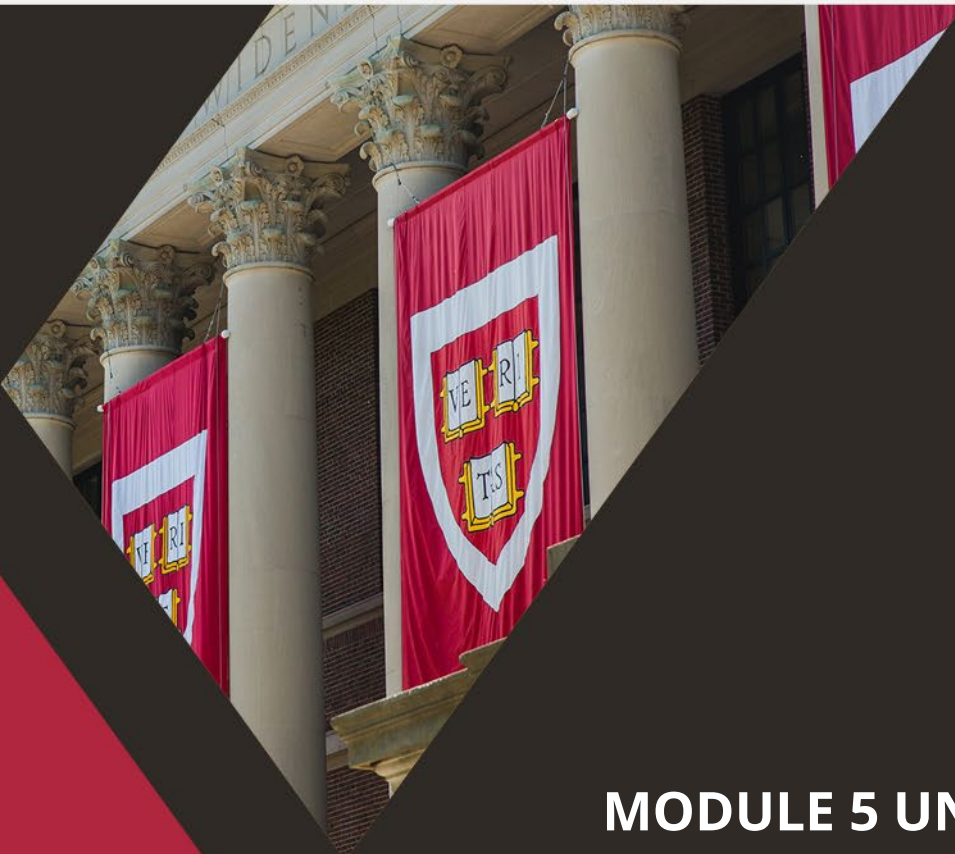




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MODULE 5 UNIT 1

Casebook Video 1

Transcript

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CHRISTIAN K. KAMEIR: So central banks have historically distributed two types of money: physical cash and electronic central bank deposits, also known as reserve balances. CBDCs in that sense will be a third kind of money, and can be best thought of as electronic cash.

The promise of CBDCs

KAMEIR: The CBDC papers that we have analyzed share the promise mostly of financial inclusion. According to the World Bank data, more than 1.7 billion people worldwide are still unbanked – and a number which, by the way, includes 10 million Americans. But most of today's commercial activity is driven by digital technologies, and only 3% of all money even exists in physical form. So being limited to cash transactions leaves this population at a very significant disadvantage.

So, as a joint statement by the G20 countries earlier this year pointed out, this deficiency is incompatible with the public goods quality of government-issued currency. In that way the promise of CBDC designs is to make digital currencies available to every individual regardless of his or her ability to open a bank account.

Bitcoin and other cryptocurrencies have proven that it's technologically possible to achieve finality of funds transfers, which currently is limited to cash transactions, within minutes or faster. So papers and discussions are mostly focused on the settlement times of payments, in particular those involving another country or another currency. In the current-account-based systems, cross-border payments regularly take three days to settle.

Lastly, most central banks recognize the need for programmable money, which would introduce efficiencies and reduce the cost of money transfers significantly.

Analyzing CBDC research and adoption

KAMEIR: We look at the topic of money as a network technology, as such fundamental changes to currencies will affect all forms of value transfer. So the real-time settlement options and programmability that cryptocurrencies introduced cannot be “uninvented” and they are already enabling weekly new lending experiments in the open-source community. We can deal with movements of hundreds of millions of dollars in a single day.

So what stood out to us is that CBDC papers largely fail to put discussions into the context of broad money. So while the predominant use case of fiat money is that of lending, thus far the focus of the CBDC paper discussions has been its use for payments. This aspect will obviously impact the \$2 trillion a year payment sector, including the profits of commercial banks, which derive about 30% of their revenues from payments – but also checking accounts maintained by those commercial banks, which are currently the central source for all payments, including cash.

Several papers also point out the possibility of a significant decrease of these demand deposits, a scenario which would be more likely if CBDCs would be interest-bearing, an option which is discussed by papers published by the International Monetary Fund, the Philadelphia Federal Reserve, and also other central banks.



And lastly, we noticed that many papers still use the 1875 textbook definition of money and consider CBDCs a new medium of exchange. As technology investors we find it more useful to observe that most money already exists and is only moved in digital form. As such we think of the default medium of exchange as bytes.

So the introduction of CBDCs could shift many of the bytes and databases controlled by commercial banks to consumers or new market participants. And then the additional function of programmable money will extend the ability to innovate to many other industries, enabling things such as machine-to-machine payments, event-based settlements, and use cases such as micro payments and streaming money.

So as of this month, which is November 2020, 80% of the world's countries are either researching, developing, or already piloting a central bank digital currency. Five countries report to have already launched their digital currencies, which include Iran, Senegal, Uruguay, Venezuela, and the Bahamas, which calls their CBDC the sand dollar. Eleven other countries have been piloting central bank digital currencies, in particular China, which has been experimenting with it for a couple of months now and has issued ¥200, which is about \$30, to more than 47,000 citizens in Shenzhen. And 11 countries are reportedly developing solutions currently, while there's 15 of the major countries that are still in the research phases.

As is often the case with new technologies the largest obstacles to implementation are legacy laws and regulations, since these were not written with the capabilities of current technologies in mind. CBDC designs will also have to carefully balance between privacy requirements such as... and anti-money laundering and “know-your-customer” rules. Countries may decide to prevent their citizens from using the CBDC of another country because of the difference in the prioritization of AML or privacy, or vice versa. And since CBDCs are likely to diminish the ability of commercial banks significantly to extract fees for moving money, these could be very resistant to adopt these new technologies.

An investment perspective on CBDCs

KAMEIR: A key decision criteria to investing is timing. So for technology investors, decisions depend largely on development and scaling cycles of these solutions. And our analysis of these cycles thus far uses first principles and a science-based approach, simply starting from the observation of the current state of financial technologies, including the technology of money itself.

Central bank digital currencies will have a very broad impact on the type of business our funds invest in, and so, as such, we are directly engaged with teams developing strategies and solutions for CBDCs. This allows us to understand their thinking and timelines, and we can offer peer review. So to judge the viability of the approaches, including the product-market fit, we are drawing from global observations of current financial technologies, as well as experiments that we've been seeing for some time now in the cryptocurrency space, such as stablecoins.

