International Monetary Review

October 2025, Vol. 12, No. 4

Introduction to the International Monetary Institute (IMI)

Established on December 20, 2009, IMI is a non-profit academic institution affiliated to China Financial Policy Research Center and the School of Finance of Renmin University.

Following the "general theory of macro-finance", IMI aims to become a world-class think tank, focusing on the studies of international finance, in particular the international monetary system and RMB internationalization. Despite its relatively short history so far, IMI has established itself as a leading research institution and important forum, where industry leaders, policy makers and academic experts from home and abroad share their insights and expertise.

Name of Journal: International Monetary Review
Frequency of Publication: Quarterly
Sponsor: International Monetary Institute of Renmin University of China
Publisher: Editorial Office of *International Monetary Review*
Editor-in-Chief: Ben Shenglin
Associate Editors: Song Ke, Qu Qiang, Xia Le
Managing Editor: Herbert Poenisch
Associate Managing Editor: Li Jingyi
Assistant Editors: Zhang Yulan
Editorial Office:
International Monetary Institute, Renmin University of China
Room 605, No. 59 Zhongguancun Avenue, Beijing 100872, China
Tel: 86-10-62516755
Email: imi@ruc.edu.cn
Website: www.imi.ruc.edu.cn/en/

CONTENTS

RMB Internationalization

New World Order

Climate Change

Digitalisation

Debt Issues

China

Working Paper

International Monetary Review
October 2025, Vol. 12, No. 4

RMB Internationalization

BIS Triennial Central Bank Survey: OTC Foreign Exchange Turnover in April 2025

By MONETARY AND ECONOMIC DEPARTMENT

1. BIS Triennial Central Bank Survey

The BIS Triennial Central Bank Survey is the most comprehensive source of information on the size and structure of global over-the-counter (OTC) markets in foreign exchange (FX) and interest rate derivatives (IRD). The Survey aims to increase the transparency of OTC markets, and help central banks and market participants to monitor global financial markets.

Activity in FX markets has been surveyed every three years since 1986, and in OTC IRD markets since 1995. The Triennial Survey is coordinated by the BIS under the auspices of the Markets Committee (for the FX part) and the Committee on the Global Financial System (for the IRD part). It has been supported through the Data Gaps Initiative endorsed by the G20.

This statistical release concerns the FX turnover part of the 2025 Triennial Survey that took place in April and involved central banks and other authorities in 52 jurisdictions (see page 18)[1]. They collected data from more than 1,100 banks and other dealers and reported national aggregates to the BIS for inclusion in global aggregates. Turnover data are reported by the sales desks of reporting dealers, regardless of where a trade is executed, and on an unconsolidated basis, ie including trades between related entities that are part of the same group.

The data are subject to revision. The final turnover data, as well as several articles that analyse them, will be released with the BIS Quarterly Review in December 2025. A separate survey on outstanding amounts as of June 2025 will be published in November 2025.

Highlights

Highlights from the 2025 Triennial Survey of turnover in OTC FX markets:

Trading in OTC FX markets reached $9.6 trillion per day in April 2025 ("net-net" basis,[2] all FX instruments), up 28% from $7.5 trillion three years earlier.

Turnover of FX spot and outright forwards was 42% and 60% higher, respectively. Their shares in global turnover thus increased, from 28% and 15%, to 31% and 19%, respectively. Turnover of FX options more than doubled. Turnover of FX swaps grew modestly, resulting in a drop in their share to 42% (from 51% in 2022).

The US dollar continued to dominate global FX markets, being on one side of 89.2% of all trades, up from 88.4% in 2022. The share of the euro fell to 28.9% (from 30.6%) and that of the Japanese yen was virtually unchanged at 16.8%. The share of sterling declined to 10.2% (from 12.9%). The shares of the Chinese renminbi and the Swiss franc rose to 8.5% and 6.4%, respectively.

Inter-dealer trading accounted for 46% of global turnover (almost unchanged from 47% in 2022). The share of trading with "other financial institutions" was 50% (up from 47%). At $4.8 trillion, turnover with other financial institutions was 35% higher than in 2022, mostly driven by 72% higher trading of outright forwards and a 50% increase in spot transactions with this counterparty group.

---

[1] All jurisdictions have submitted at least partial data; final data will be published in the December BIS Quarterly Review.

[2] Figures on a "net-net" basis are corrected for local and cross-border inter-dealer double-counting. Figures on a "net-gross" basis are corrected for local inter-dealer double counting only.

Sales desks in the top four jurisdictions – the United Kingdom, the United States, Singapore and Hong Kong SAR – accounted for 75% of total FX trading ("net-gross" basis). Singapore gained market share, reaching 11.8% of the total (up from 9.5% in 2022).

2. Turnover in foreign exchange markets

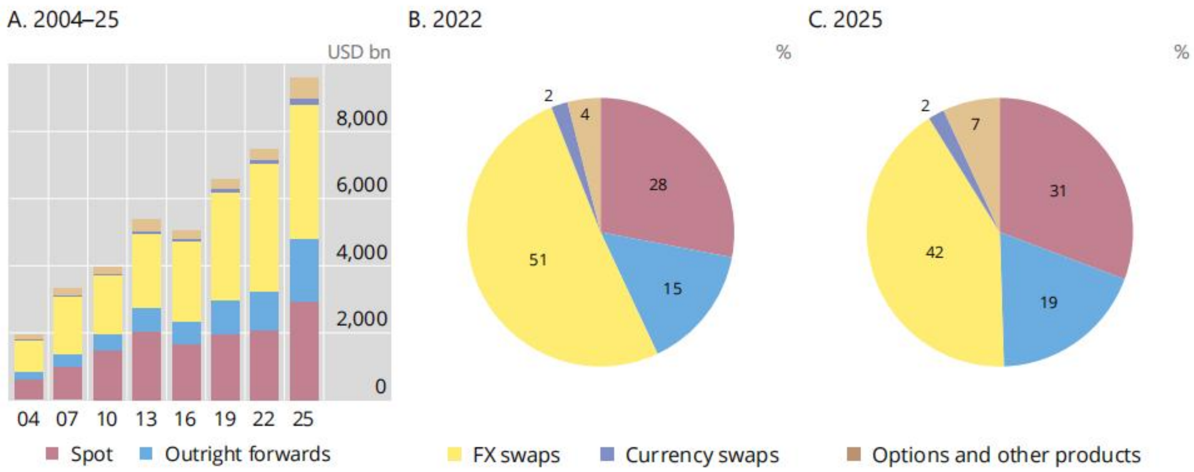
Turnover in OTC FX markets averaged $9.6 trillion per day in April 2025 (Graph 1.A and Table 1).[3] This represents a 28% increase from the $7.5 trillion per day recorded in the 2022 Survey. The April 2025 Survey was conducted amidst elevated FX volatility and a surge in trading activity that followed trade policy announcements early in that month by major jurisdictions.[4]

Turnover by instrument

The share of spot and outright forwards increased relative to those of other FX instruments. At $3 trillion per day in April 2025, turnover in FX spot markets accounted for 31% of global turnover (all instruments), up from 28% in 2022 (Graph 1). Turnover in outright forwards in particular – used by market participants to lock in future exchange rates – was $1.8 trillion, or 19% of global FX turnover in April 2025, compared with 15% in 2022.

Foreign exchange market turnover by instrument[1]

Net-net basis, daily averages in April — Graph 1



[1] Adjusted for local and cross-border inter-dealer double-counting, ie "net-net" basis.

Source: BIS Triennial Central Bank Survey. For additional data by instrument, see Table 1.

FX swaps remained the most traded instrument, with average daily turnover rising to $4 trillion in April 2025 – a 5% increase from $3.8 trillion in April 2022. Despite this growth, their share in global turnover declined to 42% in 2025 (from 51% in 2022), owing to faster growth in turnover of other FX instruments. Although this marks the lowest share since the 2010 survey, FX swaps continue to play a critical role in the market. They typically combine a spot transaction with an outright forward at a later date. Predominantly short-maturity instruments (up to seven days; Table 2), FX swaps are widely used to manage FX funding liquidity and hedge currency risk.

Average daily turnover of FX options more than doubled from 2022 to 2025, accounting for 7% of global turnover in 2025 (up from 4% in 2022). Options are mainly used to hedge currency risk or to speculate on currency movements.

[3] All figures are expressed in US dollars. The modest appreciation of the US dollar between 2022 and 2025 will tend to understate the reported values in 2025 relative to those in 2022 (Table 1). The growth was also similar to that which can be derived from more frequent regional surveys run by local foreign exchange committees in australia, Canada, Hong Kong SAR, London, New York, Singapore and Tokyo. There are some methodological differences between the Triennial Survey and these surveys. Importantly, the Triennial collects data based on the location of the sales desk, whereas some regional surveys are based on the location of the trading desk.

[4] The 2022 Survey, nonetheless, also coincided with heightened FX volatility following the Russian invasion of Ukraine. See more in M Drehmann and V Sushko, "The global foreign exchange market in a higher-volatility environment", BIS Quarterly Review, December 2022, pp 33–48.

Turnover of currency swaps remained stable at around 2%. Currency swaps are mainly used to manage longer-term funding needs across currencies and to hedge currency risk. Since they typically have longer maturities than FX swaps or outright forwards, their average daily turnover tends to be much lower.

Turnover by currency and currency pairs

The US dollar remained the dominant currency: it was on one side of 89.2% of all trades in April 2025, up from 88.4% in 2022 (Graph 2.A and Table 4). The euro share declined to 28.9%, down from 30.6% in 2022 and 32.3% in 2019. The Japanese yen’s share held steady at 16.8%, roughly unchanged since 2019.

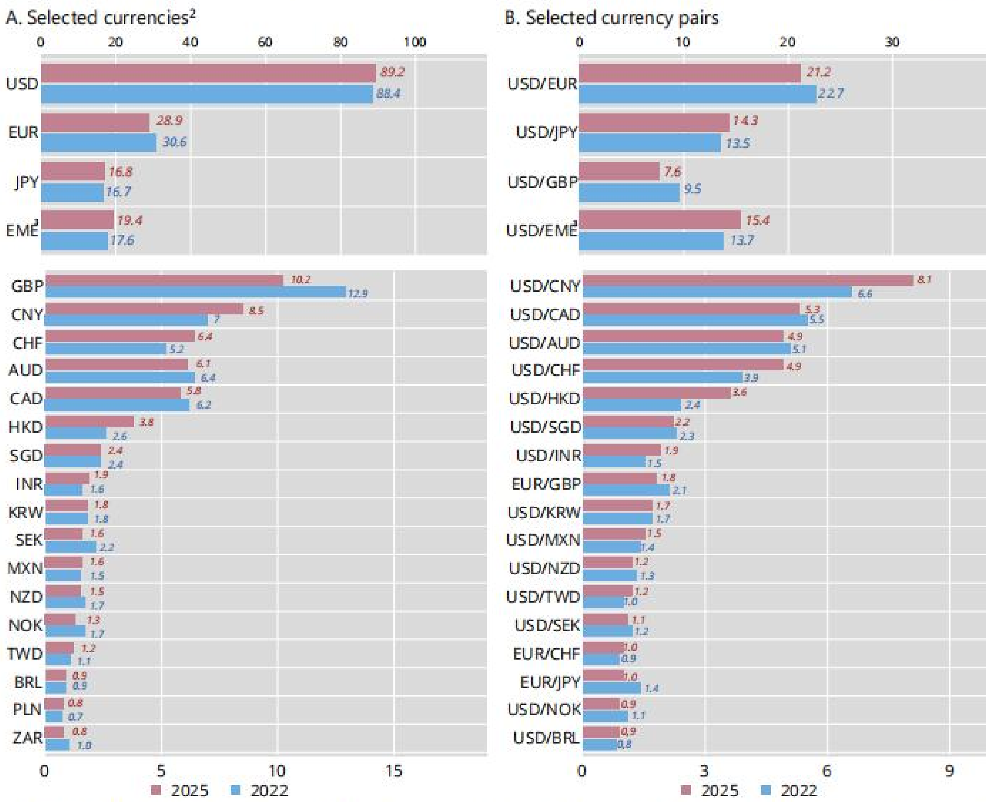
The next three most traded currencies – sterling, the Chinese renminbi and the Swiss franc – registered more notable shifts. The renminbi (CNY) and the franc saw gains in market share. The renminbi continued its upward trajectory observed since 2013, reaching 8.5% of global turnover. The share of the franc increased to 6.4% in 2025, making it the sixth most traded currency, up from eighth place in 2022. By contrast, sterling’s share dropped sharply, to 10.2% in April 2025, falling below its average of 13% observed over the previous three surveys since 2016.

With the notable exception of the Hong Kong dollar, the next most traded currencies saw minor changes in market share. The Australian dollar, Canadian dollar and Singapore dollar maintained stable shares around 6%, 6% and 2%, respectively. The share of the Hong Kong dollar, however, increased from 2.6% in 2022 to 3.8% in 2025, back close to the 3.5% share reported in the 2019 survey.

The top 10 most traded currency pairs all involve the US dollar, reflecting its status as the world’s vehicle currency (Graph 2.B panel). Trading in the currency pairs USD/CNY, USD/CHF and USD/HKD rose materially by 59%, 60% and 95%, respectively (Table 5). Their share in global turnover increased to 8.1% (from 6.6%), 4.9% (from 3.9%) and 3.6% (from 2.4%), respectively.

Foreign exchange market turnover by currency and currency pairs[1]

Net-net basis, daily averages in April, as a percentage of total turnover — Graph 2



[1] Adjusted for local and cross-border inter-dealer double-counting, ie "net-net" basis. [2] As two currencies are involved in each transaction, the sum of shares in individual currencies will total 200%. [3] Emerging market economy (EME) currencies excluding the Chinese renminbi and Russian rouble: AED, ARS, BGN, BHD, BRL, CLP, COP, CZK, HKD, HUF, IDR, ILS, INR, KRW, MXN, MYR, PEN, PHP, PLN, RON, SAR, SGD, THB, TRY, TWD and ZAR.

Source: BIS Triennial Central Bank Survey. For additional data by currency and currency pairs, see Tables 4 and 5. See our Data Portal for access to the full set of published data.

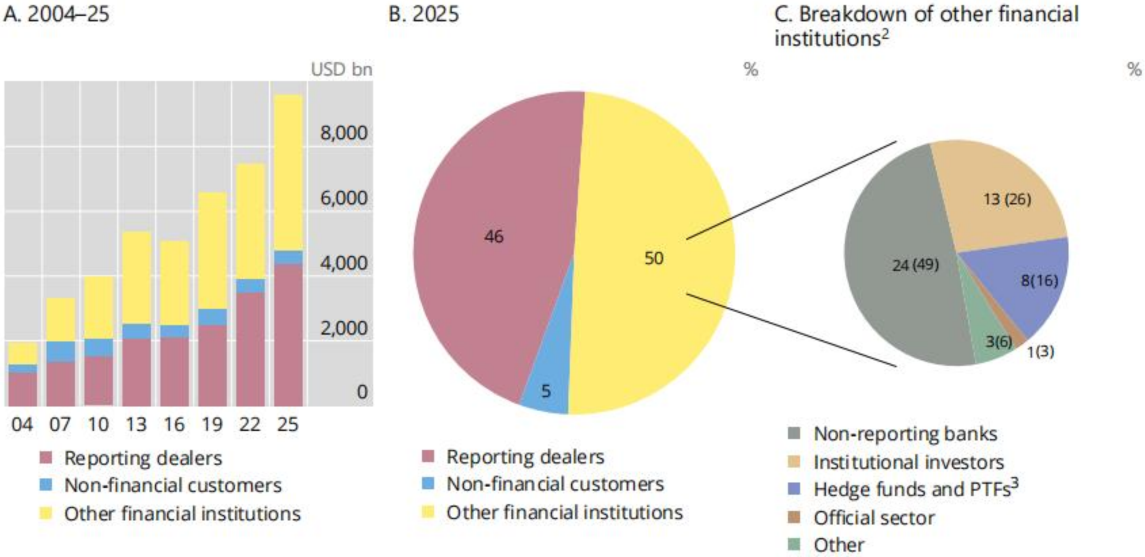
Turnover by counterparty

Trading between reporting dealers (ie inter-dealer trading) averaged $4.4 trillion in April 2025, or 46% of total FX turnover. This was slightly lower than the 47% share in 2022, but higher than the shares recorded in the previous surveys from 2010 to 2019.

Dealers' trading with "other financial institutions" accounted for 50% of average daily FX turnover in April 2025, up from 47% in 2022 (Graph 3).[5] A further breakdown by instrument shows that these counterparties accounted for 55% of turnover in spot (up from 52% in 2022) and 62% of turnover in outright forwards (up from 57%) (Table 2). Higher turnover in spot and forwards with these counterparties reflected elevated trading activity amid heightened FX volatility following US tariff announcements in early April 2025. For example, the depreciation of the US dollar appears to have led many institutional investors and asset managers with dollar asset exposures to limit further FX losses on their portfolios by selling dollars forward. This ex post hedging activity contributed to the high turnover in outright forwards.

Foreign exchange market turnover by counterparty[1]

Net-net basis, daily averages in April | Graph 3



[1] Adjusted for local and cross-border inter-dealer double-counting, ie "net-net" basis. [2] For definitions of counterparties, see explanatory notes in the annex. Shares in overall total, with shares in other financial institutions in brackets. [3] Proprietary trading firms.

Source: BIS Triennial Central Bank Survey. For additional data by counterparty, see Tables 2 and 3.

Within the "other financial institutions" customer group, trading with non-reporting banks (mainly smaller regional banks) remained dominant (Graph 3.C). Turnover with this subsector averaged $2.4 trillion per day (Table 3) or 24% of global turnover in 2025, up from 21% in 2022. Similarly, trading with institutional investors increased in relative terms for the first time since 2016; at $1.3 trillion per day in 2025, its share in global turnover rose to 13% from 11% in 2022. Trading with hedge funds and proprietary trading firms was also higher, at 8% of global turnover in 2025, up from 7% in 2022.

By contrast, the share of trading with non-financial customers extended its downward trend:[6] it accounted for 5% of global turnover in 2025, down from 6% in 2022 and 7% in 2019.

Geographical distribution of turnover

[5] "Other financial institutions" is a broad category that includes non-reporting banks, institutional investors, hedge funds and proprietary trading firms (PTFs), and official sector financial institutions.

[6] That said, non-financial corporates could use their financial affiliates ("financing arms") for FX trading, which would have contributed to the turnover share with "other financial institutions".

FX trading continued to be concentrated in major financial centres. In April 2025, sales desks in four locations – the United Kingdom, the United States, Singapore and Hong Kong – intermediated three quarters of total FX trading (Table 6, "net-gross" basis).[7]

The relative shares of major financial centres remained largely stable, with Singapore as a notable exception. The United Kingdom retained its position as the world's leading FX trading hub, followed by the United States in second place. The shares of these two jurisdictions were largely unchanged compared with three years ago, at approximately 38% and 19%, respectively. Singapore reported brisk growth in trading activity, pushing its share to 11.8% of the total (up from 9% in 2022). Hong Kong's share remained steady at 7.0%.

The share of cross-border trading in global FX turnover was 63% in April 2025, inching up from 62% in 2022 (Table 2). Cross-border trading accounted for 68% in the inter-dealer segment and 61% in the turnover with "other financial institutions" (Table 3).

Market-facing vs non-market-facing trades

The 2022 Survey introduced new dimensions to better identify "market-facing trades", ie deals with customers and other unrelated entities that contribute to price formation in the market. The 2025 Survey continues to break out "non-market-facing" trades, which consist of: (i) "back-to-back" trades (ie deals that automatically follow trades with customers to shift risk across sales desks); and (ii) compression trades (ie trades used by dealers to optimise their portfolios by replacing existing contracts with new ones to reduce notional amounts while keeping net exposures unchanged).[8] In the 2022 and 2025 Surveys, these trades are separately reported as "of which" items (without breakdowns by counterparty sector or currency).

In total, non-market-facing trades amounted to $1.2 trillion, or 13% of the $9.6 trillion of global FX turnover in 2025 (Table 3). This is up slightly from 12% in 2022. Across instruments, these trades accounted for similar shares of turnover in the 2025 Survey: 13% in spot, 13% in FX swaps and 14% in outright forwards. The corresponding figures in the 2022 Survey were 8%, 14% and 12%, respectively.

Annexes

A Tables

OTC foreign exchange turnover by instrument

"Net-net" basis,[1] daily averages in April in billions of US dollars — Table 1

Instrument	2010	2013	2016	2019*	2022*	2025
Foreign exchange instruments	3,973	5,357	5,066	6,581	7,468	9,595
Spot transactions	1,489	2,047	1,652	1,979	2,085	2,957
Outright forwards	475	679	700	998	1,157	1,847
Foreign exchange swaps	1,759	2,240	2,378	3,198	3,798	3,986
Currency swaps	43	54	82	108	124	172
Options and other products[2]	207	337	254	298	303	634
Memo:						
Turnover at April 2025 exchange rates[3]	*3,506*	*4,648*	*4,751*	*6,320*	*7,311*	9,595
Exchange-traded derivatives[4]	*144*	*145*	*115*	*127*	*154*	*207*

[1] Adjusted for local and cross-border inter-dealer double-counting (ie "net-net" basis). [2] The category "other FX products" covers highly leveraged transactions and / or trades whose notional amount is variable and where a decomposition into individual plain vanilla components was impractical or impossible. [3] Non-US dollar legs of foreign currency transactions were converted into original currency amounts at average exchange rates for April of each survey year and then reconverted into US dollar amounts at average April 2025 exchange rates. [4] Sources: Euromoney Tradedata; Futures Industry Association; The Options Clearing Corporation; BIS derivatives statistics. Foreign exchange futures and options traded worldwide. * Revised data.

[7] The figures in Table 6 are on a "net-gross" basis, which corrects for double-counting of local (ie in the same country) interdealer positions but not for double-counting of cross-border inter-dealer positions.

[8] Compression trades play a marginal role in the FX market since few FX OTC derivatives are cleared with central counterparties.

OTC foreign exchange turnover by instrument, counterparty and maturity

"Net-net" basis,[1] daily averages in April in billions of US dollars and percentage share — Table 2

Instrument/counterparty/maturity	2010		2013		2016		2019*		2022*		2025	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Spot transactions	1,489	37.5	2,047	38.2	1,652	32.6	1,979	30.1	2,085	27.9	2,957	30.8
With reporting dealers	518	34.8	676	33.0	605	36.6	589	29.8	846	40.6	1,181	39.9
With other financial institutions	755	50.7	1,183	57.8	930	56.3	1,234	62.4	1,089	52.2	1,632	55.2
With non-financial customers	217	14.6	188	9.2	117	7.1	155	7.8	150	7.2	144	4.9
Outright forwards	475	11.9	679	12.7	700	13.8	998	15.2	1,157	15.5	1,847	19.2
With reporting dealers	113	23.7	181	26.6	189	27.0	267	26.8	402	34.7	626	33.9
With other financial institutions	254	53.5	402	59.2	431	61.6	614	61.6	660	57.0	1,137	61.6
With non-financial customers	108	22.8	96	14.2	80	11.4	116	11.6	95	8.2	84	4.5
Up to 7 days	219	46.1	270	39.7	270	38.6	268	26.9	382	33.0	633	34.3
One day	—	—	—	—	—	—	—	—	117	31	239	37.8
Over 1 day and up to 7 days	—	—	—	—	—	—	—	—	265	69	394	62.2
Over 7 days and up to 1 month	—	—	—	—	—	—	290	29	324	28.0	546	29.6
Over 1 month and up to 3 months	—	—	—	—	—	—	321	32	328	28.4	509	27.5
Over 3 months and up to 6 months	—	—	—	—	—	—	71	7	71	6.1	101	5.5
Over 6 months	—	—	—	—	—	—	47	5	52	4.5	58	3.1
Over 7 days and up to 1 year	245	51.5	378	55.6	412	58.9	—	0.0	—	—	—	—
Over 1 year	11	2.4	31	4.6	18	2.5	—	0.0	—	—	—	—
Foreign exchange swaps	1,759	44.3	2,240	41.8	2,378	46.9	3,198	48.6	3,798	50.9	3,986	41.5
With reporting dealers	834	47.4	1,088	48.6	1,205	50.7	1,497	46.8	2,062	54.3	2,221	55.7
With other financial institutions	755	42.9	1,002	44.7	1,026	43.1	1,535	48.0	1,587	41.8	1,616	40.5
With non-financial customers	170	9.7	150	6.7	147	6.2	166	5.2	149	3.9	149	3.7
Up to 7 days	1,300	73.9	1,573	70.2	1,635	68.7	2,059	64.4	2,697	71.0	2,711	68.0
One day	—	—	—	—	—	—	—	—	1,217	0	1,193	0.4
Over 1 day and up to 7 days	—	—	—	—	—	—	—	—	1,481	1	1,518	0.6
Over 7 days and up to 1 month	—	—	—	—	—	—	398	12	422	11.1	493	12.4
Over 1 month and up to 3 months	—	—	—	—	—	—	519	16	424	11.2	517	13.0
Over 3 months and up to 6 months	—	—	—	—	—	—	143	4	157	4.1	165	4.2
Over 6 months	—	—	—	—	—	—	79	2	97	2.6	99	2.5
Over 7 days and up to 1 year	442	25.2	579	25.9	713	30.0	—	0.0	—	—	—	—
Over 1 year	15	0.8	87	3.9	30	1.3	—	0.0	—	—	—	—
Currency swaps	43	1.1	54	1.0	82	1.6	108	1.6	124	1.7	172	1.8
With reporting dealers	20	46.8	29	53.7	38	46.1	56	51.6	66	53.1	81	47.0
With other financial institutions	19	45.0	19	34.7	37	45.5	47	43.0	52	42.4	76	43.9
With non-financial customers	4	8.2	6	11.6	7	8.5	6	5.5	6	4.5	16	9.0
FX options and other products[2]	207	5.2	337	6.3	254	5.0	298	4.5	303	4.1	634	6.6
With reporting dealers	60	29.1	99	29.4	84	32.8	109	36.5	119	39.3	263	41.5
With other financial institutions	113	54.7	207	61.3	141	55.3	162	54.5	158	51.9	320	50.5
With non-financial customers	33	16.1	31	9.3	30	11.9	27	9.1	27	8.8	50	7.9
Total	3,973	100.0	5,357	100.0	5,066	100.0	6,581	100.0	7,468	100.0	9,595	100.0
With reporting dealers	1,545	38.9	2,072	38.7	2,120	41.9	2,518	38.3	3,495	46.8	4,372	45.6
With other financial institutions	1,896	47.7	2,812	52.5	2,564	50.6	3,592	54.6	3,546	47.5	4,780	49.8
With non-financial customers	532	13.4	472	8.8	382	7.5	470	7.1	427	5.7	443	4.6
Local	1,394	35.1	2,259	42.2	1,798	35.5	2,902	44.1	2,848	38.1	3,569	37.2
Cross-border	2,579	64.9	3,097	57.8	3,268	64.5	3,678	55.9	4,619	61.9	6,027	62.8

[1] Adjusted for local and cross-border inter-dealer double-counting (ie "net-net" basis). [2] The category "other FX products" covers highly leveraged transactions and/or trades whose notional amount is variable and where a decomposition into individual plain vanilla components was impractical or impossible. * Revised data

OTC foreign exchange turnover by currency and counterparty

"Net-net" basis,[1] daily averages in April 2025 in billions of US dollars — Table 3

Currency/counterparty	Total	Spot transactions	Outright forwards	Foreign exchange swaps	Currency swaps	FX options
Total	9,595	2,957	1,847	3,986	172	634
By currency						
USD	8,560	2,577	1,649	3,604	163	567
EUR	2,773	838	488	1,159	53	236
JPY	1,610	577	236	660	35	102
GBP	981	269	190	472	17	34
CNY	817	277	87	365	7	82
CHF	612	174	109	291	6	30
AUD	583	205	109	216	9	43
CAD	561	163	107	241	24	26
HKD	367	97	47	190	1	32
SGD	232	77	34	101	1	19
INR	185	53	92	31	1	9
KRW	171	44	87	31	1	8
SEK	155	47	29	72	3	3
MXN	153	59	22	55	9	9
NZD	147	56	27	52	1	10
NOK	125	42	27	50	3	3
TWD	116	22	75	13	0	5
BRL	90	15	61	4	2	9
ZAR	78	29	14	30	0	5
PLN	74	24	11	36	1	2
DKK	69	15	11	42	0	0
IDR	64	7	18	38	0	1
TRY	50	21	9	16	0	3
OTH	618	226	154	203	4	31
By counterparty[2]						
with reporting dealers	4,372	1,181	626	2,221	81	263
local	1,398	395	206	660	43	95
cross-border	2,974	786	420	1,561	38	169
with other financial institutions	4,780	1,632	1,137	1,616	76	320
local	1,890	673	546	545	16	110
cross-border	2,890	959	591	1,071	59	210
non-reporting banks	2,350	712	525	976	32	106
institutional investors	1,262	442	377	349	10	84
hedge funds and PTFs[3]	758	357	169	130	23	79
official sector	138	27	18	78	8	7
other	273	94	49	83	2	45
with non-financial customers	443	144	84	149	16	50
local	281	100	53	81	12	34
cross-border	162	44	30	68	3	16
Of which items						
Prime brokered	2,163	1,281	371	313	1	198
Retail-driven	242	109	21	80	0	31
Related party trades	1,716	...	219	761	...	...
Back-to-back trades	1,192	376	204	517	13	83
Compression trades	59	...	56	3	0	0

[1] Adjusted for local and cross-border inter-dealer double-counting (ie "net-net" basis). [2] See explanatory notes for definitions of counterparties. [3] Proprietary trading firms.

OTC foreign exchange turnover by currency

"Net-net" basis,[1] daily averages in April in billions of US dollars and percentage share — Table 4

Currency	OTC turnover										Memo: XTD turnover[2]	
	2013		2016		2019*		2022*		2025		2025	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
USD	4,662	87.0	4,437	87.6	5,811	88.3	6,599	88.4	8,560	89.2	205	98.9
EUR	1,790	33.4	1,590	31.4	2,126	32.3	2,286	30.6	2,773	28.9	48	22.9
JPY	1,235	23.0	1,096	21.6	1,108	16.8	1,249	16.7	1,610	16.8	24	11.4
GBP	633	11.8	649	12.8	843	12.8	966	12.9	981	10.2	11	5.5
CNY	120	2.2	202	4.0	285	4.3	524	7.0	817	8.5	36	17.2
CHF	276	5.2	243	4.8	326	4.9	388	5.2	612	6.4	7	3.5
AUD	463	8.6	349	6.9	446	6.8	478	6.4	583	6.1	9	4.5
CAD	244	4.6	260	5.1	332	5.0	463	6.2	561	5.8	8	3.7
HKD	77	1.4	88	1.7	233	3.5	193	2.6	367	3.8	0	0.0
SGD	75	1.4	91	1.8	119	1.8	182	2.4	232	2.4	0	0.0
INR	53	1.0	58	1.1	114	1.7	119	1.6	185	1.9	4	2.0
KRW	64	1.2	84	1.7	132	2.0	138	1.8	171	1.8	8	3.8
SEK	94	1.8	112	2.2	134	2.0	167	2.2	155	1.6	0	0.1
MXN	135	2.5	97	1.9	111	1.7	114	1.5	153	1.6	2	1.1
NZD	105	2.0	104	2.1	137	2.1	124	1.7	147	1.5	3	1.3
NOK	77	1.4	85	1.7	119	1.8	125	1.7	125	1.3	0	0.1
TWD	24	0.5	32	0.6	60	0.9	80	1.1	116	1.2	0	0.0
BRL	59	1.1	51	1.0	71	1.1	65	0.9	90	0.9	47	22.5
ZAR	60	1.1	49	1.0	72	1.1	73	1.0	78	0.8	1	0.4
PLN	38	0.7	35	0.7	41	0.6	54	0.7	74	0.8	0	0.0
DKK	42	0.8	42	0.8	42	0.6	55	0.7	69	0.7	0	0.0
IDR	9	0.2	10	0.2	27	0.4	27	0.4	64	0.7	...	...
TRY	71	1.3	73	1.4	71	1.1	27	0.4	50	0.5	0	0.1
THB	17	0.3	18	0.4	32	0.5	31	0.4	48	0.5	0	0.0
ILS	10	0.2	14	0.3	20	0.3	31	0.4	42	0.4	0	0.2
HUF	23	0.4	15	0.3	27	0.4	26	0.3	39	0.4	0	0.0
CZK	19	0.4	14	0.3	26	0.4	29	0.4	36	0.4	0	0.0
CLP	16	0.3	12	0.2	19	0.3	24	0.3	24	0.3	0	0.0
PHP	8	0.1	7	0.1	19	0.3	18	0.2	20	0.2	...	...
COP	6	0.1	8	0.2	12	0.2	13	0.2	20	0.2	...	...
MYR	21	0.4	18	0.4	10	0.2	14	0.2	20	0.2	...	...
AED	...	...	...	...	14	0.2	28	0.4	14	0.1	...	...
SAR	5	0.1	15	0.3	12	0.2	18	0.2	11	0.1	...	...
RON	7	0.1	5	0.1	6	0.1	9	0.1	10	0.1	...	...
PEN	3	0.1	4	0.1	5	0.1	7	0.1	9	0.1	...	...
BGN	1	0.0	1	0.0	2	0.0	2	0.0	4	0.0	...	...
RUB	86	1.6	58	1.1	72	1.1	13	0.2	3	0.0	0	0.0
ARS	1	0.0	1	0.0	4	0.1	1	0.0	1	0.0	...	...
BHD	0	0.0	0	0.0	2	0.0	3	0.0	1	0.0	...	...
Other	83	1.6	103	2.0	121	1.8	173	2.3	315	3.3	1	0.6
Total	5,357	200.0	5,066	200.0	6,581	200.0	7,468	200.0	9,595	200.0	207	200.0

[1] Because two currencies are involved in each transaction, the sum of the percentage shares of individual currencies totals 200% instead of 100%. Adjusted for local and cross-border inter-dealer double-counting (ie "net-net" basis). Turnover for years prior to 2013 may be underestimated owing to incomplete reporting in previous surveys. Methodological changes in the 2013 survey ensured more complete coverage of activity in emerging market and other currencies. See annex for abbreviations. [2] Exchange traded derivatives. See seperate BIS statistics. * Revised data.

OTC foreign exchange turnover by currency pair

"Net-net" basis,[1] daily averages in April in billions of US dollars and percentage share — Table 5

Currency pair	2013		2016		2019*		2022*		2025	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
USD/EUR	1,292	24.1	1,172	23.1	1,581	24.0	1,697	22.7	2,033	21.2
USD/JPY	980	18.3	901	17.8	871	13.2	1,009	13.5	1,372	14.3
USD/CNY	113	2.1	192	3.8	270	4.1	492	6.6	781	8.1
USD/GBP	473	8.8	470	9.3	630	9.6	710	9.5	731	7.6
USD/CAD	200	3.7	218	4.3	287	4.4	408	5.5	505	5.3
USD/AUD	364	6.8	262	5.2	359	5.4	380	5.1	467	4.9
USD/CHF	184	3.4	180	3.6	227	3.4	291	3.9	467	4.9
USD/HKD	69	1.3	77	1.5	220	3.3	178	2.4	347	3.6
USD/SGD	65	1.2	81	1.6	110	1.7	169	2.3	215	2.2
USD/INR	50	0.9	56	1.1	110	1.7	114	1.5	181	1.9
USD/KRW	60	1.1	78	1.5	126	1.9	124	1.7	165	1.7
USD/MXN	128	2.4	90	1.8	102	1.5	103	1.4	140	1.5
USD/NZD	82	1.5	78	1.5	107	1.6	99	1.3	118	1.2
USD/TWD	22	0.4	31	0.6	59	0.9	78	1.0	114	1.2
USD/SEK	55	1.0	66	1.3	86	1.3	93	1.2	102	1.1
USD/BRL	48	0.9	45	0.9	66	1.0	62	0.8	86	0.9
USD/NOK	49	0.9	48	0.9	73	1.1	80	1.1	83	0.9
USD/ZAR	51	1.0	40	0.8	62	0.9	64	0.9	71	0.7
USD/TRY	63	1.2	64	1.3	62	0.9	24	0.3	45	0.5
USD/PLN	22	0.4	19	0.4	25	0.4	33	0.4	44	0.5
USD/MYR	6	0.1	3	0.1	7	0.1	9	0.1	13	0.1
USD/OTH	287	5.4	265	5.2	370	5.6	382	5.1	480	5.0
EUR/GBP	102	1.9	100	2.0	130	2.0	154	2.1	169	1.8
EUR/JPY	148	2.8	79	1.6	114	1.7	102	1.4	99	1.0
EUR/CHF	71	1.3	44	0.9	73	1.1	68	0.9	97	1.0
EUR/SEK	28	0.5	36	0.7	36	0.6	38	0.5	39	0.4
EUR/AUD	21	0.4	16	0.3	18	0.3	24	0.3	31	0.3
EUR/NOK	20	0.4	28	0.6	33	0.5	36	0.5	31	0.3
EUR/PLN	14	0.3	13	0.3	13	0.2	17	0.2	27	0.3
EUR/DKK	13	0.2	13	0.2	11	0.2	13	0.2	26	0.3
EUR/HUF	10	0.2	5	0.1	11	0.2	8	0.1	23	0.2
EUR/CAD	15	0.3	14	0.3	15	0.2	20	0.3	22	0.2
EUR/CNY	1	0.0	2	0.0	4	0.1	10	0.1	11	0.1
EUR/BGN	1	0.0	1	0.0	2	0.0	1	0.0	3	0.0
EUR/OTH	55	1.0	68	1.3	85	1.3	97	1.3	162	1.7
JPY/AUD	46	0.9	31	0.6	35	0.5	37	0.5	35	0.4
JPY/GBP	20	0.4	25	0.5	30	0.4	22	0.3	24	0.3
JPY/CAD	6	0.1	7	0.1	7	0.1	10	0.1	9	0.1
JPY/NZD	5	0.1	5	0.1	6	0.1	5	0.1	5	0.1
JPY/CHF	1	0.0	1	0.0	2	0.0	3	0.0	4	0.0
JPY/TRY	1	0.0	3	0.1	6	0.1	2	0.0	2	0.0
JPY/OTH	29	0.5	44	0.9	37	0.6	58	0.8	60	0.6
Other currency pairs	90	1.7	95	1.9	102	1.6	143	1.9	156	1.6
All currency pairs	5,357	100.0	5,066	100.0	6,581	100.0	7,468	100.0	9,595	100.0

[1] Adjusted for local and cross-border inter-dealer double-counting (ie "net-net" basis). * Revised data

Geographical distribution of OTC foreign exchange turnover[1]

"Net-gross" basis,[2] daily averages in April, in billions of US dollars and percentages — Table 6

Country	2013		2016		2019*		2022*		2025	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Argentina	1	0.0	1	0.0	2	0.0	1	0.0	1	0.0
Australia	182	2.7	121	1.9	119	1.4	150	1.5	201	1.6
Austria	15	0.2	19	0.3	16	0.2	17	0.2	18	0.1
Bahrain	9	0.1	6	0.1	2	0.0	2	0.0	2	0.0
Belgium	22	0.3	23	0.4	36	0.4	32	0.3	41	0.3
Brazil	17	0.3	20	0.3	19	0.2	21	0.2	30	0.2
Bulgaria	2	0.0	2	0.0	2	0.0	2	0.0	4	0.0
Canada	65	1.0	86	1.3	109	1.3	172	1.8	243	1.9
Chile	12	0.2	7	0.1	8	0.1	9	0.1	11	0.1
China	44	0.7	73	1.1	136	1.6	153	1.6	235	1.9
Chinese Taipei	26	0.4	27	0.4	30	0.4	33	0.3	45	0.4
Colombia	3	0.0	4	0.1	4	0.1	5	0.1	7	0.1
Czechia	5	0.1	4	0.1	7	0.1	6	0.1	9	0.1
Denmark	117	1.8	101	1.5	63	0.8	83	0.8	102	0.8
Estonia	0	0.0	...	...	...	...	...	...	...	...
Finland	15	0.2	14	0.2	7	0.1	8	0.1	10	0.1
France	190	2.8	181	2.8	167	2.0	214	2.2	242	1.9
Germany	111	1.7	116	1.8	124	1.5	184	1.9	386	3.1
Greece	3	0.0	1	0.0	1	0.0	1	0.0	1	0.0
Hong Kong SAR	275	4.1	437	6.7	632	7.6	694	7.1	883	7.0
Hungary	4	0.1	3	0.1	4	0.0	6	0.1	12	0.1
India	31	0.5	34	0.5	40	0.5	53	0.5	87	0.7
Indonesia	5	0.1	5	0.1	7	0.1	5	0.1	7	0.1
Ireland	11	0.2	2	0.0	7	0.1				
Israel	8	0.1	8	0.1	7	0.1	8	0.1	12	0.1
Italy	24	0.4	18	0.3	19	0.2	19	0.2	20	0.2
Japan	374	5.6	399	6.1	376	4.5	433	4.4	440	3.5
Korea	48	0.7	48	0.7	55	0.7	68	0.7	86	0.7
Latvia	2	0.0	1	0.0	0	0.0	0	0.0	...	...
Lithuania	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Luxembourg	51	0.8	37	0.6	58	0.7	92	0.9	70	0.6
Malaysia	11	0.2	8	0.1	12	0.1	16	0.2	24	0.2
Malta	...	...	...	...	...	...	...	...	0	0.0
Mexico	32	0.5	20	0.3	20	0.2	19	0.2	28	0.2
Netherlands	112	1.7	85	1.3	64	0.8	74	0.8	60	0.5
New Zealand	12	0.2	10	0.2	9	0.1	11	0.1	9	0.1
Norway	21	0.3	40	0.6	30	0.4	24	0.2	23	0.2
Peru	2	0.0	1	0.0	2	0.0	2	0.0	3	0.0
Philippines	4	0.1	3	0.0	4	0.0	3	0.0	6	0.0
Poland	8	0.1	9	0.1	9	0.1	13	0.1	15	0.1
Portugal	4	0.1	2	0.0	2	0.0	1	0.0	1	0.0
Romania	3	0.1	3	0.0	2	0.0	3	0.0	3	0.0
Russia	61	0.9	45	0.7	47	0.6	...	...	...	...
Saudi Arabia	7	0.1	8	0.1	6	0.1	6	0.1	7	0.1
Singapore	383	5.7	517	7.9	640	7.7	929	9.5	1,485	11.8
Slovakia	1	0.0	2	0.0	1	0.0	0	0.0	1	0.0
Slovenia	...	...	...	...	...	...	...	...	...	...
South Africa	21	0.3	21	0.3	20	0.2	16	0.2	21	0.2
Spain	43	0.6	33	0.5	28	0.3	39	0.4	68	0.5
Sweden	44	0.7	42	0.6	37	0.4	42	0.4	41	0.3
Switzerland	216	3.2	156	2.4	264	3.2	349	3.6	370	2.9
Thailand	13	0.2	11	0.2	14	0.2	15	0.2	18	0.1
Türkiye	27	0.4	22	0.3	19	0.2	18	0.2	19	0.1
United Arab Emirates[3]	...	...	...	...	46	0.6	66	0.7	39	0.3
United Kingdom	2,726	40.8	2,406	36.9	3,576	43.2	3,735	38.0	4,745	37.8
United States	1,263	18.9	1,272	19.5	1,370	16.5	1,912	19.5	2,335	18.6
Total	6,686	100.0	6,514	100.0	8,279	100.0	9,823	100.0	12,570	100.0

[1] Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding. The data for the Netherlands are not fully comparable over time due to reporting improvements in 2013. The 2019 data for Switzerland are not fully comparable with past periods due to reporting improvements in 2019. [2] Adjusted for local inter-dealer double-counting (ie "net-gross" basis). [3] The U.A.E. aggregates since 2022 incorporate data from the Dubai Financial Services Authority. * Revised data.

B Explanatory notes

The methodology and structure of the foreign exchange turnover part of the 2025 Triennial Central Bank Survey are aligned with those from 2022. The 2022 Survey was expanded to break out non-market-facing trades, namely back-to-back trades and compression trades.

Participating jurisdictions

Central banks and other authorities in 52 jurisdictions participated in the 2025 Triennial Survey. The Central Bank of Malta participated for the first time. Russia did not participate in the 2022 and 2025 Surveys.

Argentina	Korea
Australia	Lithuania
Austria	Luxembourg
Bahrain	Malaysia
Belgium	Malta
Brazil	Mexico
Bulgaria	Netherlands
Canada	New Zealand
Chile	Norway
China	Peru
Chinese Taipei	Philippines
Colombia	Poland
Czechia	Portugal
Denmark	Romania
Finland	Saudi Arabia
France	Singapore
Germany	Slovakia
Greece	South Africa
Hong Kong SAR	Spain
Hungary	Sweden
India	Switzerland
Indonesia	Thailand
Ireland	Türkiye
Israel	United Arab Emirates
Italy	United Kingdom
Japan	United States

Coverage

The Triennial Survey of foreign exchange turnover covers spot transactions, outright forwards, foreign exchange swaps, currency swaps, currency options and other OTC foreign exchange transactions with exposure to more than one currency

The basis for reporting was in principle the location of the sales desk of any trade, even if deals entered into in different locations were booked in a central location. Thus, transactions concluded by offices located abroad were not reported by the country of location of the head office, but by that of the office abroad (insofar as the latter was a reporting institution in another reporting country). Where no sales desk was involved in a deal, the trading desk was used to determine the location of deals.

The survey collected turnover data for both proprietary and commissioned business of the reporting institutions. “Commissioned business” refers to reporting institutions’ transactions as a result of deals as an agent or trustee in their own name, but on behalf of third parties, such as customers or other entities.

Turnover data

Turnover data provide a measure of market activity, and can also be seen as a rough proxy for market liquidity. Turnover is defined as the gross value of all new deals entered into during a given period, and is measured in terms of the nominal or notional amount of the contracts.

No distinction was made between sales and purchases (eg a purchase of $5 million against sterling and a sale of $7 million against sterling would amount to a gross turnover of $12 million). Direct cross-currency transactions were counted as single transactions (eg if a bank sold $5 million of Swiss francs against the Swedish krona, the reported turnover would be $5 million); however, cross-currency transactions passing through a vehicle currency were recorded as two separate deals against the vehicle currency (eg if a bank sold $5 million of Swiss francs against euros first and then used the euros to purchase kronor, the reported turnover would be $10 million). The gross amount of each transaction was recorded once, and netting arrangements and offsets were ignored.

OTC derivatives transactions that are centrally cleared via central counterparties (CCPs) were reported on a pre-novation basis (ie with the original execution counterpart as counterparty). Any post-trade transaction records that arise from central clearing via CCPs (eg through novation) were not reported as additional transactions.

As in the previous Surveys, turnover data were collected over a one-month period, the month of April, in order to reduce the likelihood of very short-term variations in activity contaminating the data. The data collected for the survey reflected all transactions entered into during the calendar month of April 2025, regardless of whether delivery or settlement was made during that month. In order to allow comparison across countries, daily averages of turnover were computed by dividing aggregate monthly turnover for the country in question by the number of days in April on which the foreign exchange and derivatives markets in that country were open.

Transactions are reported to the BIS in US dollar equivalents, with non-dollar amounts generally converted into US dollars using the exchange rate prevailing on the date of the trade.

Instruments

The instruments covered in the foreign exchange turnover part of the survey are defined as follows:

spot transactions	Single outright transactions involving the exchange of two currencies at a rate agreed on the date of the contract for value or delivery (cash settlement) within two business days. The spot legs of swaps are not included among spot transactions but are reported as swap transactions even when they are due for settlement within two days. This means that spot transactions are exclusive of overnight swaps and spot next swaps, as well as other "tomorrow/next day" transactions.
outright forwards	Transactions involving the exchange of two currencies at a rate agreed on the date of the contract for value or delivery (cash settlement) at some time in the future (more than two business days later). This category also includes forward foreign exchange agreement transactions (FXAs), non-deliverable forwards (NDFs) and other forward contracts for differences. Outright forwards are generally not traded on organised exchanges, and their contractual terms are not standardised.
foreign exchange swaps	Transactions involving the actual exchange of two currencies (principal amount only) on a specific date at a rate agreed at the time of the conclusion of the contract (the short leg), and a reverse exchange of the same two currencies at a date further in the future at a rate (generally different from the rate applied to the short leg) agreed at the time of the contract (the long leg). Both spot/forward and forward/forward swaps are included. For *turnover*, only the forward leg is reported as such. The spot leg is not reported at all, ie neither as a spot nor as a foreign exchange swap transaction. Short-term swaps carried out as "tomorrow/next day" transactions are also included in this category.
currency swaps	Contracts which commit two counterparties to exchange streams of interest payments in different currencies for an agreed period of time and/or to exchange principal amounts in different currencies at a pre-agreed exchange rate at maturity.
OTC options	Option contracts that give the right to buy or sell a currency with another currency at a specified exchange rate during a specified period. This category also includes exotic foreign exchange options such as average rate options and barrier options. OTC options include: • The currency swaption: an OTC option to enter into a currency swap contract. • The currency warrant: a long-dated (over one year) OTC currency option.
other products	Other derivative products are instruments where decomposition into individual plain vanilla instruments such as forwards, swaps or options is impractical or impossible. An example of "other" products is swaps with underlying notional principal in one currency and fixed or floating interest rate payments based on interest rates in currencies other than the notional (differential swaps or "diff swaps").

Counterparties

Reporting institutions were requested to provide for each instrument a breakdown of contracts by counterparty, as follows: reporting dealers, other financial institutions and non-financial customers, with separate information on local and cross-border transactions. The distinction between local and crossborder was determined according to the location of the counterparty and not its nationality. Starting with the 2013 survey of foreign exchange turnover, other financial institutions were further broken down into five subsectors.

reporting dealers	Financial institutions that participate as reporters in the Triennial Survey. These are mainly large commercial and investment banks and securities houses that (i) participate in the inter-dealer market and/or (ii) have an active business with large customers, such as large corporate firms, governments and non-reporting financial institutions; in other words, reporting dealers are institutions that actively buy and sell currency and OTC derivatives both for their own account and/or in meeting customer demand. In practice, reporting dealers are often those institutions that actively or regularly deal through electronic platforms, such as EBS or Reuters dealing facilities. This category also includes the branches and subsidiaries of institutions operating in multiple locations that do not have a trading desk but do have a sales desk in those locations that conducts active business with large customers. The identification of transactions with reporting dealers allows the BIS to adjust for double-counting in inter-dealer trades.
other financial institutions	Financial institutions that are not classified as "reporting dealers" in the survey. These are typically regarded as foreign exchange and interest rate derivatives market end users. They mainly cover all other financial institutions, such as smaller commercial banks, investment banks and securities houses, and mutual funds, pension funds, hedge funds, currency funds, money market funds, building societies, leasing companies, insurance companies, other financial subsidiaries of corporate firms and central banks.
non-reporting banks	Smaller or regional commercial banks, publicly owned banks, securities firms or investment banks not directly participating as reporting dealers.
institutional investors	Institutional investors such as mutual funds, pension funds, insurance and reinsurance companies and endowments. Primary motives for market participation are to trade FX instruments eg for hedging, investing and risk management purposes. A common label for this counterparty category is "real money investors".
hedge funds and proprietary trading firms	(i) Investment funds and various types of money managers, including commodity trading advisers (CTAs), which share (a combination of) the following characteristics: they often follow a relatively broad range of investment strategies that are not subject to borrowing and leverage restrictions, with many of them using high levels of leverage; they often have a different regulatory mandate than "institutional investors" and typically cater to sophisticated investors such as high net worth individuals or institutions; and they often hold long and short positions in various markets, asset classes and instruments, with frequent use of derivatives for speculative purposes. (ii) Proprietary trading firms that invest, hedge or speculate for their own account. This category may include specialised high-frequency trading (HFT) firms that employ high-speed algorithmic trading strategies characterised by numerous frequent trades and very short holding periods.
official sector financial institutions	Central banks, sovereign wealth funds, international financial institutions in the public sector (BIS, IMF etc), development banks and agencies.
other	All remaining financial institutions (eg retail aggregators) that cannot be classified in any of the four above-mentioned subcategories for other financial institutions.
non-financial customers	Any counterparty other than those described above, ie mainly non-financial end users, such as corporations and non-financial government entities. May also include private individuals who directly transact with reporting dealers for investment purposes, either on the online retail trading platforms operated by the reporting dealers or by other means (eg giving trading instructions by phone).

Trading relationships

Reporting dealers were requested to identify how much of their total turnover for each instrument and currency pair was attributed to: (i) transactions conducted in a foreign exchange prime brokerage relationship (with the reporting dealer in the role of FX prime broker); and (ii) transactions that are directly or indirectly generated by retail investors. As in previous surveys, reporting dealers were requested to identify how much of their grand total of foreign exchange turnover was attributed to "related party" transactions. Additionally, dealers were asked to separately collect data on back-to-back trades and compression trades, to better separate market-facing from non-market-facing trades.

prime brokers	Institutions (usually large and highly rated banks) facilitating trades for their clients (often institutional funds, hedge funds and other proprietary trading firms). Prime brokers enable their clients to conduct trades, subject to credit limits, with a group of predetermined third-party banks in the prime broker's name. This may also involve granting the client access to electronic platforms that are traditionally available only to large dealers. In an FX prime brokerage relationship, the client trade is normally "given up" to the prime broker, which is interposed between the third-party bank and the client and therefore becomes the counterparty to both legs of the trade.
retail-driven transactions	Reporting dealers' (i) transactions with "wholesale" financial counterparties that cater to retail investors (ie electronic retail trading platforms and retail margin brokerage firms), and (ii) direct transactions with "non-wholesale" investors (ie private individuals) executed online or by other means (eg phone), if applicable.
related-party trades	Transactions between desks and offices, transactions with branches and subsidiaries, and transactions between affiliated firms. These trades are included regardless of whether the counterparty is resident in the same country as the reporting dealer or in another country. Back-to-back trades that involve the transfer of risk from the sales desk to another affiliate are included. However, trades conducted as back-to-back deals and trades to facilitate internal bookkeeping and internal risk management within the same sales desk (ie reporting dealer) are excluded.
back-to-back trades	Back-to-back deals are linked deals where the liabilities, obligations and rights of the second deal are exactly the same as those of the original deal. They are normally conducted between affiliates of the same consolidated group to facilitate either internal risk management or internal bookkeeping (and, as such, also included in related-party trades). Back-to-back trades that involve other entities outside the group should also be reported here, but not in related-party trades.
compression trades	Compression is a process of replacing multiple offsetting derivatives contracts with fewer deals of the same net risk to reduce the notional value of the portfolio. It can be carried out between two or more counterparties (bilateral and multilateral compression, respectively).

Currencies and currency pairs

All foreign exchange transactions involving the 24 currencies listed in the table below were collected in the survey. This list of currencies for which reporting is compulsory and consistent across all jurisdictions was expanded from eight currencies in the 2010 survey to 24 in the 2013 survey, the latter total being carried forward until the 2025 survey. These changes in the reporting setup were introduced to better capture offshore trading in non-major currencies, most of which are EME currencies.[9]

[9] In previous surveys, only eight "major" currencies were subject to compulsory reporting on a global basis. Reporting of the other "non-major" currencies was only compulsory in the currencies' "home" jurisdictions, whereas the reporting of these currencies' offshore turnover was left to the discretion of the offshore jurisdictions. Potentially inconsistent treatment of nonmajor currencies across jurisdictions is known to be associated with problems such as "overnetting", which affects the accuracy of the turnover aggregates.

Currencies collected in the 2025 survey

AUD	CHF	EUR	HUF	KRW	NZD	SEK	TWD
BRL	CNY[1]	GBP	INR	MXN	PLN	SGD	USD
CAD	DKK	HKD	JPY	NOK	RUB	TRY	ZAR

[1] Includes offshore transactions, commonly denoted by CNH.

Data were collected for the following 47 currency pairs. Turnover in currency pairs that are not listed was recorded in aggregate under "other" and "residual".

Currency pairs collected in the 2025 survey

	Domestic currency against	USD against	EUR against	JPY against	Residual[1]
G8 currencies	AUD, CAD, CHF, EUR, GBP, JPY, SEK, USD	AUD, CAD, CHF, EUR, GBP, JPY, SEK	AUD, CAD, CHF, GBP, JPY, SEK	AUD, CAD	
Non-G8 currencies		BRL, CNY, HKD, INR, KRW, MXN, NOK, NZD, PLN, RUB, SGD, TRY, TWD, ZAR	CNY, DKK, HUF, NOK, PLN, TRY	BRL, NZD, TRY, ZAR	
Other	Other[2]	Other[2]	Other[2]	Other[2]	

[1] Transactions that do not involve the domestic currency, USD, EUR or JPY in one leg. [2] Currencies not explicitly listed in the table.

Given the interest in identifying turnover in all reporting countries' currencies, supplementary information for currencies recorded in aggregate under "other" and "residual" was also collected for the following 36 currencies: AED, ARS, AUD, BGN, BHD, BRL, CAD, CHF, CLP, CNY, COP, CZK, DKK, GBP, HKD, HUF, IDR, ILS, INR, KRW, MXN, MYR, NOK, NZD, PEN, PHP, PLN, RON, RUB, SAR, SEK, SGD, THB, TRY, TWD and ZAR.

Transactions conducted in a special unit of account adjusted to inflation (such as CLF, COU and MXV) were treated as having been executed in the main currency (respectively, CLP, COP and MXN).

Maturities

In the 2025 Survey, transactions in outright forwards and foreign exchange swaps were broken down into the following original maturity bands: one day; over one day and up to seven days; over seven days and up to one month; over one month and up to three months; over three months and up to six months; over six months, the same as in 2022. In the 2019 Survey, the maturity bands were: seven days or less; over seven days and up to one month; over one month and up to three months; over three months and up to six months; over six months. In all previous Surveys, the maturity bands were: seven days or less; over seven days and up to one year; over one year.

For outright forward contracts, the maturity band for the transaction is determined by the difference between the delivery date and the spot date. For both spot/forward and forward/forward foreign exchange swaps, the maturity band for the contract is determined by the difference between the due date of the second or long leg of the swap and the date of the initiation of the contract.

Elimination of double-counting

Double-counting arises because transactions between two reporting entities are recorded by each of them, ie twice. In order to derive meaningful measures of overall market size, it is therefore necessary to halve the data on transactions between reporting dealers. To permit this, reporters are asked to distinguish deals contracted with other reporters (dealers).

The following methods of adjustment were applied: data on local deals with other reporters were first divided by two, and this figure was subtracted from total gross data to arrive at so-called "net-gross" figures, ie net of local inter-dealer double-counting. In a second step, data on cross-border deals with other reporters were also divided by two, and this figure was subtracted from total "net-gross" data to obtain the so-called "net-net" figures, ie net of local and cross-border inter-dealer double-counting

Gross turnover	Minus	= **Net-gross turnover**	Minus	= **Net-net turnover**
Not adjusted for inter-dealer double-counting (ie "gross-gross" basis)	half of the turnover with local reporting dealers	Adjusted for local inter-dealer double-counting (ie "net-gross" basis)	half of the turnover with reporting dealers abroad	Adjusted for local and cross-border inter-dealer double-counting (ie "net-net" basis)

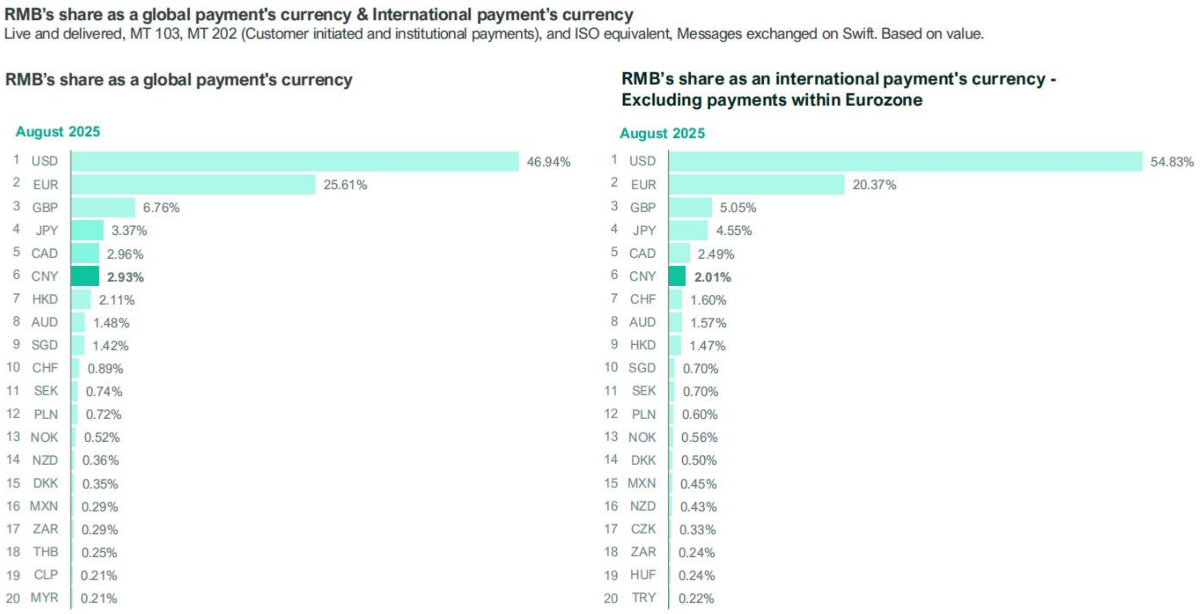
October 2025
Vol.12, No.4

RMB Tracker Monthly Reporting and Statistics on Renminbi (RMB) Progress Towards Becoming an International Currency

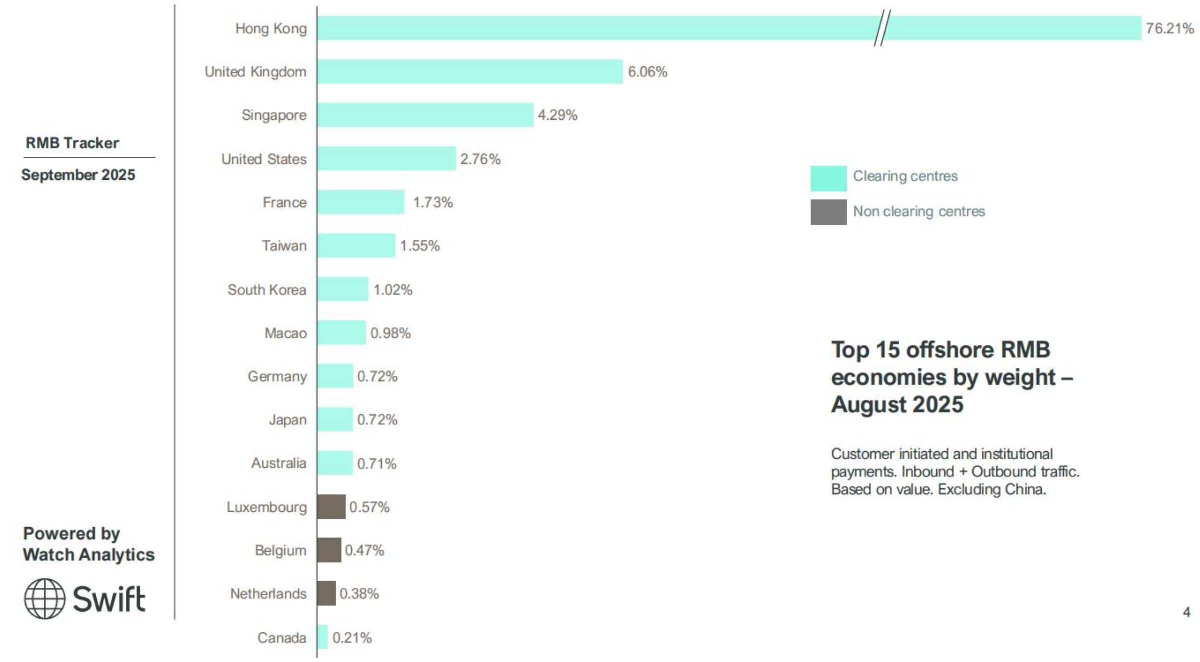
By SWIFT*

In August 2025, the RMB remained in the same position as the 6th most active currency for global payments by value, with a share of 2.93%. Overall, RMB payments decreased by 5.13% compared to July 2025, whilst in general all payments currencies decreased by 6.77%.

In terms of international payments excluding payments within the Eurozone, the RMB ranked 6th with a share of 2.01% in August 2025.



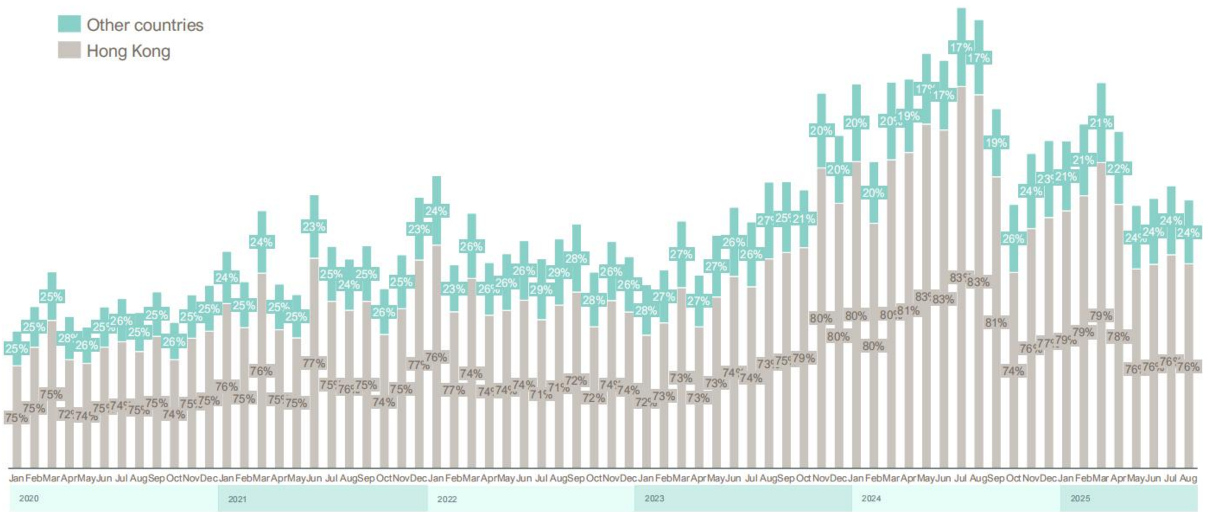
* Swift is a member-owned cooperative that provides the communications platform, products and services to connect more than 11,500 financial institutions and corporations in more than 200 countries and territories. Swift enables its users to exchange automated, standardized financial information securely and reliably, thereby lowering costs, reducing operational risk and eliminating operational inefficiencies. Swift also brings the financial community together to work collaboratively to shape market practice, define standards and debate issues of mutual interest.



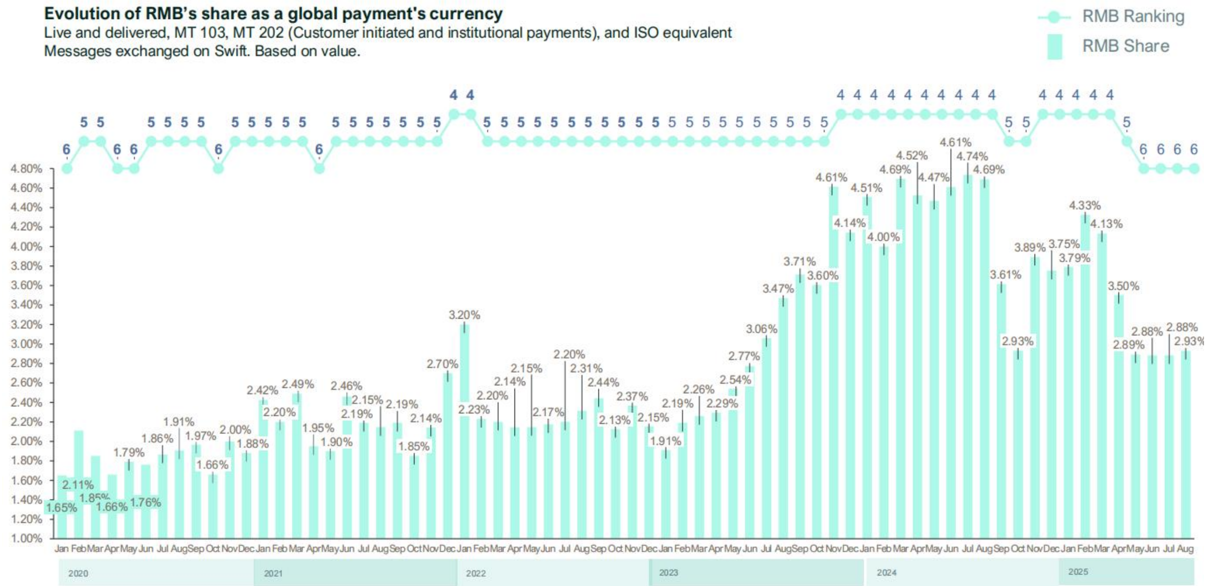
Offshore RMB payments evolution

Customer initiated and institutional payments. Excluding China.

Messages exchanged on Swift. Based on value.



Evolution of RMB's share as a global payment's currency
Live and delivered, MT 103, MT 202 (Customer initiated and institutional payments), and ISO equivalent Messages exchanged on Swift. Based on value.

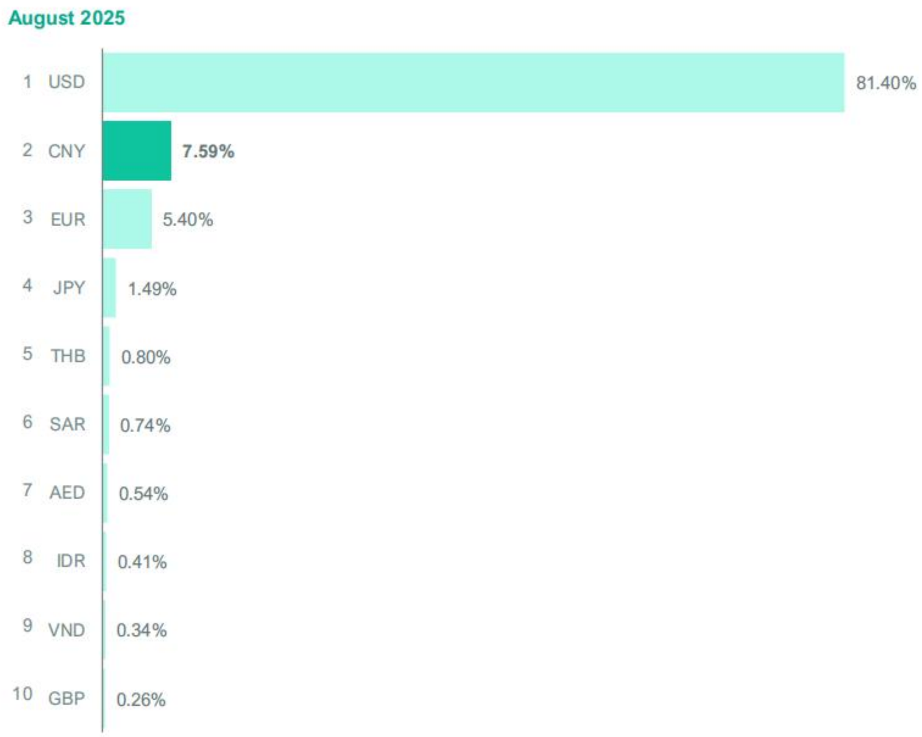


RMB's share as a global currency in trade finance market

Live and delivered, **inter-group only** MT 400 and MT 700.
Messages exchanged on Swift. Based on value.

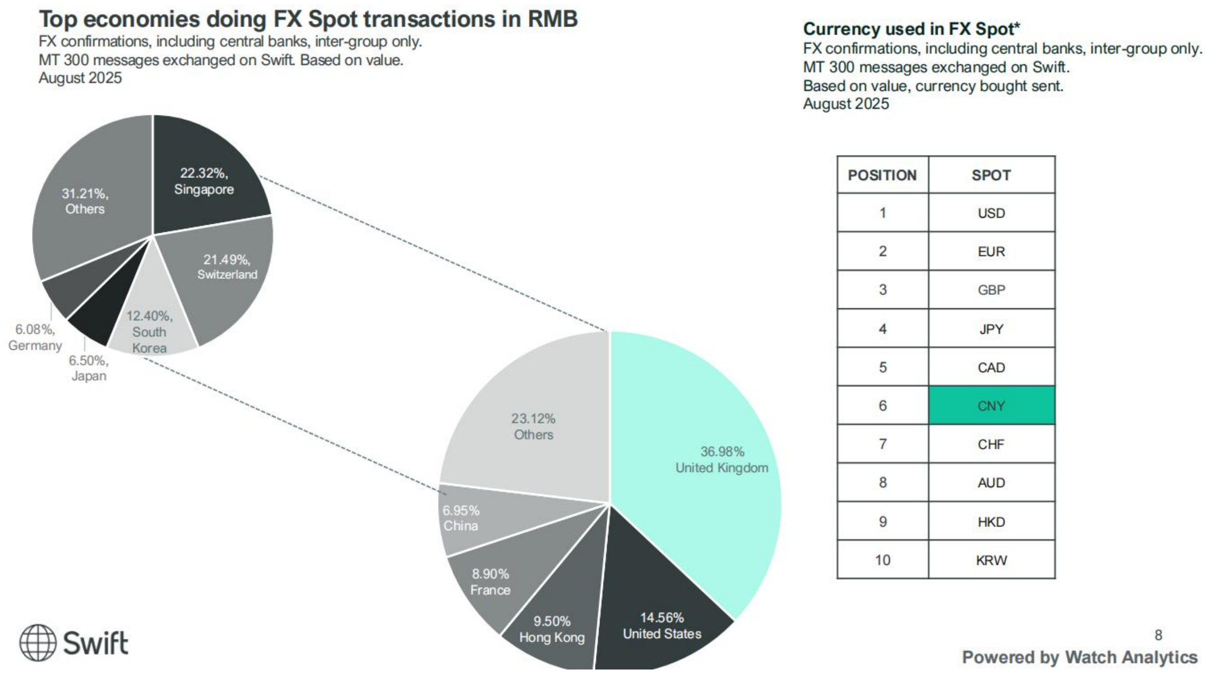
RMB Tracker

September 2025



Powered by Watch Analytics

Swift



Disclaimer

The RMB Tracker only reflects the statistics computed from the following message types (Payments: MT103, MT202, pacs.008 and pacs.009; Foreign Exchange: MT 300; Trade Finance: MT 400 and MT 700) and exchanged between financial institutions through Swift. Because financial institutions have multiple means to exchange information about their financial transactions, the RMB Tracker does not represent complete market or industry statistics. The RMB Tracker statistics can also fluctuate for reasons not linked to the use of a particular currency (for instance, when financial institutions adopt new market practices, use new messages types for certain transaction or reporting flows, or increase or reduce their use of Swift).

Swift does not guarantee the fitness for purpose, completeness, or accuracy of the RMB Tracker, and reserves the right to rectify past RMB Tracker data.

Swift provides the RMB Tracker on an 'as is' basis, and for information purposes only. As a mere informative publication, the RMB Tracker is not meant to provide any recommendation or advice.

Swift disclaims all liability for any decisions based, in full or in part, on RMB Tracker data, and for their consequences. The RMB Tracker is a publication of S.W.I.F.T. SC.

October 2025
Vol.12, No.4

White Paper on RMB Internationalization of Bank of China-RMB in Multilateral Cooperation

By BANK OF CHINA

CHAPTER 1. Overview of RMB Internationalization

Policy environment

China has continued to push forward the high-standard opening up of its financial sector, further refine relevant policies, enhance both the scale and level of cross-border use of RMB, promote trade and investment facilitation on a broader scale, and more actively contribute to the establishment of a new development pattern.

First, promoting trade and investment facilitation. To strengthen the coordination between domestic and foreign currencies, China has piloted a policy to optimize integrated capital pool for multinational corporations' domestic and foreign currencies in ten provinces and municipalities, including Beijing, Shanghai, Jiangsu, Zhejiang, and Guangdong. This initiative aims to help large multinationals further reduce financing costs, enhance the convenience of cross-border settlement, improve cross-border capital management, and increase the efficiency of capital utilization.

Second, deepening the opening of China's financial market. China has further refined the Swap Connect mechanism by introducing interest rate swap contracts that adopt settlement dates in alignment with international money markets settlement cycles. This alignment with mainstream global trading varieties is intended to meet the diverse risk management needs of both domestic and overseas investors. In parallel, contract compression services and the supporting backdated trade contracts were launched to help participating institutions manage the business scale of outstanding contracts, reduce capital consumption, and stimulate market activity. Additionally, China has revised the Regulations on the Administration of Domestic Securities and Futures Investment Funds by Foreign Institutional Investors to improve the management of cross-border capital by qualified foreign investors (QFIs). The revisions focus on four key areas: streamlining registration procedures, optimizing account management, enhancing foreign exchange (FX) administration, and improving the oversight of spot FX purchase and sales as well as FX derivatives. Collectively, these measures aim to further facilitate foreign institutional investors' participation in China's futures market. Third, supporting the development of the offshore RMB market. To improve the RMB liquidity supply mechanism in offshore markets, China has included bonds under the Bond Connect scheme as eligible collateral for the Hong Kong Monetary Authority (HKMA)'s RMB Liquidity Facility. This marks the first time that domestic bonds have been granted collateral status in an offshore market, enabling eligible RMB bonds to serve not only as high-quality investment assets but also as key instruments for liquidity management.

Fourth, promoting infrastructure connectivity. The People's Bank of China (PBC) and the HKMA have signed the Memorandum of Understanding on the Cross-Boundary Linkage of Payment Systems to advance the interconnection of fast payment systems between the Mainland and Hong Kong. In addition, the State Council's executive meeting reviewed and adopted the Opinions on Further Optimizing Payment Services to Enhance Payment Convenience, which further improves the accessibility of cross-border mobile payments. With overseas-issued UnionPay cards now fully supporting integration with Alipay and WeChat Pay, foreign visitors to China can enjoy more convenient, inclusive, and user-friendly payment options.

Fifth, strengthening multilateral cooperation to uphold financial stability. China has signed memorandums of understanding with the State Bank of Vietnam and Norges Bank to further expand the scope and scale of bilateral local currency swap arrangements. As of now, the PBC has entered into bilateral local currency swap agreements with the central banks or monetary authorities of 29 countries and regions, with a total swap volume exceeding RMB4 trillion. These arrangements are designed to facilitate cross-border trade and investment and to help safeguard regional financial stability.

Market environment

1. Economic growth.

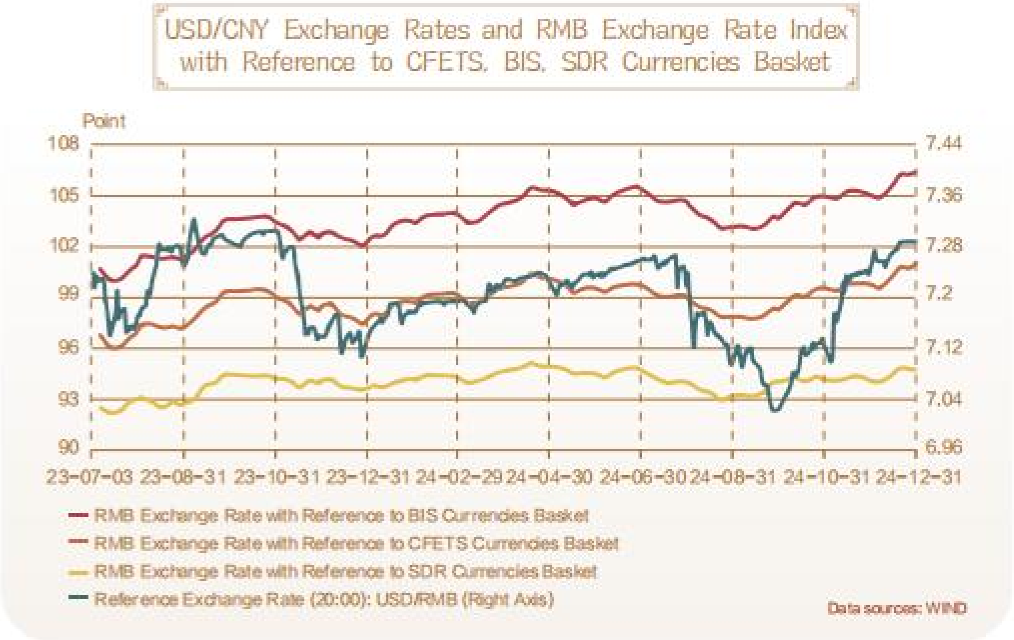
In 2024, the global economy continued to face challenges, including geopolitical tensions and rising protectionism, which led to a slowdown in aggregate demand and a persistently weak recovery. As a result, growth momentum remained insufficient. The International Monetary Fund (IMF) projected global economic growth at 3.2% for the year 2024, marking the second consecutive year below the pre-pandemic average of 3.7% (2000-2019). Despite mounting external pressures and increasing internal challenges, China's economy maintained overall stability and steady progress. Its GDP grew by 5% and surpassed the RMB130 trillion mark for the first time, reflecting the robust resilience and vast potential of the Chinese economy.

2. Goods trade.

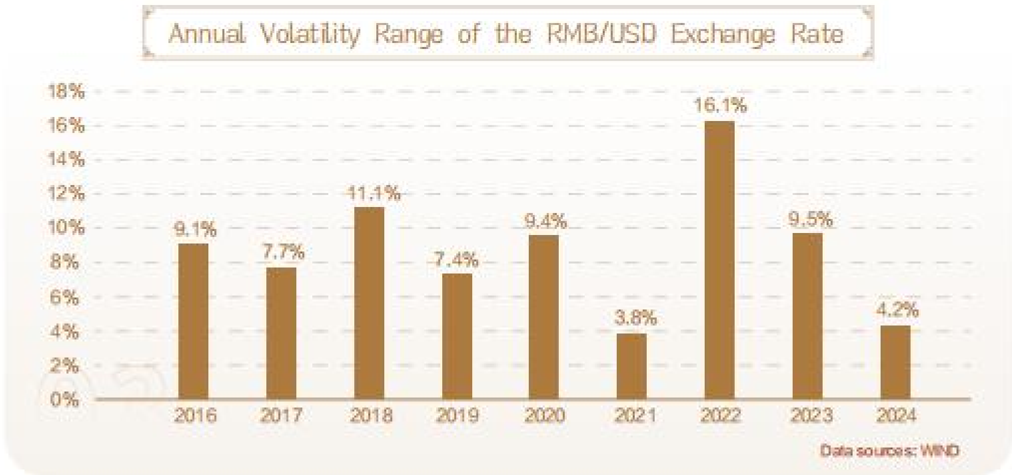
In 2024, the World Trade Organization (WTO)'s global trade barometer index continued its moderate upward trajectory and remained above the level recorded during the same period in 2023, signaling stronger global trade momentum. The value of global merchandise trade grew by 2.2% year-on-year. China's foreign trade maintained steady growth, with total imports and exports of goods increasing by 5% to RMB43.8 trillion. This accounted for 12.5% of global merchandise trade, representing a 0.2 percentage point increase from the previous year. China contributed approximately 21.9% to global trade growth.

3. Interest rate and exchange rate developments. In the second half of 2024, both the core inflation in the US and the harmonized index of consumer prices (HICP) in the Eurozone bottomed out on a monthly year-on-year basis. Consequently, interest rates in US dollar and euro markets remained volatile at relatively high levels. In contrast, China's consumer price index (CPI) remained broadly stable, with year-on-year monthly changes ranging from 0.1% to 0.6%. RMB interest rates continued to decline gradually. The interest rate spread between RMB and the USD remained inverted, with the spread fluctuating between 170 and 300 basis points.

The RMB exchange rate remained generally stable with a slight appreciation trend. Although the RMB depreciated modestly against the US dollar, its exchange rate indices — measured against the CFETS currencies basket, the SDR currencies basket, and the BIS currencies basket—all recorded moderate gains.



The RMB-USD exchange rate continued to exhibit two-way fluctuations, with reduced volatility and fewer extreme movements. In 2024, the annual amplitude of exchange rate fluctuation between RMBand US dollar stood at 4.21%, significantly lower than the 9.5% recorded in 2023. The number of trading days when the intra-day difference between the highest and lowest RMB-USD exchange rates exceeded 300 basis points dropped to 25, a reduction of 66 days from the year 2023.



Progress in RMB internationalization

1. Continued expansion of The scale of cross-border RMB settlement expanded.

In 2024, China's total cross-border RMB settlement value reached approximately RMB64.1 trillion, marking a year-on-year increase by 22.5%. Among which, RMB settlements under the current account amounted to RMB16.3 trillion, up by 15.7% from the previous year. Within this category, settlements for goods trade totaled approximately RMB12.4 trillion, reflecting a 15.9% year-on-year increase. RMB settlements under the capital account reached RMB47.8 trillion, a year-on-year rise by 24.9%, including RMB28.7 trillion in securities investment settlements, an increase by 28.8% from the year 2023.

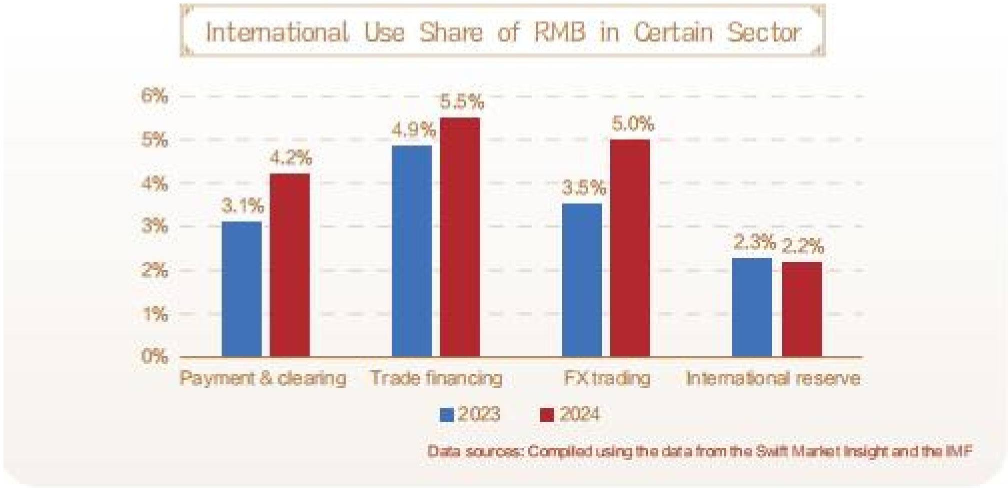
Cross-border RMB settlements for securities investment accounted for nearly 60% of China's total cross-border RMB settlement value, serving as a major driver of overall growth and resulting in a closely correlated trend between the two indicators.

2. The cross-border use of RMB was continuously active.

The Cross-Border RMB Index (CRI), developed by Bank of China ("BOC" or "the Bank") to track and measure cross-border RMB usage, maintained its upward momentum in 2024, closing the year at 365 points—surpassing the level recorded in the end of previous year. According to SWIFT message data, cross-border RMB payments and receipts occurred in 166 countries and regions, five more than in 2023. This broader coverage of RMB payment network supported the dynamic cross-border use of RMB.

3. The international role of the RMB was further strengthened.

According to data from SWIFT and the IMF, the RMB's global usage in 2024 reached 4.2% in international payments, 5.5% in trade financing, 5.0% in FX trading, and 2.2% in FX reserves—each reflecting varying degrees of improvement compared to 2022. In terms of global rankings, the RMB was the fourth most used currency for payments, third in trade financing, fifth in FX trading, and seventh as a reserve currency.



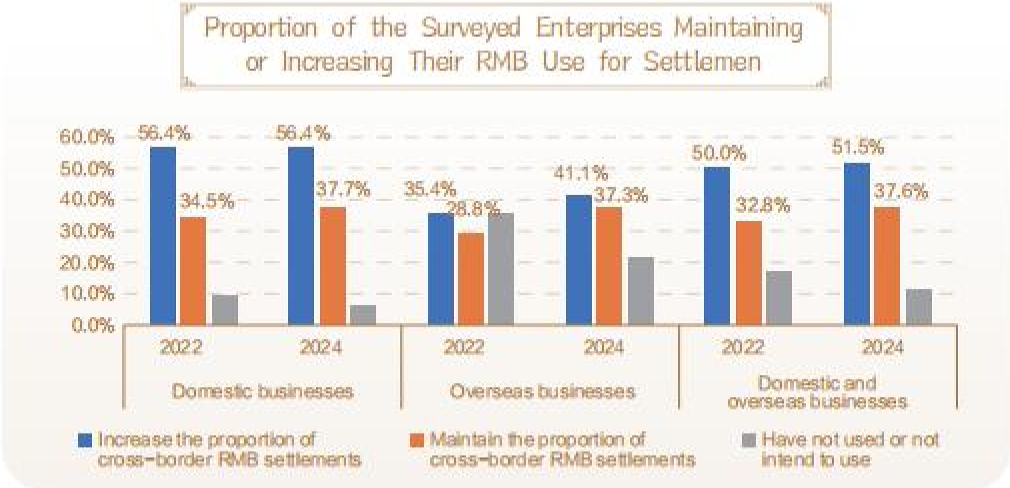
CHAPTER 2. Assessment on the role of RMB as an International Currency

In 2025, the cross-border use of the RMB i produced more significant effects in facilitating trade and investment and better serving the real economy. Both domestic and overseas businesses and financial institutions have given positive assessment on the role of RMB as an international currency from various perspectives, highlighting the growing market recognition of its global role.

RMB as a settlement currency

1. The domestic and overseas market entities' intention to use cross border RMB remained positive.

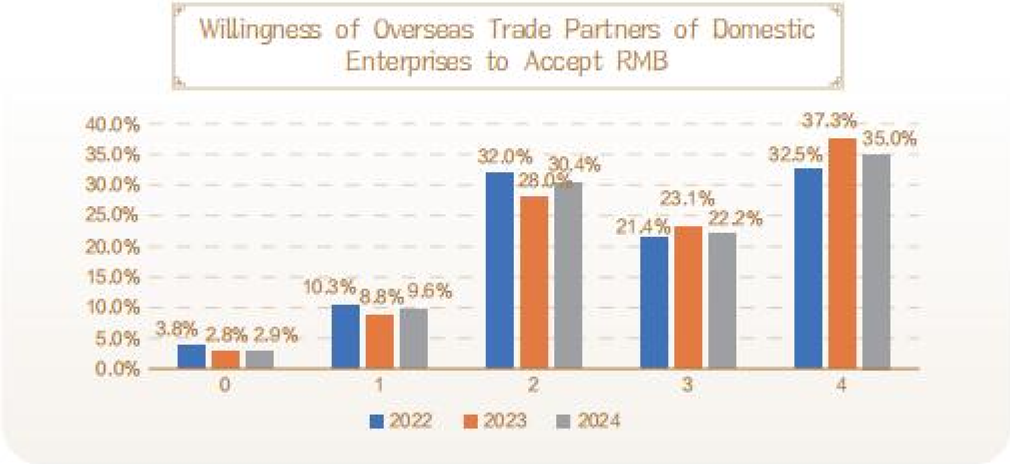
The 2024 market survey revealed that most of the surveyed domestic and overseas market entities planed to maintain or increase the use of RMB for settlement, reflecting continued enthusiasm for RMB settlements for cross-border transactions.



Disaggregated data showed that 94.1% of the domestic enterprises and 78.4% of the overseas enterprises intend to either sustain or expand their RMB settlement activities. These figures remain high and showed represent an improvement over the first survey conducted in 2022, with more notable improvement observed among overseas businesses. The willingness to use the RMB is particularly pronounced in some key overseas regions. Among ASEAN enterprises surveyed, 85.9% expressed the intention to maintain or increase their RMB settlement usage, 2.4 percentage points higher than the 2022 survey. Among European enterprises surveyed, 75.5% expressed the intention to maintain or increase their RMB settlement usage, 10.3 percentage points higher than the 2022 survey.

2. The acceptance of RMB for settlement by overseas trade partners was at high level.

When asked to rate their foreign trade partners' willingness to accept RMB settlement (on a scale from 0 = completely unwilling to accept RMB, 4 = fully willing to accept RMB), 57.2% of domestic enterprises reported that their partners either fully (4) or mostly (3) accepted RMB settlement. While this figure represents a 3.2 percentage point decline compared to the previous year, it remains at a relatively high level in recent years.



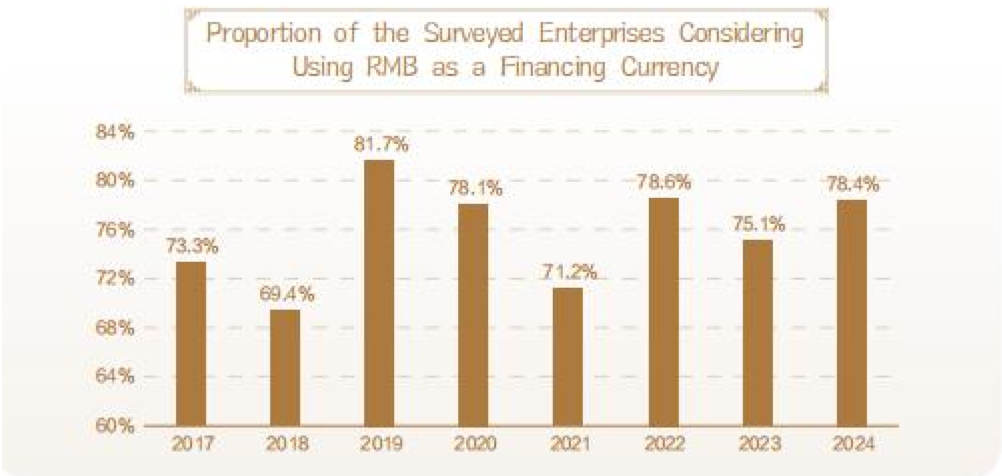
3. The circulation and use of the RMB among countries and regions outside China was continuously active.

In 2024, 29.6% of the surveyed overseas enterprises reported conducting cross-border RMB settlements with countries and regions outside China. While this figure represents a slight decline by 0.8 percentage point from 2023, it marks an increase by 3.3 percentage points compared to 2022, indicating sustained activity in the RMB's cross-border use over recent years.

The use of the RMB outside China was particularly notable in some key regions. For example, 36.1% of the surveyed ASEAN businesses reported conducting RMB settlements with countries and regions outside China, 6.5 percentage points higher than the overall result for overseas enterprises. Similarly, 34.1% of the surveyed European companies reported using the RMB in countries and regions outside China, 4.5 percentage points above the overall results for overseas respondents.

RMB as a financing currency

The RMB has become a new alternative for overseas market entities to access international liquidity. According to the 2024 survey, 78.4% of the overseas enterprises indicated that, during periods of tight liquidity in international currencies such as the US dollar and Euro, they would increasingly turn to the RMB for financing. This represents a 3.3 percentage point increase from the 2023 survey, with the figure remaining above 75% for the third consecutive year. Furthermore, 71.7% of the surveyed overseas financial institutions stated that they would consider the RMB an important supplement to international liquidity, reflecting a 6.6 percentage point increase compared to 2023.



Box: Cross-Border RMB Bond Financing in 2024

In recent years, cross-border RMB bond financing has been active, highlighting the RMB's growing role as a financing currency. In 2024, both the balance of outstanding offshore RMB bonds and Panda bonds continued to grow at a relatively fast pace, and reached record highs.

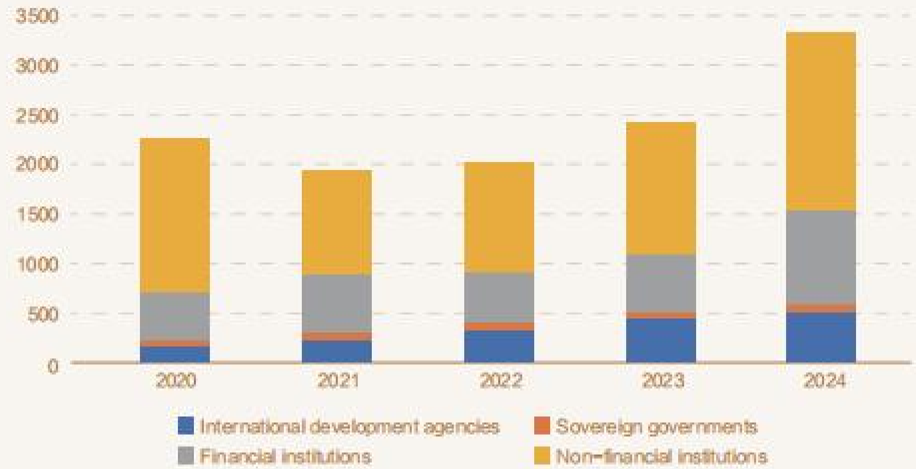
I. Panda bond market

With China's financial markets becoming increasingly open in both directions, overseas institutions have actively issued Panda bonds to raise fresh funds or to raise funds for their operations in China—fueling rapid market growth. The number of newly issued Panda bonds rose from 43 in 2020 to 109 in 2024, while total issuance value surged from RMB58.65 billion to RMB194.8 billion over the same period, marking a 2.3-fold increase. Both the number and the value of issuance set new records in 2024.

A broad range of overseas market entities actively issued Panda bonds, driving further expansion in the balance of outstanding bonds. As at the end of 2024, there were 197 outstanding Panda bonds with a total balance of RMB319.29 billion—up by 31.1% and 27.1% year-on-year, respectively—both reaching historic highs.

Panda bonds issued by different market entities in recent five years (RMB100 million)

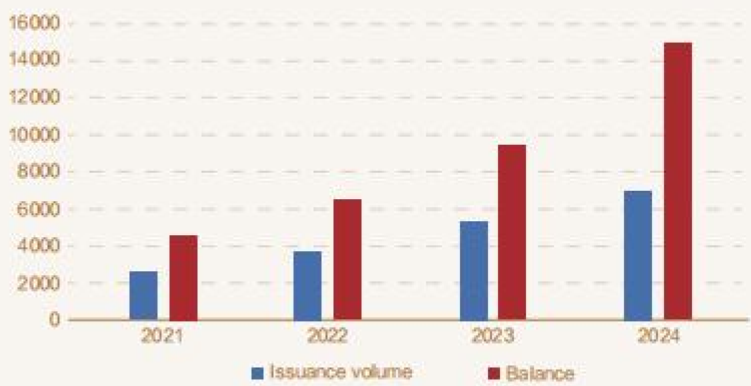
Outstanding Panda bonds by issuer (RMB100 million)

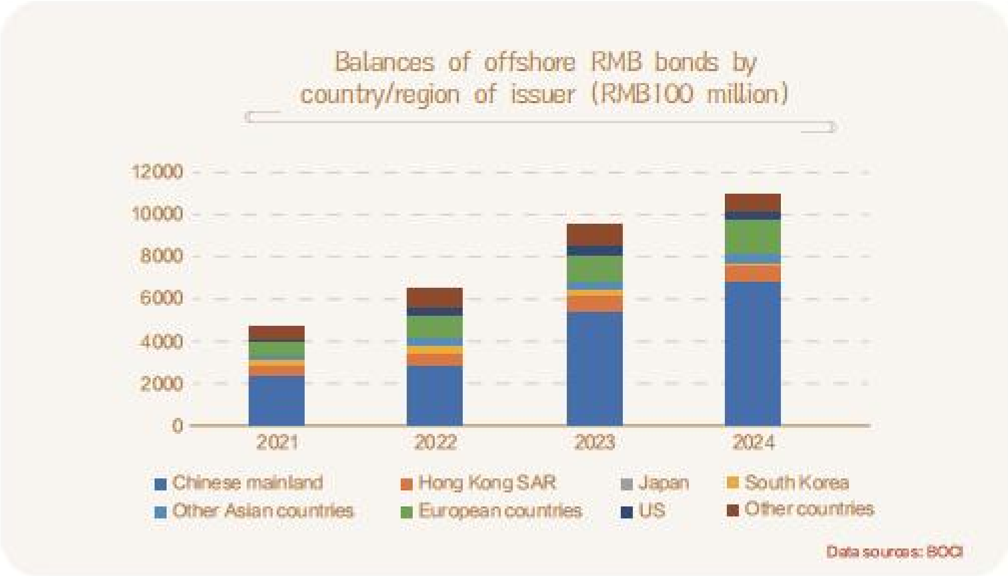


II. Offshore RMB bond market

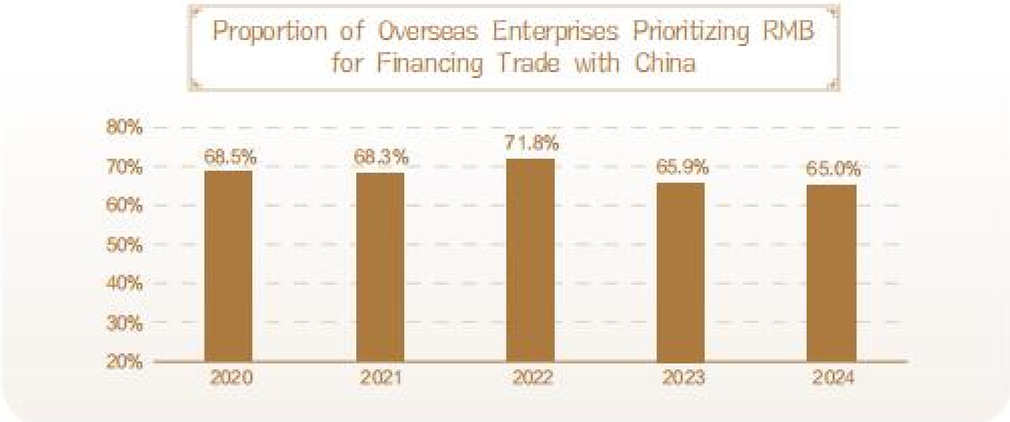
Bond financing in the offshore RMB market is also highly active in 2024. Compared with the Panda bonds, offshore RMB bonds offer greater flexibility and convenience for cross-border use, making them the preferred option for overseas institutions that seek RMB funding internationally. The People's Bank of China ha continued to issue central bank bills in offshore markets, making the offshore RMB bonds yield curve more complete and market liquidity more adequate. These factors collectively promoted the simultaneous growth of both new issuance and outstanding value in the offshore RMB bond market. In 2024, offshore RMB bond issuance totaled RMB729.3 billion, while the outstanding volume rose to RMB1,466.62 billion—year-on-year increases by 34.0% and 53.9%, respectively. Both figures marked new record highs.

RMB bonds issued in offshore markets and their balances (RMB100 million)





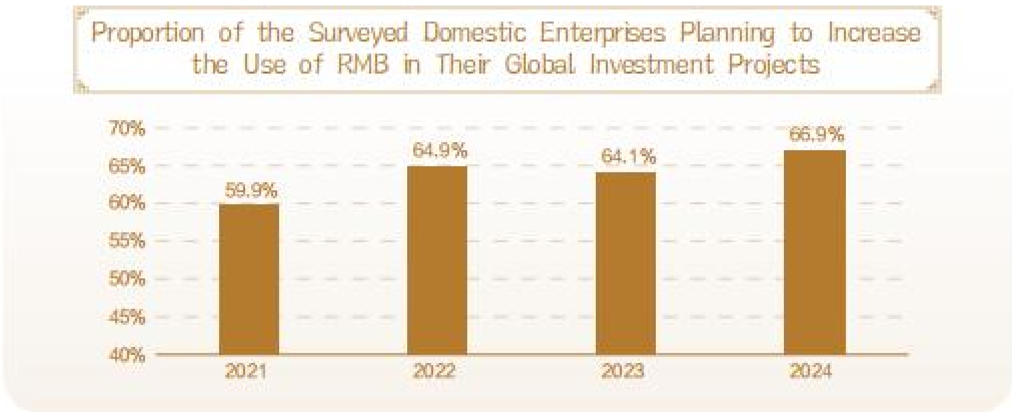
The willingness to prioritize the RMB for trade financing with China remains strong. Among the surveyed overseas enterprises, 65.0% indicated that they would consider using RMB as the preferred currency for trade financing in transactions with China. This preference is particularly pronounced in key regions. For example, 77.1% of the surveyed ASEAN enterprises expressed willingness to prioritize RMB for trade financing with China – consistent with the 2023 level – while 61.2% of European enterprises indicated the same, up by 3 percentage points from the previous year.



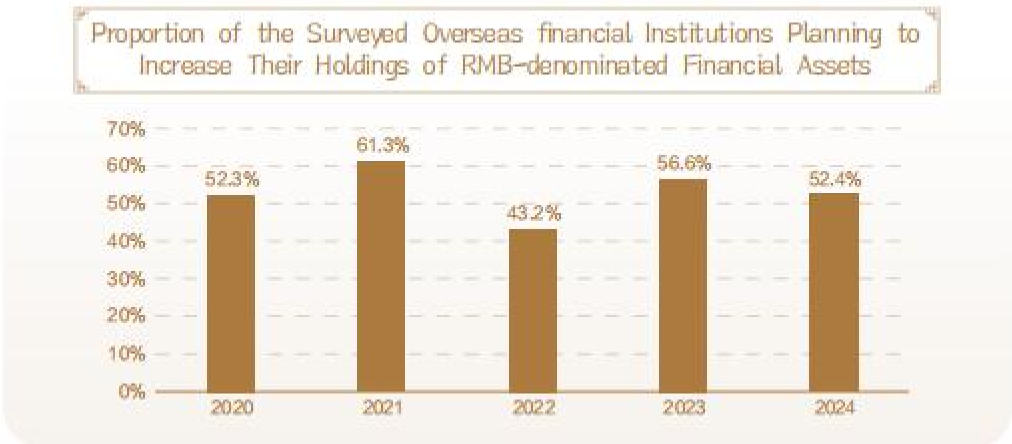
RMB as an investment vehicle currency

The RMB's role as a vehicle currency for direct investment has further strengthened. Among the surveyed Chinese enterprises going global, 27.1% reported that the RMB accounted for at least 50% of their FDI, representing a 2.2 percentage point increase from 2023. Additionally, 22.3% indicated that the RMB made up at least 20% of their FDI, up by 3.1 percentage points year-on-year. These findings underscore the RMB's growing role as a vehicle currency for foreign direct investment.

The intention to further increase the use of the RMB in FDI has also strengthened. According to the 2024 market survey, 66.9% of the surveyed domestic enterprises indicated plans to increase RMB use in their overseas investment projects－a 2.8 percentage point increase from 2023 and the highest level recorded in recent years.

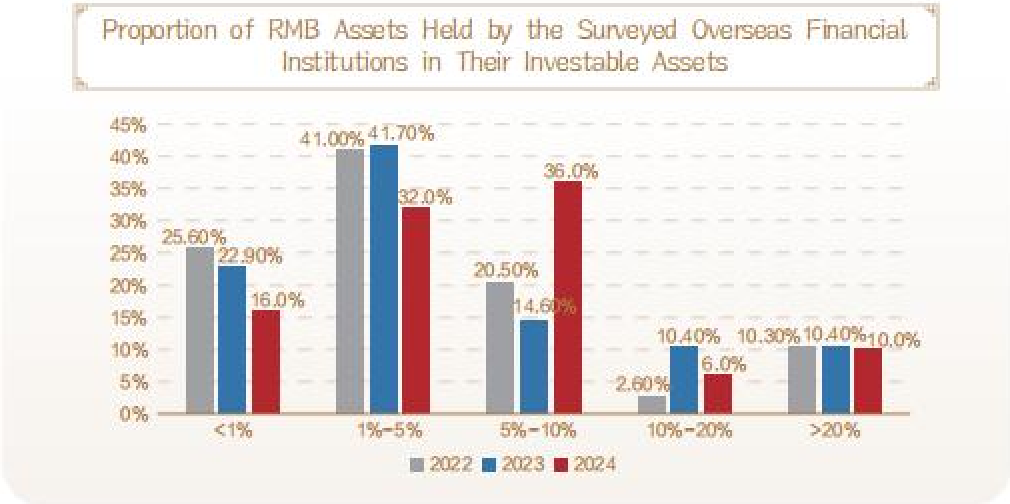


The proportion of overseas financial institutions planning to increase their allocations to RMB financial assets has experienced some fluctuation. In the 2024 survey, 52.4% of respondents expressed an intention to expand their RMB asset holdings, down by 4.2 percentage points from 2023.



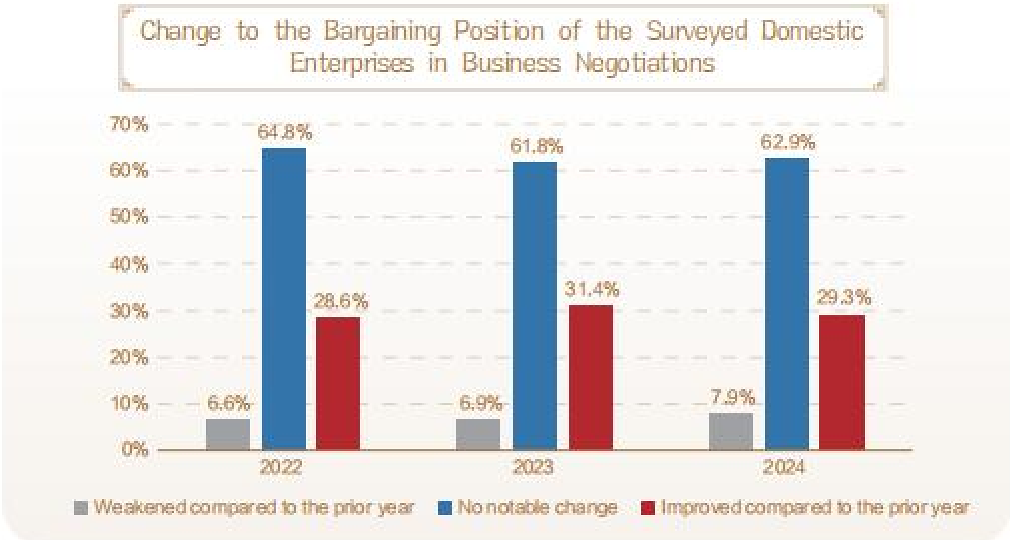
Although the proportion of overseas financial institutions planning to increase their allocation to RMB financial assets declined slightly, those that do intend to increase their allocations have generally shown a tendency to assign a higher weight to RMB assets within their investment portfolios. The 2024 survey results indicate that among the overseas financial institutions planning to increase their allocation to RMB assets, the share of institutions with RMB holdings below 1% or between 1% to 5% of their investable assets declined compared to the previous year. In contrast, the proportion of institutions allocating between

5% and 10% to RMB assets rose by 21.4 percentage points year-on-year, reflecting a stronger intention to increase their investment in RMB financial assets.

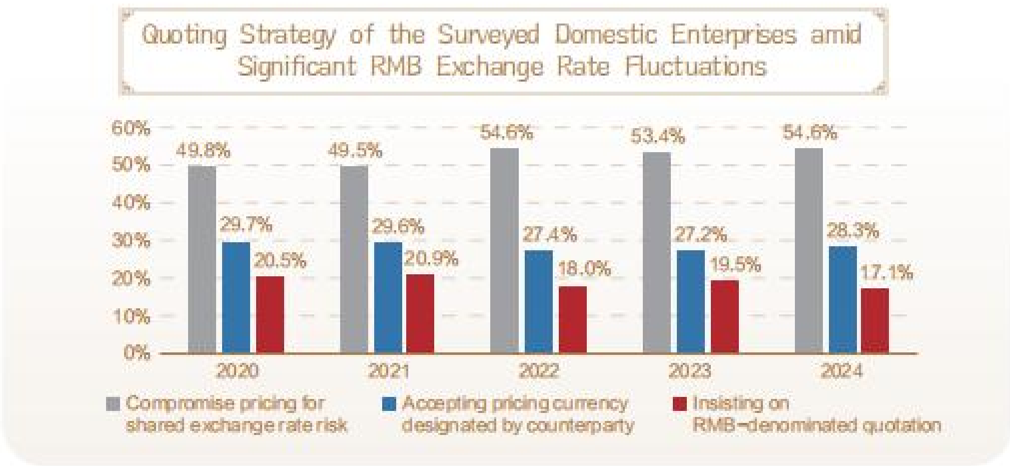


RMB as invoice currency

The bargaining power of domestic enterprises has shown some fluctuations. According to the 2024 survey, 7.9% of domestic enterprises reported a weakening of their bargaining position in business negotiations, a slight increase by 1 percentage point from the previous year. Conversely, 29.3% of enterprises indicated that their bargaining position had improved compared to the previous year. Although this marks a small decline by 1.9 percentage points from the 2023 survey, it remains higher than the level observed in 2022. Additionally, 62.9% of domestic enterprises reported no change in their bargaining position, representing a slight increase by 1.1 percentage points from the previous year. Overall, the bargaining position of domestic enterprises remains somewhat weak and fluctuating, there is still significant potential for improvement.

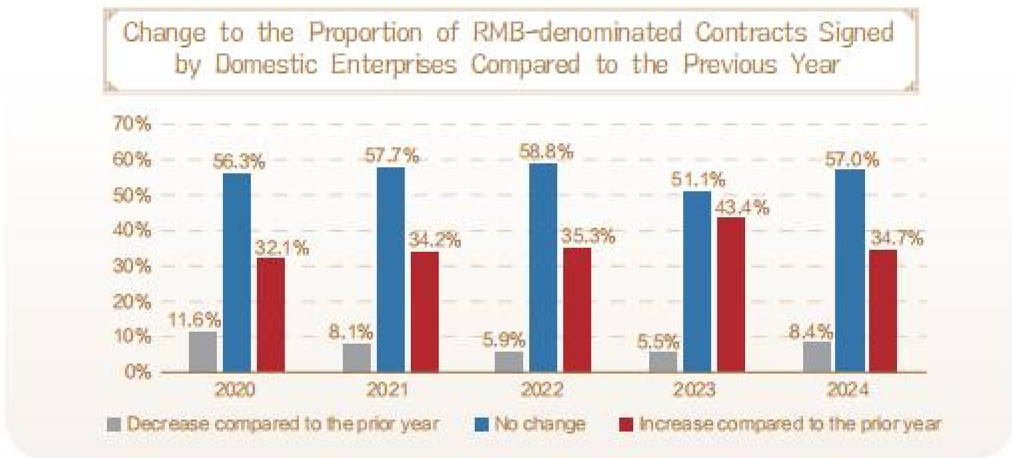


The proportion of enterprises adhering to quotation in RMB has experienced some fluctuations. According to the 2024 survey, 17.1% of domestic enterprises reported that they adhered to quotation in RMB, thereby completely avoiding exchange rate risks. The result is 2.4 percentage points lower than the 2023 survey, marking the relatively low level in recent years. In contrast, the proportion of domestic enterprises that accepted quotation from trade partners, and thus fully bearing the exchange rate risk, increased by 1.2 percentage points compared to 2023.



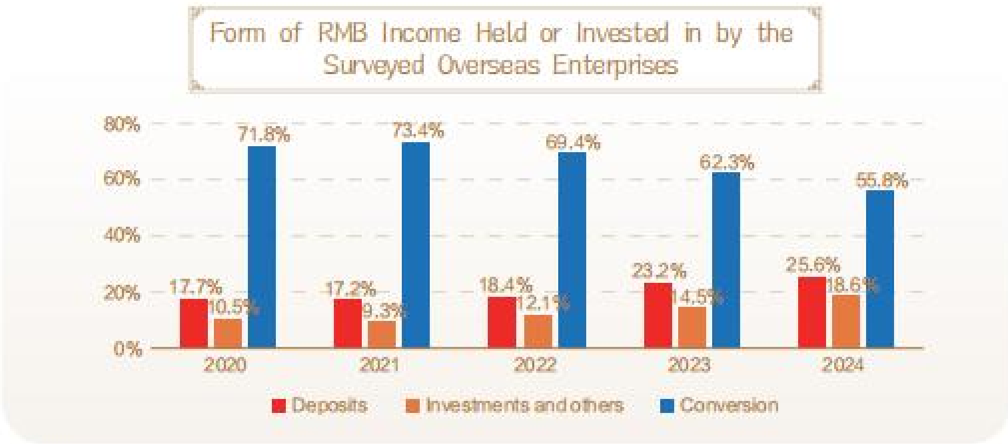
The fluctuation in the proportion of domestic enterprises insisting on RMB quotation might be caused by several factors. Besides the more direct factor, i.e. the changes in bargaining position, there might be indirect factor i.e. change in the pattern of exchange rate movements. In 2024, the annual amplitude of exchange rate fluctuation of RMB against USD decreased by 55.8% compared to 2023, and the number of trading days with extreme fluctuations in the RMB/USD exchange rate dropped by 72.5% from the previous year. The reduced exchange rate volatility may have weakened the motivation of the enterprises to avoid exchange rate risks by adhering to RMB quotation, as reflected in the variation in the proportion of domestic enterprises insisting on quoting in RMB.

The proportion of enterprises signing RMB invoiced crossborder trade contracts also fluctuated. In the 2024 survey, 34.7% of the surveyed domestic enterprises reported an increase in RMB invoiced trade contracts compared to the previous year, a decrease by 8.7 percentage points from the year 2023 survey. Additionally, 57% of the surveyed domestic enterprises indicated that the proportion of RMB invoiced contracts remained unchanged, marking a 5.9 percentage point increase compared to the 2023 survey. This results may be caused by changes in exchange rate volatility as well. As extreme fluctuations in the RMB/USD exchange rate decreased, the motivation for enterprises to use avoid exchange rate risk has not been further reinforced, the enterprises tend to follow the existing practice in choosing invoice currency for trade contracts.



RMB as a store of value

The function of RMB as a store of value has strengthened significantly, with a growing number of overseas enterprises holding RMB cash or financial assets to preserve purchasing power. According to the 2024 survey, 25.6% of the overseas enterprises under survey reported retaining RMB income in the form of RMB deposits for future trade payments with China, an increase by 2.4 percentage points from 2023. Meanwhile, 18.6% of the surveyed overseas enterprises indicated plans to invest in RMB-denominated financial assets such as bonds — an increase by 8.7 percentage points year-on-year. In contrast, the proportion of overseas enterprises converting RMB income into their local currencies fell by 6.5 percentage points to 55.8%.



In 2024, China's CPI recorded a year-on-year increase by 0.2%, unchanged from 2023 and was at the relatively low level among major large economies. Against the backdrop of fluctuating global inflationary pressures, the stability of the purchasing power of RMB has been reaffirmed, attracting more overseas enterprises to hold RMB in the form of deposits or financial assets. The role of RMB, as a general equivalent, has further strengthened its function as store of value.

CHAPTER 3. Cross-border RMB flows between the Chinese Mainland and the Overseas Markets

The cross-border RMB flows between the Chinese mainland and the overseas markets are the origins and foundation of the currency's global circulation. The structure of these flows directly affects the availability of RMB liquidity in other regions, and their regional distribution plays a vital role in shaping and expanding the global RMB circulation network.

Total volume and structure of cross-border RMB flows between the Chinese mainland and the overseas markets

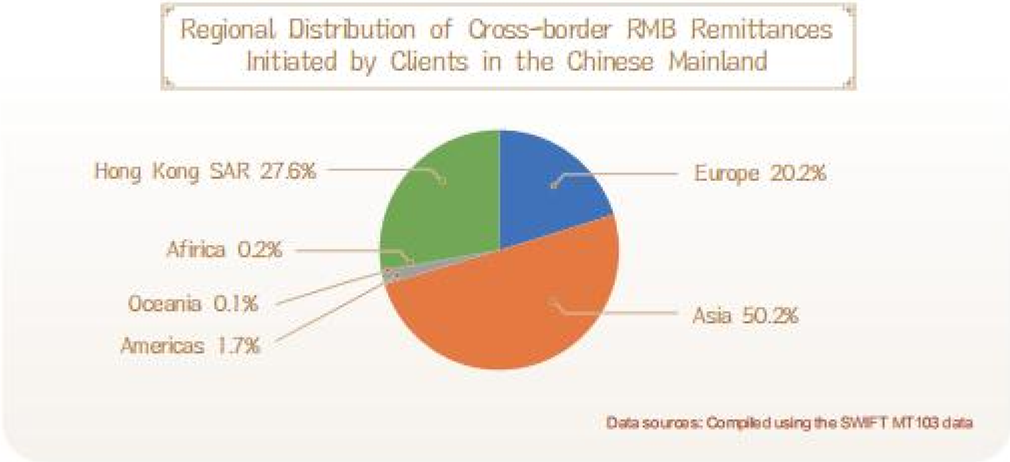
In 2024, cross-border RMB settlements in the Chinese mainland reached approximately RMB64.1 trillion. Structurally, RMB settlements under the current account totaled RMB16.3 trillion, accounting for 25.4% of the total, while settlements under the capital account amounted to RMB47.8 trillion, representing 74.6%. Goods trade and securities investment remained the primary channels for cross-border RMB flows under the current and capital accounts, respectively. Specifically, RMB settlements for crossborder goods trade reached RMB12.4 trillion, making up 76.01% of current account settlements, while RMB settlements for securities investment and financial derivatives totaled around RMB36.9 trillion, accounting for 77.2% of capital account settlements.

From a regional perspective, the Shanghai International Finance Center plays a dominant role in China's cross-border RMB flows. In 2024, Shanghai recorded approximately RMB29.8 trillion in cross-border RMB settlements, accounting for 46.5% of the national total. This included RMB2.4 trillion in goods trade settlements—representing 19.1% of the national total — and nearly RMB22.5 trillion in securities investment settlements, which took up roughly 60% of the country's total capital account settlements.

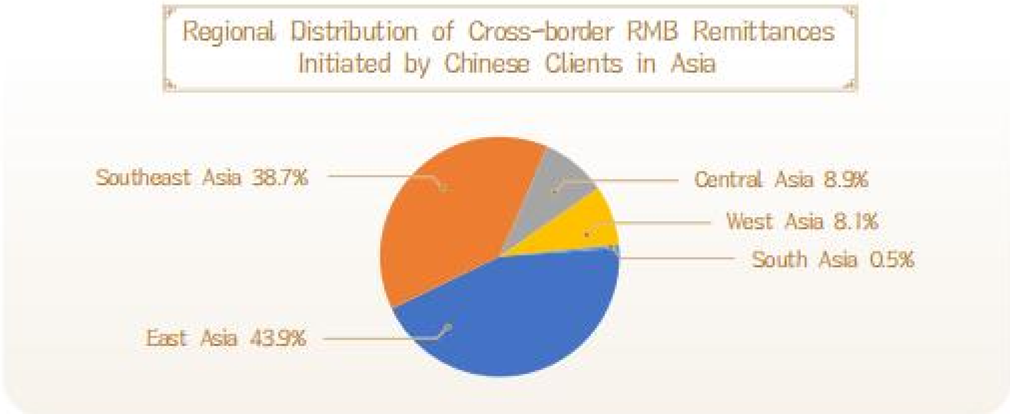
Regional distribution of cross-border RMB flows between the Chinese mainland and the overseas markets

1. Asia's share in cross-border RMB settlements has continued to grow.

Globally, China's cross-border RMB settlements in the Chinese mainland in 2024 occurred mainly with three major regions: Hong Kong SAR, other Asian countries and regions (excluding Hong Kong SAR), and Europe. Together, these regions accounted for approximately 98% of all RMB customer remittances in China. Compared with 2023, Asia—including Hong Kong SAR— increased its share by 2.1 percentage points.

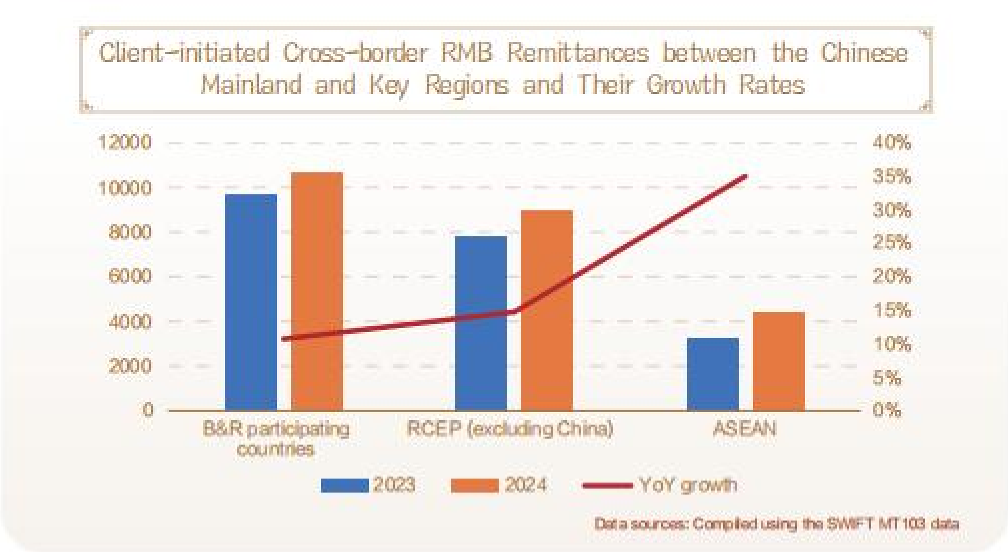


Among RMB customer remittances between Asia (excluding Hong Kong SAR and Macao SAR) and the Chinese mainland, East Asia retained the largest share, Southeast and Central Asia experienced rapid growth. In 2024, East Asia accounted for 43.9% of RMB customer remittances, down by 6.3 percentage points from the previous year. In contrast, Southeast Asia (ASEAN) and Central Asia saw substantial increases by 35% and 267%, respectively. Their shares in the RMB customer remittances between Asia and the Chinese mainland rose to 38.7% and 8.9%, up by 5.2 and 6.0 percentage points year-on-year.



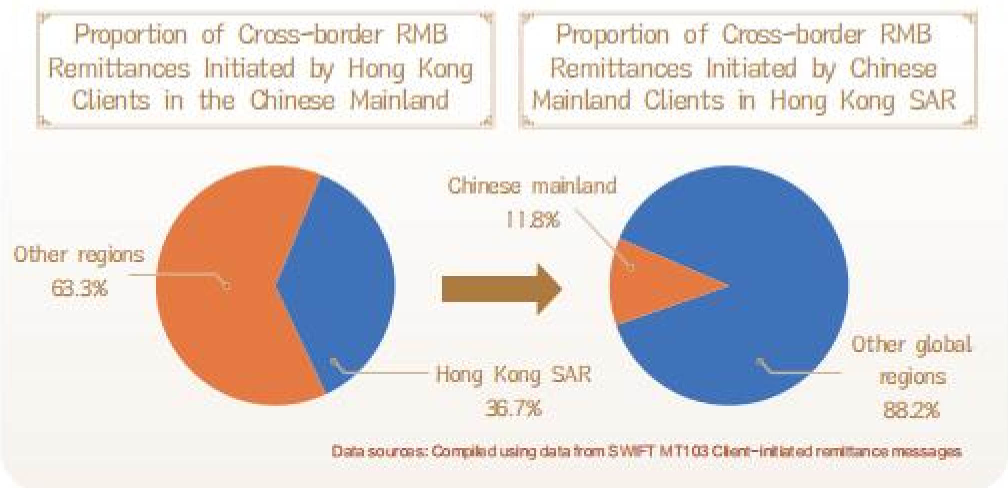
2. Cross-border RMB flows between the Chinese mainland and key regions have continued to grow rapidly.

In 2024, RMB customer remittances between the Chinese mainland and overseas markets rose by 3.4%. In particular, RMB remittances between China and ASEAN, Regional Comprehensive Economic Partnership (RCEP) countries, and countries along Belt and Road (B&R) increased by 10.7%, 14.7%, and35.0%, respectively. These growth rates significantly outpaced the overall growth rate of the RMB customer remittance between the Chinese mainland and overseas markets, highlighting the deepening trade and investment links between the Chinese mainland and these regions and underscoring the accelerating momentum of RMB flows with these key partners.



3. The Hong Kong International Financial Center serves as a key hub for cross-border RMB flows between the Chinese mainland and the regions.

In 2024, RMB customer remittances between the Chinese mainland and Hong Kong SAR accounted for approximately 36.7% of the Chinese Mainland's total RMB cross-border customer remittances. Meanwhile, RMB remittances between the Mainland and Hong Kong made up 11.8% of Hong Kong's total RMB customer remittances. Leveraging its strengths as an international financial center, Hong Kong maintains a leading position in both the value and geographic reach of RMB flows. Over one-third of cross-border RMB funds originating from the Chinese mainland are routed through Hong Kong before being allocated to other global regions, underscoring its critical role in supporting the global circulation of the RMB.

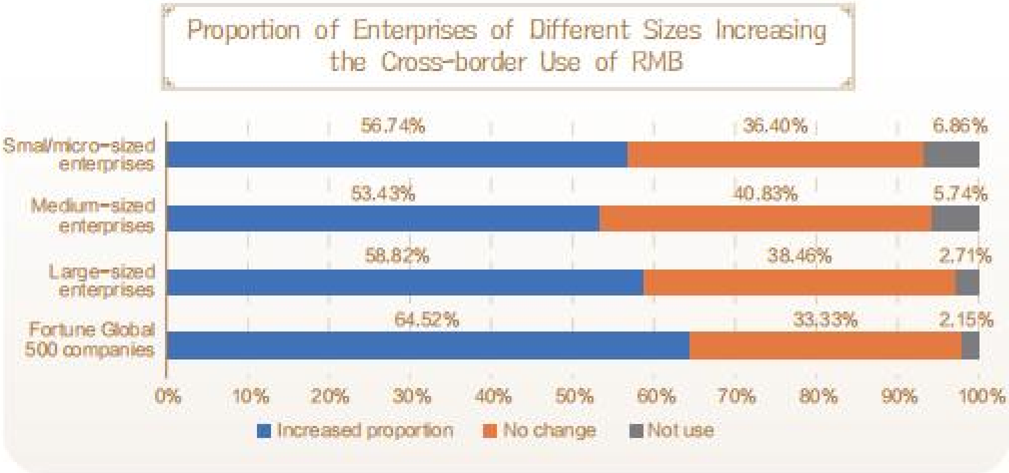


Usage evaluation and feedback of the crossborder RMB products and services

The experience and perception of cross-border RMB products and services by domestic and overseas enterprises—across different sizes, industries, business models, and supply chain position—have microlevel impacts on the quality and efficiency of cross-border RMB flows. The breadness and depth of the coverage of these products and services on market participants are closely related to both the scale and growth potential of cross-border RMB circulation.

1. Large multinational corporations demonstrate a stronger willingness to expand their use of the RMB for settlement.

According to the 2024 survey, 64.5% of the Fortune Global 500 companies and 58.8% of large enterprises indicated plans to increase their RMBdenominated settlements—13.2 and 7.5 percentage points higher, respectively, than general level of all surveyed domestic enterprises. Since 2019, China has steadily streamlined and refined policies that facilitate cash management on local and foreign currencies for multinationals. The policies upgrade the centralized operation of cross-border fund to integrated fund pools covering both RMB and foreign currencies. The consolidation and co-ordination of local and foreign currenciesliquidities has greatly improved the convenience of RMB usage, encouraging more large and super-large multinationals to increase their RMB adoption.

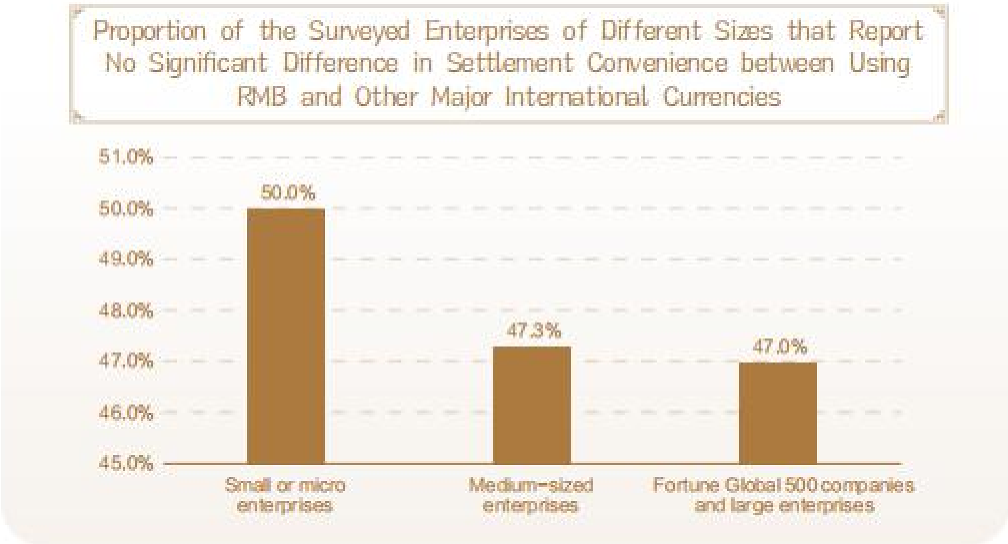


2. Enterprises with more cross-border business are more inclined to use the RMB for settlement.

The 2024 survey showed a clear positive correlation between a company's intention to increase RMB usage for cross-border settlements and the share of import/export revenue in its total income. Firms with a higher share of import/export revenue in their total income are more likely to increase the use of RMB in their cross-border settlements. In contrast, among companies where import and export trade accounts for less than 10% of total revenue, only 48.9% expressed plans to increase RMB usage, 2.4 percentage points below the general level. Enterprises with higher proportion of imports and exports have a higher demand for trade facilitation, and the cross-border use of RMB has promoting effects on trade facilitation. Therefore, these enterprises show a higher willingness to use RMB across borders.

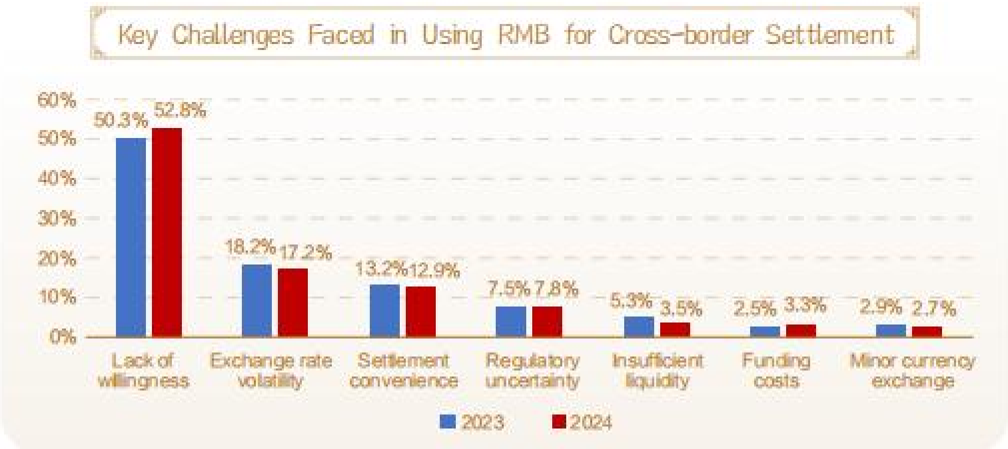
3. Small and medium-sized enterprises show stronger recognition on the convenience of cross-border RMB settlement.

As to the evaluation of cross-border RMB settlement convenience by enterprises of different sizes, small and micro sized enterprises were more likely to give positive feedback. Among these enterprises, 51% reported no significant difference between RMB and other major international currencies in terms of settlement convenience—about 13 percentage points higher than the that for medium and large sized enterprises. The practical advantages of using the RMB for cross-border settlement—i.e. simple procedures, exemption from currency conversion, and avoidance of exchange rate risks—can deliver tangible benefits to micro, small, and medium-sized foreign trade enterprises.



4. Counterparties' willingness to accept the RMB remains a key factor influencing the use of RMB in cross-border settlement.

According to the 2024 survey, the barriers faced by domestic enterprises in using the RMB for cross-border settlement remain largely unchanged from the previous year. The most prominent obstacle continues to be the limited willingness of counterparties to accept RMB, reported by 53.8% of the surveyed enterprises—up by 2.5 percentage points from 2023. Although concerns over regulatory uncertainty saw a slight uptick, their overall impact remains limited. In contrast, improvements in the supporting facilities in market mechanism i—such as improved offshore RMB liquidity provison mechanism and smoother conversion with nonmajor international currencies—have helped ease some of the previous constraints on RMB usage for settlement.



The survey results indicate that, toenhance the scale and level of cross border settlements in RMB, continueous efforts will be needed on the offshore end, i.e. further improving market infrastructure, optimizing RMB liquidity provision, strengthening monetary and financial cooperation, and deepening the connectivity between domestic and international financial markets, to consistently foster and and expand overseas demand for the use of RMB in cross-border transactions.

Case: Z Bank's Xiamen and Jakarta Branches Collaborate to Provide Integrated Cross-Border RMB Services, Bringing about More Trade and Investment Facilitation to the enterprises

To meet the diverse needs of Chinese enterprises going global, Z Bank's Xiamen Branch partnered with its Jakarta Branch to deliver integrated cross-border RMB services to Xiamen-based XY Group—one of China's four major commodity supply chain leaders. This cooperation has facilitated XY Group's overseas trade and investment activities and significantly expanded its use of the RMB in cross-border transactions.

I. Supporting the group's FDI with RMB services

In response to Indonesia's 2014 ban on laterite nickel ore exports, XY Group established OSS Company in Indonesia to develop an integrated stainless steel smelting industrial park with a total investment for approximately equivalent value of RMB14 billion. Since most of the equipment and construction services were sourced from China, the group opted to contribute the capital in RMB. Z Bank assisted with the Overseas Direct Investment (ODI) registration and handled outbound RMB capital settlement for about RMB4 billion.

II. Providing overseas RMB financing solutions

During the project's construction phase, Z Bank acted as the leading arrangement bank for a syndicated cross border loan for equivalent value of RMB7 billion to OSS Company, . The syndicate included over 10 participating banks across five countries and regions and incorporated three different loan products. To reduce exchange rate risks and financing costs, Z Bank optimized the product portfolio, and structured the syndication primarily around RMB-denominated loans. This approach received endorsement from both the borrower and the participating banks, with RMB financing accounting for over 70% of the total syndicated amount. The financing was executed as a cross-border RMB direct loan, effectively supporting the project's implementation in Indonesia.

3. Facilitating RMB settlement across the supply chain

Following the project's commencement, Z Bank's Xiamen and Jakarta branches continued to work closely to provide cross-border RMB settlement services. Since the project became operational, they have handled cross border RMB settlement for XY Group's sales revenues and the cumulative settlement value amounted to RMB11.4 billion in. Furthermore, they respectively extended RMB1.5 billion and RMB400 million credit lines for the domestic parent company and OSS Company, , to support XY Group's import financing and OSS Company's raw material procurement.

Through Z Bank's integrated cross-border RMB services, XY Group has significantly enhanced trade and investment facilitation enjoyed by the enterprise, whose demand for cross border use of RMB grew rapidly. The proportion of cross-border RMB settlements in its international settlements under current account of XY Group surged from 28.4% to 67.9%.

Support for cross-border use of RMB through two-way financial market opening

Enhanced interconnectivity between domestic and international financial markets facilitates smoother and more extensive cross-border circulation of the RMB. It expands the channels for RMB flows and facilitates the optimization of RMB assets allocation. Moreover, the linkage between domestic and overseas markets allows functions of domestic financial infrastructure to extend its reach to overseas markets and provides indirect backing to local cross-border RMB products and services.

1. Stable participation by overseas financial institutions in China's financial market.

According to the 2024 survey, 46.7% of overseas financial institutions reported having participated in or invested in China's financial market— a proportion that remains largely unchanged from 2023. This reflects a generally stable level of engagement by overseas financial institutions in the domestic financial market.

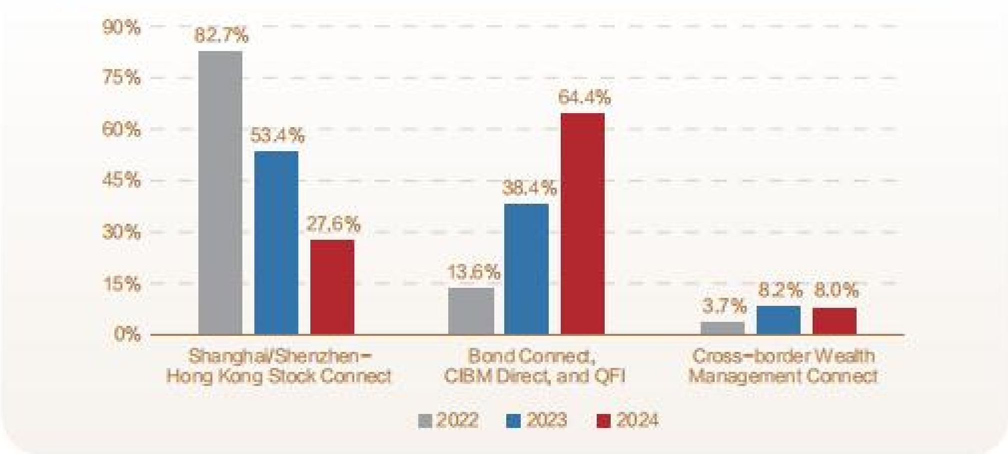
2. More diversified channels adopted by overseas financial institutions participating in China's financial market.

The 2024 survey indicates that overseas financial institutions are accessing China's financial market through increasingly diverse channels. Among the surveyed overseas financial institutions, 26.00% utilized two or more products or channels—i.e. the Shanghai/Shenzhen-Hong Kong Stock Connect, Bond Connect, CIBM Direct, Wealth Management Connect, QFI, or depository receipts—representing an increase by 8.46 percentage points from 2023. This growing use of multiple access reflects the rising diversity of demand for RMB products and services in international markets.

3. More balanced channel preferences among the surveyed overseas enterprises and financial institutions that participate in China's financial market.

As China's level of two-way financial market opening continues to enhance, overseas financial institutions are displaying more balanced preferences across available access channels or products and services. The reliance on the Shanghai/Shenzhen-Hong Kong Stock Connect has gradually declined, while participation through the Bond Connect, CIBM Direct, and QFI schemes has steadily increased. This shift reflects the broader array of accessible options and is contributing to deeper and more diversified engagement by overseas financial institutions in China's financial market.

Products Through Which the Surveyed Financial Institutions Participate in Two-way Opening of China's Financial Market



Cross-border use of e-CNY

Compared with traditional cross-border fund transfers, the use of e-CNY offers three key advantages. First, enhanced cost-effectiveness and operational efficiency. In conventional account systems, there may exist non-synchronization between transmission of remittance information and funds settlement information. Project mBridge, which is based on digital currencies and a distributed ledger architecture, facilitates payment-versus-payment (PvP) settlement without the involvement of correspondent banks. This streamlines the transaction path between payer and payee, reduces intermediary fees and processing delays, and enables real-time settlement. Operating 24/7, digital currency systems further improve the overall efficiency of cross-border payments. Second, risk diversification. Growing concerns over long-arm jurisdiction in certain countries have led enterprises to seek alternative payment channels. The use of digital currencies can help ensure that compliant cross-border transactions are settled smoothly. Third, technological innovation. Digital currencies are programmable and can be integrated with smart contracts and big data technologies, creating a new paradigm for cross-border payments. For instance, privacy-preserving distributed ledgers enable data sharing while protecting data security, so as to support more effective cross-border regulatory cooperation. This, in turn, more effectively addresses anti-money laundering (AML) and counter-terrorist financing (CTF) issues. Moreover, smart contracts can automate liquidity transfers, helping enterprises reduce liquidity management costs. Aimed at improving cross-border payments, the cross-border application of e-CNY has been gradually advancing through two key modes: bilateral cooperation and the m-Bridge project.

1. Bilateral cooperation mode.

The bilateral cooperation mode refers to pilot cross-border application s of e-CNY conducted within the framework of cooperation agreements signed between the PBC and overseas central banks or monetary authorities. For instance, under the guidance of regulatory authorities from both the Chinese mainland and the Hong Kong SAR, BOC took the lead in launching cross-border e-CNY trials in Hong Kong. These trials initially established service capabilities for both individual and corporate users in the region.

Case: Z Bank Expands E-CNY Services under the Bilateral Cooperation Mode

In 2024, as a result of bilateral collaboration between the PBC and the HKMA, Hong Kong became the first overseas pilot region for the use of e-CNY. Leveraging on the opportunity presented by supportive regulatory policies and the growing market interest, Z Bank in Hong Kong established a comprehensive e-CNY service framework covering three core areas: personal e-CNY wallets, cross-border merchant acquiring, and corporate cross-border payments via e-CNY.

For personal e-CNY wallets, in 2024, Z Bank launched an e-CNY service module within its proprietary mobile payment app, enabling users to bind and recharge their e-CNY wallets, check balances, and receive promotional red envelopes. This enhanced convenience for Hong Kong users traveling to or consuming within the Chinese Mainland.

As to cross-border merchant acquiring, Z Bank implemented real-time currency quotation and conversion functions, allowing merchants to settle in either HKD or RMB. As at the end of 2024, over 300 local merchants—including those in cosmetics and convenience retail sectors—had adopted Z

Bank's services. The bank also partnered with major local retail chains such as Mannings and SOGO. A notable innovation involved enabling southbound travelers to recharge their Octopus cards using e-CNY, expanding its use to approximately 190,000 acceptance points across Hong Kong.

Regarding corporate cross-border payments via e-CNY, on a pilot basis, Z Bank offered local enterprises a full suite of e-CNY services, including wallet recharge, cross-border payment, redemption, account opening, and inquiry. The Bank successfully processed the first corporate cross-border e-CNY transaction for a bulk commodity purchase. In collaboration with the Shanghai Gold Exchange, Z Bank also completed the first-ever cross-border gold settlement using e-CNY, paving the way for overseas investors to access China's precious metals market via e-CNY.

2. mBridge mode.

The Multi Central Bank Digital Currency Bridge (mBridge) project is a cross-border payment and clearing platform jointly initiated by the Bank of Thailand, the Central Bank of the United Arab Emirates (UAE), the PBC Digital Currency Institute, and the HKMA. Following its first real-value pilot conducted from August to September 2022, mBridge completed a pre-MVP1 pilot between April and May 2024. On June 5, 2024, it officially entered the MVP stage, launching continuous operations. On the same day, the Saudi Central Bank also announced its formal participation in the initiative.

To date, numerous domestic and overseas banking institutions—including BOC's domestic branches, BOCHK, BOC (Thai), and Abu Dhabi Branch— have actively participated in the mBridge project. These institutions have supported the pioneering cross-border transactions and advanced the application of e-CNY in diverse settlement scenarios.

Case: Cross-Border Trade Settlement via the mBridge Project

In June 2024, an importer in the UAE initiated a payment to an exporter in Yunnan Province, China. Under the traditional SWIFT-based system, the absence of a direct account relationship between the importer's paying bank and the exporter's beneficiary bank would have necessitated routing the transaction through intermediary banks—incurring higher remittance costs and creating uncertainty regarding the timing of fund delivery. However, since both China and the UAE are participants in the mBridge project, the trading parties opted to settle the transaction using central bank digital currencies (CBDCs) via the mBridge platform.

Under the mBridge mode, the importer's bank directly transferred digital currency through the mBridge to the exporter's bank, which then credited the funds to the exporter's account.

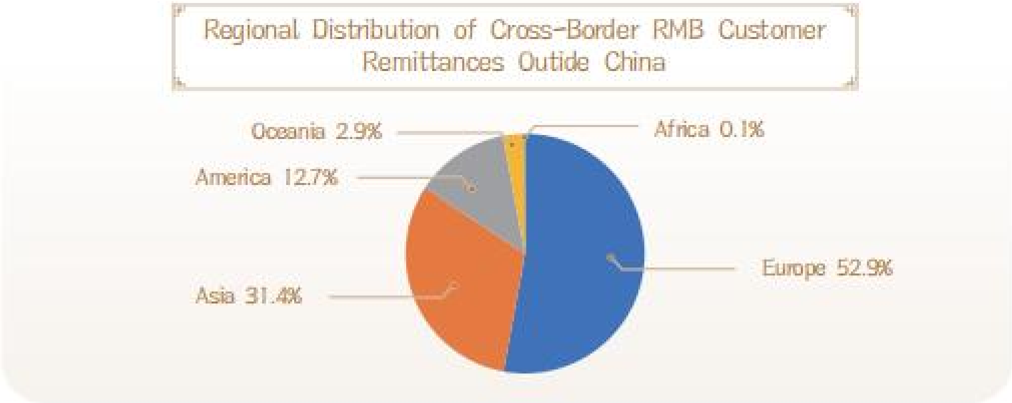
Compared with traditional cross-border payment methods, the mBridge-based settlement offered a significantly improved experience. First, it eliminated the need for intermediary correspondent banks, thereby reducing transaction costs. Second, it enabled the simultaneous transfer of funds and transaction information, ensuring greater efficiency, transparency, and timeliness in fund delivery.

CHAPTER 4. Offshore RMB Market Developments

RMB fund flows in offshore markets

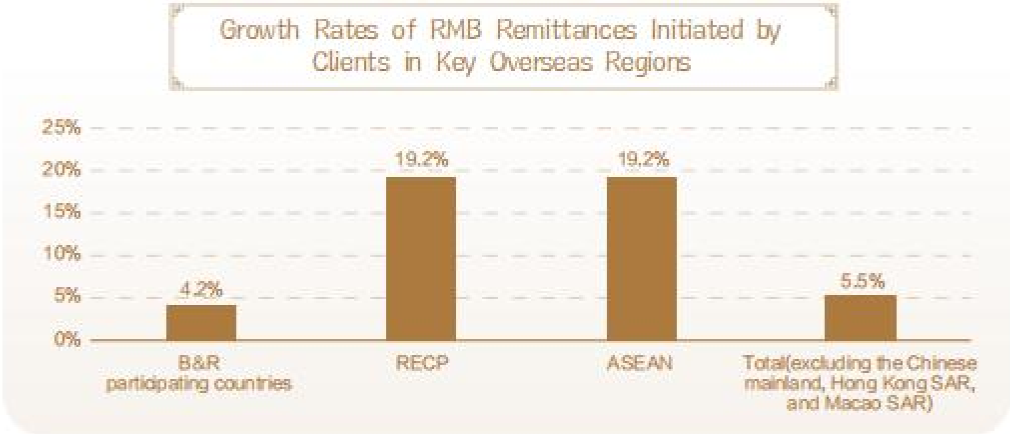
1. Expansion in offshore RMB payments and receipts, with Asia's share in overseas RMB customer remittances increasing.

In 2024, total cross-border RMB customer remittances in regions outside China2 increased by 5.5% year-on-year. While Europe continued to account for more than half of the total volume, its share declined by 4.2 percentage points from the previous year. In contrast, Asia's share rose by 3.9 percentage points year-on-year, surpassing 30%.



2. Rapid growth in the RMB customer remittances in RCEP and ASEAN countries.

From the perspective of important economic regions, in 2024, customer RMB remittances in RCEP and ASEAN countries both recorded robust year-on-year growth of approximately 19.2%, which is 13.7 percentage points higher than the overall growth rate of RMB customer remittances outside China. This rapid expansion led to an increased share of RMB in total customer remittances within these regions. Specifically, RMB accounted for 27.8% of remittances in the RCEP region, up by 3.2 percentage points year-on-year, while the share of the ASEAN region reached 18.9%, an increase by 2.2 percentage points from the previous year.

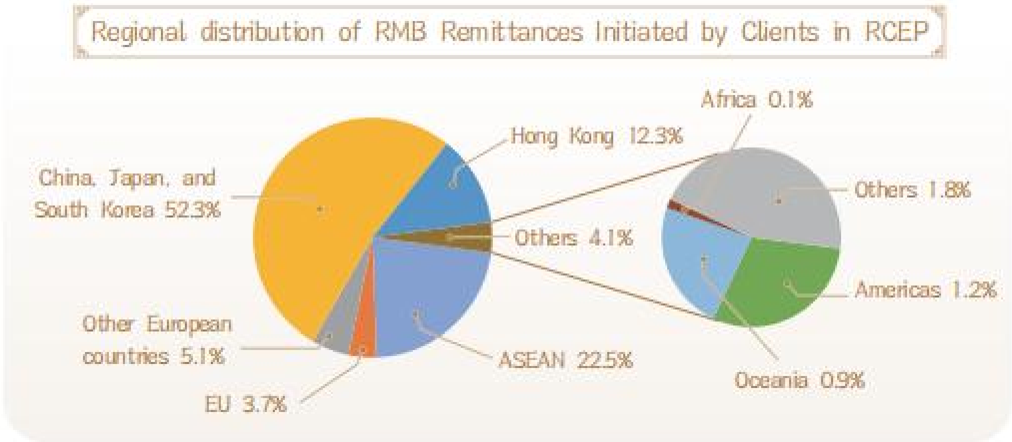


RMB fund flows in key regions

In 2024, the RCEP region and the EU remained the two largest sources of RMB customer remittances in offshore markets, accounting for 27.8% and 26.3% of the total, respectively. These regions serve as key indicators for understanding the overall international use of the RMB.

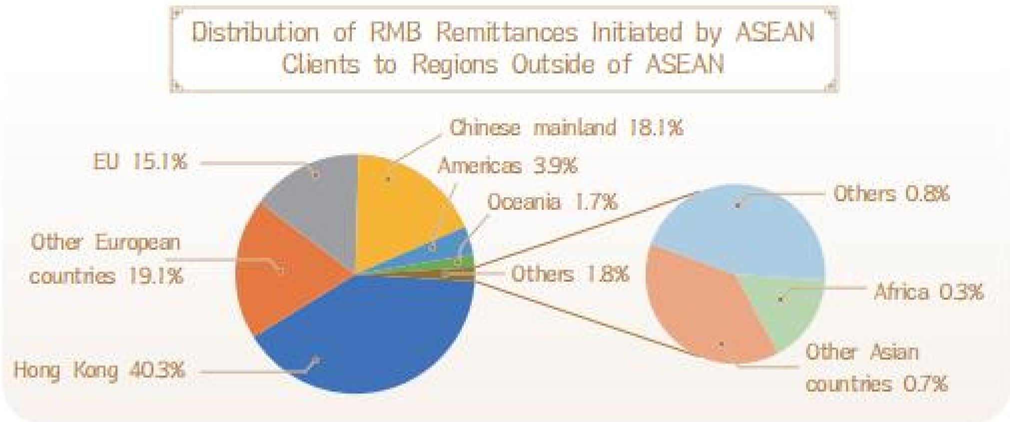
1. Cross-border use of RMB in the RCEP region

In 2024, RMB customer remittances from the RCEP region reached 56 countries and regions worldwide, with total remittance volume increasing by 19.2% year-on-year. Intra-regional RMB usage remained robust, as RMB customer remittances among RCEP member countries accounted for 75.6% of the region's total. Among non-RCEP countries and regions, Europe ranked second only to Hong Kong SAR in terms of RMB customer remittance value with RCEP countries, making up 8.8% of the total.



Hong Kong SAR, the UK, France, Germany, and the Netherlands recorded the relatively large value of RMB fund flows with the RCEP region in 2024, collectively accounting for 77.2% of all RMB customer remittances between non-RCEP and RCEP regions.

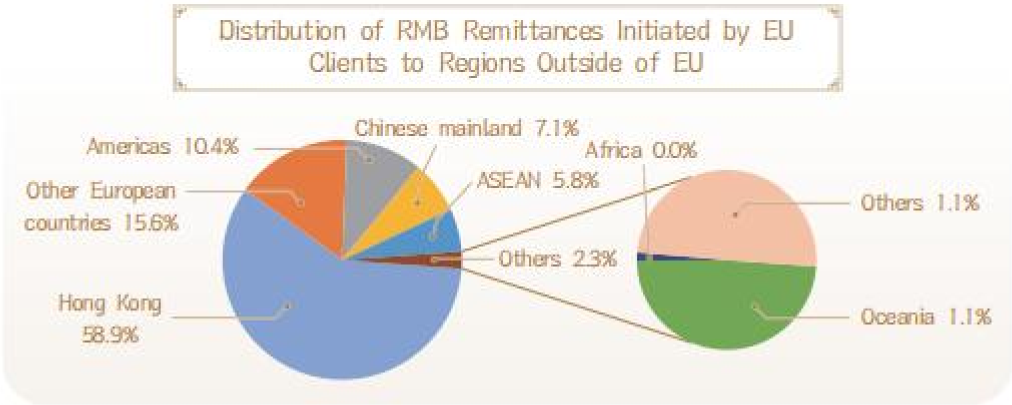
As a regional bloc within the RCEP region, ASEAN countries saw active RMB payments and settlements, accounting for 27.0% of total RMB customer remittances within the RCEP region. Notably, intra-ASEAN RMB customer remittances made up 66.8% of ASEAN's total, reflecting robust internal RMB usage and contributing positively to the broader adoption of RMB settlement across the RCEP region.



2. Use of RMB in the EU

In 2024, EU-based client-initiated RMB remittances reached 97 countries and regions worldwide, accounting for 75.5% of all RMB remittances in Europe and 26.3% of global RMB remittances outside China. IntraEU RMB customer remittances made up 32.4% of the EU's total RMB customer remittances, indicating that a larger share of the EU's RMB transactions occurred with non-EU counterparts—a contrast to patterns seen in ASEAN and the broader RCEP region.

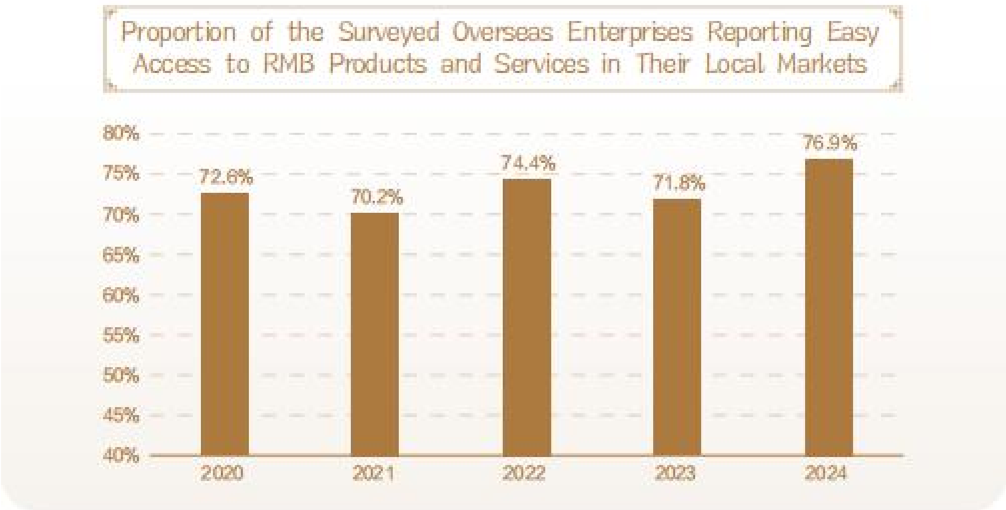
Hong Kong SAR, the UK, the US, the Chinese mainland, and Singapore were the EU's top five trading partners by RMB customer remittance value, collectively accounting for 96.8% of the EU's RMB remittances with nonEU countries and regions.



Products and services in offshore RMB markets

1. Wider coverage of cross-border RMB products and services in overseas markets.

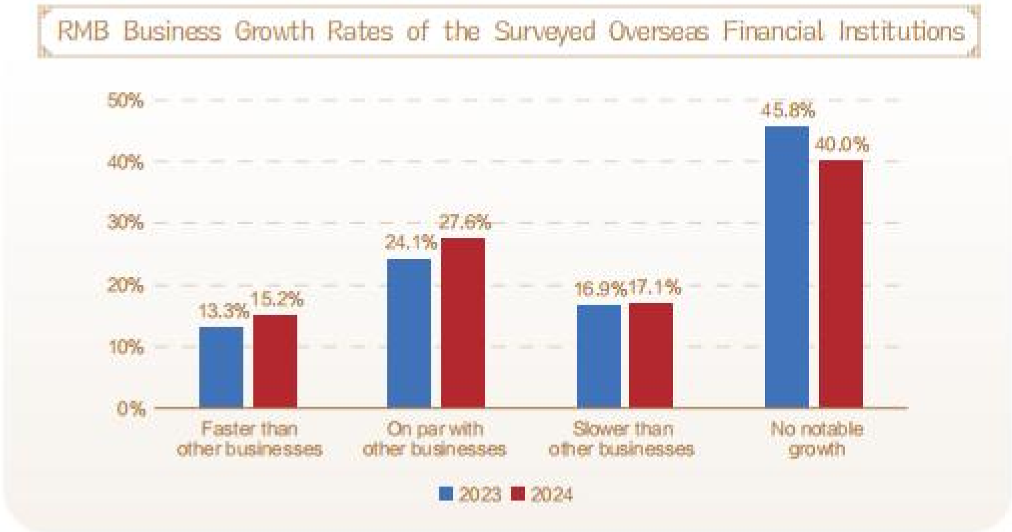
According to the 2024 survey, 76.9% of overseas enterprises reported relatively convenient access to RMB products and services in their local markets, marking a 5.1 percentage point increase from 2023. This reflects the enhanced availability and coverage of RMB products and services for overseas corporate clients.



2. Growing demand for cross-border RMB products and services in overseas markets.

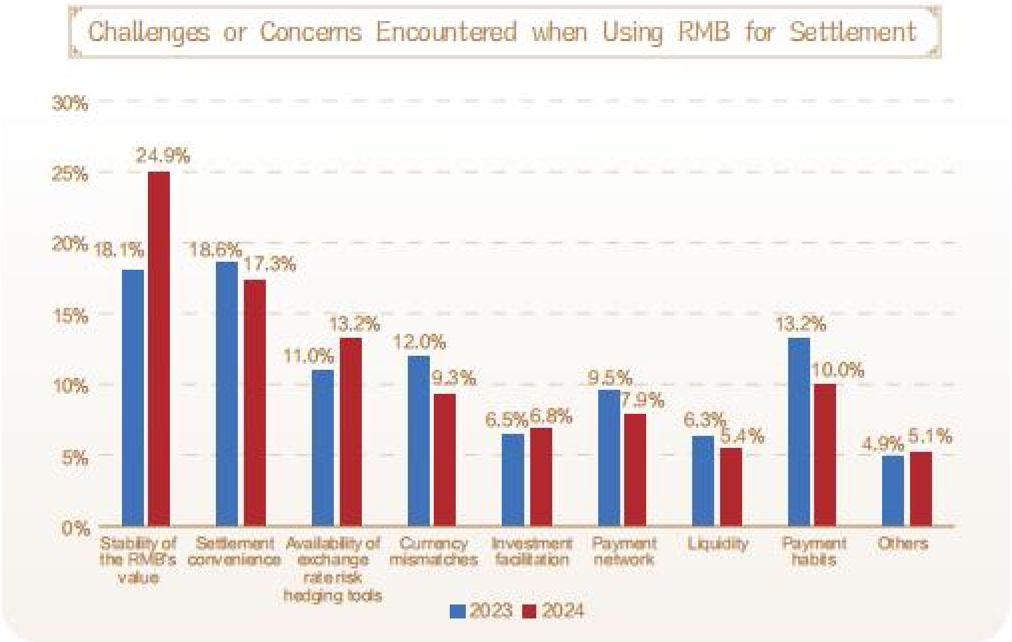
The 2024 survey indicates a continued rise in demand for RMB products and services among overseas enterprises. Notably, 15.2% of the surveyed overseas financial institutions reported that their clients' demand for RMBrelated products and services is growing faster than for other business segments, representing a 1.9 percentage point increase from 2023. At the same time, the proportion of institutions seeing no significant increase in such demand fell to 40.0%, down 5.8 percentage points year-on-year.

Correspondingly, 65.7% of the surveyed overseas financial institutions indicated plans to further expand their range of cross-border RMB products and services, marking a 5.7 percentage point increase compared to 2023. Driven by robust demand growth, an increasing number of overseas financial institutions are actively seeking to diversify their RMB offerings to better serve the evolving needs of overseas enterprises.



3. Cultivating and expanding demand for RMB products and services among overseas enterprises requires enhanced outreach and coordinated efforts.

According to the 2024 survey, a variety of factors influence the willingness of overseas enterprises to adopt the RMB for settlement, each to varying degrees. Key considerations include the stability of the RMB's value, convenience of settlement, availability of exchange rate risk hedging tools, potential currency mismatches between payments and receipts, access to investment channels, payment network coverage, accessibility of RMB funding, and the need to shift away from established payment practices.



In the 2024 survey, more overseas enterprises expressed concerns regarding the stability of the RMB's value. Compared with major economies and international currencies, China's price level has remained relatively stable, indicating a stable intrinsic value of the RMB. Moreover, the RMB has broadly remained stable or appreciated against a basket of currencies, reflecting its external value stability. These findings highlight the need for enhanced communication efforts to help overseas market participants better understand the fundamentals of the RMB through diverse channels.

The 2023 and 2024 survey results show that the factors influencing corporate RMB usage are relatively evenly distributed, with no single factor emerging as a dominant influence. This suggests that, beyond enhancing outreach, a comprehensive approach is necessary to cultivate and expand demand for RMB products and services. Such an approach should encompass infrastructure development, a broad range of supporting product offerings, and robust liquidity supply.

RMB businesses in major offshore RMB centers

1. Rapid growth in RMB businesses across major offshore RMB centers

In 2024, major offshore RMB centers recorded a general upward trend in RMB business volume, with notable growth in both global RMB payment clearing and RMB-FX trading volume. For example, RMB-FX trading volume in Hong Kong increased by 59.4%, while its RMB payment clearing volume rose by 41.2%. In Singapore, RMB-FX trading grew by 40.6%, and in the UK, RMB payment clearing volume expanded by 45.6%.

Business Scale of Major Offshore RMB Markets

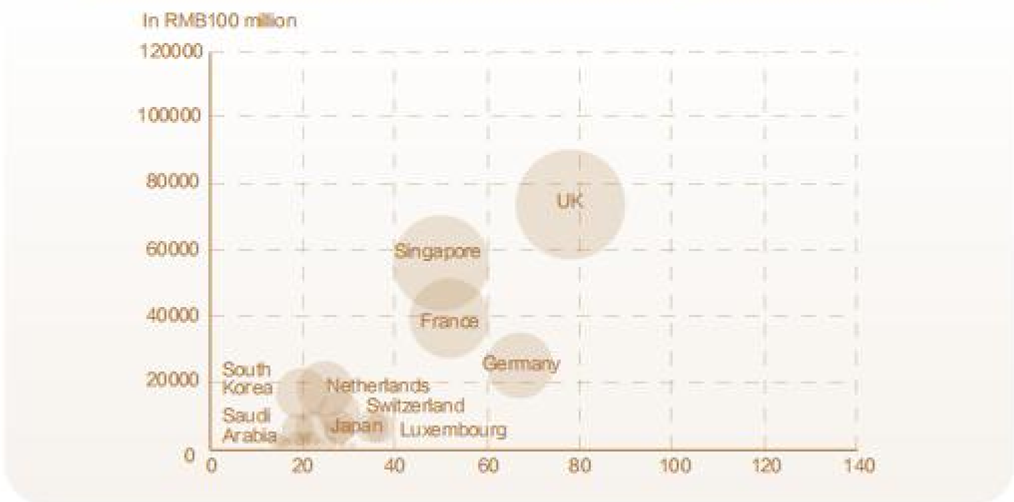
		RMB deposits (RMB100 million)	RMB loans (RMB100 million)	RMB-FX trading (USD1 trillion)	RMB payment clearing (USD1 trillion)
Hong Kong SAR	Volume	9,266	7,235	68.9	224.5
	YOY change	-1.3%	64.0%	59.4%	41.2%
Singapore	Volume	2,760		11.3	9.7
	YOY change	17.4%		40.6%	28.6%
The UK	Volume	1,560	324	100.6	16.1
	YOY change	64.6%	-4.1%	21.0%	45.6%

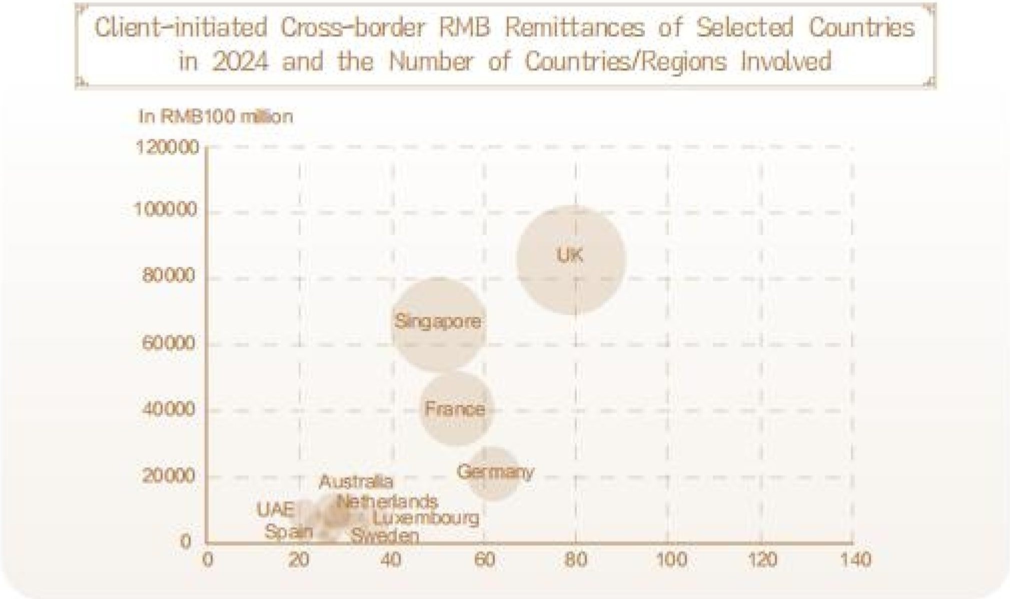
Data sources: Compiled using data from Swift Marketing Insights, the HKMA, the Monetary Authority of Singapore (MAS), and the Bank of England (BoE)

2. RMB flows in the offshore network becoming more concentrated in key nodes.

In 2024, the number of offshore RMB centers that occurred RMB customer remittances with over 20 countries or regions remained steady at 24, indicating no change in the number of key nodes within the offshore RMB network. However, these centers continued to see a further increase in RMB remittance volumes.

Client-initiated Cross-border RMB Remittances of Selected Countries in 2023 and the Number of Countries/Regions Involved



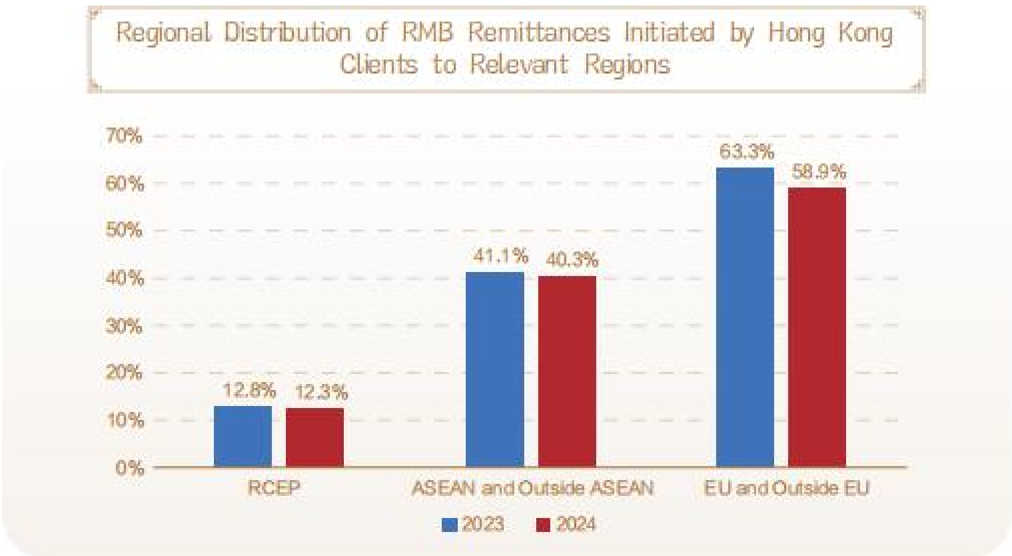


These 24 offshore centers recorded a 6.5% increase in RMB remittance value in 2024, outpacing the overall growth rate of RMB customer remittances outside China by 1 percentage point. Among the top five offshore centers (excluding Hong Kong SAR) ranked by the number of countries or regions involved in RMB remittances, four registered an increase in remittance value. Collectively, these five centers posted a 9.0% growth rate, exceeding the average for the 24 offshore centers. This trend highlights a further concentration of offshore RMB flows toward key nodes within the network.

3. Hong Kong maintaining its central hub status in offshore RMB markets

In 2024, Hong Kong SAR accounted for 50.8% of RMB customer remittances between the RCEP region and non-RCEP regions, 40.3% between ASEAN and non-ASEAN regions, and 58.9% between the EU and non-EU regions. These figures underscore Hong Kong's dominant role in facilitating RMB payments and receipts within and across key regions, reaffirming its position as the central hub in the offshore RMB network.

However, compared with 2023, Hong Kong SAR's share declined slightly in 2024. Under the "one core, multiple nodes" pattern of offshore RMB center distribution, other major centers have expanded their RMB flow volumes. This trend reflects the continued broadening and deepening of the offshore RMB network, signaling enhanced global coverage.



Topic: RMB in Multilateral Cooperation

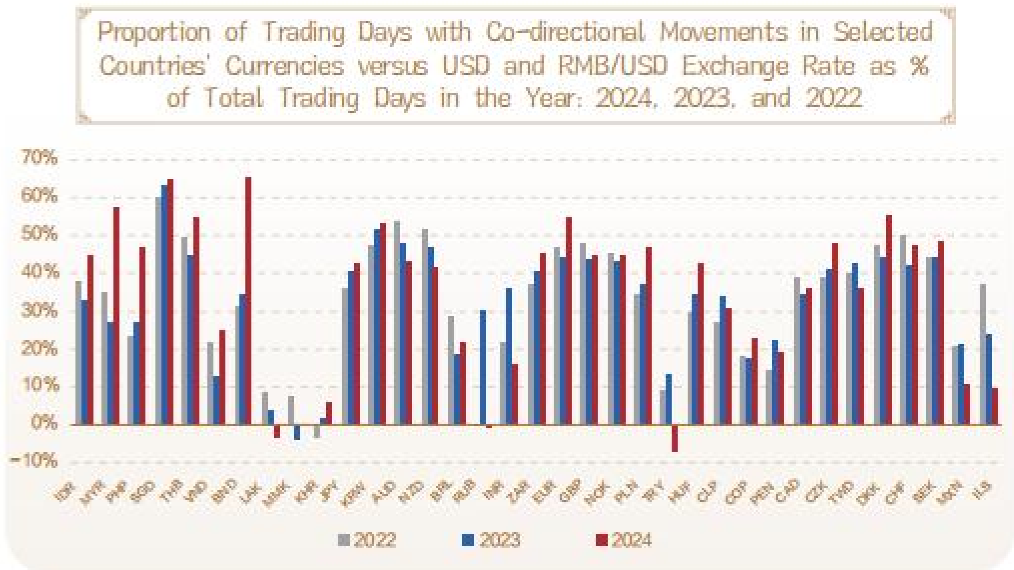
In 2024, multilateral cooperation sustained momentum for robust growth. The XVI BRICS Summit Kazan Declaration issued in October explicitly endorsed the use of local currencies in trade and financial transactions, providing fresh impetus for deepening multilateral collaboration. In parallel with participation in multilateral local currency settlement frameworks, China actively promoted bilateral cooperation, signing new memorandums of understanding with the State Bank of Vietnam and Norges Bank. As of now, the PBC has established bilateral local currency swap agreements with the central banks or monetary authorities of 29 countries and regions, recording a total swap value of over RMB4 trillion.

Drivers and willingness for multilateral cooperation

1. Stronger correlation in exchange rate movements boosting cooperation incentives.

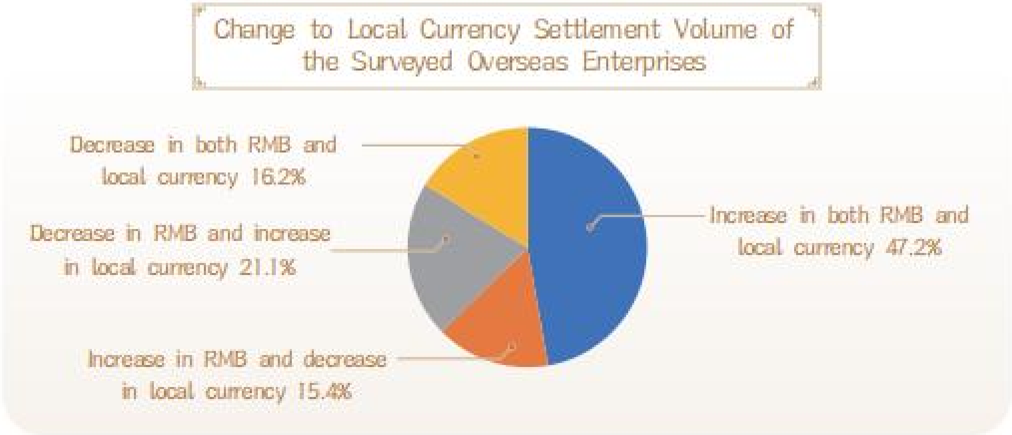
In 2024, among 35 currencies tracked over a continuous three-year period, 26 showed an increase in the proportion of trading days on which they moved in the same direction as the RMB—a substantial rise of 16 currencies compared to 2023.

When a country's currency against the US dollar moves more synchronously with the RMB against the US dollar, the bilateral exchange rate between the two tends to be more stable. This reduced volatility helps mitigate exchange rate risks in cross-border transactions settled in local currencies, thereby enhancing the appeal of local currency settlements.



2. Positive momentum in multilateral cooperation and strong recognition of local currency settlements.

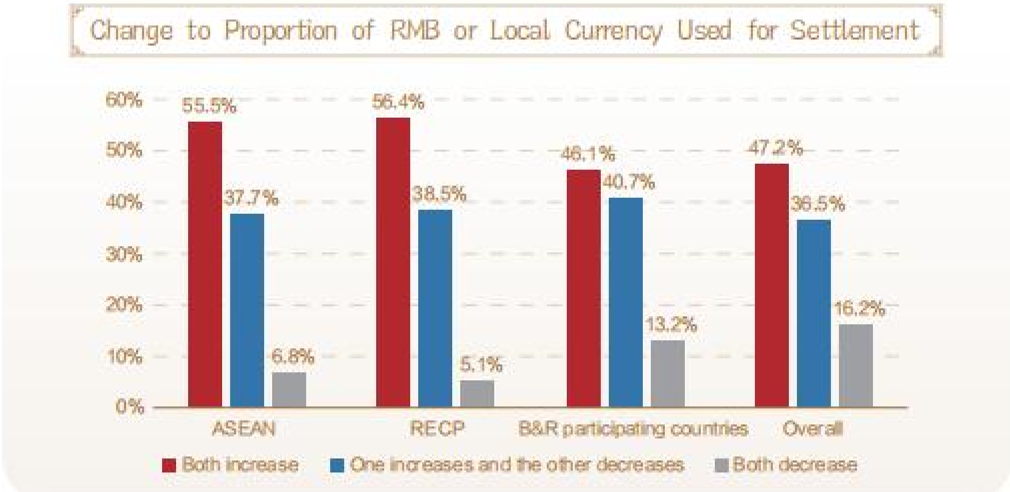
According to the 2024 survey, over 80% of the surveyed overseas enterprises reported increased use of local currencies settlement compared to the previous year. Notably, more than 40% indicated that both the RMB and their respective local currencies had seen expanded usage in trade settlements. Only 15.4% reported a decline in the share of transactions settled in RMB or local currencies. These findings reflect continued momentum in local currency usage, driven by more refined policy frameworks and growing synchronicity in exchange rate movements.



More than 90% of the surveyed domestic and overseas enterprises acknowledged the advantages of local currency settlement. Of these, over one-quarter believed it facilitates bilateral trade, while around 20% highlighted its role in enhancing trade and financial stability, reducing cross-border transaction costs, and mitigating exchange rate risks. This high level of recognition underscores enterprises' strong intention to deepen multilateral cooperation.

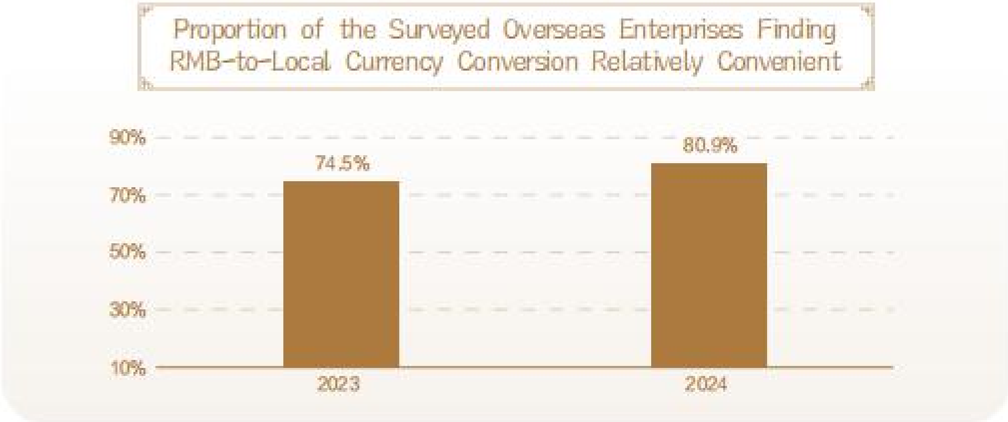
3. ASEAN and RCEP well positioned for multilateral cooperation

From the perspective of exchange rate synchronization, nine ASEAN currencies as well as the Japanese yen and South Korean won in 2024 demonstrated improved alignment with the RMB compared to the previous year. Regarding the enhanced adoption of local currencies for settlement, over half of the enterprises in ASEAN and RCEP reported increased usage—8.3 and 9.2 percentage points higher than the overall surveyed average, respectively. The deepening economic integration within ASEAN and RCEP provides a solid foundation for scaling up multilateral cooperation in these regions.



Supporting products and services for multilateral cooperation

Improved RMB-local currency convertibility. The ease of converting RMB into local currencies is a critical infrastructure that supports multilateral cooperation and a necessary condition for lowering foreign exchange costs. According to the 2024 survey, around 80% of overseas enterprises found RMB-to-local currency conversion relatively convenient—an increase by 6.4 percentage points compared to 2023.



Enhanced infrastructure connectivity facilitating local currency settlements. The interconnection of payment and clearing infrastructure between China and neighboring countries has continued to improve. For example, Cambodia implemented WeChat QR code payments in 2023, while Malaysia began supporting QR code payments via WeChat and UnionPay cards in 2024. These developments have made it easier to use local currencies in cross-border business and tourism transactions.

Case: Z Bank Facilitates QR Code Payment Interconnectivity Between China and Malaysia

PayNet (Payments Network Malaysia Sdn Bhd), Malaysia's sole state-owned clearing operator and a key component of the country's financial market infrastructure (FMI), launched the DuitNow QR code payment service in 2019 to promote cashless retail transactions nationwide. Built on the Real-time Retail Payment System (RPP), DuitNow has become central to Malaysia's electronic payments ecosystem, processing 1.5 billion transactions in the first half of 2024 alone.

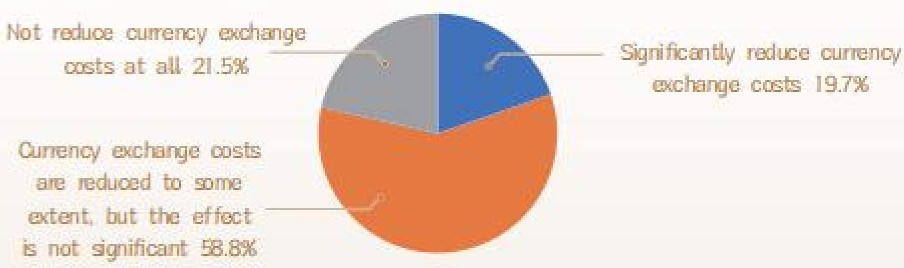
In early 2023, PayNet began working to integrate the RPP with China's electronic payment systems. In 2024, it designated Z Bank's Malaysian Branch as the settlement bank for cross-border QR code payments between China and Malaysia. Following the front-end technical integration with UnionPay and WeChat Pay, Z Bank now provides cross-border fund settlement and related support services, enabling Chinese tourists in Malaysia to scan DuitNow QR codes for payment.

Under the first phase of the project, Chinese visitors can use WeChat Pay or UnionPay QuickPass to scan DuitNow QR codes at Malaysian merchants. Transactions are settled in real time, with the RMB amount debited based on exchange rates quoted by the two Chinese payment platforms and the corresponding MYR amount paid to PayNet. The second phase will expand functionality to allow Malaysian users to scan UnionPay or WeChat merchant QR codes and complete retail payments while visiting China.

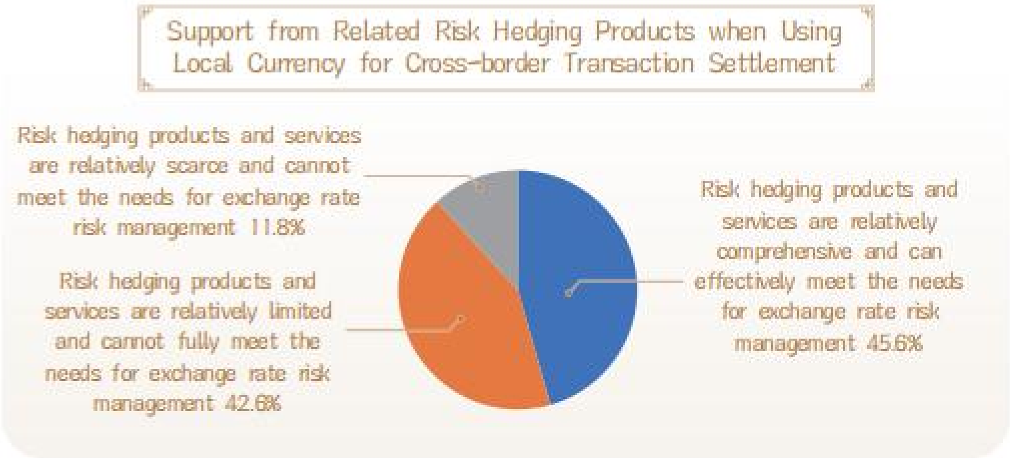
This successful cross-border QR code interconnection has established a new local currency settlement channel between China and Malaysia, supporting cashless tourism and cross-border consumption. It also lays the groundwork for broader local currency usage. With other ASEAN countries such as Indonesia (QRIS), Singapore (NETS), and Thailand (PromptPay) having developed similar domestic payment systems, China's continued integration with regional networks will further unlock the potential for local currency settlement cooperation.

Local currency settlement has shown initial cost-saving advantages, though there remains room for further improvement. According to the 2024 survey, 19.7% of the enterprises reported that direct local currency-to-foreign currency exchange quotes significantly reduced their FX costs. Nearly 60% of respondents indicated that while such quotes helped reduce costs to some extent, the impact was not substantial. Approximately 20% of the enterprises stated that direct exchange quotes did not lead to any cost savings. To fully unlock the cost-saving potential of direct settlement transactions using local currencies, efforts should focus on increasing the volume of direct exchange transactions and narrowing the bid-ask spreads of the local currency exchange quotation.

Degree of Reduction in Costs of Direct Local Currency Exchange

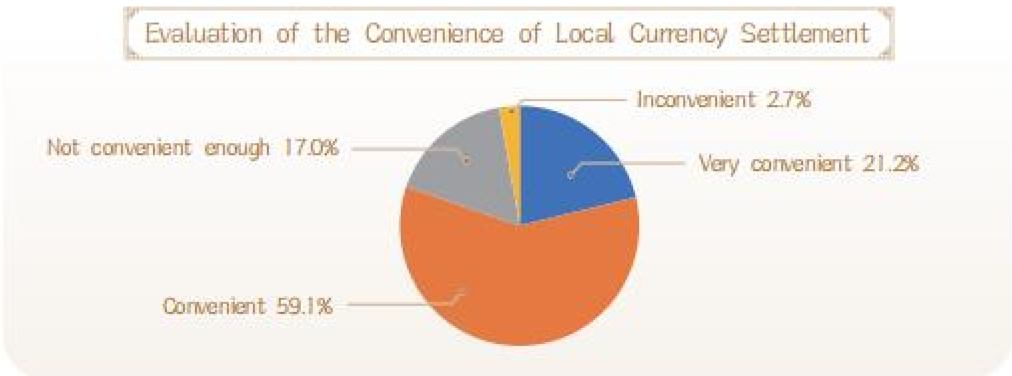


While exchange rate hedging products provide some auxiliary support for local currency settlement, there is significant room for improvement. According to the 2024 survey, only 45.6% of enterprises reported that existing exchange rate risk hedging products adequately met their needs for managing exchange rate risks when using local currencies for settlement.



Meanwhile, 42.6% of respondents felt that these products only partially addressed their risk management needs, while 11.8% believed their requirements were not met at all. This indicates that although current exchange rate risk hedging tools provide some support in managing exchange rate risks associated with local currency settlement, there is a need for further improvement in these instruments.

The convenience of local currency settlement is widely acknowledged, though there is still room for improvement. The 2024 survey revealed that 21.2% of respondents found local currency settlement to be very convenient and 59.1% considered it convenient. Together, these figures underscore the high level of recognition for the convenience of local currency settlement among the surveyed enterprises. However, 17.0% of respondents indicated that local currency settlement remained inconvenient, suggesting that there is still potential to optimize related products and services.

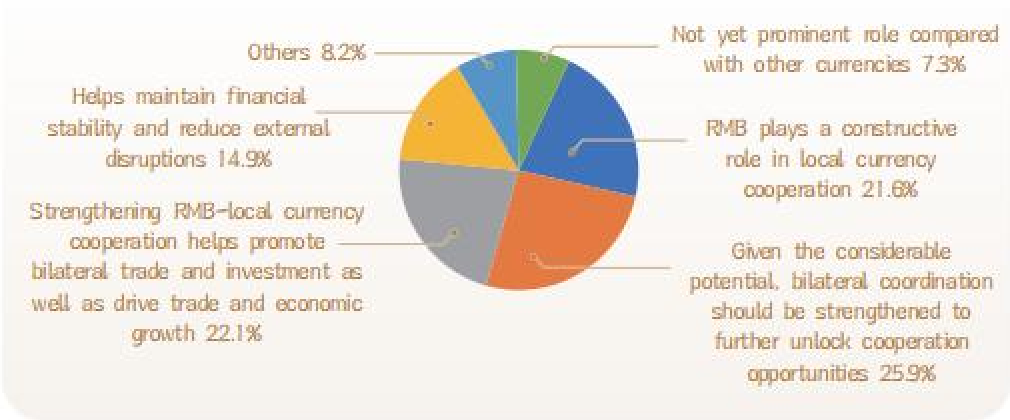


The roles and significance of RMB in multilateral cooperation

The role of RMB in multilateral cooperation has been positively received by overseas enterprises. According to the 2024 survey, 47.5% of the respondents acknowledged that the RMB has played a constructive role in facilitating multilateral cooperation and suggested that strengthening bilateral coordination could further unlock future cooperation potential. Additionally, 22.1% believed that deepening RMBlocal currency settlement cooperation would support the growth of bilateral trade, investment, and economic development. Furthermore, 14.9% of respondents indicated that enhanced RMB-local currency settlement cooperation would contribute to financial stability and help mitigate the impact of external shocks.

Given China's strong trade ties with many countries and its substantial contribution to global economic and trade growth, multilateral cooperation involving the cross-border use of the RMB is widely viewed as conforming to common interest and has attracted considerable attention and recognition from overseas enterprises.

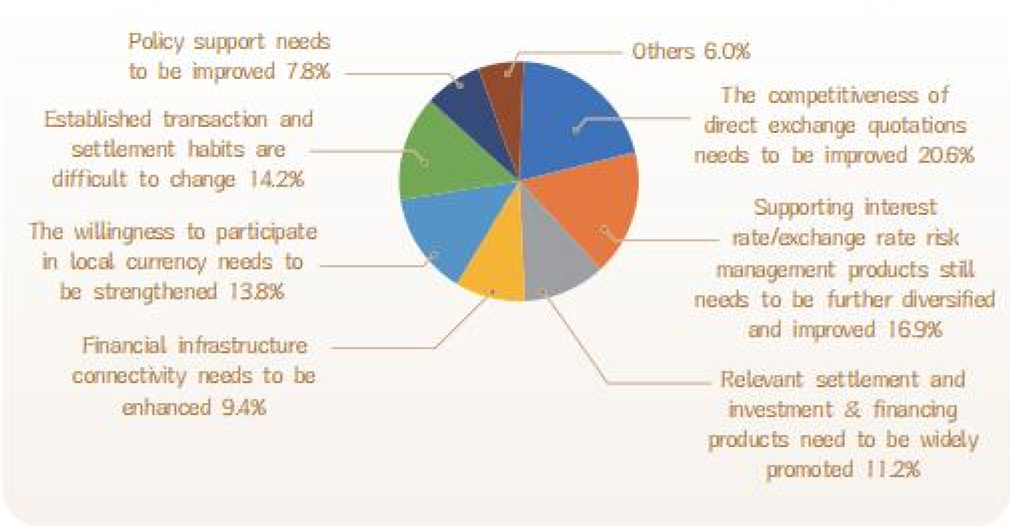
Evaluation by Overseas Enterprises of the Role of RMB in Multilateral Cooperation



Challenges and outlook for multilateral cooperation

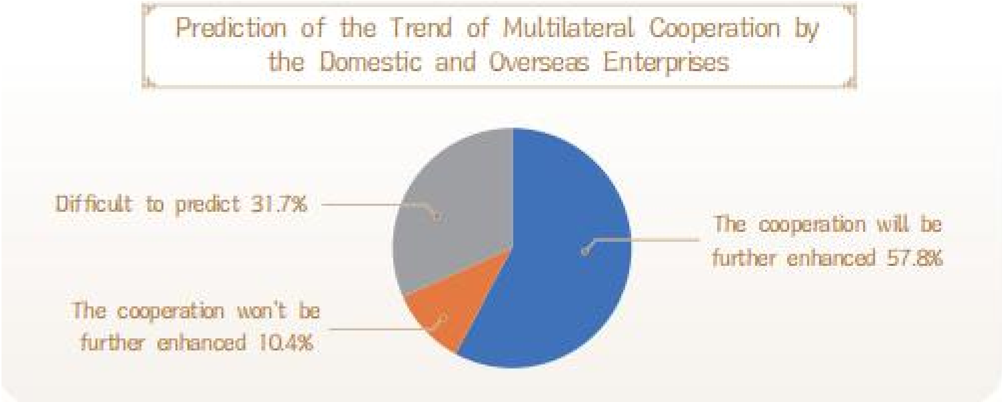
Despite the positive momentum in multilateral cooperation and the strong willingness of both domestic and overseas enterprises to participate, the adoption of local currency settlement in cross-border transactions still has significant room for improvement. The expansion and deepening of local currency settlement face several key challenges. According to the 2024 market survey, respondents identified major obstacles such as limited competitiveness of direct exchange rate quotations, insufficient availability of interest rate/exchange rate risk management products, the path dependence on traditional settlement currencies, and the need to further enhance willingness for multilateral cooperation.

Difficulties and Challenges Faced in Multilateral Cooperation



Overall, addressing these challenges calls for stronger guidance from central banks to emphasize the shared benefits of multilateral cooperation in local currency settlement. At the same time, sustained market-level efforts are essential to continuously enhance the user experience, thereby stimulating demand and fostering a positive supply-demand cycle. To reduce dependency on traditional settlement currencies, it is crucial to seize emerging market opportunities and strengthen the endogenous motivation of the market participants to shift away from such dependency.

Regarding the development trend of multilateral cooperation, both domestic and overseas enterprises have expressed an overall positive outlook. Nearly 60% of respondents indicated that the momentum of multilateral cooperation is expected to strengthen in the future, while only 10% predicted little or no increase in momentum. These survey results reflect a cautiously optimistic attitude among domestic and overseas enterprises toward multilateral cooperation. Generally speaking, the process of multilateral cooperation is already underway, with domestic and overseas enterprises reaching broad consensus on the benefits of local currency settlement. More than 60% of the surveyed enterprises offered optimistic projections for the future of multilateral cooperation, signaling a clear trend toward its gradual expansion and deepening.



CHAPTER 5. Outlook for RMB Internationalization

Enhanced quality and efficiency of cross-border RMB use in serving the real economy

First, promoting foreign trade and supporting small and microsized enterprises. The 2024 survey results indicate that enterprises actively engaged in import and export are more inclined to adopt RMB for cross-border settlement. Among enterprises whose import and export revenues account for more than 50% of their total operating income, 60% expressed plans to increase the share of RMB in their settlement activities, underscoring the positive role of cross-border RMB use in facilitating trade. Moreover, the survey highlights that small and micro-sized enterprises show a particularly strong recognition for the convenience of using the RMB in cross-border settlement. Streamlined procedures, the exemption from currency conversion, and reduced exposure to exchange rate risks have significantly improved the efficiency of settlement processes for a broad range of small and micro-sized foreign trade businesses.

Second, facilitating two-way investments and supporting "dual circulation" of domestic and international markets. Among Chinese enterprises going global, nearly 50% reported using the RMB for at least 20% of their ODI, representing a 5.3 percentage point increase compared to 2023. A growing number of enterprises are utilizing RMB both to contribute the outbound investments and to purchase domestic goods, thereby fostering a circulation pattern that features RMB outflows from investment under the capital account and RMB inflows from trade under the current account. This mode effectively mitigates exchange rate risks and reduces FX costs on the macro level.

Third, optimizing resource allocation and enhancing economic and financial security. According to the 2024 survey, the RMB's growing role as a financing currency can contribute to more efficient allocation of both domestic and international resources. For instance, offering RMB-denominated trade financing to overseas enterprises can enhance the stability of trade between their home countries and China. As China continues to be a key destination for foreign capital inflows, greater use of the RMB in inbound financing helps reduce currency mismatch risks in the country's external liabilities, thereby strengthening overall economic and financial resilience.

Further improvements in the breadth and depth of offshore RMB markets

First, the scale of offshore RMB fund flows has expanded. In 2024, the total volume of cross-border RMB customer remittances outside China increased by 5.5% year-on-year. This growth in cross-border RMB fund flows supported the liquidity needs of offshore RMB markets, to sustain active financial transactions and roll out a more diversified range of products and services.

Second, increased participation of financial institutions in offshore RMB markets. The 2024 survey results show a rising number of institutions reported increased demand for RMB-denominated products and services compared to the previous year. Notably, over 60% of the surveyed overseas financial institutions indicated plans to further expand their offerings of cross-border RMB products and services—an increase by 5.7 percentage points from 2023. In parallel, more overseas enterprises reported improved access to RMB products and services in their local markets. These trends highlight a mutually reinforcing dynamic between supply and demand for cross-border RMB offerings in offshore markets.

Third, improved support for offshore RMB markets and greater diversification of offshore RMB products and services. According to the 2024 survey, key market components—such as the ease of converting RMB into non-USD currencies—have further improved over the past year. Nearly 80% of the surveyed enterprises reported that direct currency conversion helped reduce FX costs to varying degrees. Additionally, under bilateral and multilateral cooperation frameworks, the scale and application scenarios for cross-border use of digital currencies have expanded. The interconnection of payment and clearing infrastructures has also facilitated small-value RMB payments overseas. Offshore RMB products and services have become more diversified.

Fourth, growing influence of offshore RMB centers on other regions. Hong Kong SAR has further solidified its position as the leading offshore RMB center, playing an increasingly vital role in promoting RMB use within ASEAN and RCEP frameworks, as well as in facilitating crossborder RMB fund flows with Europe. At the same time, other major offshore RMB centers have continued to expand in scale, enabling them to provide more comprehensive and in-depth support for the development of offshore RMB markets.

Steadier momentum for RMB regionalization

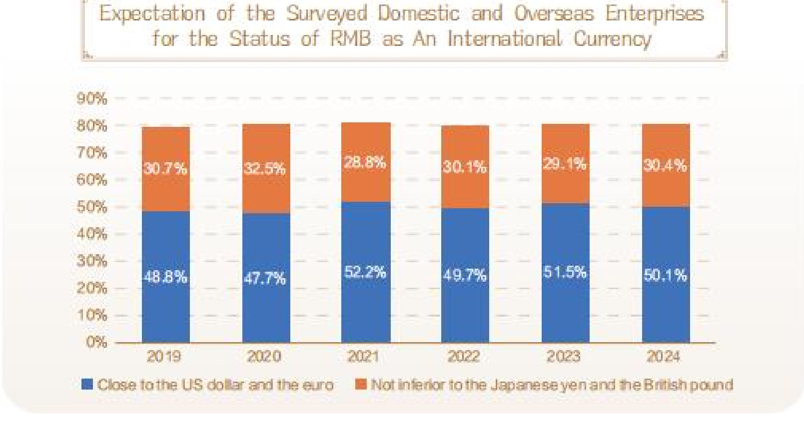
First, increasing synchronicity in exchange rate movements between regional currencies and the RMB. With deepening economic integration under ASEAN and RCEP frameworks, the exchange rate movements of ASEAN currencies, as well as the Japanese yen and the Korean won, have become more synchronized with the RMB compared to the previous year. This growing correlation has created a more conducive market environment for the regionalization of RMB.

Second, more active intra-regional cross-border use of RMB. In 2024, RMB customer remittances within the RCEP and ASEAN regions rose by nearly 20%, outpacing the average of RMB customer remittances outside China by 13.7 percentage points. Intra-regional RMB usage remained vibrant, with such remittances accounting for 75.6% of total RMB customer remittances in the RCEP region and 66.8% in ASEAN. Furthermore, willingness to use the RMB within the regions was relatively strong. Among the surveyed ASEAN enterprises, 85.9% indicated they would maintain or increase the proportion of RMB settlements—7.5 percentage points higher than the overall overseas respondent average.

Third, a solid foundation for intra-regional multilateral settlement cooperation. The interconnectivity of regional financial infrastructure has continued to improve. For example, Cambodia enabled WeChat QR code payments in 2023, while Malaysia began supporting QR code payments via WeChat and UnionPay cards in 2024. Over half of the enterprises in ASEAN and RCEP reported increased usage—8.3 and 9.2 percentage points higher than the overall surveyed average, respectively.

Positive outlook for the RMB as an international currency

According to the 2024 survey, 80.5% of domestic and overseas enterprises believed that the RMB's international currency status would be on par with, or even exceed, that of the Japanese yen or British pound within the next decade. Although this figure declined slightly by 0.1 percentage point from 2023, it remains one of the highest in recent years. This optimistic outlook reflects the ongoing enhancement of the RMB's role as an international currency across multiple dimensions.



First, strong willingness to use RMB for cross-border settlement. Over 90% of the surveyed enterprises, both domestic and overseas, indicated plans to maintain or increase their use of the RMB in cross-border transactions, reinforcing its role as an international settlement currency.

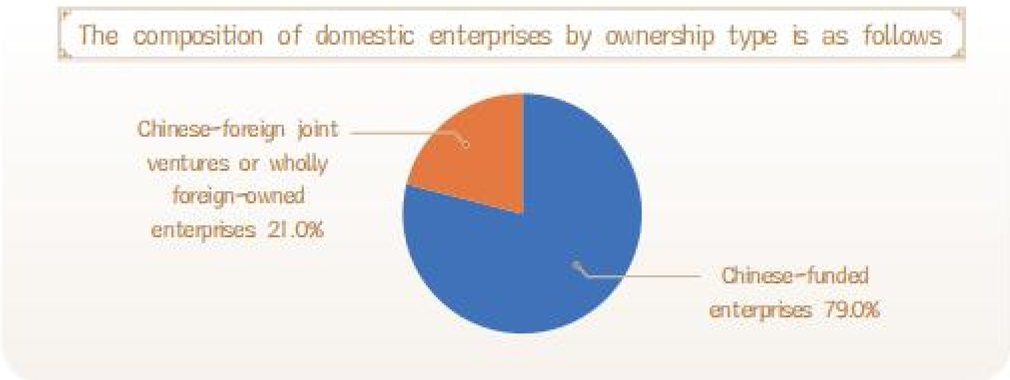
Second, the steadily expanding scale of RMB financing. Overseas enterprises and financial institutions increasingly regard the RMB as a valuable supplementary source of global liquidity. Interest in using the RMB for financing trade with China remains high, contributing to record levels of cross-border RMB bond financing both in China and abroad. These survey findings, together with market data, underscore the RMB's growing strength as a financing currency. The RMB's appeal as a financing currency is further supported by China's deepening trade ties with the rest of the world, the currency's relatively low interest rates, and its sustained purchasing power.

Third, the enhanced function of the RMB as an investment vehicle. A growing number of Chinese enterprises going global planned to increase the share of RMB in their ODI. Among overseas financial institutions planning to increase their holdings of RMB assets, the share of RMB financial assets relative to their total investable assets continued to rise. These survey findings indicate a strong and growing willingness among enterprises and financial institutions to use the RMB as an investment vehicle.

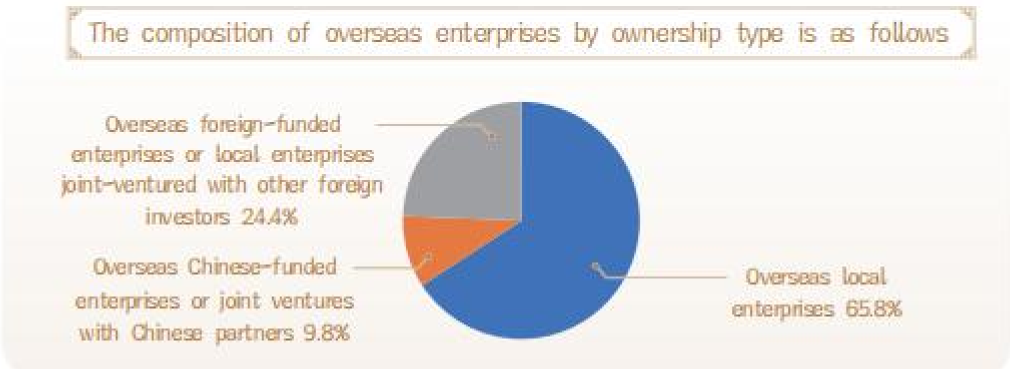
Fourth, the strengthened role of the RMB as a store of value. Survey results over the past five years show a consistent decline in the proportion of overseas enterprises converting RMB income into local currencies. Instead, more companies chose to retain RMB in the form of deposits, bonds, equities, and other financial instruments. More companies choosing to hold RMB cash or assets as a means of value preservation and appreciation has further reinforced the RMB's role as a store of value at the micro level.

The survey was conducted between December 27, 2024, and January 27, 2025, and received a total of 3,379 responses from both domestic and overseas enterprises. Of these, 2,286 responses came from domestic enterprises, including 1,711 from those located within free trade zones (FTZs) and 315 from enterprises going global. The remaining 1,093 responses were submitted by overseas enterprises.

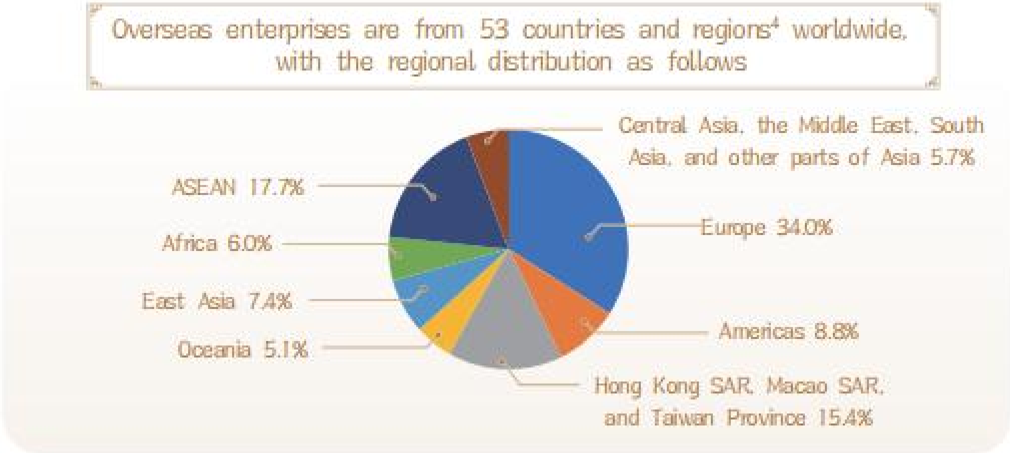
Composition of domestic enterprises by ownership type



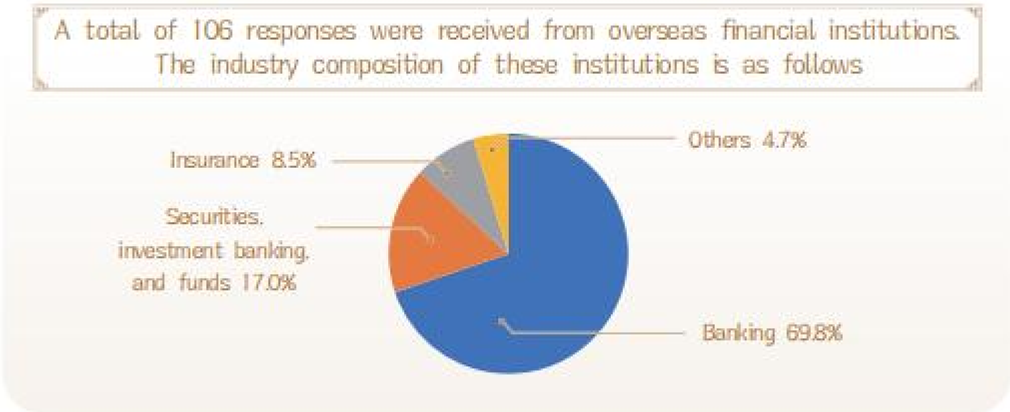
Composition of overseas enterprises by ownership type



Composition of overseas enterprises by region



Composition of overseas financial institutions by industry



Asia

• On January 24, 2024, the PBC and the HKMA jointly announced six policy measures to deepen financial cooperation between the Hong Kong SAR and the Chinese mainland. These include: expanding the list of eligible collateral for the HKMA's RMB Liquidity Facility to include RMB bonds issued onshore by the Ministry of Finance of China and the policy banks of China; further opening up the onshore repurchase agreement (repo) market to all overseas institutional investors; releasing the amendments to the Implementation Arrangements for the Cross-border Wealth Management Connect Pilot Scheme in the Guangdong-Hong KongMacao Greater Bay Area (GBA); implementing facilitative measures on the remittances for property purchase by Hong Kong and Macao residents in the Mainland cities in the GBA; promoting the collaboration on crossborder credit referencing to facilitate corporates' cross-border financing activities; and expanding the cross-border e-CNY pilots in Hong Kong.

• On January 30 and September 4, 2024, BOCHK, as a lead underwriter, successfully facilitated the issuance of offshore RMB bonds by Prologis, L.P. (rated "A3" by Moody's and "A" by S&P Global Ratings). The offerings comprised 3-year RMB1.5 billion bonds and 5-year RMB1.35 billion bonds, respectively. As a constituent of the S&P 500 Index, Prologis made its debut in the Hong Kong bond market through these issuances, becoming the first US company in nearly a decade to complete two public RMB bond offerings within a single calendar year.

• In February 2024, BOCHK introduced the "GBA Property Purchase Remittance" facilitation measure to support Hong Kong and Macao residents in purchasing properties within the GBA. The initiative enables clients to remit funds in RMB, HKD, or foreign currencies to GBA cities for property settlement, thereby providing more comprehensive cross-border payment services.

• On February 26, 2024, the newly revised Implementation Arrangements for the Cross-border Wealth Management Connect Pilot Scheme in the Guangdong-Hong Kong-Macao Greater Bay Area (Cross-border Wealth Management Connect 2.0) officially came into effect. The updated framework introduces a series of optimizations, including reduced investment thresholds, an expanded range of the Southbound Scheme products, and increased individual investment quotas.

- In March 2024, BOCHK Global Markets successfully executed its first RMB futures transaction on Bursa Malaysia Derivatives, serving as a market maker for RMB futures products.
- In April 2024, BOCHK Global Markets and BOCI successfully completed multiple interest rate swap (IRS) transactions, utilizing BOCHK's clearing services as an agent for the London Clearing House (LCH).
- On April 19, 2024, the China Securities Regulatory Commission (CSRC) announced five measures aimed at strengthening capital market cooperation with Hong Kong SAR. These measures include expanding the range of eligible ETF products under the Hong Kong Stock Connect program, integrating REITs into the program, supporting the inclusion of RMB-denominated stock trading counters in the Hong Kong Stock Connect program, optimizing the mutual recognition of funds mechanism, and encouraging leading Mainland enterprises to list in Hong Kong.
- On May 29, 2024, BOCHK, serving as the joint global coordinator and settlement bank, successfully supported the Airport Authority Hong Kong in issuing a 10-year, RMB1.5 billion offshore RMB bond. This marked the authority's first RMB public bond issuance and was the first 10-year RMB public bond in the Greater China region issued by an entity other than the HKSAR Government or the Ministry of Finance of China. The bond featured the lowest coupon rate among offshore RMB non-China government bonds.
- In June 2024, BOCHK served as the sole issuing agent for MTR Corporation's 30-year offshore RMB bonds.
- On September 10, 2024, BOCHK supported the People's Government of Guangdong Province in its inaugural offshore RMB local government bond issuance in Hong Kong, totaling RMB5 billion. Following four consecutive years of successful issuances in Macao, this marked Guangdong's debut in Hong Kong, making it China's first local government to issue bonds in both Hong Kong and Macao.
- In November 2024, BOCHK became the first overseas institution to successfully participate in the inaugural standard IRS transaction on the China Foreign Exchange Trade System platform. The transaction was centrally cleared through BOC Shanghai Branch at the Shanghai Clearing House.
- On December 17, 2024, BOCHK, as the first overseas member of the Shanghai Clearing House for cross-border RMB clearing and settlement of commodity spot transactions, provided cross-border RMB clearing and settlement services to the Hainan International Energy Exchange for a commodity spot transaction. The total transaction amount exceeded RMB33 million, marking the first such transaction conducted in the overseas market.
- On December 23, 2024, Hong Kong announced the extension of cross-border clearing service hours for local RMB clearing banks. Through Hong Kong's RMB real-time payment system and RMB faster payment system, institutions participating in RMB businesses can now access 24-hour realtime cross-border RMB clearing services from Monday to Friday (Hong Kong time).
- On March 15, 2024, BOC Macao Branch successfully completed the full disbursement of an RMB 15 billion offshore syndicated loan for a leading global tissue paper company. This marked the largest offshore RMB syndicated loan in the Asia-Pacific region in recent years. The loan supported an acquisition project valued at approximately HKD28.3 billion, which stands as one of the largest and most high-profile M&A transactions in the Asia-Pacific consumer market in recent years.
- In June 2024, BOC Macao Branch successfully issued the world's first RMB bonds dedicated to sustainable development projects under the Belt and Road Initiative (BRI). This pioneering issuance is expected to encourage Chinese-funded institutions to leverage cross-border RMB funds to finance green projects under the Belt and Road Initiative, thereby facilitating greater mobilization of cross-border RMB resources in support of green development in the B&R participating countries.
- In August 2024, BOC Macao Branch, acting as the sole global coordinator, successfully assisted the People's Government of Guangdong Province in issuing RMB2.5 billion in local government bonds in Macao for the fourth consecutive time, including RMB1.5 billion in green bonds. For the first time, proceeds from the offshore RMB bonds would be used to finance infrastructure development in the Guangdong-Macao In-depth Cooperation Zone in Hengqin, further strengthening collaboration between Guangdong and Macao.
- In October 2024, BOC Macao Branch, acting as joint global coordinator, led the successful pricing and issuance of RMB5 billion in offshore RMB bonds for the Ministry of Finance of China in Macao. This

issuance sustained the record for the largest single bond offering in Macao and achieved a subscription multiple of 3.06 times—the highest ever recorded in the region.

• On November 11, 2024, the China-Singapore Joint Council for Bilateral Cooperation held its annual meeting in Singapore, highlighting 25 outcomes of bilateral cooperation. Among them, BOC served as the lead underwriter for the first Panda bond listed on the Singapore Exchange — marking the first time a Panda bond has been listed on an exchange outside of Greater China in Asia.

• In 2024, BOC (Malaysia) was appointed by PayNet — a payment company under Bank Negara Malaysia — as a cross-border payment settlement bank in the country. BOC (Malaysia) successfully launched the crossborder QR code interoperability project between WeChat and the PayNet system.

• In 2024, BOC (Malaysia) processed a total of RMB144.5 billion in RMB clearing through the local clearing system (RENTAS), surpassing the RMB100 billion mark for the first time — a significant milestone. This represents a year-on-year increase of RMB50.8 billion, or 54%, setting a new historical record. BOC (Malaysia) remains the sole RMB settlement bank designated by Bank Negara Malaysia for the RENTAS clearing system.

• On May 21, 2024, Governor Pan Gongsheng of the PBC met with visiting Governor Sethaput Suthiwartnarueput of the Bank of Thailand to exchange views on bilateral financial cooperation and related topics. Following the meeting, both sides signed the Memorandum of Understanding between the People's Bank of China and the Bank of Thailand on a Framework for Cooperation to Promote Bilateral Transactions in Local Currencies.

• In January 2024, BOC Phnom Penh Branch was authorized by the National Bank of Cambodia to serve as the clearing bank for the BAKONG-ALIPAY cross-border QR code payment interoperability initiative. On October 14, the project was officially launched, allowing Alipay users from China to make cross-border RMB payments by scanning KHQR codes.

• In 2024, the annual direct trading volume of the RMB against the Philippine peso under the Philippine RMB Trading Community mechanism surpassed RMB10 billion for the first time. Established in October 2018 and jointly supported by the central banks of China and the Philippines, this mechanism serves as China's first overseas self-regulatory financial liaison platform for RMB-to-local currency transactions.

• In 2024, the agreement for upgrading the Philippines' local RMB transfer system (RTS) to version 2.0 entered its final stage. Once completed, the upgraded system will provide real-time RMB clearing and Paymentversus-Payment (PVP) settlement capabilities for RMB/peso transactions. BOC Manila Branch initially launched the system in 2014 in collaboration with the Philippine Dealing System Holdings Corp. (PDS) to support local RMB fund remittance, transfer, and clearing.

• On May 21, 2024, BOC hosted a cross-border RMB and bilateral local currency settlement roadshow in Jakarta to promote the internationalization of the RMB. The event drew nearly 150 participants, including Deputy Director Ita Vianty from the International Department of Bank Indonesia, officials from the Investment Coordinating Board (BKPM), the IndonesiaChina Association of Economic, Social and Cultural Cooperation, the Chinese Embassy in Indonesia, and the China Chamber of Commerce in Indonesia, as well as representatives from enterprises and financial institutions in both countries.

• On September 27, 2024, BOC facilitated a closed-door meeting in Beijing between Bank Indonesia and the PBC on the theme “Further Facilitating the Use of Bilateral Local Currency Settlement Mechanism by Enterprises in China and Indonesia”. The meeting was attended by representatives from eight institutions, including China International Capital Corporation (CICC), the Silk Road Fund, and the Jakarta-Bandung High-Speed Railway. Bank Indonesia indicated that it would subsequently revise the regulatory framework to enhance the bilateral local currency settlement mechanism.

• On November 28, 2024, BOC Jakarta Branch launched the “Splendid China: Guangxi” themed card, which can be linked to both WeChat and Alipay. The card enhances the diversity of RMB usage scenarios and offers a range of cardholder benefits, thereby providing Indonesian travelers to China with more convenient payment solutions.

• As at the end of 2024, the cumulative RMB-IDR exchange transaction volume under the local currency settlement (LCS) mechanism surpassed RMB10 billion. A total of 15 Chinese banks and 16 Indonesian banks participated in market trading. The Indonesian rupiah remained the most actively traded regional currency in China for the fourth consecutive year.

- On August 21, 2024, Brunei implemented its first local RMB project financing deal. BOC Brunei Branch, acting as the sole lender, signed a loan agreement with Muara Port Company Sdn Bhd to support the expansion of its container terminal. During the construction period, BOC Brunei Branch will provide a total of BND95 million and RMB400 million in loans over a 13-year term.
- In 2024, the total KZT-RMB exchange trading volume in Kazakhstan reached KZT7,976.9 billion (approximately RMB122.2 billion), marking a year-on-year increase by 79.5%.

Europe

- As at the end of November 2024, the China Europe International Exchange (CEINEX) offered 40 financial products denominated in RMB, EUR, and USD. RMB-denominated products recorded a trading volume of RMB781 million, representing 0.72% of the total trading volume.
- According to German data, in 2024, Germany ranked 11th globally (excluding the Chinese mainland) in RMB usage, accounting for a 0.64% share. It ranked third in Europe, following the UK and France. That year, the German market processed 456,700 RMB clearing transactions, marking a 17% year-on-year increase, with a total clearing volume of RMB12.31 trillion, up by 30% from the previous year.
- On June 7, 2024, BOC Frankfurt Branch, acting as the lead underwriter and bookrunner, successfully assisted BASF in completing its inaugural Panda bond issuance, totaling RMB2 billion with a three-year maturity.
- On August 13, 2024, BOC issued the world's first offshore RMB SGS bonds in Frankfurt, totaling RMB2.5 billion with a two-year maturity. SGS bonds cover sustainability-linked, green, and social loans, and the proceeds will be used to fund ESG-related projects. The bonds attracted active subscriptions from global investors, setting a record for the lowest interest rate on two-year offshore RMB bonds issued by a Chinese bank. This milestone marked significant progress in advancing RMB internationalization and ESG finance. The bonds were officially listed on the Frankfurt Stock Exchange on August 26.
- On September 11, 2024, BOC Frankfurt Branch, in collaboration with BOC Luxembourg Branch, successfully completed a supporting currency swap transaction for Volkswagen Group's RMB1.5 billion three-year Panda bond issuance.
- On January 10, 2024, the National Bank of Serbia appointed BOC as its agent for accessing China's interbank bond market and signed an interbank market service agreement with the Bank.
- On May 8, 2024, Chinese President Xi Jinping and Serbian President Aleksandar Vučić signed a joint statement in Belgrade, expressing support for the early establishment of the Serbian RMB Clearing Bank to facilitate local currency settlement for bilateral trade and investment. On the same day, BOC held an unveiling ceremony for the Serbian RMB Clearing Bank in Belgrade, jointly officiated by BOC Chairman Ge Haijiao and National Bank of Serbia Governor Jorgovanka Tabaković. The Serbian RMB Clearing Bank officially began operations on June 3, providing efficient RMB clearing services to support China-Serbia economic and trade cooperation.
- On June 3, 2024, BOC Serbia Branch became a direct participant in the Cross-border Interbank Payment System (CIPS). On the same day, it successfully completed its first cross-border RMB remittance, transferring RMB2 million on behalf of HBIS Group Serbia's steel plant in Smederevo.

Middle East and Africa

- On March 15, 2024, Ministry of Foreign Affairs of the People's Republic of China released the Joint Statement on the Establishment of a Comprehensive Strategic Cooperative Partnership between the People's Republic of China and the Republic of Angola. The statement affirms both sides' commitment to strengthening financial cooperation, supporting financial institutions in offering financing and investment services to enterprises in both countries, promoting greater use of local currencies in trade and investment to lower FX costs, and fostering a favorable policy environment for local currency settlement.
- On September 4, 2024, the PBC and the Bank of Mauritius signed a bilateral local currency swap agreement, with a swap size of RMB2 billion/ MUR13 billion and a three-year term, extendable upon mutual agreement.
- On November 23, 2024, the PBC announced its decision to designate Bank of China (Mauritius) Limited as the RMB clearing bank in Mauritius.

Americas

- In June 2024, BOC México was officially approved as a direct participant in the CIPS.

RMB Internationalization to Greatly Stabilize Global Financial System*

By WANG FANG*

RMB internationalization is a systematic solution for China to effectively address the deepening impact of geo-economic risks in the world, which also contributes to stabilizing global markets as well as the international financial system.

Some countries refuse to relinquish their long-held dominant positions and monopolistic power in global supply chains, the global monetary and financial systems, as well as global governance. Technology blockades, financial sanctions, and the abusive use of legislative and regulatory "long-arm jurisdictions" are specific manifestations of those countries leveraging their power to artificially create geo-economic risks.

As the Chinese currency, the RMB or the yuan, increasingly matures into a major international currency, it can bring a diversified mechanism into the international monetary and financial system, helping mitigate the systemic risks arising from the inherent instability of a world economic order based on self-interest and a monopolistic core. In this sense, RMB internationalization benefits not only China but also the whole world.

The Belt and Road Initiative (BRI) and the Regional Comprehensive Economic Partnership (RCEP) framework are both China's practices of new regional economic integration, adhering to the principles of consultation, joint construction and sharing. They prioritize development, sovereign equality, and respect for differences in varied countries' development stages, focusing on infrastructure construction and integration of institutional rules to collectively promote inclusive development and re-globalization. Both the BRI and the RCEP framework hold significant importance for RMB internationalization.

The more critical an economy's position in the global supply chain, the more effective it is in enhancing the welfare of supply chain partners and strengthening supply chain resilience through providing better financial services. Also, as a country's financial system improves its ability to support the sustainable growth of the global supply chain, the foundation for the international use of its currency is inevitably solidified.

Therefore, in international economic and trade cooperation primarily involving developing countries, China should fully leverage its role as a regional powerhouse in integrating industrial and supply chains, continuously optimizing the hardware and software conditions for the member countries to use and hold the Chinese currency.

By promoting regional economic and financial integration, China should advance the economic and financial development of the member countries, continuously improve resource integration efficiency, share the developmental dividends of multilateral cooperation, and build a community with a shared future in the field of economic and trade cooperation.

The BRI and the RCEP have the potential to become crucial platforms for promoting RMB internationalization, but they also face numerous obstacles and challenges. Currently, the level of RMB usage in those regions remains relatively low, and its competitive advantage over other major international currencies is not yet prominent.

On one hand, the convenience and flexibility for non-Chinese residents to acquire, use, and hold RMB for trade, investment, risk management, or asset allocation are far from ideal. On the other hand, the breadth, depth, and openness of China's financial markets, as well as the efficiency of macroeconomic risk management, remain insufficient to support broader international use of the currency. These constraints are expected to be gradually addressed through high-quality financial development and greater financial opening-up.

* The article was first published on Global Times on August 22th 2025.

* Wang Fang is deputy director of International Monetary Institute of Renmin University of China.

China is a staunch supporter of new economic globalization, as we believe that fostering a cooperative, win-win and open global economy aligns with the common interests of the humanity and represents the right direction for historical progress.

As a key regional player, China should shoulder greater responsibilities and play a more significant role. Emphasis should be placed on enhancing the "hard connectivity" of financial infrastructure and the "soft connectivity" of institutional rules to create better conditions for the widespread use of the RMB in the region.

China should actively promote RMB's role as a global public good in areas such as trade pricing and settlement, financial transactions, and reserve assets, while promptly addressing the practical demands of regional member countries for secure and reliable international liquidity assets.

Notably, amidst the growing impact of deepening geo-economic risks in the world, the global payment system and official reserve currencies of various countries are showing a trend toward diversification.

Our research finds that as the geo-economic risk index (GER) rises, RMB Internationalization index (RII) also increases. In the context of the evolving global payment system and reserve currency landscape under the geo-economic shocks, efforts should be made to strengthen the Cross-border Interbank Payment System (CIPS), seize the development opportunities of central bank digital currencies (CBDC), and create new prospects for RMB internationalization.

IMI International Monetary Review

New Features of Cross-Border RMB: Based on an Enterprise Questionnaire Survey⋆

By TU YONGHONG, WANG JINGYE*

The Trump administration, holding high the banner of "America First", launched the "Liberation Day" tariff war, which disrupted trade order and global supply chains. It also gave support to Israel in attacking Iran. All of these has weakened the international community's confidence in the U.S. economy and the U.S. dollar, leading to capital outflows from the United States and a more pronounced trend toward currency diversification. Amid the changes that have not been seen in a century, RMB settlement in cross-border trade and investment has continued to grow, and the RMB's function as an international currency has been further strengthened. According to data from the Bank for International Settlements (BIS), in the first quarter of 2025, the RMB remained the world's fourth-largest payment currency, accounting for 4.13% of global payments. For the first time, the proportion of RMB settlement in cross-border transactions of Chinese enterprises exceeded that of the U.S. dollar, marking a new stage in the internationalization of the RMB.

I. Current Status of Cross-Border RMB: An Analysis Based on Enterprise Questionnaire Surveys

Enterprises are the users of cross-border RMB and participants in cross-border RMB business, and their behaviors and decisions have a profound impact on advancing the internationalization of the RMB. With the support of Bank of Communications and the Ministry of Commerce, the International Monetary Institute of Renmin University of China conducted quarterly questionnaire surveys on cross-border RMB business of enterprises four times in 2024, which objectively reflected the latest developments in cross-border RMB business. Between 1,090 and 1,793 valid enterprise questionnaires were collected each quarter, and the results showed that Chinese enterprises had stronger motivation and initiative to use the RMB; the types of cross-border RMB business have increased; the RMB has become the second-most used settlement currency after the U.S. dollar. However, there are still some obstacles that need to be overcome.

1. Characteristics of Surveyed Enterprises

Regarding the type of surveyed enterprises, state-owned enterprises (SOEs) accounted for 11%, private enterprises for 71%, and foreign-invested enterprises for 18%. The proportion is basically consistent with the ownership structure of enterprises in China, ensuring the validity and representativeness of the survey. In terms of the regions of cross-border transactions of the surveyed enterprises, East Asia area accounted for 75%, Central Asia area for 11%, Southeast Asia for 8%, and other regions for 5%. This indicated that cross-border RMB business was mainly concentrated in China's neighboring countries and regions. By industry, manufacturing enterprises accounted for 40%, wholesale and retail enterprises for 30%, and enterprises in other industries for 30%.

2. Diversified Demand for Cross-Border RMB Business

Due to diversified scales, business types, and industries, the surveyed enterprises had different demands for cross-border RMB business, which were mainly concentrated in foreign exchange transactions and trade settlement. To reduce exchange rate risks, shorten the settlement process, and lower time and capital costs, more than 60% of enterprises have carried out RMB settlement, and over 50% of enterprises have participated in RMB foreign exchange transactions. Moreover, the proportion of foreign-invested enterprises using the RMB for foreign exchange transactions and trade settlement was higher than that of SOEs and private enterprises. However, only less than 20% of the enterprises have used the RMB for trade financing and cross-border cash management, and even fewer enterprises have conducted offshore RMB business, indicating that cross-border RMB business was still in its initial stage. Fortunately, in trade and investment with third countries, especially countries along the "Belt and Road", nearly 40% of the surveyed enterprises have used the RMB for settlement.

⋆ This article is one of the research of the "Green Innovation Index Report for the Yangtze River Economic Belt" project.

* Tu Yonghong, Director of the Yangtze River Economic Belt Research Institute, Renmin University of China; Deputy Director of the International Monetary Institute; Professor at the School of Finance. Wang Jingye, Assistant Professor at the School of Finance, Renmin University of China.

3. Safety and Risk Aversion as the Main Motivations

Despite the diversified motivations of cross-border RMB business, safety remained the primary pursuit of enterprises. Approximately 70% of the surveyed enterprises prioritized asset safety. China's low inflation rate and the stable RMB exchange rate has made the RMB an effective tool in avoiding asset impairment. More than 50% of the surveyed enterprises regarded the RMB as an important tool for diversifying risks and optimizing the asset-liability structure, due to the low correlation between the RMB and major currencies such as the U.S. dollar and the euro. Strengthening cash management and obtaining higher returns were also reasons for enterprises to engage in cross-border RMB business, with 40% of the surveyed enterprises choosing cross-border RMB settlement for this reason.

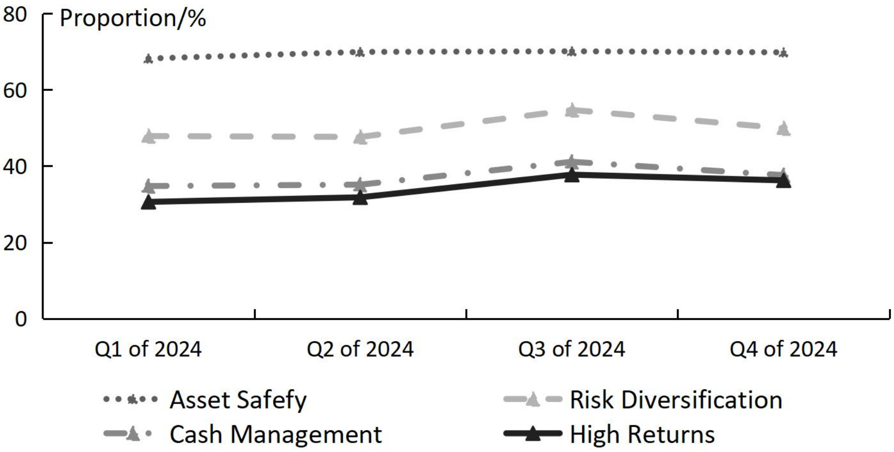


Fig.1: Motivations of Enterprises for Engaging in Cross-Border RMB Business

4. Policies as a Key Driver for Cross-Border RMB Business

Sound policies for cross-border RMB business were the common expectations of the surveyed enterprises. Approximately 80% of the surveyed enterprises expressed expectations for new supportive policies adopted by the government to encourage cross-border RMB business; more than 25% hoped for simplified procedures alongside tax incentives to facilitate the flow of RMB; over 50% hoped for consistent policies; 65% expected the government to maintain the stability of the RMB exchange rate due to its significant impact on their choices regarding RMB settlement.

5. Institutional Obstacles and Bottlenecks Facing Cross-Border RMB Business

Over-complexity of policies and poor compatibility of relevant laws and regulations are the most prominent problems reported by the surveyed enterprises. More than 60% of surveyed enterprises considered cross-border RMB policies to be complex; for example, diverse policy provisions with high update frequencies made it difficult for enterprises to understand and apply them. Nearly 50% of the enterprises regarded capital controls or "capital flow barriers" as the major obstacles. Nearly 40% complained about weak legal compatibility. For instance, different government departments may have inconsistent policies and regulations. Coupled with their complex and divergent document submission requirements, this has led to high costs for enterprises when conducting cross-border RMB business. Other institutional obstacles included "limited investment scope", reported by over 30% of surveyed enterprises, and " insufficient derivative tools for risk hedging", reported by over 20%.

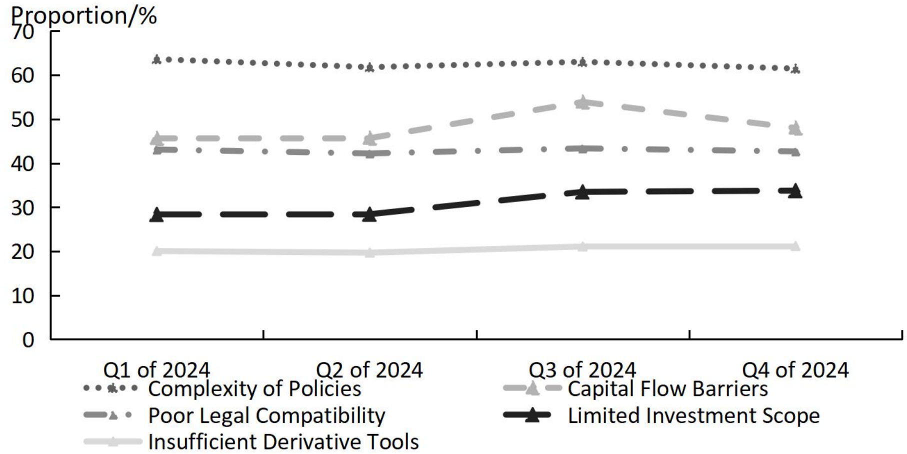


Fig.2: Institutional Factors Hindering Enterprises from Engaging in Cross-Border RMB Business

In fact, the reluctance of transaction counterparts to accept the RMB has formed a major market constraint on the cross-border use of the RMB. The result of the survey showed that approximately 40% of the surveyed enterprises have encountered situations where their transaction counterparts refused to accept the RMB. In addition, the limited availability of RMB derivative tools and the poor effectiveness of risk hedging have dampened enterprises' enthusiasm for using RMB business. Approximately 25% stated that the lack of risk hedging tools made them unwilling to use the RMB.

6. Strengthened Willingness to Expand RMB Settlement in Cross-Border Trade and Investment

The surveyed enterprises had full confidence in the prospects of RMB internationalization. Approximately 70% believed that the RMB will play a more important role in international trade and investment and showed willingness to expand the use of the RMB in their operations. Approximately 25% had plans to increase RMB settlement: specifically, more than 10% planed to increase it by 10%, 9% increasing it by 10% to 50%, and about 2% increasing it by 50% or more. In particular, private enterprises showed a stronger willingness to increase RMB settlement than SOEs and foreign-invested enterprises.

II. Strength and Weakness of Cross-Border RMB Business

The results of the enterprise questionnaire survey in the fourth quarter of 2024 generally continued the trends of the previous three quarters, reaffirming the positive progress and weakness in RMB internationalization. The main highlights of cross-border RMB business at this stage included the wide participation of enterprises, diversified application scenarios, positive motivations, policy support, and obvious advantages over non-U.S. dollar currencies. However, it still had weak points, including the low penetration rates in specific businesses, complex policies, high external uncertainties, limited risk hedging tools, and uneven risk management among enterprises. Against the backdrop of Trump winning the U.S. presidential election and significant uncertainties in China-U.S. trade, the survey in the fourth quarter revealed some new developments: although SOEs remained the main force in cross-border RMB business, foreign-invested and private enterprises have significantly increased their use of the RMB, especially the enterprises from Europe, the North America, and Australia; enterprises' awareness and capabilities in risk management have been further enhanced, while private enterprises had a strong willingness for risk management but with reluctance in taking measures and low recognition of onshore derivative products.

1. Wide Enterprise Participation, with Business Expanding from Trade Settlement to Risk and Asset Management

Despite the complex and volatile international situation in 2024 and fluctuations in economic and trade cycles between quarters, cross-border RMB business on the enterprise side showed a growing trend. The four surveys covered more than 5,000 enterprises in total, with high consistency in dimensions such as ownership, region, industry, and scale, which demonstrated that RMB internationalization has a solid micro-foundation. The application scenarios of the RMB are expanding from basic settlement to more complex financial businesses. Among the surveyed enterprises in the fourth quarter, 68% have engaged in cross-border RMB trade settlement, 53% in foreign exchange transactions, 20% in trade financing, 15% in cross-border cash management, and 20% in offshore receipt and payment business. Enterprises have diversified motivations for using the RMB: 71% emphasized asset safety, 51% considered risk diversification, and 37% took returns and cash management into account. This diversified demand has provided an endogenous driving force for the penetration of the RMB in multiple scenarios.

2. State-Owned Enterprises Playing a Leading Role, with Increased RMB Usage in Third Countries

Due to their rapid response to policies, strong execution capabilities, and greater bargaining power in international trade, state-owned enterprises (SOEs) have been the main drivers of cross-border RMB usage. 71% of them have engaged in cross-border RMB settlement, and outperformed private and foreign-funded enterprises in risk management and tool utilization rate. Additionally, approximately 40% of enterprises reported using RMB for settlements in transactions with non-associated third countries, indicating that RMB is permeating from bilateral trade into multilateral networks, with its function as an international payment instrument continuously strengthening.

3. Increased RMB Usage Among Foreign Enterprises and in Europe, America, and Australia

In the fourth quarter of 2024, foreign enterprises and companies registered in Europe, the North America, and Australia showed a significant increase in enthusiasm for using cross-border RMB. The proportion of foreign enterprises in the sample rose from 13% in the third quarter to 18%, with comprehensive growth in cross-border RMB business. The usage rate in cross-border trade settlement increased from 68% to 77%, the proportion of RMB usage in transactions with third-country enterprises rose from 40% to 48%, and participation in foreign exchange transactions, trade finance, and offshore financing activities also improved. This indicates that, driven by market demand and profitability considerations, foreign enterprises are actively incorporating RMB into their cash and asset management frameworks. Notably, RMB usage among enterprises registered in Europe, America, and Australia surged: the proportion of cross-border trade settlements increased from 40% to 67%, and cross-border RMB businesses such as offshore financing and wealth management achieved initial breakthroughs, with a significant rise in offshore RMB payment usage. This change may be attributed to enhanced liquidity in the offshore RMB market, improved global service capabilities of Chinese financial institutions, and increased demand for non-USD currencies due to geopolitical uncertainties.

4. Continuous Improvement in Enterprises' Risk Management Awareness and Capabilities

The survey reveals a healthy upward trend in enterprises' risk management awareness and capabilities. The proportion of enterprises adopting exchange rate hedging measures has increased for four consecutive quarters, rising from 29.2% to 32.3%. The rates of internal risk control strategy formulation and dedicated risk management positions have also improved simultaneously. This enhancement was evident not only in state-owned and foreign enterprises but also in private enterprises, which showed positive changes. Enterprises tailor their risk management strategies to specific circumstances and employ diverse risk hedging tools. Natural hedging remained the primary tool, while the usage of market-based instruments such as offshore futures contracts and currency adjustment clauses in contracts has increased. Strengthening risk management helped enterprises actively expand RMB applications in more complex financial scenarios, facilitating its transition from a "settlement currency" to a "financing currency" and "reserve currency."

5. Obstacles and Weakness Requiring Urgent Resolution

Policy complexity and capital flow restrictions. Despite strong overall willingness to use cross-border RMB, some institutional issues remain obstacles to RMB internationalization. The most prominent problems reported by enterprises were high policy complexity, capital flow barriers, and poor regulatory compatibility. Numerous and frequently updated policy made it difficult for enterprises to understand and comply, while capital flow restrictions and inconsistent cross-departmental regulations increase their time and financial costs.

Low recognition of onshore derivatives. The survey result of the fourth quarter showed that among seven hedging tools—natural hedging of assets and liabilities, offshore RMB futures, contract currency adjustments, non-deliverable forwards, offshore forwards/swaps, offshore spot foreign exchange markets, and onshore derivatives—onshore derivatives had the lowest usage rate, and about 66% of enterprises considered them "least important." This reflected a mismatch between supply and demand for onshore derivative financial products and low risk management efficiency, failing to meet enterprises' risk management needs.

Strong willingness but poor action. Among Private Enterprises. Private enterprises accounted for over 70% of the sample and showed strong willingness to use cross-border RMB, but their actual execution capabilities were noticeably inadequate. Compared to state-owned and foreign enterprises, private enterprises lag in penetration rates for cross-border RMB trade settlement, financing, foreign exchange transactions, and risk management. This is mainly due to their small scale, limited financial resources, lack of professional talent, and insufficient policy adaptability. Urgent efforts are needed in policy support, financial services, and enterprise capacity building to streamline processes, reduce costs, and enhance training and guidance, helping private enterprises translate willingness into action and improve cross-border RMB usage.

III. Recommendations for Expanding Cross-Border RMB Scale and Scenarios

1. Strengthen Policy Support to Enhance Cross-Border RMB Attractiveness

First, accelerate the development of a dual-drive model of "RMB + Digital Currency." Leverage the advantages of digital RMB—low cost, high efficiency, and strong transparency—to promote its use in cross-border trade settlements, in line with global digital currency trends. Collaborate with central banks of major economies to establish a "Digital RMB-Local Currency" cross-border payment network, expanding application scenarios in emerging markets such as Southeast Asia and Africa to reduce reliance on the USD system. Second, create RMB usage hubs in free trade zones (FTZs). Explore innovative RMB settlement models in China's 23 FTZs and Hainan Free Trade Port, aligning with high-quality Belt and Road Initiative development. Establish cross-border RMB clearing centers and explore RMB-local currency swap and settlement mechanisms to increase RMB usage in Asia-Pacific, Middle Eastern, and African regions. Third, enrich the supply of RMB financial products. Promote international issuance of more RMB-denominated green bonds, ESG funds, and other products, enhance liquidity and transparency, coordinate tax and rating policies, reduce costs for foreign investors, and boost the international appeal of RMB-denominated assets.

2. Enhance Financial Institutions' Cross-Border Payment Efficiency and Innovation Capabilities

Promote the establishment of more bilateral local currency swaps and cross-border clearing centers, deepen cooperation with new international payment platforms, expand cross-border usage scenarios for digital RMB, reduce dependence on the USD and SWIFT, improve the convenience of RMB payments, and lower cross-border payment costs. Accelerate derivative innovation in the RMB bond market, launch more RMB-denominated products meeting international investor demands, such as green bonds, carbon bonds, and bond index funds. Enhance market liquidity, lower entry barriers, and attract more long-term capital to allocate RMB assets. Improve risk management tools, provide personalized risk management solutions, and diversify exchange rate hedging instruments, such as RMB futures, options, and forward contracts, to help enterprises effectively cope with RMB exchange rate fluctuations.

3. Increase Enterprises' Initiative in Using Cross-Border RMB

Enterprises should incorporate cross-border RMB usage into their strategies for optimizing cash management, asset management, and risk management. On one hand, actively sign RMB settlement agreements with global trade partners, especially Belt and Road countries and emerging markets, leveraging local policy support and financial service networks to increase RMB usage in cross-border transactions. Enhance counterparties' acceptance and trust in RMB through marketing and customer education. On the other hand, build global fund concentration management platforms to optimize RMB fund allocation and settlement, reducing transfer costs. Fully utilize tools such as futures, options, and forward contracts to hedge exchange rate risks. Leverage fintech for real-time monitoring and efficient allocation of fund flows, improving fund utilization efficiency and security. Additionally, expand international financing channels by issuing RMB-denominated financial products (e.g., bonds, stocks), and use innovative products like green bonds and carbon credit bonds to attract sustainability-focused investors, enhancing enterprises' international competitiveness.

In summary, further progress in RMB internationalization requires joint support from policies, markets, and enterprises. By improving the institutional environment, optimizing financial services, and enhancing enterprise capabilities, existing shortcomings can be effectively addressed, RMB's position in the international monetary system consolidated, and higher-quality development achieved.

October 2025
Vol.12, No.4

Anchoring the Future: A New Course for RMB Internationalization in the Tide of Stablecoins⋆

By WANG BO, ZHANG YIBO*

Within the US dollar-dominated stablecoin ecosystem, proactively embracing stablecoins as a transformative force and incorporating them into the top-level design and tactical toolbox of RMB internationalization is an inevitable choice to follow the trend of the times, defend financial sovereignty, and enhance currency competitiveness. Through scientific planning, prudent advancement, and global collaboration, China has the capacity to transform the challenge of stablecoins into momentum, sketching a more diversified, balanced, and efficient global monetary landscape for the new era.

Since May 2025, regulatory frameworks have been successively established by the US Guiding and Establishing National Innovation for U.S. Stablecoins Act (also known as the “GENIUS Act”) and the Hong Kong Special Administrative Region’s Stablecoin Ordinance. These explicitly define fiat-referenced stablecoins as legal payment instruments and strengthen anti-money laundering and counter-terrorism financing requirements. Major economies like the UK and South Korea are also advancing legislative agendas to incorporate stablecoins into their sovereign regulatory systems.

Stablecoins, as innovative products blending cryptographic technology with traditional fiat systems, possess inherent global attributes. Their high efficiency and technical advantages in cross-border flows create opportunities while simultaneously posing unprecedented impacts on national monetary sovereignty. Facing this global monetary system adjustment driven by stablecoins, China needs to gradually construct a new governance framework that not only safeguards national financial security and sovereignty but also transforms technological shocks into strategic pivots for RMB internationalization through institutional design.

Stablecoins represent the tokenization of fiat currency on the blockchain. Their systematic development as a Renminbi stablecoin system will become a new pathway to break through existing dilemmas and accelerate RMB internationalization.

Favorable Winds in the Channel: Stablecoins Open a Strategic Window for RMB Internationalization

Bypassing the SWIFT System, Establishing Non-USD Settlement Channels

Currently, the US dollar accounts for up to 41% of global cross-border payments, with the SWIFT system serving as a tool for US "long-arm jurisdiction." RMB stablecoins can utilize blockchain's distributed ledger technology to build a decentralized cross-border payment network, thereby breaking SWIFT's technical monopoly. Domestic commercial banks or licensed institutions could issue compliant stablecoins, fully backed 1:1 by RMB reserves, in offshore centers like Hong Kong. Upon receiving the stablecoin, the payee could immediately exchange it for local currency on a local digital asset exchange or automatically swap it for digital RMB or other central bank digital currencies via blockchain-based cross-chain smart contracts. As blockchain addresses can be anonymous and transactions operate 24/7, making real-time tracking against sanctions lists difficult, this boosts stablecoin penetration in regions with restricted cross-border payments (or even facing sanctions), effectively bypassing USD control. As participating nodes increase, network effects will drive more countries and enterprises to actively connect, forming a parallel payment network denominated in RMB, providing practical financial infrastructure for "de-dollarization."

Expanding the Use Scope of Offshore RMB, Activating “Non-Chinese Users”

Current offshore RMB deposits in Hong Kong amount to around 1.2 trillion RMB, but over 80% are held by Chinese enterprises. RMB stablecoins, by lowering account opening thresholds, shortening settlement times, and providing online transparency, can transform RMB into a “programmable, divisible, and globally circulating” digital asset. SMEs need only a wallet address to receive RMB stablecoins,

⋆ Translated from an article previously published in Modern Bankers.

* Wang Bo is a Professor and Doctoral Supervisor at the School of Finance, Nankai University. Zhang Yibo is a Master’s Degree Candidate at the School of Finance, Nankai University.

without opening a Hong Kong bank account or bearing 3%–5% exchange costs. Simultaneously, stablecoins require only internet access and a digital wallet, breaking the constraints of traditional bank account systems and providing a low-threshold transaction tool for the global unbanked population. With the continuous integration of cross-border scenarios like e-commerce, online gaming, and SaaS subscriptions, RMB stablecoins could settle in the wallets of overseas consumers and merchants like "digital dollars," thereby expanding the circulation radius of offshore RMB, forming an effective supplement to traditional financial infrastructure, and further perfecting the path of RMB internationalization.

Reducing Cross-Border Payment Costs, Penetrating Fragmented SME Scenarios

Leveraging blockchain's peer-to-peer real-time clearing, the time and cost of cross-border transactions are significantly reduced. Traditional cross-border remittance fees can be as high as 5%–10%, taking 2–5 working days, a significant burden for SMEs with annual transactions under $100,000. Stablecoins streamline the process into "on-chain confirmation + exchange rate conversion," compressing settlement time to minutes and keeping fees below 1% of the transaction value. Payment institutions provide automated settlement services via APIs. When an e-commerce platform receives RMB stablecoins from an overseas buyer, the system automatically exchanges them for local fiat currency on a chain-based DEX and settles with the merchant. Immutable on-chain records allow regulatory nodes real-time, transparent monitoring, enabling cost reduction and efficiency gains while preventing money laundering risks, attracting a large number of long-tail SMEs to use RMB for pricing and settlement. RMB stablecoins could become a "digital bridge" connecting global SMEs with Chinese supply chains, promoting the natural extension of RMB from traditional bulk trade settlement to fragmented scenarios like cross-border e-commerce, service outsourcing, and digital content, solidifying RMB's new status in global payments, reserves, and pricing, achieving the internationalization leap from "reliable to use" to "easy to use" to "willing to use." Furthermore, while the digital RMB currently focuses more on B2B wholesale payment scenarios, the legalization of RMB stablecoins would fill its gap in B2C small payments and Web3 applications, creating a synergistic division of labor between "onshore digital RMB + offshore RMB stablecoins," jointly building a multi-layered global RMB pricing and settlement system.

Building an "RMB-centric Regional Settlement Circle," Achieving Partial Substitution of the USD System

RMB internationalization has long been constrained by "dollar inertia," while stablecoins offer a tool to reshape regional settlement networks from the bottom up. China can use RMB stablecoins as a medium to jointly build multi-currency liquidity pools with central banks or commercial banks along the Belt and Road. For instance, within the China-ASEAN Free Trade Area, allow real-time on-chain swapping between Vietnamese Dong, Thai Baht, Singapore Dollar, and RMB stablecoins. In energy trade with Saudi Arabia and Iran, drawing lessons from Tether's $45 million USDT crude oil transaction in the Middle East, achieve Delivery vs. Payment (DvP) using RMB stablecoins, exploring stablecoins' new role in commodity markets and reducing USD exposure. Through distributed governance involving multilateral central bank nodes, this regional settlement circle could gradually formulate clearing rules, interest rate benchmarks, and error correction mechanisms. When trade, investment, and bond issuance within the region are all denominated in RMB stablecoins, the RMB becomes not just a settlement currency but a de facto "anchor currency." This could form a partial substitution for the USD system in Southeast Asia, the Middle East, Africa, etc., substantively advancing RMB internationalization.

Hidden Shoals and Undercurrents: Multiple Challenges Facing RMB Internationalization Driven by Stablecoins

"First-Mover Advantage" in Cross-Border Payments

Relying on the triple advantages of 24/7 on-chain clearing, low transaction fees, and deep liquidity, USD stablecoins (USDT/USDC) have already achieved first-mover market positioning in cross-border e-commerce, remittances, and B2B settlements in Southeast Asia, Africa, and Latin America, holding an absolute dominant share of over 95% of the global stablecoin market capitalization. In emerging economies like Nigeria, Indonesia, and Mexico, numerous SMEs use USD stablecoins as de facto clearing tools, bypassing traditional correspondent banking systems and forex controls via decentralized networks, forming informal settlement channels parallel to formal finance. Once local consumers and traders form path dependency, convincing them to switch to systems like China's Cross-border Interbank Payment System (CIPS) incurs higher education, compliance, and switching costs.

"Transmission Failure" of Monetary Policy

Stablecoins are issued by private entities via algorithms, asset collateral, or financial contracts, essentially stripping money issuance authority from central banks, forming a "private central bank" system. If offshore institutions issue RMB stablecoins backed by offshore assets, these assets remain deposited offshore, preventing the mainland central bank from directly adjusting their liquidity and interest rates using policy tools like reserve requirement ratios or MLF. Holders enjoy RMB denomination convenience but remain outside the monetary policy transmission radius. More critically, USD stablecoins (like USDC) already enable the real-time conversion of US Treasury yields into returns for global users via on-chain protocols (e.g., Compound). If RMB stablecoins lack an autonomous interest rate formation mechanism, their price fluctuations may be forced to follow the US Treasury cycle, trapping RMB internationalization in a passive state of "nominal sovereign independence,substantive pricing power dependency", ultimately weakening the central bank' s macroeconomic control effectiveness.

Network Effect Lock-in

On-chain entry points with hundreds of millions of users like MetaMask, Phantom, and Coinbase Wallet already list USDT/USDC as default tokens; mainstream decentralized applications (Dapps) like OpenSea, Uniswap, and Aave use them as core pricing and collateral units. Mainstream wallets, exchanges, and DeFi protocols form a self-reinforcing "closed-loop ecosystem," creating huge network externality barriers for any new currency to overcome. Simultaneously, entities like Tether and Circle have accumulated global user profiles through transaction data, forming data monopolies that further lock in end-user scenarios.

"Absence Dilemma" of Institutional Backing

The US, while navigating political controversies around a digital dollar (CBDC), has through acts like the STABLE Act and the GENIUS Act endowed USDC with a "quasi-official" status: the Treasury can authorize its use for disaster relief, international aid, and even government procurement. Private issuance with public sector backing avoids the legislative tug-of-war of CBDC while extending dollar hegemony at lower cost. In contrast, if the RMB lacks similar institutional backing, even launching offshore stablecoins will struggle to gain equivalent trust, greatly constraining the enhancement of international influence.

"Closed Gate" for Reflux Channels

While Hong Kong has taken the lead in launching offshore RMB stablecoins, whose circulation overseas is largely unconstrained by mainland law, these digital assets face dual institutional obstacles of lacking infrastructure and regulatory framework misalignment when needing to flow back onshore. The mainland has not yet established a corresponding RMB stablecoin system, nor does it have widely available digital wallets capable of identifying on-chain assets and real-time clearing interfaces. Converting on-chain tokens into onshore fiat requires complex processes like foreign exchange declaration, account verification, and AML screening, with the current system treating each on-chain-to-fiat conversion as a cross-border capital flow. The result is two paths: either let transactions remain in an offshore closed loop, halting RMB internationalization at the border; or prolong settlement cycles for compliance, dragging second-level payments back to traditional T+1 or even T+3.

"Regulatory Challenges" Arising from Fund Flows

Stablecoins can easily cause financial disintermediation, as deposits converted into stablecoins directly lead to bank deposit outflows. Although issuing institutions purchasing assets like government bonds may partially recycle funds into the banking system, in the long term, this could shift bank liability structures from savings deposits to interbank liabilities, or force them to reduce bond holdings and shrink their balance sheets, compressing interest margins and eroding profits. Concurrently, onshore funds might use stablecoins to transfer capital offshore seeking interest rate differentials, challenging existing cross-border capital flow management. Furthermore, if an RMB stablecoin itself faces a crisis of confidence (e.g., de-pegging due to reserve issues), panic and selling pressure could impact the offshore RMB exchange rate and even spill over to the onshore market, damaging the RMB's international credibility.

Navigating the Waves: Strategic Paths for Accelerating RMB Internationalization with Stablecoins

Institutional Design: Pilot First with a "Controlled Offshore" Model

The sequence is “Hong Kong first, then the Mainland.” Leveraging its status as an international financial center and its enacted Stablecoin Ordinance, Hong Kong supports the issuance and trading of compliant offshore Renminbi (RMB) stablecoins, conducting practical exploration in exchange rate management, capital flows, Anti-Money Laundering/Know Your Customer (AML/KYC), user protection, and risk prevention and control; it will further deepen and test the stablecoin issuer sandbox system implemented by the Hong Kong Monetary Authority, accumulating experience for the mainland's opening. Geographically, it’s “offshore abroad first, then domestic offshore.” The experience will be promoted to domestic offshore financial areas such as the Shanghai Free Trade Zone and the Hainan Free Trade Port, piloting the issuance of onshore offshore RMB stablecoins; subsequently, offshore and onshore RMB stablecoins will be piloted simultaneously in the Guangdong-Hong Kong-Macao Greater Bay Area, while simultaneously improving the monetary regulation and financial supervision framework. Finally, after the capital account is fully liberalized, the path for comprehensive domestic implementation will be assessed and decided based on actual conditions. Through this gradual, risk-controlled practice from the outside in, key experience in stablecoin application will be accumulated for RMB internationalization and an institutional foundation will be laid.

Macro Governance: Building a “Trinity” Risk Firewall

China needs to build a “trinity” risk firewall composed of monetary sovereignty, financial security, and market supervision, ensuring that RMB stablecoins do not detach from the national macro-prudential framework during offshore innovation. On the monetary sovereignty front, the People’s Bank of China formulates rules for reserve asset custody, 100% reserve funds, real-time disclosure, and on-chain auditing; all issuing institutions must deposit equivalent RMB cash or highly liquid government bonds into designated custodian banks and accept penetrative supervision to prevent over-issuance and currency substitution. On the financial security front, the Ministry of Finance routinely enlarges, deepens, and stabilizes its reserve asset pool, for instance by issuing offshore government bonds in Hong Kong, providing “risk-free collateral” for RMB stablecoins, while optimizing the yield curve, forming a global RMB pricing anchor, and enhancing the safe-haven attributes of RMB assets. On the market supervision front, the Hong Kong Securities and Futures Commission, the Hong Kong Monetary Authority, and the mainland’s State Administration of Foreign Exchange establish a joint regulatory interface. Through technical means such as on-chain data sharing, one-click freezing of abnormal transactions, and synchronization of cross-border blacklists, a full-process closed loop of “pre-entry access, in-process monitoring, post-event accountability” is achieved, preventing illegal activities such as money laundering, terrorist financing, and sanctions evasion, while leaving compliant space for legal innovation, ultimately making RMB stablecoins a “controllable, trustworthy, and usable” global public product.

Technological Complementarity: Central Bank Digital Currency and Stablecoins Complement Each Other with Distinct Roles

Build a layered payment ecosystem of “Onshore Digital RMB + Offshore RMB Stablecoins,” where the digital RMB focuses on the “wholesale layer” for large-value, low-frequency official cross-border scenarios (such as energy procurement, sovereign bond settlement, etc.), relying on the multi-central bank digital currency bridge (mBridge) to connect central banks and the Cross-border Interbank Payment System (CIPS) to connect foreign banks, strengthening the main channel role for cross-border clearing and consolidating the foundation of sovereign currency. Correspondingly, offshore RMB stablecoins mainly target the “retail layer” for high-frequency, peer-to-peer private cross-border scenarios, prioritizing coverage of cross-border e-commerce, B2B small-value trade, crypto asset trading, and real-world asset tokenization (RWA), utilizing blockchain technology to significantly reduce payment costs and time, bypassing traditional intermediary systems like SWIFT, opening up new application space for RMB in markets dominated by US dollar stablecoins, and increasing the frequency of offshore RMB usage by non-Chinese enterprises. By building an ecosystem where “Digital RMB leads + RMB Stablecoins supplement,” the efficiency of financial infrastructure is jointly enhanced, the US dollar payment monopoly is broken, the leap of the RMB from a settlement currency to a reserve currency and pricing currency is advanced, ultimately driving the process of RMB internationalization, and seizing the institutional and technological high ground in the digital currency era.

Usage Scenarios: Gradual Opening from “Cross-Border Payment” to “Financial Investment”

Under the principle of prioritizing risk control, a gradual opening path should be constructed through scenario restrictions and user stratification mechanisms: initially strictly limit usage scenarios and user scope to control risks, prioritizing service to the cross-border trade payment sector. Specifically, only allow certified cross-border e-commerce platforms, large import and export enterprises, and qualified institutional investors to use RMB stablecoins in high-frequency, small-amount scenarios such as payment settlement, supply chain finance, and freight payment, fully leveraging their efficiency and cost advantages in cross-border payments, and cooperating with the CIPS system to achieve integrated on-chain clearing, significantly reducing US dollar exchange and SWIFT channel costs. After market size, liquidity, and regulatory experience accumulation reach a critical point, gradually open broader financial investment scenarios to retail users. Allow ordinary users to purchase digital bonds, participate in offshore wealth management products, conduct DeFi staking and lending, and even directly subscribe to financial products such as Hong Kong government bond ETFs and green bonds using RMB stablecoins through compliant digital wallets. Thereby, the global accessibility of RMB assets is elevated from a “payment currency” to an “investment currency.” Against the backdrop of increasing US dollar liquidity volatility, it provides international investors with a new, low-threshold, high-transparency channel for RMB asset allocation, further consolidating the “network effect” of the RMB in the international monetary system.

Dual-Wheel Drive: Expanding Stablecoin Application Boundaries with “RWA + RDA”

In the process of RMB internationalization, Real-World Assets (RWA) and Real Data Assets (RDA) are constituting the underlying innovation logic of dual-wheel drive. RDA, as an innovative paradigm proposed by the Shanghai Data Exchange, uses blockchain to encapsulate operational data of physical assets (such as commodity inventory, trade flows, carbon emissions, etc.) into trusted units, forming standardized, tradable digital assets. It is an extension and enhancement of RWA (Real-World Assets): RWA focuses on the on-chain mapping of physical assets (such as green energy projects, infrastructure, etc.), while RDA endows assets with dynamic value and risk profiles through real-time, verifiable data flows, laying the foundation for generating scenario-customized stablecoins (such as “PORT-CNY” port settlement coin, “STEEL-CNY” steel trade coin, etc.). Relying on the Hong Kong Stablecoin Ordinance as an institutional support, the credit support system for offshore RMB stablecoins is upgrading from a single fiat reserve model to a composite model of “RWA Asset Bundle + RDA Data Verification”. For example, the long-term toll rights of strategic ports along the “Belt and Road” could be packaged into RWA tokens, and RDA could be generated by real-time access to port IoT, satellite remote sensing, and ship AIS systems, dynamically verifying key operational indicators like cargo flow and berth utilization rate. International investors can directly use RMB stablecoins to purchase these high-quality infrastructure revenue rights presented in the form of RWA tokenization, forming a complete closed loop of “Asset On-chain Rights Confirmation (RWA) − Data Dynamic Verification (RDA) − Stablecoin Circulation and Settlement,” activating the global liquidity and positive cycle of real assets.

Rule Shaping: Seizing Global Stablecoin Rulemaking via “Multilateral Platforms”

Currently, China lags in participating in international stablecoin rulemaking. It is urgently necessary to actively promote the establishment of key international standards regarding stablecoin reserve asset transparency, liquidity coverage ratio requirements, and cross-border regulatory consistency through core platforms such as the G20, Bank for International Settlements (BIS), Financial Stability Board (FSB), BRICS organization, and Shanghai Cooperation Organization (SCO), enhancing China’s voice in the global stablecoin market. Simultaneously, it is necessary to systematically strengthen the depth of the RMB’s institutional participation in the global digital financial governance system, gradually transforming this participation into actual rule-shaping and export capability, promoting the transformation of the RMB from a “passively used currency” to a “global monetary force actively shaping institutions.” Relying on the practical experience of pioneering RMB stablecoin trials in international financial centers like Hong Kong, China can seize the institutional high ground in digital financial regulation, accumulate practical basis and discursive advantage for participating in future international digital currency rule negotiations, and effectively enhance its institutional influence.

International Linkage: Embedding Stablecoins into “Belt and Road” and RCEP Scenarios

China should embed RMB stablecoins into the “Belt and Road” and Regional Comprehensive Economic Partnership (RCEP) regions, seizing the strategic window of opportunity created by the structural weakening of the US dollar system. First, in key resource transactions such as oil and gas, minerals, and grains, encourage both Chinese and foreign enterprises to adopt RMB stablecoins for pricing and settlement, guiding them to form institutional path dependency. Second, conduct pilot “Multilateral Stablecoin Corridors” with the central banks of countries such as Saudi Arabia, the UAE, Indonesia, and Malaysia, allowing 1:1 real-time conversion between RMB stablecoins and local central bank digital currencies, reducing exchange rate risks arising from US dollar liquidity fluctuations, and forming regional RMB liquidity pools. Additionally, bind transactions of strategic resources such as weaponry, large aircraft, high-speed rail technology, and rare earth resources to RMB stablecoins. Leveraging the attractiveness of China’s core assets, promote the application of RMB stablecoins in high-end international trade, enhancing their international credibility. Using trade as the link, promote the high-frequency use of RMB stablecoins in regional cross-border settlements, gradually increase their usage rate in international trade, form a virtuous cycle, and secure a level of discursive power in the new global digital financial landscape commensurate with China’s economic scale.

October 2025
Vol.12, No.4

Geoeconomic Risks and Internationalization of the RMB*

By LU LIPING, DONG HONGYI, LIU RENPING, ZHANG BORUI*

The RMB serves as a supplement to the existing international monetary system rather than a substitute for traditional sovereign currencies such as the US dollar and the euro. The internationalization of the RMB requires multiple measures, including strengthening the foundation of the currency's value, deepening the opening-up of financial markets, improving the cross-border payment system, and enhancing the risk management system. These measures can promote the steady development of the internalization amid high-risk environments and further promote the diversification of the international monetary system.

Intensifying geoeconomic risks is profoundly reshaping the international monetary landscape, bringing new opportunities for the internationalization of the RMB. The rising external risks not only increase the demand for the RMB as a trading medium for hedging purposes but also prompt countries to include the RMB in their value reserve asset portfolios for diversification. Furthermore, the improvement of cross-border payment infrastructure has expanded the RMB usage network, enhancing both the depth and breadth of the RMB's internationalization. Although geoeconomic risks have a stronger promoting effect on the RMB's internationalization than on traditional currencies including the US dollar and the euro, the RMB still serves as a supplement of the existing international monetary system rather than a substitute of traditional sovereign currencies mentioned above. The steady progress of the internationalization of the RMB in a high-risk environment requires multiple measures including solidifying the currency's value foundation, deepening financial market openness, optimizing the cross-border payment system, and strengthening the risk management system, which can also advance the diversification of the international monetary system.

1. Mechanism of Geoeconomic Risks Promoting the Internationalization of the RMB

Hedging Demand for the Medium of Exchange Function

Against the backdrop of high geoeconomic risks, the RMB's role as a hedging tool in international trade, investment, and other fields has become increasingly prominent. After the outbreak of the Russia-Ukraine conflict in 2022, Western countries led by the United States weaponized the international monetary system and imposed financial sanctions on Russia. This move exposed the political nature and manipulability of international payment network, which means the security of reserve currencies is no longer determined solely by economic fundamentals but is deeply influenced by geopolitical positions and state-to-state relations. To avoid over-reliance on a single currency, many countries have begun to seek alternative currencies for trade pricing and settlement and explore the establishment of trade clearing mechanisms independent of the US dollar system, so as to ensure the security of economic and trade activities. Against the backdrop, the RMB, due to its stable currency value and China's solid economic fundamentals, witnesses its usage increase in cross-border trade settlement year by year.

Meanwhile, intensifying geoeconomic risks has prompted countries to reevaluate their trading partners and markets, and build more reliable and secure trade relationships. A growing number of countries have deepened economic and trade cooperation with China. For instance, in 2024, the proportion of RMB settlement in China-Russia bilateral trade rose to 50%. This cooperation has not only helped trading partners avoid currency fluctuation risks caused by geopolitical conflicts but also created a stable settlement environment for bilateral trade. As the world's largest trader with its stable international status, China has laid a solid foundation for the regular use of the RMB in international trade settlement. Additionally, the weaponization of the US dollar has accelerated the global de-dollarization process, prompting countries to shift from theoretical discussions to practical actions. To break through the SWIFT blockade, many countries have accelerated the establishment of non-SWIFT bilateral payment channels, thereby further stimulating the demand for the RMB as a medium of exchange for hedging.

---

* Translated from an article previously published in Modern Bankers.

* Lu Liping: Researcher at the Yangtze River Economic Belt Development Institute of Renmin University of China, Researcher at the Institute of International Monetary Research.
Dong Hongyi: PhD Candidate at the School of Finance, Renmin University of China.
Liu Renping: Master Candidate at the School of Finance, Renmin University of China (Corresponding Author).
Zhang Borui: Undergraduate Student at the School of Finance, Renmin University of China.

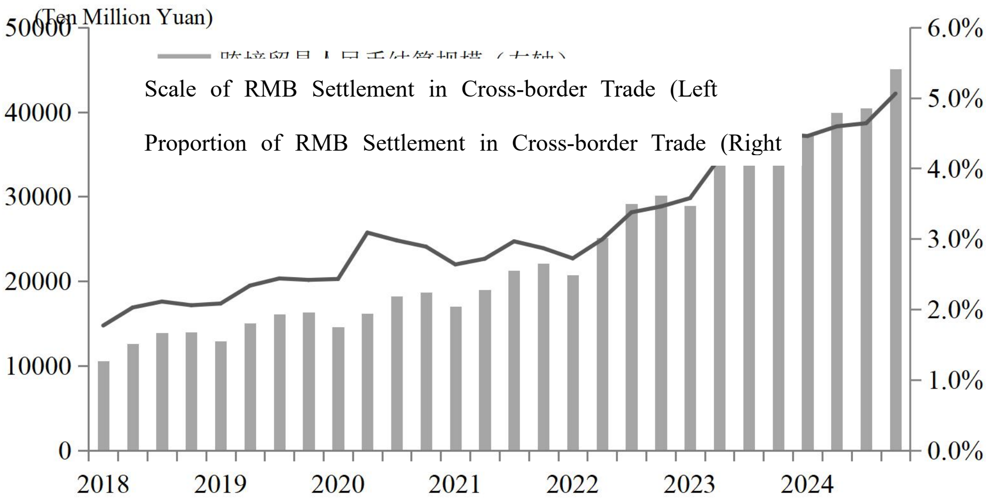


Figure 1. Scale and proportion of RMB Settlement in Cross-border Trade
Source: People's Bank of China, State Administration of Foreign Exchange

Diversification for the Store of Value Function

When geoeconomic risks rise, the value of traditional reserve currencies may fluctuate due to policy changes or geopolitical games of the issuing countries, leading to a decline in market confidence. Therefore, many countries tend to seek more stable alternative currencies to diversify risks and enhance the stability and risk resistance of their economies. The RMB is gradually becoming an important option in this diversified allocation. In May 2024, Saudi Arabia announced that it would accept RMB settlement in oil trade and planned to formally include the RMB in its official foreign exchange reserves. In June 2024, the Central Bank of Russia announced that the RMB would become Russia's main foreign exchange reserve currency. At the same time, RMB usage in Latin America, Africa, and Central Asia continues to expand.

Supported by China's stable economy and the continuous and transparent macro policies, the RMB exchange rate has remained basically stable despite short-term risk shocks such as global geopolitical conflicts, and its risk resistance has been continuously enhanced. This has made the RMB increasingly attractive as an international reserve currency, effectively helping holding countries diversify the risks associated with holding reserves in a single currency.

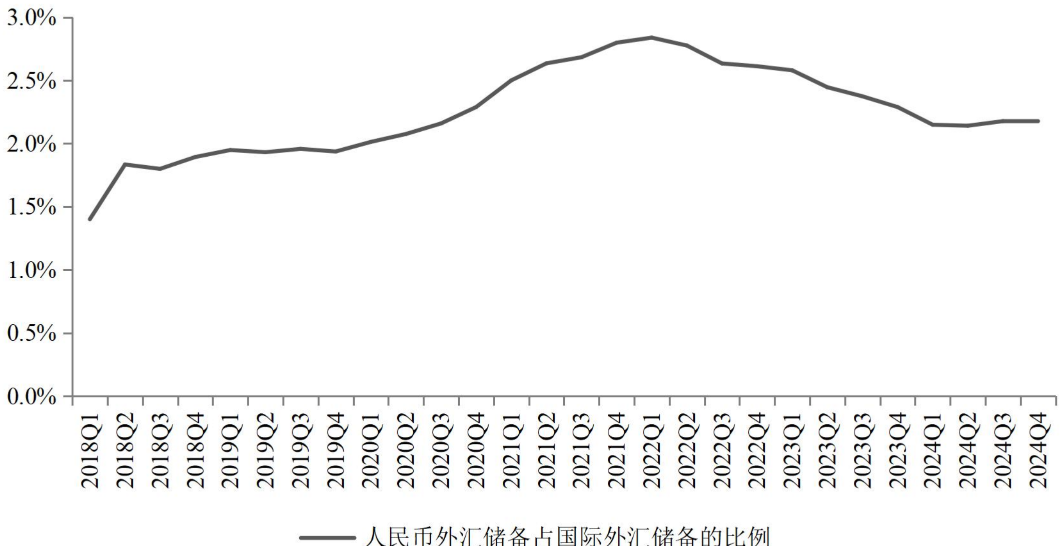


Figure 2. Changes in the propo Proportion of RMB Foreign Exchange Reserves in Global Foreign Exchange Reserves

Expansion and Deepening of Cross-border Payment Coverage

Against the backdrop of the global payment system being impacted by geoeconomic risks, new payment technologies represented by Central Bank Digital Currencies (CBDCs) have offered a new pathway of the diversified development of the global payment system. They help alleviate the "center-periphery" structural issues in the traditional system, thereby injecting new impetus into the internationalization of the RMB. The application of CBDCs not only improves the efficiency and security of cross-border RMB payments, but also avoids the shocks of geopolitical conflicts, which attracts more countries and enterprises to choose RMB settlement in cross-border trade. As the CBDC system expands the application scenarios of cross-border payments and the Cross-border Interbank Payment System (CIPS) gradually covers more countries and regions, the global network of RMB usage continues to expand. This will effectively reduce the switching costs for market entities and form a positive cycle of "wider usage and higher acceptance", thereby further enhancing the depth and breadth of the RMB's internationalization.

2. Differentiated Impact of Geoeconomic Risks on Currency Internationalization

Differentiated Impact of Different Types of Geoeconomic Risks

Different types of geoeconomic risks have varying effects on the internationalization of the RMB. When facing risks that directly impact trade and investment activities, such as economic sanctions and trade barriers, market entities tend to choose the RMB for trade settlement or increase their allocation of RMB assets to avoid over-reliance on traditional international currencies, which can directly promote the internationalization of the RMB. Risks such as technological blockades and supply chain disruptions will accelerate the restructuring of global and regional value chains. In the context, the pricing and settlement functions of the RMB have been strengthened in emerging industrial cooperation and regional supply chains led or deeply participated in by China. With the growing intensity of geoeconomic and financial risks including financial sanctions and capital controls, the internationalization of the RMB now faces the imperative of overcoming two key barriers: the limited opening of the capital account and the insufficient depth of RMB-denominated financial products.

Differentiated Impact of Geoeconomic Risks on Different Economies

The intensification of geoeconomic risks exerts an asymmetric impact on the international status of currencies across different countries. It has significantly advanced the internationalization of the RMB and the Japanese yen. Their comparable safe-haven asset characteristics amid geoeconomic risks can be attributed to the fact that Japan and China, both located in East Asia, share similarities in economic structure and trade patterns. For the euro, geoeconomic risks may drive its internationalization under specific circumstances, yet the magnitude of this effect pales in comparison to that on the RMB and the Japanese yen. In contrast, geoeconomic risks don't have a significant impact on the internationalization of the US dollar and the British pound. The differentiated impact of geoeconomic risks on the internationalization of currencies reflects the differences among economies in their economic structure, financial system maturity, position in the industrial chain, and macro-policy stability. It further highlights the presence and potential of the RMB in the international monetary system.

3. RMB as a Safe-Haven Asset and Diversification of the International Monetary System

Enhancement of the RMB as a Safe-Haven Asset

Against the backdrop of high geoeconomic risks, the RMB's attribute as a safe-haven asset has become increasingly prominent. As the world's second-largest economy and the largest traders, China's stable economic fundamentals and huge market scale provide a solid credit foundation for the stability of the RMB's value. Another point is that China's innovative policies in financial opening-up has brought continuous benefits. Mechanisms including the "Cross-border Wealth Management Connect" have expanded the channels of the use of the RMB in the international market; the "Nine New Guidelines" aims to expand the two-way opening of the capital market and enhance the liquidity and attractiveness of RMB assets. Amid the global "de-dollarization" trend, the RMB exchange rate has remained basically stable at a reasonable and balanced level; the depth and breadth of cross-border RMB usage have continued to expand; the RMB infrastructure has been continuously improved. These factors have led more countries to choose the RMB as a safe-haven asset to enhance the stability and security of their economies and finances.

A Supplement Rather Than a Substitute of the Dominant Currencies

As the world's most important reserve currencies and mediums of exchange, the US dollar and the euro will continue to maintain their dominant positions in the global monetary system in the short term. The

RMB serves a strong supplement to them and a contributor of the diversified international monetary system. The dominance of the US dollar and the euro mainly attributes to their strong overall national strength, network effects, mature financial market systems, and geopolitical inertia. This scale effect results in strong market inertia and extremely high costs in currency replacement. In particular, in key markets such as oil and bulk commodities markets, international trade is deeply bound to the US dollar financial system and cannot be replaced quickly. In addition, the United States and the European Union possess the world's most developed and mature capital markets, legal environments, and financial infrastructure. The US Treasury bond market is large in scale and highly liquid, making US Treasury bonds the primary safe-haven choice for global investors. From the perspective of geopolitical inertia, the United States has strengthened the political stickiness of the US dollar system through its alliance system and its influence in international financial infrastructure such as SWIFT, making it difficult for its core network to be replaced in the short term.

In spite of the US dollar and the euro maintaining their leading positions, the RMB's internationalization has been advanced due to the rise of geoeconomic risks. It can be seen that the RMB and dominant currencies are not in a simple trade-off relationship. The RMB enjoys unique internal driving forces in the international process and has seized special external opportunities. In the context, the RMB, as a supplementary rather than substitutive safe-haven asset, plays a key role in building a diversified international monetary system. From a global perspective, the rise of the RMB helps promote the multipolarization of the international monetary pattern and reduce the systemic financial risks caused by over-reliance on a single currency. For emerging market countries facing US dollar sanctions or external financial pressure, the RMB provides a feasible option for "de-dollarization", which is conducive to enhancing the financial autonomy and risk resistance of these countries.

4. Measures to Advance the Internationalization of the RMB

Consolidate the Foundation of RMB Value Stability and Enhance International Market Confidence

To promote the internationalization of the RMB against the backdrop of high geoeconomic risks, it is necessary to maintain the continuity and predictability of macroeconomic policies. Through a prudent monetary policy and a cautious fiscal policy, the RMB exchange rate should be maintained at a reasonable and balanced level to avoid large fluctuations, fundamentally consolidating the international market's confidence in the RMB. It is also necessary to further optimize the exchange rate formation mechanism, enhance the flexibility of the exchange rate in the context of increasing external uncertainties, and reduce the impact of market uncertainties on the exchange rate.

Deepen the Opening-Up of Financial Markets and Enrich the Choices of RMB Asset Allocation

It is necessary to promote the comprehensive institutional opening-up of financial markets, optimize the business environment and attract more international capital to flow into the domestic market in an orderly manner. In terms of the construction of the bond market, efforts should be made to expand the breadth and depth of the market, increase the channels of opening-up practices, facilitate foreign investment, and improve the market liquidity of RMB bonds. Another point is that, centering on free trade zones, the Guangdong-Hong Kong-Macao Greater Bay Area, and the Shanghai International Financial Center, innovate cross-border RMB investment and financing businesses, enrich financial products denominated in RMB, and meet the diversified asset allocation and risk management needs of international investors. Hong Kong, as a world-leading international financial center, should be engaged in promoting the alignment of the RMB with international financial market rules, build a more mature and diversified RMB financial product ecosystem, and enhance the global allocation value of RMB assets. Attention should be paid to enhancing the opening of capital accounts and the convertibility of the RMB; quota restrictions on QFII and RQFII should be eased with risks under control; a more flexible "negative list" should be adopted to improve management model. These measure help expand the freedom of foreign capital to participate in the RMB market while ensuring financial security.

Improve the Cross-Border Payment System and Strengthen the Support of Cross-Border Financial Infrastructure

Focus should be set on expanding the global coverage of the Cross-border Interbank Payment System (CIPS), and attracting more overseas financial institutions through policy guidance and market cooperation, so as to build a more efficient and resilient global RMB clearing network. It is necessary to strengthen the interconnection of payment systems with major economies and countries along the "Belt and Road", deepen multilateral and bilateral currency cooperation mechanisms, and promote the global usage of the

RMB as the pricing and settlement currency in trade, investment, and other fields. Also, efforts should be paid to accelerate the R&D, iteration, and pilot application of central bank digital currencies (CBDCs), and explore their application in cross-border trade, investment, and financing and enhance the security of CBDC payments with more advanced underlying technologies and more optimized design schemes. In addition, the RMB Cross-border Payment and Receipt Information Management System (RCPMIS) should be improved to enhance the information collection and statistical analysis functions of the RCPMIS.

Improve the Risk Management System and Ensure the Steady Advancement of the RMB's Internationalization

Attention should paid to the risk management of the RMB in exerting its pricing, settlement, and reserve functions on an international scale, so as to establish a full-chain risk prevention and control mechanism. Dynamic monitoring of risk factors including geopolitical conflicts, trade barriers, and financial sanctions should be maintained, and quantitative evaluation models should be established to analyze the impact of geoeconomic risks on the RMB's internationalization from different dimensions. Efforts should be made to establish and improve the risk early warning and response mechanism related to the RMB's internationalization, strengthen scenario analysis, and conduct regular stress tests. Special emergency plans should be made for exchange rate fluctuations, abnormal capital flows to ensure the stability of the RMB under extreme circumstances; exchange rate policy and capital flow management should be improved to ensure the steady progress of the RMB's internationalization process.

IMI International Monetary Review

Deepening Geoeconomic Risks and the Strategy for RMB Internationalization⋆

By WANG DAOPING, SHEN XINYAN, WANG YEDONG*

With the profound adjustment of the global political and economic structure and the increasingly fierce international competition, geoeconomic risks pose systemic challenges to macroeconomic stability through multiple channels such as trade, investment, and financial markets. Faced with the deepening geoeconomic risks, the internationalization of the RMB has become a strategic fulcrum to address external uncertainties, ensure the security of industrial chains, and promote the evolution of the international monetary system toward a more balanced structure.

The economic globalization wave swept across the world after the end of the Cold War (1947-1991). Economic and trade exchanges are generally believed by the international community as a kind of "positive-sum game" pursuing "absolute gains", and cross-border flows of capital, goods, technology, and personnel are regarded as effective ways to promote common prosperity and resolve conflicts. This process reshaped the global division of labor system with unprecedented depth and breadth. However, since the 2008 global financial crisis, economic globalization has encountered severe challenges: slowing growth, uneven distribution, and the resurgence of great-power competition have jointly given rise to the rise of protectionism, populism, and economic nationalism. The world economy is quietly shifting from an incremental game of win-win cooperation to a stock competition centered on relative gains.

Against the backdrop, "geconomics" has replaced traditional geopolitics as the core perspective for understanding the logic of international conflicts. As scholar Edward N. Luttwak pointed out in the early 1990s, with the "symbolization" of the deterrence of military confrontation, the logic of international conflicts is shifting from the military field to the commercial field, and competition in military power is gradually being replaced by competition in economic means. Countries are increasingly using economic tools, including but not limited to trade policies including tariffs and export controls, investment reviews, financial sanctions, and supply chain controls, to achieve their geopolitical goals. Interactions in the economic field are no longer purely driven by market logic but are deeply embedded in the strategic competition between countries. For China, which is deeply integrated into the global economy, the impact of this transformation is particularly far-reaching. How to accurately identify and measure geoeconomic risks and formulate effective macroeconomic and financial strategies on this basis is crucial to national economic security and long-term development.

Evolution and Interpretation of China's Geoeconomic Risks

To evaluate China's geoeconomic risks, this article constructs a China Geoeconomic Risk Index (GER) based on big news data from official media such as People's Daily, which intuitively reflects the dynamic evolution of geoeconomic risks faced by China since 1979.

As shown in Figure 1, the evolution of geoeconomic risks faced by China presents distinct phased characteristics. Over the nearly four decades from 1979 to 2017, China's Geoeconomic Risk Index mainly fluctuated around its long-term average, with an overall relatively stable level. This reflects that against the macro background of China's reform and opening up and gradual integration into the global economic system, the perceived risk of confrontation at the geoeconomic level was relatively low or not prominent.

However, since 2018, the geoeconomic risks faced by China have risen sharply, and have repeatedly reached historical peaks in the following years. Behind this fundamental change is the profound adjustment of the international competition pattern, especially the escalating Sino-US economic relations caused by the trade war initiated by the Trump administration.

To gain a deeper understanding of the structural characteristics and driving factors of China's geoeconomic risks, based on the core issues and risk manifestations of geconomics, we further constructed sub-indices of geoeconomic risks in six key areas (see Figure 2), namely: Trade Risk Index, Investment

⋆ Translated from an article previously published in Modern Bankers.

* Wang Daoping, Associate Professor at the School of Finance, Nankai University; Shen Xinyan, PhD candidate at the School of Finance, Nankai University; Wang Yedong, Assistant Professor at the School of Finance, Nankai University.

Risk Index, Technology Risk Index, Financial Risk Index, Supply Chain Risk Index, and Other Risk Index. These sub-indices not only reveal the dynamic evolution and relative importance of different types of geoeconomic risks but also provide a more detailed analytical perspective for understanding the internal structure and driving forces of fluctuations in the overall geoeconomic risks.

First, geopolitical trade and investment risks are important drivers of the rise of geoeconomic risks in this round.

Since the outbreak of the Sino-US trade conflict in 2018, geoeconomic risks related to trade have risen sharply. Although the intensity of direct confrontation in the trade field has eased somewhat since then, trade risks remain at a historical high, and geoeconomic risks related to trade have shown a long-term trend. Geoeconomic risks related to investment have also shown an upward trend since 2018, but a more significant peak emerged after 2020. This indicates that geoeconomic risks related to investment, such as foreign investment access restrictions, investment security reviews, and potential risks to overseas investment, have become increasingly important sources of geoeconomic risks and have continued to escalate in recent years.

Second, from the evolution trend of geoeconomic risks related to technology, it can be seen that geoeconomic competition has rapidly expanded from the trade field to the science and technology field.

Before 2018, technology-related geoeconomic risks were at a low level for a long time, but starting from 2018, such risks rose sharply and continuously. This is highly related to the increasing Sino-US competition in science and technology, which has expanded from 5G and semiconductors to artificial intelligence, biotechnology, new energy, and other fields. Restrictive measures targeting enterprises including Huawei and SMIC, as well as export controls on high-end chips and manufacturing equipment, have become core and long-term factors driving the perception of technology risks.

Third, since the outbreak of the COVID-19 pandemic in early 2020, geoeconomic risks related to supply chains have experienced explosive and continuous growth, becoming one of the most prominent sources of geoeconomic risks in recent years.

The pandemic has exposed the vulnerability of the global production network, triggering widespread concerns about industrial chain “decoupling”, near-shoring outsourcing, and friend-shoring outsourcing. This has made the issues of vulnerability, security, and resilience of the global supply chain a top priority in national assessments and policy considerations.

Figure 1. Evolution trend of geoeconomic risks facing China (1979-2025)

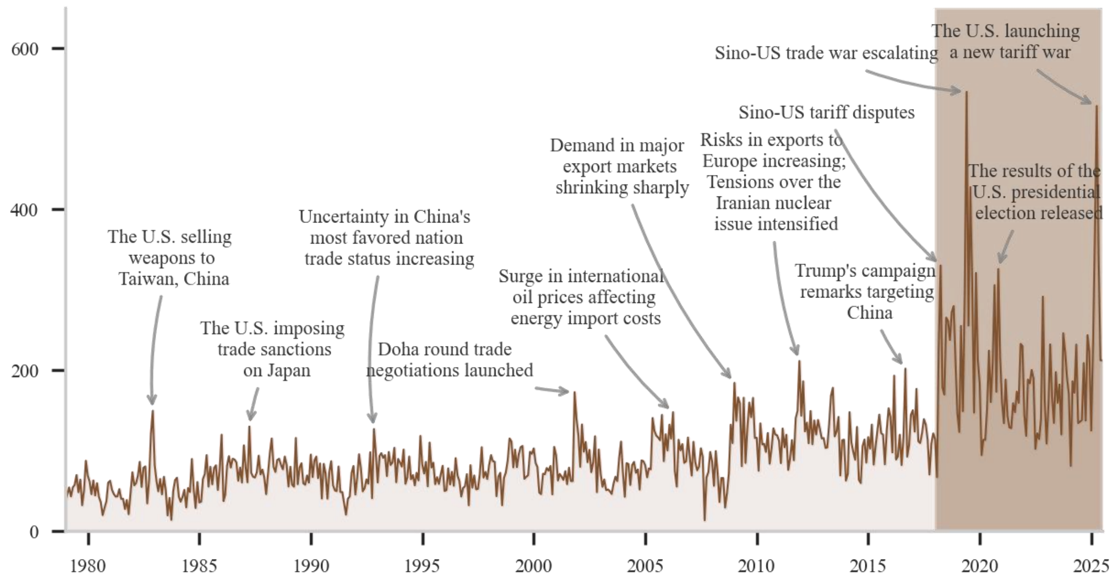
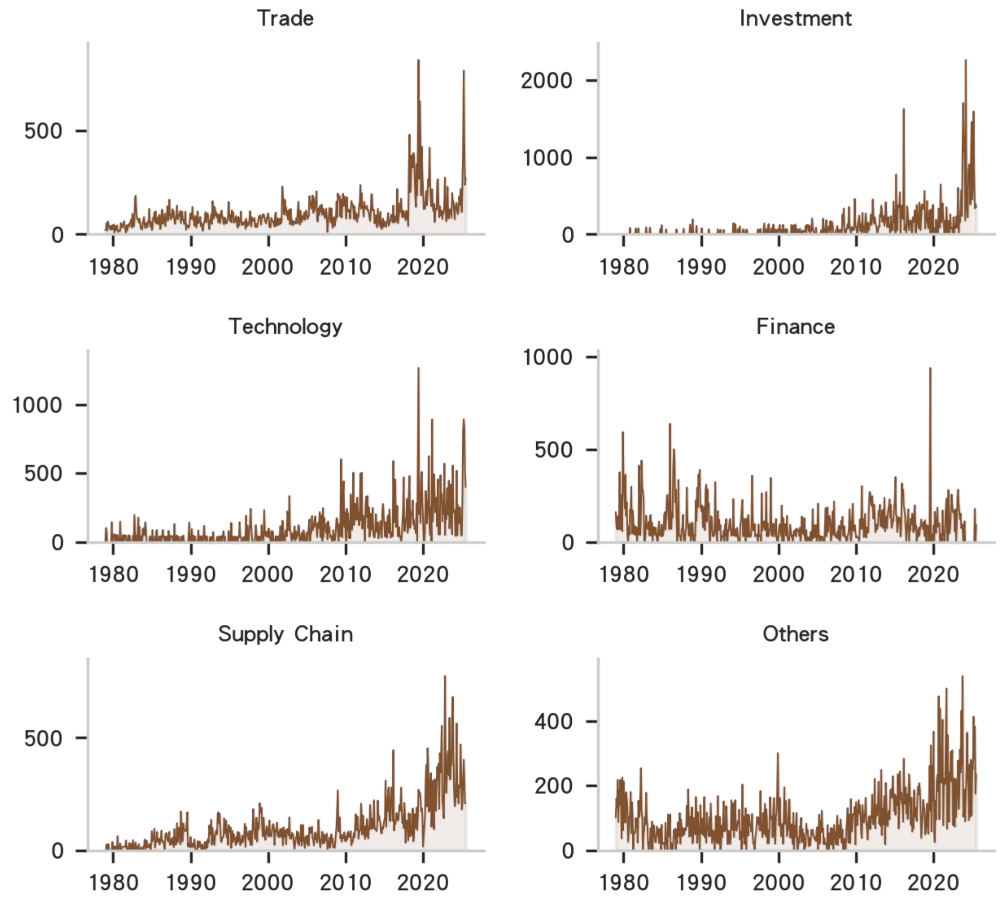


Figure 2. Geoeconomic Risks in Sub-fields



Fourth, geoeconomic risks related to financial risks and other risks have also shown a simultaneous intensification trend.

Geoeconomic risks related to financial risks have shown high volatility throughout the period. In addition to being related to major global financial crises, they are also closely linked to issues such as financial "decoupling", supervision of Chinese concept stocks, and financial sanctions in recent years, thus keeping the related geoeconomic risks at a high level. Other geoeconomic risks capture factors that cannot be clearly classified into the first five categories. Their trend has also shown an overall upward trend since 2018, and their fluctuations are somewhat synchronized with the overall Geoeconomic Risk Index. This reflects the increasingly generalized and complex characteristics of geoeconomic risks in recent years.

Systemic Impacts of Geoeconomic Risks on China's Economy

Geoeconomic risks have a broad and profound impact on the real economy and financial markets through multiple economic channels and approaches, posing comprehensive and profound challenges to China's economic growth, financial stability, and price levels.

First, geoeconomic risks will inhibit foreign economic activities.

In theory, tools such as tariffs, export controls, and trade sanctions directly increase the cross-border transaction costs of goods and services and hinder trade flows. The decline in supply chain stability will also trigger changes in corporate behavior patterns. When geoeconomic risks rise, enterprises have to shift from pursuing maximum efficiency to attaching more importance to the security and resilience of the supply chain. This will lead to the restructuring of the global production network, and enterprises may choose friend-shoring or near-shoring outsourcing with higher costs but lower geoeconomic risks, thereby sacrificing efficiency and increasing costs, which will also reduce the total volume of global trade. In addition, according to the real options theory, when the future policy environment, market access, and operating conditions are full of high uncertainty, the "option value" for multinational corporations to postpone investment decisions will increase significantly. In other words, in an investment environment where restrictive measures may be introduced at any time, rational enterprises will choose to "wait and see" rather than make long-term large-scale capital investments. Therefore, the rise of geoeconomic risks will also weaken the attractiveness of foreign direct investment (FDI). In recent years, major economies have frequently used tools such as tariffs, export controls, and investment security reviews, which have continuously weakened the external circulation of China's economy and posed practical constraints on China's economy, which is deeply involved in globalization.

Geoeconomic risks are posing comprehensive and profound challenges to China's economic growth, financial stability and price level through multiple channels including trade, investment and finance.

Second, geoeconomic risks affect the domestic financial market through the expectation channel and capital flow channel.

The rise of geoeconomic risks means that the uncertainty of enterprises' future cash flows has increased significantly. Moreover, some technology enterprises may face "supply cuts" of key technologies, and some export enterprises may lose their main markets. To compensate for this increased uncertainty, investors will require a higher rate of return to hold the company's stocks, that is, the equity risk premium rises. When the profit expectations of enterprises do not increase accordingly, a higher discount rate will inevitably lead to a decline in their stock prices. Therefore, the continuous deepening of geoeconomic risks will directly impact investors' confidence, lead to an increase in the risk premium of the financial market, and thus lower the expected return on assets in the future. At the interest rate level, on the one hand, the intensification of external risks will prompt funds to seek safer assets, such as government bonds, leading to an increase in government bond prices and a decrease in interest rates; on the other hand, the market will expect that risks will drag down economic growth, thereby digesting in advance the expectation that monetary policy may be loosened in the future, which often drives down market interest rates. At the exchange rate level, tariffs and trade barriers worsen the export prospects, reduce future trade surpluses, lower the international market demand for the local currency, and lead to pressure on the depreciation of the local currency.

Finally, the rise of geoeconomic risks will also have an impact on the domestic price level.

On the one hand, factors such as supply chain disruptions and trade barriers will lead to an increase in the cost of imported raw materials and intermediate products. These increased costs will eventually be partially passed on to end consumer goods, creating inflationary pressure on the Consumer Price Index (CPI). On the other hand, the rise of geoeconomic risks will inhibit enterprises' investment confidence and willingness to expand production, and at the same time curb domestic consumers' consumption confidence, suppressing total demand. The sluggish total demand, especially the decline in demand for industrial products such as steel, mechanical equipment, and building materials, will put manufacturers in a dilemma of reduced orders and overstocked inventory. To destock and maintain operations, enterprises have to reduce their ex-factory prices, thereby putting downward pressure on the Producer Price Index (PPI).

In general, geoeconomic risks are exerting comprehensive and profound impacts and challenges on China's economic growth, financial stability, and price levels through multiple channels such as trade, investment, and finance.

RMB Internationalization Strategy Amid Geoeconomic Changes

In the traditional analytical framework of economic theory, the internationalization of the RMB is often regarded as a result of the growth of China's economic aggregate and the deep integration of globalization. However, in the face of deepening geoeconomic risks, the internationalization of the RMB has evolved beyond a passive outcome of its role as a supplementary currency, but becomes a pivotal strategy to mitigate external risks and safeguard economic sovereignty and security.

First, the internationalization of the RMB is a "firewall" to safeguard the security of trade and supply chains.

Trade and supply chains are the core sources of current geoeconomic risks. When international economic and trade activities are increasingly instrumentalized, over-reliance on the US dollar for pricing and settlement will undoubtedly place China's trade system and industrial chain security under potential external threats. Therefore, actively promoting pricing, settlement, and financing in RMB in multilateral and bilateral cooperation including the Regional Comprehensive Economic Partnership (RCEP) and the Belt and Road Initiative can effectively build an independent, secure, and low-cost RMB circulation cycle, providing a solid international monetary foundation for China's economic lifeline.

Second, the internationalization of the RMB is a "ballast stone" to stabilize the domestic financial market and macroeconomy.

The transmission of external risks through financial channels is both rapid and violent. A more internationalized RMB must be accompanied by an onshore and offshore financial market with greater depth, breadth, and resilience. This can not only provide global investors with a new type of safe asset option different from traditional developed markets, enhancing the attractiveness of RMB assets, but also improve the ability of China's financial system to absorb and resolve external shocks. When the global demand for holding and trading RMB assets increases, the autonomy and effectiveness of China's macroeconomic policies will also be enhanced, thereby providing a broader space for stabilizing the domestic economic market.

Third, the internationalization of the RMB is a "new business card" for participating in global economic governance and shaping a favorable external environment.

Faced with the countercurrent of protectionism and "decoupling", China is firmly promoting high-level institutional opening-up, and the internationalization of the RMB is an important manifestation of this strategy. By providing an international currency alternative to the US dollar for the world, especially for emerging markets and developing economies, it helps to establish a more diversified, balanced, and resilient international monetary system, preventing systemic risks brought about by the US dollar hegemony, and promoting a better global financial and monetary system.

Conclusions and Prospects

China is facing a new era of increasingly fierce geoeconomic competition. Amid the long-term challenge of geoeconomic risks, the internationalization of the RMB requires us to maintain strategic focus and make prudent and effective efforts.

On the one hand, we should continue to deepen multi-level economic and trade cooperation; we should take the implementation of the RCEP and the construction of the Belt and Road as opportunities to create and expand natural scenarios for the use of RMB in trade and investment activities, thereby fostering real market demand. On the other hand, we should constantly consolidate financial infrastructure and institutional supply, improve the functions of the Cross-border Interbank Payment System (CIPS), and at the same time steadily promote the institutional opening-up of the financial market, enrich the system of RMB-denominated financial products, and provide a convenient, efficient, and secure asset allocation platform for global users. At the same time, we need to actively promote the digital economy; we should leverage the first-mover advantage in the research and development of central bank digital currency (e-CNY), and actively explore the application of digital RMB and stablecoins pegged to RMB in cross-border payment. We should deeply participate in the formulation of global digital currency governance rules, and seize opportunities for the future development of RMB internationalization.

October 2025
Vol.12, No.4

New World Order

Cutting Through the Noise - Exercising Good Judgment in a World of Change*

By CHRISTINE LAGARDE

It is my pleasure to welcome you to the ninth annual conference of the European Systemic Risk Board (ESRB).

Having done my fair share of scuba diving, allow me to begin with a brief detour beneath the waves.

Submarines rely on sonar to navigate unseen depths and detect hidden dangers. Yet the ocean is never silent: it is filled with shifting currents, marine life and, increasingly, noise from human activity. In some waters, that background noise has doubled every decade for the past 60 years,1 making it harder to pick out the signals that really matter. But no matter how unfamiliar the waters are, the technical principles remain the same. Those trained to listen can always discern the echoes of real danger.

So it is with our financial system. We too are navigating waters where the currents are shifting rapidly. Geopolitical fragmentation, climate change and rapid digital innovation are reshaping where finance flows and through which channels. The noise is getting louder and the landscape more complex, but the echoes of risk remain familiar.

Our task, like that of the submariner, is to listen carefully and to separate signal from noise. However much the structures of finance may change, the patterns of risk endure. As Charles Kindleberger reminded us: "Financial crises are a hardy perennial." By recognising their recurring signals, we can keep such crises in check and preserve stability.

Today I would like to reflect on how we can safeguard financial stability in a changing system by cutting through the noise to recognise the risks that endure.

The financial system's architecture is changing, but its functions and risks have not

This task has become ever more demanding. In the past, when Europe's financial system was dominated by banks, detecting risks often meant closely reading banks' balance sheets. That world has changed. Europe's non-bank financial sector has expanded rapidly. In relative terms it is now larger than that of the United States, amounting to 3.8 times GDP compared to 3.1 times in the U.S.2 At the same time, banks' activities are intertwined with those entities and increasingly with new entrants such as fintech platforms. The line between "banks" and "non-bank financial institutions " has blurred to the point where the old conceptual distinction is no longer a useful guide.3

So how do we cut through the noise created by this new complexity? Two constants can help us.

The first is that financial activities, however novel their appearance, are almost always variations on a few timeless functions: transacting, saving and borrowing; investing and sharing risk; insuring and hedging; and transforming maturity.

Likewise, the risks that arise from these functions - namely credit, market, liquidity, underwriting and operational risks - are equally enduring. And we know from experience that the tools to contain them remain familiar: capital and liquidity buffers, reliable data and secure infrastructure.

The second constant is the framework of sound risk management and supervision. These principles endure best when they are set globally. This is why banks remain governed by global standards developed by the Basel Committee, and why the Financial Stability Board is extending that framework to new financial activities.

This does not mean a reluctance to adapt to new realities. On the contrary, it is about using a stable framework for regulators and supervisors to 'cut through the noise'.

* Welcome address by Ms Christine Lagarde, President of the European Central Bank and Chair of the European Systemic Risk Board, at the ninth annual conference of the ESRB, Frankfurt am Main, 3 September 2025.

That is why the ESRB has argued for an activity-based and system-wide approach to financial stability.4 By 'looking through' the outer shell of both traditional and novel financial entities, we can assess the activities and risks that truly matter.5 And by viewing the system as a whole, rather than as a collection of individual firms, we can better understand how risks propagate across these institutions.

Applying timeless principles to new issues: the specific case of stablecoins

How does this perspective apply to new financial entities that are emerging across the financial landscape? Take the crypto-asset sector. For example, stablecoins are issued with the promise of maintaining a stable value against a reference asset. For now, they are used mainly as a bridge to and from the crypto ecosystem and as a tool to facilitate crypto-asset trading. But they also aspire to take on more traditional functions, such as serving as a means of exchange.

At first sight, these entities and activities may seem novel. But we do not need to wait for them to mature to realise that they are reintroducing old risks through the back door.6 The categories of risk they create are not new. They are risks long familiar to supervisors and regulators.

The most evident is liquidity risk. We know the challenges posed by institutions that invest in risky assets while promising investors redemption at short notice and at par. Such entities must mitigate the risk of a run by ensuring that they have sufficient liquidity to meet redemptions swiftly: this is why the ESRB has been sounding the alarm on certain types of money market funds, for example.7

In the case of stablecoins, the EU's Markets in Crypto-Assets Regulation (MiCAR) seeks to address this risk in two ways. First, stablecoin issuers must allow EU investors to always redeem their holdings at par value. Second, stablecoin issuers must hold a substantial share of reserves in bank deposits.

But gaps remain. One example is so-called multi-issuance schemes, where an EU entity and a non-EU entity jointly issue fungible stablecoins.8 9 In such cases, MiCAR requirements do not extend to the non-EU issuer. In the event of a run, investors would naturally prefer to redeem in the jurisdiction with the strongest safeguards, which is likely to be the EU, where MiCAR also prohibits redemption fees. But the reserves held in the EU may not be sufficient to meet such concentrated demand.

The risk of liquidity mismanagement across jurisdictions is one we have seen before. Banking groups, for example, are already required to ensure that reserves are available in the part of the group where and when they are needed. This is why requirements such as the net stable funding ratio and liquidity coverage ratio apply at every level of consolidation. Multi-issuance schemes replicate these very same risks within a single entity.

We know the dangers. And we do not need to wait for a crisis to prevent them.

That is why we must take concrete steps now. European legislation should ensure that such schemes cannot operate in the EU unless supported by robust equivalence regimes in other jurisdictions and safeguards relating to the transfer of assets between the EU and non-EU entities. This also highlights why international cooperation is indispensable. Without a level global playing field, risks will always seek the path of least resistance.

Conclusion

Let me conclude.

Today you will be looking at many of the ways in which finance is changing at breakneck speed, through new technologies, new actors and new forms of finance. Yet as the crypto-asset sector shows, the echoes of risk remain familiar: liquidity strains, leverage, sudden loss of confidence, and hidden interconnections.

Our task is to cut through the noise of novelty while remaining anchored in the perennial principles of good risk management, supervision, and effective policy. I am confident that institutions such as the ESRB can adapt to change while keeping crises in check.

I look forward to hearing your ideas on how macroprudential policy can rise to these challenges. With this, I am pleased to open the ninth annual conference of the European Systemic Risk Board.

October 2025
Vol.12, No.4

Sustaining Financial Stability Amid Uncertainty, Fragmentation and Rapid Innovation⋆

By DARRYL CHAN*

Hyun (Hyun Song Shin, Economic Adviser and Head of the Monetary and Economic Department, BIS), Jason (Jason Wu, Assistant Director, Monetary and Capital Markets Department, IMF), distinguished guests, ladies and gentlemen, good morning.

It gives me great pleasure to welcome you to today's conference , jointly organised by the Hong Kong Institute for Monetary and Financial Research (HKIMR), the International Monetary Fund (IMF), and the Bank for International Settlements (BIS).

The theme of this conference aptly summarises the complex and unsettling global economic and financial landscape. The world today faces a confluence of challenges, chief of which are uncertainty and fragmentation. Innovation greatly improves efficiency and promotes growth. But the disruption it brings, and the speed with which it advances, also poses tremendous challenges to the way we used to monitor and manage risks and vulnerabilities. Putting together all these known and unknown risks, it makes the task of sustaining financial stability all the more challenging.

We have a strong line-up of speakers for this two-day conference. For sure there will be plenty of insightful sharing and exchange regarding these important topics. If I may, by way of raising the curtain, share some initial thoughts and observations.

Let me start with fragmentation in global trade. In recent years reshoring or friend-shoring has been widely discussed and, to some degree, being put into action. Yet, wholesale relocation of supply chains has proven difficult and uneconomical due to the entrenched integration of global supply chain with local production ecosystems and end markets. The result is therefore a web of more diversified supply chains, with connector economies playing a more significant role. However, with the recent wide-spread tariff measures, some of which may highlight the significance of local value added content, it seems the end game is far from settled.

Already, recent data indicates a decline in new export orders across many economies, signalling a slowdown in global trade. Over time, this could lead to more persistent dislocation of supply chains and increased fragmentation in a global trading system that aimed to optimise economic efficiency. The uncertainties are slowing down investments as people take a wait-and-see approach, pending more clarity on the future of global trades.

The twists and turns on the trade front have brought volatility to financial markets, unsettled by the potential supply shock brought by much elevated tariff levels, and its implications on US inflation outlook and future interest rate path. This has added new complexities to the global financial system that already had to grapple with a multitude of vulnerabilities including elevated asset valuations, rising debt levels, and increased leverage among non-bank financial institutions (NBFIs).

At one point, the markets seemed to be casting doubts on what used to be regarded as safe haven assets. The effect was immediately felt in this region with the abrupt unwinding of long-USD positions and the widespread appreciation of Asian currencies. The episode also exposed the degree of unhedged forex positions by some exporters and financial institutions in the region. That said, recent market movements amid continued uncertainties seemed to suggest that risk-on exuberance is back. There could be multiple reasons behind the swing in market sentiments. The question is whether excessive complacency is being built up that may come back and haunt us.

Let me turn to innovation. The advancement of artificial intelligence (AI) has drawn much discussion about its potential to revolutionise various aspects of finance, from risk management to customer service, as well as the potential risks of AI models and algorithms to the financial system.

In the world of finance, the equally exciting, and perhaps more imminent, issue is the emergence of tokenisation. In its latest annual economic report, the BIS devotes a full chapter to the discussion of the

---

⋆ The article was first published on BIS on August 5th 2025. Opening remarks by Mr Darryl Chan, Deputy Chief Executive of the Hong Kong Monetary Authority, at the joint conference on "Sustaining financial stability amid uncertainty, fragmentation and rapid innovation", organised by the Hong Kong Institute for Monetary and Financial Research (HKIMR), the International Monetary Fund (IMF), and the Bank for International Settlements (BIS), Hong Kong, 14 July 2025.

* Darryl Chan, Deputy Chief Executive of the Hong Kong Monetary Authority.

next-generation monetary and financial system, including the very hot topic of stablecoins. The intellectual rigour behind the study, in particular the very concept of a "unified ledger", presents us with an excellent framework to get a glimpse of what the future of finance may hold in the form of tokenisation.

I hope Hyun would be kind enough to share some of the thoughts with us. Suffice it to say, at this point, that Hong Kong is bringing stablecoins under regulation, and that we are at various stages of putting together the building blocks of the unified ledger. It would be interesting to look back, hopefully in the not too distant future, how things have evolved in this space.

Ladies and gentlemen, we are living in a world of uncertainty. Policymakers should adopt an agile approach that is capable of responding to a wide range of scenarios, while ensuring effective communication of their policy reaction functions. Let me highlight a few things that central banks and regulators should do to address emerging risks and safeguard financial stability.

First, we need to continuously enhance our surveillance frameworks for risk monitoring. I mentioned non-banks in my earlier discussion. As an example, the HKMA has developed a holistic surveillance framework to help us better monitor systemic risks in the financial system. The framework uses granular data sets, including trade repository data on over-the-counter derivatives and transaction-level data on bank loans, to reconstruct NBFIs' portfolios and risk exposures. Together with textual analysis and conventional indicators, the framework gives us a fuller picture of NBFIs' market positions and potential vulnerabilities, as well as early warning indicators for closer monitoring and follow-up actions.

We have also been experimenting with AI tools to enhance financial stability monitoring, leveraging its ability to distil insights from large pools of data, particularly document-based data such as research reports and news articles. This capability is particularly valuable in identifying emerging risks that may not be captured by traditional indicators.

Second, the rapid pace of financial innovation calls for timely regulatory preparedness. We seek to encourage a culture of responsible innovation. Again, using AI as an example, we aim to reap its benefits while effectively managing its risks. To this end, the HKMA has launched a Generative AI sandbox which provides a risk-controlled environment for banks to develop and test innovative solutions. The sandbox enables us to understand how banks intend to use AI, gauge the potential risks, and assess the need for supervisory guidance.

Last but not least, multilateral collaboration is crucial. Despite the threat of economic fragmentation, the global financial system is highly interconnected. It makes perfect sense that central banks, regulators, and international organisations like the IMF and the BIS continue to collaborate closely and safeguard the resilience and stability of the financial system. Only by delivering on this goal, we can continue to have the trust of the people that we serve.

With that, it remains for me to thank all speakers and participants for joining us at this conference, which I am sure will be a great occasion for fruitful and insightful exchange. Thank you.

October 2025
Vol.12, No.4

World Economic Outlook Update, July 2025: Opening Remarks⋆

By PIERRE-OLIVIER GOURINCHAS*

Global trade developments continue to shape the outlook.

Following an unprecedented escalation in tariffs imposed on the rest of the world in April, the United States partly reversed course, pausing the higher tariffs for most of its trading partners. This, and a de-escalation of trade tensions with China in May, modestly reduced the US effective tariff rate from 24% to about 17%.

Despite these welcome developments, tariffs remain historically high, and global policy remains highly uncertain, with only a few countries having reached fully-fleshed out trade agreements.

This modest decline in trade tensions, however fragile, has contributed to the resilience of the global economy so far.

A few other developments have also helped:

First, concerns about future tariffs led to a strong surge in exports to the US in the first quarter of the year. This front-loading helped support activity in Europe and Asia.

Second, financial conditions improved, and monetary conditions eased as global inflation continues to recede, largely unchanged from our previous projections.

Third, the dollar has depreciated by roughly 8 percent since January. As we already pointed out in April, the effect of tariffs on exchange rates can be complex. In previous episodes, the tariffing country saw its currency appreciate, buffering the impact of the tariffs. This time around, however, the dollar depreciation has amplified the impact of the tariff shock on other countries' competitiveness. With a stable value relative to the US dollar, the Chinese RMB has tracked the dollar while the euro has appreciated significantly.

Accordingly, we have revised our growth projections upwards from the April 2025 reference forecast, from 2.8 percent to 3.0 percent this year, and from 3.0 percent to 3.1 percent next year.

Most regions are experiencing modest growth upgrades this year and next.

This resilience is welcome, but it is also tenuous. While the trade shock could turn out to be less severe than initially feared, it is still sizeable, and evidence is mounting that it is hurting the global economy. For instance, compared to our pre-April 2 forecast, global growth is revised downwards by 0.2 percentage points this year. At around 3 percent, global growth remains disappointingly below the pre-COVID average.

And we continue to project a persistent decline in global trade as a share of output despite the recent front-loading, from 57% in 2024 to 53% in 2030.

Risks to the global economy remain firmly to the downside.

The current trade environment remains precarious. Tariffs could well reset at much higher levels once the 'pause' expires on August 1 or if existing deals unravel. If this were the case, model-based simulations suggest global output would be 0.3 percent lower in 2026.

Without comprehensive agreements, the ongoing trade uncertainty could increasingly weigh on investment and activity.

Further, while exports front-loading has supported global activity so far, firms could become vulnerable if the demand for stockpiled goods does not materialize.

The geopolitical environment also remains fragile, with a potential for more negative supply disruptions.

While global inflation continues to decline, the latest price data suggests that inflation pressures are building gradually in the US. Overall, US import prices in dollars have remained largely unchanged or even increased this year, suggesting that the cost of tariffs will be borne by US retailers, and eventually customers as firms start to pass through higher costs into their prices.

In too many countries, the combination of high public debt and still elevated public deficits continues to be a cause for concern. The lack of fiscal space makes these countries especially vulnerable to a sudden tightening in financial conditions that increase term premia.

⋆ Puclished on July 29, 2025.

* Economic Counsellor and Director of the Research Department.

Such tightening becomes even more likely if central bank independence — a cornerstone of macroeconomic, monetary and financial stability — is undermined.

Turning to policies, our recommendations continue to call for prudence and the need for improved collaboration.

Let me outline some key priorities:

First and foremost, restoring stability in trade policy is essential to reduce policy uncertainty. We urge all parties to settle trade disputes and agree on clear and predictable frameworks. Collective efforts should be made to restore and improve the global trading system.

The need for predictable and stable rules extends to other areas of policymaking. It is important to reaffirm and preserve the principle of central bank independence. The evidence is overwhelming that independent central banks, with a narrow mandate to pursue price and economic stability, are essential to anchoring inflation expectations. That central banks around the world achieved a successful 'soft landing' despite the recent surge in inflation owes a great deal to their independence and hard-earned credibility.

Restoring fiscal space remains a priority for many countries. Even where new spending needs are emerging, efforts must be made to implement gradual and credible consolidation while protecting growth.

Lastly, as global growth remains tepid, more efforts must be made to increase long-term productivity through structural reforms.

Thank you.

October 2025
Vol.12, No.4

The Developmental Characteristics of Stablecoins and Their Potential Impact on the International Monetary System⋆

By E ZHIHUAN*

The ongoing technological revolution and rising digital economy represent a brand-new variable that will exert a long-term impact on the international monetary system. As an emerging carrier of value, stablecoins may disrupt the operating logic of the current international monetary system in areas such as cross-border payments and capital flows, posing new challenges to the existing monetary sovereignty and international monetary structure.

Developmental Characteristics of the Stablecoin Market

In 2014, USDT, the world's first stablecoin, was launched. In 2020, the wave of Decentralized Finance (DeFi) drove the widespread application of stablecoins as a core liquidity tool. In 2025, Trump signed the Guiding and Establishing National Innovation for U.S. Stablecoins Act, which injected new impetus into the stablecoin market. Looking back at its development over more than a decade, stablecoins have the following characteristics:

First, leapfrog expansion of total market value and trading volume, dominating centralized cryptocurrency trading. As of July 21, 2025, the global total market value of stablecoins has exceeded USD 260 billion, accounting for approximately 7% of the overall market value of cryptocurrencies (source: CoinMarketCap), which is dozens of times the market value of USD 5 billion at the beginning of 2020. In 2024, the trading volume of stablecoins reached 27.6 trillion U.S. dollars, surpassing Bitcoin's USD 19 trillion and also exceeding the combined trading volume of Visa (USD 14.1 trillion) and Mastercard (USD 7.7 trillion) (source: World Economic Forum). Currently, stablecoin transactions account for over 80% of the trading volume on major centralized cryptocurrency exchanges. According to a research report by Citigroup, with improved regulations and policy support across countries, the market value of stablecoins will reach USD 1.6 trillion under the baseline scenario by 2030, and may reach USD 3.7 trillion.

Second, continuous expansion of application scenarios and increased participation of traditional financial institutions. Following the development pace of the digital economy and cryptocurrencies, stablecoins have gradually become the trading medium and price benchmark for cryptocurrencies, establishing increasingly close and stable links between the crypto market and the traditional financial system. The application scenarios of stablecoins have gradually expanded from cryptocurrency trading services and DeFi services to cross-border payments, consumer payments, and traditional financial markets. Currently, on major cryptocurrency trading platforms, stablecoins are widely used for the purchase, sale, and settlement of mainstream virtual currencies including Bitcoin and Ethereum, RWA (Real World Assets) trading and mortgage liquidation in DeFi protocols. In retail payment, stablecoins are increasingly used in online shopping and retail payment due to the high efficiency and low costs. Credit cards, as a traditional payment method, charge a 2-3% handling fee, while stablecoins offer a more simplified settlement, significantly reducing transaction costs. In cross-border payment, relying on blockchain technology, stablecoins can realize peer-to-peer instant fund transfer, significantly reducing intermediary costs and settlement time. According to the World Bank, the cost of traditional cross-border payments is approximately 6.5%, while the stablecoin payment fee can be as low as less than 1 U.S. dollar, and the settlement time is shortened from 3-5 days to real-time arrival.

Third, differentiation in market structure, with 99% of stablecoins' underlying assets pegged to D.S. dollar assets, and emerging markets becoming important usage regions. As of July 21, 2025, the market values of Tether (USDT) and USD Coin (USDC), the two major U.S. dollar-pegged stablecoins, were USD 161.7 billion and USD 64.4 billion respectively, accounting for 85% of the total market value of stablecoins (see Figure 1). From the perspective of the regional distribution of stablecoins, stablecoins are

⋆ Translated from an article previously published in Modern Bankers.
* The author is Vice President of the Research Institute of Bank of China.

not limited to developed economies such as the United States; some emerging markets with high inflation, large exchange rate fluctuations, and strict foreign exchange controls have become important usage regions. Among them, Africa enjoys the fastest growth in cryptocurrency application, with a year-on-year growth rate of 45% from 2022-2023 to 2023-2024 (source: Chainalysis).

Financial Risks Implied in the Development of Stablecoins

First, depegging risk. The value and security of the assets that stablecoins are pegged to are decisive factors in maintaining their currency value stability, and the price fluctuations of the pegged assets directly affect the changes in their currency value. If these pegged assets suffer losses, it may lead to a "depegging" of the value between stablecoins and the pegged assets, triggering a run on the market, thereby losing the most critical "stability" in the concept of stablecoins.

Second, currency mismatch risk. 99% of the underlying assets of stablecoins are pegged to U.S. dollar assets. With their widespread use in emerging markets, the risk of currency mismatch is constantly rising.

Third, contagion risk from the digital asset market to the traditional financial market. Generally, the price fluctuation risk of the digital asset market is relatively high, but its impact scope is limited. However, with the widespread use of stablecoins, the impact of fluctuations in the digital asset market on the traditional financial system has become increasingly apparent. If stablecoin investors redeem their holdings in a concentrated manner, it will force issuers to sell assets, triggering liquidity pressure in the banking system and abnormal fluctuations in the bond market, and may even lead to cross-market contagion effects.

Fourth, legal and compliance risks. Stablecoins are digital holding tools on borderless public blockchains. The identities of individual users are hidden behind addresses; the inherent anonymity means there isn't the sound "Know Your Customer (KYC)" standards and processes of the traditional financial system. Large-scale use may lead to abnormal cross-border capital flows, and there are also compliance risks such as money laundering and terrorist financing, which may pose new challenges to the security of the global payment system.

The popularity of stablecoins indicates that the global monetary system has entered a period of accelerated digital transformation, and stablecoins have become a core area in the global competition for digital currencies.

Latest Progress in Stablecoin Regulation

First, gradual formation of a global stablecoin regulatory framework. The collapse of the algorithmic stablecoin TerraUSD (UST) in 72 hours in May 2022, which saw its value drop to zero, indicated that stablecoins are not necessarily "stable" and exposed the fragility of the stablecoin market without proper regulation. Increasingly more major economies have begun to reevaluate the potential risks that stablecoins pose to their monetary policy transmission, financial stability, consumer protection, and payment system security. Driven by international organizations including G20, the Financial Stability Board (FSB), and the Bank for International Settlements (BIS), FSB has issued high-level recommendations for global stablecoin arrangements, and the stablecoin regulatory framework has become increasingly clear.

Second, regional differences in stablecoin regulatory legislation and market measures. The European Union took the lead in adopting the Markets in Crypto-Assets Regulation (MiCA), establishing a unified regulatory framework for cryptocurrencies such as stablecoins. It requires stablecoin issuers to obtain licenses, fulfill the obligation of reserve transparency, and accept continuous supervision. The United States has established a federal-state dual-track system through the Guiding and Establishing National Innovation for U.S. Stablecoins Act. The federal government is accelerating the unification of the regulatory framework at the legislative level, while states are promoting the implementation of the system. Japan has revised the Payment Services Act, restricting stablecoin issuers to banks or trust companies and ensuring a 1:1 legal tender reserve. Eight major banks in South Korea have jointly established a won-denominated stablecoin issuance company and plan to issue won-denominated stablecoins. Singapore has relatively strict stablecoin regulatory policies, requiring stablecoin issuers to have a capital of not less than 50% of the annual operating expenses or 1 million Singapore dollars, and issuers are not allowed to engage in other businesses such as trading, asset management, pledge, and lending, nor directly hold shares of other legal entities. Hong Kong, China, has adopted the Stablecoin Ordinance, with a minimum paid-up capital requirement of 25 million Hong Kong dollars, allowing stablecoins pegged to Hong Kong dollars, U.S. dollars, offshore renminbi, etc. (see the table).

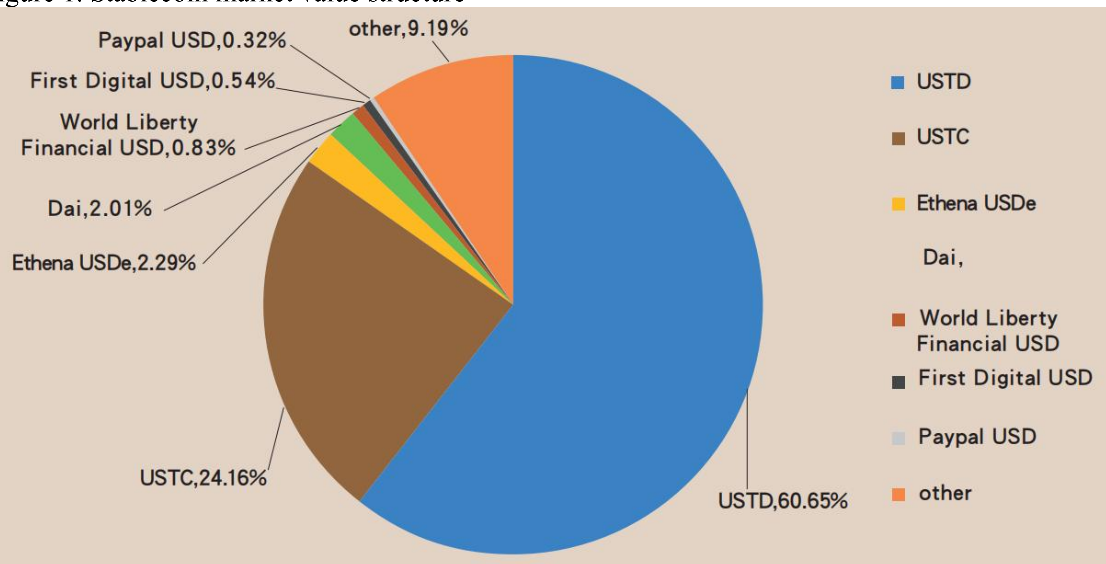
Third, regulatory focus on financial stability risks and strengthened control over core links including reserve management. In regulatory practice, countries generally take “reserve asset management”, “issuer qualification”, and “liquidation and redemption mechanisms” of stablecoins as regulatory focuses. For example, MiCA requires issuers to hold equivalent high-liquidity legal tender assets as reserves and establish a custody mechanism to protect redemption rights. The United States requires stablecoin issuers to be included in the federal regulatory system and accept capital adequacy ratio and liquidity management standards similar to those of banks. In addition, the characteristics of stablecoins in cross-border circulation have also drawn the attention of regulatory authorities in regard to anti-money laundering, combating terrorist financing, and foreign exchange management.

Potential Impact of Stablecoins on the Current International Monetary System

First, the current international monetary system has systemic defects, but the evolution of its logic is long-term and systematic.

There are three inherent systemic defects of the current international monetary system. Firstly, the U.S. dollar dominates, and the “Triffin Dilemma” is becoming increasingly severe. Secondly, the Federal Reserve has a misalignment of functions. As the main provider of global liquidity, the Federal Reserve actually performs the function of a “global central bank”. However, the U.S. monetary policy has long been inward-looking, with domestic inflation data, labor market unemployment rate, and other indicators as the basis for adjusting its monetary policy. The contradiction between an inward-looking central bank and the function of an outward-looking “world central bank” is irreconcilable. Thirdly, after losing the hard constraint of the quantity of gold, the liquidity of the U.S. dollar has expanded sharply. The scale of global financial market transactions is dozens of times that of the Bretton Woods system era. Changes in the U.S. inward-looking monetary policy are manifested in the global financial market as the U.S. dollar liquidity adjusting sharply between extreme easing and extreme tightening in a very short period of time, which often triggers financial crises of varying degrees frequently.

Figure 1. Stablecoin market value structure



Source: CoinMarketCap

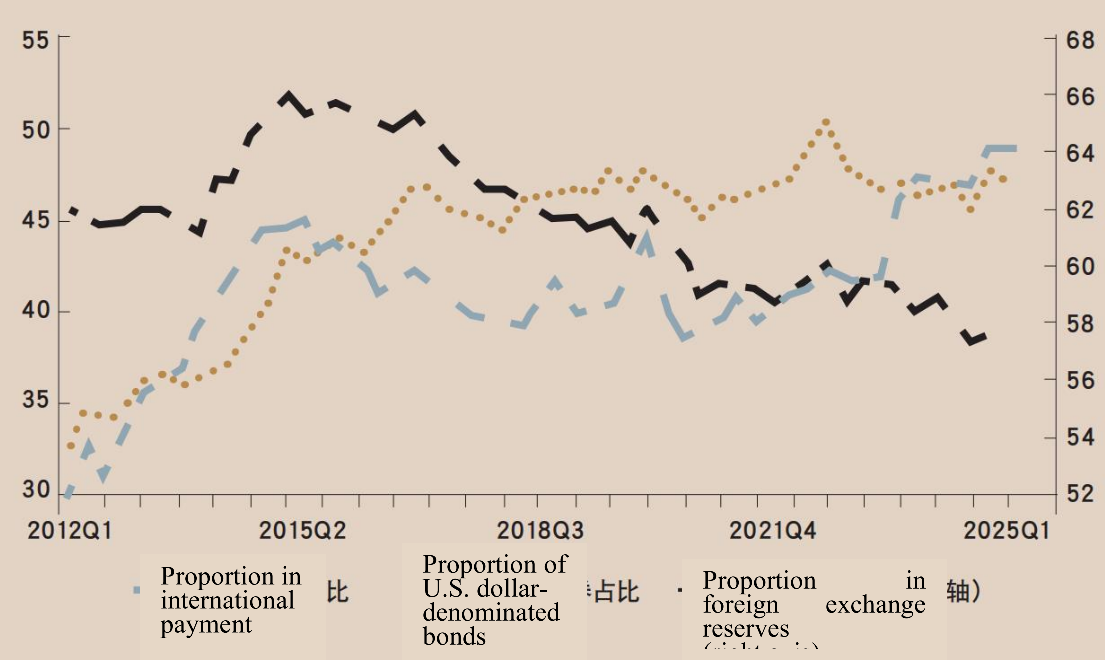
Table: Regulatory Policy Frameworks for Stablecoins Issued in Some Regions					
Country/ Region	Main Laws	Regulatory Characteristics	Regulatory Authorities	Capital/Scale Requirements	Reserve Asset Requirements
United States	GENIUS Act	Federal-state dual-track system	Office of the Comptroller of the Currency (OCC)/State regulatory	>USD 10 billion under federal regulation; <USD 10 billion under state	High-liquidity assets such as cash and short-term treasury bonds

			authorities	regulation	
European Union	Markets in Crypto-Assets Regulation (MiCA)	Unified supervision, prudent support	European Banking Authority (EBA)/National regulatory authorities of member states	Issuers must obtain authorization from the regulatory authorities of member states and establish a legal entity within the EU	High-liquidity assets such as cash and short-term treasury bonds
Singapore	Payment Services Act, Stablecoin Regulatory Framework	Early start, high standards	Monetary Authority of Singapore (MAS)	Minimum 1 million Singapore dollars	Cash, cash equivalents, bonds with a remaining maturity of no more than three months
Japan	Payment Services Act, Amendment to the Payment Services Act 2025	Regulation first, gradual relaxation	Financial Services Agency (FSA) of Japan	Stablecoin issuers are limited to banks, remittance companies, and trust companies	In addition to current deposits, short-term treasury bonds and fixed deposits are allowed to be held, but the proportion is capped at 50%
United Kingdom	Financial Services and Markets Act 2023	Phased promotion	HM Treasury, Financial Conduct Authority (FCA) of the United Kingdom	Maintain a minimum paid-up capital of 2.5 million British pounds	Cash, short-term treasury bonds, high-quality repurchase agreements (AAA-rated)
Hong Kong, China	Stablecoin Ordinance	High access threshold	Hong Kong Monetary Authority (HKMA)	Minimum paid-up capital of 25 million Hong Kong dollars	High-quality and high-liquidity assets

Source: Compiled based on public information.

Second, although the connotation of stablecoins is still evolving, at the current stage, 99% of stablecoins are pegged to U.S. dollar assets, which is far higher than the proportion of the U.S. dollar in traditional cross-border payments, denominated bonds, and foreign exchange reserves (see figure 2).

Figure 2. The proportion of U.S. dollar in fulfilling international monetary functions



Source: SWIFT, BIS Proportion in foreign exchange reserves (right axis)

The use of U.S. dollar-pegged stablecoins in cross-border payments, settlement, investment and financing, and other fields has built a set of global digital financial infrastructure for the U.S. dollar system. To a certain extent, this has expanded the circulation capacity of the U.S. dollar, enhanced the stickiness and flexibility of U.S. dollar credit transmission on the chain, and the prototype of a new "on-chain U.S. dollar hegemony" is emerging.

In recent years, the U.S. fiscal deficit has remained high, and the supply of national debt has continued to expand. According to the estimation of the Congressional Budget Office (CBO), from 2025 to 2035, the U.S. fiscal deficit will account for an average of 5.8% of GDP, and the proportion of federal debt held by the public will rise from 97.8% to 118.5%. Concerns about the huge U.S. debt supply and its sustainability have led to a structural contradiction of weak demand in the U.S. Treasury bond market. U.S. dollar-dominated stablecoins have established a new "stablecoin--U.S. dollar--U.S. Treasury bond" cycle, forming a U.S. dollar credit recycling mechanism of "on-chain issuance--off-chain allocation", and creating a demand source for U.S. Treasury bonds that is de-nationalized and de-central banked. According to the optimistic scenario forecast of Citibank, if the market value of stablecoins reaches 3.7 trillion U.S. dollars by 2030, with 50% allocated to U.S. Treasury bonds, it will create a purchasing power of 1.5 trillion U.S. dollars, indirectly alleviating the financing pressure of U.S. Treasury bonds. Obviously, U.S. dollar stablecoins have further expanded the scope of U.S. dollar use, will further enhance the dominance of the U.S. dollar in the digital asset field, realize the extension of the existing monetary system under digital technology conditions, and strengthen the international monetary status of the U.S. dollar to a certain extent.

Third, in regions with weak financial infrastructure or unstable macroeconomics, stablecoins may trigger large-scale currency substitution and impact the current sovereign monetary system.

The decentralization, borderlessness, and anonymity of stablecoins can usually bypass the traditional bank cross-border settlement system, without accepting strict foreign exchange or capital flow controls, weakening the effectiveness of capital controls, and may even "break through" the capital control system. This greatly reduces the effectiveness of foreign exchange and capital control measures, encourages capital outflows from some emerging markets and developing countries, and then poses challenges to exchange rate stability and monetary policy transmission. In 2024, the cross-border flow of stablecoins reached USD 2 trillion. Among them, North America and the Asia-Pacific region had the highest flow, and the proportion of stablecoin flow in GDP in Latin America and the Caribbean region and Africa and the Middle East region reached 7.7% and 6.7% respectively. As BIS estimates, for every 25 basis points increase in the U.S. federal funds rate, the cross-border flow of stablecoins will increase by 15%. With the global flow of stablecoins, the monetary policies of various countries have to be further synchronized, and the monetary sovereignty and decision-making autonomy of emerging markets will be weakened to some extent.

Fourth, against the background of the accelerated digitalization of the global economy, stablecoins have emerged as connectors and converters between the digital economy and the traditional financial system.

Stablecoins have integrated information flow and capital flow under blockchain technology, providing a new type of high-efficiency payment and settlement tool. For example, they have shortened the cross-border settlement time from 2-3 days to minutes. In some regions with underdeveloped financial infrastructure, they provide a new alternative to the traditional correspondent banking model, launching an efficiency revolution.

The popularity of stablecoins indicates that the global monetary system has entered a period of accelerated digital transformation, and stablecoins have become a core area in the global competition for digital currencies. Therefore, we should fully recognize the importance and uniqueness of stablecoins, actively participate in the discussion of international standards for stablecoins and the alignment of regulatory rules, and actively explore new paths for the internationalization of the RMB through the integration of Central Bank Digital Currencies (CBDCs) and appropriate stablecoins. On the basis of the smooth adoption of Stablecoin Ordinance in Hong Kong, China, we should support the development of stablecoin-related products in the offshore RMB market, promote relevant market entities to participate in the exploration and competition of the cryptocurrency ecosystem, and empower the construction of a financial power with digitalization while balancing development and security.

October 2025
Vol.12, No.4

The Evolutionary Logic of Geo-Economic Risks and Implications for International Monetary System Reform⋆

By QIAN ZONGXIN*

The evolution of geo-economic risks offers profound insights for reforming the international monetary system. There is a need to reconstruct the authority and responsibility framework of international financial institutions, curb the abuse of veto power, and embed the provision of global public goods, such as low-carbon development financing and poverty reduction support, into the mandates of multilateral development banks.

The concept of geo-economic risk originated from research on geopolitical risk, and its definition has continuously evolved alongside the increasingly complex global political and economic environment. For a long time, academia has not reached a universally accepted and unified definition of its precise connotation.

In 1990, Luttwak's article in The National Interest elaborated on the trend of shifting from geopolitics to geo-economics. He pointed out that the dominant form of competition among nations was transitioning from military confrontation to economic means, with the tools of conflict consequently shifting from military force under the traditional geopolitical perspective to "weapons of capital and commerce" from the geo-economic perspective. Luttwak's core insight clearly revealed that the key difference lies in the means relied upon to achieve national strategic goals: the former depends on military coercion, while the latter relies on economic influence.

Building on this theoretical foundation, Qian Zongxin et al. (Qian Zongxin, Guo Yiming, Ma Zhenbin, Zhang Xinle, 2025, The Genesis of Geo-economic Risks and Wang Fang, Qian Zongxin, Wang Bo et al. Deepening Geo-economic Risks, published by China Renmin University Press), attempted to integrate the diverse definitions found in the literature. Based on the principle of different means, they proposed two interrelated core definitional dimensions.

The Objective Dimension (a spatial perspective from the global network) approaches geo-economic risk from the perspective of abrupt changes in the structure of the global economic network. It defines geo-economic risk as the expected loss that entities (nodes) across the interconnected global economic relationship network may suffer due to unexpected changes in economic relations between nations (or regions, groups of nations). This emphasizes the systemic, objective, and exogenous shock nature of the risk.

The Subjective Dimension (perspective of major power game strategies) approaches geo-economic risk from the angle of strategic games between nations (especially major powers). It defines geo-economic risk as the expected loss inflicted upon other participants in the network by large economies with special influence, who leverage their advantageous positions within the international economic network to actively alter or threaten to alter existing network connections, rules, or structures (e.g., supply chains, trade flows, financial channels). This highlights the strategic, intentional, and power-structure-dependent nature of the risk.

These two dimensions are not separate but constitute two sides of the same coin for understanding geo-economic risk. The "Objective Dimension" focuses on the universality of shock consequences－any unexpected deterioration in relations between key nodes can trigger global risk ripples. The "Subjective Dimension" reveals the core driving mechanism: conscious actors (especially major powers) intentionally using economic linkages as levers of power to achieve strategic objectives or conduct coercion. Together, they reveal that the essence of geo-economic risk lies in the fact that major powers, by virtue of their structural position in the globally interconnected economic network, cause significant changes in economic relations between nations (regions, groups of nations) through their policies or actions (whether intended as direct intervention or not), leading to expected losses for other political and economic actors. This

⋆ Translated from an article previously published in Modern Bankers.
* The author is a researcher at the Yangtze River Economic Belt Research Institute, Renmin University of China, and a professor at the School of Finance, Renmin University of China.

reflects its complexity as a systemic phenomenon－encompassing both the active instrumental use of strategy and the negative spillover effects of power concentration and non-subjective intentions.

The Formation and Evolution of the Global Economic Network and Geo-Economic Risks

During the process of economic globalization, economic and trade interdependence among countries, regions, and groups of nations has continuously deepened, and economic linkages have evolved into a highly interconnected, multi-dimensional network structure. In this complex system, any unexpected change in economic relations between core nodes can, through the transmission effects of the network, trigger unanticipated changes in the welfare of economic entities worldwide－some entities may benefit, while others inevitably bear losses. This systemic volatility stems from the nested nature of the global economic network: trade, investment, financial, and technology networks are interwoven, and their formation and evolution are constrained by differences in technology, factor endowments, institutional environments, and policies among nations (regions, groups of nations). When these fundamental conditions undergo significant, unforeseeable abrupt changes, they can trigger drastic adjustments in the network structure, constituting a substantive source of geo-economic risk.

The dynamic adjustment of trade networks is rooted in the principle of comparative advantage. When the transaction costs of cross-border outsourcing production are lower than domestic production, firms engage in intermediate goods trade. Among these, contract enforcement efficiency is a key constraint－a sound legal system enhances the attractiveness of a nation (region, group of nations) as a trading partner by reducing information search, contract negotiation, and dispute resolution costs. Technological progress, capital accumulation, demographic transition, and institutional leaps can all reshape the comparative advantage landscape among nations, but gradual changes are manageable as they can be anticipated by the market. The real threat comes from sudden policy shifts: tariffs and non-tariff barriers directly distort trade costs, and strategic industrial policies alter cross-border competition patterns; both can lead to trade network restructuring and changes in the welfare of various nations (regions, groups of nations).

Changes in investment networks are also influenced by factors such as technology, factor endowments, institutional environment, and policies. The choice for multinational enterprises between export trade and foreign direct investment depends on whether their technological monopoly rents can cover overseas fixed costs. Firms with significant technological advantages tend to integrate into global production chains via FDI, while less efficient firms rely on export modes to enter international markets. The host country’ s factor endowment conditions and strength of property rights protection further screen investment flows. Generational technological leaps can redraw firm efficiency boundaries, prompting a reshaping of the investment landscape, while intervention measures such as host country preferential policies and the relaxation of home country capital controls drive abrupt changes in investment layout by altering cost thresholds.

Changes in financial networks are affected by cross-border capital flows. Cross-border capital flows are influenced by geographical distance, financial center effects, and the strength of trade linkages. Increased distance reduces bilateral capital flows, financial centers attract more capital, and stronger trade links correlate with more capital flows. Monetary policies of developed economies are core variables affecting capital flows. Unexpected monetary tightening by major central banks can trigger panic capital flight from highly leveraged emerging markets; while a plunge in host country asset returns, sovereign credit downgrades, or sudden changes in the regulatory framework can also lead to reversals in capital flows. Such liquidity shocks are often amplified and transmitted through the balance sheets of financial institutions, creating global risk resonance.

The evolution of technology networks exhibits path dependence. As an extension of global production networks, the efficiency of innovation diffusion is constrained by three factors: geographical proximity, institutional isomorphism, and cultural affinity. Close input-output linkages facilitate technology spillovers, and regional trade agreements can also significantly enhance cooperative R&D efficiency. The intensification of geo-economic competition generates systemic fragmentation risks: coercive decoupling measures such as key technology embargoes and frozen scientific research cooperation deconstruct the connectivity of existing innovation networks. In contrast, the deep integration of common market rules may catalyze the formation of new communities. This indicates that technology networks rely on the foundation of market-based collaboration yet are highly susceptible to political intervention.

The core commonality running through all network dimensions is: only when factors such as technological iteration, endowment changes, institutional transformation, or policy intervention undergo unforeseeable and drastic mutations, substantially disturbing the structure of the global economic network, do they constitute geo-economic risks in the true sense. Predictable gradual adjustments (such as known demographic aging trends) can be incorporated into the decision-making functions of agents, and their risk attributes are resolved through market mechanisms. It is "black swan" events like sudden policy shifts, technology supply cuts, and liquidity crises that are the critical triggers for geo-economic risks.

Concentration of Power in the Network Structure, Major Power Policies, and Geo-Economic Risks

The wave of globalization has shaped a profound “core-periphery” division of labor structure: developed countries occupy the upstream of the global value chain by virtue of their dominance in technological standards, while developing countries are locked into labor-intensive segments due to constraints of factor endowments. Core economies with huge market sizes (e.g., the US, EU) continuously absorb global capital, technology, and talent resources, gradually evolving into hub nodes for resource allocation. Core countries consolidate their industrial monopoly positions through technological barriers and high-skilled labor barriers, while peripheral countries fall into low-end development traps due to insufficient capital accumulation and weak innovation systems. Multinational enterprises embed strategic foreign direct investment into key segments of peripheral countries' industrial chains, solidifying economic dependency relationships into institutionalized power structures. Their operational logic is rooted in the historical legacy of the colonial era - regions in Asia, Africa, and Latin America were forced into the world system as suppliers of raw materials and appendages of international capital, leading to fractured industrial bases and a lack of financial autonomy, forming the “core-periphery” dependency chain that persists to this day.

Core countries maintain their structural hegemony through a dual mechanism. In the technological dimension, developed countries dominate the international standard-setting system and impose strict technology export controls, forcing peripheral countries to rely long-term on technology imports and delaying their industrial upgrading. The combination of economies of scale and network effects further enables core countries to form a positive “innovation-market” feedback loop in advanced manufacturing; even if peripheral countries attempt technological catch-up, they struggle to break market monopolies due to generational gaps and path barriers. In the financial dimension, the currency privilege of core countries constructs a deep asymmetry in global capital circulation: the reserve currency status of the US dollar and others makes their sovereign debt the benchmark for “safe assets,” with global capital absorbed at low interest rates transformed into high-return equity through multinational investment; peripheral countries, meanwhile, are forced to bear a triple cost: sovereign financing relies on foreign currency debt, exposing them to exchange rate risk; insufficient financial market depth constrains local currency pricing capability; and sudden stops in capital flows frequently impact macroeconomic stability. This financial ecology of “leveraging debt as power” allows core countries to continuously obtain net benefits in the balance of payments, while peripheral countries become the actual bearers of risk.

The asymmetry of influence in the global economic network further reinforces the one-way transmission of policies. Monetary policy adjustments by core countries powerfully diffuse to peripheral economies through interest rate and asset price channels. When the Federal Reserve adopts tightening policies, rising US Treasury yields trigger capital outflows from emerging markets, leading to local currency depreciation, stock market declines, and increased foreign currency debt burdens. Capital outflows simultaneously raise domestic financing costs, worsen the corporate investment environment, and suppress output expansion. The contraction of US domestic demand directly reduces order volumes for global industrial chains, and while dollar appreciation theoretically enhances the price competitiveness of peripheral countries' exports, it is offset by soaring raw material import costs and global demand shrinkage, even triggering imported inflationary pressures. Broader policy tools such as macroprudential regulation or climate planning also generate cross-border spillover effects through value chain linkages (Qian Zongxin et al., 2025). This asymmetric transmission systematically squeezes the policy autonomy of peripheral countries – when developed market stock prices fluctuate, emerging markets are often forced to bear “contagious” shocks; when international financial institutions set aid conditions, developing countries often must accept attached political and economic terms to obtain liquidity support.

The combined effect of market structure and institutional arrangements ultimately completes the normalization of power relations. The centralized nature of commodity pricing power leaves raw material exporting countries chronically affected by price volatility, while the technical architecture of cross-border payment systems (such as SWIFT) is deeply tied to the US dollar clearing network, turning financial infrastructure into a tool for sanctions. This means that the "core-periphery" is not merely a product of economic efficiency differences but also the result of historical path dependence and long-formed institutional power distribution. Colonial legacies fractured industrial development foundations, technological control reinforced industrial hierarchy barriers, financial centrality ossified risk-sharing imbalances, and the one-way policy transmission ultimately translated the structural advantages of core countries into real geo-economic dominance.

The Income Distribution Effects of the Developed-Country-Led Globalization Model and Its Impact on Geo-Economic Risks

Globalization has profoundly reshaped the distribution pattern of the world economy. The expansion of trade and capital flows enhanced resource allocation efficiency through the restructuring of multinational corporate supply chains, but it also generated significant income divergence within countries: medium-skilled workers in developed countries faced employment substitution pressures, while capital owners and technical elites reaped excess returns. This contradiction reflects the dual effects of globalization−the paradox of converging development levels between nations (e.g., the rapid rise of East Asian economies narrowed the economic gap with the West) coexisting with intra-national stratification. East Asian countries used globalization as a growth engine, while the European and American middle classes viewed it as the root of income stagnation.

The multi-layered fission of income distribution spawned complex economic and political consequences. The long-term lag of labor remuneration growth behind the rate of return on capital led to a continuous expansion of the capital share in national income. This imbalance suppressed aggregate social consumption (as the marginal propensity to consume is higher for low-income groups than for the wealthy) while intensifying class contradictions.

The developed-country-led model of globalization further weakened national governance capacity through a triple mechanism: First, capital mobility forced governments to lower tax rates, weakening the redistributive function. Second, the decline of traditional manufacturing industries fueled populist waves. Finally, differences in the influence of interest groups led to policy distortions: capital groups, leveraging their organizational advantages, promoted favorable policies, while dispersed workers struggled to counter the bargaining power of transnational capital. This imbalance ultimately corroded the foundations of globalization. Regions in Europe and America impacted by import competition significantly strengthened their protectionist tendencies. When the political energy of anti-globalization groups accumulated to a critical point, governments often adjusted foreign policies to divert domestic contradictions, thereby generating geo-economic risks.

Implications for International Monetary System Reform

The evolutionary course of geo-economic risks offers profound insights for reforming the international monetary system. The dollar-centric order established by the Bretton Woods system, by binding technological hegemony, financial centrality, and multilateral institutional arrangements, constructed a US-led global resource allocation system: the US dollar's international reserve currency status spurred the concentration of global capital in US financial markets, enabling it to rely on developed bond markets to provide globalization financing tools for multinational corporations; the combination of technological standard-setting power and discourse power in free trade rules reinforced the US monopolistic returns at the top of the global value chain. The stability of this unipolar structure peaked after the Cold War but sowed the seeds of systemic contradiction−when the multilateralist trade and investment promoted by the US triggered domestic industrial hollowing-out and income divergence, the backlash from protectionist political forces began to erode the globalization consensus; simultaneously, the substantive rise of emerging economies achieved through technological catch-up and market expansion continuously diluted the institutional power of traditional core countries. The interplay of these two forces pushes the world economy towards geo-economic fragmentation, with the vulnerability of global supply chains and the risk exposure of peripheral countries rising simultaneously.

Historical experience shows that an international system reliant on a single hegemonic currency, while possessing short-term efficiency advantages, is difficult to sustain due to three structural flaws: First, US dollar liquidity contraction transfers adjustment costs to peripheral countries through interest rate and exchange rate channels, exacerbating their debt crisis risks. Second, the seigniorage privilege leads to lax fiscal discipline, enabling the US to long maintain a “leveraging debt as power” capital circulation model, distorting the global savings-investment balance. Third, the lack of a neutral financial governance architecture allows payment and clearing systems (like SWIFT) to be weaponized for geo-strategic games, undermining the system’s neutrality and credibility.

The core direction of reform is to enhance the system's inclusivity and resilience. At the functional level, it is necessary to promote the diversification of reserve assets, while cultivating regional liquidity rescue mechanisms to mitigate the spillover shocks of US dollar tightening; and to weaken any single country’s control over the payment system through the multipolarization of clearing systems. At the governance level, the authority and responsibility framework of international financial institutions should be reconstructed, limiting the abuse of veto power, and embedding the provision of global public goods, such as low-efficiency development financing and poverty reduction support, into the mandates of multilateral development banks. The success of reform requires both developed countries accepting the reality of power diffusion and developing countries cooperating for mutual benefit, jointly promoting global financial governance reform to prevent the global system from falling into a trap of adversarial fragmentation.

IMI International Monetary Review

From Fragmentation to Alignment*

By GU JING*

The Global South is rewriting the rules of development aid to facilitate long-term transformation

The global aid landscape is undergoing a significant transformation. Once defined and dominated by Western institutions and priorities, this system is being reshaped by new actors, new expectations and new geopolitical realities. One of the most important and influential changes is the emergence of China as an alternative development provider, rewriting the way aid is conceived, delivered and valued in partnerships across the Global South.

This change is not about replacing one model with another. Its significance runs deeper than that. Fundamentally, it is about alignment: realigning development cooperation and assistance provision to the needs and aspirations of the Global South and aligning global partnerships with the values and imperatives of promoting sustainability, equity and peace central to the sustainable development goals of the United Nations.

For many decades, the rules and requirements of foreign aid have been set by Western countries, principally the United States, the United Kingdom and other Western European donors, led by the Development Assistance Committee of the Organization for Economic Cooperation and Development, institutions such as US Agency for International Development and the UK's now-defunct Department for International Development (DFID), combined with multilateral institutions such as the World Bank. The universal development model they promoted was grounded in conditionality, governance reform and technocratic planning. This model contributed development gains, in health and education for example, but has critical limitations that have intensified in recent years and deepened into a full-blown crisis.

Western aid is fragmented, politicized and out-of-touch with Global South recipient priorities. Indicative of this is the dismantlement of USAID under the "America First" doctrine of the Donald Trump administration. In parallel, the UK's aid budget will be cut from 0.5 percent to 0.3 percent of its GDP in 2027, and the DFID has been absorbed by the Foreign, Commonwealth and Development Office — signaling a pivot toward diplomacy over poverty reduction. The finance ministers of Germany and France have confirmed similar diversion of funds from aid to defense. In the US, the Trump administration ended USAID and put aid under auspices of the State Department, with the aim of harnessing aid as a tool for strategic competition with China.

The donor-funded active projects in sub-Saharan Africa often duplicated each other and some were disconnected. Not only is this inefficient, undermining effectiveness, it is also debilitating and disempowering, sapping limited financial, human and administrative resources, but also belief in the system. In practice, aid has reinforced dependency, rather than enabling autonomy.

In this context, China has emerged as a new type of strategic development partner. Since the Belt and Road Initiative was launched in 2013, China has mobilized resources for infrastructure, energy and connectivity projects in the Global South. The focus has largely been on practical deliverables: bridges, roads, ports and power plants, often delivered ahead of schedule, within budget and without reformist strings attached, offering partner governments political space to define their development pathways. New quality productive forces are central to the Fourth Industrial Revolution development in the Global South. Recognizing and responding to this, China has integrated emerging technologies into its South-South cooperation, supporting the development of digital economies and e-commerce.

China's approach has growing appeal across the Global South. This ought not to be seen as a threat to the West, but rather as a wake-up call. Development aid is not a zero-sum game. The central issue is not China versus the West — it is fragmentation versus alignment. The Global South needs coordinated, respectful and equitable partnerships aligned with national priorities, facilitating long-term transformation. That means integrating the strengths of different models, fostering mutual learning and avoiding rigid ideological divisions.

---

* Published on China Daily Global | Updated: 2025-07-14.

* The author is a senior research fellow and director of the Centre for Rising Powers and Global Development at the Institute of Development Studies in the United Kingdom, and a chair professor at International Development at China Agricultural University. The author contributed this article to China Watch, a think tank powered by China Daily..

China has a vital role to play in this, leading by example — demonstrating that projects maintain high standards of environmental sustainability, labor protection and local participation. The era of top-down, donor-driven development is fading. What comes next must be built on mutual respect, shared responsibility and strategic alignment. China's rise as a development partner has created new possibilities.

In a world increasingly shaped by the climate crisis, geopolitical instability and economic uncertainty, development cooperation is more vital than ever. But it must serve peace, not rivalry; empowerment, not dependency. Ultimately, development must be reclaimed, not as a technical problem to be solved from outside, but as a political and ethical project, grounded in local realities, informed by global solidarity and shaped by those most affected.

The present system is in profound flux and change. This incurs important costs, but also fresh opportunities. The choice isn't between Western aid or Chinese aid — it's between ineffective fragmentation and coordinated impact. As the development landscape enters a new era of geopolitical tension, the Global South is transitioning from passive recipient to strategic broker.

The future of global development will be shaped not in Washington or Brussels, but increasingly in Beijing, Rio de Janeiro, New Delhi, Johannesburg and Jakarta, among others. And the Global South is no longer just a recipient — it is a shaper of the rules.

IMI International Monetary Review

Engine of Prosperity*

By PEDRO BARRAGÁN*

The Belt and Road Initiative is consolidating its role as a driver for Eurasia's development in the face of US protectionism

The Belt and Road Initiative, launched by China in 2013, has established itself as one of the most extensive and dynamic international cooperation platforms of our time. It has blossomed into a network of physical and digital connectivity spanning Asia, Europe, Africa and Latin America.

To date, China has signed more than 200 cooperation agreements with more than 150 countries and more than 30 international organizations. The BRI has been incorporated into the final documents of major multilateral mechanisms such as the United Nations and APEC, reinforcing its legitimacy and reach. In Eurasia, its impact is particularly visible: rail corridors, ports, industrial parks and logistics platforms have shortened distances, reduced costs and opened up opportunities for more balanced development between core and peripheral regions.

One of the BRI's greatest successes has been understanding infrastructure not only as a physical investment, but also as a catalyst for economic and cultural integration. The new rail routes connecting Chongqing with Duisburg (Germany) and Yiwu with Madrid (Spain) have drastically reduced transport times between China and Europe. This has not only promoted trade in manufactured goods, but also in agricultural products, consumer goods and high-value-added items that previously could not compete with maritime transport in terms of speed.

In Central Asia, countries such as Kazakhstan and Uzbekistan have found in the BRI a vehicle to diversify their economies, traditionally dependent on raw materials, toward light manufacturing, logistics and services. The construction of logistics parks in Khorgos in the Xinjiang Uygur autonomous region and Aktau in Kazakhstan has not only generated employment but also stimulated more resilient regional supply chains.

This push for connectivity and cooperation stands in sharp contrast to the current approach of the United States administration, which has intensified the use of its so-called tariff stick as an instrument of foreign and economic policy. Under this approach, Washington has resorted to unilateral tariff increases and the imposition of trade sanctions to pressure other countries and thus maximize its own economic interests, even at the cost of distorting international trade and destabilizing both global and regional value chains.

The figures are telling: the US has increased tariffs on hundreds of billions of dollars' worth of imports from China, the European Union and other strategic partners. These measures are having a double negative effect: on the one hand, for US consumers, they mean higher prices for goods ranging from electronics to processed foods; and, on the other hand, for global companies, they represent greater regulatory uncertainty and the risk that investments in international supply chains will become unviable.

Protectionism is not a new phenomenon in the economic history of the US — it already had similar, unsatisfactory expression in the 1930s with the Smoot-Hawley Tariff Act. In such an interconnected world, the consequences of its protectionism are amplified exponentially. Supply chain fragmentation is causing disruptions in the delivery of critical components, higher raw material prices, and reduced predictability for cross-border investments, discouraging long-term planning.

Unlike this defensive and exclusionary US strategy, the BRI presents itself as a win-win cooperation framework. Rather than imposing barriers, it seeks to reduce physical and technical obstacles to trade through investments in infrastructure, logistics integration and regulatory harmonization. Thus, partner countries can better leverage their comparative advantages, diversify their export markets and increase their connectivity with multiple economic hubs, without depending on a single dominant partner.

By integrating with regional organizations such as the Association of Southeast Asian Nations, the Shanghai Cooperation Organization, the Eurasian Economic Union, the African Union, the Gulf Cooperation Council and the Community of Latin American and Caribbean States, the BRI has fostered the coordination of trade and investment policies. This synergy helps reduce regulatory costs, harmonize standards and foster more fluid trade.

---

* Published on China Daily Global | Updated: 2025-08-18.

* The author is an economist and advisor at the Cátedra China Foundation, Spain. The author contributed this article to China Watch, a think tank powered by China Daily.

In Eurasia, the expansion of maritime routes open to the Global South offers inland countries — from Mongolia to Belarus — new options for exporting and importing without bottlenecks. This not only increases their resilience but also stimulates competition in transportation and logistics, reducing prices and improving efficiency.

For example, Eurasian rail corridors have allowed shipments between China and Europe to be delivered within 15-20 days, compared to six weeks for traditional maritime transport. This is key for industries such as automotive, electronics and fast fashion, where time-to-market is critical.

Beyond economic considerations, the BRI has fostered a steady stream of cultural, academic and tourism exchanges. Scholarship programs, cultural centers and city twinning foster mutual understanding and reduce the risk of tensions arising from mistrust or lack of contact.

In regions with historical conflicts or rivalries, cooperation on infrastructure and trade projects creates incentives to maintain stability. It's harder to break off diplomatic relations when there's a shared rail line, pipeline or port that generates tangible benefits for both sides.

In this context, the continuation of the Donald Trump administration's tariff policy, based on punitive measures and bilateral pressure negotiations, could be accelerating a reorganization of international trade. Many countries affected by the tariffs will seek to diversify partners and routes to reduce their dependence on the US, and the BRI appears to be an ideal platform for this. Its emphasis on connectivity and openness offers participants access to new markets, financing, and infrastructure, countering the restrictions imposed by US protectionism. If these trends persist, the BRI could consolidate its role as an axis of global economic integration.

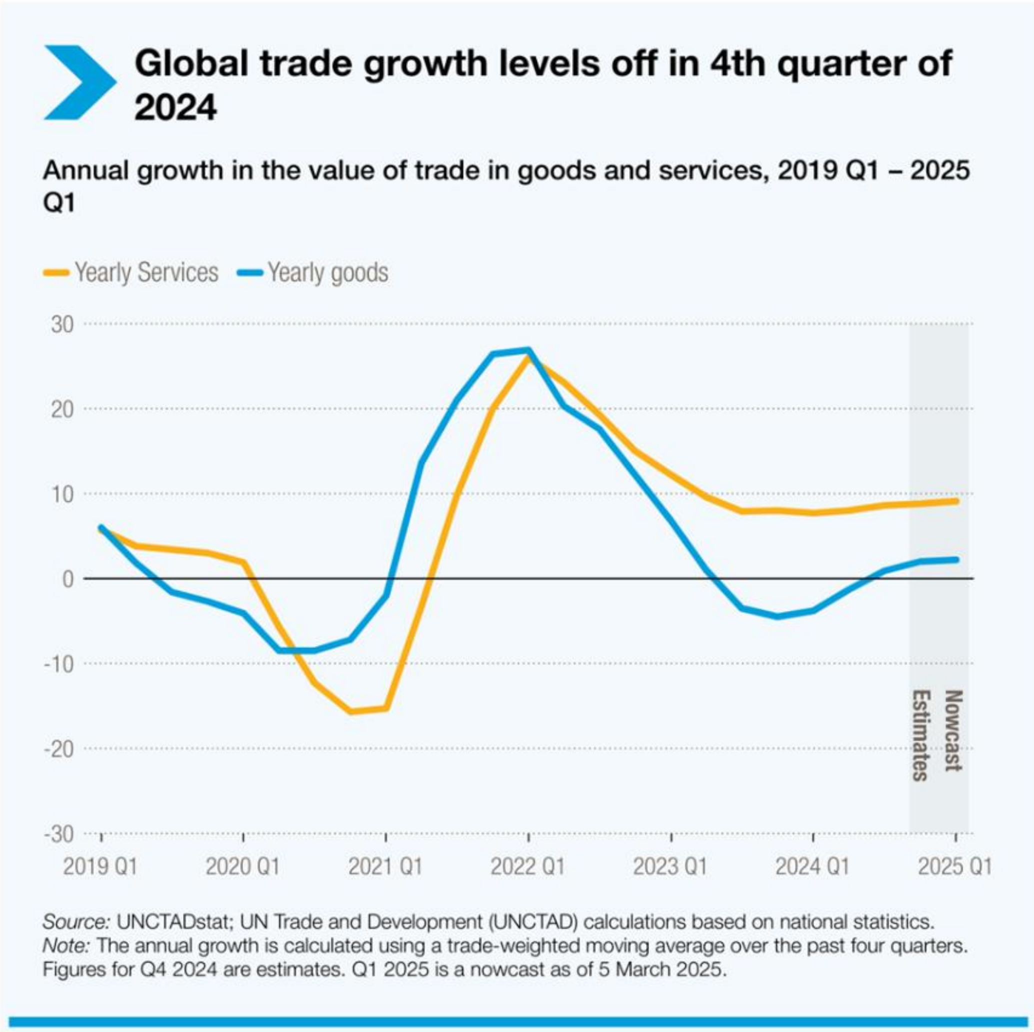
IMI International Monetary Review

Global Trade in 2025: Resilience under Pressure⋆

By UN TRADE AND DEVELOPMENT*

As trade uncertainty grows, global cooperation and balanced policies will be key to preventing economic fragmentation and safeguarding long-term growth.

Global trade started 2025 on stable ground, but challenges are mounting. The latest Global Trade Update by UN Trade and Development (UNCTAD), covering data through early March, signals a shifting landscape. In 2024, world trade saw record expansion to $33 trillion in 2024 – up 3.7% from 2023 – driven by developing economies and strong services trade. But looking ahead, new risks loom, including trade imbalances, evolving policies, and geopolitical tensions.



The gap between developing and advanced economies is widening. Asia and Latin America remain key trade drivers, but growth has slowed in many advanced economies. South-South trade is holding up, yet Africa's intra-regional trade is shrinking, reversing gains. Meanwhile, trade between Europe and Central Asia has declined, reflecting shifting demand.

Supply chains diversify, not consolidate

⋆ Published on China Daily | Updated: 2025-06-13.

* Waseem Ishaque is director China Studies Center, National University of Modern Languages (NUML) Islamabad, Pakistan. The views don't necessarily reflect those of China Daily.

Nearshoring and friendshoring trends reversed in 2024, as businesses moved beyond limiting trade to geopolitical allies or nearby regions. Instead of consolidating supply chains, firms are now diversifying trade networks across multiple regions to reduce risk – creating opportunities but adding complexity.

Trade dependence is also shifting. Economies such as Russia, Viet Nam, and India, have deepened trade ties with specific partners, while others, including Australia and the EU, are reducing reliance on traditional markets. The decline in trade concentration suggests that smaller economies are playing a bigger role.

Trade policies redraw the map

Governments are expanding tariffs, subsidies, and industrial policies, reshaping trade flows. The United States, European Union (EU) and others are increasingly tying trade measures to economic security and climate goals, while China is using stimulus policies to maintain export momentum.

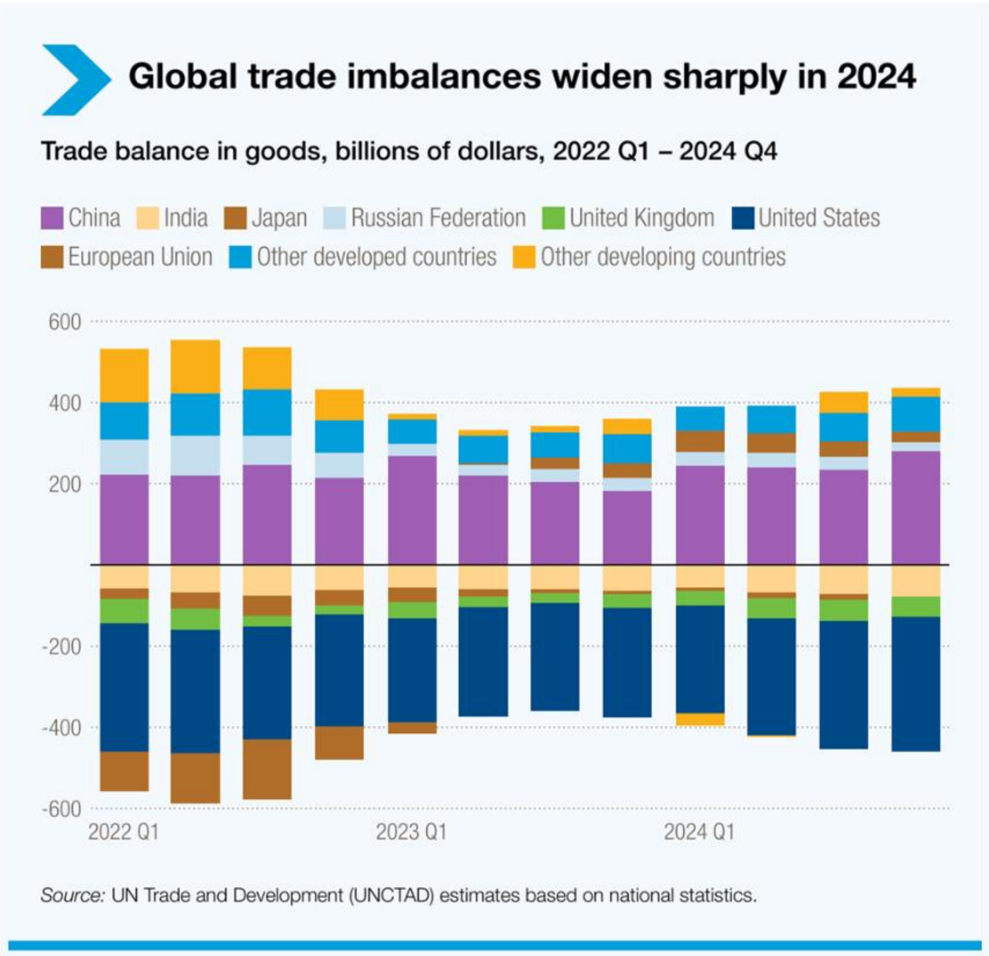
This policy realignment is contributing to uncertainty. Rising protectionism (policies favouring domestic industries through tariffs or restrictions), particularly in advanced economies, is triggering retaliatory measures (countermeasures from trading partners in response to trade restrictions) and adding trade barriers.

Meanwhile, industrial policies (long-term strategies to develop specific sectors) are reshaping key sectors like clean energy, technology and critical raw materials, risking competition distortion.

Global trade imbalances widen

In 2024, global trade imbalances returned to 2022 levels. The US trade deficit grew, China’s surplus expanded, while the EU shifted to surplus due to energy price changes.

Bilateral gaps persist: the US-China deficit is widening, the EU’s surplus with China is growing, and India’s deficit with Russia has increased amid shifting energy trade. These trends could prompt new tariffs, restrictions, or investment shifts, adding to economic uncertainty.



Uneven sector growth

Trade growth varied by industry: agri-food, communication tech, and transport saw gains, while energy, apparel, and extractives slowed due to weaker demand and policy shifts.

Shipping trends indicate a slowdown, with falling freight indices signaling weaker industrial activity, particularly in supply chain-dependent sectors.

Navigating 2025: Avoiding fragmentation

As trade uncertainty grows, global cooperation and balanced policies remain critical. While China's stimulus measures and lower inflation in some regions could support trade, protectionism and shifting policies in major economies remain key risks.

The challenge in 2025 is to prevent global fragmentation - where nations form isolated trade blocs – while managing policy shifts without undermining long-term growth. The actions taken now by governments and businesses will shape trade resilience for years to come.

October 2025
Vol.12, No.4

Poorest Countries and Fragile States Are Increasingly Falling Behind*

By GUILLAUME CHABERT, ROBERT POWELL

Support for developing countries should focus on grants and highly concessional loans for the poorest and fragile countries and helping the more advanced crowd in foreign investment and private finance.

The significant shocks that have buffeted the global economy over the past five years have weighed heaviest on low-income countries and fragile and conflict-affected states.

The post-pandemic recovery in low-income countries has lagged emerging market economies, which began their revival in 2021, though with significant differences.

Among low-income countries, defined as the 70 countries eligible for IMF concessional lending (the Poverty Reduction and Growth Trust), 38 of the more advanced—with higher income, varied exports, and international capital market access—grew by an average of 5.3 percent from 2022-24. As the Chart of the Week shows, that compares with 3.3 percent in the poorest 32 in the group. It was just 2.6 percent for fragile and conflict states.

While some low-income countries with more robust economic growth are poised to soon achieve emerging status, their poorest and fragile counterparts are increasingly falling behind, which threatens their prospects for their income per person to converge with advanced economies. Poverty and food insecurity, as well as debt vulnerabilities, also are disproportionately affecting the poorest and fragile and conflict-affected states.

Meanwhile, financing flows to developing countries, and especially to those that are low-income, have significantly declined since the onset of the pandemic, even though these countries face huge needs to finance critical spending such as education, health, and infrastructure. Reversing that trend, and ensuring developing countries receive sufficient and recurrent flows of new and affordable financing, is essential. In addition, debt vulnerabilities should be proactively addressed.

For the wealthier developing countries, the focus should be on helping them attract more foreign investment and international private finance, with the support of bilateral and multilateral partners where needed. For the poorest and fragile countries, adequate financial support through grants or highly concessional loans is critical, alongside technical assistance to build further institutional capacity. Further improvements in restructuring processes are also needed to deliver efficient and timely debt restructuring for countries where debt is not sustainable.

Building institutional capacity

Strengthening public financial management, efficiency of spending, and tax capacity—the policy, institutional, and technical capabilities to collect tax revenue—is part of a deeper process of building institutional capacity. While developing countries have made some progress in raising additional government revenue in recent decades, much more is needed. A 7 percentage-point increase in the ratio of tax revenue to economic output is feasible for low-income countries through a combination of tax system reform and institutional capacity building, according to IMF research published in 2023.

For its part, in addition to economic surveillance and concessional lending, the IMF has expanded its capacity development work with low-income countries. Between 2022 and 2024, this group of countries received over 40 percent of the IMF's overall capacity development with its member countries. More broadly, the IMF will continue to help its members achieve economic and financial stability, which is a prerequisite for reaching their development objectives. It will do so by using the whole range of its tools including policy advice, capacity development, and balance of payment financial support where relevant.

The international community can help by intensifying efforts to provide technical and financial assistance, including grants and concessional loans, and timely debt restructuring where needed. It could also develop risk-sharing instruments to attract more participation by private investors where appropriate.

* Published on June 26, 2025. This blog draws on a recent IMF policy paper detailing the Fund's contribution to the agenda at the International Conference on Financing for Development from June 30 to July 3, 2025.

Given the higher costs associated with private finance, developing countries should ensure that private debt is incurred in a sustainable manner.

October 2025
Vol.12, No.4

Initiative Aims to Address Global Governance Deficit*

By CHINA DAILY

Editor's Note: President Xi Jinping proposed the Global Governance Initiative during the Shanghai Cooperation Organization Summit held in Tianjin on Sunday and Monday. The initiative relates to global development, cooperation, security and civilization. Below are excerpts from an analysis of the GGI published by the China Media Group. The views don't necessarily represent those of China Daily.

Eighty years ago, after reflecting deeply on the painful lessons of the two world wars, the international community decided to establish the United Nations, ushering in a new era of global governance. Eighty years later, the quest for peace, development, cooperation and win-win outcomes remains unchanged, but humanity now faces increasingly complex and diverse global challenges.

Unilateralism and hegemony have severely impacted multilateral mechanisms such as the UN, even as the global governance deficit continues to enlarge. It is fair to say that the world has entered a period of turbulence and change, and global governance is at a crossroads.

World affairs should be handled through consultation among all countries. Those with greater power cannot be allowed to dictate decisions. Unity, cooperation, openness and inclusiveness are the right path for humanity.

Global governance should be based on extensive consultation and joint contribution for shared benefits. President Xi Jinping highlighted the principles for the GGI: countries should adhere to sovereign equality, abide by international rule of law, practice multilateralism, advocate a people-centered approach and focus on taking real actions.

These principles address the primary premise, fundamental guarantee, basic approach, values and key tenets of global governance. They align with the objectives and principles of the UN Charter and the expectations of a majority of countries.

Related proposals such as enhancing the representation and voice of developing countries, refraining from imposing the "house rules" of a few countries on others, and opposing unilateralism aim to tackle the unfairness, injustice and irrationality that exist in the current international order.

The GGI addresses key questions such as "who governs", "for whom", and "how to govern". Rather than reinventing the wheel, it advocates adjustments and improvements in the existing global governance system to better meet the needs of the times.

In this special year marking the 80th anniversary of the victory in the World Anti-Fascist War and the founding of the United Nations, the GGI elevates the concept of global governance and contributes a Chinese approach to addressing global governance challenges.

China proposing the GGI at the SCO Summit holds special significance showing that the SCO can play a greater role in promoting positive global governance. The rich outcomes of the summit in various fields prove how effective governance can help such multilateral organizations function more efficiently and productively.

From advocating an open world economy to promoting political solutions to international flash points, from promoting the establishment of an international mediation chamber to advocating the establishment of an organization to foster global cooperation on artificial intelligence, China has, over the years, not only been a sayer but a doer in promoting the reform of the global governance system.

* Published at CHINA DAILY | Updated: 2025-09-04.

IMI International Monetary Review

Climate Change

US Tariffs Propel Global Clean Energy Shift*

By NICK ROBINS AND BOB WARD*

China and the rest of the world have been presented with an enormous economic opportunity by the United States' so-called One Big Beautiful Bill Act. US tariffs have already increased the costs of many imported low-carbon goods in the US. Now, the new act, signed into law on US Independence Day on July 4, will further harm the market for many clean energy goods by removing tax credits, most likely leading to greater dependence on fossil fuels and increased damage to the climate.

This will create more challenges for clean energy producers and consumers in the US, likely affecting exporters, particularly those that export their products.

But more interestingly, the new act is likely to put China further ahead of the US in the global race to capitalize on the rapidly growing market for clean energy technologies. Strategically, the task ahead is to identify how this shift can be used to triple the production of renewable energy the world needs by 2030, one of the key climate goals we need to achieve this decade.

China and the US are the biggest investors in large-scale electricity storage, with the two sides, along with Europe, accounting for more than 90 percent of global spending on electricity storage. But the new act may signal a cooling off for electricity storage companies in the US, giving China a decisive edge in the field.

Any reduction in the export of clean energy technologies from China to the US is likely to be offset by the increase in exports to other countries. China already exports more solar photovoltaic panels to developing countries than to advanced economies.

Chinese electric vehicle (EV) manufacturers, too, are looking at international markets, where they can offer a clean, competitive alternative to cars powered by gasoline. Chinese EV and battery manufacturers have announced they would invest huge amounts to establish and expand their manufacturing capacities in major foreign markets, including Indonesia, Thailand, Brazil, Mexico and Turkiye.

Besides, more than 17 million EVs were sold worldwide last year, meaning more than one in every five new vehicles sold worldwide was an EV. China accounts for more than 70 percent of the global EV production, primarily meeting the demand at home. Also, the global market for EVs increased by 20 percent last year, with China exporting almost 1.25 million EVs, or about 40 percent of the global total, in 2024.

The production of solar panels in China reached a record high in March 2025. Measured by value, 44 percent of Chinese-made solar panel exports were destined for emerging market economies and developing countries in 2023. Many emerging market economies and developing countries imported record levels of Chinese solar power technology in 2024.

This gives rise to a burning question: How do governments and businesses across the world benefit from China's advancement in clean energy?

This is an acute issue for strategic sectors, from EVs to renewables. To resolve it, a new generation of joint ventures is needed, joint ventures that are mutually beneficial to manufacturers in China and those across Africa, Asia, Europe and Latin America.

There is now a major opportunity to deconcentrate clean energy supply chains, which will attract more investments, make them more resilient and strengthen economic security.

Moreover, global partnerships are needed to strengthen environmental and social safeguards in clean energy goods trade. In this regard, the Solar Stewardship Initiative, which has several leading Chinese

* The article was first published on ChinaDaily on August 9th 2025.

* Nick Robins is chair of the Just Transition Finance Lab at the Grantham Research Institute on Climate Change and the Environment at the London School of Economics and Political Science; and Bob Ward is policy and communications director of the same institute.

producers as members, recently released a list of comprehensive standards to address environmental, social and governance issues.

Furthermore, the huge decline in the prices of Chinese-made solar panels and wind turbines since 2022 could especially benefit African countries. Africa currently accounts for just 2 percent of the global investment in clean energy, with countries like Nigeria witnessing a significant increase in imports of clean energy tools from China over the past few years, albeit the increase is on a low base.

As the world looks forward to the United Nations Climate Change Conference in Belém, Brazil, in November, a major challenge the international community faces is to show how China's leading position in the global clean energy market can contribute to Africa's green industrialization, and create new jobs and business opportunities across the globe.

Indeed, the spectacular growth of the global clean energy technology market because of China's massive investments in the sector can help erase the gloom arising from the abandonment of climate leadership by the US.

IMI International Monetary Review

Digitalisation

Private Versus Public: US and Europe Diverge over Stablecoins*

By UDAIBIR DAS*

Different approaches to regulation risk fragmenting the global digital finance landscape

Stablecoins have emerged as a practical alternative to the traditional banking system for payments and remittances. These digital coins seek to maintain stable value by pegging to currencies like the dollar, combining blockchain technology with reserve backing. They bring opportunities for more accessible and efficient financial intermediation, but also raise concerns about monetary control, illicit transactions, user protection and financial stability.

However, a fundamental divide has emerged between the US approach to the regulation of stablecoins, which encourages private sector innovation, and the European approach, which prioritises sovereign monetary and regulatory control. This divergence in approach could profoundly reshape the global financial structure.

Regulatory and policy concerns

The growing use of stablecoins in finance is raising a complex set of policy concerns. These include the risk of undermining official currencies as more transactions migrate to stablecoin platforms, their potential use in illicit financial flows, gaps in safeguards for retail users and unresolved questions surrounding the taxation of returns on cryptoassets.

Regulatory concerns are arising from the increasing role of stablecoins in financial intermediation. Central banks and regulators now consider large stablecoin issuers as systemically important institutions. The US Financial Stability Oversight Council 2024 Annual Report noted that stablecoins 'continue to represent a potential risk to financial stability because they are acutely vulnerable to runs absent appropriate risk management standards'.

Concerns were highlighted by the May 2022 collapse of TerraUSD (which lost its dollar peg entirely) and the November 2022 failure of the FTX exchange, as well as brief de-pegging events affecting even major stablecoins like USDC under banking sector stress in March 2023. Such events can have systemic implications given that stablecoins' integration with securities markets, custody chains and payment processors creates links to the core financial infrastructure.

A related concern is that weak reserve management by stablecoin issuers or trading platforms could trigger collateral fire sales during mass redemptions, driving down the cost of assets and potentially destabilising other parts of the financial markets.

To date, however, progress in addressing these risks has been uneven, slowed by the absence of clear regulatory mandates over stablecoin activities and by diverging views among policy-makers and agencies on the dangers and potential benefits of this rapidly evolving ecosystem.

Transatlantic divergence

The transatlantic divergence in the regulation of stablecoins widened in early 2025. The US, under the Donald Trump administration, views stablecoins primarily as vehicles for innovation – tools to expand consumer choice and provide more efficient forms of financial intermediation, with the additional benefit that the rapidly rising use of dollar stablecoins helps to bolster dollar dominance globally. An executive

---

* Published on 26 June 2025

* Udaibir Das is a Visiting Professor at the National Council of Applied Economic Research, Senior Non-Resident Adviser at the Bank of England, Senior Adviser of the International Forum for Sovereign Wealth Funds, and Distinguished Fellow at the Observer Research Foundation America.

order issued in January 2025 promoted stablecoins while explicitly prohibiting central bank digital currencies in the US.

Meanwhile, the Generating Revenue and Enhancing National Investment by Using Stablecoins Act, which has just been passed by the Senate, proposes a light touch but structured framework for stablecoins. The Act mandates that stablecoins be backed 1:1 with safe, liquid assets and that issuers undergo regular audits and adhere to disclosure requirements.

However, it carves out a separate regime for smaller issuers – with less than $10bn in outstanding stablecoins – allowing them to operate under state-level oversight. This has raised concerns about regulatory arbitrage and the potential for inconsistent standards across jurisdictions, and the potential for systemic risk from a growing multitude of alternative forms of digital money.

Europe is taking the opposite approach, prioritising tighter control. This is not just a technical difference from the US – rather, it reflects competing visions about who should control the future of finance: private companies or government institutions. The European Central Bank's concerns focus on monetary sovereignty and the ability to implement effective monetary policy in a digital world. The ECB is accelerating the development of a digital euro to counter the growth of US stablecoins, with pilot testing of a coordinated digital payments platform expected by the end of 2025.

At the same time, EU regulations treat stablecoin issuers much like banks, with equivalent capital and operational rules. The European Union's Markets in Crypto-Assets regulation, adopted in 2024, imposes stricter rules than the US GENIUS Act. It requires large stablecoin issuers to maintain strong capital buffers, establish clear liability frameworks and implement tight operational controls. MiCA also seeks to limit the spread of non-euro stablecoins, particularly dollar-denominated ones, by increasing compliance costs and making authorisation more challenging for foreign issuers.

What this means

Diverging approaches to regulating stablecoins risk fragmenting the global digital finance landscape, with a dollar-based stablecoin system in the US, a state-backed European digital euro regime and a mix of regional approaches elsewhere. These competing models risk disrupting the transmission of monetary policy, cross-border capital flows and regulatory coherence.

Stablecoins must now be considered an integral part of the core financial architecture. A coordinated international response is needed before their scale outpaces the capacity of any single jurisdiction to manage the risks they pose to monetary and financial stability.

IMI International Monetary Review

HK Takes Lead in Stablecoin Regulation as China Explores a Digital Future*

By SONG KE*

On May 30, Hong Kong made history by enacting the world's first dedicated legislation specifically governing fiat-referenced stablecoins — the Stablecoins Ordinance. With a commencement date of Aug 1, the new legislation represents a milestone in the global regulation of digital assets, positioning the city as a front-runner in shaping the future of digital finance.

As jurisdictions across the globe — from the United States and the European Union to emerging markets — race to stake their claim in the growing stablecoin arena, Hong Kong's move is widely viewed as a strategic play to capture first-mover advantage in global competition.

Less discussed, but equally significant, is the broader strategic context behind Hong Kong's push: the effort to elevate the global status of the Chinese renminbi in the digital era. By establishing a legal foundation for stablecoin issuance, the ordinance opens the door to new possibilities for the cross-border use of the digital yuan or e-CNY, while offering a valuable reference point for potential stablecoin adoption in other parts of China.

For readers unfamiliar with the concept, a stablecoin is a digital currency that is built on blockchain technology and pegged to fiat currencies or other real-world assets at a designated exchange rate to maintain a stable value. Fiat-referenced stablecoins are backed by government-issued fiat currencies.

Upon implementation of the Stablecoins Ordinance, any person who issues a fiat-referenced stablecoin in Hong Kong, or issues the cryptocurrency that purports to maintain a stable value with reference to Hong Kong dollars in or outside Hong Kong will need to obtain a license from the Hong Kong Monetary Authority. The relevant persons must satisfy requirements in areas such as reserve asset management and redemption.

Clearly, the ordinance is setting a global policy benchmark. Its value-anchored regulatory philosophy builds upon existing international regulatory frameworks while introducing meaningful innovations — offering a potential blueprint for the future governance of stablecoins worldwide.

The ordinance provides a clear legal foundation for the development of the stablecoin market in Hong Kong, offering regulatory certainty for institutions and investors and paving the way for innovation in the regional stablecoin ecosystem.

In addition, as an international financial center, Hong Kong already possesses a well-developed financial market and a vibrant community of financial institutions. By taking the lead in enacting stablecoin legislation, the city has, to a certain extent, alleviated the concerns of traditional financial institutions about participating in the stablecoin market.

This move is also expected to attract more innovative stablecoin issuers, exchanges and related entities, thereby enhancing Hong Kong's position and influence in the stablecoin space and securing a first-mover advantage in the global market.

In fact, Hong Kong has long positioned financial technology as a key pillar of its strategy to strengthen its role as a global financial hub. The "Fintech 2025" strategy, introduced by the Hong Kong Monetary Authority, laid the groundwork with initiatives such as digital banking reforms, research of central bank digital currencies, data infrastructure development, fintech talent pipelines and regulatory innovation.

These efforts have already borne fruit. In recent years, the HKMA has actively participated in multiple digital currency projects including mBridge, e-HKD and Ensemble.

With the Stablecoins Ordinance now in place, these pilot experiments can be quickly translated into commercial products, accelerating the formation of a comprehensive stablecoin ecosystem in Hong Kong.

The ordinance also carries demonstration significance for the rest of China. While the Chinese mainland maintains a cautious stance toward stablecoins due to financial stability considerations — focusing instead

* Published at China Daily | Updated: 2025-06-23.

* The writer is executive vice-president of Renmin University of China's Shenzhen Research Institute, executive dean of RUC's Institute of Advanced Social Sciences (Shenzhen) and deputy director of RUC's International Monetary Institute.

on the development of e-CNY — Hong Kong's experience could serve as a testbed for regulatory innovation.

While issuing a renminbi-backed stablecoin is not yet feasible given the current legal framework, Hong Kong's ordinance can serve as a regulatory pilot, offering insights for the central government in evaluating stablecoin oversight effectiveness and avoiding regulatory loopholes.

Equally important, the development of stablecoins pegged to the Hong Kong dollar could also play a complementary role in the internationalization of the renminbi.

Over the past few years, Hong Kong has worked closely with the mainland on cross-border digital currency initiatives. Notably, the HKMA and the People's Bank of China have conducted joint trials for cross-border e-CNY payments, achieving technical breakthroughs such as interoperability with Hong Kong's Faster Payment System and the use of e-CNY hardware wallets in the city.

With stablecoin issuance now legally enabled, Hong Kong is in a unique position to integrate e-CNY with the stablecoin ecosystem. For instance, by enabling conversion into stablecoins pegged to the Hong Kong dollar, e-CNY could be integrated into the broader stablecoin ecosystem, expanding its role in cross-border settlement.

Such synergy may allow China to explore innovations for cross-border payments, which can help reduce costs, improve efficiency and reduce reliance on SWIFT, the world's leading system of secure financial messaging services.

While currency digitalization does not equate to internationalization, in the digital era, the former has become an essential component of the latter.

Through the development of cross-border payment systems like the Cross-Border Interbank Payment System or CIPS, along with the promotion of e-CNY and Hong Kong's stablecoin, China is improving cross-border payment efficiency while reducing reliance on the US dollar-based clearing and settlement system.

This is happening as the international influence of the US dollar is showing signs of weakening, though it still holds a crucial position in the global financial system.

The US government has been actively working to consolidate the dollar's dominance and has repeatedly used its monetary hegemony to impose sanctions on developing countries, further intensifying the competition among global currencies.

In this new landscape, China has been exploring the internationalization of the renminbi, deepening regional cooperation that helps raise the renminbi's share in foreign trade transactions while increasing the attractiveness of renminbi-based payments.

In May, the PBOC and Indonesia's central bank agreed to extend cooperation in local currency settlements to all transactions including capital and financial accounts while agreeing with its Brazilian counterpart to expedite the interlinking of cross-border QR code payment systems.

Meanwhile, CIPS and the Central Bank of the UAE signed a memorandum of understanding to provide local currency clearing services for financial institutions in the Middle East and North Africa.

Overall, by leveraging a dual engine of "financial application scenarios + technological innovation", China can further improve global acceptance and recognition of renminbi-based clearing and settlement.

This, in turn, will support the internationalization of the renminbi, promote the diversification of the international monetary system and help safeguard global financial stability.

IMI International Monetary Review

Europe Doubles Down on Public Money for Digital Finance⋆

By JOHN ORCHARD AND LEWIS MCLELLAN*

That was the clear answer from a key Eurosystem official in a recent OMFIF session to the question: 'has the Genius Act changed your mind about the role of private money in wholesale capital markets?'

Although some central bankers have been panicking about their sector's impotence or complacency in response to the expected dollar stablecoin boom, the Eurosystem has been stepping on the gas for its digital overhaul of wholesale euro settlement projects to embed public money at the heart of tokenisation. The same official expects, as a private opinion, that distributed ledger technology will underpin the majority of finance within 10 years.

Deutsche Bundesbank's well-established 'Trigger' pilot, a 'synchronisation' system which settles between the existing real-time gross settlement platform, T2, and blockchain-based finance at regular intervals, is becoming a solution on behalf of the Eurosystem, known as Pontes, and will go live as a component of wholesale markets in Q3 2026. While that is still a year away, the Genius glut is not expected in practical terms until 2027, as stablecoin companies get ready to fulfil the obligation to buy a trust bank or set one up, and secure lawyers who can present their propositions to the Office of the Comptroller of the Currency. The Genius Act empowered the OCC to authorise stablecoins and while some observers expect to be overwhelmed, it is only just starting to understand the Act and its interpretation.

Project Appia

Some, including the Bank of England, hold the view that synchronising traditional settlement infrastructure with tokenised securities settlement will be sufficient. But the Eurosystem is preparing to go further. A medium-term Eurosystem project, Appia, is assessing a more ambitious undertaking to integrate public money into DLT finance on a live, token-based level – a true wholesale central bank digital currency.

This may take a while. The European Central Bank will publish a launch paper in mid-2026, but it will take years of industry collaboration before Appia is ready for the market to use. The faddish idea of a 'regulated liability network', where central banks, commercial banks and asset managers all sit on the same live permissioned network seems to be dying a quiet death for now.

So, while Europe's future of wholesale settlement is mapped out, the picture in the US is far murkier. CBDCs in the US have become mired in populist ideology, not to mention assertive bank and crypto lobbying. The present administration has made it clear that it does not want the Federal Reserve System to work on a CBDC, throwing its weight behind a bill known as the Anti-CBDC Surveillance State Act.

Whether this ban also applies to wholesale CBDC is unclear, and many observers report the Fed quietly pressing on developing ways to provide wholesale settlement in digital money. Circumlocutions such as 'tokenised reserves' are now the order of the day. A synchronisation solution like Pontes should not fall into even the broadest definitions of CBDC, but that requires lawmakers to distinguish between an upgrade designed to facilitate settlement of tokenised assets with public money systems versus the use of novel digital money tokens. Although the shape of legislation could still change, President Donald Trump's administration clearly prefers to support private money solutions.

Who wins the DLT race?

For capital markets, that goal represents a serious disruption of the status quo. A representative at a public blockchain company suggested to OMFIF that Europe might win the DLT-based finance race over the US on the basis that wholesale market participants will eventually want a public-money-based system, as is stipulated by the Bank for International Settlements' Principles for Financial Market Infrastructure, rather than one merely backed by public debt. The representative added that the ECB is way ahead in that regard.

⋆ Published on 11 September 2025.

* John Orchard is Chairman and Lewis McLellan is Head of Content of the Digital Monetary Institute at OMFIF.

Europe still has its headaches. Sources close to the European Commission think it risks becoming a ‘flyover zone for DLT’ because of the deliberately onerous restrictions in MiCAR, compounded with an overly ‘Napoleonic’ application of it.

A patchwork of national regulators in Europe is still getting to grips with digital assets rules. A row erupted in a recent off-record OMFIF roundtable between a country’s paramount quasi-sovereign issuer and its finance regulator, who suggested it will abide by the swingeing capital weights recommended by BIS for digital assets on permissionless blockchains, and then was unable to advise which of the two incredibly punitive rates would apply to this issuer, whose bonds are otherwise rated ‘AAA’.

Since many of the Banque de France’s DL3S experiments take place on ethereum – a permissionless blockchain – the capital treatment of central bank money may also be the subject of the same confusion. There is no chance that digital assets can become mainstream in Europe while that framework prevails. The US, and many others, are expected to ignore the recommended risk weights.

Varied levels of readiness

Central banks cannot prepare for digitalisation of wholesale markets alone. OMFIF has heard different accounts of banks’ preparedness to make use of the Eurosystem’s DLT provisions, ranging from ‘not ready at all’, through to ‘needlessly duplicating work in their silos’ and on to ‘ready by the time Pontes goes live’.

A bigger ambiguity hangs over central securities depositories. Blockchain theory would suggest that additional clearing and settlement infrastructure is unnecessary, since blockchain is supposed to facilitate that on a peer-to-peer basis in short order, notwithstanding the need for a ramp off into fiat cash.

A Eurosystem official at a recent OMFIF session deflected a question about the CSD’s medium-term role to a representative of such an organisation, which suggested they may go onto provide the necessary interlinkages between various blockchains. Digital finance regulators are trying to work out how to avoid mandating fragmentation on the one hand to prevent, for example, public permissionless blockchain monopolies, and on the other habilitating monopolies to avoid the interoperability headaches. Worries about credit risk, counterparty risk and finality lurk in the background, meaning that CSDs may yet be needed, as new ones such as Ubyx emerge for these reasons.

The financial system as it stands is complex and replete with organisations who, policy-makers and disrupters alike seem to agree, are in places unduly clipping the coins passing through their hands. It may be that Europe’s attempts to digitalise the public-money anchored, bank-centric financial system will be the more stable route and spare the public purse the expense of a major financial accident from unforeseen flaws in the latest financial fashion.

While Europe is often mocked for its hair-trigger approach to regulation and the smothering effect this has on innovation, surety is highly prized by financial market participants. While there is no insurmountable reason that capital markets cannot run on private money, making this change would introduce new risks and raise new questions. In Europe, at least market participants know the form of money they’ll be using for the foreseeable future. Can anyone answer that question in the US?

IMI International Monetary Review

Reserve Managers Overwhelmingly Reject Digital Assets*

By JOHN ORCHARD*

That the US will inevitably devalue or renege on its sovereign debt, probably through inflation and money-printing, found easy consensus at a recent private dinner for family offices and sovereign funds attended by OMFIF.

A furious and intractable row broke out, however, about whether gold or bitcoin was the better alternative to the dollar, while the renminbi and the euro went unmentioned. If a reserve manager were also present it would perhaps have swung the argument.

OMFIF's Global Public Investor 2025 found that not a single central bank surveyed holds any digital assets, and 93% have no intention of doing so. Of the institutions in question, representing $5tn of global reserves, there were outliers in the Middle East plus a lone voice in Europe (Figure 1). The pronounced conservativism extended beyond distributed-ledger technology assets to the technology itself: 82% of respondents neither use it nor intend to in future, even though some of their central bank digital currency teams are getting ready to do so.

What is holding the vast majority of reserve managers back from the crypto party, at a time when the same survey found 58% looking for diversification?

Even though they resemble reserve-like money more than they resemble securities, the main reason not to hold stablecoins is very simple. Regulators – including central banks – are mostly intent on preventing them from paying a yield (which is also why their operators are incredibly profitable). As Larry Hathaway, global investment strategist at Franklin Templeton, explained at the launch of the GPI report, there wouldn't be many takers for this kind of 'negative carry', and reserve managers might as well directly hold the kind of government money market instruments that sit in stablecoins' collateral pools.

Daniela Klingebiel, who helped manage the Reserve Advisory and Management Partnership for the World Bank, added a host of other factors militating against stablecoins as a reserve asset, rather than as a means of payment. These include legal and counterparty risk, custodial complexity, regulatory ambiguity, technical risk, credit risk (of the coin issuer) and the risk of de-pegging, which for example both USDC and USDT have done, and happens occasionally to money market funds, which somewhat resemble stablecoins.

What about digital assets that more resemble securities or commodities, such as bitcoin? Some observers refer to it as the 'new gold', primarily on the basis of its programmatic scarcity. Similar ecosystem obstacles exist to those for stablecoins, Klingebeil explained, in addition to the nature of the asset itself, which is volatile, illiquid and harder to trade compared to typical reserve assets. Nor is bitcoin (yet, at least) used for cross-border trade and capital flows, both of which also significantly determine a national reserves managers' allocation strategy.

What of the 7% of reserve managers at least keeping an eye out? At the GPI launch, Jan Kubíček, board member, Czech National Bank, said 'we can pretend there is no such thing as bitcoin or gain some hands-on experience with it', adding that this does not immediately equate, say, to 2% of reserves. The ecosystem differences to other types of assets, including auditing and accounting treatment, posed major challenges, 'but still we are open to experimenting with it'.

The CNB has also explored the potential benefits of (non-)correlation, but 'not discovered any miraculous stabilising force' through a portfolio holding of bitcoin, though all these factors may significantly change 'as it becomes more financialised'.

Public pension and sovereign funds, whose allocation objectives are more return-focused and less complex and systemic than central banks, are more adventurous. In the same survey, 7% of those respondents already hold digital assets, and a further 20% intend to.

Facts on the ground march on. President Donald Trump has announced that the US would set up a strategic bitcoin reserve. The Genius Act, presaging the mainstream adoption of stablecoins in the US,

* Published on 1 July 2025.

* John Orchard is Chairman of OMFIF's Digital Monetary Institute.

has been passed by the Senate and awaits approval in the House of Representatives. Fannie Mae and Freddie Mac may soon treat cryptoassets as legitimate collateral for housing finance.

The future path of stablecoins remains intriguing. They lack the value creation of programmatic scarcity and, for the most part, have no yield. They are not backed, for now, by central bank reserves, merely government debt and fiat cash. They have de-pegged in the past. OMFIF has heard that hedge funds are waiting to test them in a market dislocation. So why bother?

Stablecoins are saving counterparties material sums on payments. At an off-record event convened by a global universal bank and some of its key wholesale customers as well as OMFIF, a major consulting firm said that it is already using stablecoins for internal cross-border payments. The bank in question, a major transactions services player for whom this could be an existential headache, could afford to relax a little, though.

A leading multilateral development bank in attendance said that it did not wish to take on the theoretical risks of using stablecoins even for a short time, and would prefer to use the service in development by the bank, which uses stablecoins in the background to remit more quickly and cheaply.

If, in the end, the stablecoin and DLT boom makes the regulated financial sector faster and cheaper, it will have ended up at a version of the Regulated Liability Network, thanks to the advancing threat of the opposite, which will leave the financial system broadly as it is.

IMI International Monetary Review

Debt Issues

Global Debt Remains Above 235% of World GDP[*]

By VITOR GASPAR, CARLOS EDUARDO GONCALVES, MARCOS POPLAWSKI-RIBEIRO

Decline in private lending offsets increase in public borrowing; notable differences persist across countries and income groups.

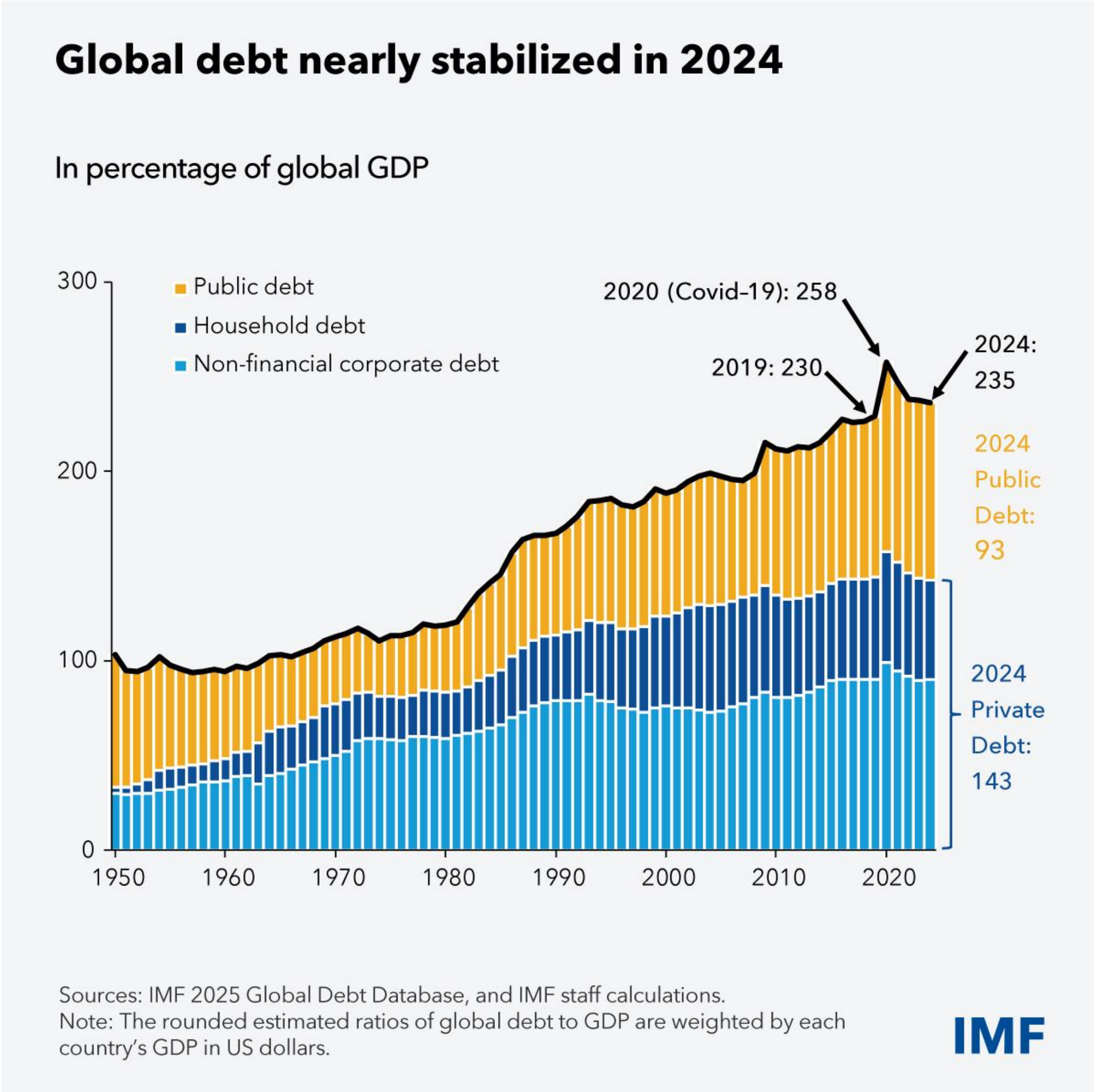
Global debt has stabilized, though it remains at an elevated level, as a continued reduction in private-sector lending offset greater borrowing by governments.

Total debt was little changed last year, just above 235 percent of global gross domestic product, according to the latest update of the IMF's Global Debt Database.

Private debt declined to under 143 percent of GDP, the lowest level since 2015, reflecting a reduction in household liabilities and little change in non-financial corporate debt. In contrast, public debt rose to nearly 93 percent, according to our database reflecting an annual survey of the amount and composition of debt held by governments, businesses, and households.

In US dollar terms, total debt increased slightly to $251 trillion, with public debt rising to $99.2 trillion and private debt decreasing to $151.8 trillion.

[*] This article first appeared on September 17, 2025.



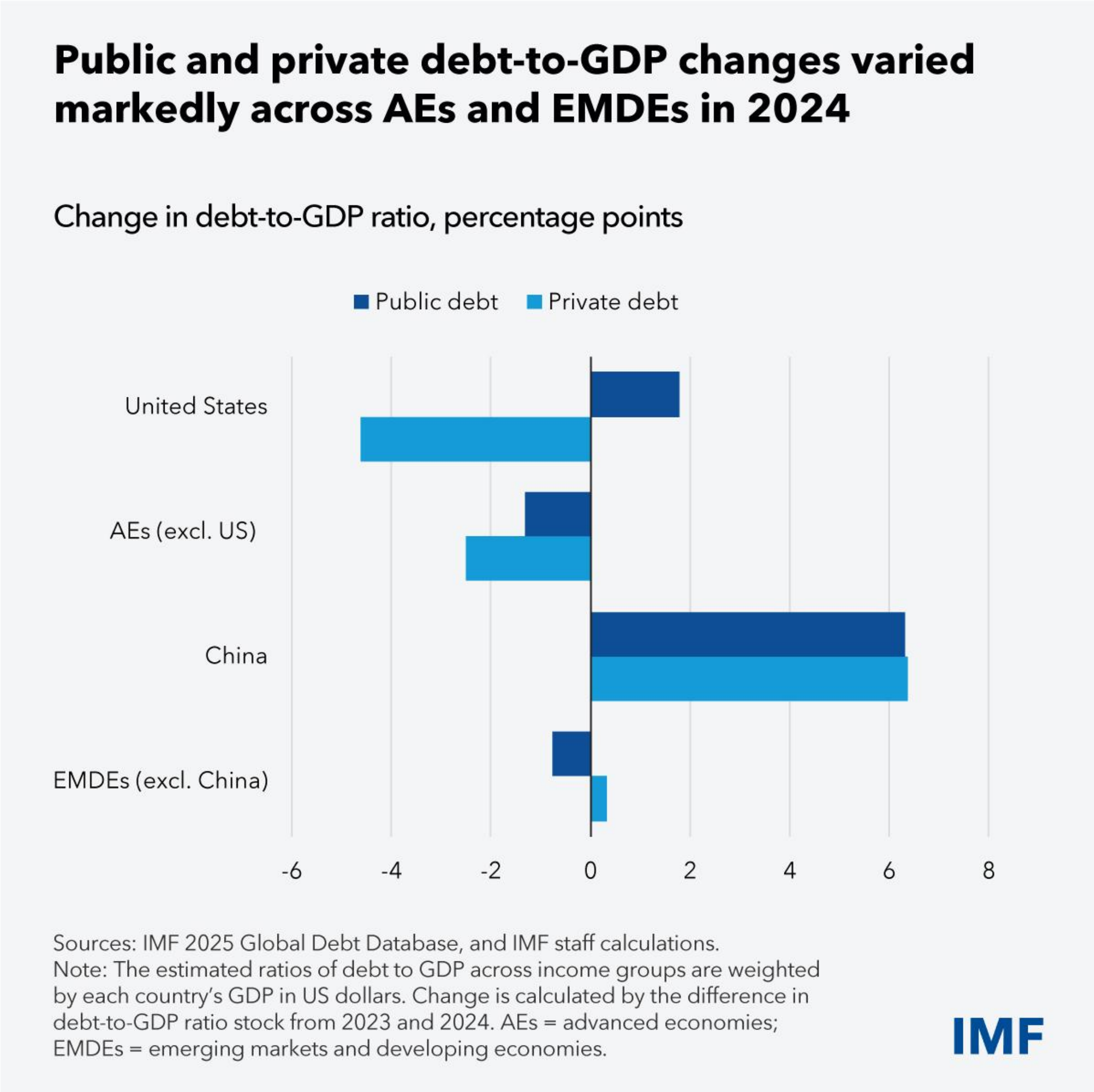
Diverging trends across income groups

These global averages mask notable differences across countries and income groups. While the US and China continue to play a dominant role in shaping global debt dynamics, as our April Fiscal Monitor showed, debt and deficit levels in many countries are still high and concerning by historical standards, in both advanced and emerging economies.

In the US, general government debt last year rose to 121 percent of GDP (from 119 percent), while China saw an increase to 88 percent (from 82 percent). Excluding the US, public debt in advanced economies fell by more than 2.5 points to 110 percent of GDP. Increases in some large, advanced economies like France and the UK were offset by declines in Japan and smaller economies, such as Greece and Portugal.

Excluding China, public debt in emerging markets and developing economies edged down to under 56 percent on average.

Private debt trends varied significantly across countries. The United States experienced a significant drop of 4.5 percentage points, to 143 percent of GDP), while China recorded an increase of 6 points, to 206 percent of GDP. Among other emerging markets and developing economies, private borrowing surged in larger economies like Brazil, India, and Mexico, but declined in Chile, Colombia, and Thailand.



What drives public and private debt patterns?

The persistently high global fiscal deficit, averaging around 5 percent of GDP, is the main driver of rising public debt. This deficit still reflects legacy costs from the Covid-19—such as subsidies and social benefits—combined with rising net interest costs.

The decline in private debt stems from different factors depending on the country and income group. In many advanced economies, companies are borrowing less, likely in response to subdued growth prospects, continuing a trend started in 2023. In the US, strong balance sheet positions and cash holdings are also contributing to lower corporate borrowing. In other cases, rising public debt alongside falling private debt suggests a crowding-out effect, in which heavy public borrowing limits credit availability or raises its cost for the private sector.

In China, the increase in private debt was led by non-financial corporate debt. The pickup, despite ongoing weakness in the property sector, reflects still-ample credit supply, especially to support strategic sectors. In contrast, household debt edged lower, as soft mortgage demand and concerns over employment and wage growth continue to weigh on borrowing.

Elsewhere in large emerging markets and developing economies, rising private debt stems from high interest rates and their impact on non-performing loans (as in Brazil), improved near-term growth prospects (as in India), and corporate mergers and acquisitions. Conversely, weaker growth prospects have led to private debt declines in countries such as Colombia or Thailand.

In low-income countries, recent debt dynamics reflect a range of additional factors. They include more limited financial development, tight liquidity conditions, and crowding-out effects linked to the sovereign debt-private debt nexus.

Governments should help manage these trends by prioritizing gradual fiscal adjustments within a credible medium-term plan to reduce public debt, while helping to avoid crowding- out private borrowing and investment. At the same time, fostering an environment that boosts economic growth and reduces uncertainty will help ease public debt and encourage private sector investment.

China

Growth Engine Fires Up*

By YU YONGDING*

Editor's note: The world has undergone many changes and shocks in recent years. Enhanced dialogue between scholars from China and overseas is needed to build mutual understanding on many problems the world faces. For this purpose, the China Watch Institute of China Daily and the National Institute for Global Strategy, Chinese Academy of Social Sciences, jointly present this special column: The Global Strategic Dialogue, in which experts from China and abroad will offer insightful views, analysis and fresh perspectives on long-term strategic issues of global importance.

Some have argued that because of factors such as its aging population, relatively high per capita income and the scale of its economy, the slowdown of China's GDP growth rate from about 10 percent to 5 percent is inevitable. But long-term variables that affect the economy incrementally and cumulatively should not be used to explain short-term economic changes. For example, although China has an aging society, the challenge that the Chinese authorities are currently facing is youth unemployment rather than labor shortage. Furthermore, even if the demographic aging affects the economic growth rate in a particular year, there is a long causal chain from the explanatory variable to the outcome variable. You cannot say that because China is aging, it must be satisfied with an economic growth rate of 5 percent. To jump to conclusions by skipping over many steps in the causal chain is a non sequitur.

China's indicative economic growth target should be set by trial and error based on recent experience, rather than by relying on estimates of its potential growth rate. The so-called potential economic growth rate refers to the maximum sustainable long-term growth rate an economy can achieve when it fully utilizes all its available resources, such as labor, capital and technology, without triggering high and accelerating inflation. There are three standard methods to estimate potential output: aggregate approaches, production function approaches and dynamic stochastic general equilibrium models. All methods used to calculate the potential growth rate are imperfect in one way or another and can be used only as references when making decisions.

So, what exactly is China's potential economic growth rate? It is difficult to provide a definitive answer. Nevertheless, we should still be able to roughly gauge whether the economy is operating above or below the potential rate. If the previous year saw low economic growth (or high unemployment) coupled with low inflation, the government should not hesitate to adopt more expansionary fiscal and monetary policies to stimulate the economy. Conversely, the opposite conditions would warrant a more contractionary policy stance.

The fact that China's GDP growth rate has declined from 10.3 percent in 2010 to 5 percent in 2024 and its consumer price index (CPI) growth rate has remained below 3 percent since 2012 makes it evident that the Chinese macroeconomy is currently challenged by insufficient effective demand rather than mere overcapacity that basically is a sectorial problem. Hence, the implementation of expansionary fiscal and monetary policy to stimulate the economy for a higher growth rate is entirely warranted.

China's government debt-to-GDP ratio is much lower than most industrialized economies and the People's Bank of China's benchmark interest rates are well above zero, all of which show that China still has substantial policy space for implementing expansionary fiscal and monetary policy. Traditionally, the Chinese government has been very cautious about running a budget deficit, prioritizing economic stability and sustainable growth. It worries the inflationary consequences of a loose fiscal policy. However, recent experience shows that the fiscal authorities' focus should be on fiscal sustainability rather than on fiscal

---

* Published at China Daily Global | Updated: 2025-09-12.

* The author is an academic member of the Chinese Academy of Social Sciences. The author contributed this article to China Watch, a think tank powered by China Daily.

balances. China is a high savings country. The yield of China's 10-year bonds is about 1.6 percent, which suggests that Chinese households are very keen on holding more government bonds as a store of value. As long as the domestic demand for government bonds is strong, China doesn't need to worry too much about its fiscal sustainability. On the contrary, a more expansionary fiscal policy could accelerate GDP growth. This higher growth rate would, in turn, lead to a lower government debt-to-GDP ratio over time, ultimately making China's fiscal position more sustainable. A similar argument applies to the analysis of China's monetary policy.

Others have argued that deepening China's structural reforms is more critical than combating deflationary pressures for achieving higher long-term growth. They contend that an economic slowdown creates more space for implementing such reforms. Consequently, proponents of this view feel no urgency to employ expansionary fiscal and monetary policies.

However, this argument is flawed because the pursuit of expansionary policy and structural reform are not mutually exclusive. In fact, they are mutually reinforcing. For instance, boosting consumer demand effectively requires a dual approach: It necessitates both macroeconomic tools, such as the distribution of consumption vouchers and tax cuts, and deep-rooted structural reforms, such as strengthening the social security system, which is crucial for reducing precautionary savings and encouraging household spending.

Conversely, a favorable macroeconomic climate, sustained by supportive policies, facilitates the process of structural reform. For example, workers made redundant in declining industries will find it significantly easier to transition to new jobs in a growing economy with robust aggregate demand. This makes reforms socially and politically more manageable.

In the late 1990s and early 2000s, when China's growth rate was low due to the impact of the Asian Financial Crisis, it was beset by the severe non-performing loan problem, making the retrenchment and restructuring of its banking system an urgent priority. Some urged the government to refrain from implementing expansionary fiscal policy, warning that it would exacerbate the non-performing loan problem. However, the government proceeded with its stimulus plans. The resulting high economic growth rate led to a crucial outcome: the leverage ratio of banks decreased. Growth expanded the denominator (GDP and bank assets) faster than the numerator (bad debts), improving the health of bank balance sheets. This improvement made the subsequent restructuring of the banks significantly easier to execute.

The 4-trillion-yuan ($561.3 billion) stimulus package, launched in November 2008, has been widely debated. Many economists attribute the subsequent sustained decline in China's economic growth, the drop in total factor productivity and various financial irregularities to this plan.

In my view, a more objective assessment would be that, despite its side effects, the overall direction of the stimulus package was correct. The issue was not that the government introduced the stimulus, but that it exited the stimulus too rapidly after achieving a V-shaped economic rebound.

The government was fully aware of the potential negative impacts of expansionary fiscal and monetary policies and intended to exit these policies as quickly as possible from the outset. This intention was followed through — the fiscal deficit-to-GDP ratio was reduced to about 2 percent in 2011 from about 3 percent in 2009. New loans dropped to 7.5 trillion yuan in 2011 from 9.6 trillion yuan in 2009. The growth rate of infrastructure investment declined sharply from 44.3 percent in 2009 to just 5.9 percent in 2011. The hasty exit was bound to cause a slowdown in China's growth rate and create various financial irregularities, especially the local government debt problem.

In contrast, Western countries maintained their expansionary fiscal and monetary policies for a significantly longer duration. For instance, when the subprime crisis erupted in 2007, the United States fiscal deficit-to-GDP ratio stood at 1.1 percent. It increased to 3.1 percent in 2008 and surged to 9.8 percent in 2009. The US maintained an annual average deficit-to-GDP ratio of 4.8 percent from 2009 to 2019. The average rate was 6.9 percent for the period from 2009 to 2021.

Following the implementation of quantitative easing in 2008, the Federal Reserve's balance sheet expanded from less than $1 trillion to $4.5 trillion in 2014.

The Fed lowered its target for the federal funds rate to 0.25 percent in 2008 and maintained this near-zero interest rate policy until the end of 2015. It reinstated the Zero Interest Rate Policy in March 2020, which remained in effect until March 2022.

It is worth mentioning that the Franklin Roosevelt administration's New Deal, adopted in 1933, spurred a significant rebound. However, fearing fiscal imbalances and inflation, the government implemented fiscal austerity in 1937. This policy shift triggered a renewed recession, and the US economy did not achieve a full recovery until the wartime economy emerged in 1941. This historical episode underscores the crucial importance of correct policy timing.

While no country should become addicted to fiscal and monetary stimulus, such policies should not be exited before confidence is fully restored and demand becomes self-sustaining. Certainly, this is easier said than done; it is a matter of experience and the art of statecraft.

Inflation is not "always and everywhere a monetary phenomenon". Chinese economic policymakers and economists were once almost uniformly disciples of Milton Friedman, a US economist and Nobel laureate, firmly believing that "inflation is always and everywhere a monetary phenomenon". They held that the inflation rate was highly correlated with the growth rate of money supply, and that any apparent divergence was merely due to a lag of the former behind the latter.

However, broad money supply growth in 2009 was 27.7 percent, while the growth rates of GDP and CPI were 8.7 percent and minus 0.7 percent, respectively. The sharp increase in the money supply after the global financial crisis, coupled with a sharp decline in the inflation rate, is difficult to explain merely by a time lag.

The crucial point is that the external shock of the global financial crisis led to a collapse in effective demand, which directly caused the CPI to fall. In this instance, the change in the inflation rate was caused by an imbalance between supply and demand in the real economy, rather than by changes in the money supply. Hence, policy should be aimed at stimulating aggregate demand rather than focusing only on price stability.

Since the outbreak of the global financial crisis, developed countries worldwide have implemented unconventional ultra-loose monetary policies. Although the effects of these ultra-loose monetary policies have varied across these countries, they have not caused inflation in any of them. On the contrary, how to raise the inflation rate has become a major headache for their central banks since late 2021. The implementation of monetary policy over the past decade has forced economists to rethink the nature of money. However, it is also worth mentioning that eventually, ultra-loose monetary policy will trigger inflation, if monetary authorities fail to exit in a timely fashion. Again, the right timing is crucial.

Many economists argue that China's "investment-driven" growth paradigm or strategy has reached its limits and that the country should shift to a "consumption-driven" approach. This argument is misguided. In fact, there is no such a thing as a "consumption-driven" growth paradigm or strategy.

Across all economic theories — from classical economics to Marxist political economy to modern growth theory — none propose the existence of a "consumption-driven" growth paradigm. Economic growth, or its potential, depends on the accumulation of physical capital, increases in effective labor supply and technological progress. In a macroeconomic production function, there isn't an independent variable that is called consumption. Consumption contributes to economic growth only to the extent that it enhances human capital. For example, hiking improves health and thus increases effective labor supply.

The experience of China's reform and opening-up also demonstrates that without a high investment rate supported by a high savings rate, it would have been impossible for China to transform itself from the world's 11th-largest economy into the second-largest economy with a robust manufacturing sector and a comprehensive supply chain in over 40 years.

The role of consumption becomes relevant only in the context of demand management: Boosting consumption, along with investment and net exports, can help close output gaps and align actual growth with potential. But consumption does not raise potential growth itself.

When the economy faces deflationary pressure, macro policies should aim to stimulate both consumption and investment, at times with greater emphasis on consumption. This may raise the consumption rate — the share of consumption in GDP — relative to the investment rate. However, the key metric is not the consumption rate but the absolute level of consumption. In many developing countries, consumption levels remain low even with high consumption rates due to low investment and constrained economic growth. In such cases, elevating investment is essential to expand productive capacity and raise future consumption possibilities.

The trade-off between investment and consumption fundamentally represents a choice between present consumption and higher consumption in the future. This trade-off should be determined through public deliberation and collective decision-making.

The communiqué released by the Conference of the Political Bureau of the Communist Party of China Central Committee on Sept 26, 2024, emphasized the need to strengthen the force of countercyclical adjustments by fiscal and monetary policies, ensure necessary fiscal expenditures, and effectively issue and utilize ultra-long-term special government bonds as well as special bonds for local governments to enhance the leading role of government investment. It also calls for reducing the reserve requirement ratio and implementing interest rate cuts with sufficient intensity.

To ensure the effective implementation of these policies, it is essential to draw on past experiences and lessons to clarify misconceptions in macroeconomic management. There is more work to be done.

IMI International Monetary Review

Working Paper

Belt and Road Initiative: Driving Innovation in Tech Enterprises through Global Value Chains*

By WENSHENG DAI*

ABSTRACT

Utilizing a dataset of Chinese technology-listed companies spanning from 2008 to 2022, this research investigates the influence of the "Belt and Road" initiative on technological innovation performance. The results disclose a significant positive association between the "Belt and Road" initiative and enterprise innovation outputs. Further examination indicates that the global value chain acts as a crucial mediator in the connection between the "Belt and Road" initiative and enterprise innovation efficiency. Moreover, the heterogeneity analysis reveals a remarkable difference in the way the "Belt and Road" initiative impacts the innovation effectiveness of state owned and non-state-owned enterprises.

* Received 23 September 2024; Received in revised form 14 January 2025; Accepted 14 January 2025.
* E-mail address: Dwsheng19@163.com.

1. Introduction

Under the impetus of globalization, the "belt and road" initiative, which is one of the most important strategies of China's openingup, has not only promoted infrastructure construction and economic cooperation among participating countries but has also had a profound impact on the innovation performance of technology enterprises in these countries (Jin et al., 2022). From a global value chain point of view, this initiative provides a unique framework for analyzing how technology enterprises conduct production, distribution, and trade activities on a global scale (Fu et al., 2024), emphasizing the interconnections and interdependencies between various links (Zhang et al., 2020).

As economic globalization continues to deepen, technology companies play an increasing role within the global value chain. Innovation, as a key driver of sustainable business development, directly relates to an enterprise's competitiveness and market position (Yang and Xu, 2023). In this context, the introduction of the "Belt and Road" initiative has brought forth both novel opportunities and challenges for technology companies in the participating nations. This study is intended to examine how the "Belt and Road" initiative influences the innovation performance of technological enterprises. with a particular focus on the role of the global value chain.

Since its 2013 launch, the Belt and Road Initiative (BRI) has fostered innovation in tech firms through global value chain cooperation, market expansion, foreign investment, and R&D enhancement. This study explores the BRI's impact on technological innovation, examining its influence on innovation, firm responses, and global value chain roles. Using a Difference-In-Differences (DID) model and quantitative analysis, it considers enterprise characteristics, industry, and macro-environment. The findings aim to enrich GVA and CI frameworks and guide strategies for promoting innovation in tech firms.

2. Theoretical analysis and research hypotheses

The Belt and Road Initiative (BRI) enhances enterprise innovation by promoting capital flows, technology exchanges, and market expansion (Tian et al., 2022). BRI fosters cross-border capital flow through enhanced economic cooperation and infrastructure development, enabling companies to access new markets, external capital, and technical resources, which boost R&D and managemen1101t innovation (Kong et al., 2021). This drives internal innovation, facilitates technology transfer, and optimizes supply chains, helping enterprises overcome technical bottlenecks and improve efficiency. BRI encourages technological exchanges among participating countries, allowing firms to absorb advanced technologies, creating knowledge spillovers and accelerating innovation. Additionally, market expansion under BRI opens new international markets, increasing demand for innovative products and prompting firms to intensify their innovation efforts to meet diverse market needs (McKillop et al., 2020).

H1: The Belt & Road Initiative has the potential to contribute to business innovation.

In the global economy, the global value chain (GVC) has become crucial for enterprises' participation in international trade. The Belt and Road Initiative (BRI) significantly impacts the role of enterprises in GVCs by enhancing economic cooperation and trade between countries along the route (Xing et al., 2021). Through the BRI, resources like labor, raw materials, and capital are integrated more efficiently, reducing production costs and boosting innovation capacity. GVCs also facilitate technology and knowledge transfer, with firms gaining advanced technology and management experience through global partnerships, leading to technology spillovers that enhance innovation (Kong et al., 2021). As companies enter diverse markets, they must adapt to local consumer preferences, regulatory standards, and cultural differences, driving innovation in products, services, and business models. Thus, GVCs, aided by the BRI, play a key role in fostering enterprise innovation.

H2: The Belt & Road Initiative enhances business innovation by optimizing the global value chain.

The BRI offers state-owned enterprises (SOEs) more international opportunities and policy support, boosting their innovation performance. Non-state-owned enterprises, especially SMEs, face challenges in leveraging BRI opportunities due to limited resources, reducing its innovation impact. Conversely, enterprises that are not state-owned (Zheng et al.,2024), may struggle to fully benefit from improvements in innovation performance due to issues related to market positioning and resource allocation. In terms of risk management, state-owned enterprises are generally in a more advantageous position amidst international competition and market fluctuations due to policy support and the security provided by state capital. Conversely, non-SOEs have to deal with more external risks and uncertainties, which means that BRI has less impact on their innovation performance than SOEs.

H3: The Belt and Road Initiative has varying impacts on the innovation performance of state-owned and non-state-owned companies.

3. Study design

3.1. Sample selection

This study centers on all A-share listed companies from 2008 to 2022. In the course of the research, samples are removed according to the following standards: (1) excluding ST and *ST. and PT listed companies that are in a non-normal financial state; (2) exclusion of companies that lack continuous relevant financial data for three consecutive years from 2008 to 2022 and cannot be supplemented through other channels. After these exclusions, a total of 31,834 samples were gathered.

3.2. Definition of variables

3.2.1. Dependent variable

Efficiency of innovation (rd). In this paper, the number of patents awarded to a company in a given year is used as an indicator of innovation performance, calculated as ln (number of patents in the year + 1). In addition, this paper uses the logarithm of patent citations (rdd) to represent the innovation efficiency for robust testing.

3.2.2. Independent variable

"Belt and Road" initiative (did). The study divides China's 31 provinces and municipalities into two groups based on the "Belt and Road" Initiative (BRI). The treatment group, consisting of 17 provinces along the BRI, is assigned a value of 1, while the control group (13 provinces) is assigned 0. The starting year of the BRI is 2013, with a time dummy variable (post) where pre-2013 is 0 and post-2013 is 1. The Difference-in-Differences (did) estimator measures the BRI's impact.

3.2.3. Intermediary variable

Global value chain (value). TiVA analyzes the value added that companies create in the global value chain, focusing on the production links of companies in the global supply chain. Companies' participation in global value chains can be measured by the following indicators. Therefore, this paper uses the Value added trade law to measure the direct contribution of enterprises to the global market by the proportion of their own value added in the export products they produce.

3.2.4. Control variables

The control variables comprise: firm size (size), debt ratio (lev), years since listing (the first step), percentage of independent directors (indep), level of equity balance (equilibrium), number of board members (board of directors), presence of losses (losses), and share percentage of the top ten shareholders (top10). The definitions of all variables are presented in Table 1.

3.3. Model construction

To test hypothesis 1, we use the DID method and the two-directional fixed-effect model for regression. The specific model is:

$$rd_{i,t} = \beta_0 + \beta_1 did_{i,t} + \beta_2 controls_{i,t} + \gamma_i + \delta_t + \varepsilon_{i,t} \tag{1}$$

Here, the conditional variable rd is the innovative performance of the listed company i in year t. The independent variable did indicates whether company i was participating in the "Belt and Road" initiative in year t. Controls refer to the relevant important control variables that affect the company's innovation performance, while γ denotes company-specific effects, δ denotes year-specific effects, and εi,t denotes a random disturbance term.

$$value_{i,t} = \varphi_0 + \varphi_1 did + \varphi_2 controls_{i,t} + \gamma_i + \delta_t + \varepsilon_{i,t} \tag{2}$$

$$rd_{i,t} = \pi_0 + \pi_1 did_{i,t} + \pi_2 value_{i,t} + \pi_3 controls_{i,t} + \gamma_i + \delta_t + \varepsilon_{i,t} \tag{3}$$

4. Empirical analysis

4.1. Descriptive statistical analysis

Table 2 shows the descriptive statistics of each variable in this research. As shown in Table 2, the maximum innovation performance of technological enterprises is 2, while the minimum is 0, indicating significant variations among the technological enterprises.

The variable "did" is a dummy variable, which aligns with the principles of quasi-natural experiments. The standard deviations of most variables are relatively large in comparison with their means, indicating that the data distribution might be rather dispersed.

4.2. Basic regression analysis

To investigate the influence of "belt and road" on technological enterprises' innovation performance, this study employs an empirical approach by sequentially adding control variables. The baseline regression results obtained from Model (1) are presented in Table 3. Column (1) of Table 3 reveals that, in the absence of any control variables, the regression coefficient for did is significantly positive, this suggests that the "Belt and Road" initiative has notably enhanced the innovation performance of technological enterprises.From the results in columns (2) to (5), it can be observed that after sequentially introducing key control variables, the "Belt and Road" initiative positively influences the innovation performance of technological firms. The findings demonstrate that the initiative significantly boosts technological enterprises' innovation performance, supporting Research Hypothesis 1.

4.3. Parallel trend test

A parallel trend test was conducted using data from 2008 to 2022, focusing on four years before and two years after the BRI's implementation. Fig. 1 shows no significant differences in the years leading up to the BRI, indicating no major disparities before the policy. However, after its implementation, the effects on corporate innovation performance became significant. This confirms that the parallel trend assumption is upheld.

Table 1
Definition of variables.

Variable type	Variable name	Variable symbol	Variable definition
Dependent variable	innovation achievement	rd	ln(Number of patents in the current year + 1)
Independent variable	Belt and road initiative	did	post*treat
Intermediary variable	Global value chain	value	Export products/value added produced by enterprises
Control variables	Enterprise size	size	ln(Total assets of the enterprise)
	Debt-to-asset ratio	lev	Total liabilities / Total assets
	Years listed	listage	ln(Current year - Year listed + 1)
	Percentage of Independent Directors	indep	Independent directors / Total directors
	Equity balancing degree	balance	Share of the second-biggest shareholder/share of the biggest shareholder
	Number of directors	board	ln(Number of board members)
	Is in loss	loss	Takes 1 if the current year's net profit is below 0, otherwise it takes 0
	Proportion of top ten shareholders	top10	Proportion of top ten shareholders

Table 2
Descriptive statistics table.

VarName	Obs	Mean	SD	Min	Median	Max
rd	21,909	1.0836	0.5773	0.0000	1.1219	2.0000
did	21,909	0.4589	0.4983	0.0000	0.0000	1.0000
efficiency	21,909	4.5726	0.9835	−9.2840	4.6292	12.6371
size	21,909	21.9209	1.1792	19.3167	21.7452	26.4523
lev	21,909	0.3687	0.1921	0.0274	0.3541	0.9079
listage	21,909	1.7949	0.9617	0.0000	1.9459	3.4012
indep	21,909	37.5789	5.2591	25.0000	35.7100	60.0000
balance	21,909	0.3912	0.2862	0.0059	0.3234	1.0000
board	21,909	2.1066	0.1933	1.6094	2.1972	2.7081
top10	21,909	58.8593	14.8068	20.8434	59.9186	90.9737
loss	21,909	0.1034	0.3045	0.0000	0.0000	1.0000

Table 3
Basic regression results.

VARIABLES	(1)	(2)	(3)	(4)	(5)
did	0.7557***	0.4107***	0.2617***	0.2581***	0.2566***
	(60.3825)	(28.8538)	(17.9017)	(17.6990)	(17.6740)
size		0.4398***	0.2444***	0.2424***	0.2549***
		(55.6241)	(27.4807)	(27.0728)	(28.2499)
lev		−0.4760***	−0.8354***	−0.8251***	−0.9370***
		(−11.8833)	(−21.6603)	(−21.4182)	(−23.9294)
listage			0.3361***	0.3354***	0.3293***
			(39.1740)	(38.8203)	(32.1719)
indep			0.0018*	−0.0003	−0.0005
			(1.7188)	(−0.2209)	(−0.4216)
balance				0.1486***	0.1317***
				(6.2148)	(5.5295)
board				−0.1443***	−0.1521***
				(−3.6649)	(−3.8849)
top10					0.0010*
					(1.8982)
loss					0.1788***
					(14.4574)
Constant	0.7326***	−8.5783***	−4.7718***	−4.4045***	−4.6716***
	(114.4856)	(−51.5146)	(−25.3239)	(−20.8175)	(−21.9542)
Observations	21,909	21,909	21,909	21,909	21,909
code	YES	YES	YES	YES	YES
year	YES	YES	YES	YES	YES
R-squared	0.3314	0.4535	0.5036	0.5047	0.5108

4.4. Placebo result analysis

To account for potential stochastic factors or omitted variables, this study randomly selected provinces and municipalities involved in the "Belt and Road" initiative and conducted regression analysis on these samples. An indirect placebo test was performed by randomly assigning provinces to the treatment group and running regressions to obtain pseudo-estimation coefficients. This process was repeated 500 times, generating a distribution of pseudo-coefficients. As shown in Fig. 2, the mean pseudo-estimation coefficient is near 0, and most p-values exceed 0.1, suggesting that the observed effects of the initiative are not due to unobserved factors.

4.5. Robustness and endogeneity analysis The benchmark regression confirms that the Belt and Road Initiative (BRI) improves innovation performance. To ensure reliability, two robustness checks were performed: substituting the core explanatory variable with patent citation rdt and using provincial clustering. Both methods yield consistent positive results. Additionally, an instrumental variable (IV), the distance to key economic corridors, was used to address potential endogeneity. The results of the IV test, which confirm its validity, are presented in Table 4. The DID coefficient in the second stage was 0.4739 (significant at 1 %), indicating that the BRI positively impacts innovation, unaffected by endogeneity.

4.6. Mechanism analysis In order to verify the mediating role of global value chain in the Belt and Road Initiative on enterprise innovation performance, regression results in Table 5 are obtained according to model (2) and (3). From the results in column (1) of Table 5, it can be seen that the significant positive coefficient of did is 0.5873, and it is significant at 1 % level, indicating that the Belt and Road Initiative will enhance the global value chain. According to the results in Table 5 (2), the coefficient of did and value are significantly positive, indicating that the Belt and Road Initiative can improve the innovation performance of technology enterprises by promoting the global value chain.

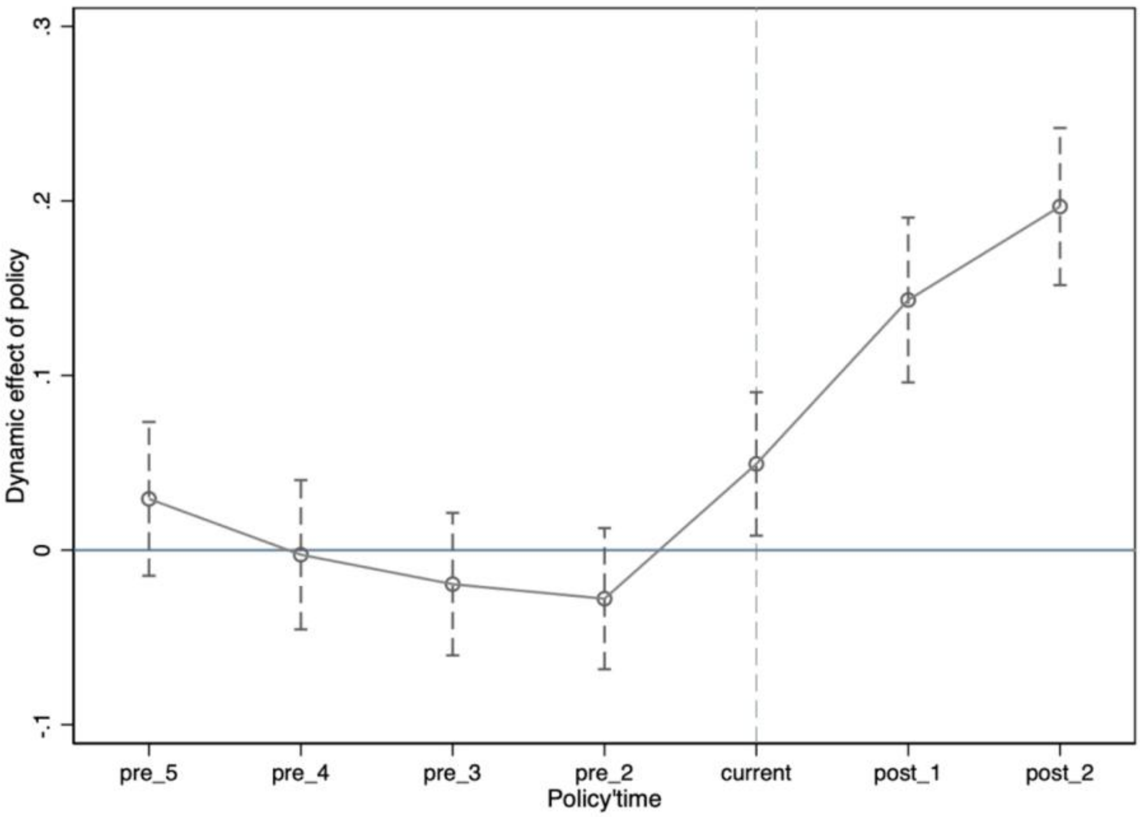


Fig. 1. Parallel trend test.

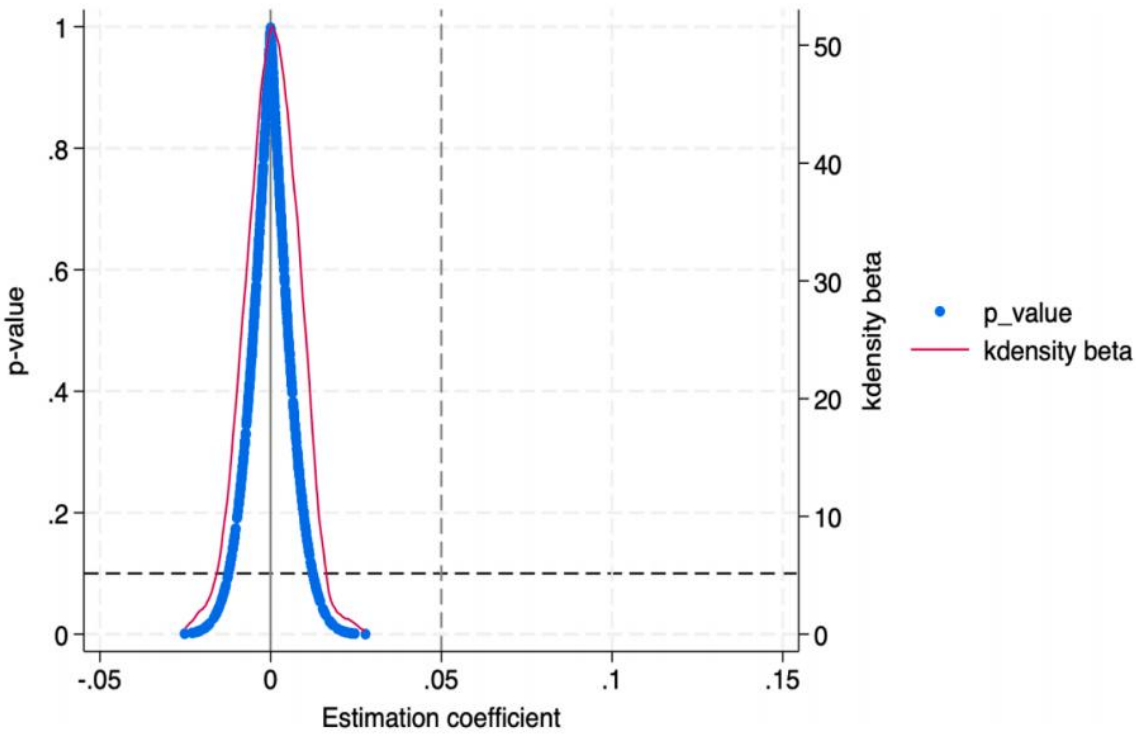


Fig. 2. Placebo test diagram.

Table 4
Robustness and endogeneity test.

VARIABLES	(1) rdt	(2) rd	(3) did	(4) rd
did	0.7593*** (3.800)	0.2566*** (6.5289)		0.4739*** (9.4375)
IV			0.4927*** (4.7341)	
Controls	YES	YES	YES	YES
Constant	−0.8453* (−1.6224)	−4.6716*** (−11.0828)	−3.5867*** (−13.4575)	−6.3857*** (−8.9238)
LM	–		43.345	
Wald F			44.585	
code	YES	YES	YES	YES
year	YES	YES	YES	YES
Observations	21,909	21,909	18,294	18,294
R-squared	0.478	0.510	0.321	0.633

Table 5
Mechanism analysis.

VARIABLES	(1) value	(2) rd
value		0.5843*** (9.4834)
did	0.5873*** (15.9433)	0.8402*** (14.7447)
Constant	5.2544*** (4.5432)	5.3453*** (5.9583)
Observations	21,749	21,749
Controls	YES	YES
code	YES	YES
year	YES	YES
R-squared	0.8164	0.5155

4.7. Heterogeneity test

The different nature of enterprise property rights has always been an important factor of concern for domestic scholars. Chinese enterprises exhibit significant differences in various aspects due to their differing property rights. Therefore, the paper classifies the listed companies into two categories, namely the state and the non - state enterprises, and makes the regression analysis for the two groups. The results of the regression analysis in Table 6 shows that the "belt and road" factor is significant in the SOE sample, but not in the NSE group. This indicates that the "belt and road" initiative has great influence on the innovation performance of SOEs, but not on the innovation performance of non-SOEs. In conclusion, Hypothesis 3 is verified.

5. Conclusions

Utilizing data spanning from 2008 to 2022, sourced from China's technology-listed companies, this study makes use of the Difference-in-Differences (DID) model and a two-way fixed effects model to explore the complex relationship between the Belt and Road Initiative (BRI) and enterprise innovation performance.Additionally, it examines the intermediary role of the global value chain in this dynamic. The research highlights several pivotal findings: Foremost, the baseline regression analysis underscores a statistically significant positive correlation between the implementation of the BRI and the enhancement of corporate innovation performance. This indicates that the implementation of the BRI can effectively enhance the innovation performance of firms. Second, the mechanism analysis reveals that a company's position in the global value chain serves as a crucial mediator between the Belt and Road Initiative and corporate innovation performance.This suggests that the BRI promotes innovation performance by enhancing the global value chain. Finally, the heterogeneity analysis indicates that there are notable disparities in. BRI's impact on innovation performance. In particular, BRI plays an important role in SOEs, but has little effect on non-SOEs.

CRediT authorship contribution statement

Wensheng Dai: Writing – review & editing, Writing – original draft, Funding acquisition, Formal analysis, Data curation, Conceptualization.

Table 6
Heterogeneity analysis.

VARIABLES	(1) State-owned enterprises	(2) Non-state-owned enterprises
did	0.2880***	0.1943
	(10.9514)	(0.0566)
size	0.3564***	0.1893***
	(19.2850)	(17.7399)
lev	−1.2894***	−0.7232***
	(−15.9054)	(−15.7468)
listage	0.5247***	0.3037***
	(17.0022)	(26.7159)
indep	0.0023	−0.0031**
	(1.0762)	(−2.0531)
balance	0.0670	0.1749***
	(1.4636)	(5.7375)
board	−0.2902***	−0.0395
	(−3.7948)	(−0.8451)
top10	−0.0014	−0.0012**
	(−1.2220)	(−1.9804)
loss	0.1305***	0.1899***
	(5.5612)	(12.9674)
Constant	−7.2761***	−3.1529***
	(−18.1162)	(−12.2721)
Observations	5467	15,830
code	YES	YES
year	YES	YES
R-squared	0.5663	0.5254

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data will be made available on request.

References

Fu, C., Sun, X., Guo, M., Yu, C., 2024. Can digital inclusive finance facilitate productive investment in rural households?–an empirical study based on the china household finance survey. Financ. Res. Lett. 61.

Jin, X., Zhang, M., Sun, G., Cui, L., 2022. The impact of COVID-19 on firm innovation: evidence from Chinese listed companies. Financ. Res. Lett. 45, 102133.

Kong, Q., Li, R., Peng, D., Wong, Z., 2021. High-technology development zones and innovation in knowledge-intensive service firms: evidence from Chinese A-share listed firms. Int. Rev. Financ. Anal. 78, 101883.

McKillop, D., French, D., Quinn, B., Sobiech, A.L., Wilson, J.O., 2020. Cooperative financial institutions: a review of the literature. Int. Rev. Financ. Anal. 71, 101520.

Tian, G., Li, B., Cheng, Y., 2022. Does digital transformation matter for corporate risk-taking? Financ. Res. Lett. 49, 103107.

Xing, C., Zhang, Y., Tripe, D., 2021. Green credit policy and corporate access to bank loans in China: the role of environmental disclosure and green innovation. Int. Rev. Financ. Anal. 77, 101838.

Yang, T., Xu, B., 2023. Incentive effects of government subsidy on technological innovation: evidence from pharmaceutical industry. Financ. Res. Lett. 55, 103928.

Zhang, D., Guo, Y., Wang, Z., Chen, Y., 2020. The impact of US monetary policy on Chinese enterprises' R&D investment. Financ. Res. Lett. 35, 101301.

Zheng, X., Wang, Y., Wu, Q., Zhou, Y., 2024. Digital inclusive finance and migrant wages: evidence from over 700,000 internal migrants in china. Financ. Res. Lett. 62.

Call for Papers

International Monetary Review

International Monetary Review is an internal academic magazine sponsored by International Monetary Institute. Following the principle of including both Chinese and western merits with precise and practical academic spirit, International Monetary Review focuses on the cutting-edge theoretical researches in internationalization of RMB, reform of international monetary system, regional monetary and financial cooperation, China's international financial strategies, and other macro-financial theories and policies. We welcome submissions by scholars, experts and practitioners in financial industry. Papers and articles should center on key financial issues and follow academic standard and scientific methodology. We welcome quality articles based on data analysis and theoretical model and other insightful articles with standard writing.

Prepare your article

General rule: Submitted manuscripts should be double-spaced texts in 10.5 point font, and formatted for paper of standard size with margins of at least 20mm on all sides. Pages should be numbered, and an abstract (of no more than 200 words), as well as keywords and complete author affiliations, should be included in the paper in the title page. A regular article should not exceed 50 pages.

Mathematics: Equations must be identified by consecutive Arabic numbers in parentheses on the right. Expressions should be aligned and compound subscripts and superscripts clearly marked if there is any potential for confusion.

Figures: Figures must be of professional quality and ready for reproduction. They should be numbered consecutively. Black-and-white versions of figures are required for printing purposes, but color figures can also be supplied for online dissemination.

Tables: Tables should be numbered consecutively throughout the article. Each table must include a descriptive title and headings to columns. Gather general footnotes to tables as "Note:" or "Notes:", and use a, b, c, etc., for specific footnotes. Asterisks * and/or ** indicate significance at the 5 percent and 1 percent levels, respectively, if used.

Reference style

Please follow the EPS Style Guide when preparing your article.
http://eps.ruc.edu.cn/UserFiles/File/EPS%20Style%20Guide.pdf

Further considerations

- Manuscript has been spell-checked and grammar-checked
- References are in the correct format for this journal
- All references mentioned in the reference list are cited in the text, and vice versa
- Permission has been obtained for use of copyrighted material from other sources

Submit your article

Manuscripts can be submitted via e-mail to imi@ruc.edu.cn

INTERNATIONAL MONETARY INSTITUTE OF RUC

中国人民大学国际货币研究所