GOVERNOR'S SPEECH

STATE BANK OF PAKISTAN

Governor	: Dr. Reza Baqir
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بسم الله الرحمن الرحيم

Mr. Nasser Mohammed Alsubeaei, Vice Chairman of MASIC, Governor Dr. Fahad bin Abdullah Almubarak of Saudi Central Bank, Mr. Abu Khalid, Dr. Nouriel Roubini, distinguished guests, Assalam o Alaikum and a very good morning.

I am delighted to join you today at the MASIC Annual Investment Forum 2022 to share my thoughts on "Digital Currencies: The Road Ahead." It is particularly an honor to follow after the speech of Governor Fahad Almubarak for an important reason. Under the vision of the Saudi leadership and that of Governor Almubarak, the Saudi financial system is racing ahead on its digitization agenda, a lot faster than people often realize. So let me congratulate Governor Almubarak and also the people of Saudi Arabia for their strides in this area. It's also special for me as a Pakistani to be with you in Saudi Arabia. Our two countries have had deep and historic ties. Some of the illustrations of this special relationship are as follows: one of the first governors of the Saudi Monetary Authority was Mr. Anwar Ali a Pakistani; the road that I take to work every day in Karachi is called Shahrah-e-Faisal. The largest mosque in Pakistan is the Faisal Mosque. And the list goes on. So today as a Pakistani I also bring to you the good wishes and prayers of the people of Pakistan.

In my remarks I'll cover three points:

- First, I would like to dwell upon the rapid transformation we are witnessing today from cash to digital. The history of money is one where innovation has occurred in sudden bursts. We are in one such burst today. I will speak about how this transformation from cash to digital is manifesting itself in Pakistan. The State Bank of Pakistan in recent history has not witnessed the pace of work on digital payments in decades as we are experiencing now.
- My second main point will be that while promoting digital payments is a key goal of the State Bank this is not the same as promoting crypto currencies. Over the past months we have carefully looked at the private digital currencies and we have come to the view that, based on what is on offer now, such virtual currencies have more risks than benefits when evaluated against our objectives as a central bank and regulator of the payment and financial system. I will share how we have reached this stage in our thinking.
- Finally, my third point will be that the work underway in many countries and international institutions on Central Bank Digital Currencies (CBDCs) is welcome. This work should not be driven just by the desire to offer an alternative to private digital currencies or out of the fear of them. Instead, this work should be evaluated from the perspective of how CBDCs can contribute to each regulator's agenda—in our case, it is to preserve stability

of the financial system and promote inclusion and innovation. I believe CBDCs hold considerable promise in this regard.

I will end with a few messages as a central banker in navigating the times ahead.

Let me begin with Pakistan's digital journey and the remarkable transformation we are experiencing right now. But first, a few key facts about Pakistan and how it is in a prime spot for a major digital evolution: 189 million mobile telecom subscribers, 82 million unique bank accounts including mobile bank accounts, 108 million 3G and 4G subscribers (49% penetration), 110 million broadband subscribers (50% penetration). My point with sharing these statistics is that Pakistan, given its size of users, is a prime and attractive destination for investment in digital payments.

Given this state and size, digital money has played a key role in our agenda as a central bank. A few of our flagship initiatives include:

- Pakistan, like many other countries, has a well-functioning Real Time Gross Settlement system for wholesale payments that processes around USD 8.5 billion (approximately PKR 1.5 trillion) worth of transactions every day. It also performs ancillary settlements from clearing houses and stock market and provides a delivery vs payment mechanism for government securities.
- This past Friday we have launched our person-to-person instant payment system called RAAST to allow for instant payments and settlements at retail level using central bank's money. RAAST, short from Rah-e-Raast an Urdu phrase which means the direct and correct way. Customers can conveniently receive money using their Raast ID, which is their mobile

number linked to their preferred account. We have also made this service free. We also plan to offer Request-to-Pay functionality and QR based acceptance via Raast this year.

- To enable fintechs SBP has issued the Rules for Payment Systems Operators (PSOs) and Payment Service Providers (PSPs) and regulations for Electronic Money Institutions (EMIs) in 2019. Numerous PSOs/PSPs and EMIs are venturing in Pakistani market to offer innovative, user-friendly and cost-effective low value digital payment prepaid instruments like wallets, prepaid cards, and contactless payment instruments including wearables to consumers. SBP has fast tracked the licensing process of Electronic Money Institutions (EMIs) and currently, two companies have gone live with commercial operations whereas six (6) companies are in different phases of approval such as in-principle approvals and pilot phase. Similarly, five (5) PSOs are live with commercial operations.
- Our first circular for this year was licensing framework for digital banks in Pakistan. The digital bank licensing framework provides flexible requirements to setup a digital bank in Pakistan. Key features of the proposed framework include two types of digital banks: *digital retail bank* (DRB), a uniquely designed category for retail customer segments, and digital full bank (DFB) – which may deal with corporate, commercial and retail customer segments. For now, we are only issuing up to five licenses for Digital Banks and interested parties can apply for a license until March 31, 2022.

- One of Pakistan's key assets is the Digital Identity System for citizens, provided by an authority called National Database and Registration Authority (NADRA). This has been leveraged by SBP to provide remote/digital onboarding of customers for banking services for not only resident but non-resident Pakistanis. A very successful example of remote/digital onboarding is the launch of Roshan Digital Account Scheme by SBP in September 2020. This has provided innovative banking solutions to millions of Non Resident Pakistanis (NRPs). NRPs can now easily open a bank account in a Pakistani bank from abroad, digitally, with simplified requirements and avail all the facilities without visiting a bank branch. These accounts will offer a wide range of digital banking and payment services such as online banking, funds transfer, utility bills and tuition fee payment in Pakistan.

Above are some of our recent initiatives. Aside from the comment about RTGS all of the above are initiatives in the past 2-3 years which show the pace with which the SBP is working on new areas in promoting the move from cash to digital. Let me now briefly share some key statistics on the pace with which indicators of digitization are improving.

- During fiscal year 2021, 1.2 billion transactions of USD 500 billion value were processed through retail e-Banking channels. These transactions showed year-on-year growth of 30.6% in volume and 31.1% in value.
- Last year also saw major uptake in mobile banking by the consumers registering a 29% increase in the number of users, 133.6% increase in volume of transactions and 178.7% increase in value of transactions compared to the previous year.

- This promising growth was achieved on the back of 27 banks offering app-based banking along with other entities offering innovative payment solutions for accepting digital transactions.
- The number of card accepting POS machines saw a growth of 47%. Transactions processed through POS machines reached as high as 88.8 million amounting to USD 2.6 billion (453 billion rupees), showing a growth of 26.3% by volume and 24.4% by value.
- The retail commerce space is fast growing in Pakistan like B2B, online transactions and e-commerce transactions. In e-commerce space, the number of e-commerce merchants reached 3,003 which shows double-digit growth of 76%. Consumers carried out 21.9 million online transactions worth $350 million (60.6 billion rupees) on these locally registered e-Commerce merchants during the year 2021 which amounts to significant growth of 114.8% and 74.1% by volume and value of transactions respectively.

Ladies and Gentlemen,

Let me now segue into the second theme of my talk today, which is the rise of emergence of Distributed Ledger Technology (DLT) and the rise of private digital currencies or cryptocurrencies, the tradeoffs that regulators face in assessing these new developments, and the approach that Pakistan is taking.

After the global financial crisis of 2007/2008, we saw the emergence of so-called cryptocurrencies based on new technology called Distributed Ledger Technology (DLT). One of the key elements of DLT is to dis-intermediate financial services and enable people to make payments without the need of a central ledger or financial institution. However, we are seeing many variants of DLT including, permissioned, and permission-less ledgers. As a result, today we are witnessing a large number of private digital coins/currencies being issued based on DLT. According to some estimates, there are over 17,000 different cryptocurrencies[1] which have gained some influence, whose total value exceeded 2 trillion US dollars before the recent crash. We are also seeing financial innovation happening using this technology commonly called Decentralized Finance or DeFi. Decentralized finance (DeFi) aims to provide financial services without intermediaries, using DLT protocols and stable coins to facilitate fund transfers.

So how are regulators assessing these developments? There are some benefits that these technologies bring. First, the movement of capital and access to capital will become easier using innovations like Peer to Peer lending and crowdfunding. Similarly, it is also expected that cross border transfer of remittances will become easier and less costly. Most alluringly, I believe that these technologies have the potential to democratize finance and give more power and control to the people on their finances. In general, that is a good goal. I think this was also the intent and purpose of introducing private digital currencies that don't require financial intermediation.

At the same time there are some risks. First, in their current form, private digital currencies are mostly speculative in nature and have not provided any robust use case and real economic benefits especially to underdeveloped countries like

[1] According to https://coinmarketcap.com/ as on 28th Jan 2022

Pakistan. Because of their speculative nature, acute price fluctuations and most importantly, their distributed and decentralized nature they can pose risk to financial and monetary stability. Because of their anonymous nature, some cryptocurrencies are prone to be used for illegal economic activities. In such cases, for countries like Pakistan, there is a risk of widening of gray economy and capital flight. More importantly, there are some serious consumer protection issues and challenges arising from these private digital currencies, which has resulted in people losing money due to inadequacy of legal and regulatory frameworks and inability of authorities to take actions in multiple jurisdictions. Finally, lack of coordinated regulations and common standards and inadequate and fragmented legal protections imply that these currencies can pose threat to financial and monetary stability that may leave authorities with limited options in times of acute economic stress.

In Pakistan, we as the central bank have reached the conclusion as of now that, for us and in terms of the core objectives of the central bank, the potential risks far outweigh the benefits. As many of you would be aware, we are not alone in reaching this conclusion. Many large emerging markets, including China, India, Russia, amongst others have reached similar conclusions. At the same time the approach in several advanced economies towards such virtual currencies has been more permissive.

An interesting question is why there is this difference in approach between the major advanced and emerging economies. One reason may be that in many of the advanced economies there is little practical threat that their currency, in many cases one of the major currencies of the world in which trade and finance is denominated, would be replaced by a new virtual currency. For many emerging markets, however, informality and use of alternative modes as store of value and unit of account, often the US dollar, is common. Given that such dollarization—defined broadly as the formal and informal use of another currency—is already a concern it is no surprise that emerging markets would be very wary of a new potential alternative to the legal tender in these countries. Another valid concern is the impact of virtual currencies on promoting capital outflows and more generally capital volatility. Since by definition such currencies cannot be monitored, regulators are at a loss to determine the impact on the balance of payments, representing another key risk.

This global environment, where such currencies are evolving in some jurisdictions and not in others, may be a helpful state of play. For an emerging market like Pakistan, it allows us to observe, study and monitor these developments. It gives us time to fully understand these technologies not only from the perspective risk-response but also to get an in-depth understanding and a full appreciation of the impact and implications that these distributed technologies are going to have on the future of finance. If, in the future, solutions evolve which address current risks and also give people more control, power and choices over their financial decisions, we are open to looking at them. In other words, never say never. I also hope in jurisdictions where crypto is allowed the regulatory response will be holistic in nature. A lot of work is indeed being done to identify legal and regulatory gaps, infrastructure related requirements, common standards and oversight practices etc. However, we also need to work on cross jurisdiction cooperation and coordination and the various controls that we have in our own jurisdictions.

This brings me to the third theme of my speech, the topic of central bank digital currencies or CBDCs as they are popularly known.

In simpler terms, and as Bank of International Settlements (BIS) aptly described in one of its papers, CBDCs are simply digital banknotes. They are central bank liabilities in digital form issued either directly to the general public or via intermediaries.

As we all are aware that these CBDCs can be classified into two categories, wholesale and retail. In wholesale, a number of experiments have been conducted in the form of pilot projects primarily to understand the efficiencies that wholesale CBDCs will bring over conventional RTGS based digital money. Experiments of project Jasper by Bank of Canada and Project Stella by Bank of England have demonstrated that wholesale CBDC may not have substantial benefits over conventional RTGS (except reconciliations). There is also a challenge of complying with international principles like Principles of Financial Market Infrastructure especially with regards to settlement finality. Another challenge is the integration of block chain-based systems with core banking systems of other participating banks and a number of experiments are being conducted to determine the issues. Project Helvetia of Bank of International Settlement (BIS) innovations hub and Swiss National Bank is aimed at finding answers to these questions.

On the retail side, a lot of work is being done and a number of countries have initiated pilot projects. The primary objective of these experiments and pilots seem to be aimed at more of understanding the role of CBDCs and their benefits at retail level especially digitization and financial inclusion.

At SBP, we have also been studying CBDCs both from technological and functional perspective. Core issues revolve around accessibility, universal access or limited access, value storage (token based or account based), Issuance (directly by Central Bank or via intermediary). We also have to look at some other issues such as compatibility of CBDC with legal and regulatory framework especially Foreign Exchange Regulations, Cyber security, online frauds, robustness of telecom infrastructure etc.

These considerations are critical as these factors impact the ability of customers to make payments in an efficient and seamless manner. So, these are important considerations and have to be weighed against potential benefits of enhanced digitization, low cost payment services and direct provision of digital payment services by Central Banks to masses while at the same time enhanced AML/KYC requirements and documentation of economy.

SBP, like in many other economies, is rolling out its faster payment systems. We are hopeful that this will give a big boost to our agenda on inclusion and innovation in the financial sector. So the question for us becomes what *additional* benefit CBDCs could bring to us. As pointed out by a few commentators, a CBDC could be complementary in such circumstances. First, CBDC can be DLT-based and thus potentially help spur the development of DLT-based asset markets. Second, CBDC can be designed to work outside the banking system and may thus favor financial inclusion. Third, CBDC could provide competition to banks and induce these to fully leverage the advantages of fast payment systems. Fourth, DLT-based CBDC could facilitate cross-border retail payments, thereby complementing the not-so-easy task of linking traditional inter-bank payment systems.

Overall, CBDCs provide a promising opportunity for the regulators to harness the distributed ledger technology for promoting innovation and the transformation of the entire financial system. We are closely looking at how other jurisdictions are addressing the technological, legal and other design considerations so we can make the right choices when we consider issuance.

Wrapping up let me summarize the main points I hoped to convey. First, Pakistan strongly welcomes the evolution from cash to digital. We have taken several important measures and are taking many more to push this journey further and see our financial system as ripe for a major evolution. Second, based on the current menu of private digital currencies, we have reached the conclusion that they come with more risks than benefits when assessed against our core objectives as a central bank. That said we are carefully monitoring developments in other jurisdictions to see if technologies and regulations can successfully develop to address the main risks. Finally, CBDCs present an exciting opportunity that could further enhance inclusion, innovation and overcome long standing issues of retail cross border payments and complement our recently introduced faster payment system.

Let me end with what I see as challenges and goals for us regulators. This represents the evolution of my thinking as well in light of recent developments in the digital space. First, we must encourage the entities we regulate to innovate. If our banks and other regulated entities do not innovate, we will be left behind and we would not do justice to one of our core goals of inclusion. Second, to credibly make a commitment to this, we as regulators need to innovate ourselves. In other words we as regulators have to lead from the front. This means we have to change the culture in our institutions where while we need to have our core regulatory function continue without compromise, we also need to develop cohorts of colleagues who are rewarded for innovation who are rewarded not simply for well they enforce existing rules but whether they create new solutions. Finally, we need to think of ourselves as enablers, and many times as promoters. It is not just sufficient to create a regulatory framework that addresses some new development and stand back. We need to engage proactively with our key stakeholders in the rapidly evolving digital space and push and promote our vision of our financial sector. And that, in fact, is why I am here with you today.

Thank you.

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