

Legal Issues Related to the Value Feature of E-CNY¹

MU Changchun

CF40 Member

Director, Digital Currency Research Institute, People's Bank of China

Abstract: E-CNY, the digital form of legal tender issued by the People's Bank of China, is a store of value, an essential feature that helps with the understanding of the legal nature of e-CNY. This feature of e-CNY grants it the same legal status as physical RMB as a form of property, applicable to the principle of “to possess is to own. Payment is completed with the delivery of cryptocurrency strings, and e-CNY ownership transfer signifies completion of settlement, a process that not only clarifies e-CNY ownership changes between the transaction participants, but also provides legal certainty for the finality of settlement.

I. THE VALUE FEATURE IS THE FOUNDATION FOR THE DETERMINATION OF E-CNY OWNERSHIP

1. The value feature of e-CNY is reflected in the form of cryptocurrency strings.

E-CNY is generated through an encrypted front-end system. Then, front-end processors distributed among operating institutions would add the user's owner ID and related fields in the core domain of e-CNY, thereby generating cryptocurrency

¹The article is based on the author's speech delivered at the 11th China Payment and Clearing Forum on September 15. The views expressed herewith are the author's own and do not represent those of CF40 or other organizations. It is translated by CF40 and has not been subject to the review of the author himself.

strings that are sent to the user's e-CNY wallet. The value of physical RMB is not decided by the paper that carries it. Likewise, the value of e-CNY does not lie in the cryptocurrency strings but state credibility. It is this “abstract value” that lays the foundation for e-CNY to function as money.

E-CNY is a universal equivalent, whose basic units are “yuan, jiao, and fen” of RMB. It can measure the value of all types of products within jurisdiction, reflecting its function as a unit of account.

As a means of payment, holders of e-CNY can use it in exchange for property, debt settlement or any other activities related to value exchange, which demonstrates its attribute as a medium of exchange; at the same time, the value of e-CNY is granted by the state and has the highest credibility. Through legal possession and control of e-CNY, users enjoy the equivalent value of the currency, thus realizing its purpose of value storage.

In addition, technologies such as encryption algorithms strengthen the traits of e-CNY including its ability to prevent double spending, illegal duplication and counterfeit, transaction falsification and repudiation, thereby ensuring the trustability and safety of cryptocurrency strings that act as the value carrier of e-CNY.

2. The value feature of e-CNY allows it to carry the basic attribute of property defined in law.

E-CNY is a special chattel. Currency is a highly substitutable indefinite thing, which can be used interchangeably by the same type and quantity of other things. As a combination of unit of account and medium of exchange, e-CNY does not have a “personality” in itself, and its value is calculated in terms of the currency unit it represents.

Therefore, users can use e-CNY based on the value it represents in exchange for property or for debt settlement. E-CNY is a typical type of *res consumptibiles*, or things that cannot be used repeatedly by the same person for the same purpose. As a medium of exchange, e-CNY is far more liquid than other property, and once used, it is transferred to another person and cannot be used again by the previous holder, making it a typical consumable thing.

II. E-CNY'S VALUE FEATURE GRANTS IT LEGAL ATTRIBUTE AND MAKES E-CNY SUBJECT TO THE PRINCIPLE OF "TO POSSESS IS TO OWN", MEANING THAT OWNERSHIP TRANSFER OCCURS UPON DELIVERY.

Currency abides by the principle of "to possess is to own", meaning that any individual in possession of the currency is presumed to be the owner of it. The rule emphasizes that the ownership of money is determined by its current state of possession. The nature of currency decides its highly circulatable and substitutable features, making the law of definite things inapplicable. Ownership of currency should not be created outside of the legal possession of currency.

The essential purpose of the creation of currency as a universal equivalent is to facilitate transactions since it is convenient for people to use money to exchange property, purchase goods, and service debt. As people have become used to the convenience of this type of transaction, once the possession of money is separated from ownership, the burden of ownership verification during transactions will build up. This will undermine people's willingness to use currency, substantially raise transaction costs, wipe out the advantage of currency in circulation, and hurt the safety of transactions and economic order.

Hence, assigning the ownership of currency to the actual possessor is a requirement for ensuring the safety of transactions and the basic legal ground for the determination

of currency ownership. **Just like physical currency, e-CNY is also subject to the principle of “to possess is to own”.** The value of e-CNY is reflected in the cryptocurrency strings, stored in users’ e-wallets established in the operating institutions, and used for payment and settlement through the wallets. End users are the owners of the e-CNY in the e-wallets, and can announce their ownership through the possession and control of e-wallets.

E-CNY ownership is transferred through the delivery of cryptocurrency strings.

According to China's Civil Code and other laws, the establishment and transfer of property rights in chattels takes effect upon delivery, and the same applies to the change of ownership of e-CNY as a special chattel. When the payer makes a payment in e-CNY for the purchase of goods or services, etc., and completes the delivery by transferring possession of e-CNY cryptocurrency strings to the payee, the legal effect of e-CNY ownership transfer occurs simultaneously. After the payment, the payer loses the possession and control of the delivered amount of e-CNY, and the payee obtains the ownership; in the e-wallets of both the payer and payee, the balance and the information of cryptocurrency strings change in sync.

III. THE VALUE FEATURE OF E-CNY ENABLES SETTLEMENT UPON PAYMENT AND ENSURES THE FINALITY OF SETTLEMENT THROUGH OWNERSHIP TRANSFER

Payment and settlement are two different legal acts with different legal meanings.

Payment is a legal act where a payer pays an amount of money to the receiving side, and the completion of the payment means the performance of the payer's paying obligation. Settlement means the actual receipt of the money by the receiving side, and emphasizes the legal result that the debt is paid off.

In a physical cash transaction, a point-to-point transaction is carried out directly between the payee and the payer. When the payer pays cash, the payee receives it

simultaneously, so that a debt is repaid. Therefore, paying by cash has legal significance in both payment and settlement.

As a form of property, e-CNY has the same legal nature as physical money. When a payer makes point-to-point payment to the receiving side, the currency value is transferred from the former to the latter, so that settlement is completed upon payment.

However, in traditional electronic payment, banks and payment institutions generally turn to financial market infrastructure (FMI) such as payment systems in inter-institutional businesses such as consumption, cross-border business, and remittance due to considerations of risk control, liquidity savings, or compliance with regulatory requirements. Therefore, it is of great significance to clarify the final settlement time of FMI and ensure its legal stability.

According to the *Principles for Financial Market Infrastructures (PFMI)* jointly published by the Committee on Payments and Settlement Systems (CPSS) and the Technical Committee of the International Organization of Securities Commissions (IOSCO), "an FMI should provide clear and certain final settlement, at a minimum by the end of the value day. Where necessary or preferable, an FMI should provide final settlement intraday or in real time."

Final settlement requires that transfer of assets and financial instruments or settlement of liabilities in accordance with relevant contractual terms be irrevocable and unconditional.

Settlement finality determines an important time point for dividing the rights, obligations and risks of the receiving and paying banks. The determination of this time point marks the "end" of the legal obligations of the institution providing the collection and payment services in the transaction.

Meanwhile, in traditional electronic payments, legally clarifying the finality of settlement can help prevent the application of the so-called “zero hour rule”.

The “zero hour rule” provides that the bankruptcy of an institution commences from the midnight before the day on which it declares bankruptcy, which voids all transactions made by the institution between midnight and the time of the declaration. Under this rule, despite of the obligatory relationship between commercial banks and payment institutions, and the account holders, once an institution goes bankrupt, the payments it processes from midnight to the time when the court decision comes into effect will be affected, a phenomenon that contradicts the finality of settlement .

Therefore, special provisions are adopted internationally through legislation to exclude the application of the “zero hour rule” in the field of payment and settlement, so as to protect the finality of settlement.

However, the e-CNY naturally provides for the finality of settlement, so it is not subject to the “zero hour rule”, and boasts legal certainty. This is because e-CNY is a property and the user enjoys the ownership of the money in the e-wallet which is not part of the assets of the operating institutions and cannot be listed on their balance sheets.

From the perspective of the e-CNY system, once the payment instruction is verified by the relevant system, it assumes the features of unconditional execution and irrevocability. At the time when the payment and settlement is completed, ownership transfer is done, with settlement finality being ensured.

Therefore, **even if the operating institution goes bankrupt, the e-CNY in the user's wallet will not be affected due to non-applicability of the “zero hour rule”.**

In addition, the e-CNY is a central bank currency, and the PBC is the ultimate provider

of liquidity, a fact that ensures the finality of settlement from another perspective.

To sum up, the value feature of e-CNY ensures users' ownership. The user completes a payment by delivering cryptocurrency strings, and e-CNY ownership transfer signifies the completion of settlement, a process that not only clarifies e-CNY ownership changes between the transaction participants, but also provides legal certainty for the finality of settlement, thus avoiding credit and liquidity risks.