Chapter 8 Status Quo and Prospects of Global Financial Openness

Recent years have seen a divide in the global financial openness landscape. While developed economies still maintain a high level of financial openness, some emerging and less developed economies have slowed down or even showed signs of retrogression. China remains determined to adhere to its financial openness policies and stepped up its implementation in many fields. Although global financial openness is faced with many challenges in the short term, promoting openness in the long term is still mainstream. In this context, countries should strengthen global financial supervision and coordination and negotiate crisis relief policies, as part of an effort to strike a balance between financial openness and security.

I. The Global Financial Openness Landscape

The 1980s marked the beginning of an era of widening financial openness. When the outbreak of the 2008 global financial crisis put a halt to the process, countries around the world began to reflect on the benefits and security issues brought by financial openness. While developed economies with mature financial markets maintained a relatively high level of financial openness, emerging and underdeveloped economies started to put more focus on security issues. Some chose to slow down their pace of opening up, while others even regressed a bit.

Due to data availability, this paper will mainly analyze global financial openness based on the degree of capital account openness. The Chinn-Ito index (KAOPEN) is an index measuring a country's degree of capital account openness. It is also an important indicator of financial openness incorporated by the World Openness Index. KAOPEN

is based on the binary dummy variables that codify the tabulation of restrictions on cross-border financial transactions reported in the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER). The higher the KAOPEN value of a country, the higher the degree of capital openness.

1. Status Quo of Financial Openness in Developed Countries

Developed countries have maintained a high level of financial openness. The degree of financial openness in developed countries is significantly higher than that in underdeveloped countries. In 2019, the average KAOPEN of developed countries was 1.34, while that of emerging markets and developing countries were -0.16 and -0.23, respectively. The degree of financial openness also diverged within developed countries. In 2019, the median KAOPEN of developed countries was 2.32, with the highest value as 2.32, the lowest value as -1.92, and the standard deviation as 1.31. More than 30 countries, including the US, the UK Germany, and Japan, had a KAOPEN of 2.32, meaning they were economies with the highest degree of financial openness. The Bahamas was at the bottom of the developed world, with a KAOPEN of -1.92. The general trend was that the degree of financial openness in developed countries was still growing. Overall, the average KAOPEN of developed countries in 2018 was 1.33, which rose by 0.01 in 2019. In 2019, Greece's KAOPEN index rose sharply by 1.07, while those of Iceland and Lithuania rose by 0.25.

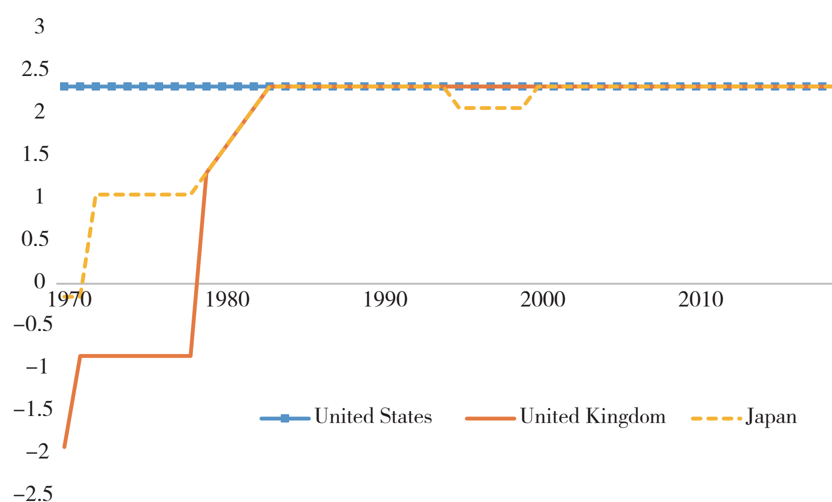

Fig. 8.1 KAOPEN Index for the United States, United Kingdom and Japan, 1970-2019[①]

① As Germany's KAOPEN index is the same as the US's, the German sample is not shown in the figure to avoid overlapping.

2. Status Quo of Financial Openness in Developing Countries

Developing countries around the world can be divided into emerging markets and other developing countries.

Emerging markets are generally more open financially, but certain markets have regressed. The financial openness of emerging markets is generally higher than that of other developing countries. The average KAOPEN of emerging markets in 2019 was -0.16, higher than that of other developing countries (-0.23). There were also huge divergences in the degree of financial openness within emerging markets. In 2019, the median KAOPEN of emerging markets was -0.15, with the lowest value as -1.92, the highest value as 2.32, and the standard deviation as 1.44. The general trend was that some emerging markets had seen a significant regression in their financial openness. For example, Russia's KAOPEN index was 1.12 in 2013, which dropped to 0.1 in 2019. Brazil's KAOPEN index was 0.36 in 2009, which dropped to -1.23 in 2019.

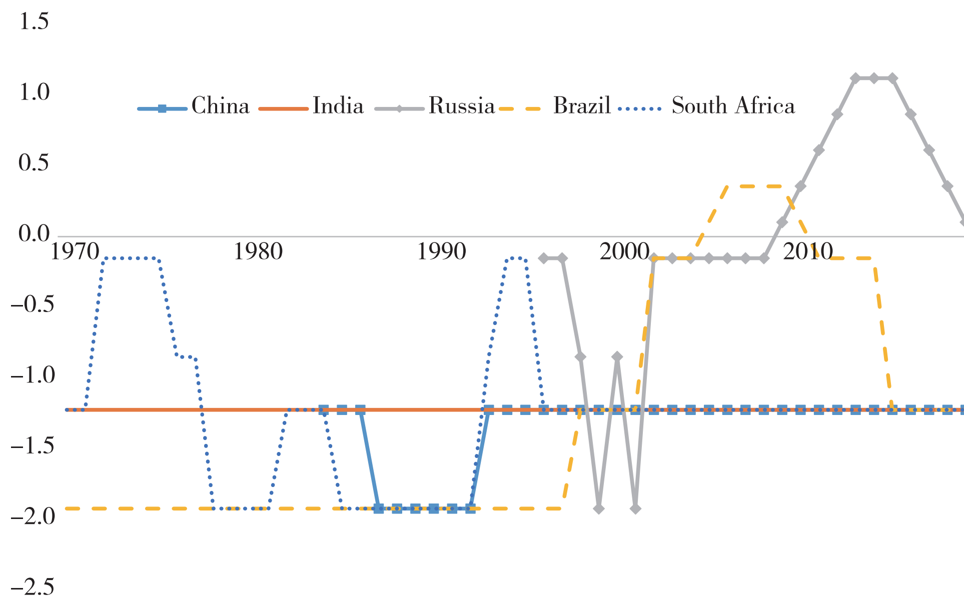

Fig. 8.2 KAOPEN Index for BRICS countries, 1970-2019[1]

[1] Since 1996, China, India, and South Africa have had the same KAOPEN index of -1.23. So the lines of the three countries overlap.

Other developing countries maintain lower levels of financial openness. The financial openness of most developing countries was generally lower than that of developed countries and emerging markets. In 2019, the average KAOPEN of developing countries other than emerging markets was -0.23, which was lower than the world average. There were also huge divergences in the degree of financial openness within developing countries. In 2019, the median KAOPEN was -1.23, with the lowest value as -1.92, the highest value as 2.32, and the standard deviation as 1.31. The general trend was that the degree of financial openness in these developing countries had remained unchanged. Overall, the average KAOPEN for these developing countries in 2018 was -0.23, roughly the same as in 2019, while the median was -1.22, 0.01 higher than in 2019. By country, Tajikistan's KAOPEN index fell by 0.44 in 2019, and Bulgaria's dropped by 0.25.

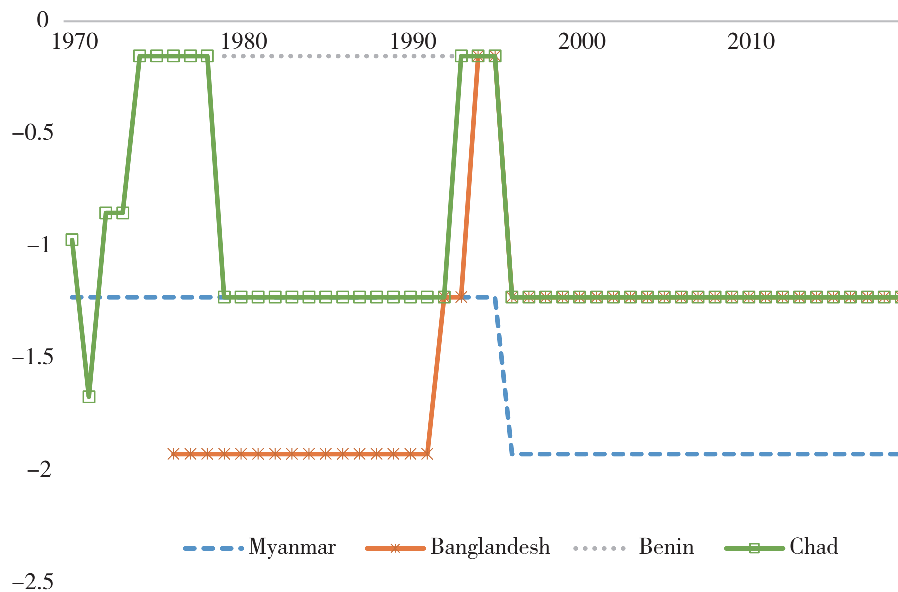

Fig. 8.3 KAOPEN Index for some underdeveloped countries, 1970-2019[1]

II. Status Quo of China's Financial Openness

China remains determined to promote financial openness and has taken implementation measures in many fields. In 2018, Chinese President Xi Jinping

① Since 1996, Bangladesh, Benin, and Chad have had the same KAOPEN index of -1.23. So the lines of the three countries overlap.

emphasized at the Boao Forum for Asia that more efforts should be made to open up the services industry, especially the financial sector, and the implementation of the opening-up policy "should better be sooner than later, faster than slower". At the forum, Yi Gang, Governor of the People's Bank of China, announced the "three principles and twelve measures" for opening up China's financial sector. In July 2019, the Office of the Financial Stability and Development Committee under the State Council announced the introduction of 11 measures to open up the financial sector to the outside world.

Box 8-1 Three Principles and Twelve Measures for Opening up China's Financial Sector

In 2018, when he attended the Boao Forum for Asia, Yi Gang, Governor of the People's Bank of China, announced the following "three principles" for opening up China's financial sector:

The first is the principle of pre-entry national treatment and negative list.

The second is that the opening-up of the financial sector to the outside world shall be promoted in tandem with the reform of the exchange rate mechanism and the process of capital account convertibility.

The third principle is to prevent financial risks while opening up and to make sure the level of financial supervision is commensurate with that of financial openness.

In the meanwhile, he announced the launch of "twelve measures for opening up", and gave a detailed timeline for implementation.

1) Remove the foreign ownership cap for banks and asset management companies, treating domestic and foreign capital equally; allow foreign banks to set up branches and subsidiaries at the same time.

2) Lift the foreign ownership cap to 51% for securities companies, fund managers, futures companies, and life insurers, and remove the cap in three years.

3) No longer require joint-funded securities companies to have at least one local securities company as a shareholder.

4) To further improve the stock market connectivity of the Chinese mainland and Hong Kong, we will increase the daily quota by three times from May 1, after which the daily quota for Shanghai-bound and Shenzhen-bound investment will be increased from

RMB 13 billion to RMB 52 billion, while that for Hong Kong-bound investment from RMB 10.5 billion to RMB 42 billion.

5) Allow eligible foreign investors to provide insurance agent and loss adjuster services in China.

6) Lift restrictions on the business scope of foreign-invested insurance brokerage companies, treating them as equals of domestic companies.

7) Encourage foreign ownership in trust, financial leasing, auto finance, currency brokerage, and consumer finance.

8) Apply no cap to foreign ownership in financial asset investment companies and wealth management companies newly established by commercial banks.

9) Substantially expand the business scope of foreign banks.

10) Remove restrictions on the business scope of jointly-funded securities companies, treating domestic and foreign institutions equally.

11) Foreign insurance companies will no longer need to have a representative office in China for two consecutive years prior to establishing a fully-owned institution.

12) The preparatory work for Shanghai-London Stock Connect is proceeding as desired. We are aiming for launching the Shanghai-London Connect in 2018.

The results indicate that China is tapping deeper into financial openness through the following measures.

1. Significantly relaxing the access of foreign financial institutions

China has removed the restrictions on foreign ownership cap in banking, securities, fund management, futures, and life insurance institutions, and relaxed the limits on the business scope, asset scale, operating years, and shareholder qualifications of foreign financial institutions, which have been granted national treatment in corporate credit, credit rating, and payment clearing. According to the data made public by the People's Bank of China, since 2018, China has approved foreign organizations to establish more than 100 banks, insurance institutions, 12 foreign-controlled (including wholly-owned) securities, fund management, and futures companies, and 6 foreign-funded corporate credit, rating, payment, and clearing agencies.

Box 8-2 Further opening up the banking and insurance sectors by working on five key fronts

At a sub-forum of the Boao Forum for Asia Annual Conference 2022, the Vice-chairman of the China Banking and Insurance Regulatory Commission pointed out the five fronts the Commission will work on to open the banking and insurance sectors wider.

Firstly, institutional openness. The “pre-entry national treatment plus a negative list” system for managing foreign capital will be put in place to encourage more foreign-funded institutions to enter the Chinese market. Coordination and cooperation in international financial supervision will be strengthened to better implement the RCEP. These efforts serve as the preparatory work for China to apply to join the CPTPP and DEPA.

Secondly, the quality and efficiency of opening up. Quantitative access restrictions on foreign capital will be reduced. The requirement that foreign financial institutions acting as initiators or strategic investors of Chinese-funded commercial banks shall have a total asset of no less than $10 billion will be canceled. Accordingly, administrative licensing regulations will be revised as soon as possible to remove the foreign ownership cap in Chinese-funded commercial banks.

Thirdly, fairness and transparency. Non-discriminatory national treatment shall be implemented for domestic and foreign institutions alike. In line with this principle, the time limit for processing the applications of foreign-funded corporate banks to establish branches in China shall be shortened to 4 months, and approval will not be needed for foreign-funded banks to issue general financial bonds. These measures are aimed to support the quality development of foreign-funded institutions in China.

Fourthly, the philosophy of openness. The philosophy of green development shall be put in place as part of an effort to achieve carbon peaking and carbon neutrality. The financial sector will be encouraged to channel capital into energy consumption, transformation, and upgrading.

Fifthly, the rhythm and safety of opening up. Continued efforts will be made to improve China’s supervision capabilities, by strengthening the monitoring of traditional risks, such as global monetary policy adjustments, imported risks, and inflation, doing more research on new risks, such as the pandemic, climate, and technological risks, and getting prepared for overseas emergencies. The bottom line is no systemic risk happens.

2. Steadily promoting the opening-up of the financial market

China will lift investment quota restrictions on Qualified Foreign Institutional Investors (QFII) and Renminbi Qualified Foreign Institutional Investors (RQFII) across the board. The restrictions on the proportion of foreign institutional investors' remittances in domestic and foreign currencies will be relaxed. On top of the Shanghai-Hong Kong Stock Connect, Shenzhen-Hong Kong Stock Connect, and Shanghai-London Stock Connect, among other mechanisms, the Southbound Bond Connect and the Cross-boundary Wealth Management Connect Scheme in the Guangdong-Hong Kong-Macao Greater Bay Area have been launched. As China's achievements in opening up its financial market have been recognized by the international market, foreign capital has flooded into China. MSCI Emerging Markets Index, FTSE Russell Index, S&P Dow Jones Indices, and other internationally famous indexes have incorporated China A shares successively, while Bloomberg Global Aggregate Bond Index, JPMorgan Government Bond Index-Emerging Markets Global Diversified Index, FTSE World Government Bond Index have successively incorporated Chinese bonds. According to the People's Bank of China, as of the end of May 2022, foreign investors held RMB 3.25 trillion of domestically listed stocks, accounting for 5.0% of the total circulating value of A-shares. They also held RMB 3.78 trillion of Chinese bonds, accounting for 2.8% of China's bond market.

Box 8-3 Eleven Measures of the Financial Stability and Development Committee for the Opening-up of the Financial Sector

To implement the decisions and arrangements of the CPC Central Committee and the State Council on opening China wider to the outside world, in July 2019, the Office of the Financial Stability and Development Committee under the State Council announced the launch of the following 11 measures to open up the financial sector to the outside world, under the principle of "better faster than slower, better sooner than later" and based on in-depth research and evaluation.

1) Foreign-invested rating agencies can give ratings to all kinds of bonds that are traded on China's interbank market and exchanges.

2) Foreign financial institutions are encouraged to participate in the establishment of or investment in the asset management subsidiaries of commercial banks.

3) Foreign asset managers are allowed to partner with the subsidiaries of Chinese banks or insurers to set up asset management companies that are controlled by a foreign party (parties).

4) Foreign financial institutions are allowed to set up or invest in pension fund management companies.

5) Foreign investors will be given support to establish or invest in currency brokers.

6) The transition period for relaxing restrictions on foreign ownership in life insurance companies from 51% to 100% will end in 2020, instead of 2021 as previously stated.

7) The restriction that domestic insurers must hold in aggregate not less than a 75% equity interest in an insurance asset management company will be removed and foreign investors can hold more than 25% in insurance asset management companies.

8) The qualification for a foreign insurer that is eligible to invest in China will be further relaxed, with the abolishment of the requirement that the foreign insurer should have been in business for no less than 30 years.

9) Foreign ownership restrictions in securities companies, fund management, and futures firms will end in 2020, one year earlier than originally planned.

10) Foreign-invested financial institutions are allowed to obtain type-A underwriting licenses in the interbank bond market.

11). Additional measures will be implemented to further facilitate foreign institutional investors' investment in the interbank bond market.

3. Making consistent efforts to internationalize RMB

Over the years, the People's Bank of China has continued to improve the infrastructure for RMB internationalization, deepened bilateral currency cooperation with relevant countries, and further enhanced the role of RMB as a currency for international payment and reserve. By the end of 2021, the People's Bank of China had authorized 27 RMB clearing banks in 25 countries and regions and had signed bilateral local currency swap agreements with central banks or monetary authorities from 40 countries and regions. In December 2021, RMB accounted for 2.70% of international payments, ranking the 4th most active currency for global payments. In May 2022, the IMF announced that it would raise the RMB's weighting in the Special Drawing Rights (SDR) basket of currencies from 10.92% to 12.28%. The

percentage of RMB in global foreign exchange reserves rose from 2.79% in the fourth quarter of 2021 to 2.88% in the first quarter of 2022, ranking fifth among all currencies.

III. Major Events Affecting Global Financial Openness

The Fed has started a new round of interest rate hikes, which have significant spillover effects. Under capital outflow pressures, certain countries may strengthen capital flow management and slow down their pace of financial openness. Distributed financial systems based on digital currency and blockchain are taking shape. They have the potential to change the international financial structure and domestic financial ecosystem as major forces that may both promote financial openness and affect financial security.

1. The Fed's interest rate-hiking cycle

The new round of Fed interest rate hikes is stronger and its spillover effect more obvious than ever. Since March 2022, the Fed has raised interest rates four times in a row, up to 225 basis points cumulatively. Compared with the rate-hiking cycle that started in December 2015, this new round of rate hikes is much faster and bigger. **As the Fed raises interest rates due to inflationary pressures, the spillover effect on other countries is even worse.** If the Fed's rate hikes were out of consideration of improving employment and stimulating all-around economic recovery, the US's economic growth would increase import demand from other countries, which can partially offset the impact of capital outflows from these countries due to the rate hikes. Unfortunately, that's not the case. As the rate hikes were due to inflationary pressures, they will further dampen the US's import demand, while impacting other countries in terms of capital outflow. **This rate-hiking cycle may lead to greater capital outflows from emerging markets and underdeveloped countries.** The economies of most emerging markets and underdeveloped countries have suffered a major blow from the pandemic. As their fiscal stimulus is far less than that of developed countries, their economic recovery is relatively slower. Due to inflation pressures, some countries have followed the Fed to raise their interest rates, yet their economic fundamentals don't allow them to continuously do so. Countries with low-interest rates and high inflation

will thus face greater risks of capital outflows.

Owing to the pressure of exchange rate depreciation and the risk of capital flight, emerging markets and underdeveloped countries are likely to slow down their pace of financial opening-up, if not strengthen capital controls. According to the Impossible Trinity theory, if a country is to maintain monetary policy independence and free capital movement, it will have to sacrifice exchange rate stability. During the Fed's rate-hiking cycle, emerging markets and underdeveloped countries generally face greater capital outflow pressures and exchange rate depreciation risks, which may cause heavier debt pressures for countries already overwhelmed by external debts. Taking into account the pressure of capital outflows and foreign debt risks, these countries will tend to slow down the pace of financial opening-up and pay more attention to financial security.

2. Distributed digital financial systems gradually take shape

Distributed digital financial systems based on blockchain and digital currency will change the international financial structure and domestic financial ecosystems. Not only will they drive the diversification of the international monetary and financial systems, but they will facilitate financial and economic openness.

a.Distributed digital financial systems have a major influence on the international monetary system.

Distributed finance refers to a new digital financial system based on blockchain and digital currency, which is essentially about achieving a certain degree of decentralization. In real life, be it a central bank digital currency or a stable currency issued by a single institution, it is highly centralized when issued, i.e. there is only one issuing organ, yet its circulation is decentralized and featured by peer-to-peer transactions. Therefore, the future distributed financial system will be a combination of single-center, multi-center, and no-center. A diversified governance structure like this will serve to promote the diversification of cross-border payment systems and currency forms. As a result, traditional fiat money, digital stablecoins, central bank digital currencies, and unanchored digital currencies will be both competitive and cooperative, thus forming a truly diversified landscape of the international monetary system in the long run.

Box 8-4 New Approach to Cross-border Payment

Distributed payment systems based on blockchain and digital currency will become a new approach to cross-border payments that competes with traditional payment platforms.

The existing cross-border payment systems are centralized in terms of both technology platforms and business operations. Traditional cross-border payment platforms typically adopt a centralized underlying technology architecture, where the information flow and the capital flow are separated. This architecture relies heavily on batch processing and runs short of real-time processing control capabilities. So it is often plagued by low efficiency in data exchange, transmission, and processing. Meanwhile, to enhance system security, payment institutions have to develop a new security platform on the underlying platform, thus making the system more complex and the operations and maintenance more costly.

Global cross-border payments are primarily made through correspondent banking. In this mode, at least four bank intermediaries are required to complete a cross-border payment. The procedure is complicated and the costs are high, yet the efficiency is low.

In contrast, cross-border payment platforms based on blockchain and digital currency are emerging with a new distributed technology architecture and governance model. The combination of peer-to-peer transactions enabled by blockchain and the merge of information and capital flows serve not only to improve cross-border payment efficiency and reduce costs, but enhance trust mechanisms, protect user privacy, and prevent insider manipulation. Therefore, with the technology, it is possible to establish a more just, inclusive, secure, and efficient cross-border payment system on a global scale.

b.Distributed digital financial systems serve to promote financial openness

Distributed digital financial systems promote financial openness by reducing cross-border transaction costs and improving transaction efficiency. Correspondent banking in traditional cross-border transactions has the following problems: an excessive number of intermediaries, backward infrastructure, and low level of automation, which result in a long time span (usually takes 3-5 days), high costs, and complicated operations for processing a cross-border payment. The peer-to-peer transaction model of distributed financial systems based on blockchain and digital currency eliminates correspondent banking that relies on multiple intermediaries, thus

making cross-border payments receivable within a day or even seconds. The average cost for a bank to execute a cross-border payment via correspondent banking network remains in the range of $25 to $35, more than 10 times of an average domestic ACH payment. (McKinsey, 2016).[①] If digital currency is used for cross-border payment, the cost can be reduced to close to domestic payment levels. Therefore, distributed financial systems can significantly facilitate cross-border financial services and expedite cross-border capital flows, thereby promoting financial openness.

Distributed digital financial systems drive financial openness by enhancing trust mechanisms and ensuring transaction security. Firstly, the trust mechanisms of distributed financial systems are based on algorithms and computer networks, rather than on the morality of centralized entities or individuals. So it is characterized by disintermediation and strong trust. Secondly, the payment network based on blockchain and digital currency naturally allows transaction traceability and tamper resistance, which provides an effective guarantee for payment security. By effectively maintaining the data and financial security of individuals, institutions, and countries, distributed financial systems elevate the “Internet of Information” into the “Internet of Value”, which serves to promote financial openness through expanded cross-border trade and financial services based on the Internet.

Box 8-5 Distributed cross-border payment systems are emerging globally

So far, certain private companies, international organizations, and national central banks have begun their attempts to build distributed cross-border payment networks.

In April 2021, JPMorgan Chase, the largest bank in the US, joined hands with Singapore’s DBS Bank and Temasek Group to establish Partior, a global payment company based on blockchain and digital currency. The company enables cross-border payments in a variety of digital currencies, including JPM Coin, and provides services, such as trade finance, foreign exchange transactions, and securities settlement. JPM Coin is 1:1 anchored to the US dollar and aims to use blockchain technology to reduce customers’ cross-border counterparty settlement risks and reduce capital requirements for

① McKinsey & Company (2016). “Global Payments 2016: Strong Fundamentals Despite Uncertain Times”, from https://www.mckinsey.com/~/media/McKinsey/Industries/Financial%20 Services/Our%20Insights/A%20mixed%202015%20for%20the%20global %20payments%20industry/ Global-Payments-2016.ashx

instant value transfer. Cross-border payment settlement with JPM Coin can be completed instantly at any time of the day, and such use can reduce the cost of checking by 70%-80%. “The establishment of Partior is a global watershed for digital currencies, marking the shift from experimentation and pilot to commercialization and real-time application,” said the Chief Financial Technology Officer of the Monetary Authority of Singapore.

SWIFT (Society for Worldwide Interbank Financial Telecommunication), a global cross-border payment message provider established based on the traditional centralized model, also takes distributed technology as its prioritized strategy and has begun to create a new blockchain-based messaging system to simplify the cross-border payment process. It is SWIFT’s hope to apply blockchain technology to reduce the cost of reconciliation between independent databases for maintaining members, thereby reducing operating costs. For that reason, SWIFT is integrating open-source blockchain technology into its system to create Proofs of Concept to replace account verification in a distributed ledger system.

In addition, many countries and regions have established partnerships on distributed cross-border payment arrangements, such as with the Bank of Canada and the Monetary Authority of Singapore, the Bank of Japan and the European Central Bank, the Bank of Thailand and the Monetary Authority of Hong Kong, China.

IV. Prospects for Global Financial Openness

In the short term, the pace of global financial openness may slow down, with certain countries going backward. But in the long run, advancing global financial openness remains the mainstream. The world is faced with the ongoing COVID pandemic, the cumulative risk of stagflation, and worsening debt distress. There is an urgent need to strengthen financial cooperation and exchanges around the world, align daily macro-prudential and micro-compliance supervision measures, and negotiate remediation policies in times of crisis. As digital currency and blockchain technologies continue to evolve, the distributed and intelligent digital model of financial openness will become a new trend. Meanwhile, it is also necessary to strengthen regulations by improving the technological level of supervision, carrying out international coordination, and establishing corresponding international rules for supervision.

1. Trends in global financial openness

In the short term, the current global financial openness landscape faces many challenges. Certain countries may experience a temporary slowdown or even a setback. **Facing greater capital outflow pressures and debt default risks, developing countries are now very cautious about expanding financial openness.** The World Bank estimates that 60% of low-income countries are already in, or are at high risk of, debt distress. The situation may deteriorate in 2022. The plans of major powers and international organizations to help heavily indebted developing countries to restructure their debts progress slowly, putting developing countries under heavier debt pressures. **In the post-pandemic era, the shrinking of the global industry chain may lead to a slowdown in the speed of financial globalization.** On the one hand, the pandemic has hindered the free flow of raw materials for production and skilled workers around the world and put the supply chains in a state of obstruction for years, thus objectively severing part of the global industry chains. On the other, the pandemic has exposed the vulnerability and instability of the current industry chain which is excessively long and thin. Countries have begun to make industry chains more local and regional, thus subjectively severing the global industry chains. The restructuring of the industry chain in the opposite direction of globalization will undermine cross-border investment, leading to curtailed demand for cross-border capital.

In the long run, the support for global financial openness remains robust, and advancing financial openness in various countries is still mainstream.

Firstly, multinationals, as an important champion of financial globalization, are still motivated to deploy and allocate resources globally. Since the 1980s, multinationals have become the main driver of economic globalization. As pursuing high profits is the main goal of multinationals in their global operations, they are likely to continue investing in regions with a benign business climax and low production costs, thereby promoting economic and financial globalization. In addition, as information technology develops, multinationals tend to be a hybrid of emerging and traditional enterprises that break through geographical limitations.

Secondly, emerging markets represented by China have become an important driver for financial globalization. These countries, as both beneficiaries and promoters of globalization, will continue expanding financial openness. On the one hand, they bring in long-term institutional investors and international leading institutions to provide

sufficient liquidity for the market, improve the level of market services, pricing, and investment, and enhance the market's resilience and vitality. On the other, they allow domestic financial institutions to raise and allocate funds around the world and enhance their ability to gain profits and compete in the international financial market.

Thirdly, the distributed, intelligent, digital model of financial openness will become a new trend in advancing global financial openness. As digital currency and blockchain technologies develop, future international economic activities, including cross-border payments, trade, investment, and financial services, will increasingly count on distributed financial systems. Distributed financial systems establish algorithm-based rules and multi-center governance models at the international level through smart contracts and different decentralization mechanisms, thus enabling a more just, safe, and efficient model of global financial openness. As distributed cross-border payment networks continue to develop, it is possible to build multiple digital currency areas across geographical borders in the future, which will become the highlight of digital financial and economic openness.

Box 8-6 Digital Currency Area

A digital currency area refers to an area in which multiple countries use one or multiple digital currencies and conduct international economic and trade activities on the same distributed cross-border payment platform.

It will be an updated version of the traditional optimal currency area (OCA) in the digital economy era. Cross-border payment platforms based on blockchain and digital currency have a strong "network effect". As more institutions, businesses, and consumers join the network, the economic and social value generated by the network will grow as well. When it grows to a certain scale, the distributed cross-border payment platform will surpass the financial platform to become an international economic cooperation platform integrating trade, investment, and financial services that utilize digital currency. This is how a digital currency area takes shape.

In recent years, empirical research by the IMF has found that the circulation speed of digital currency is significantly higher than that of traditional currency (Manmohan Singh, Caitlin Long, 2020).[①] According to economic principles, when other conditions remain

① Manmohan Singh, Caitlin Long (2020). "How programmable digital assets may change monetary policy", from https://www.ft.com/content/773d0eac-8d75-43ea-b62e-ba8ef39e51f2

unchanged, the increase in the velocity of currency circulation will boost the growth of GDP. Therefore, the formation of digital currency areas will deepen regional economic cooperation and promote the economic growth of countries in them.

2. Challenges facing global financial regulation

The difficulty to supervise the rapid cross-border capital flow due to the varying policies and legal systems of different countries poses systemic and structural challenges to their financial systems. Some countries have even encountered financial crises brought about by financial openness. That said, although expanding financial openness remains a general trend of world economic development, opening up must be accompanied by effective supervision, because it is a necessary condition for the efficient operation of the financial market and the stability of the financial system, and a prerequisite for financial openness. To continue advancing financial openness, global financial regulatory authorities must address the following challenges.

Firstly, the costs of coordinated regulation are not commensurate with its benefits. That is why some countries are not willing to do so for political considerations. As financial markets in developing countries are generally immature and less competitive, the space for the financial development of developing countries may be restrained if the world adopts a unified supervision model. Such a model may also hinder the long-term development of financial institutions in developing countries. Moreover, the legal systems and regulatory standards vary by country, which puts a damper on global financial supervision.

Secondly, effective enforcement agencies are lacking in global financial regulation. The existing executive agencies mainly include the IMF, the Bank for International Settlements, the World Bank, and regional financial institutions. However, these agencies run short of resources and are not legally binding in terms of risk prevention, institutional supervision, and crisis relief, because their authority is not universally recognized. In the international community nowadays, there aren’t any legally binding, and politically independent institutions that are both capable of mobilizing resources and are recognized for the legitimacy of law enforcement to assume the responsibility of global financial regulation.

Thirdly, it is not easy to coordinate prudential regulation on the macro level and compliance regulation on the micro level. After the 2008 global financial crisis,

countries around the world started a round of financial regulatory reforms focusing on building macro-prudential mechanisms. However, as the objectives and responsible agencies of macro-prudential and micro-compliance policies are different, the two policy tools are different yet highly overlapping. Therefore, however the mechanism is designed, the two tools may complement and conflict with each other at the same time. Moreover, the significant differences in the macro-financial environment of different countries, the diverse development level of micro-financial institutions, and the individualized requirements of each country's supervision make it all the more difficult to coordinate macro-prudential and micro-compliance regulation on a global scale.

Fourthly, distributed digital financial systems make it more difficult to supervise money laundering and illegal financing behaviors. Existing regulatory rules and technologies cannot effectively supervise unanchored digital currencies and certain stablecoins. The non-anchored digital currencies represented by Bitcoin are characterized by distributed storage and issuance, transaction anonymity, high encryption level, and difficulty to crack. They can be used for capital flight, illegal money laundering, online gambling, and drug and gun trading, with little risk of being tracked and identified. There are even cases in which cryptocurrencies are issued entirely by the issuer for illegal fundraising, fraud, and other purposes. If digital stablecoins issued by market-oriented institutions are not subject to the strict supervision of the government, there will also be problems of insufficient guarantees and excessive currency issuance.

Box 8-7 Supervision of Distributed Digital Financial Systems

The future regulations of distributed financial systems are expected to develop in the following two directions.

The first is to use fin-tech to supervise fin-tech. The innovative development of distributed financial systems, in essence, benefits from the development of fin-tech. Therefore, it is also advisable to leverage fin-tech for the supervision of such systems. Compared with centralized networks, the Internet of Value, which is built based on blockchain, is a pro-supervision system in terms of the technical architecture, which allows for penetrative supervision. Blockchain is characterized by traceability, difficulty to tamper with, and high transparency. With adequate regulatory technology, distributed financial systems will be effectively regulated, thus becoming a safe and stable Internet of Value.

The second is to strengthen international coordination to establish international rules for supervising distributed financial systems. The use of digital currency and distributed financial systems will change the currency circulation model and improve financial efficiency. It may even redefine the role of central banks and commercial financial institutions, and reshape the domestic financial ecosystem and international financial architecture. Owing to the complex design of digital currencies, as well as the divergent legal frameworks of different countries, digital currencies are now in a fragmented and disorderly international regulatory environment, where regulation inconsistencies and loopholes abound. Therefore, it poses a challenge to improve the interoperability of digital currencies in different countries and distributed financial systems.

All these problems need to be solved by establishing new international rules. Under the G20 framework, countries around the world may discuss and build international rules for supervising distributed financial systems.

In this regard, China has a part to play in the formulation of technical standards and regulatory frameworks for digital currency and distributed financial systems, through extensive bilateral and multilateral exchanges and cooperation. China stands ready to participate in global financial infrastructure construction, and develop distributed financial systems and cross-border platform economy, as part of an effort to promote financial and economic openness.