## Central Bank Digital Currency and the Role of the Renminbi after the Covid-19 Pandemic – Report on the Budapest Renminbi Initiative Conference\*

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On 16 September 2021, the Magyar Nemzeti Bank (the Central Bank of Hungary, MNB) held the Budapest Renminbi Initiative Conference for the sixth time, with the title "Central banks' vaccine against Covid-19 and the role of China and the RMB in the post-pandemic era". While the pandemic has brought unexpected challenges for humankind, it has also opened up new opportunities. The existing megatrends of digitalisation and environmental sustainability have gained momentum recently and also left their mark on the financial system. The development of central bank digital currency (CBDC) has great potential opportunities, which are being discussed intensively by experts and central bank representatives. China plays a significant role in this field, as the country is the world leader in terms of testing its own central bank digital currency and has also been remarkably effective in its management of the crisis. The MNB launched the Budapest Renminbi Initiative Conference in 2015 to strengthen ties with China. The conference this year gathered renowned international and domestic experts to discuss the management of the global Covid-19 crisis by central banks, the role of China and the renminbi (RMB) in the post-Covid world and the development of the central bank digital currency.

The coronavirus pandemic has brought unprecedented challenges for the nations of the world, testing the crisis management capabilities of individual countries. The public health crisis and widespread lockdowns caused huge problems in the economy and fundamentally changed the lives of billions of people. In addition to losses, however, the pandemic has also opened new opportunities for further cooperation and development. The trends of recent decades, such as digitalisation and environmental sustainability, gained new momentum during the crisis, and the champions of crisis management have turned to tap into the opportunities presented by their advantage. The pandemic has once again highlighted the potential for digitalisation in the financial system and the importance of reliable electronic payment options, along with the important role of central banks in their

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creation. China has not only shown good crisis management but also significant results in its central bank digital currency research and testing, thus offering important solutions for other countries worldwide, and although international trade and financial markets are still dominated by the dollar, efforts to internationalise the RMB seem to be paying off now.

The MNB launched the Budapest Renminbi Initiative Conference in March 2015 in connection with the central bank's Renminbi Programme to strengthen its ties with the People's Bank of China (PBoC) and facilitate a dialogue on the importance and effects of the internationalisation of the Chinese renminbi. The explicit goal of the initiative is to take advantage of the growing international weight of the RMB, to strengthen Chinese-Hungarian foreign economic relations and to reinforce the role of Budapest in Chinese and Central European relations. An important goal of the MNB with the initiative is to broaden the range of investment and financing sources in Hungary and to promote the growth of cross-border economic activity. In line with these objectives and the international situation shaped by the pandemic, the sixth Budapest Renminbi Initiative Conference focused on China's crisis management, the internationalisation of the renminbi and especially the development of the central bank digital currency with important contributions from Chinese and international experts.

The conference was opened by Mihály Patai, the MNB's Deputy Governor responsible for international relations, cash logistics, financial infrastructures, digitalisation and lending incentives. He emphasised that, after the coronavirus pandemic, the world will undoubtedly be different. In his view, digitalisation and environmental sustainability, as two megatrends that have evolved over the past 40 years, will be decisive in the next two decades and will significantly shape the future of humanity. Accelerating digitalisation and the revolution of money may transform our entire perspective on money and central banks, while central banks will play an increasingly active role in greening the economy. An excellent example of this is MNB's new, unique green mandate obtained this year. Nevertheless, apart from the previously mentioned two megatrends, there have been several other significant events in the last 40 years, in which the rise of Asia, and particularly China, is outstanding. The economic and geopolitical weight of this region will continue to grow in the future. He stressed that although 70–75 per cent of international trade is dominated by the US dollar, foreign trade transactions settled in RMB have grown fivefold over the last decade, and the RMB's share in international foreign currency reserves has tripled over the last four years, according to IMF data. Patai emphasised that the Hungarian and Chinese financial systems are increasingly interconnected, which is underlined by the Bank of China's long term presence in Hungary, and that the China Construction Bank will also soon start operations in the country. Attention shall also be paid to the presence of Chinese government bonds in the Hungarian foreign exchange reserve portfolio, and to MNB's three-year FX swap agreement with the PBoC concluded in 2013, which has been renewed several times since then.

In his video message, Péter Szijjártó, Minister of Foreign Affairs and Trade, highlighted the fact that in the new age of the global economy following the coronavirus pandemic, Hungary may gain much benefit in the race for investments from its exceptional relations with China formed under the Policy of Eastern Opening. Owing to this, Hungary was able to conduct the fastest vaccination campaign in the European Union, which provided the foundations for reopening the economy. He said that the Policy of Eastern Opening, launched in 2010, is based on mutual respect, from which both countries reap many benefits. The Minister spoke highly of the strengthening investment and trade relations with China and noted that the trade volume between the two countries had increased by 25 per cent last year in spite of all the difficulties, and that Hungarian exports to China had grown by more than 50 per cent this year. As evidence of these good relations, the Bank of China has opened its regional centre in Hungary, and the Chinese brought the most investments into the country in 2020. The Minister also said he was proud that Hungary was the first country in Central Europe to sign the Memorandum of Understanding on the Belt and Road Initiative (BRI).

The final opening address was delivered in a video message by Dayu Qi, Ambassador Extraordinary and Plenipotentiary of the People's Republic of China to Hungary. He pointed out that Hungary's Policy of Eastern Opening and the Belt and Road Initiative were particularly important in strengthening bilateral relations. He emphasised that Hungary is the primary target for Chinese investments in the CEE region and that China attaches great importance to the development of the RMB on the CEE markets and is planning to further expand the European RMB-bond market. Qi added that currently Hungary is the only sovereign country issuing dim sum and panda bonds as well. He highlighted that the internationalisation of the RMB plays a key role in China's economic upturn and also supports the Belt and Road Initiative and the Policy of Eastern Opening. Commenting on the Chinese economy, he stated that China's GDP grew at a rate of 12.7 per cent in the first half of this year, and the fast recovery of the Chinese economy provides an opportunity for the internationalisation of the RMB. The RMB settlement index rose from 13.4 per cent to 16.1 per cent between 2019 and 2020, indicating that the RMB is used for a growing number of transactions. He added that the establishment of the Regional Comprehensive Economic Partnership (RCEP) contributes to the development of economic cooperation and also supports the international use of the RMB.

## Crisis management by China and the internationalisation of the RMB

The first panel of the conference covered China's crisis management, the internationalisation of the RMB and its role in the post-pandemic global economy and international financial system, as well as issues related to green finance. *Ádám Banai*, MNB's Executive Director for monetary policy and foreign reserve management, acting as panel moderator said in his introduction that compared to the 2008 crisis, central banks had to face a new type of exogenous crisis caused by the pandemic, which spread uncertainty throughout the real economy and the financial markets. Central banks played a key role in the management of the emerging economic crisis for two reasons. Firstly, they ensured financial stability by providing sufficient liquidity for market players, and secondly, they had to play a major role in trends reshaping the economy, such as digitalisation and environmental sustainability.

In a keynote address, Mei Jin, Chief Representative of the People's Bank of China's (PBoC) Representative Office for Europe, explained that the efficient monetary policy of the central bank was a key factor in China's successful crisis management. Thanks to the monetary policy instruments introduced by the PBoC, it was possible to alleviate the financial burdens of economic agents and ensure favourable credit conditions for SMEs. The Chinese central bank conducted a solid, prudent monetary policy throughout, did not resort to any interest rate cuts close to zero or lower, and did not introduce any quantitative easing. Jin emphasised that the PBoC, in line with China's carbon neutrality goals, gives priority treatment to green finances and considers it important for central banks to elaborate strong regulatory systems for the development of green finances and the provision of fair market conditions, as well as to boost international cooperation. With reference to Gang Yi, governor of China's central bank, Jin said that the development of green finances requires the mobilisation of private and public funds, and the setting up of a mandatory information disclosure system to facilitate the sharing of information between financial institutions.

As far as financial relations with the CEE region are concerned, Jin stated that more and more central banks have RMB-denominated financial instruments and that their future role is expected to grow, not only in the region but also globally. Crossborder use of the RMB and the volume of RMB-denominated reserves expanded rapidly in 2020. According to the report of the Official Monetary and Financial Institutions Forum, 30 per cent of central banks are planning to establish RMB foreign exchange reserve portfolios in the next 1–2 years, and 70 per cent of the central banks investing in RMB-denominated instruments are planning to prolong and extend their investments of this type. According to a Morgan Stanley report, 5–10 per cent of the world's foreign exchange reserve will be invested in RMB by 2030. The panel continued with a discussion between *Zoltán Kurali*, CEO of the Hungarian Government Debt Management Agency, *Domenico Nardelli*, Head of Treasury Department of the Asian Infrastructure Investment Bank (AIIB), and *Hong Zhong*, Deputy General Manager of the Research Institute, Bank of China under the moderation of *Ádám Banai*. *Kurali* explained that, although today the RMB shows the fastest growth in foreign exchange reserves, the US dollar is still the dominant currency of foreign exchange reserves (approximately 60 per cent) and of global trade (approximately 80 per cent). In the area of market capitalisation however, the renminbi had strengthened noticeably, and although 43 per cent of the total stock market capitalisation can be associated with the USA, this figure is over 10 per cent for China and around 9 per cent for the European Union.

In connection with the internationalisation of the RMB, Nardelli stated that his experiences with regard to AIIB's bond issuance support the observation that RMB-denominated financial instruments are becoming increasingly popular with foreign investors. Two-thirds of AIIB's RMB-denominated bonds issued in 2020 were purchased by foreign investors. *Zhong*, the representative of the Bank of China, added that the use of the RMB had seen significant development over the last few years. It ranked 17th on the list of the most frequently used currencies 10 years ago, while today it is already 5th. Regarding the diversification of financial reserves, the panellists confirmed that more and more market players are deciding to invest their reserves in RMB-denominated financial instruments. By the end of the first half of 2021, the total amount of RMB-denominated financial instruments in the hands of foreigners (including also domestic shares and bonds) amounted to RMB 10 trillion (USD 1.55 trillion), and 70 per cent of the world's central banks and monetary authorities had RMB-denominated foreign exchange reserves. The representative of the Bank of China added that the RMB-denominated reserves of central banks reached USD 287.5 billion, which is more than double that of the value five years ago. This significant growth can be attributed to the fact that China is no longer seen only as a huge market for goods, but also as an investment source, which makes it practicable for central banks to conclude bilateral swap agreements.

Commenting on the "going out" strategy, *Zhong* stated that the Bank of China had been highly successful. In 2020, the deposit and credit portfolios of the Bank of China's foreign units reached USD 285.1 billion and USD 407.8 billion respectively, corresponding to growth of 6.8 per cent and 4.6 per cent year-on-year, respectively. The revenues of the foreign units amounted to 18.8 per cent of the total revenue of the Bank of China Group. Referring to the green bonds, Zhong noted that the Chinese bond market is growing fast, and there are several reasons for its popularity, such as the beneficial costs (lower interest compared to traditional bonds), the issuance of bonds in several different categories, the support of fiscal and monetary policies, as well as compliance with the ESG guidelines becoming an increasingly important expectation both in the private and public spheres.

## The money of the future, the future of money – central bank digital currency and the e-CNY

The second panel of the Budapest Renminbi Initiative Conference examined the issue of central bank digital currency under the title "What could be the money of the future? What could the future of money be like? – Central bank digital currency and e-CNY as the next step in the evolution of the monetary system?" In the introduction to the discussion, Anikó Szombati, the MNB's Executive Director responsible for Digitalisation and Chief Digital Officer, said that although money has always been a changing concept, the 21st century has brought revolutionary changes. Similar to the transformation in social interaction, where the Internet has basically changed our everyday life, technological innovation will reshape our ideas of finances and money as well. Szombati stressed that, after the Covid-19 trauma, actors in international financial markets and global economy will turn to the central banks, looking forward to the next step in the evolution of money. It is time now for central banks to take the lead in the innovation of money. She added that the central bank digital currency may present a comprehensive answer to the challenges of the new era.

Although several central banks are looking into the issue of introducing central bank digital currency, nobody has gone as far in this area as the central bank of China, which has conducted tests in several cities in connection with its central bank digital currency and the everyday use of e-CNY. In the keynote speech of the second panel, a renowned expert on the topic, Changchun Mu, Director General of the PBoC Institute of Digital Currency, briefed the audience on the latest developments and details of the e-CNY project. The PBoC published the very first e-CNY white paper titled "Progress of Research and Development of E-CNY in China" in July 2021. Among other topics, they offered a response to the population's concerns relating to the central bank digital currency. Mu highlighted that the e-CNY is the digital version of the fiat money issued by the PBoC, and therefore a legal tender which is backed by the establishment of a two-tiered system, which offers equal footing for all who comply with the regulations. He emphasised that the e-CNY is positioned as M0 and hence it will not pay interest or give rise to any competition between bank deposits, and the PBoC will not charge its partners with any extra costs. He emphasised that the e-CNY system pays great attention to data protection through the so-called "managed anonymity" system.

Mu spoke about the reasons behind the introduction of the e-CNY and noted the e-CNY may act as backup for the retail payment system, thus facilitating the stability of the financial system, can improve financial integration for even those who are remote and have no access to basic financial services, and can boost the efficiency of the payment system of the central bank. He stated that there are pilot programmes running in several cities, selected on the basis of the most important national and regional development strategies, as well as the industrial and economic characteristics of the cities. In response to a question raised about the way in which the e-CNY will be used during the Olympic Games in Beijing, Mu explained that foreign users are mostly interested in data protection questions, and they have no Chinese bank accounts therefore they cannot use the traditional Chinese mobile payment systems. In the framework of the e-CNY system, however, foreign visitors can create a digital wallet with just a mobile telephone number, and upload money into it with the help of their bank cards. IC cards will be provided for those who are worried about data protection on their applications.

After Mu's presentation, this topic was further discussed by Yanyun Wang, General Manager of the China Construction Bank (CCB), Hungary Branch, Lian Cheng, Professor at the Institute of Finance & Banking of the Chinese Academy of Social Sciences (CASS), and Binur Zhalenov, Head of the Payments and FinTech R&D Centre, National Bank of Kazakhstan. In connection with the role of commercial banks, Wang said that the CCB had been one of the first banks joining the e-CNY testing, which gives them several opportunities. For example, it reduces the costs of managing physical currency, optimises the business activity of commercial banks and facilitates the transformation and modernisation of commercial banks. Wang added that the CCB had further developed the application model so that it can communicate with e-commerce platforms and also created offline scenarios. In terms of how the central bank digital currency has been welcomed by the people of China, the panellists agreed that the Chinese users had received the introduction of the e-CNY positively as mobile payment options had already been very popular in China, and the related means of promotion had also been familiar. Nevertheless, Cheng pointed out that this is also the reason why users cannot see a difference between the e-CNY system and the traditional mobile payment platforms, thus they are not aware of dealing with a legal tender. He also highlighted the fact that the currently running tests are limited, and therefore the full capacity of the system is not yet known. This is especially true for extreme situations, for instance natural disasters, meaning that further tests will be necessary.

In connection with the CBDC project of the Central Bank of Kazakhstan, *Zhalenov* explained that the central bank digital currency is part of the modernisation of the national payment system in his country. One of the main motivations to introduce the digital tenge is to facilitate competition by providing new infrastructure for financial institutions to help them create new financial services and increase the supply of financial market services. Additionally, some aspects of the digital tenge, such as the online payment option, may give an impetus to financial integration and the increase of cash-free payments. Referring to the international use of CBDC, Zhalenov noted that cross-border transactions present a key problem in

international trade, especially in Central Asia, but cooperation is indispensable for the international use of CBDC. Most of the currently running projects focus on technology, but in his view, regulation may be the biggest challenge. He emphasised that several questions need to be clarified before technological integration could begin. CBDC can only be the next step after the large economies of the world and central banks decide to introduce interoperability standards.

The whole event can be retrieved on the conference website: https://www.mnb. hu/en/the-central-bank/conferences/budapest-renminbi-initiative-conference-2021