Digital currencies, like the eCNY in China, can’t be turned into physical cash.

A
nnabelle Huang, 28, recently won a Chinese government lottery. As a prize, she got to test out the country’s new digital currency. Two hundred electronic Chinese yuan, or eCNY, worth about $30, showed up on her phone. To spend it, she went to a convenience store and used a QR code for the digital currency, which is based on blockchain technology. “It was easy,” she says. “I can spend it, I can withdraw it.”

You probably already use digital money, as many people opt to pay for items with a card or app rather than by handing over bills and coins. But there are differences between the money involved in your digital payments and China’s experiment with digital currency: Your debit card or payment app is linked to your bank account, which holds the physical cash you can withdraw from your bank account, for starters. China’s new currency, on the other hand, must always be exchanged electronically because it has no physical form.

The first digital currencies to gain popularity were cryptocurrencies, such as Bitcoin, which was created in 2009 and uses complex technology to protect users’ privacy. As cryptocurrencies have taken off, dozens of countries have considered creating their own official digital currencies. Unlike cryptocurrencies, these are backed by a government’s central bank, which oversees the monetary system for the entire nation. That means they’re likely to be more universally recognized as “money”—something you can use to pay for goods and services. Most businesses still don’t accept Bitcoin.

The U.S. is in the early stages of developing a central bank digital currency (C.B.D.C.), but some experts are excited about the idea. “For hundreds of years, governments have had to make money to help people buy and sell things . . . but technology is moving, and the governments have fallen behind,” says Tadge Dya, a research scientist at the Massachusetts Institute of Technology’s Digital Currency Initiative, which is researching C.B.D.C.s with the Federal Reserve Bank of Boston. “This is like updating cash for the era of the internet.”

**Government Surveillance?**

China isn’t the first country to explore a C.B.D.C. In fact, more than 60 nations have recently looked into them, according to the Bank for International Settlements. The Bahamas was the first to launch a C.B.D.C., called the Sand Dollar, making it available to all citizens in late 2020. Sweden is conducting real-world trials of a digital krona, while Thailand is in the development process. But China’s experiment has earned more headlines than any other. That’s partly because no other major power is as far along, and China’s moves could signal where the rest of the world goes. The country has been testing eCNY in cities such as Beijing and Shanghai.

Privacy experts are worried about the government knowing about it, I do worry about what this could mean,” says Eswar Prasad, former head of the International Monetary Fund’s China division. Those concerns would apply to a U.S. digital currency too, experts add. “Financial transactions paint a really detailed, intimate portrait of your life,” says Marta Belcher, special counsel to the Electronic Frontier Foundation. “If you’re a senior in high school, you can probably work out what this could mean.”

**Digital Currency Fast Facts**

- **Most countries:** Governments are looking to replace physical money. Instead, they plan to have both options available.
- **Chinese affiliates:** “We have tried to have both options available.”
- **Facebook:** Is developing a digital currency that could potentially allow the site’s 4 billion users to store money online.
- **Young People Can Have a Say:** Compared with China, the U.S. has moved slowly to create a C.B.D.C., but the fact that other countries are making progress will likely speed things up. Although there’s still a lot of research to be done, Dya notes that young people can have a say in what an American C.B.D.C. might end up looking like. “If you’re a senior in high school, you can probably work out what this could mean.”

**A digital currency might save taxpayers money if a government no longer needed to print as much cash. The government would also be able to issue payments such as tax refunds instantly. And it could be easier for people with low incomes to use a C.B.D.C. rather than traditional bank accounts, which often charge fees and have high minimum-balance requirements.**

**Young People Can Have a Say**

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**With reporting by Nathaniel Popper, Cao Li, and Joanna Smialek of The New York Times.**