INSIGHT

How Digital Currencies Can Support Climate Resilience

Using digital currencies has the potential to improve the speed of sending aid to disaster-stricken families. Photo credit: ADB.

With the help of digital technology, faster and larger amounts of aid can reach those affected by disasters.

Published: 01 October 2021

Introduction

Digital currencies have frequently appeared in the headlines in the past year, including predictions for how their growing prominence may reshape the financial system. Such transformative innovations and changes have the potential to impact many aspects of society.

Digital currencies continue to gain prominence thanks to the introduction and ideas behind the creation of bitcoin and the increasing adoption of distributed ledger solutions within the digital financial ecosystem. A growing number of central banks around the world are studying and piloting the use of digital currencies as a form of the country's fiat money (central bank digital currency or CBDC) where electronic coins are issued as direct substitute for printed money.

The introduction of CBDCs has the potential to drastically improve the speed and cost of sending cross-border payments, including remittances. Alongside parallel innovations from the private sector in the use of digital currencies, CBDCs may bring significant and positive development outcomes for their users such as financial inclusion and improved resilience to climate and disaster shocks through the role played by remittances.

Role of Remittances

Remittances represent an important source of livelihood for many households in Asia and the Pacific—a large number of whom live in a state of vulnerability or poverty. They are recognized for their potential to reduce poverty and act as a form of insurance, often representing the fastest form of aid to reach disaster-hit regions. Remittances also serve to increase the gross domestic product (GDP) of receiving countries and their developing economies. In 2020, remittance flows to low- and middle-income countries (excluding the People's Republic of China) surpassed the combined sum of foreign direct investment and overseas development assistance.

Sustainable Development Goal 10 aims to reduce the transaction costs of migrant remittances to less than 3% by 2030. National governments and central banks exploring the development of CBDCs should recognize the potential economic and societal opportunities of their introduction and prioritize these in the design, piloting, and rollout. The expected increase in financial inclusion from the use of CBDCs and the receiving of remittances will also serve as an enabler of other SDGs by promoting inclusive growth and income equality.

Central banks should also work toward the interoperability of their digital currencies to maximize the benefits at a regional and global level, most notably as a catalyzer for efficient, effective, and lower-cost remittance corridors. These benefits are especially relevant for emerging market economies poorly served by existing banking arrangements, some of which involve charges of up to 20% to send money cross-border. The Bank of International Settlements suggests these benefits can be difficult to achieve unless central banks incorporate cross-border considerations in their CBDC development from the start and coordinate on these internationally.

CBDC collaborations within Asia and the Pacific already exist and can be used as examples for others to follow. In May 2019, the Monetary Authority of Hong Kong, China and the Bank of Thailand signed a memorandum of understanding to partner in CBDC research and collaborate on promoting financial inclusion. In February 2021, the Central Bank of the United Arab Emirates and the Digital Currency Institute of the People's Bank of China joined the initiative, working toward the facilitation of real-time foreign currency transactions between the countries on a 24/7 basis. A statement released by the Multi Central Bank Digital Currency Bridge project encourages other central banks in Asia to work together to study the potential of blockchain to enhance cross-border payments.

Climate Resilience

The small island developing states of the Pacific comprise some of the most climate-vulnerable populations of the world. Their economies are also heavily dependent on the remittances of overseas workers and family members.

Average annual losses from climate disasters in the Pacific amount up to $284 million or 1.7% of the regional GDP. In Samoa and Tonga, 2019 data shows remittances represent over 17% and 37% of GDP, respectively.

Reducing the cost and increasing the speed of sending remittances to low-income and climate-vulnerable countries will have a direct and notable positive impact on GDP, as well as their populations' resilience to extreme weather events. In the aftermath of a disaster, this represents a faster and higher amount of aid reaching affected individuals. These remittance channels may also be considered as entry points for the offer of other products, such as climate risk microinsurance and savings accounts, both of which also serve to increase climate resilience.

Risks and Implications

Transformational change in the financial sector does not come without risks and implications. The core objective of a central bank is to ensure the stability of the financial sector, and the introduction of any digital currency—central bank or otherwise—must not threaten this.

Data generated by the use of CBDCs poses the need to balance a trade-off between the privacy of its users and the need to address anti-money laundering and counter-terrorist financing through know-your-customer (KYC) requirements.

On the flip side, transformational change brings transformational opportunities. The careful and thoughtful design of CBDCs, together with a regulatory framework for digital currency, will encourage private sector innovation and efficiency in building a new ecosystem of financial services and products. This will also contribute toward the goals of increasing financial inclusion and cheaper, more efficient cross-border payments.

Countries introducing CBDCs must be prudent, calculated, and conscious of addressing these issues and risks. The key to achieving the benefits of using CBDC is coordination and collaboration.

Developing innovative financial products for climate investment

The Asian Development Bank (ADB) recognizes the role of innovation in tackling global challenges, such as climate change. Challenges of this magnitude, importance, and urgency require all stakeholders, public and private, to challenge their existing way of thinking and develop new and innovative solutions.

In 2017, ADB established the Asia-Pacific Climate Finance Fund (ACliFF) to support the development of innovative financial risk management products that scale up climate investment and increase climate action in ADB and non-ADB projects. More information can be found on http://www.adb.org/acliff.

Resources

CBDC Tracker Website.

R. Auer, P. Haene and H. Holden. 2021. *Multi-CBDC Arrangements and the Future of Crossborder Payments.* Bank for International Settlements.

Josh Ling

Climate Change Specialist, Sustainable Development and Climate Change Department, Asian Development Bank

Josh Ling started his career in the financial sector before moving into roles focused on financial inclusion and disaster risk financing with international organizations such as the World Food Programme, Mercy Corps, and World Bank. He joined ADB in 2020 as fund manager of the Asia-Pacific Climate Finance Fund (ACliFF), working on financial risk management solutions that increase climate investment and impact.

ADB

Asian Development Bank (ADB)

The Asian Development Bank is committed to achieving a prosperous, inclusive, resilient, and sustainable Asia and the Pacific, while sustaining its efforts to eradicate extreme poverty. Established in 1966, it is owned by 68 members—49 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.