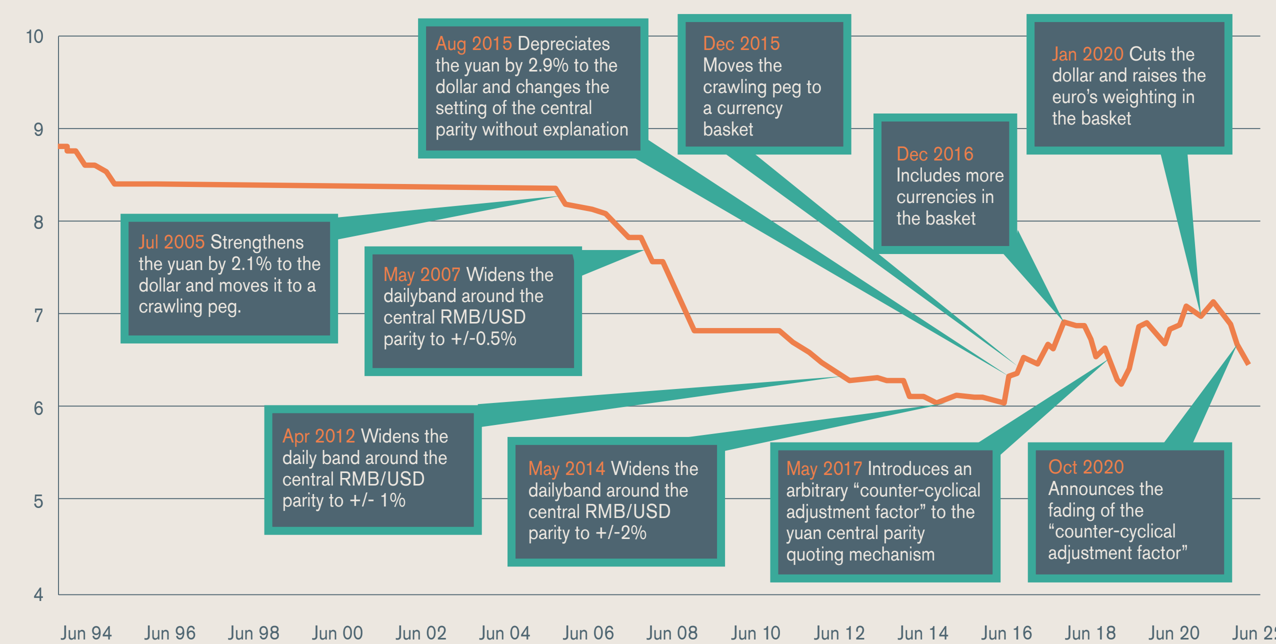
Each morning a handful of banks – market makers in the foreign exchange market – submit to the PBoC the level at which they think the yuan should start trading that day. Their numbers are based on the price at which the yuan closed against the dollar the previous day, combined with reference to the yuan's value against a trade-weighted basket of currencies.

Based on these contributions, the PBoC publishes what it calls the "central parity rate" – a reference level for the day's trading. The market can trade 2% above or below the reference level. That gives the yuan a lot of scope of move, albeit within limits.

Between mid-2017 and late-2020 the PBoC applied a "counter cyclical adjustment factor" – a formula deployed to help minimize volatility – when calculating the central parity. On October 27, 2020, the central bank said it would phase out the counter-cyclical factor, but it's not clear whether it will be abolished for good or could be revived at some point.

Major Exchange Rate Regime Changes

USD/CNY monthly average exchange rate



The PBoC's willingness to permit the yuan so much flexibility is born from the recognition that RMB internationalization requires a market-determined exchange rate, but the bank has also used RMB internationalization to promote the need for exchange rate flexibility.

According to Zhou Chengjun, director of the PBoC's Institute of Finance, more than 40% of global foreign exchange transactions involving the yuan occur offshore, beyond the PBoC's regulatory reach. Even if China's authorities impose their will on the onshore value of the yuan, the offshore market is free to do its own thing.

"[Consequently] the central bank no longer routinely intervenes in the RMB exchange rate," Zhou wrote in 2021.

As RMB internationalization advances, yuan trading will continue to migrate offshore – about 80% of transactions involving the dollar occur outside of the US – and the PBoC's ability to manage the exchange rate will wane further.

"We have to admit that under the conditions of RMB internationalization, we cannot control the RMB exchange rate," Zhou writes. *"The PBoC will eventually abandon the exchange rate target [because] the RMB exchange rate will be determined by the preferences, expectations, and transactions of all market players in the world."*

Most countries are already in this position. Rather than manage their currencies using targets, direct intervention, and regulatory constraints, they rely primarily on interest rates. That's the direction China is moving in.

Once the bulk of currency trading moves overseas, the PBoC needs to be able to combat a decline in the value of the yuan by raising interest rates, thereby increasing global demand for yuan-denominated assets. If the yuan strengthens too much, it can do the reverse.

However, it can't set rates by diktat. Global markets will only respond if interest rates reflect changes to supply and demand. That requires China to overhaul the way it sets monetary policy.

China has gone through successive bouts of interest rate liberalization this century, but its current monetary policy framework can still be best described as a hybrid, as discussed in Chapter 3. Beijing increasingly uses interest rates to steer the economy, while also resorting to adjustments to the quantity of money in the system, as well as leaning heavily on administrative guidance to influence bank behavior.

The PBoC ultimately wants to rely more on the interest rate tool. To that end it is trying to make interest rates more representative of market conditions. Further liberalization of the exchange rate depends on it.

"The ultimate goal of China's monetary policy is to "maintain the stability of the RMB's value and promote economic growth," PBoC Governor Yi Gang wrote in 2021. *"Interest rates are the key to achieving that goal."*

Timeline of Interest Rate Liberalization

Year	Events
1996	Removed the ceiling on interbank lending rate
1997	Introduced market-based repurchase agreements (repo)
1998-1999	Introduced auctions to policy bank and treasury bonds issuance
2000	Removed restrictions on FX lending rates and large-account FX deposit rates
2003	Removed interest rate floors on small-account FX deposits
2004	Removed the ceilings on lending rates; Expanded the floating floors for lending rates to 90% of the benchmark rate; Removed the floors on deposit rates; Removed interest rate ceilings on small-account FX deposits with maturity above 1 year
2012	Expanded the floating range for lending rates to 70% of the benchmark rate; Expanded the floating range for deposit rates to 110% of the benchmark rate
2013	Removed the lending rate floors on all loan facilities except for mortgages
2014	Expanded the floating range for deposit rates to 120% of the benchmark rate
2015	Launched the bank deposit insurance scheme; Expanded the floating range for deposit rates to 150% of the benchmark Removed the ceiling for deposit rates
2019	Linked loan prime rates (LPR) to medium-term lending facility (MLF); Required banks to price outstanding loans based on LPR

Source: Enodo Economics, PBoC

Consequently, the yuan is in no position to challenge the dollar head-to-head.

For China to replicate the conditions the dollar enjoys, it needs vibrant currency markets supported by deep pools of offshore yuan. It has to be cheap and easy for banks to get yuan if their customers need them. That is going to take time to achieve, something that isn't lost on China's financial officials.

"Due to the economies of scale and lower conversion costs of reserve currency settlement, it is difficult for the renminbi to replace reserve currency settlement in the short term," Sun Guofeng, director of the PBoC's research institute, who would later go on to become a deputy governor of the central bank, wrote in August 2017. [8]

5.5 The Full Cycle

The challenge for China is that the cost of transacting in yuan deters foreign firms from using the currency. However, the only way to bring down the cost of doing business in yuan is for the cross-border use of the currency to increase massively.

Consequently, Beijing needs to develop some mechanism whereby foreigners willingly accept receipt of yuan – in spite of the costs – and then use it in some way that results in the yuan cycling back into China's economy.

The US has established mechanisms for doing just that on two distinct occasions.

In 1947, the US launched the Marshall Plan, under which it provided Europe with aid, denominated in dollars, for post-war reconstruction, and the similar Dodge Plan for Japan. The Europeans and Japanese then used most of those dollars to buy inputs produced in America to get their exports going again.

"The shrinking European economy and the lack of US dollar foreign exchange led to declining European demand for US commodities," [9] Zheng Zhijie, president of China Development Bank, wrote in 2018. *"Against this background...the United States proposed the Marshall Plan to rebuild the large-scale export of dollar liquidity to Europe, thereby accelerating the process of dollar internationalization significantly."*

In effect, the US exported dollars as aid and loans, and those dollars then flowed back into the US economy to finance the purchase of US commodities and machinery. They also pooled overseas as countries transacted among themselves using the dollar, the only creditworthy currency to emerge from the war.

The outward flow of dollars also picked up with the advent of petrodollars. The trade surplus that the US had maintained until the 1970s turned into a deficit when a series of shocks pushed up the global price of oil, and with it the US import bill. Suddenly, the volume of dollars flowing to Saudi Arabia and other Middle East oil producers spiked. The Saudis sent those dollars back to the US by buying Treasuries and other US financial assets.

Moreover, the Saudis agreed to accept payment for all of their oil sales – regardless of the buyer – in dollars only, thereby creating demand globally for the US currency. This led many other oil-producing countries to also set their prices in dollars. The petrodollar system was born. It is noteworthy that Saudi Arabia's choice at the time was shaped by US diplomatic demarches, economic inducements and further US offers of military protection. [10]

The net effect was that dollars flowed out of the US to pay for energy and flowed back in as investment in financial assets. The US currency also piled up overseas, satisfying countries' need for dollars to pay for oil.

The BRI has been described as China's answer to the Marshall Plan – although Beijing offers loans not aid. Indeed, one could be forgiven for believing that China is pursuing RMB internationalization by lending yuan to developing countries in return for their purchase of Chinese manufactured goods. However, that hasn't happened – at least not yet. Borrowers in BRI countries have proven reluctant to accept yuan.

It is somewhat surprising, given that China runs a large trade surplus – not a deficit, as the US did in the 1970s – that Beijing is taking the petrodollar approach. It is striving to pump yuan into the global economy through trade and to absorb it via investment in financial assets.

Specifically, the current phase of RMB internationalization is focused on giving foreign firms reason to accept yuan as payment – and to invoice in yuan – even though hedging, trade finance, and foreign exchange markets aren't developed enough to make the Chinese currency sufficiently cheap to use.

Meanwhile, Beijing is trying to encourage yuan to flow back to China via the capital account, and specifically through investment in stocks, bonds, and other financial products. To do that it's not only removing barriers to investing in China's financial markets, it's overhauling those markets in a bid to make them more attractive for global capital.

Coming up, Chapter 6 looks at Beijing's attempts to encourage pricing and settlement in yuan, especially in energy and commodities markets, and Chapter 7 discusses its efforts to attract yuan inflows into China's financial markets. Chapter 8 outlines the payment infrastructure Beijing is building to start insulating itself from the US, trying also to lower costs and improve the efficiency of global payments, and its nascent attempts at an e-currency.

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Enodo Economics

6 Settlement and pricing in yuan

Wilson Center

6.1 Introduction

The key to RMB internationalization is pricing – not merely settling – cross-border trade in yuan. Almost all cross-border trade involves a lag between the moment buyer and supplier agree on the terms of their transaction and the moment when the buyer pays. The supplier might need to create the product being sold, and even if the product is already sitting in a warehouse ready to ship, it's still going to take time to transport it to the buyer.

Regardless of how long it takes for the buyer to take delivery, the price is agreed upon days, months, or even years in advance of actual payment. Crucially, the price is set in a currency. It might be the currency of one of the counterparties, or it might be a third currency – a vehicle currency – that both parties mutually agree upon. But when the price is set in a particular currency, payment is usually made in that currency.

That creates risk for companies transacting in currencies that are not their own. During the period between pricing and settlement the value of the pricing currency can change. To mitigate that risk, firms need to be able to purchase foreign exchange forwards and futures. Companies the world over are willing to price transactions in dollars because the financial tools for managing dollar risk are relatively cheap, accessible, and trustworthy. That's one of the reasons why the dollar is the global reserve currency.

The relative scarcity of yuan offshore means that getting hold of the currency can be time consuming and expensive. To bring down the cost of using yuan there needs to be a large, readily accessible pool of yuan beyond China's borders. For that to happen, firms outside of China must be willing to accept receipt of yuan either as payment, credit, aid, or investment.

However, for the most part the accumulation of offshore yuan has been propelled by expectations of yuan appreciation and arbitrage opportunities between the onshore and offshore market in Hong Kong. That's not a sustainable driver.

> For the authorities, the challenge is finding ways that foreign firms will willingly use yuan – other than for arbitrage – even though it's cheaper to transact in dollars.

China's authorities realize that it's no longer enough for Beijing to rely on the market to turn the yuan into an international currency. It needs to change the dynamics that determine how global trade is priced and settled.

Since 2018, China has been looking for ways to transform the functioning of global trade relationships to help the yuan displace the dollar in global payments. Its efforts are focused on altering how it transacts with developing economies, and with Asian and BRI countries in particular. We've identified four ways in which Beijing is trying to institutionalize overseas demand for yuan through commerce.

- **Commodities:** Beijing hopes to be able to shift the epicenter of global commodity futures trading from the US to China in order to make the yuan the dominant currency for settling and pricing commodity transactions. China's authorities hope that BRI countries will be particularly open to making the change, but a successful transition would affect commodity markets globally.

- **Industrial/processed goods:** Even if China can't alter set benchmark prices for commodities, it still wants to find ways to pay for them in yuan. To that end, Beijing wants Chinese capital to go abroad and fund resource extraction and processing facilities to produce goods that will be sold to China, in yuan.
- **Supply chains:** Asian supply chains are typically denominated in dollars because, in the past, the main consumer of the end product was usually the US. Beijing wants to make the yuan the currency of choice by establishing China as the anchor of an Asian trade bloc.
- **E-commerce:** Beijing hopes that it can circumvent traditional trade settlement patterns by using new technology and processes to increase the yuan's use.

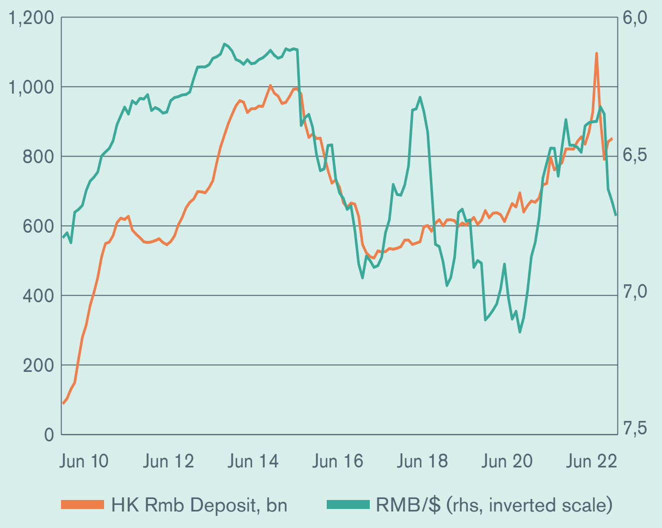
6.2 Settlement and Arbitrage

During the first stage of RMB internationalization (2009 – mid-2015), foreigners proved moderately willing to accept yuan as payment, resulting in the gradual accumulation of yuan deposits in Hong Kong banks. But the accumulation occurred not because of a genuine shift towards yuan-denominated trade, but because firms – both foreign and Chinese – sought to benefit from the yuan's appreciation and arbitrage opportunities between onshore and offshore markets.

Their opportunism took two main forms.

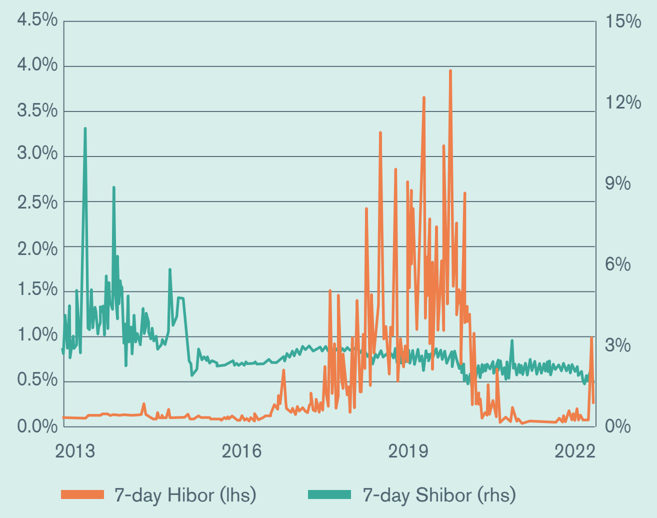
The first was quite simple. The yuan appreciated against the dollar consistently from mid-2010 until early 2014. Foreign suppliers were willing to accept yuan as payment because they had little doubt that the currency would continue to rise in value. Hence, they could earn an almost riskless return on any yuan they received just by holding it a while.

Hong Kong RMB Deposits and RMB/$



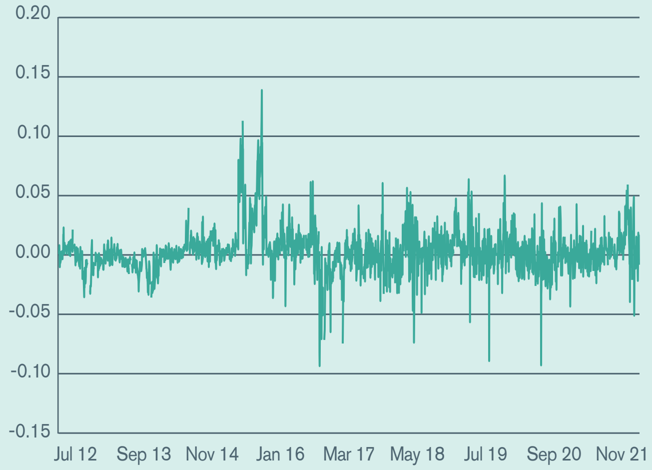
Source: Enodo Economics, CEIC

Seven-day HIBOR and SHIBOR Rates



Source: Enodo Economics, Wind

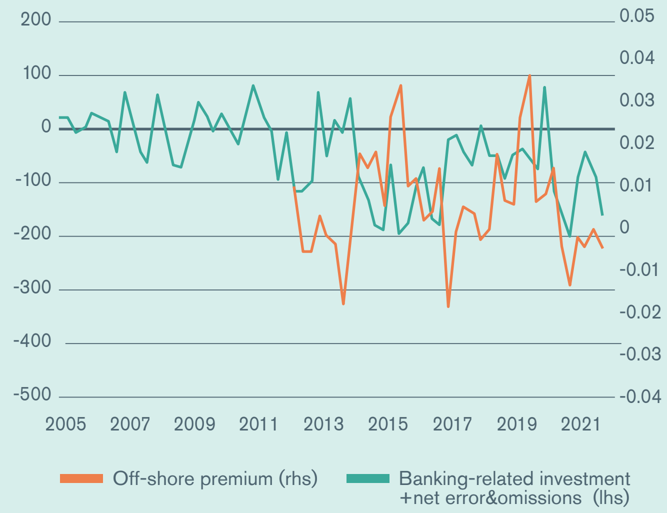
Daily Difference Between CNH and CNY



Source: Enodo Economics, CEIC

Banking-related Capital Flows and the Offshore Premium

$ bn; CNH-CNY



Source: Enodo Economics, IMF

"For foreign exporters, to use the renminbi as an invoice currency is beneficial, because the renminbi is a currency in appreciation," Yu Yongding, a former academic member of the PBoC's monetary policy committee, wrote in 2014. [1] ***"For importers in the PRC, however, this is irrational, because it means that they will forfeit the possible gains from the appreciation."***

As a result – in an unusual divergence from common practice – Chinese firms invoiced their transactions in dollars but settled them in yuan.

They were unwilling to commit to invoicing in yuan because the currency would undoubtedly increase in value before payment came due. By setting prices in dollars instead, the value of the transaction declined over the period when measured in yuan. Then, by settling in yuan rather than dollars when payment fell due, they avoided the hassle and expense of currency conversion.

Chinese firms also exploited the yuan's appreciation by trading with themselves. Rather than buy products from foreigners, mainland companies routinely made purchases using yuan from subsidiaries in Hong Kong. The transaction allowed the mainland company to get a letter of credit from a local bank, which was contingent on making a deposit in yuan of the same amount.

The Hong Kong subsidiary would then use the letter of credit to borrow US dollars. Because dollar interest rates were lower than yuan rates, the firm made more on the interest income from the yuan deposit than they paid in interest on the dollar loan. Once yuan appreciation was factored in, the gains on the deposit could be far in excess of the cost of the loan.

This highly lucrative arbitrage led to a peculiar development whereby the yuan remained one of the least-used currencies in the world – ranked 12th at the end of 2013 by total payments – but was the second most active for issuance of letters of credit.

The opportunities afforded firms by appreciation led to the build-up of yuan offshore, but the risk was that the yuan would just as easily flow back into China once the arbitrage opportunity reversed. This is what happened. Yuan deposits in Hong Kong banks peaked in mid-2015, declining after appreciation expectations evaporated following the PBoC's bungled exchange rate regime change and depreciation (as discussed in Chapter 4).

Profits from arbitrages are the major driving forces of, but do not constitute a sustainable basis for, internationalization," [2] Yu wrote of the phenomenon at the time.

These trades declined rapidly from 2015 onwards when the yuan's trajectory changed and China's authorities tightened the regulatory screws to deter arbitrage. Today, the value of the yuan against the dollar is far more stable. However, other arbitrage opportunities are still helping drive cross-border yuan settlement.

In recent years the outflow of yuan under the current account has been increasing again, although at a slower pace. In 2020, Rmb3.86trn flowed out of China as payment under the current account, equivalent to roughly 20% of the overall outflow.[3] The net outflow of yuan under the current account (that is the amount by which payments in yuan exceeded receipts) was almost Rmb1trn, up from Rmb720bn in 2019.[4]

That a fifth of China's outflow is settled in yuan seems, at first glance, a welcome improvement. However, it's worth noting that a significant portion of yuan-denominated trade settlement is between companies in mainland China with firms in Hong Kong. The PBoC doesn't provide a figure for imports only, but in 2020 trade that was conducted with Hong Kong and settled in yuan – exports and imports combined – accounted for 42.2% of the total.

According to a 2021 paper co-authored by a SAFE researcher, what's actually happening is that Chinese firms aren't paying foreign suppliers in yuan, but are paying Hong Kong affiliates in yuan in order to take advantage of better exchange rates available offshore.[5]

Cross-border trade is mainly settled in RMB [to take advantage of] the difference between the offshore and onshore market exchange rates," the paper reads.

This isn't a new phenomenon. It was also going on during the first stage of yuan internationalization when the gap between onshore and offshore rates was wider. But it's become more prominent now that other types of arbitrage are no longer possible.

If offshore yuan (CNH) is stronger than onshore yuan (CNY), then Chinese importers remit yuan to their Hong Kong affiliates, which then exchange the yuan for foreign currency in order to pay their overseas suppliers. That way Chinese firms hand over fewer yuan than if they had made the currency conversion on the mainland.

It works the other way as well. When CNH is weaker than CNY, Chinese exporters can earn more yuan if they exchange dollar earnings for CNH in Hong Kong, then remit the CNH to the mainland.

Throughout 2020, the number of days when CNY was weaker than CNH was roughly equal to the number of days when it was stronger. However, according to the PBoC, CNH was nonetheless stronger than CNY on average. The relative strength of the CNH may have helped support outflows.

Whenever there is a sufficiently large interest rate and exchange rate difference between the RMB offshore market and the onshore market, RMB cross-border activity is likely to be dominated by arbitrage motives," the paper by the SAFE researcher reads. [6]

"The RMB is used more as a cross-border settlement currency [for domestic entities] rather than an international pricing currency. " [7]

On one level, China needs to shut down any opportunity for arbitrage by ensuring that the onshore and offshore exchange rates and interest rates are identical.

> But more importantly, China needs to create conditions under which foreign firms are willing to take on the risk of pricing long-term contracts in yuan.

6.3 Pricing Determinants

The difficulty in achieving such conditions is that the dollar's cost advantages are unassailable. Until China is able to develop both large pools of offshore yuan and highly liquid, actively traded offshore futures and interest rate swaps markets, the yuan will not be able to compete with the dollar on cost.

However, there are other things Beijing can do. It can strive to minimize the volatility of the yuan against other currencies – especially those of its major trading partners – thereby reducing the need for hedging. Small firms often don't hedge their foreign exchange risk. If the currency they're transacting in is relatively stable, the chance of losing money due to adverse exchange-rate movements is lessened. Additionally, Beijing can strive to minimize inflation – something it has long been committed to – thereby preserving the value of the currency (as discussed in Chapter 4).

But it's also necessary to give firms a reason to use the yuan, even if it is more expensive than the dollar. This means creating conditions under which foreign firms are willing to price their transactions in the Chinese currency.

[We] paid too much attention to the settlement in yuan, while relatively neglecting the improvement of the renminbi's pricing function" during the first phase of RMB internationalization, wrote Zhang Ming, deputy director of the Institute of Finance & Banking at the China Academy of Social Sciences (CASS), in August 2021. [8]

"Judging from the existing international experience…pricing is more important for a country's currency to become an international currency…By only relying on trade settlement combined with the development of offshore markets it is difficult to truly achieve international currency status."

> Luckily, under certain circumstances firms have the power to overcome the dollar's entrenched advantages and determine for themselves the pricing currency of their cross-border transactions.

For example, countries that can produce goods and services that aren't easily reproduced anywhere else are typically able to sell them in whatever currency they like. Beijing is striving to do just that by rising up the value-added chain with initiatives like "Made in China 2025."

But many of the goods that China buys from developed economies – other than commodities – are of a quality or technological standard that it is unable to produce for itself.

For example, China is a major producer of low-end semiconductors, but it relies heavily on US companies for imports of high-end chips that it's unable to manufacture itself. China assembles most of the world's ballpoint pens, but key components – the nib, ball bearing, and ink – have traditionally been imported from places like Japan and Germany because they require a degree of engineering and certain proprietary technologies that China hasn't been able to replicate.

China doesn't necessarily pay Germans in euros or Japanese in yen for these goods. Foreign firms routinely accept dollars for their premium goods for the sake of convenience. But China has little leverage to get firms from advanced economies to accept yuan.

However, China has identified a number of ways in which it can potentially decide the currency in which imports are priced, particularly those from developing economies. They are:

- **Making China the place where global prices for commodities are determined**
- **Using Chinese capital to develop overseas production facilities that sell to China**
- **Making China an anchor of demand for Asian supply chains**
- **Leveraging the idiosyncrasies of cross-border e-commerce**

Success on any of these counts will help build a pool of offshore yuan while also developing demand for offshore yuan financial products. In the sections that follow we discuss how China has been trying to challenge the settlement and pricing norms of cross-border trade since 2018.

6.4 Commodity Settlement and Pricing

Being able to purchase essential commodities using yuan is at the heart of Beijing's RMB internationalization strategy, but dislodging the dollar will be difficult. China is the world's biggest consumer of most agricultural, mineral, and industrial commodities. And yet almost all major commodities are not only settled in dollars, but pricing is based on futures exchanges in the West that use dollars. Chinese officials argue that this distorts prices.

The PBoC says it's making progress toward changing matters.

"The use of the RMB in commodity trade already had a good start and is expected to be a growth pillar for the cross-border use of the RMB," the PBoC said in its 2021 report on RMB internationalization. [9] ***"In 2020...cross-border RMB payments and receipts in crude oil, iron ore, copper, soybean and other commodities trade during the whole year amounted to 252.57 billion yuan, up 16.4% yoy. "***

While the pace of growth is robust, it's starting from a low base. Moreover, even though China is the world's biggest importer of a host of commodities – it purchases 60% of globally exported soybeans, and imports four times as much copper as the next biggest importer – that hasn't enabled it to insist on invoicing or paying for those imports in yuan.

China's experience with iron ore is telling. China buys about 70% of global seaborne iron ore exports. Almost all of it comes from Brazil's Vale, and Anglo-Australian miners BHP and Rio Tinto, which supply the mineral under long-term contracts priced in dollars.

However, in recent years, the miners have been willing to allow Chinese steel mills to pay for a small portion of their iron ore imports with yuan. In 2020, Baowu Steel Group – the world's biggest steel producer – paid Brazil's Vale Rmb300m, and BHP and Rio Tinto Rmb100m each, for iron ore purchases. Separately, Rio Tinto accepted Rmb100m in payment from Ansteel Group.

That likely amounts to less than 1% of what China paid for iron ore that year. China imported 1.17bn tonnes of iron ore in 2020. Most of that was sold under long-term contracts, but the spot price per tonne bounced around between $80 and $155 in 2020.

In addition to accepting yuan in a handful of showcase deals, in some instances iron ore producers have been willing to accept yuan for spot market purchases by small Chinese steel mills that are unable to get dollar-denominated trade financing.

However, global miners aren't likely to abandon the US currency. With mines and customers spanning the globe, producing a homogenous good, pricing and transacting in dollars simplifies operations.

Petro pricing

In some cases, the dollar's role as commodity pricing and settlement currency is political. Under certain circumstances China might be able to leverage changing geopolitical conditions to encourage some countries to accept payment in yuan. For example, China would ideally like to be able to pay for oil imports in yuan. That could possibly happen one day. In March 2022, the Wall Street Journal reported that Saudi Arabia was considering accepting yuan as payment for at least some of the oil it ships to China. [10]

According to the report, the two countries have been negotiating on the issue on-and-off for six years, but discussions "accelerated this year as the Saudis have grown increasingly unhappy with decades-old US security commitments to defend the kingdom."

Those security arrangements were built on the US need to ensure a stable supply of oil. However, US oil independence means that its interests no longer align as closely as they once did with those of Saudi Arabia. Instead, a quarter of Saudi exports go to China, almost four times as much as to the US. US disengagement has also affected the UAE – another major oil producer – that has grown increasingly disillusioned with what it considers Washington's unpredictability.

The WSJ article said that should Saudi Arabia start accepting yuan as payment, some of it could be used to pay Chinese contractors building Saudi infrastructure projects.

However, for most commodities pricing is based on the commercial decisions of private institutions, not governments.

> Changing the way private sector actors decide the currency they use to buy and sell commodities will require a radical shift in the way global markets currently function.

Specifically, it will require the center of commodities futures trading to shift from the US to China.

The centrality of futures

A futures contract is an agreement to buy or sell something at a future date. The price at which a futures contract trades reflects expectations of how much that thing will be worth in three or six or 12 months' time. There are futures contracts for currencies and bonds, but they have a special place in commodities trading.

Commodities are typically sold under long-term contracts. For example, the costs involved in opening and maintaining a mine means that mining companies need to have buyers lined up before starting production. To that end, they usually sign agreements with buyers under which they promise to deliver a certain tonnage of ore, at a certain point in the future, for a certain price.

Similarly, in order to decide what mix of crops to plant, farmers need to know in advance how much the eventual harvest will sell for. Hence, they might sell a portion of the future harvest before planting.

The challenge for farmers, miners, and their customers is arriving at a reasonable price for something that's not going to be delivered for months or even years into the future. That's where futures contracts come in.

In a commodities futures market, traders, investors, producers, and buyers come together to buy and sell futures contracts. In a mature, well-functioning market, vigorous trading of those contracts generates a market price for a commodity each month into the future, up to a year.

In essence, futures prices are a crowdsourced forecast of how much a given commodity will sell for at a certain point in the future.

Futures markets in the US and London are the deepest, most liquid, entrenched, and accessible in the world. Consequently, the world recognizes that the futures prices of those exchanges are the best available expression of market expectations. The result is that commodity producers and buyers globally set prices using benchmarks predominantly established by those exchanges.

The benchmark futures contracts for oil are traded in New York and London, while most agricultural futures are traded in Chicago. Most metals are traded on the London Metal Exchange (LME) which is actually owned by the Hong Kong Exchanges and Clearing (HKEX).

Pricing power

However, while US and London commodities markets are the best functioning, the epicenter for demand for most major commodities is China.

"We import [the most] soybean, but we have to listen to Chicago, which isn't reasonable," Eugene Zhu Yuchen, former CEO of the Dalian Commodity Exchange and China Financial Futures Exchange, said in a 2018 interview.[11] "At least for these products [where Asia is the biggest buyer], we should have our voice."

Chinese officials argue that the role of the US exchanges – and the pricing of futures contracts in dollars – undermines the proper functioning of the global economy.

"If the country responsible for issuing the key global reserve currency is no longer at the core of global commodity and industrial supply chains...then exchange rate adjustments...will not provide price signals or promote better resource allocation on a global scale," Zhou Chengjun, director of the Institute of Finance at the PBoC, wrote in May 2021.[12]

To redress these imbalances, Beijing believes that it needs "pricing power," which means that the price of commodities primarily used in China should be set by its futures exchanges in Shanghai, Dalian, Zhengzhou and Guangzhou.

> Whether the migration of global commodities pricing from US to Chinese exchanges would have a meaningful impact on prices is debatable. However, were it to occur, it would likely have a significant impact on the global use of yuan.

The lack of pricing power of bulk commodities has affected the expansion of RMB internationalization," writes Ba Shusong, chief China economist of HKEX and chief economist of the China Banking Association.[13] ***"Drawing on the experience of international currencies…achieving pricing power in commodities is undoubtedly a key part of the next stage of the yuan's internationalization."***

Once commodities futures are priced in yuan, then it follows that commodity producers and buyers will eventually start settling their transactions in yuan as well. Settling in some other currency introduces the risk of receiving less – or paying more – in yuan-denominated terms than would otherwise be the case.

Based on the experience of the US dollar, one possible way to further promote yuan internationalization is by using commodity futures markets to help facilitate the pricing of commodities in yuan," the Shanghai Futures Exchange wrote in a research paper in 2017.[14] ***"With the development and growth of RMB-denominated commodity futures markets, the status of RMB as a commodity pricing currency is gradually increasing."***

Building the profile of Chinese commodity futures

That said, China's futures markets have a long way to go before being a viable alternative to the CME, CBOT, or NYMEX. China's markets are extremely volatile, in large part due to the disproportionately large role retail traders play relative to other markets. Moreover, regulators routinely tweak trading rules whenever they feel that commodity prices are too high. And overseas investors currently play a very minor role.

Still, Chinese authorities feel that China's status as the world's biggest consumer of many commodities gives it a long-term edge. It's trying to build on that advantage in two main ways.

- **New commodities futures:** Beijing is trying to increase the relevance of China's markets by introducing yuan-denominated futures contracts for commodities that don't presently have futures. Some are quite small and niche, like pulp for paper, while others are much larger, like iron ore. Moreover, it's trying to take advantage of changes in industry – and in particular shifts towards decarbonization – to take the lead in pricing the metals and minerals that become newly important.

  To that end, the Shanghai Futures Exchange is considering introducing futures contracts for cobalt, hydrogen, and ammonia.[15] Meanwhile, in 2021 China launched its fifth futures exchange, the Guangzhou Futures Exchange, which is focused on developing carbon futures but also hopes to develop contracts for polysilicon, industrial silicon, and rare earths.[16]

  The Zhengzhou Commodities Exchange is taking a slightly different approach. It's identified a niche in textiles and says that "from plant fiber to chemical fiber, it will form the world's most complete series of textiles [futures]."[17]

- **Market opening:** China's authorities are also gradually opening the country's futures markets to greater foreign involvement. In 2018, China launched yuan-denominated crude oil futures contracts on the Shanghai International Energy Ex-

All Chinese Futures Exchanges

	Trading size	Key features	Investment scope for foreign investors
China Financial Futures Exchange (CFFEX) Est. Sept 2006	World's 9th largest exchange by number of stock index options contracts traded and 6th largest exchange by number of long-term interest rate options and futures contracts traded in 2021	• Specialises in financial futures, options and other derivatives including equity, interest rate and foreign exchange derivatives • 6 types of futures and 1 option have been opened for trading on CFFEX	• Qualified Foreign Investors (QFI) are allowed to trade stock index options for hedging purposes only effective Nov. 1, 2021
Shanghai Futures Exchange (SHFE) Est. Dec 1999	World's 3rd largest exchange in crude oil by trading volume and 2nd largest by number of commodity options and futures contracts traded in 2021	• Specializes in metal, energy, and chemical products • 20 types of commodity futures and 6 commodity options have been opened for trading on SHFE	• All foreign investors are allowed to trade in TSR 20 rubber futures, crude oil futures and options, and bonded copper futures without prior approval from Chinese regulators • Qualified Foreign Investors (QFI) are permitted to trade in all types of commodity futures and options listed on the exchange effective Nov. 1, 2021
Dalian Commodity Exchange (DCE) Est. Feb 1993	World's largest exchange in agriculture and non-precious metal, 4th largest in energy by trading volume and 3rd largest by number of commodity options and futures contracts traded in 2021	• Specializes in coal, iron ore, agricultural and chemical products • 21 types of commodity futures and 8 commodity options have been opened for trading on DCE	• All foreign investors are allowed to trade in Iron ore futures, palm oil futures and options without prior approval from Chinese regulators • Qualified Foreign Investors (QFI) are permitted to trade in all types of commodity futures and options listed on the exchange effective Nov. 1, 2021
Zhengzhou Commodity Exchange (ZCE) Est. Oct 1990	World's 2nd largest exchange in agriculture and non-precious metal, 3rd largest in energy by trading volume and largest by number of commodity options and futures contracts traded in 2021	• Specializes in agricultural and chemical products • 23 types of commodity futures and 6 commodity options have been opened for trading on ZCE	• All foreign investors are allowed to trade in PTA futures without prior approval from Chinese regulators • Qualified Foreign Investors (QFI) are permitted to trade in all types of commodity futures and options listed on the exchange effective Nov. 1, 2021
Guangzhou Futures Exchange Est. Apr 2021		• 16 types of commodity futures have been approved for trading • Plans to officially launch its first contract in late 2022 • Aims to find niches in goods that are not yet traded on other domestic platforms such as carbon resource trading, rare earth, silicon, etc.	• Qualified Foreign Investors (QFI) are permitted to trade in all types of commodity futures and options listed on the exchange effective Nov. 1, 2021

change, the first yuan futures that foreigners could directly buy and sell. Additionally, over the last few years Beijing has launched yuan-denominated futures contracts for rubber, palm oil, copper, purified terephthalic acid (or PTA, which is used in the production of polyester), rubber, and iron ore that are open to trading by foreigners.

As part of its current five-year plan, Shanghai wants the "international market's acceptance of the Shanghai price for major commodities to be much higher by 2025."

The overall strategy was best summed up by Fang Xinghai, vice chairman of the China Securities Regulatory Commission, in January 2022.

> ***It is necessary to promote the innovation of futures products such as carbon emission rights and new energy metals,"*** he said.[18] ***"It is necessary to continue to expand the range of products open [to foreign investors], deepen the price influence of products that have already been opened, and strive to promote breakthroughs in the regional pricing influence of key products such as crude oil, PTA, and iron ore."***

> Changing the epicenter of global commodities trading is a hugely ambitious undertaking. The dollar is truly entrenched as the currency of both pricing and settlement for commodities and China will find it difficult to replicate the conditions which have led to the dollar's dominance.

However, ensuring that it can pay for commodities in yuan is an important aspect of China's safeguarding its economic security.

Consequently, even if China is unable to change the way commodities are priced, it hopes to be able to find ways to pay for what it needs using yuan. One of those ways is to use Chinese capital to help develop resources extraction and processing abroad.

6.5 The Closed Loop

Commodity transactions are typically settled in dollars because the global price for commodities is set in dollars. But in a 2017 speech, Sun Guofeng, then head of the PBoC's research institute, identified another factor that stands in the way of commodities being settled in yuan. According to Sun, processed commodities are usually priced in dollars and euros – even if the buyer and seller are both developing countries – because "the pricing currency...is mainly determined by multinational companies from developed countries that commission the processing." [19]

However, Chinese officials are hoping to change that.

> ***Under the current transfer of production capacity from domestic enterprises to neighboring countries...we expect more market participants will accept RMB as settlement and payment currency, especially for those located either in neighboring countries or along the Belt and Road,"*** the PBoC wrote in its 2020 report on yuan internationalization. [20]

Since the early days of the BRI – launched in 2013 – Chinese officials have spoken of how the initiative will help promote RMB internationalization. Given the huge need for new infrastructure in BRI countries – and so few sources of financing – it seemed inevitable that funding would be welcomed in whatever form the Chinese wished to make it available.

However, such optimism was misplaced. Almost all Chinese overseas loans are made in dollars. A 2019 research paper by Sebastian Horn and Carmen Reinhart on Chinese overseas lending, found that of the loans in their sample, around 85% were ***"contracted in US dollars, while Renminbi denominated loans play a minor role."*** [21]

> Much like everyone else, BRI countries want dollars and euros. However, China's authorities have struck upon a strategy they hope will result in the yuan-denominated loans receiving a warmer welcome.

Chinese authorities are using something called ***"industrial capacity cooperation"*** to help advance Chinese investment in BRI countries. Beijing is encouraging Chinese firms to build production capacity in BRI countries in order to make the goods that will ultimately be exported to China and paid for in yuan. [22]

Economic pressures are driving the transition.

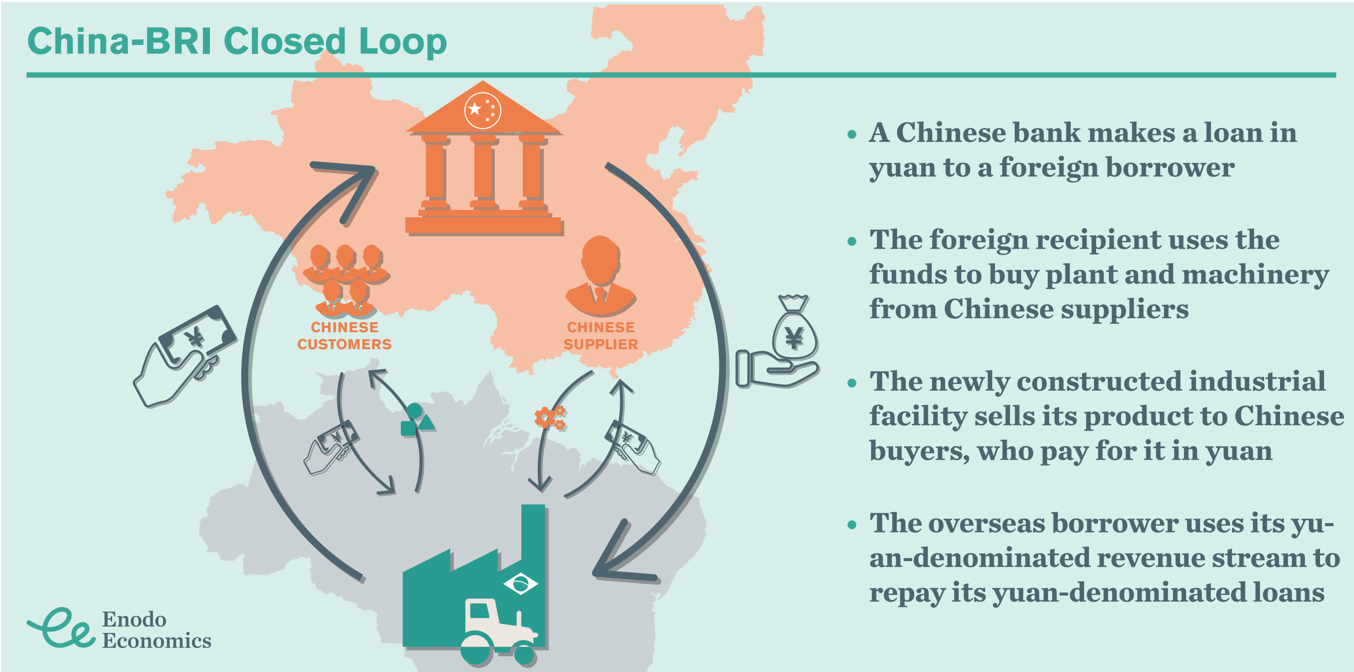
- **China's rapidly aging population and shrinking workforce** mean it will increasingly need to move low-end industries to economies with cheaper labor.
- **Industries that intensively consume inputs which China lacks –** namely energy, water, and land – can relocate to developing economies without such constraints.
- **As China pursues decarbonization and a cleaner environment,** pressure will mount to move polluting industries to countries with lower environmental standards.
- **China can help develop extraction and processing facilities for resources** it lacks in countries within its sphere of influence.

The hope is that the process of building industrial capacity overseas won't just result in the sale of products to China in yuan, but that it will also spur demand for yuan services and assets as part of the management of firms' treasury operations.

> ***In the past two years, the PBoC has...cooperated with relevant ministries... to find ways to use yuan to facilitate the large-scale transfer of industrial capacity overseas,"*** Zhou Chengjun, director of the Institute of Finance at the PBoC, wrote in May 2021. [23]

> ***Large-scale industrial transfers involve yuan being deposited in foreign countries...It is used to import and transfer machinery, equipment, production lines, and services from China. It results in a basket of services being provided by Chinese financial institutions, such as the sales of yuan-denominated stocks, bonds and other financial assets to foreigners."***

What Zhou is describing is a "closed loop" of yuan demand. The process creates demand for yuan like this:



So far, the most high-profile example of such a cycle occurred in 2016 when China Development Bank (CDB) and China Export-Import Bank (Exim Bank) provided Rmb9.8bn – and € 9.3bn – in credit to Yamal LNG, a project to extract gas from the Russian Arctic.[24] The yuan was then used to pay 45 Chinese companies which produced 101 of the 142 modules required to construct the offshore gas project.[25] In April 2021, the chairman of Novatek – the majority owner of Yamal – said the company planned to sell at least some of its LNG in yuan.[26]

We have no way of knowing just how many other projects have used similar funding models, but we suspect that so far it has been very few. Still, it could be a particularly useful model in resource-rich countries like Russia and Iran that have been cut off from using dollars. It is also the model for the Saudi "petroyuan" deal described by the WSJ and referenced in Section 6.4.

6.6 Supply Chains

In its 2021 report on RMB internationalization, the PBoC said it expects the Regional Comprehensive Economic Partnership (RCEP) to "enlarge the room for the use of the RMB in trade and investment activities."

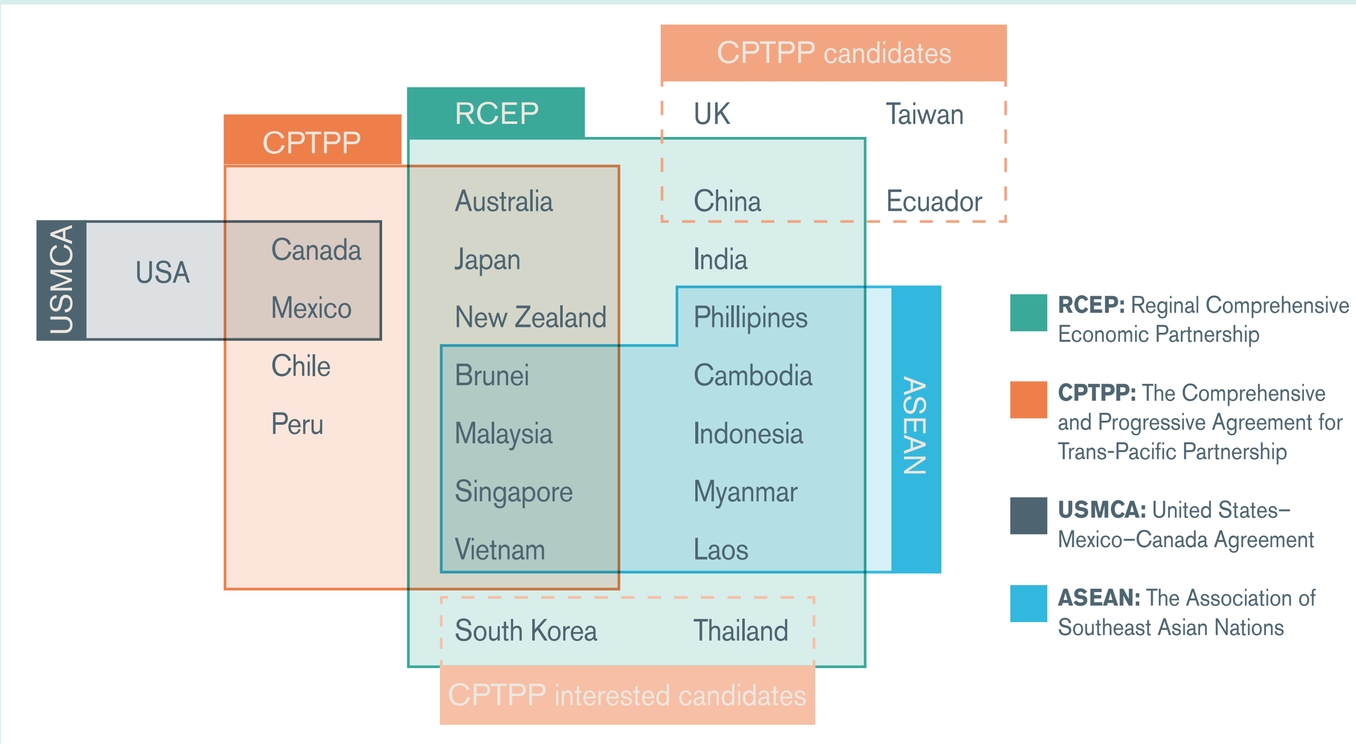
It's not immediately obvious why the yuan should stand to gain from RCEP.

RCEP is a free trade agreement signed in 2020 by 15 members: the 10 members of ASEAN, plus China, Japan, South Korea, Australia, and New Zealand. The establishment of the grouping was driven by ASEAN members, some of which have ambitions to increase the cross-border use of their own currencies. Moreover, the yen currently fea-

Regional Comprehensive Economic Partnership and the Comprehensive and Progressive Agreement for Trans-Pacific Partnership

RCEP / came into force Jan 2022 / eliminating over 90% of import tariffs / common rules for trade, e-commerce, intellectual property

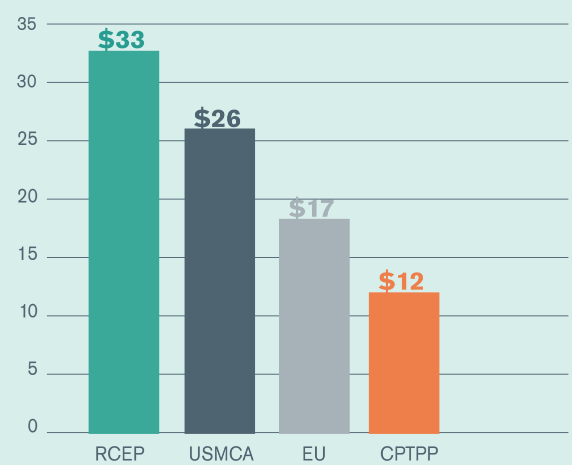
CPTPP / came into force Dec 2018 / eliminating over 95% of import tariffs / common rules for trade, e-commerce, intellectual property, food regulations, environmental protections, investment, labor, financial services



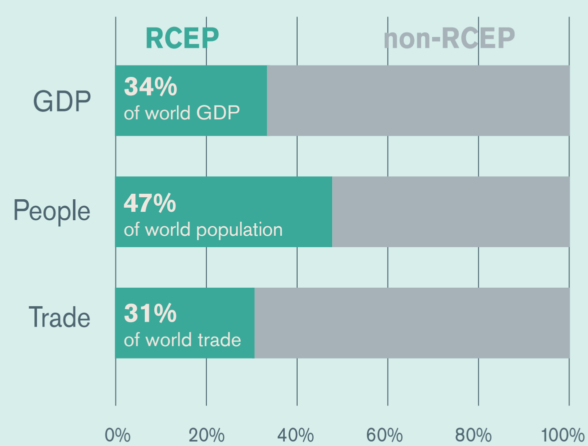
Relative Size of RCEP versus Other FTAs

Trade Agreements by Size of Member GDP

Current $ trn, 2021



RCEP at a Glance in 2021



Source: Enodo Economics

tures in far more international transactions than the yuan does; the Japanese currency was already widely used throughout the region during the eighties and nineties.

The yuan is barely used by the major economies of East Asia. According to a report by the Asian Development Bank (ADB), in 2020 only 2.3% of Japan's exports and 1.3% of its imports were denominated in yuan.[27] In South Korea the ratio was 2.0% and 1.5% respectively, while in Indonesia it was 1.0% and 3.3%, and Thailand it was 0.5% and 1.5%.

> However, Beijing hopes that RCEP will boost use of the yuan by providing the foundations of a trade bloc that China might eventually anchor.

RCEP is designed to tighten regional economic ties.

"RCEP provides an institutional platform for East Asian economic integration," Zhang Jianping, deputy director of the Academic Committee of the Research Institute of the Ministry of Commerce, said in 2022.[28] ***"[It] will give economies across East Asia the opportunity to strengthen and secure global supply chain collaboration."***

Under the agreement, tariffs on more than 90% of goods traded within the group will eventually be eliminated. Additionally, rules of origin – which determine which goods traded among members are subject to tariffs – have been greatly simplified such that a product is exempt from tariffs if at least 40% of its constituent parts are made in RCEP member countries.

Such measures are designed to create an incentive for Asian countries to trade more with each other, at the expense of non-members.

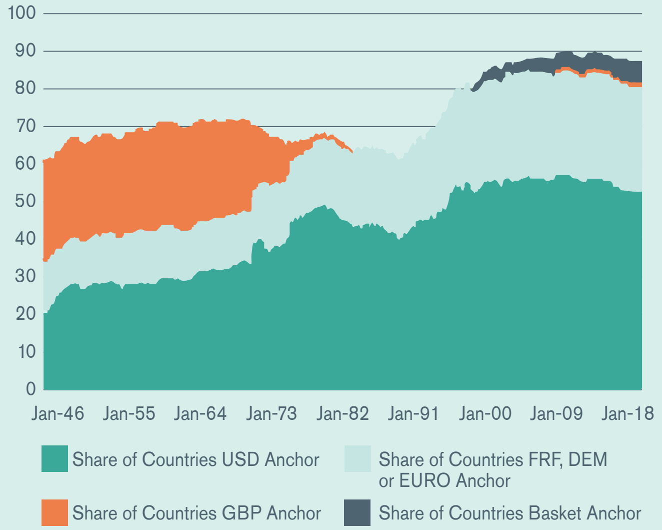
"Most of [the agreement's] gains come from trade diverted away from non-members," the United Nations Conference on Trade and Development (UNCTAD) wrote in a 2021 report.[29] ***"As the process of integration of RCEP members goes further, these diversion effects could be magnified."***

> At a time of re-shoring, near-shoring, and friend-shoring, RCEP has the potential to make Asian supply chains even more concentrated in Asia.

"The pandemic has led to a marked increase in uncertainty in the world, making globalization over long distances more constrained, and neighboring countries becoming more interdependent," said Bai Ming, a researcher in the Ministry of Commerce's International Market Research Institute.[30] ***"From a global perspective, the signing of RCEP will promote the balance of the three economic circles in North America, Europe and East Asia."***

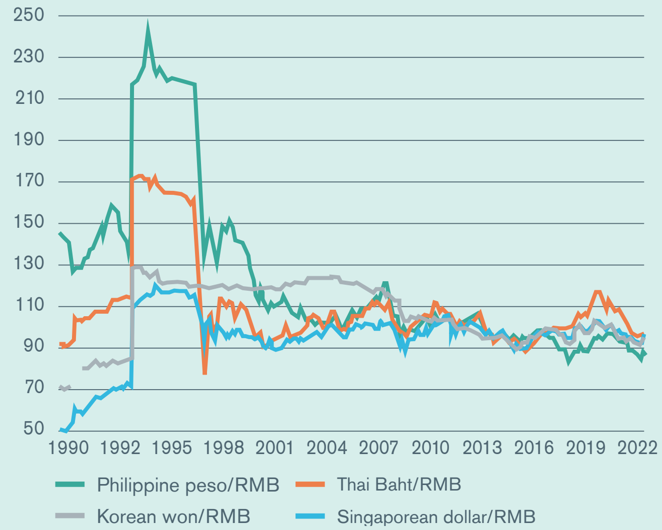
Stability of Asian Currencies

Share of Countries with Currencies Anchored to the Dollar, Euro, Pound and a Basket
1946-2019



Source: Exchange Rate Arrangements into the 21st Century: Will the Anchor Currency Hold?, Ethan Ilzetzki, Carmen M. Reinhart, Kenneth Rogoff

Asian Currencies vs. the Yuan
Monthly average, Jan 2012=100



Source: Enodo Economics, CEIC

Anchor currency

Closer economic integration creates an incentive for member countries to minimize currency volatility within the group. While large firms typically hedge against currency fluctuations, small firms don't, which means that if a currency moves too far the wrong way they could see their profit wiped out. Currency stability between countries that do large volumes of trade with each other helps lessen the risk and reduce the cost of cross-border trade.

That requires central banks throughout a particular region to manage the value of their currencies relative to each other. That usually involves anchoring those currencies against a dominant regional currency, a role that the Deutsche Mark fulfilled in Europe prior to the advent of the euro. By minimizing volatility against an anchor currency, countries can minimize volatility against all other currencies that do the same.

> The yuan is the only feasible currency anchor for RCEP.

China is the region's biggest economy by a large margin – almost three times larger than second-ranked Japan. Moreover, China and ASEAN are already each other's biggest trading partners, and there are signs that their currencies are already drawing closer to each other.

"One of the most significant achievements of yuan internationalization is that the currency has been playing an important role as a partial nominal anchor for exchange-rate management in many Asian economies, particularly in ASEAN+3," the

ADB wrote in a 2021 report.[31] ***"The currency weight of the yuan in the implicit basket of exchange rate movements has risen to more than 20% for the Republic of Korea, Malaysia, and Singapore."***

That weight could increase under RCEP – but not necessarily. There is already very little volatility between Asian currencies. Moreover, even though the yuan has become a partial anchor, that hasn't translated into widespread use of the currency for trade across Asia. For that to happen, closer economic integration isn't enough. China needs to anchor the regional economy – not just the currency regime – by being a source of demand.

Redefining supply chains

Traditionally, China has mainly been a transit point for Asian supply chains rather than the end consumer. Components produced around the region eventually make their way to China for assembly and further processing before being shipped to the US, Europe, or other developed economies. However, each link in the supply chain for a given product typically does business in the currency of the primary end user. Consequently, the invoice and settlement currency of choice in Asia is the dollar.

"Most of [China's] export enterprises are still labor-intensive enterprises, and their role in the global supply chain is mainly processing and assembling," wrote Wang Daxian, a SAFE researcher, with a co-author in a 2021 paper.[32] ***"The final products are mainly sold to the United States, Europe, Southeast Asia, Latin America and other places, and the enterprises along the supply chain prefer to transact in the currency of the final place of sale."***

That has potential to change. In 2017, Takatoshi Ito, a professor of international and public affairs at Columbia University, who conducts regular surveys of Japanese firms with operations in Asia, noted an increase in his respondents' willingness to accept local Asian currencies – and yuan in particular – as payment. In a follow-up survey to gauge why the change had occurred, he found that

"China and other Asian countries have become more important as final consumption destinations."[33]

Ito found that the relative stability of the yen against Asian currencies had also encouraged the shift, as had the liberalization of financial markets around the region.

"These results suggest that the role of the US dollar will be gradually diminished if Asian countries further advance their local production," Ito wrote.

To build on those gains, China needs to consume more of what Asia manufactures – not as a processor, but as an end user. That requires China to increase consumer demand, something Beijing is trying to achieve with Common Prosperity.

Common prosperity

In August 2021, Xi Jinping introduced the idea of Common Prosperity as a governance framework that will form the basis of the Party's legitimacy for the next generation.

Common Prosperity is a generational project designed to create a more affluent China and one where wealth is more equitably distributed. It aspires to do nothing short of restructuring the economic priorities of the country such that growth is powered by consumption, rather than by investment or exports.

Common Prosperity is built on the understanding that for consumption to drive growth it is not sufficient for Chinese households to simply consume a greater share of their incomes. Rather, the incomes need to be bigger – not just in absolute terms but relative to the size of the economy – and they need to be able to spend a greater share of that income on discretionary items.

This notion was perhaps best articulated in a December 2020 speech by Yang Weimin, deputy director of the Chinese People's Political Consultative Conference's (CPPCC) economic committee, and previously Vice Premier Liu He's deputy at the Central Financial and Economic Affairs Commission.

> ***The main thing is to expand consumption by domestic residents, so that the growth of household consumption is faster than the growth of government consumption, faster than the growth of investment, and faster than the growth of exports.***
>
> ***"Residents' income is closely related to residents' consumption. Without income, there is no ability to consume. Therefore, it is necessary to adjust the distribution pattern of national income, and strive to make the growth of residents' income keep pace with economic growth, and preferably be faster than economic growth.***
>
> ***"At the same time, it is necessary to appropriately reduce the proportion of government revenue as part of national income, and appropriately reduce the proportion of the income of the corporate sector, especially the banking, real estate, and information service industries, in the national income."*** [34]

> Common Prosperity is geared toward realizing such a redistribution of national resources.

It envisions a reallocation of wealth, not simply from rich to poor, but from the state, state firms, and large private sector firms (in particular those that generate their profits from monopoly power, such as the tech giants, and those that benefit from asset price appreciation, like property developers) to households.

Beijing is striving to attain three goals: to reduce household outlays, by lowering the cost of housing, healthcare, education, childcare, and eldercare; to raise household incomes, by lifting public sector wages, bolstering labor rights, and supporting income generation from dividends and rental housing; and to give people more opportunities to create wealth. The last category is focused on helping entrepreneurs and small firms build their businesses.

There are no guarantees that China will be able to make the transition. We will discuss its chances of success in Chapter 9. Nonetheless, if people start consuming more, their demand for imports will increase. That will help establish China as the bedrock of a broad Asian trade bloc. And the more Asia's economic fortunes are tied to China, the greater the impetus to use the yuan as an anchor and as a settlement currency.

But this is unquestionably a long-term project that demands a fundamental restructuring of China's economy. More immediately, Beijing is trying to increase the yuan's use for settling trade in manufactured and processed goods by promoting e-commerce.

6.7 E-Commerce

In recent years, Beijing has explicitly promoted cross-border e-commerce as a tool for encouraging RMB overseas use. In a September 2021 report, the PBoC called cross-border e-commerce "a new pillar of growth" for yuan internationalization and said it "will enrich the scenarios of the use of the RMB and promote the use in foreign trade." [35]

E-commerce is one of the fastest-growing subsets of China's cross-border trade. According to Chinese Customs, the total volume of cross-border e-commerce in 2020 was Rmb1.7trn, up 31% from a year earlier. [36] According to the PBoC, the amount of cross-border e-commerce that was settled in yuan in 2020 was Rmb259.4bn, up 50% from a year earlier.

> Imports are likely to be the leg of cross-border e-commerce that has the biggest impact on RMB internationalization.

Under traditional trade arrangements, Chinese firms typically pay for imports in dollars. Importers have to go to a bank and present extensive paperwork required by the State Administration of Foreign Exchange (SAFE) to prove that the transaction legitimately requires foreign currency. Once the bank is happy that the transaction is compliant, it converts yuan held by the importer into dollars and transfers them – via correspondent banking arrangements – to the overseas supplier.

E-commerce imports work differently in that, at checkout, the Chinese buyer typically pays in yuan. (In every country, cross-border e-commerce broadly tries to emulate the convenience of domestic online shopping – that means the buyer pays in local currency.)

For Chinese e-commerce imports, a fintech payment platform will typically transfer the yuan to a multi-currency account held by the overseas seller, most commonly in Hong Kong. This is convenient for the buyer, while the seller gets to choose when and how they exchange the yuan they have received. Rather than rely on a bank or payments company to convert the yuan into foreign currency, they can do it with a dedicated currency exchange platform that is able to offer a better rate.

Sellers are unlikely to keep anything but a small portion of the yuan they receive. Still, e-commerce is a way for yuan to pool offshore. This is at present a niche avenue through which to promote yuan internationalization. However, there is potential for it to grow.

Specifically, there's scope for traditional imports to become e-commerce imports. Arranging conventional imports is time consuming and bureaucratically complex. E-commerce platforms seek to simplify the process as much as possible, taking care of customs, payments, and logistics. If e-commerce imports continue to expand rapidly, they could become an important tool for making yuan available offshore.

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Enodo Economics

7 Financial markets opening and reform

Wilson Center

7.1 Introduction

For RMB internationalization to work, yuan needs to flow into the Chinese economy from offshore. There are several ways that can happen, but the channel needs to be big enough to recycle the net outflow of yuan Beijing ultimately hopes to generate under the current account.

> Consequently, Beijing has now focused its efforts on encouraging the return of offshore yuan through one primary conduit: investment into China's financial markets.

Financial markets are also central to China's long-term RMB internationalization plans. In order for China to anchor an economic sphere of influence, its markets need to be a place where overseas firms can raise funds by issuing shares or selling bonds, and where foreigners are willing to invest their savings. In short, China needs to become an international financial hub sitting in the center of a yuan zone (as we discussed in Chapter 3).

To realize both its short- and long-term goals, Beijing needs to do two things:

1. **It needs to liberalize China's capital account.** Foreigners need to be able to freely invest in China's stock, bond, and futures markets in whatever quantities they like – and just as freely withdraw their investment in full, at a time of their own choosing.

2. **It must create financial markets that foreigners want to invest in,** not simply as a way to diversify their investments, but as a trustworthy destination that attracts large volumes of capital. To do that, China needs to provide a stable, professional investing environment that offers opportunities equal to or better than anything available to investors elsewhere.

Since mid-2017, Beijing has put enormous effort into pursuing both goals. Progress is still at an early stage, but the direction of reform is clear: Beijing is trying to overhaul its capital markets to better accommodate foreign investment.

> Crucially, reform and opening up of China's financial markets isn't just about RMB internationalization. Rather, it's being driven by a range of policy goals, many of which are central to how Beijing hopes to remake the economy.

7.2 Reasons for Capital Market Opening and Reform

China doesn't currently need capital from overseas. However, that may change in the near future as Beijing deals with the non-performing loans that have accumulated over the past decade. Since the GFC, China's economic growth has been driven by investment in housing, infrastructure, and industrial capacity. That's been made possible by a sharp increase in the ratio of non-financial non-government debt to GDP, surpassing Japan's peak in the run-up to the bursting of its bubble.

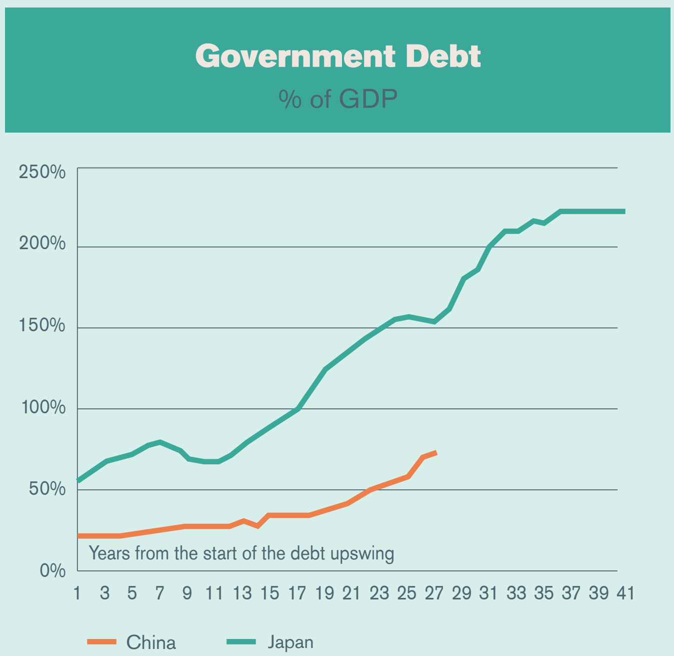
Many institutions that borrowed excessively will struggle to repay their loans. Enodo Economics estimates that by the end of 2021, expected credit losses were between 26% and 31% of GDP.[1] Absorbing losses of that magnitude will require banks to massively replenish their capital. Such a huge injection of capital will require resources beyond what China is capable of generating domestically.

> Relaxing capital inflows now will help China to deal with its banking sector problems before they lead to debt deflation pressures.

Moreover, opening the capital account to foreign investment brings much-needed expertise and best practice from overseas. China's equity market has long been disparaged both locally and internationally as a casino where ordinary savers lose out to investors with good connections. Beijing wants to transform its markets into something the public trusts as a long-term store of value.

China's Debt Problem

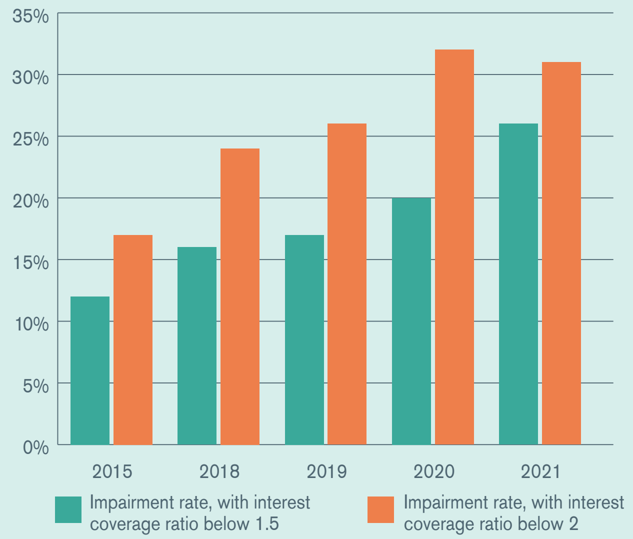
Source: Enodo Economics, BIS



Source: Enodo Economics, CEIC

China's Credit Losses

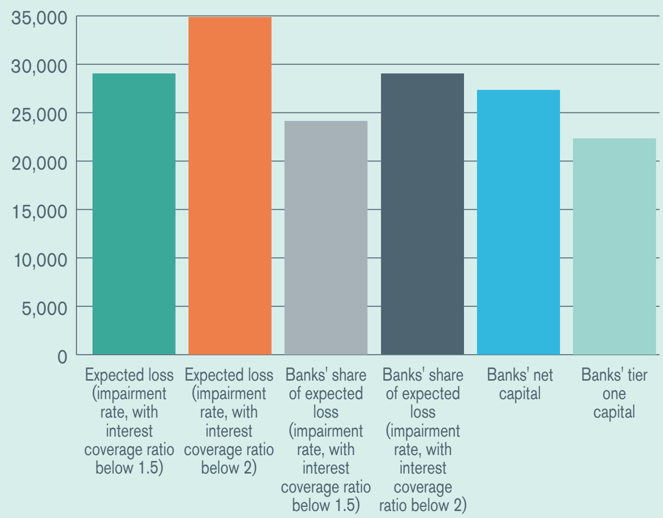
Enodo estimates, % of GDP



Source: Enodo Economics, CEIC & Wind

China's Credit Losses in 2021

Enodo estimates, Rmb bn



Source: Enodo Economics, CEIC

Opening of the capital market to the outside world brings in more medium- and long-term funds from overseas, helping improve the stable operation of the A-share market," Fang Xinghai, vice-chairman of the China Securities Regulatory Commission (CSRC), said in 2021.[2] ***"The introduction of foreign investors has…played an active role in…enhancing market transparency and improving corporate governance."***

> Improving professionalism is an important step toward ensuring that China's capital markets are better equipped to accommodate the changing needs of the country's economy.

Traditionally, Chinese households have stored their wealth primarily in real estate. That no longer serves China's interests.

Home price inflation exacerbates China's income inequality, making the rich richer and the poor poorer. With Xi Jinping focused on improving wealth distribution under the banner of Common Prosperity, savings can no longer be allowed to accumulate mainly in real estate.

Moreover, as China's population shrinks, real estate in much of the country will struggle to retain its value, making it an unreliable nest egg for a rapidly aging population. Instead, savings need to be redirected into more productive assets.

Seventy percent of the asset allocation of Chinese residents is in real estate," Wu Xiaoqiu, former vice-president of Renmin University and director of the China Capital Market Research Institute, wrote in 2021.[3] ***"This ratio should gradually decrease…and financial assets substituted in its stead."***

> Beijing wants to see savings directed into stocks and bonds not just to better serve households, but as a way to fund a new growth model.

Instead of an economy led by debt-heavy investment, Beijing wants an economy driven by innovation – one that invests heavily in high-value manufacturing and low-carbon production. However, the lion's share of innovation is generated by small and medium-sized private sector firms. Consequently, to realize Beijing's vision, small firms need to be able to access the capital they need.

Today, the private sector generates 80% of urban employment and two-thirds of economic activity. However, banks direct proportionately more credit to the state sector. Beijing has complained for years that the private sector doesn't have sufficient access to credit, and banks are under significant political pressure to increase their lending to private firms.

However, banks still lack the expertise of how to assess risk in that sector and prefer to lend to borrowers that are either backed by the state or are able to back their loans with collateral, ideally land. These borrowers also tend to be state firms.

> The burden of funding China's innovative firms will thus increasingly fall upon capital markets.

Larger, deeper, and more efficient capital markets will help China improve the allocation of capital, diminish the financial repression of households, boost productivity growth, and place the economy on a more sustainable growth path.

7.3 Beijing's Shifting Priorities

> Since mid-2017, Beijing has been implementing a liberalization of China's financial industry best described as radical, particularly given the Party's obsession with control.

It's no exaggeration to say that investment into China's capital markets are now basically open, after years of foreigners banging at the doors. Overseas institutions still need to get approval from Chinese regulators to invest in some financial products, but there is no longer a limit on how much foreign investment Beijing is willing to accept. However, the openness is nearly entirely directed at luring money into China — the channels for capital to leave China are far more restrictive.

For decades, capital controls were essential to the success of China's growth model. Traditionally, savings in China were channelled through state-owned banks as low-cost loans to state-owned corporations, thereby subsidizing industrial development. To make this arrangement work it was necessary to ensure that savers kept their money in the banks, where artificially low interest rates meant they earned practically nothing – and even lost money – in inflation-adjusted terms. Capital controls were necessary to ensure that people and companies were unable to transfer their money abroad in search of better returns.

At various stages capital controls served other purposes as well. Early in China's reform era, controls helped Beijing husband foreign exchange so it could be used to import strategically important foreign equipment and technology. Later, as China's exports took off, they helped suppress the value of the yuan.

The importance of capital controls became an article of faith among China's regulators following the Asian Financial Crisis in 1997-98, when China avoided the regional contagion because foreign capital wasn't able to flee the country.

That mentality is apparent in the vigilance with which Beijing still monitors cross-border flows. Companies in China are free to import goods and services but can only pay for them after providing SAFE with extensive documentation proving the authenticity of the transaction. Foreign companies in China are free to repatriate profits, but sometimes regulators delay the approval process indefinitely. And while Chinese individuals are officially permitted to send $50,000 overseas each year, transfers have become more difficult to make in recent years.

Nevertheless, China has made great strides since it started opening its capital markets to foreign investment back in 2002. Initially, access was conditional on onerous approval processes and subject to strict limits on how much money could enter the country.

> Now, 20 years later, China's markets are more or less fully open to inbound foreign investment. It is especially welcomed when it is made using yuan sourced offshore.

7.4 Recycling Yuan

Equally as important, Beijing has opened up in a way that limits its accumulation of dollars. Previously, investing in China's capital markets meant transferring dollars to the mainland where they were exchanged for yuan. The yuan would then be invested in stocks and bonds, and the dollars would end up at the central bank, which would use them to buy US Treasuries or, since 2013, lend them to fund BRI investments.

That's no longer the case.

> In recent years, Beijing has established multiple channels through which foreigners can invest in financial assets, but almost all of them require that the investments be made in yuan sourced from outside of China.

The guiding principle is the same for almost all of these channels. Financial investors need offshore yuan (CNH). They can acquire CNH in the course of doing business, or they can purchase it from a bank. That has hugely increased the scope for how offshore yuan can be used.

BOX 7.1

Onshore (CNY) versus Offshore (CNH) Yuan

China has two classes of currency – the onshore CNY and the offshore CNH – and its onshore and offshore markets are not completely integrated. The offshore renminbi interbank FX market and the CNH started to exist in July 2010.

Capital does not flow freely between the onshore and offshore market, so the CNY and CNH rates can differ. But porous capital controls mean that cross-border trade settlement flows in renminbi can arbitrage away some of the difference. The CNH is market-driven and more volatile.

Main differences

CNY	CNH
Managed-float against a basket of currencies	Free-float
Subject to domestic capital controls and currency trading restrictions	Free use and trading without restrictions
Regulated by the PBoC and SAFE	Regulated by the Hong Kong Monetary Authority (HKMA)
Only used by Chinese citizens and residents	Open to residents and non-residents of Hong Kong, as well as certain Chinese investors

CNY and CNH are interchangeable; however, the exchange rate will differ when converting to foreign currencies.

"Financial opening has advanced significantly, making it more convenient for overseas RMB to return as investment and financing," Hu Xiaolian, chairman of China Export-Import Bank and former head of SAFE, said in June 2021.[4]

However, CNH isn't always easy or cheap to obtain. To compensate, a handful of banks in Hong Kong are allowed to provide foreign investors with yuan sourced from onshore (CNY). The banks are permitted to trade in China's domestic interbank foreign exchange market run by the China Foreign Exchange Trading System (CFETS), so any dollars or other foreign currency they acquire from investors in Hong Kong can be exchanged for CNY in the mainland.

However, these CNY aren't allowed to circulate offshore. They get placed in special accounts in Hong Kong and can only be used to invest in mainland capital markets – which means their stay in Hong Kong is temporary.

This arrangement results in some foreign exchange flowing into China's economy. However, rather than investors bringing it in, a handful of banks now make that decision. As the supply of offshore yuan increases – something Beijing is striving to achieve (as discussed in Chapter 6) – there will be less need for banks to secure yuan from the mainland. In the meantime, it helps align the exchange rates of onshore and offshore yuan.

> Nonetheless, Beijing has put in place a permanent, sustainable mechanism for recycling yuan back into the Chinese economy.

Since cross-border renminbi trade settlement was launched in 2009, the volume of renminbi [that has accumulated] overseas has continued to expand," Sheng Songcheng, former head of the PBoC's statistic department, wrote in 2020.[5]

"In order to increase the channels for [offshore] RMB to return, China has launched RQFII, Shanghai- and Shenzhen-Hong Kong Stock Connects, CIBM Direct, Bond Connect, the Mutual Recognition of Funds program, the Shanghai International Gold Exchange, and other programs to attract global investors to use offshore RMB when investing in the domestic capital market."

Since Sheng made that comment, another couple of channels have been added – the Wealth Management Connect and Swap Connect. Most of these channels, as discussed earlier, are designed to facilitate inbound capital flow. Following is a brief explanation of each:

QFII/RQFII

Foreigners have been permitted to invest in China's capital markets since 2002, when Beijing launched the Qualified Foreign Institutional Investor (QFII) program. They had to endure a tortuous application process to win QFII status, which entitled them to bring in a certain amount of foreign currency. They were then allowed to exchange it for yuan which they used to buy stocks and bonds. In 2011, the Renminbi QFII (RQFII) program was introduced. It worked in a similar way, except that foreigners were required to use CNH to invest in mainland stocks and bonds.

As of the end of May 2020, the combined total of funds permitted to be invested under the QFII quota was $116.26bn spread among 295 financial institutions.[6] The RQFII total came to Rmb722.99bn for 230 institutions.[7]

The following month Beijing abolished the quotas, giving investors freedom to invest as much as they like. Then in November, the entire program was radically overhauled.

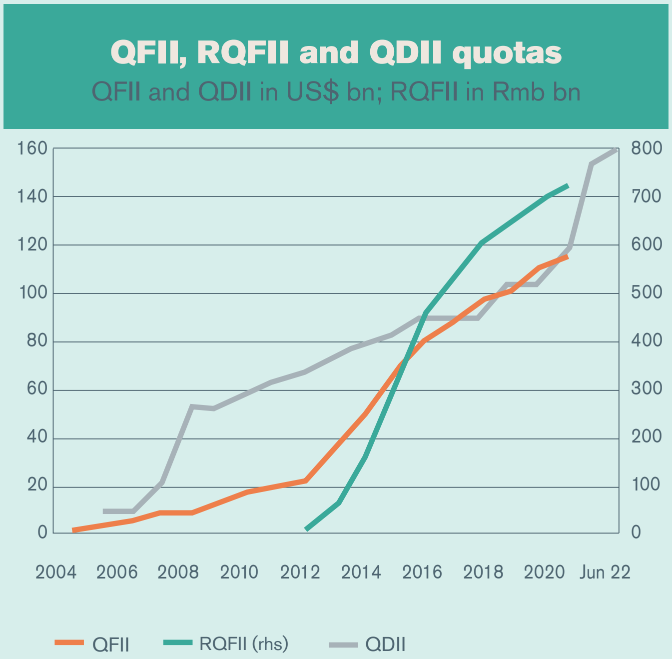
The QFII and RQFII schemes were merged and the application process was simplified. The requirement for applicants to have a minimum amount of assets under management was dropped, thereby opening the program to a far wider range of investors.

The array of financial assets open to foreign investors was also broadened. Previously, they'd been limited to stocks, bonds, interbank fixed income products, and stock index futures. This was expanded to include shares traded on the New Third Board (an over-the-counter equities market), financial futures, commodity futures, options, private investment funds, margin trading, and securities lending.

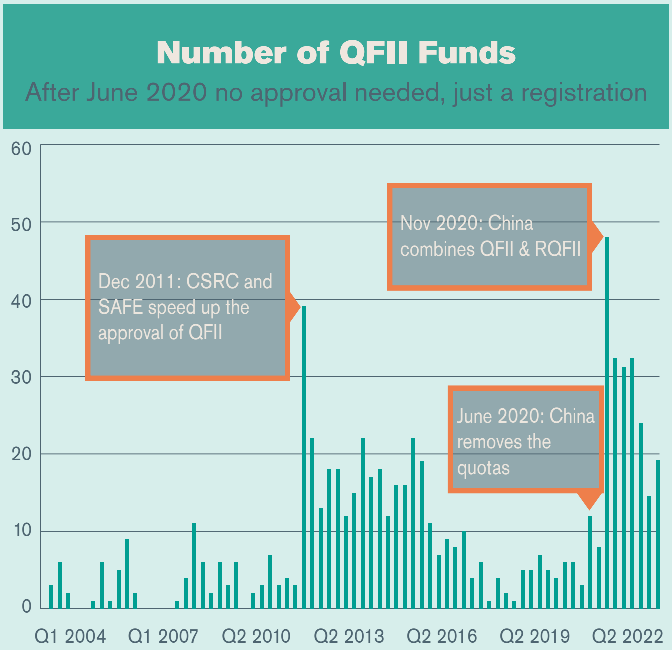
> Today, the combined QFII/RQFII program allows foreign investors the freedom to invest as much as they like in almost any financial product on offer in mainland China.

China also lets Chinese institutions invest in overseas capital markets under the Qualified Domestic Institutional Investor (QDII) program. However, the scheme is still subject to quotas. At the end of May 2022, the combined total of funds permitted to be invested under QDII was $157.52bn spread among 174 financial institutions.[8]

China's QFII and QDII Programs



Source: Enodo Economics, CEIC



Source: Enodo Economics, CSRC

Beijing established a RMB QDII program in 2014 but shut it down in late 2015 at a time when officials were struggling to manage large capital outflows. It was resurrected in 2018, but investors can only invest in overseas assets denominated in yuan. Given that such assets are few and far between, the program remains small.

Stock Connect

For years QFII and RQFII were the only official way for foreigners to put money to work in China's capital markets, and while quotas increased over time both the number of investors and the sums they could invest remained limited.

Then in 2014, the authorities introduced the Shanghai-Hong Kong Stock Connect. Under the scheme, foreign investors – individuals and fund managers alike – can buy and sell shares traded on the Shanghai Stock Exchange via an electronic link established with the Hong Kong Stock Exchange (HKEX).

> In effect, foreigners can use the HKEX trading platform to trade Chinese stocks. And crucially, no explicit approval from onshore regulators is required - the first time Beijing made such a concession.

Nonetheless, limits remain. There's a quota on how much money from Hong Kong can be invested in Shanghai each day – once the quota is reached, investors can sell but not buy for the remainder of the day – and some stocks are off limits to foreigners.

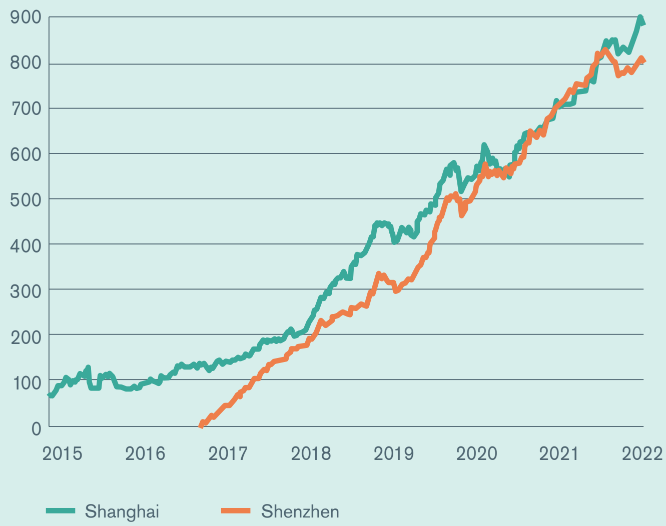
The Shanghai link was followed by a Shenzhen-Hong Kong Stock Connect in 2016, which operates along similar lines.

Since 2018, the scope of the program has expanded rapidly. In 2018, the daily net quota for investing in both Shanghai and Shenzhen quadrupled from Rmb13bn to Rmb52bn.

China's Connect Programs

Net Inflows Via Northbound Stock Connect Since Inception

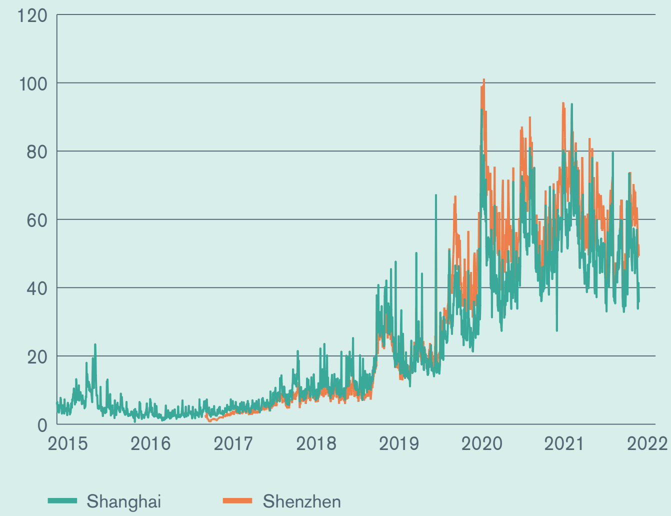
Rmb bn, daily



Source: Enodo Economics, Wind

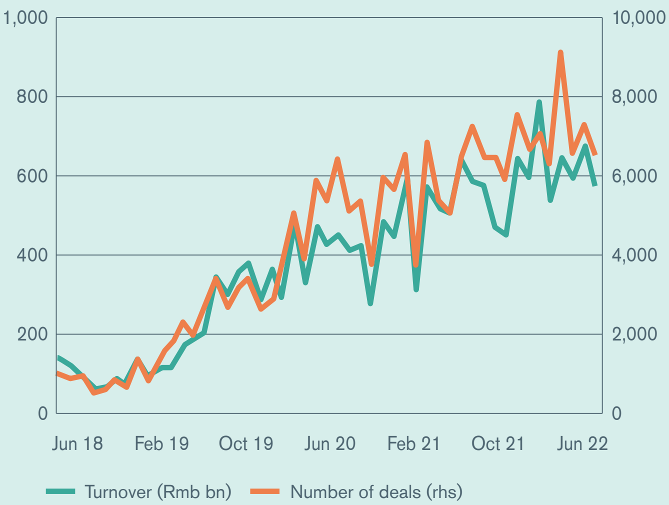
Gross Value Traded Via Stock Connect, Northbound

Rmb bn, daily



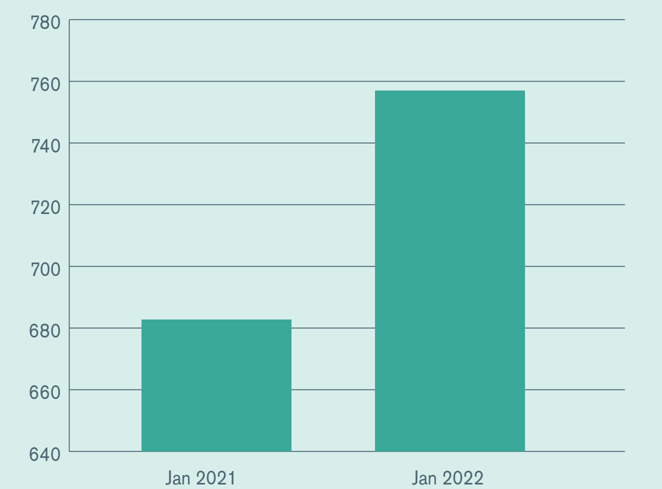
Source: Enodo Economics, Wind

Turnover Volume via Northbound Bond Connect



Source: Enodo Economics

Number of Foreign Investors on Bond Connect



Source: Enodo Economics

Then, in 2019, a Shanghai-London Stock Connect was launched, although it has so far failed to gain much traction. The CSRC has promised to expand all three programs.[9]

Additionally, in June 2022 the range of assets in which investors can invest was expanded to include exchange-traded funds (ETFs).

The Stock Connect programs also allow mainland Chinese residents to trade stocks listed on the HKEX. The daily net quota for southbound flows (i.e. money moving from the mainland to Hong Kong) under both the Shanghai and Shenzhen programs is Rmb42bn – about 20% lower than northbound flows. Also, participation is limited to institutional investors and wealthy individuals only.

The northbound program requires yuan to be sourced offshore, while the southbound leg requires yuan to be transferred from the mainland to Hong Kong. In 2021, Rmb432.2bn flowed north through the Connect schemes, while Rmb372.6bn flowed south , or on a net basis Rmb60bn.

Bond Connect

The Bond Connect program was established in July 2017. It allows investors in Hong Kong to buy and sell onshore bonds traded in the interbank market via international trading platforms like Bloomberg or Tradeweb. Crucially, there is no quota on how much foreigners can invest, and they don't require explicit approval.

China's Interbank Bond Market (CIBM) is where 90% of China's bonds are issued, including government bonds issued by the MoF, quasi-sovereign bonds issued by policy banks, negotiable certificates of deposit issued by commercial banks, special purpose bonds issued by local governments, corporate bonds, asset-backed securities, and a range of other fixed-income products.

> The Bond Connect program is open to most types of financial institutions: commercial banks, insurers, securities firms, fund management companies, institutions investors, central banks, sovereign wealth funds, and foundations.

As of the end of May 2022, more than 3,500 foreign investors had been approved to use the Bond Connect. Collectively they held Rmb3.66trn worth of mainland Chinese bonds.

That month, regulators expanded the scheme so foreigners can also invest in bonds traded on the Shanghai and Shenzhen stock exchanges as well as those in the interbank market.

A southbound program was launched in September 2021, giving mainland investors an opportunity to invest in bonds traded in Hong Kong. However, the scheme is open to QDII funds and 41 banks only. Moreover, net capital flows are limited to a daily cap of Rmb20bn and an annual limit of Rmb500bn.

Like the Stock Connect programs, northbound investors must invest using yuan acquired offshore, while southbound investors need to transfer yuan from the mainland to Hong Kong.

CIBM Direct

The CIBM Direct program was a precursor to the Bond Connect. It was established in February 2016, giving foreign central banks, international financial organizations, and sovereign wealth funds access to interbank bonds, bond forwards, interest rate swaps, bond repos, and forward rate agreements. The scheme isn't subject to a quota, and is now open to a similar range of investors as the Bond Connect. Investors don't require explicit approval from mainland regulators before they can start trading – although they are required to register with the PBoC in advance.

> The difference between the two programs is primarily one of convenience.

Bond Connect allows foreign investors to trade mainland bonds from offshore using platforms they're likely already familiar with. CIBM Direct requires foreign investors to place their orders with onshore banks which trade on their behalf. Consequently, the Bond Connect is the more actively used of the two channels.

Under the program, investors are allowed to invest using either CNH or foreign currency. Notably, CIBM Direct doesn't have a southbound component, making it purely a channel for capital inflows.

Wealth Management Connect

The Wealth Management Connect was launched in September 2021 as part of the Greater Bay Area (GBA) project, the lynchpin of Beijing's effort to integrate Hong Kong and Macau with mainland China. Under the program, residents of Hong Kong, Macau, and nine cities in Guangdong province are able to invest in wealth management products (WMPs) distributed by banks in each other's markets. WMPs use the funds they raise to invest in stocks and bonds.

As with the other Connect schemes, the cross-border flow of funds is in yuan, which means that Hong Kong and Macau residents have to convert their savings into yuan before investing in mainland WMPs.[10]

Hong Kong residents can freely participate in the program, but mainland residents must have a net worth of at least Rmb1m or total financial assets of Rmb2m.

Swap Connect

The Swap Connect is the newest Connect initiative and will allow overseas investors to trade interest rate swaps onshore. The PBoC announced the scheme in July 2022 and hopes to formally launch it in January 2023.

It will work in a manner similar to Bond Connect, allowing foreign investors to access the onshore trading platform via offshore platforms in order to hedge interest rate risk on RMB bonds. Swap Connect will launch with a northbound leg only but may eventually add a southbound component. In time it might also expand to include other financial derivatives.

Others

- **The Shanghai International Gold Exchange (SGEI):** The SGEI was set up in 2014 in Shanghai's free trade zone (FTZ). It lets foreigners buy and sell physical gold with offshore yuan (CNH). Even though it's based in Shanghai, the SGEI is technically an offshore market. Neither funds brought into the FTZ nor the physical gold traded in the FTZ can move freely between the FTZ and the rest of China.

- **Mutual Recognition of Funds (MRF):** Launched in July 2015, the program allows mutual funds in Hong Kong and mainland China to be distributed in each other's markets. An initial quota of Rmb300bn was set for funds flowing both ways.

7.5 Limits to Opening

Combined, these programs represent an expansive opening of China's capital markets, albeit under conditions set by Beijing.

> Opening will continue, but it's unlikely China will ever liberalize its capital account completely.

For decades, the overriding preoccupation of China's foreign exchange regulators has been with the potential risk that a sudden flight of capital could undermine financial stability, as was the case in neighboring economies during the Asian Financial Crisis. That precipitated the collapse of governments across the region, a lesson China took to heart.

"We will welcome mid- to long-term capital flows more than we welcome short-term and ultra-short-term speculative financial transactions," Zhou Xiaochuan said in August 2018, soon after he retired as PBoC governor.[11] ***"Therefore, the renminbi is basically free to use, and we will continue to promote the degree to which the renminbi is freely used, but it won't be 100%."***

> China will open its capital account up to the point at which the CCP is no longer willing to cede further control.

How close China gets to being 100% open – and whether it's close enough to make the yuan sufficiently widely used to realize its goals – are questions that will be settled years from now. So far, it is evident that China has not yet overcome its fear of capital flight.

In the meantime, the real challenge for Beijing isn't whether it can open up sufficiently, but whether foreign investors believe that if they invest in China they will be able to withdraw their funds in full and at a time of their own choosing.

As outlined above, there are far more restrictions on Chinese nationals investing abroad than there are on foreigners investing in China's capital markets. Whereas quotas have been lifted on some of the channels through which foreigners can invest in China, funds flowing the other way are still subject to quotas, the programs are smaller, and the range of investors allowed to participate is more limited.

Anecdotally, foreigners who have invested under QFII have traditionally not had difficulty transferring their funds abroad. That said, it may take time before large numbers of overseas investors are confident of being able to get their money out on demand.

China's capital constraints have been relaxed sufficiently that there is no longer any meaningful economic impediment to foreign investors ramping up their involvement in China's capital markets. However, for that to happen, especially in the context of heightened geopolitical tensions, it's not sufficient for Beijing to simply open the door. It's also necessary to give investors a good reason to walk through it.

7.6 Capital Markets Reform

Foreigners have traditionally invested in Chinese equities because the economy has generated fast economic growth. Additionally, returns weren't closely correlated with those of other countries, making China a useful way for investors to diversify their assets.

The correlation between RMB assets and asset prices and returns in developed and emerging economies is relatively low, making it a very good choice for risk diversification in international investment portfolios," Wang Chunying, deputy director of SAFE, said in early 2022.[12]

However, Chinese firms have been listed across the world in Tokyo, Hong Kong, London, Singapore, and New York for a while now, which means foreigners can invest in China without ever needing to deploy funds in the mainland. Moreover, as most global investors see Chinese financial assets as an opportunity to diversify, they will allocate only a small portion of their portfolios to China.

> Beijing has been looking for ways to encourage them to invest far more.

Special drawing rights and index inclusion

One way was to lobby the IMF to add the yuan to the currencies making up the SDR, the Fund's reserve asset - which the IMF agreed to in November 2015.

Inclusion in the SDR basket – alongside the dollar, euro, pound, and yen – was based on the IMF's determination that the yuan was sufficiently widely used in global trade and is freely usable. The decision came after the PBoC allowed foreign central banks, sovereign wealth funds, and supranational institutions direct access to China's onshore interbank bond market. The IMF's decision implicitly bestowed legitimacy upon the yuan as a worthy asset for central banks to hold in its reserves.

The inclusion of the RMB in the SDR basket enhances the attractiveness of the RMB as an international reserve asset," said Siddharth Tiwari, director of the IMF's strategy, policy, and review department, upon the yuan's formal inclusion in the basket in 2016.[13]

In May 2022, the IMF further endorsed the yuan's importance, increasing the weight of the RMB in the SDR basket from 10.92% to 12.28%.

> No doubt encouraged by the IMF's seal of approval, central banks around the world have been gradually increasing their holdings of RMB-denominated assets.

The Official Monetary and Financial Institutions Forum (OMFIF) found that over 30% of the central banks it surveyed in 2021 planned to increase their RMB holdings during the next 12-24 months and 82% expected a greater role for the RMB. This was particularly the case in Asia and Africa.[14]

The OMFIF survey found that the chief reasons for raising allocations towards RMB assets were diversification (81%), the increasing importance of the RMB in the global economy (73%) and the possibility for higher yields (61%).[15]

More recently, Beijing has also been able to generate demand for yuan-denominated assets by securing the inclusion of mainland stocks and bonds in key global indices. Despite years of lobbying by Beijing, the managers of those indices were initially reluctant. However, as China made it easier to invest in mainland stocks and bonds, Beijing's efforts finally paid off.

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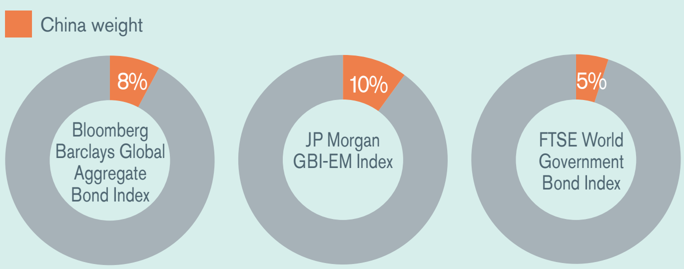
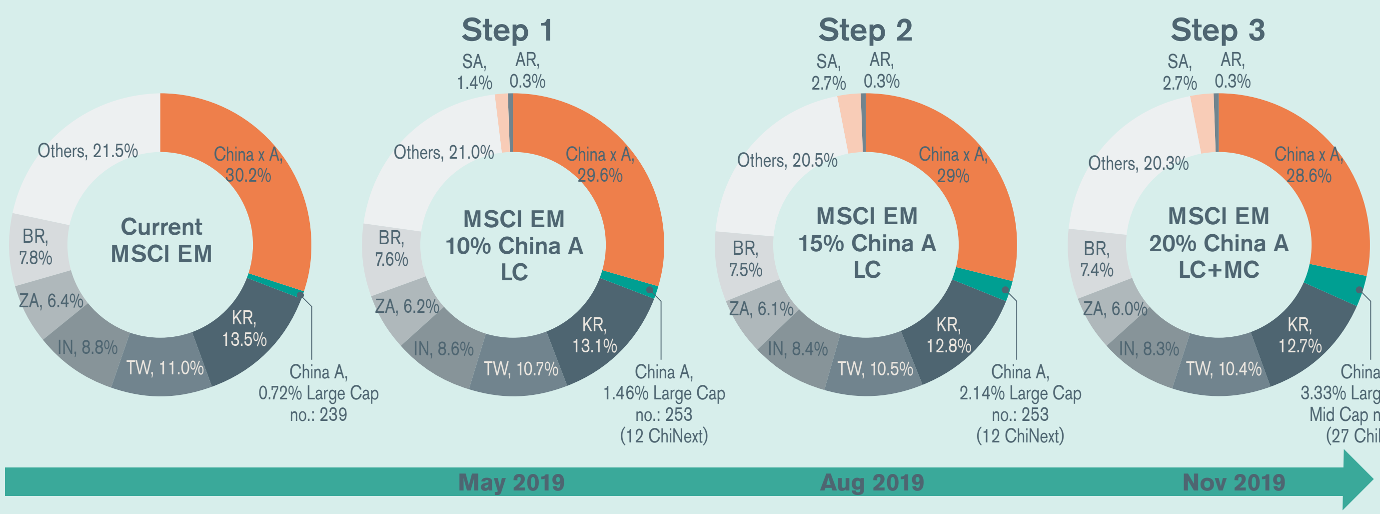
Index Inclusion Will Lead to Significant Passive Flows



	Bloomberg Barclays	JP Morgan	FTSE World
Inclusion start date	Apr 2019	Feb 2020	Oct 2021
Inclusion completion	Nov 2020	Dec 2020	Sep 2024
Securities included	Government Bonds & Policy	Government Bonds	Government Bonds

Pro-forma Weight in MSCI EM Index



Many global funds track these indices, which means investment managers need to add newly included Chinese stocks and bonds to their portfolios, creating instant demand.

Such developments are encouraging, and foreign investors have been putting more money to work in China. However, the volume of stock and bond purchases they've generated is still tiny relative to the size of China's capital market.

At the end of June 2022, foreign institutional investors held Rmb3.6trn worth of mainland Chinese bonds, more than triple the amount at the end of 2017. Still, that represented only 2.6% of China's Rmb142trn worth of outstanding bonds.

Access isn't enough

For the yuan to become an international currency, China's capital markets need to become more like those of the US. Specifically, they need to provide investment opportunities that aren't available to people in their home economies – or potentially anywhere else.

The US does that by providing deep, broad, and liquid capital markets that are professional and transparent, and where property rights are enforced according to the law. Although the US economy typically doesn't grow quickly, it is nonetheless a big, dynamic, and innovative economy that has fast-growing firms. Moreover, companies from all over the world list their shares on the New York Stock Exchange and the Nasdaq, which means investors can get global exposure just by investing in US-listed stocks.

That's unique. Many countries' financial systems are dominated by banks, so they don't have many stocks, bonds, or futures to invest in. Sometimes investors don't trust their own capital markets, either because of weak property rights or because they're manipulated by elites. Other markets are too volatile for people to be comfortable committing their savings. And others might be functioning, dynamic market economies, but they're just small and so offer only a limited variety of financial products and opportunities.

> For China to decouple from the dollar it needs to attract sizable investment into its capital markets, not just as a way for investors to diversify their portfolios but because China's markets are at least on a par with the alternatives.

Making China's financial markets comparable to America's will take a long time, assuming it's even achievable. At the bare minimum, that requires investors having sufficient confidence that their rights will be protected, and that they will be treated fairly according to the rules, something we will cover in more detail in Chapter 9.

China's regulators are nonetheless striving to make the nation's markets more appealing. In mid-2022, a spokesperson for the PBoC described its goals like this:

> ***We will continue to promote the opening of China's financial market, further simplify the procedures for foreign investors to invest in the Chinese market, enrich the types of investable assets, improve data disclosure, [and] continue to improve the***

business environment," she said.[16] ***"We will continuously improve the convenience of investing in the Chinese market and create a more favorable environment for foreign investors and international institutions to invest in the Chinese market."***

To create a more favorable environment, Beijing must make China's capital markets deeper, broader, and more liquid.[17]

- A market that is sufficiently **deep** is one where there are enough investable financial assets available to satisfy both domestic and international demand.
- A **broad** market is one with a wide range of different financial assets that span the spectrum of risk-return. At one end of the spectrum there are safe assets like Chinese government bonds (CGBs) that offer relatively low returns, and at the other there are junk bonds and venture capital funds that offer high returns but come with the risk that investors might lose some of their capital. A broad market has offerings at both ends of the range – and an array of products in between.
- A **liquid** market is one in which financial assets are bought and sold at the officially quoted price. For that to happen, the assets – whether they be stocks, bonds, futures, or something else – have to be actively traded so there's always someone willing to take the other side of any transaction. Liquidity gives investors peace of mind that they can sell at a time of their own choosing, and at a price broadly in line with their expectations. If a market is illiquid it might take time to find someone willing to buy or sell the asset, and to arrive at a price both parties are happy with.

Beijing is gradually working on all three fronts. Progress requires significant changes in the way the economy deploys savings and allocates credit.

Traditionally, state-owned enterprises (SoEs) have mainly relied on bank loans for capital, not issuance of bonds and shares. Private sector firms funded themselves by drawing upon friends, family, and sometimes foreign direct investment. China's stock and bond markets have been around for more than 20 years, but they've functioned primarily as an additional source of funding for state companies, rather than the private sector, and they've been small relative to the size of China's economy.

However, China's economic priorities have changed and Beijing is striving to overhaul its capital markets so they better serve the economy's future needs. It's likely to be a long, slow process.

> It is reasonable to assume that Beijing will remain committed to reform efforts for the long term, given that they are driven not just by currency ambitions but by fundamental concerns over the allocation of wealth and the pursuit of a new, sustainable economic growth model.

7.7 Depth, Breath and Liquidity

Depth

In some ways, China's markets are already fairly deep.

In mid-2022, there were 4,732 companies listed in Shanghai and Shenzhen. That still trails the US by a large margin. At the end of March 2022, there were 6,596 companies listed on the New York Stock Exchange and Nasdaq combined. However, China's listings are expanding rapidly. In 2021 alone, 484 companies raised Rmb535.2bn on the Shanghai and Shenzhen stock exchanges.[18]

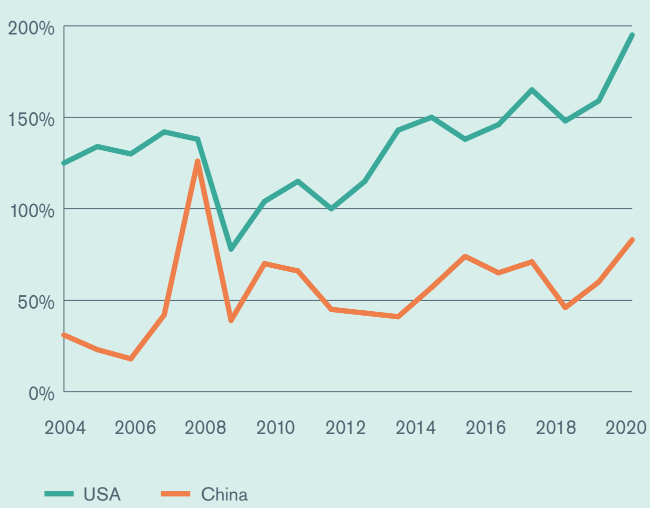
In Shenzhen's most recent five-year plan for the financial sector, the city said it plans to have 3,000 companies listed on the local bourse by the end of 2025, up 22% from 2,335 at the beginning of the five-year period.[19]

Looking at another metric – market capitalization as a share of GDP – the Chinese domestic equity market underwhelms when compared with the US. Turnover is high, although, as we will discuss below, that's not necessarily a sign of maturity.

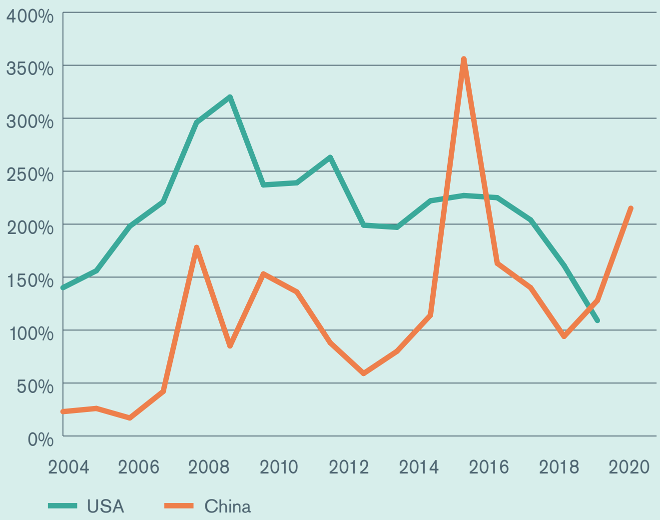
Moreover, Beijing is trying to increase the range of companies eligible to list by setting up new stock exchanges, like the one in Beijing for small and medium-sized firms (SMEs) that was set up in 2022, and the STAR market, Shanghai's technology board for innovative firms, which was launched in 2019.

Equally as important, the CSRC wants to change the way companies go public. Traditionally, no company was allowed to list shares on the Shenzhen or Shanghai exchanges

Market Capitalization of Domestic Firms as % of GDP



Total Value of Stocks Traded % of GDP



Source: Enodo Economics

without the explicit say-so of the CSRC. At times this resulted in long backlogs of companies waiting for approval to raise capital. At other times, the CSRC halted approvals altogether for fear of further depressing share prices during market downturns.

China's authorities want to change the system so that it's like that of the US, where any company can list provided that it meets registration and information disclosure requirements. In 2021, this registration-based approach was launched on a trial basis on the STAR market and ChiNext, the Shenzhen Stock Exchange's tech board.

Authorities have also permitted Chinese companies that have done IPOs overseas to list Chinese Depository Receipts (CDRs) on domestic exchanges. Chinese firms that are listed overseas are typically structured in a way that makes it difficult for them to also sell shares in mainland China. CDRs are a way around that, giving people in mainland China an opportunity to hold shares – albeit indirectly – in Chinese companies listed overseas. As yet, few companies have issued CDRs.

Finally, firms that traditionally went abroad to sell shares will be encouraged to list domestically. That's partly because of Chinese rules that preclude auditors of Chinese companies from sharing their working papers with US regulators, as required by US law. Chinese companies face delisting over the issue in 2024 if US and Chinese regulators can't arrive at a compromise. But it is also because Beijing wants its best and most innovative firms to list at home to provide households with attractive opportunities to grow their wealth.

Breadth

Like the stock market, China has a large bond market but it nonetheless badly lags the US. According to the Securities Industry and Financial Markets Association (SIFMA), China had the world's third-largest bond market at the end of 2021 - just slightly smaller than that of the EU but only 45% the size of the US market.[20]

However, the challenge for Beijing isn't simply to improve depth, but to ensure breadth. That's because Chinese bonds are disproportionately rated AAA.

Like any major bond market, China has government bonds, quasi-sovereign bonds (issued by policy banks), local government bonds (primarily special and general purpose bonds issued by provinces), and corporate bonds, including asset-backed securities.

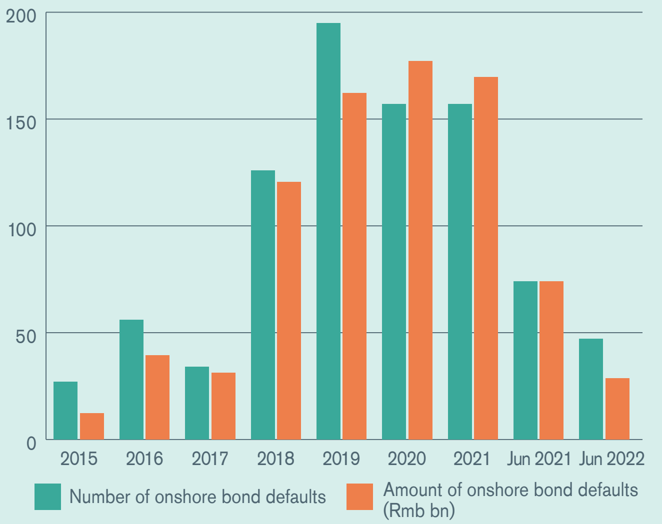
However, China's corporate bonds are universally rated higher than equivalent issues in market economies. In July 2022, nearly half of all corporate ratings and nearly two thirds of all bond ratings were triple-A. Triple-B bonds are so scarce that there's no high-yield market to speak of.

In a bid to address offshore investor concerns about the low credibility of Chinese rating agencies, foreign agencies were allowed to begin grading the creditworthiness of onshore Chinese interbank bonds, a day after the bond-trading link between the Chinese mainland and Hong Kong went live.

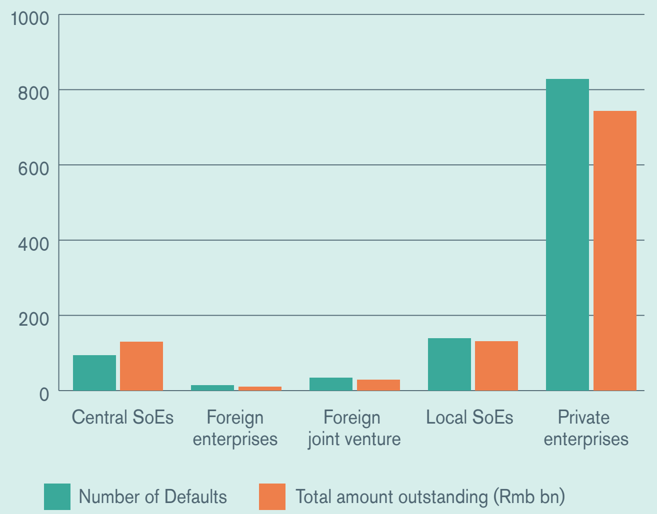
In an effort to ensure a wider range of ratings, in 2021 authorities also introduced rules that require credit rating agencies to reduce the proportion of highly rated companies to a "reasonable range."[21]

Beijing Allows Defaults

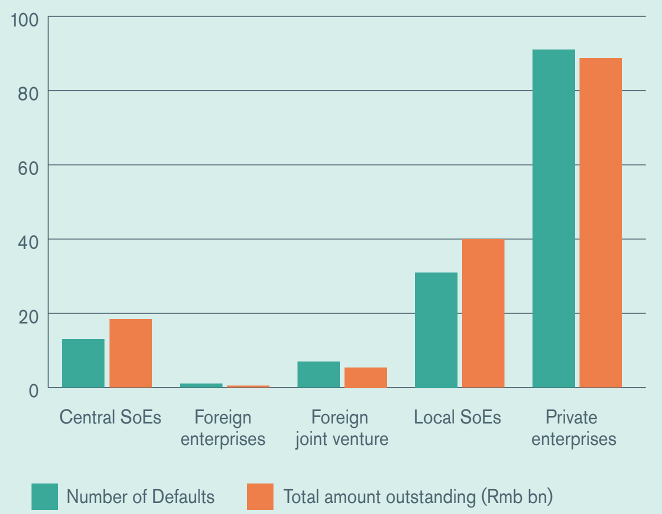
Corporate Bond Defaults
Number and amount of onshore defaults



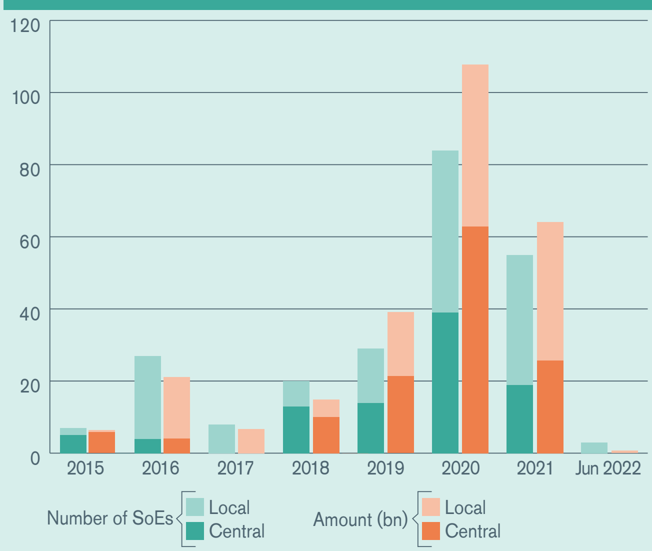
Bond Defaults by Type of Company
Number and volume (Rmb bn) of onshore corporate bond defaults during 2014 - June 2022



Bond Defaults by Type of Company
Number and volume (Rmb bn) of onshore corporate bond defaults during 2021



Bond Defaults by SoEs
Number and volume (Rmb bn)



Source: Enodo Economics, Wind

However, the fault doesn't lie entirely with the rating agencies. Their creditworthiness scores reflect the implicit government guarantee on bonds sold by state firms, the main issuers in the market, which means that default has traditionally been unlikely.

> However, things are changing. Beijing has realized it needs to allow defaults in order to start pricing risk properly.

In May 2019, Baoshang Bank – a city commercial bank based in Inner Mongolia – was taken over by the PBoC and the banking regulator. In the past, whenever there were instances of bank distress, authorities ensured that the bank's creditors received what they were owed.

However, banks that had lent to Baoshang were required to accept partial losses. That subsequently sparked a change in the perceived riskiness of interbank lending, such that banks now demand higher returns on loans to counterparts deemed a credit risk.

Then in 2020, a number of large, provincial state firms defaulted on their bonds. Nine state-owned issuers failed to pay in 2020, up from six in 2019 and four in 2018. Total bond defaults – including private firms – started rising in 2018, but what set 2020 apart was a surge in the value of the defaults to about Rmb100bn, up from about Rmb12bn in 2019, led by large and strategically important SoEs.

For investors, the spate of defaults in 2020 raised the prospect that SoEs that investors had assumed were too big to fail were in fact too indebted to save. The number of defaults will have to increase far more to signal a permanent erosion of the implicit guarantees that back state firms. But Beijing's growing tolerance of defaults is a trend unlikely to reverse.

Assuming that state firms are allowed to default in increasing numbers, then the range of returns available in China's bond market will expand and begin to reflect risk better. However, equally as important is that the range of issuers needs to expand. Private sector firms still often find it difficult to issue bonds.

Who gets to issue and at what yields is still not properly market-driven; regulatory rejection and industry-specific restrictions stop many companies from accessing the bond market. But change is afoot. For instance, the authorities are promoting asset-backed securities underpinned by trade receivables as a way to use capital markets to get credit to smaller private firms.

Liquidity

Most of China's capital markets – notably for stocks, corporate and policy bank bonds, and futures – are already very liquid (the exception is the market for government bonds, but we deal with this in Chapter 10).

The problem is that it is the wrong kind of liquidity. For example, the daily trading volume of China's commodity futures markets dwarfs that of futures markets in the US. Moreover, much of that activity is driven by individual day traders. That results in excessive price volatility. Similarly, the stock market is dominated by retail investors and riddled with insider trading.

> Beijing wants capital markets to become a tool for allocating capital in support of China's long-term development. To achieve that aim, it wants institutional investors, both domestic and foreign, to play a greater role. It is making strides in that direction.

As of the end of May [2022], domestic professional institutional investors and foreign investors accounted for 22.8% of the market value of tradable stocks, an increase of 6.9 percentage points from 2016," Li Chao, vice-chairman of the CSRC, said in June 2022.[22] ***"In 2021, the proportion of individual investor transactions dropped below 70% for the first time, and the concepts of value investment, long-term investment and rational investment are gradually being established."***

Authorities are pursuing a variety of measures to ensure that as investment in capital markets increases, institutional investors take the lead.

In September 2021, Beijing launched trials in a handful of cities permitting people to open individual pension plans. Previously, all pensions were managed by either the state or employers. The trials have since been expanded nationwide.

Beijing has also welcomed FDI into its financial sector. In late 2017, it announced that foreign firms would be permitted to hold a majority stake in joint ventures with Chinese securities companies and life insurers. In 2019, authorities dropped foreign ownership restrictions on futures, securities, and fund management companies, allowing foreign firms to wholly own operations in these sectors for the first time. Major Wall Street firms, including JP Morgan, Goldman Sachs, and Blackrock, have all been given the green light for fully owned ventures.

Additionally, authorities are encouraging insurance companies to invest more in the stock market so that ***"they become the backbone of developing and maintaining the stability of the capital market,"*** the China Banking and Insurance Regulatory Commission said in March 2022.[23] ***"It is necessary to...guide insurance institutions to allocate more funds to equities."***

> Beijing's current crackdown on the property sector should ultimately result in even more funds flowing into capital markets.

China's households have traditionally locked up the lion's share of their wealth in real estate. Housing prices have appreciated robustly for the past 25 years but, with China's working age population already shrinking, the outlook is less rosy. Consequently, savings should start migrating from property to capital markets.

However, perhaps the greatest breakthrough in recent years was the result of the regulation of WMPs. WMPs are short-term investments sold by banks to their customers as a low-risk, higher-yielding alternative to deposits. WMPs emerged as a key part of China's shadow banking system in the early 2010s. Back then, a significant portion of the funds raised by WMPs was invested in what authorities called "non-standard credit products" – a euphemism for loans that banks moved off their books.

In 2018, authorities launched a campaign to make WMPs more transparent and reduce the scope for banks to make off-book loans via WMPs. Consequently, the nature of WMPs evolved so that today they've become the single biggest source of funding for commercial bonds.

At the end of 2017 – just prior to the WMP reforms being introduced – about Rmb12.46trn worth of WMPs were invested in bonds, 42.19% of the total. At the end of 2021, that had increased to Rmb21.33trn, or 68.39% of total WMP funds.

A potential giant

China's capital markets are at an early stage of their transformation. It's clear that Beijing wants to turn them into a channel for allocating capital in ways that better serve the long-term interests of the economy and that can help to redistribute wealth in a manner that bolsters consumption and benefits retirees.

The markets will undoubtedly differ from America's, not least because the role of the state will be far greater. But they could become deeper, broader, and more liquid than those of any country other than the US. After all, China is the world's second-largest economy and could be the biggest within a decade.

> Ultimately, China will offer investment opportunities that other countries don't have, making it attractive beyond simply diversification. Eventually, China could become an investment destination for Asian, as well as global, savings.

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8 Payments infra-structure and the e-CNY

Enodo Economics

Wilson Center

8.1 Introduction

We've said throughout this report that for the yuan to become an international currency it must be at least as cheap, convenient, and secure to use as the dollar.

> To achieve that aim, one of the requirements is to put in place payments infrastructure that reduces the cost and increases the ease of using the yuan for cross-border transactions.

To that end, China is pursuing a twin-track approach. First, it has developed its own infrastructure, called CIPS, to handle international payments and messaging between banks denominated in yuan. CIPS processes only a fraction of the volume that goes through SWIFT, the dominant global platform for cross-border interbank payment messaging, but it has an important advantage: operations routed via CIPS, using its indigenous messaging system, are beyond the purview of the US, which might otherwise punish anyone caught doing business with countries and institutions on US sanctions lists.

The second track China is taking is to promote the digital yuan. By streamlining current cumbersome procedures for cross-border payments, the e-CNY could make firms more willing to use the Chinese currency. It could also indirectly promote RMB internationalization by making China more comfortable about scrapping capital account controls. That's because a digital currency will potentially give a central bank a full view in real time of how money is circulating in the economy and what it is being used for.

> However, no matter how useful these initiatives prove to be, they are unlikely by themselves to materially change the yuan's chances of dethroning the dollar.

Too many other obstacles stand in the way.

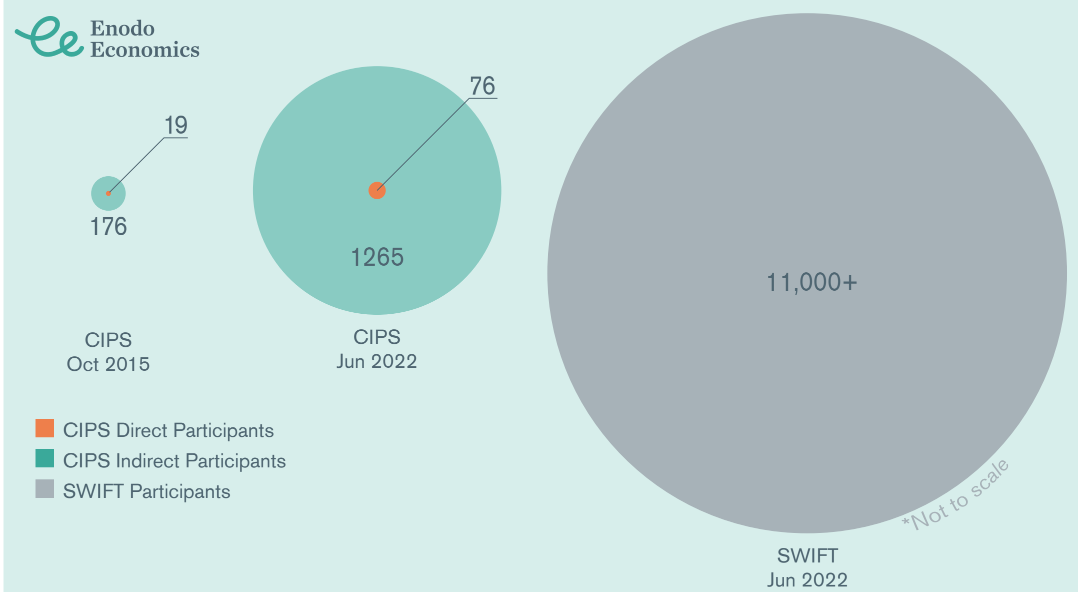
8.2 Payments Infrastructure

At the core of those efforts is the Cross-border Interbank Payments System, or CIPS. The PBoC launched CIPS in 2015 to make it easier for banks to clear and settle international transactions in yuan. By forming a single, unified platform, CIPS reduces the costs and increases the speed of cross-border transactions.

> Most large economies have similar systems for clearing and settling transactions involving their currencies, but CIPS is a strange hybrid.

When it was launched, CIPS provided real time gross settlement (RTGS) for cross-border transactions of a large value. That meant that big operations between banks are settled instantly – one bank's account is credited, and the other's is debited. That made it similar to Fedwire, a system run by the Federal Reserve, and CHAPS, operated by the Bank of England.

Participants in China's Cross-border Interbank Payments System (CIPS)



Banks which are direct participants in CIPS can send and receive messages and settle cross-border payments directly, while indirect participants can only access CIPS services via the direct participants.

However, in 2018 CIPS also started offering deferred net settlement (DNS).[1] Under DNS, lots of small cross-border transactions are allowed to accumulate before being netted out, resulting in banks receiving – or making – a single transfer at the end of the day. In the US, DNS transfers are handled by the Clearing House Interbank Payments System (CHIPS), which is run by commercial banks.

CIPS also differs in that it only clears and settles cross-border transactions, whereas equivalent systems overseas process both domestic and international transactions. China National Advanced Payment System (CNAPS) is used for domestic transfers.

Before CIPS, the majority of cross-border yuan transactions were cleared using CNAPS via specially designated overseas clearing banks; the rest went through an onshore commercial bank acting as correspondent of an offshore commercial bank.

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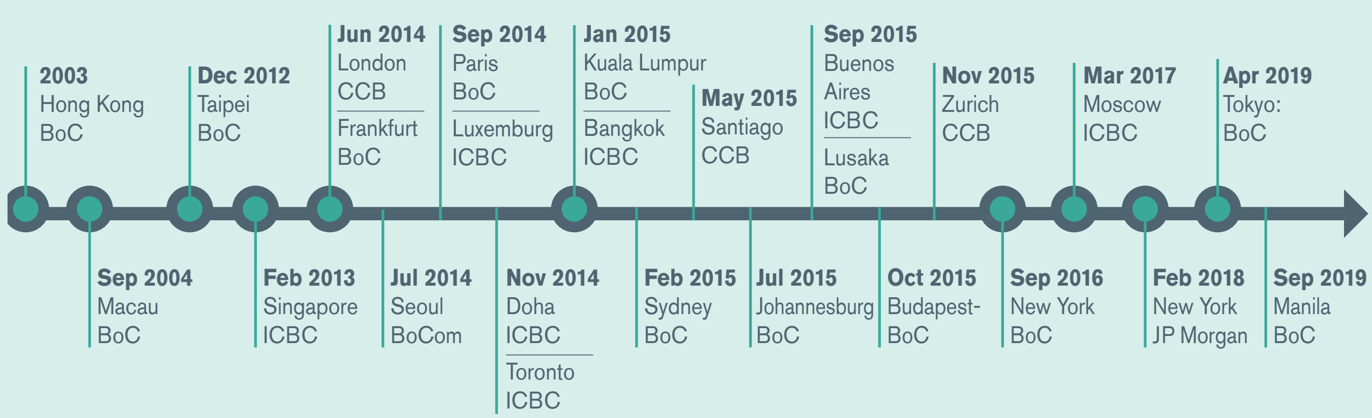
Chinese Offshore Clearing Banks



BoC: Bank of China
ICBC: Industrial and Commercial Bank of China
CCB: China Construction Bank
BoCom: Bank of Communications

Beijing would like CIPS to become the main channel for cross-border RMB clearing and settlement.[2]

Although CIPS is still immature, its existence and improvement are testament to Beijing's desire to establish its own system for clearing transactions, independent of the US or other foreign countries.

Financial communications, free from Uncle Sam

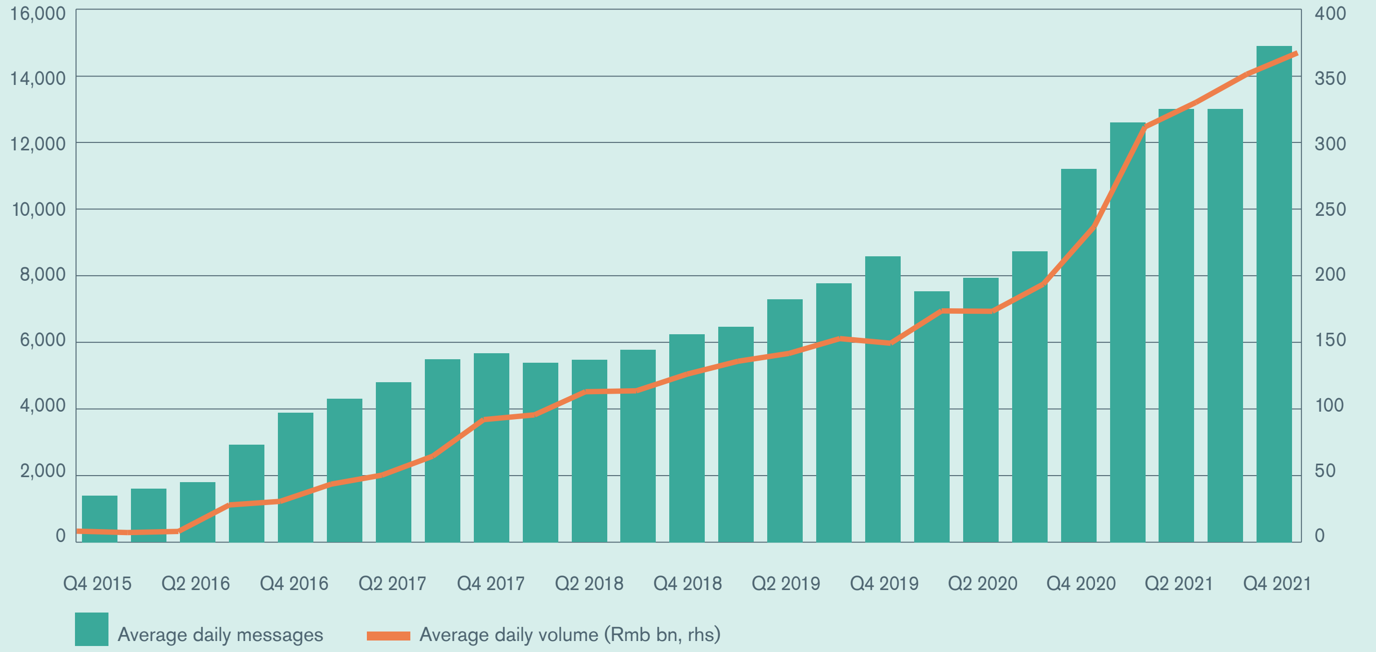
CIPS differs in one other important way. Unlike other cross-border payments systems, CIPS incorporates its own messaging system that banks can use to pass transaction instructions to each other.

Most countries are content to share a common platform for communicating payments data – the Society for Worldwide International Financial Telecommunications (SWIFT). All banks use the SWIFT messaging system, which can handle payment instructions in all currencies.

> CIPS's communications platform is currently based on SWIFT technology and standards. But most transactions that are settled and cleared over CIPS at present still use SWIFT, rather than the CIPS communication platform.

Former PBoC governor Zhou Xiaochuan admitted in April 2022 that CIPS' ***"communication functions are not used much."***[3] The reason is that it's still at a very early stage of its development.

CIPS Traffic



Source: Enodo Economics, PBoC

According to Zhou, SWIFT isn't irreplaceable, but the CIPS alternative, still in its start-up phase, is still vastly less efficient. Any two banks in the world can use SWIFT to communicate with each other, but CIPS has far fewer members. Consequently,

> ***It will affect the efficiency of trade. Some trades that were completed in a week [over SWIFT], might not be completed for two months, because many channels have not been connected."*** [4]

CIPS processed around Rmb80trn ($12.68trn) worth of transactions in 2021, a 75% increase from a year earlier. That's a daily average of Rmb219.2bn ($6bn), compared with roughly $5trn via SWIFT.[5]

However, for certain countries and certain firms, CIPS offers a unique opportunity. The US government has access to SWIFT data which it uses to police financial sanctions. The scope of sanctions imposed on Russia following its invasion of Ukraine has made many financial institutions wary of transacting with Russian firms in any currency for fear that the US might find out, label it "material support," and impose secondary sanctions on the offending institution.

> CIPS may potentially help drive RMB internationalization because it offers a way to avoid US oversight of transactions with countries and institutions on US sanctions lists

That is probably already happening.

In June 2022, Reuters reported that Indian companies were importing coal from Russia and paying in yuan.[6] It is rare for two firms, neither of which is from China, to do business in yuan. It seems likely that they chose the yuan – rather than any other currency – because China's payments infrastructure permits a degree of anonymity not available elsewhere. The Reuters story didn't mention CIPS by name. However, it said that:

> ***Business units of Russian coal traders in Dubai have become active hubs for facilitating deals with India in the recent weeks, as Singapore [the traditional hub for much of this activity] has grown wary of provoking western nations."***

By using the yuan and CIPS, the details of the transaction could be communicated on a platform controlled by China. The funds would then be routed through China for the payment to be cleared and settled in China.

Necessary, but not sufficient

However, CIPS alone isn't sufficient. While CIPS makes it easier to transact in yuan, foreign banks still need a correspondent bank in mainland China. Settlement of fiat currencies can only happen inside the financial system of the issuing country.

Because yuan payments between banks ultimately need to be settled inside China, foreign banks need to secure a correspondent banking relationship with at least one Chinese lender if they want to transact in yuan. If they're unable to secure such a partnership – known as a correspondent banking relationship – then they need to find a bank that does have one, and do their yuan business through them.

One of the reasons the dollar's reach is so extensive is because of the global branch networks of US banks.

According to Wang Daxian, a SAFE researcher, one way to ***"improve [the yuan's] cross-border financial infrastructure…is to encourage domestic financial institutions to go out and set up branches…[thereby] helping the system for RMB to radiate out of China."*** [7]

China has done both over the years. The number of Chinese correspondent banking relationships (CBR) spiked from 65 in 2009 to 2,246 in 2016, a period when US and European banks were ending many of their CBR connections because they were too costly.[8] Over the same period, China's banks rapidly expanded their overseas footprint, either by setting up branches in cities around the world or buying branch networks from other banks.

However, the irony of China trying to replicate the existing international payments infrastructure is that the system doesn't adequately serve the needs of the global economy. Unlike domestic electronic payments, which have become increasingly secure, speedy, and convenient, cross-border payments can take days to settle and can cost up to ten times more.[9]

> Currently, central banks around the world are cooperating to try to overcome the obstacles in the way of making cross-border payments more efficient.

Those impediments include:

- Differences in the operating hours of payments systems in different countries.
- Complex compliance checks on transactions that may differ between jurisdictions.
- Legacy payment platforms that are ill-suited to modern payment demands.

> However, even as China tries to replicate the existing payments infrastructure, it's also trying to leapfrog it with the introduction of a digital currency – the e-CNY.

8.3 Digital Currency: e-CNY

China is the first major economy to launch a digital currency. It started exploring the potential of a government-led digital currency in 2014. It began trialing the use of the e-CNY in four cities in 2020. Since then, the geographic scope has expanded, as has the range of purposes for which it is used.

The PBoC has repeatedly said that its motivation is to use the e-CNY for domestic purposes, such as fostering financial inclusion and protecting monetary sovereignty at a time when non-government digital currencies are being developed globally. But it has also acknowledged that the e-CNY is technically ready for cross-border use.[10]

BOX 8.1

What is the e-CNY?

Unlike physical money such as notes and coins, the e-CNY and other central bank digital currencies (CBDCs) take the form of an amount on a computer or a similar device, for example a smartphone.

Like notes and coins, CBDCs are issued by central banks. That makes them very different from privately issued cryptocurrencies such as Bitcoin and Ether. The e-CNY is a claim on the PBoC and is part of China's base money supply.

The PBoC already issues digital currency to commercial banks when it credits their reserve (deposit) accounts at the central bank. CBDCs are different because everybody can use them. Everyone will have a deposit account with the central bank to make digital transfers or payments directly without using a commercial bank as an intermediary, as is the case now.

The e-CNY and other CBDCs can thus be thought of as the equivalent of a digital banknote or digital deposit.

The PBoC will issue the e-CNY through commercial banks, just as it does with physical banknotes. The e-CNY takes the form of an encrypted numeric string representing a specific amount of money. So, to own and use the currency, people will need the relevant software apps and a specialized e-wallet.

As of August 2021, anyone with an account at one of China's six biggest banks can walk into a local branch and open an e-CNY wallet on their mobile phone.

Each e-wallet receives funds using a public address communicated to payers by a quick response (QR) code or similar identification device. The e-wallet also manages cryptographic keys used to spend the e-CNY that it stores

E-CNY transactions are processed directly by the PBoC in a centralized ledger. That makes the payments quick and secure, but it also gives the central bank complete oversight over who is paying whom and for what reason. The security-conscious CCP will have another powerful surveillance tool in its kit.

E-CNY could help make cross-border payments more efficient

However, the e-CNY creates new opportunities for Beijing to promote the international use of the yuan. Cross-border payments are cumbersome, and firms, governments, and multilateral institutions are all looking for ways to make them cheaper, quicker, more transparent and more secure.

> Digital currencies could be an important part of the solution, and China could potentially benefit from its first-mover advantage.

The emergence of digital currencies can make the international monetary system change faster than expected," writes economist Ba Shusong.[11] *"The integration of global payments systems strengthens network externalities, which could change the way the yuan gains international status."*

However, just how the e-CNY might contribute to yuan internationalization and over what time horizon remain open questions.

China has said that, as yet, it doesn't have plans to promote the use of the e-CNY in other countries.[12] That means for the e-CNY to have an international role, the PBoC would need to cooperate with other central banks to establish mechanisms that permit cross-border settlement between e-CNY and other currencies.

The main project exploring the use of e-CNY for cross-border payments is the m-CBDC Bridge initiative, which brings together the Hong Kong Monetary Authority, the PBoC's Digital Currency Research Institute, the Bank of Thailand, the Central Bank of the UAE and the BIS Innovation Hub in Hong Kong.[13]

Creating the conditions for e-CNY to be used in international payments is a complex, time-consuming process that requires countries to establish cross-border legal and administrative norms. Differences in anti-money-laundering regimes, tech standards, and capital account restrictions have to be reconciled. Given such complexities, former PBoC chief Zhou played down the e-CNY's potential to be a driving force of yuan internationalization, saying,

The internationalization of the renminbi depends more on system and policy choices, and more on the progress of [China's] reform and opening up, rather than on technical factors."[14]

The e-CNY has the potential to make cross-border transactions much simpler than they are now, which could help increase firms' willingness to use the Chinese currency for invoicing, payments, and settlement.

However, while a streamlined payments system might advance the cause of yuan internationalization, it will not be sufficient to realize that goal given the obstacles outlined in this report. Zhou sums it up best:

The modernization and digitization of the RMB payments system will help improve the status of the RMB and increase the cross-border use of the RMB to a certain extent, but it is not very helpful."[15]

BOX 8.2

How Can Central Bank Digital Currencies Facilitate Cross-border Payments?

Low Transaction Costs

- Owing to the number of intermediaries involved, such as correspondent banks, the traditional cross-border payments model is cumbersome. To ensure due diligence, it requires manual liquidity monitoring, back-office treasury operations, and FX risk management, as well as multiple communications.
- According to the World Bank, the average cost of international retail remittances is 6.51% of the total amount sent.
- Central bank digital currencies (CBDCs) could effectively reduce the number of intermediaries and directly link payers and payees, thereby greatly reducing the cost of transfers.
- Researchers in the m-CBDC Bridge pilot program estimate that it helped cut costs by up to half by reducing outlays on liquidity management, compliance costs, and treasury operations and by saving on foreign exchange transactions.

Real-Time Transactions

- Digital currencies replace the intermediaries in the traditional correspondent banking model by providing direct payment-versus-payment settlement for transfers in different currencies.
- The delay between payment and settlement for a typical transaction processed via correspondent banks averages 3-5 days. Results from the m-CBDC Bridge prototype indicate that this can be reduced to just 2-10 seconds.
- Zhou Xiaochuan, former governor of the PBoC, has said that one of the major benefits of a digital system is that both payments and currency conversions happen in near-real time.

Security and Trust

- CBDCs can be based on blockchain or other types of distributed ledger technologies (DLT) to synchronise transaction data among participants in the payments chain.
- All transactions involving blockchain-based CBDCs are immutably recorded on the blockchain with a timestamp and unique cryptographic signature. These digital signatures ensure that transactions can be verified anonymously. Only permissioned users can access the information, protecting the privacy and independence of CBDC users and preventing fraud.
- Both blockchain and DLT technology can enable cryptographically secure transaction chains. As the BIS puts it: *"Very simply, this means that transactions on the network have mathematically guaranteed results. Due to this, these types of transaction chains are useful in the implementation of tokenised assets and liabilities."*
- That in turn means the value of transactions is digitally represented and not recorded in bank accounts. Hence, participants are able to make direct payment-versus-payment transfers without going through intermediaries. While a central bank can access all transactions within its jurisdiction, commercial banks can only gain access to the transactions with which they are involved.

E-CNY to drive capital account opening

> That said, in the medium term the e-CNY could promote RMB internationalization by making Beijing more willing to open China's capital account.

Digital currencies give central banks an unprecedented degree of insight into how money moves within an economy and the purposes to which it is put. Assuming that e-CNY is eventually allowed to circulate outside of China and be used for cross-border transactions, Beijing will have far more information about capital flowing in and out of the country.

Such knowledge lessens the need for capital controls as it lets authorities police financial flows closely enough to be able to fine-tune policy rather than resort to blanket restrictions on entire categories of transactions. Consequently, China could become more willing to relax capital controls – at least for transactions that use e-CNY.

The e-CNY could thus eventually help the cause of RMB internationalization, but the precise ways will depend on how the e-CNY is permitted to connect with global payments infrastructure, how successful China is in enforcing its standards, and the degree to which its digital currency is used.

Even then, better payments systems are a useful – perhaps even necessary – foundation upon which to promote RMB internationalization. However, as we've outlined throughout this report, they're not sufficient.

> Neither CIPS nor the e-CNY alone is likely to be able to catapult the yuan into a position where it can meaningfully erode the dollar's global status.

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Enodo Economics

9

Barriers to RMB internatio-nalization

Wilson Center

9.1 Introduction

This report has so far focused on how China is promoting RMB internationalization without trying to gauge the likelihood of its efforts being successful. That's in part because this is a long-term process, and it becomes increasingly difficult to make informed predictions beyond the next five years.

> However, it's important to recognize that, despite Beijing's commitment to decoupling from the dollar, there are barriers that may delay the process or prove insurmountable.

Some of those are beyond China's ability to influence.

One, which we've touched on previously, is the stickiness of the dollar. For the yuan's international role to increase, that of other currencies – and the dollar in particular – must diminish. But it's difficult to chip away at the dollar's dominance because the ubiquity of its use generates network effects – in short, its dominance reinforces its dominance. The dollar is so widely used because it's cheap and convenient. However, it's cheap and convenient because it's so widely used.

> For that advantage to unwind, the world needs to lose faith in the dollar or some aspect of the global economy needs to change fundamentally.

As outlined in Chapter 2, Beijing believes that will inevitably happen and that the moment of reckoning is fast approaching. Not only are swings in US monetary policy destabilizing for many countries, but Beijing fears profligate US government spending will devalue the dollar. Moreover, China sees US political dysfunction eroding America's influence in the world.

But even if the pillars that support the dollar's status are eroding, is the yuan in a position to take advantage? Sure, Beijing's goals seem relatively modest at this stage. It doesn't want the yuan to supplant the dollar as the apex global currency; it wants the yuan to carve out a niche as a regional currency. But there are barriers in the way of China being able to achieve even that.

> Some barriers are economic, others geopolitical, and some are due to China's own domestic political choices and idiosyncrasies.

But all of them make it far more difficult for the yuan to flourish beyond China's own borders.

9.2 CCP and the Market

The most cogent argument for why RMB internationalization is not achievable has to do with the Communist party, and its approach to capital flows. In the Mao era, China participated in limited trade within the Soviet bloc, but its ideal was complete economic self-sufficiency. In the reform era, while trade ties blossomed and economic growth boomed, Beijing's rulers observed the destabilizing effects of currency crises in Asia and Latin America, and kept tight controls over capital flows.

It's often argued that the CCP will never relax cross-border capital flows sufficiently to allow the yuan to function as a truly international currency. Certainly, there are reasons for why total liberalization will prove difficult. China's regulators regard large outflows of capital as being a vote of no confidence in the Party's economic management. That mentality undergirds their reluctance to relax capital outflows and will be difficult to overturn.

As we have seen, many of the internationalization measures outlined in earlier chapters are still designed more with an eye to attracting capital into China while limiting China's accumulation of dollars. Beijing is much more leery about true liberalization measures that would allow the currency to trade outside its control.

Additionally, there's been significant pushback from the politically entrenched elites who have benefited from preferential access to cheap credit made possible by capital controls and relatively closed-off financial markets. The dismantling of their privileges has been a constant challenge.

> Ultimately, the Party's overriding priority is to maintain its hold on power. However, that doesn't necessarily mean preserving things unchanged.

If anything, the past 40 years have shown that the Party is willing to relinquish direct control if it means it's able to accumulate greater power.

Today, the CCP exercises far less control over the daily operations of the economy than when Deng Xiaoping came to power. Back then, almost all firms were state-owned, whereas today 80% of companies are in the private sector. Moreover, the state used to regulate all prices, while today only a small, although crucial, handful are set by authorities. But one of the prices that is still heavily regulated is the price of money.

Unequivocally, the CCP has less control over the economy than it once did. And yet, the growth generated by the marketization of the economy – allowing the forces of supply and demand to flourish – has made the Party far more powerful. It has acquired the financial resources to build an advanced military and technologically sophisticated domestic surveillance networks; to increase China's influence overseas through the example of its own success and by investing in other nations' development; and to invest in its future security by directing resources into the development of new technologies.

> Conceivably, the Party might one day come to see the removal of restrictions on cross-border capital flows in a similar light – that it stands to gain more than what it's giving

up. Certainly, there are things it can do to diminish its anxiety about relinquishing control.

As we noted in Chapter 8, the e-CNY could generate unprecedented insight into cross-border currency flows. Similarly, SAFE is striving to build a system that monitors cross-border capital flows using artificial intelligence and big data.[1] In our view, if these technological advances reach their full potential, it is likely that the CCP will become much more comfortable with releasing its grip on capital flows.

Moreover, the CCP has always taken a gradual approach towards economic development. China's opening up and reform was not conceived as a grand plan. Rather it consisted of small, step-by-step changes and learning by trial and error while striving for stability. The liberalization of cross-border currency flows will be no different.

However, Xi Jinping's centralization of power and determination to enforce state control has led to a swing toward top-down directives.[2] Local experimentation is largely off the table with a few exceptions. The mood of political paranoia as a result of rolling anti-corruption purges has left local officials terrified of taking the initiative, lest rivals use it as an excuse to end their careers.

And with the Sino-American geopolitical confrontation in full swing, Beijing feels it does not have the luxury of time to continue with experimentation. The paralysis of local leaders and aggressive American efforts to contain China's rise seem to have combined to derail the trial-and-error method favored by many financial regulators.[3]

The visible hand

Even if China is eventually willing to significantly dismantle formal barriers to cross-border capital flows – and liberalize other aspects of the financial system necessary for RMB internationalization – that may not prove to be enough for the yuan to function as a true reserve currency.

The Party's relationship with markets is complicated. Markets thrive, but the presence of the state is ubiquitous.

Authorities create market infrastructure but then fiddle with the rules or apply them inconsistently.

Part of the Party's culture is an inclination to meddle constantly in the interests of stability, and its own continued monopoly on power. It has been willing to remove the shackles of explicit state control and let market forces play out, but it retains the right to intervene whenever it doesn't like the result. It's willing to trust the economy to the magic of the open market – but only up to the point where it's happy with the outcome.

That undermines the proper functioning of markets.

Such behavior was most clearly on display during the 2015 crash in mainland stock prices. In response, the authorities halted short selling, mobilized state institutions to buy shares, and went looking for scapegoats. At one point they called in executives from overseas high-frequency trading firms to account for their actions during the crash. They consequently imposed circuit breakers, which halted all share trading for 15 minutes if a major index rose or fell by 5%; and if the index rose or fell by 7% after that, trade was suspended for the rest of the day. The mechanism reignited the rout.

More recently, volatility in China's commodity futures markets prompted the authorities to raise trading margins, halt trading, and restrict the maximum number of open positions for certain contracts.

> Beijing's readiness to change the rules complicates matters for institutional investors, who crave consistency.

Uninvestable China

Even more fundamental is the broad shift under Xi towards statist policies and the undermining of private entrepreneurship. As businessmen like Alibaba's Jack Ma and others have long feared, Xi tolerates the private sector only as long as it serves the interest of the Party-state.[4] Large private firms too easily stray from that path. Over the past couple of years, Xi has clamped down on big private sector companies that he regards as a potential threat to the Communist Party's monopoly on power.

His ideological goal is to strengthen Communist Party power in state-owned as well as strategically important private enterprises, and to subordinate business decisions to the needs of the Party.[5]

> He has thereby changed for the worse the incentives driving China's big private firms' innovative and entrepreneurial behavior.

At its extreme, some argue that the recent Party assault on the private sector has made China uninvestable.[6]

In mid-2021, Beijing released measures requiring education companies to re-register as nonprofits, effectively destroying a $100bn-a-year industry and causing the share price of about a dozen US-listed Chinese education companies to plunge.[7]

Paired with the crackdown on internet platforms launched late in 2020, many overseas observers assumed they were witnessing a broad-based campaign against China's private sector, one that could be extended to any industry without notice or recourse.

> Shocked by the arbitrary use of state power, investors of all stripes have been reconsidering their exposure to China, prompting the question: is any investment in China truly safe from the state?

Currently, ordinary Chinese don't believe that it is. Rich and middle-class households routinely hedge against the risk of the state re-appropriating their wealth by investing overseas, specifically in real estate in common law countries with strong property rights.

Investors might prove to have short memories and soon forget the losses of 2021. However, it's conceivable that the Party's disinclination to relinquish control of the economy, and its tendency to bend markets to its will, could undermine the willingness of foreign investors to put capital to work in China's financial markets. That would, in turn, stunt the yuan's progress towards internationalization.

> Foreign investors need to be able to trust that the value of their investments in China – and their access to those investments – won't be affected by sudden sweeping political decisions motivated by socialist ideology.

They need to believe that their rights will be respected by the political system, and that they will be treated fairly by the legal system according to transparent, universally upheld laws.

Economic coercion

What is true for corporations, is also true for nations. As discussed, the appeal of the dollar as an international currency is its convenience, ubiquity and relatively low cost. For the yuan to be used as an international currency – not simply as settlement in bilateral trade – it needs to hold similar appeal.

> China has wielded access to its economy as a political tool with relative frequency over the past decade.

In 2012, China curtailed imports of bananas from the Philippines over a dispute in the South China Sea. When, in 2016, in spite of Beijing's objections, Seoul agreed to allow the US to station THAAD - a highly advanced radar system — in South Korea, China responded by curtailing tour groups from traveling to Korea and suspending business at more than half of Korean conglomerate Lotte Group's 99 stores in China.

Other examples abound. In late 2016, the Mongolian government allowed the Dalai Lama to visit, China expressed its displeasure by imposing new fees on Mongolian exports to China. In 2020, China effectively embargoed the import of a range of products from Australia – including coal, wine, timber, cotton, and beef – following Canberra's call for an independent investigation into the origin of COVID-19. And in late 2021, China cut off trade with Lithuania after the Baltic state forged closer ties with Taiwan, which Beijing regards as a renegade province.

At the time of writing this chapter in early August 2022, Beijing had just banned the import of a range of Taiwanese goods in retaliation for a trip to the island by House Speaker Nancy Pelosi, the most senior US politician in 25 years to visit Taipei.

Of course, the US uses economic coercion as well – a factor that, as we shall see later in this chapter, could enhance the yuan's appeal to certain states. The difference is that the dollar was established as the dominant global currency before the US started weaponizing it.

> In contrast, China needs to build faith in the yuan from scratch at a time when it is routinely cutting off trading partners from its domestic markets in retaliation for causing offense.

9.3 China's Uncertain Economic Outlook

On the surface, China's status as the world's most populous nation and biggest economy, by many measures, argues for an internationalized yuan to play a strong global role. Historically, currency strength has followed economic strength, although there is often a lag in the timing of a nation giving up its currency dominance to a newly powerful rival, as discussed in Chapter 10.

However, there are weaknesses inherent in the Chinese economy that could limit the yuan's potential.

Since the GFC, China's fast-paced economic growth has been propelled by investment in housing, infrastructure, and factories. But it was only made possible by the rapid accumulation of debt. That model of growth isn't sustainable and hasn't been for some time.[8] Borrowers – primarily property developers and local governments – will struggle to repay the substantial debts they've piled up over the past decade, which could have a potentially destabilizing effect on the financial system and the economy. [9]

Even prior to COVD-19, the pace of economic growth in China was slowing, although it was still robust.

> It's fair to assume that growth will continue to slow, even once the pandemic is past, because even if Beijing is successful with the economic transformation it hopes to achieve, it will take years to pull it off.[10]

Beijing has been trying to change the way China's economy grows since the 2015 equity market and currency debacle. On the one hand, it wants to cultivate technologically advanced industries that are capable of generating high-paying jobs. To that end it is aiming to boost productivity growth by investing heavily in innovative firms and high-value-added manufacturing.

However, the hoped-for transformation faces major hurdles. As part of the US-China trade war, America has imposed restrictions on the sale of components and equipment to many Chinese tech firms, posing a serious impediment to their development. Beijing is trying to spur innovation by throwing resources at small private firms and dismantling the monopoly of the big tech giants. But will its approach work if simultaneously it has shown those small entrepreneurs that getting too big will not be tolerated and getting too rich will not be allowed?

A raft of leading Chinese businessmen have seen fit to keep the lowest of profiles, for fear of meeting the same fate as Alibaba's Jack Ma. And many companies have rushed to turn over part of their after-tax profits to the state, to show they are in tune with Xi's professed desire to narrow China's yawning inequality gap.

Beijing ostensibly wants consumption to be a more powerful engine of economic growth and is implementing a raft of measures aimed at redistributing income and wealth more equally, putting more money in the pockets of ordinary Chinese.[11] But that could well be undermined by efforts to deflate China's property bubble and its slow transition away from financially repressing households.

Restraining the property sector and house price inflation is necessary to slow debt growth and to give ordinary families a chance of getting on the property ladder.

> The danger is that with so much of household wealth in property, falling house prices will result in diminishing wealth and a desire to save a larger proportion of income, and ultimately thwarting the transition to consumption-led growth.

Household financial wealth is heavily invested in interest-bearing deposits and high-interest wealth management products. Not allowing bank deposit rates to truly move freely, as yet, and delaying this important part of interest reform indefinitely is also a major obstacle to the desired rebalancing of the economy.

Even if Beijing manages to pull off the transformation, economic growth will be far slower than it has been over the past three decades. On the other hand, it will be less dependent on the rapid accumulation of debt, thereby making growth more sustainable. Moreover, by boosting consumption, China will import more processed and semi-processed goods from Asian and BRI countries, helping it become an anchor for the regional economy. And by nurturing more-advanced industries, it can remain on track to evolve from a developing into a developed economy, thereby further bolstering the status of the yuan.

The demographic cliff

> Over the long term the biggest impediment to China's growth prospects is likely to be its population decline.

According to United Nations projections, China's population may have started shrinking in 2022. Moreover, the working-age population – the number of people between the ages of 15 and 64 – is set to decline rapidly in the 2030s. By 2100 it is projected to shrink by almost two-thirds. That will mean China's working-age population will go from being four times as big as that of the US to only twice as big by the end of the century.[12]

That has huge implications for growth.

Not only will China have fewer productive workers, but fewer consumers as well. Beijing is worried about the resulting impact on the return on assets, which will undermine the incentives for foreigners to invest in China's capital markets.

Data shows that [China's] aging population is in the process of gradually reducing the country's return on assets," Lin Caiyi, vice-president of the China Chief Economists' Forum, wrote in 2020.[13] ***"At present, the proportion of the elderly population over the age of 65 in [China] has reached 12.6%, and there is a continuing upward trend. Against the background of aging, the domestic capital surplus and the shortage of labor will become a problem that cannot be ignored."***

Populations with a high percentage of retirees – or people preparing to retire – consume less as a share of overall income. Countries with shrinking working-age populations don't need to borrow that much: the housing stock is sufficient, as is public infrastructure and factory capacity. That means a country like China is left with a large pool of savings that wants safe, fixed returns. However, the real economy has little need for all those savings.

That could potentially put pressure on Beijing to relax restrictions on outward capital flows so that Chinese savings can head overseas in search of better returns. Liberalizing the outflow of capital might become important for maintaining social stability.

That could be good for RMB internationalization, but only if the rest of the world is willing to accept investment from China in the form of yuan. If foreigners can raise funding more cheaply in yuan than they can in dollars, it could encourage the issuance of yuan-denominated offshore stocks and bonds.

However, the lower yield on yuan assets would make the currency less appealing to the rest of the world, thereby undermining China's efforts to encourage foreign capital inflows.

Slower growth could also diminish the appeal of yuan-denominated assets by potentially eroding faith in Beijing's ability to ensure stability – of its currency, monetary policy, and financial system. And stability, broadly defined, is a prerequisite for trust in a reserve currency.

Above all, the potential for the yuan to become a regional and eventually a global reserve currency rides heavily upon the Chinese economy's capacity to continue growing robustly. For years, China's rise to become the world's biggest economy has seemed inevitable. That's no longer the case. While it's still possible, it's not guaranteed.

When it seemed inevitable that China would play an increasingly dominant role in the global economy, the appeal of the yuan as an international currency was far greater.

But if the relative economic strength of China erodes, the yuan's appeal will diminish.

9.4 Geopolitics

This report has primarily drawn on the writings and comments of China's financial regulators, who are laying the groundwork for the yuan to trade internationally in the manner of the euro or yen. However, within the Chinese policy debate are voices that traditionally have little to do with esoteric currency matters. These interest groups, including the military and security establishment, look at the advantages that the Almighty Dollar gives to the US – advantages that include the ability to impose American policy on other nations, and a teflon-like protection from fiscal irresponsibility, as global demand for the dollar helps support demand for US government debt. These groups want the yuan to play the same hegemonic role as the dollar does. Can it?

For the past four years Enodo Economics has argued that the world is bifurcating into two spheres of influence as America, the existing hegemon, clashes with China, the aspiring challenger.[14]

> We called this all-encompassing geopolitical contest the Great Decoupling and have reasoned that it will be the driving force behind political, economic, and financial outcomes for years to come.[15]

Increasing willingness on the part of the US to deny foreign individuals and institutions access to the US financial system could transform the global dollar system from being a common good enjoyed by all into a walled garden of exclusive benefit to US friends and allies. With China pursuing a path independent of the US-led rules-based trade and financial order, it's not unimaginable that the yuan might emerge as the currency of choice among nations on the other side of the garden wall.

> Russia's invasion of Ukraine has forced global markets to consider the investment implications of abrupt geopolitical shifts.

The severe financial sanctions the US and its allies have levied on Moscow have sharpened investors' perception of the risks of allocating funds not only to Russia but also to China. Beijing has failed to condemn the war even though it has stopped short of providing Putin with military support.

China has been jolted into shedding overseas assets, impelled by fears of being subject to Russia-style sanctions in the future. A new, internal Party directive bars senior officials from owning property abroad or stakes in overseas entities, whether directly or through spouses and children, the Wall Street Journal reported in May 2022.[16]

This report details how the independent financial systems that China is trialing are very attractive to nations and individuals targeted by US sanctions. What the Chinese systems lack in efficiency, they make up in security, at least for a certain clientele.

> However, while some nations might be driven to use the yuan for lack of a better alternative, for China to develop a functional yuan bloc it will need to attract countries with sufficient economic heft into its financial orbit.

That may prove difficult.

Foreign investors started to exit China's bond markets in March 2022. They have also been selling equities over the past couple of months as the Ukraine war has sharpened the geopolitical fault lines. In a survey of global reserve managers conducted by OMFIF after the war broke out, 71% of respondents said geopolitical concerns were discouraging them from investing in renminbi assets (63% and 62% respectively cited poor market infrastructure and a market not sufficiently open to investors).[17]

At present, countries and companies around the world are waking up to the challenges of the Great Decoupling and find it hard to pick a side, especially given the integrated nature of the global economy. But they will increasingly be forced to declare their allegiance.

One event which could precipitate a seismic division is a Chinese military invasion of Taiwan.

The Taiwan threat

One of the motivations for developing a yuan bloc, free from US interference, is to shield China from the inevitable attempt by Washington to use financial retaliation as deterrent or punishment if China invades Taiwan.

Many have argued that China is closely observing the international response to the conflict in Ukraine as a trial run for a potential invasion of Taiwan. Since 1949, the Communist party has made no secret of its ambition to control the island, and it has never renounced the use of force to do so. For decades, China lacked the military power, or else was too dependent on its economic partnership with the US to act on its ambition. However, as its economic, military and diplomatic heft grows, it may decide it is finally free to attempt the move.

> Beijing may feel that its window of opportunity for reuniting with Taiwan is shrinking now that the US has focused its attention on countering China's rise.

While the US stance will accelerate Beijing's efforts to achieve maximum financial self-reliance, it also means that in its haste China is likely to eschew financial sector experimentation - to its detriment.

US Gen. Mark Milley, chairman of the Joint Chiefs of Staff, says the Chinese military has become significantly more aggressive over the past five years.[18] Central Intelligence Agency Director Bill Burns told the Aspen Security Forum in July 2022 that it's a matter of when and how – not whether – mainland China will attack Taiwan. "The risks of that become higher, it seems to us, the further into this decade that you get," he said.[19] Russia's war in Ukraine has taught Beijing it needs to "amass overwhelming force" to attempt a similar move, he said.[20]

As we discussed in Chapter 2, Taiwan is the lightning rod that can no longer be ignored.[21] China is determined to recover Taiwan, but the timing of any military action to do so is no longer squarely in its hands.[22] Not only have Taiwanese hearts and minds drifted far away from the mainland, especially after Beijing's suppression of Hong Kong, but America has also woken up to the China challenge. There is unprecedented bipartisan agreement in Washington on the need to be tough on China.

> A decision to invade would surely precipitate a decisive bifurcation of the global financial system. Countries and companies would be forced to choose.

The irony is, that China's haste to achieve its geopolitical goal may undermine those very goals. Financial preparedness may not be the decisive factor for China's military planners, and so therefore China may not be able to pursue its RMB internationalization strategy according to a timetable driven by economic and financial considerations.

Some nations may already feel that the opportunities arising from tying themselves more closely to China outweigh the risks. After all, China's rapid economic growth has been unmatched anywhere else in the world. Moreover, China has been willing to share its wealth by investing generously in the developing world through the BRI. However, these calculations change if China's economy slows or even stagnates before a Taiwan invasion.

> China has made acquiescence on a range of political issues the price of admission to the world economy's most powerful engine room. A yuan bloc would give China more tools with which it could exert influence over the grouping's members.

Without trust that China would restrain from interfering in their economies, more economically dynamic countries may not want to tie themselves completely to the Chinese sphere of influence.

Other Intangibles

As this report has outlined, there are many other prerequisites for a currency to be widely used internationally. An impartial justice system that enforces the rule of law. A central bank that can be trusted to preserve the value of the currency. The non-arbitrary application of laws and regulations that are made in a transparent, predictable manner.

> In essence, these preconditions boil down to a simple question: can the non-elected Communist Party be trusted to be the guardian of a global or even a regional currency?

As Barry Eichengreen, a professor of economics and political science at the University of California, Berkeley, has said, it is no coincidence that every truly global currency in history has been issued by a democracy or a political republic, as far back as Italy's republican city-states in the 14th and 15th centuries.[23]

It will be a tall order for the CCP to break that mold.

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Enodo Economics

10 The next five years

Wilson Center

10.1 Introduction

The yuan isn't going to become an international – or even regional – currency in the next five years. Rather, progress between now and the end of 2027 will largely take the form of incremental developments in the areas we've already outlined in this report.

Specifically, we expect Beijing to:

- **Focus on safeguarding its financial infrastructure** by ring fencing core information technologies in the financial sector, ensuring data security, and expanding the use of CIPS. We also anticipated that it will expand the use of the e-CNY for cross-border transactions, and strive to take a leading role in setting international standards for the use of digital currencies in global payments.
- **Further relax restrictions on foreign investment into China's financial markets** by opening new channels that increase the volume of investment and widening the areas in which foreigners can invest. In particular, we expect to see greater tolerance of foreign investment in financial derivatives like commodity and currency futures.
- **Deepen reform of China's financial markets** in ways that make them more attractive to foreign investment. Additionally we expect China's authorities to beef up their capacity to tackle major financial risks, enhance the PBoC's role as the lender of last resort, and establish a cross-agency mechanism for risk detection and disposal.
- **Further encourage the development of e-commerce** in ways that make greater use of the yuan.

However, we expect to see less tangible progress in other areas we've discussed.

With regard to commodities, we think it highly unlikely that benchmark pricing for any commodities futures contracts will be denominated in yuan. Commodity pricing power is a long-term goal that requires changes not only to China's markets, but also an erosion of global trust in the dollar. Consequently, we expect China's authorities to continue making gradual reforms – opening up the futures market to more foreign investment, professionalizing the futures markets – despite the potential for short-term payoff being low.

> It's possible that Beijing might make progress in convincing foreign governments to invoice commodity trade in yuan for political reasons.

As we noted in Chapter 6, Beijing is in long-term talks with Saudi Arabia over oil invoicing. Additionally, firms from countries locked out of the global dollar financial system – or firms that want to avoid the dollar system – might increasingly use the yuan, particularly as the CIPS system matures. Following Russia's invasion of Ukraine, Chinese firms have paid for imports of Russian coal and gas using yuan. Previously they used dollars or euros.

> We're also not optimistic about the extent to which China will make progress converting Asian supply chains to use yuan.

Meaningful progress will depend on consumption increasing as a share of China's economy so that it consumes more of what its Asian neighbors produce. But as we explained in Chapter 9, if Beijing remains on its current economic policy trajectory, it is unlikely to succeed in rebalancing its economy towards consumer-led growth.

However, even though some of China's biggest ambitions will take longer than our five-year window to gain traction, we expect China will make progress in areas we haven't already discussed – areas that haven't been important to Beijing's RMB internationalization strategy, until now.

We expect Beijing to make progress in the following three areas:

- Rapid development of Hong Kong as an offshore market where foreign firms, especially from the BRI, can access China's vast savings pool.
- Regulatory changes to allow Chinese government bonds to be used as collateral for cross-border transactions, sparking a surge in demand.
- Financial services industries that will generate international as well as domestic demand, as Shanghai, the Greater Bay Area (GBA), and Chongqing bid to become international financial centers (IFCs).

10.2 Hong Kong and the Offshore Market

Next five years: The flow of Chinese savings into Hong Kong's financial markets will increase significantly, resulting in the issuance of more yuan-denominated securities in Hong Kong, and attracting foreign firms and institutions to raise capital in Hong Kong.

Development of China's offshore market peaked in 2015 and has struggled ever since. In that year, annual turnover of all yuan securities reached Rmb35.9bn before dropping to Rmb15.5bn in 2020. Meanwhile, at the end of 2015, there were 155 yuan debt securities – mainly bonds – listed on the Hong Kong Stock Exchange, and 29 ETFs. At the end of 2020 there were 42 ETFs, but only 75 bonds.[1]

> One of the reasons issuance of yuan-denominated offshore stocks and bonds hasn't increased is because there hasn't been sufficient demand from investors.

The amount of yuan offshore is limited which means overseas investors don't have the currency necessary to invest in large volumes of offshore yuan-denominated financial assets. Moreover, with the opening up of China's capital markets, foreign investors' interest is mainly directed toward investing yuan in mainland markets.

Consequently, the development of offshore yuan markets is dependent on demand from mainland Chinese savers, and there are still strict limits on how much they can invest overseas. As a result, the development of China's offshore yuan market has been slow.

However, we expect that to change over the next five years.

Mainland integration

While there are offshore markets for the yuan in London and Singapore, Hong Kong is the most important. It accounts for nearly 50% of cross-border RMB payments, 60% of offshore RMB deposits, and 80% of offshore RMB bond issuance.

> Beijing is using RMB internationalization as a tool to better integrate Hong Kong with mainland China.

Closer integration is a political goal, the centerpiece of which is the Great Bay Area (GBA), a geographic grouping that includes Hong Kong, Macau, Shenzhen, and nine cities in Guangdong province. The concept was launched in 2019 and is designed to foster a regional economy by developing business and financial ties across administrative boundaries.

> The hope is that integration will create new opportunities for Hong Kong, which will tie its interests more closely to those of Beijing.

One of those opportunities is the offshore yuan market. Breathing new life into the development of offshore yuan financial activity could boost Hong Kong's financial sector at a time when the city is losing business to both Singapore and Shanghai.

"The construction of the Guangdong-Hong Kong-Macao Greater Bay Area will help enhance Hong Kong's status as an international financial center," PBoC Governor Yi Gang said in December 2021. ***"Hong Kong plays an important role in the process of RMB internationalization."*** [2]

In recent years, Beijing has taken a series of steps to develop the foundations of Hong Kong's offshore market.

Since 2018, the PBoC has regularly issued RMB-denominated central bank bills in Hong Kong, across a range of one-month, six-month and one-year maturities, as part of efforts to develop a benchmark yield curve for interest rates. Since 2021, it has been trying to better manage yuan liquidity in Hong Kong by using those bills as collateral for reverse repurchase agreements.

Then in July 2022, the PBoC upgraded its currency swap agreement with Hong Kong transforming it into a standing facility with no end date – something banks in Hong Kong have been lobbying for – and increasing the quota to Rmb800bn from Rmb500bn. The HKMA will in turn enhance its RMB liquidity facility, increasing the size and streamlining the operation, to support the continued development of Hong

Kong's offshore RMB market. This will hugely increase the availability of yuan to investors, banks, and businesses.

> However, Beijing's most valuable contribution to developing Hong Kong's offshore yuan market is unquestionably the Connect programs.

A funnel into Hong Kong

In Chapter 7 we explained how most of the foreign capital that flows into China's financial markets had to come through Hong Kong via the Stock Connect, Bond Connect, and Wealth Management Connect. These programs also allow investors from mainland China to invest in Hong Kong-listed financial assets. However, Beijing currently allows far more foreign funds to flow into mainland China than Chinese funds to flow out.

A crucial element of the outbound component of the Connect programs is that the funds from the mainland can only flow in Hong Kong financial markets. There are other outward investment programs – such as QDII and the Shanghai-London Stock Connect – that allow Chinese savings to go into other markets, but by far most outward investment leaves via the Hong Kong Connect programs.

> Moreover, the Connect programs are designed as a "closed loop" so that once funds are withdrawn from the Hong Kong markets, they have to be remitted back home to China. They can't use Hong Kong as a stopping off point before investing somewhere else in the world.

That means, to the extent that Chinese savings are permitted to leave China, they don't flow into the global economy. Rather, savings are funneled almost exclusively into Hong Kong stocks and bonds.

If the outward flow of Chinese savings increases, the concentration of Chinese savings in a single overseas market - Hong Kong - will increase demand in Hong Kong for yuan-denominated assets.

Chinese investors find it more convenient to invest in yuan than in Hong Kong dollars. As long as the Hong Kong dollar remains pegged to the US dollar, mainland Chinese investors will be exposed to currency risk when they invest in Hong Kong financial assets. But as the volume of mainland Chinese money becomes an influential force in Hong Kong, the demand for more yuan assets will increase.

> However, in order for Chinese investors to want to invest in Hong Kong, Hong Kong needs to provide a range of financial assets that aren't available in mainland China.

Up until now, Hong Kong's stock and bond markets have given foreign investors a more convenient way to invest in Chinese firms than mainland markets. Moreover, Hong Kong insulated foreign investors from the country risk – that is, the political and geopolitical risk – of investing directly in China. But after Beijing's crackdown on Hong Kong, foreign investors may perceive the risk of investing in Hong Kong as being comparable to investing in the mainland, which they can now do more freely.

> The role of Hong Kong is now changing. Rather than a way for the rest of the world to invest in China, it will increasingly become a way for Chinese investors to invest in the rest of the world.

A bridgehead

Beijing already allows foreign companies and institutions to issue "panda bonds" – yuan-denominated bonds traded in the mainland market. The volume of bonds issued has so far been low, but in its five-year plan Shanghai said it wants to support ***"governments, enterprises, and financial institutions from countries and regions along the "Belt and Road" to issue bonds and other financial products in Shanghai."*** [3]

Meanwhile, in its five-year plan for the financial sector, Shenzhen said that its stock exchange will "take the lead in...listing overseas companies." As yet, no foreign companies have listed shares on mainland China exchanges. [4]

However, despite the ambitions of Shanghai and Shenzhen, it's likely that fund raising by foreign firms in mainland China will develop slowly, not least because foreign firms are unfamiliar with mainland China's legal and regulatory environment.

It's far easier to raise capital under Hong Kong's common law legal system.

> We expect that over the next five years the number of foreign companies – particularly from BRI countries – issuing stocks and bonds in Hong Kong will increase, and that they will most likely issue in yuan.

This is likely Beijing's intention.

Hong Kong can play a role as a bridgehead linking the mainland and the international market," PBoC Governor Yi Gang said in December 2021. [5]

However, that's only likely to happen if foreign firms are able to raise funds in Hong Kong easier and more cheaply than any other major market. So, we anticipate that over the next five years Beijing will significantly relax restrictions on outward capital flows into Hong Kong under its closed loop system.

China's capital account arrangements are often "easy in and strict out," Sheng Songcheng, former head of the PBoC's statistic department, wrote in 2020.[6] ***"At present, the market environment has undergone new changes, and it may be necessary to shift from the capital account "easy entry and strict exit" to "two-way opening" in due course."***

Sheng's opinion isn't universally shared.

> Officials and government advisors remain wary of prematurely liberalizing financial outflows and exposing the economy to the risk of destabilizing capital flight.

However, the Connect programs have been set up in such a way that funds that flow out of mainland China still remain within China's broader financial ecosystem. Ramping up the Connect programs – by increasing the volume of funds that can flow outward and increasing the type of investment those funds can be used toward – is an easy and relatively safe way to promote RMB internationalization while also tying Hong Kong's fortunes more closely to the mainland.

The city's priority, for now, is to serve the financial needs of domestic participants," said Liu Shengjun, director of the China Financial Reform Research Institute in Shanghai.[7]

10.3 Global Collateral

Next five years: Beijing will make the technical adjustments necessary for Chinese government bonds to be used as collateral for cross-border financial transactions, resulting in a surge of demand for CGBs globally.

> Currently, Chinese bonds are seldom used overseas as collateral, but we expect increasing their use will be one of the ways in which Beijing strives to promote RMB internationalization in the next five years.

Safe assets are typically bonds that are highly unlikely to lose value during times of crisis, that can also be readily exchanged for other assets. Safe assets include quasi-sovereign bonds issued by government agencies (like Fannie Mae and Freddie Mac), and even AAA-trade corporate bonds. However, the safest assets are typically issued by the national governments of large, developed economies with robust economies and sustainable debt levels.

Central banks use them as a way to hold reserves of foreign currencies. Pensions and insurance companies that are required to invest a certain portion of their funds in AAA rated assets also hold them in large volume. But most importantly, institutions throughout the financial system – banks, insurers, pensions, hedge funds, money market funds – use them as collateral against which they can borrow short-term funds (under repo arrangements), borrow securities, and trade in over-the-counter financial derivatives.

US Treasury bonds, Japanese government bonds (JGB) and Euro zone bonds are used in many cross-border scenarios, such as supporting liquidity acquisition from central banks, or to be used as initial margin collateral in international derivative markets," the City of London and the PBoC wrote in a joint report in 2019. ***"On the contrary, the application of onshore RMB bonds as collateral in the global market is still in its early stage."*** [8]

Collateral reduces the risk for financial institutions transacting with each other, particularly if the collateral is highly unlikely to lose value over the period of the loan or prior to the maturity of the derivative. Collateral takes the place of trust, which means far more financial activity can take place than would be possible without it.

Global collateral shortage

However, globally there's a shortage of safe assets. That's because the nations that produce safe assets have been growing more slowly than the global economy as a whole. Consequently, the demand for safe assets has far outstripped the ability of a small handful of countries to produce them.[9] Treasuries are the most important type of collateral, which puts the burden disproportionately on the US.

The US dollar assets account for about 60% of global reserve assets, despite accounting for only about 20% of the global economy. It's not feasible to expect the US to be able to create new Treasuries in sufficient volume to satisfy growing demand for safe assets. At some point the creation of new US government debt would become so excessive that it will undermine faith in the dollar. However, were the US government to attempt to bolster its finances by retrenching its debt, the reduction in safe assets would have a contractionary effect on the global economy.

> That creates an opportunity for China to promote RMB internationalization by encouraging foreign financial institutions to use Chinese government bonds – and potentially other Chinese bonds as well – as safe assets that can be collateral for cross-currency and cross-border financial transactions.

Amid growing complexity in the global market, the use of collateral increasingly stands out as an effective and indispensable tool for risk and liquidity management," Shui Ruqing, chairman of China Central Depository & Clearing – the main securities depository for China's interbank market – wrote in 2021.[10] ***"As a result, global investors have been engaged in a vigorous pursuit to identify new and safe assets that***

can be used as collateral, and RMB-denominated Chinese government bonds have come to the fore as one promising option for this." [11]

Still, Chinese government bonds aren't a perfect substitute for Treasuries. Chinese government debt isn't rated as highly as that of the US. The US is rated AAA by two of the three ratings agencies (S&P rates it AA+). As of mid-2022, China was rated A+ by S&P and Fitch. Moody's – which has a different rating system – rated China A1, a comparable level to the other two.

Nonetheless, Chinese bonds have already been used as collateral for international deals, albeit not particularly widely. Chinese authorities hope to change that.

In its five-year plan for the financial sector, Shanghai said that it intends to ***"promote yuan-denominated bonds to be used internationally as collateral."*** [12] Meanwhile, in its five-year plan Shenzhen said it intends to:

> ***Explore the establishment of cross-border mutual recognition channels for RMB bonds as collateral, and gradually promote RMB bonds to become qualified collateral recognized by mainstream financial institutions in Hong Kong and Macao."*** [13]

Surveys suggest that many financial institutions are willing, in principle, to use Chinese government bonds as collateral – assuming that the Chinese government can address certain technical issues first. Those issues were best summed up by Masataka Miyazono, president of Japan's Government Pension Investment Fund (GPIF), in September 2021.[14]

> ***Chinese government bonds cannot be settled in an international settlement system that can be used for other major government bonds,"*** said Miyazono, whose fund has 193 trillion yen ($1.729trn) worth of assets under management. ***"The market's liquidity is still limited compared with the size of GPIF's investment scale. Trading of futures is not allowed for foreign investors."***

Global acceptance requires domestic reform

None of those barriers are insurmountable. Beijing is making incremental moves toward allowing foreigners to hedge in the onshore futures market. Foreign investors with QFII status can invest in futures, as can institutions that have set up a presence in the Shanghai Free Trade Zone. Moreover, while the Swap Connect program – which is due to launch in January 2023 – is limited to interest rate swaps only, in the future it may be expanded to include other financial derivatives.

Meanwhile, a white paper published by the Chinese central depository and the International Swaps and Derivatives Association in 2021, looked at how government bonds might be used as collateral for derivatives. It recognized that China needs to improve connectivity between mainland and offshore collateral custodian arrangements, as well as align Chinese rules on certain issues with international standards. [15]

> If Beijing is able to make the necessary changes, then foreign institutions will use its government bonds as collateral

in greater volume, and the liquidity of the Chinese bond market will increase.

At the moment, Chinese commercial banks tend to buy and hold these bonds.

BOX 10.1

Chinese Government Bonds (CGBs)

In the US, the yield on 10-year Treasuries forms the basis for pricing mortgages. In China, that function is performed by the five-year LPR. However, Chinese government bond pricing is vital because it's a foundation for the entire bond market.

Every country needs a risk-free benchmark interest rate that anchors the pricing of an economy's financial assets. That role is usually fulfilled by government bonds. If the yield on government bonds goes up, then the yield on all bonds – whether they be asset-backed securities (ABS), corporate bonds, local government bonds, or any other fixed income product – rise as well, and vice versa.

However, that only works if the range of bonds issued by the government reflects the market cost of credit. In China, that's still not the case.

"The Chinese government bond yield curve is still not as market-based as that of developed markets," PBoC Governor Yi wrote in September, 2021.

The problem is that Chinese government bonds aren't as actively traded as they need to be. These bonds are typically bought and held – primarily by commercial banks – rather than traded, which means they're not available to meet the needs of the wider financial system.

"Chinese government bonds, especially long-term government bonds, have a relatively low turnover ratio, with that of longer-than-10-year government bonds below 100 percent and much lower than the 530 percent in the US," Yi wrote.

Financial bonds issued by policy banks – China Development Bank, Agricultural Development Bank of China, and the Export-Import Bank of China – have traditionally filled the gap, providing a risk-free benchmark for bond pricing. Policy bank bonds are quasi-sovereign and attract a zero-risk weighting if held by commercial banks. Most importantly they are actively traded, with their turnover among the highest of any Chinese bonds.

However, there are pricing differences between CGBs and policy banks' financial bonds. Policy bank financial bonds yields are marginally higher due to differences in the way they are taxed. Ultimately, the PBoC wants the CGB yield curve to function as a proper benchmark.

If they become widely used globally as collateral, banks and other financial institutions will be able to utilize their value beyond simply holding them to maturity.

Given the global shortage of safe assets, China could significantly advance the cause of RMB internationalization by making the changes necessary for foreign financial institutions to accept its government bonds as collateral.

While it will take time, it is something China's authorities are striving for, and would be a welcome development globally in financial markets.

10.4 International Financial Centers

Next five years: Shanghai, the Greater Bay Area, and Chongqing will develop financial services industries that start to generate demand from companies in BRI countries.

> China aspires to build an international financial center – and ideally more than one – as a way to advance RMB internationalization and to strengthen its financial ties with BRI countries.

The two main contenders are Shanghai and the Greater Bay Area, which is anchored by Shenzhen and Hong Kong. Meanwhile, Chongqing has aspirations of becoming a regional financial center by cultivating relationships with the Central Asian members of the Shanghai Cooperation Organization (SCO), and ASEAN.

The rationale behind building an international financial center was best articulated by Guangdong province in its five-year plan for financial services:

> ***"The trend toward regionalization and near-shoring of industrial supply chains is becoming clearer. On the financial front, global debt levels are rising, sustainability issues are becoming increasingly prominent, and the competition between countries and regions over global economic governance and the restructuring of the financial order is intensifying. The international financial system is accelerating in the direction of multipolarity, the number of new international financial centers is accelerating, and so it has become more urgent [for us] to build a financial hub with international influence."*** [16]

Broadly speaking, international financial centers have capital markets that are open to foreign participants – both as investors and to raise funds – and they provide financial services to an international market. They have to satisfy a range of criteria – liquid markets, unrestricted cross-border capital flows, a credible regulatory regime, transparent legal system, and a living environment that attracts expertise from overseas, just to name a few. [17]

Some cities have managed to establish themselves as international financial centers during the time of dollar dominance as global reserve currency, namely London (which established its reputation when sterling was still the global currency) and Hong Kong. Their status comes from being offshore hubs – London became the global center for the eurodollar, and Hong Kong was the gateway to China.

> The only way in which China's three contenders will become international financial centers is if the world has sufficient demand for yuan-denominated capital and financial services.

However, causality works both ways. As China's cities work to bolster their capital markets and provide financial services to overseas firms, they can also help advance the RMB's internationalization. That was the experience of New York City – and the US dollar – between the wars.[18]

The US experience

Prior to World War I, London was the global center for trade finance. Bankers' acceptances – the dominant trade finance tool of the day – were issued in sterling, traded on a secondary market in London, and rediscounted by the Bank of England (BoE) which helped ensure that the market stayed liquid. The US was the biggest economy in the world, but sterling was the currency of international trade, largely because London was the global center for trade finance.

One of the reasons the dollar was seldom used is because domestic regulations precluded US banks from establishing overseas branches, which were necessary to establish the relationships for providing trade financing services to importers and exporters in other countries. These restrictions were relaxed in 1913 as part of legislation that established the US Federal Reserve. The Fed also played a role in developing US trade finance by discounting dollar-denominated bankers' acceptances, much as the BoE did for sterling acceptances in London.

As explained by Barry Eichengreen in his book, Exorbitant Privilege, the turning point was World War I. Demand for US products globally caused US companies to expand overseas, turning the US into a creditor nation. Meanwhile, the availability of credit in London contracted as resources were directed toward the war effort. Consequently, firms that had previously funded their cross-border trade with credit from London turned to New York. Moreover, sterling became increasingly volatile and remained so after the war, making it riskier as a trade invoicing currency.

By the late 1920s, the dollar had overtaken sterling as the leading currency for trade finance, thereby making it the primary global currency.

Rediscounting of acceptances by the Fed ***"not only provided US dollar liquidity to the market, but also indirectly exported US dollars overseas,"*** Sun Guofeng, who was head of the PBoC's financial research department at the time, wrote in 2017.[19] ***"The New York bill of exchange market suddenly emerged, and the US dollar began to become an international financial pricing and settlement currency, laying the foundation for the US dollar to become an international reserve currency. "***

This is not something China can replicate in its bid to make the yuan an international currency. The conditions that eroded the sterling's dominant position don't exist today. However, China hopes to apply the lessons in a more limited form.

We can borrow from that experience as we build a "Belt and Road" of financial services," wrote the PBoC's Sun.[20]

To the extent that China has a strategy, it is to develop financial services that currently don't exist – both globally and domestically – or services that certain constituencies (particularly in BRI countries) currently lack. To that end, Shanghai and the GBA are looking to develop:

- Trade finance
- Green finance
- Wealth management
- Maritime finance
- Insurance

It's still too early to say whether China will have much success in developing some of these businesses, let alone be able to price their services in yuan. The main focus of the next five years will be to develop the services domestically, but for them to be available to overseas firms who may lack adequate access to those services in their home markets.

As China liberalizes its capital account – assuming the yuan becomes more readily accepted globally – then the services cultivated in Shenzhen and Shanghai for the domestic market will also find potential customers in neighboring countries as well.

Trade finance

A major focus of not only Shanghai and the GBA, but also of the central government is to develop trade finance.

According to a report by the ADB, in 2020 there was a $1.7trn global shortfall in trade finance – about 10% of total global trade [21] – up by 15% from two years earlier. Small and medium-sized firms were particularly hard hit, accounting for 40% of rejected trade finance requests.

Beijing hopes to be able to exploit that shortfall by creating mechanisms that make it more feasible to provide trade finance to small firms.

One of the reasons banks are unwilling to provide small firms with credit is that the cost-benefit calculation just isn't worth it: it's costly to determine whether a small firm is an acceptable credit risk, but the income generated from their small transaction amounts isn't enough to make it worthwhile.

China is looking for ways to reduce those costs by using technology, such as by using blockchain to authenticate cross-border transactions, thereby giving banks peace of mind. Among its goals for 2022, SAFE said it is striving to use blockchain:

"To help small, medium and micro enterprises and private enterprises to better carry out cross-border trade, investment and financing activities." [22]

Beijing is also looking to reduce the interest rate banks charge on trade finance services by setting up a platform to allow the cross-border trade of bankers' acceptances. Bankers' acceptances are no longer the dominant form of global trade finance. However, acceptances still play a major role in China where they are used for domestic transactions. China also has a thriving secondary market for acceptances between banks and other financial institutions. Beijing hopes to extend the use of acceptances overseas and has set up a special platform for cross-border trading.

"In the context of increasing trade with BRI countries, trade financing services can be developed while increasing the use of RMB," Zhu Jun, head of the PBoC's international department, said in October 2021.[23] ***"China's newly established cross-border RMB trade financing transfer platform is expected to provide further assistance."***

Green finance

Shanghai wants to ***"build a carbon pricing center with international influence"*** and develop ***"a green financial hub that connects domestic and international markets."*** [24] Shenzhen wants to develop into ***"a global sustainable finance center."*** [25] Guangdong has ambitions to establish a green financial common market in the Greater Bay Area. [26]

But the development of green finance globally – whether it be green bonds, carbon emissions trading schemes, or derivative products based on either – is still at an early stage. Beijing sees that as an advantage, presenting an opportunity to become a major player in a market where the rules, conventions, and trading centers are still evolving.

"China has the potential to establish the [world's] largest carbon resource trading market," said Hu Xiaolian, former SAFE director and chairman of China Export-Import Bank, in 2021.[27] ***"The renminbi is the currency for green finance pricing and settlement. Further expansion of its cross-border application scenarios will provide a new development path for the internationalization of the RMB."***

So far, China's nascent carbon emissions trading scheme has been slow to expand, and emissions are underpriced. Nonetheless, Beijing is striving to achieve peak CO2 emissions by 2030, and carbon neutrality by 2060. The financial system will unquestionably play an important role in achieving those goals. Still, it's too early to tell whether China's green financial services will eventually become internationally relevant.

Insurance & maritime finance

Shanghai says that it wants to build ***"a world-class reinsurance center,"*** [28] but Shenzhen is more likely to drive cross-border insurance services. [29] In January 2022, the Insurance Connect scheme was launched, which allows Guangdong residents to purchase insurance policies in Hong Kong, and permits public hospitals in Shenzhen to settle health insurance claims directly with Hong Kong and Macau insurers. Meanwhile, Hong Kong and Macau insurance companies can set up offices in Shenzhen to provide policyholders with post-sales services, like claim handling and processing premium payments. [30]

As part of its five-year plan, Shenzhen also hopes to develop cross-border vehicle insurance and reinsurance services with Hong Kong and Macau.[31]

> China's maritime finance ambitions are more aspirational at this stage.

Shanghai says it wants to establish freight futures for shipping, and to ***"expand the international influence of Shanghai shipping prices."*** [32] Meanwhile, Shenzhen wants to ***"build a marine financial hub that leads the Pan-Pearl River Delta, radiates throughout Southeast Asia, and serves the Belt and Road."*** [33]

Attracting foreign institutions

> Central to providing financial services for overseas firms is being able to attract foreign financial institutions to set up a presence in China.

Shanghai has ambitions to become a global asset management center, part of which includes attracting foreign securities, fund management companies, futures firms, insurers, ratings agencies and pension funds to set up shop. [34]

China has been moving in this direction since early 2018, when Beijing announced that foreign firms could hold a majority stake in joint ventures with Chinese securities companies and life insurers. [35]

Traditionally, China's desire to attract foreign financial institutions has been perceived as being about expertise. China is still relatively inexperienced in more complex forms of financial services, and encouraging foreign participation is a way to learn from abroad.

That's still the case. In 2021, CBIRC Vice Chairman Zhou Liang said that China "welcomes foreign institutions with expertise in pension management, consumer finance, wealth management, and health insurance," areas which are still fairly underdeveloped but will play an increasingly important role in China's financial system.[36]

But as Shenzhen and Shanghai move toward becoming international financial centers, they are no longer just seeking expertise. They're seeking connections. Attracting foreign institutions to establish a physical presence in their cities is a prerequisite for the development of cross-border business opportunities.

Consequently, Shanghai doesn't just want to attract financial institutions from the US and EU. Among goals included into its five-year plan, Shanghai says it wants to:

- Attract financial institutions from countries and regions along the "Belt and Road" to set up legal persons or branches in Shanghai.
- Promote the development of trade finance and encourage multinational companies to set up centers that radiate to the Asia-Pacific and face the world.[37]

A matter of trust

> One of the biggest challenges facing any Chinese city wanting to become an international financial center is China's legal environment.

One of the reasons for Hong Kong's success as a gateway for foreign capital into China is that Hong Kong boasts a transparent legal system that has a tradition of honoring contracts. Investors are wary of investing in China because the local courts often make decisions based on political considerations. The concern for many investors is that the Chinese legal system won't give them a fair hearing, and that the courts generate inconsistent decisions based on opaque considerations.

Foreigners need to know that their property rights will be honored, and that they'll be treated fairly under the law.

> While China's authorities have no intention of overhauling China's entire legal system, they are striving to make the law, as it applies to the financial system, more appealing to foreign investors. In short, Shanghai and Shenzhen are try-

ing to create a legal environment for financial markets that foreigners are willing to trust.

In its five-year plan for financial services, Shanghai said it wants to ***"build an environment of financial rule of law and rules in line with international standards."*** [38]

To that end it plans to improve training for judges and law enforcement personnel that deal with the financial sector issues.

Meanwhile, Shenzhen says it wants to build an international financial arbitration center, and make it easier for Hong Kong- and Macao-based professional services institutions to practice in Shenzhen.[39]

Neither Shanghai, the Greater Bay Area, nor Chongqing will become international financial centers in the next five years. They first need to further develop the range of services – and the professionalism of those services – that they offer the domestic market. But as the domestic market evolves, they'll be better equipped to service international customers.

While financial services aren't at the core of what will drive RMB internationalization, they can nonetheless play an important supporting role, particularly among developing countries that China hopes to draw more closely into its economic orbit.

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Enodo Economics

11 Policy implications for the US

Wilson Center

11.1 Introduction

The world is at the cusp of major geopolitical and economic changes, which demand thinking the unthinkable, and a fundamental reassessment of America's priorities and how to achieve them. Washington has to contend with a communist-ruled China which has grown strong and more determined than ever to challenge the geopolitical status quo. This has emboldened other authoritarian regimes to disrupt Pax Americana.

Throughout this report we have looked at China's strategy to carve out a larger regional, and eventually global role for its currency, against the backdrop of these larger changes. In this chapter we provide a geo-strategic framework for how the US needs to think about the policy choices it must make with respect to the global role of the dollar.

> Given that Beijing's strategy for RMB internationalization is an important component of its resolve to transform the world order to suit its interests, there is a lot of upside for a fundamental review of the global role of the dollar and of all the US-led international institutions that enable and support it. Not questioning the status quo carries all the downside.

There is unprecedented bi-partisan agreement in the US of the need to rise to the challenge and be tough on China. This provides a stable base from which to craft a long-term strategic plan of how to deal with communist China and, more specifically, what the global role of the dollar should be in order to enable the US to achieve its geopolitical goals.

11.2 Our Recommendations

POLICY QUESTION 1

Should the US resist China's effort to internationalize the renminbi?

Given rising tensions between China and the US, it may seem intuitive that the US should oppose any incremental gains in Chinese infulence, particularly if they come at the expense of the US – as a greater global role for the yuan surely would. Hence, it may seem that the US should do all in its power to counter RMB internationalization.

However, the yuan's global use can increase without it translating into geopolitical gains for Beijing. Both the yen and sterling are used far more widely than the yuan, but the political influence that Japan and the UK have to show for it is negligible.

Moreover, the yuan may make incremental progress over the next decade and yet, given the barriers facing RMB internationalization, may never be used globally in sufficient volume to generate political returns. Even if it does, its influence won't be determined by volume alone, but by how it's used and by whom.

Policy recommendation: The US shouldn't concern itself with incremental gains by the yuan. Rather, it should strive to prevent China from realizing any political gains that may eventually come from greater global use of the yuan.

POLICY QUESTION 2

Should the US work to preserve the dollar's current global status?

This question needs to be broken down into whether the current global financial system works well for the US and if not, why. The answer to the first part of this questions is no. The Global Financial Crisis and rising social discontent and widening divisions in the US have made this clear. This has also eroded US prestige abroad, helping China present the alternative it offers in a better light.

This report has argued that the answer to the second part of the question is different than the prevailing perception among laymen. American profligacy was not the cause of the GFC, and reckless financial regulation and the "greedy bankers" played a supporting role at most.

The cause of the crisis was China, and other countries', excessive desire to save and willingness to throw cheap money at the US. The original sin was bolting China's huge economy onto the global economy with WTO entry, but without enforcing the requirement that it open up its financial system and liberalize capital flows. This led to the build-up of the global financial imbalances that precipitated the crisis, the difficult adjustment, feeble growth and the social and political consequences across the globe that followed.

We have a strong conviction in this analysis.[1] This should be the basis from which American policymakers assess whether and how they need to change the global role of the dollar and the US-led global financial system.

Policy recommendation: Washington should work to reframe the discussion around the GFC to show the critical role China's system played in precipitating it. Washington should work to redraw the US-led financial system, accepting that the dollar's unique role could well have to change.

POLICY QUESTION 3

Should the US-led financial system be open to all?

For most of the period since the end of the Cold War, the dollar-based global financial system has been a public good, freely open to anyone other than criminals and terrorists. However, over the past 20 years the US has proven increasingly willing to deny certain countries – Russia, North Korea, Iran – access to the US system, with good reason.

What was once a relatively open platform is becoming a walled garden. At a time that the US government talks of exchanging globalization for near-shoring and friend-shoring, might the use of the dollar become something the US increasingly shares with friends only?

The analysis in this report has made it clear that Beijing is determined to pursue a coherent long-term strategy to decouple from the dollar and to offer its future yuan-based financial system to like-minded countries. China's long history and current revealed preference, post the period of "hiding its strength and biding its time", are for building its own walled garden, and it certainly has more form in building walls than the US.

The past forty years of China's development have shown that unconditional, or poorly enforced conditional, economic and commercial integration between China and the US have done nothing to advance the cause of political democracy in China. Quite the reverse, the latter part of America's period of engagement enabled China to achieve tremendous economic and technological improvement. And now, under the leadership of Xi Jinping, China has turned into an even more repressive and authoritarian regime. China's economic success has also emboldened and enabled the rise of other authoritarian regimes.

Policy recommendation: The US-led global financial system cannot be open to all as not all countries want to be part of it. Amalgamating the US-led free liberal markets with China's hybrid economic system has only served to undermine confidence in the former. America needs to rebuild confidence in the financial system it will lead and include only those countries who are willing to respect the US-led rules-based order.

POLICY QUESTION 4

Who should be part of the US-led financial system?

US interests are clearly in a period of flux. Under President Trump, the US retreated toward "America First" isolationism. But for the sake of this report we'll assume that US long-term interests, as articulated by the Biden administration, involve preserving "a free and open Indo-Pacific." If China is able to develop a strong Asian sphere of influence, anchored to the yuan, it will pose a challenge to that goal.

A yuan bloc – that is, a community of countries that use the yuan as a common vehicle currency for transacting with each other – isn't necessarily a bad thing, particularly if the US willingly retrenches the role of the dollar. What matters is who is in the bloc.

The Biden administration's Indo-Pacific strategy – published in February 2022 – offers a fair idea of which nations the US wants to keep within its own orbit and out of China's.[2]

> ***We are deepening our five regional treaty alliances—with Australia, Japan, the ROK, the Philippines, and Thailand—and strengthening relationships with leading regional partners, including India, Indonesia, Malaysia, Mongolia, New Zealand, Singapore, Taiwan, Vietnam, and the Pacific Islands."***

That list represents the most dynamic economies in the Indo–Pacific. A Chinese sphere of influence or yuan bloc that doesn't include any nation in this group would be relatively weak and geopolitically marginal.

All of the countries mentioned in the US Indo-Pacific report are wary of being drawn too closely into China's orbit, but they also do not want to become mere pawns in the Sino-US geopolitical game of chess. However, some could easily drift in China's direction, if its economy becomes more consumption oriented, or if changes in US monetary policy start taking too much of a toll on their domestic economic stability.

BOX 11.1

Swap Diplomacy

In response to the GFC, the US Federal Reserve established currency swap agreements with other central banks. The Fed swaps are emergency facilities, a mechanism to help ensure that countries are able to pay for imports and repay dollar-denominated debts in times of crisis. In the event that countries find themselves suddenly short of dollars – much as they did during the GFC – the swaps are a way to provide foreign central banks with dollars that they can then distribute to local banks.

The Fed currently has swap agreements with the monetary authorities of England, Canada, the European Central Bank, Japan, Switzerland, Australia, Brazil, South Korea, Mexico, New Zealand, Sweden, Denmark, Norway, and Singapore.

For countries that don't make the cut, the Fed introduced the FIMA repo facility in 2020 at the onset of the COVID-19 pandemic. Under the FIMA (which stands for Foreign and International Monetary Authorities) repo facility, non-US central banks can borrow from the Fed by pledging US Treasuries as collateral.

Unlike the swaps which allow companies to access dollars in return for their own domestic currencies, countries can only borrow via the FIMA repo facility up to the amount of US Treasuries they hold, thereby imposing a hard limit on their borrowing capacity.

Many US "partners" in the Indo-Pacific don't have swap lines with the Fed. No doubt the Fed fears that by granting swap lines to small, developing economies it's potentially providing permanent bailout facilities that might enable countries to pursue reckless economic policies.

However, increasingly the stability of those countries is threatened by the sudden outflow (or inflow) of capital, and swings in their exchange rates due to changes in the Fed's monetary policy. Swaps lines could help lessen the impact of US monetary policy and ensure that the dollar remains more attractive than the yuan for countries that matter to US interests. Moreover, it would be a symbol of goodwill from the US – and potentially an implicit recognition on the part of its partners that they are permanent members of the dollar zone.

Certainly, without better access to dollars in times of crisis, regional nations might turn to China as an alternative. It's worth noting that Indonesia (which the US identifies as an Indo-Pacific partner) asked the US for a swap line in 2009, and Chile (which isn't part of the Indo-Pacific) asked for one in 2008, but both were rebuffed. The central banks of both countries recently became founding members of an emergency yuan-denominated reserve pool set up by the PBoC and BIS in June 2022. The pool has six members only (Hong Kong, Singapore, and Malaysia round out the group). Like the Fed's swaps, it can be tapped when countries are running low on foreign exchange.

As this report shows, from a financial perspective these Asian countries are important as they are home to a large chunk of the world's saving flows. If China attracts them within its financial orbit, it will have more heft to counter the US-led system.

Policy recommendation: If the US wants to retain its geopolitical role in the Indo-Pacific it needs to beef up its military presence throughout the region and deepen its own economic ties, something it is already doing. One aspect of this in the financial sphere is for the Federal Reserve to extend dollar swap lines with countries the White House labelled "leading regional partners" in its Indo-Pacific strategy paper, thereby helping minimize any damage caused by US monetary policy.

America should strive to include all of the free liberal democratic world and fledgling democracies into its sphere of influence as a matter of course. This requires compromises because the economic and financial costs to disentangle the current globalized economic and financial world into two spheres of influence will be substantial for everyone.

We come from the premise that a free people, who are free to choose, do not wage war.[3] The only ultimate reliable deterrence in terms of US national security is democracy. It's in America's national interest (and that of humanity) to preserve and protect existing and fledgling democracies, and to work together to safeguard democracy.

POLICY QUESTION 5

What is a suitable design for the US-led financial sphere of influence?

How to shape international monetary and financial arrangements has been a constant issue since the end of World War II. A lot of ink has been spilled in the past to diagnose problems and suggest solutions. For our purposes we will focus on how the US-led financial sphere of influence should interact with China.

While the industrial sectors of the US and China's economies are now deeply integrated, their financial sectors are not. Arguably, industrial and commercial integration is currently preventing the Sino-US contest for global power from spiralling out of control into conflict. Both sides, however, are working towards disentangling their economies in sectors that are of strategic importance. America should not care where its shoes or furniture is produced, but it should when it comes to the chips and telecommunication equipment it uses.

When it comes to the financial system and its plumbing, the payment system, America has the upper hand for now, while China's stunted financial market and fledgling currency leave it more exposed. This report has shown that while China is happy to throw the doors of its financial sector open to foreigners now, it is only because it suits its current interests. There is no guarantee that the Party will allow foreign investors to take their money out, and it is certainly keeping its domestic savings firmly at home, a "home" that now includes Hong Kong.

There are voices in China[4] who have called for enticing even more foreign financial flows into the country in the wake of Russia's invasion of Ukraine, to increase global financial dependence on China. But at the same time, Beijing has sprung into action to diminish its financial exposure to the West – from bringing IPOs back home, to requiring senior Party cadres and their families to divest their foreign assets and bring the money home, to initiating the process of breaking up HSBC to secure control over its Asian operations.

The US is also exposed. It can't impose financial sanctions without risking trade with China. For the US, cutting China off the US-dollar financial and payment system is the nuclear option, in the case of a Taiwan invasion for example. But in the meantime, it does not make long-term geopolitical or economic sense for the US to increase its financial sector investment in China and for capital to flow freely between the US-led system and China.

Policy recommendation: In the short term, US policymakers should work towards either disincentivizing Wall Street from investing in China or erecting capital control barriers between US institutions and China. Over the long term, it seems unreasonable to expect that capital can flow freely between the US-led financial sphere of influence and China's financial sphere of influence, if it manages to create one.

The economic and financial forces that led to the build-up of the global financial imbalances, the GFC, American class wars and a potential loss of confidence in the dollar are changing fundamentally. The old system is irrevocably broken, and there is political will now on both sides of the divide to address these shortcomings in a way that fits each ideology and set of priorities.

US policymakers should not waste time preventing marginal advances in the global use of the yuan. Rather they should focus on rebuilding the US-led economic and financial system fundamentally, taking into account the profound changes in the geopolitical landscape.

RMB internationalization is part of a broader effort by Beijing to carve a sphere of influence out of the existing US-led order. Consequently, the US faces the biggest challenge in generations to its role as global hegemon. Its response should be to preserve and strengthen its interests where they most matter. How it uses and shapes the future global role of the dollar will be an important aspect of its overall strategy.

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12 Conclusion

12.1 The Bottom Line

China has relatively little to show for over a decade of RMB internationalization. However, past failure hasn't dampened Beijing's ambition. Rather, its commitment to turn the yuan into a global currency is an integral part of its aspiration to become a great power. And it is a commitment that is growing, not fading.

In 2009, when RMB internationalization first became a goal for Beijing, China's dependence on the dollar was a source of frustration. It meant that China had accumulated massive dollar-denominated foreign exchange reserves earning little return as insurance against a repeat of the Asian Financial Crisis. And it meant that China's economy – like the rest of the world – was vulnerable to the vagaries of US monetary policy. But China had largely benefited from the system, and, for all its criticisms, could endure the status quo.

> Beijing now perceives its dependence on the dollar as a strategic vulnerability.

It wants to guard against the US deploying the dollar as a weapon against it, much as the US has done to Russia with the financial sanctions it imposed following the invasion of Ukraine.

Moreover, Beijing wants to use the yuan as a tool for consolidating an economic sphere of influence, thereby bolstering China's economic security. And it wants the yuan to be a symbol of its great power status, to help bolster its claim to represent a viable alternative to the US-led international order.

> In short, the success of RMB internationalization can't just be measured by the volume of yuan deposits held in Hong Kong or the share of central bank assets denominated in yuan.

"The core of currency internationalization is to build a strong currency, not to pursue simple internationalization indicators," Liu Yuanchun, president of the Shanghai University of Finance and Economics, wrote in 2021.[1]

"More important is freedom from economic dependence and transforming [China] into a world power."

China tomorrow, not China today

Those are lofty ambitions, but at first glance they appear to be well beyond China's grasp.

At present, China is inextricably dependent on the dollar. Its capital markets are underdeveloped. Its authorities are reluctant to relinquish control of capital outflows. And while it is the world's second-biggest economy, it consumes relatively little of what the world produces, instead processing imports for re-export.

This isn't the profile of a nation whose currency might feasibly become an international currency – specifically a regional currency and a peer to the dollar and euro – any time soon.

However, when assessing China's ability to internationalize the yuan, we can't make our judgment based on a snapshot of China as it is today. Instead, we must gauge whether Beijing has a strategy for overcoming the challenges it faces, and whether that strategy might feasibly achieve Beijing's goals over the long term.

> China unquestionably has a strategy to internationalize the renminbi and diminish its dependence on the dollar.

During the early stages of RMB internationalization, Beijing made it possible for foreigners to use the yuan but didn't give them a reason to do so. The dollar's advantages as the incumbent dominant reserve currency were impossible to overcome. To the extent the yuan was used, it was for arbitrage and speculation.

The Party has since changed tack. It is currently focused on giving foreigners reasons for using the yuan that are based on its merits as a medium of exchange, store of value, and unit of account – the characteristics of a reserve currency. To do so, policymakers are focused on overhauling China's domestic economy in ways that can create permanent and sustained demand for the yuan among foreign firms, investors, financial institutions, and governments.

The strategy involves developing domestic futures markets to encourage the pricing of commodities in yuan; increasing domestic consumption so that Asian supply chains use the yuan as an invoicing currency; and promoting the expansion of e-commerce. Crucially, it also involves relaxing restrictions on foreigners investing in China's capital markets and overhauling those markets so that they attract an increasing volume of foreign capital.

Failure to capitalize

Whether the strategy achieves China's goals will depend on a range of factors, many of which are beyond Beijing's control. Most important of these is the global role of the dollar.

The yuan's rise is a zero-sum game – by definition it must come at the expense of the cross-border use of other currencies, most particularly the dollar.

That could occur if the world's faith in the reliability of the dollar – its stability and credibility as a store of value – erodes. Equally, the US may willingly accept a diminishment of the dollar's global status in the interests of domestic financial stability or because it serves geopolitical considerations. That could create space for the yuan to gain international acceptance. However, Beijing might not be able to capitalize on such an opportunity.

> China is facing economic challenges over the next decade that it may not be able to overcome.

China's population is aging rapidly and is about to start shrinking, constituting a major drag on growth. Meanwhile, Beijing is trying to restructure the economy so that it no longer depends on housing and infrastructure construction for growth, but rather focuses on domestic consumption, tech innovation, and advanced manufacturing. There are no guarantees that the transition will be successful.

> The culture of China's Communist Party may also stand in the way of success.

The Party tolerates free markets only up to the point where it's happy with the outcome. It routinely meddles in markets, often in ways that ignore the interests of domestic and foreign investors alike. Political considerations take precedence over sound economic and financial policy-making. The Party's obsession with maintaining its monopoly on power counts infinitely more than Western wishes for greater regulatory transparency, the impartial enforcement of laws, and a level playing field for foreign investors. For these reasons, some global fund managers have recently labeled China "uninvestable."

> Finally, China may struggle to find countries willing to be incorporated into its sphere of influence.

China has a track record of using economic coercion against trading partners. Large economies in Asia will likely be content to maintain their trade relationship with China but may be reluctant to tighten financial (and political) links.

It won't be clear for some time whether these challenges pose insurmountable barriers to Beijing's currency ambitions. However, rather than wait and see whether the yuan can become an international currency despite those challenges, it's prudent that the US should act now to preserve its interests.

> The US shouldn't try to prevent incremental progress in the yuan's global use – which won't translate into geopolitical gains any time soon – but rather should focus on ensuring that the dollar order serves the interests of those countries that share US principles. Additionally, the US should strive the minimize the degree to which its own financial system is intertwined with that of China.

In the meantime – and certainly over the next five years – we expect Beijing to remain committed to the trust of the macroeconomic and microeconomic reforms outlined in this report. Not only are many of those changes necessary to achieve yuan internationalization but they are also needed to accommodate China's aging population, develop a vibrant tech sector, and support more equitable wealth distribution.

Beijing has developed a sophisticated strategy to decouple from the dollar. However, it's not likely to achieve its goals in less than a decade, and even then, it faces potentially insuperable hurdles. Still, regardless of the fate of the yuan, the reforms that Beijing is pursuing will have a significant impact on the way China's economy works, how China engages with the world, and how the rest of the world engages with China.

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Methodology

Our goal is to determine:

- **Why is Beijing striving to decouple from the dollar?**
- **How does Beijing intend to achieve that goal?**
- **What can we expect of decoupling efforts over the next five years?**
- **How should the US respond?**

Beijing doesn't have a blueprint for decoupling, nor has it published a guiding document that lays out how it intends to promote the yuan as an international currency. Consequently, we've drawn on a wide range of primary sources and data upon which to base out findings and analysis.

Those sources include:

- The PBoC's annual yuan internationalization reports and other PBoC policy documents
- Speeches and essays by current and former officials
- Speeches and essays by well-respected government advisors
- Academic papers from senior Chinese scholars
- Provincial five-year plans on financial sector development
- Free trade zone agreements and regulations

We have also reached out to Chinese officials and policymakers for interviews, but we could not conduct as many discussions as we would have liked. China's domestic political environment has changed in ways that have made scholars more reluctant to talk openly with foreign researchers. This is also why we chose to keep the identity of those who agreed to talk to us anonymous.

Much of our research has focused on making the connections between what China says at a high level, and the practical measures and strategies it is implementing. Consequently, we've also spoken to businesspeople, bankers, and researchers to better understand how Beijing's approach to RMB internationalization is being implemented, and how it is affecting companies and markets.

About the Authors

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Diana Choyleva is a leading expert on China's economy and politics who has been researching China for over two decades. She is Chief Economist at Enodo Economics, an independent macroeconomic and political forecasting company she set up in 2016 to untangle complexity, challenge the consensus, and give pointers to the future by making sense of today.

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