

VoxEU: Central bank digital currency remuneration in a world with low or negative nominal interest rates

A central bank digital currency based on a two-tier remuneration system would be an efficient solution to issues such as bank disintermediation and the assumed incompatibility between negative interest rates and cash-like properties such as zero remuneration, writes **Ulrich Bindseil and Fabio Panetta** for [VoxEU](#)



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Introduction

The possible introduction of central bank digital currencies (CBDCs) has developed into one of the most debated topics amongst central bankers, monetary policy researchers, and members of the payments industry. While so far, the general public and non-bank firms have only been able to access central bank money in the form of banknotes, CBDC is electronic central bank money that is available to all. Changing payment habits of consumers and the rapid progress in payments technology may induce central banks to offer digital means of payments to allow citizens to combine the convenience of modern electronic payments with the advantages of central bank money. The ECB has just published a report on a digital euro (ECB 2020). In this column, we discuss issues relating to the remuneration of CBDC, in particular in a negative interest rate environment

such as that prevailing in the euro area, as well as in countries including Japan and Switzerland.

It is often assumed that CBDC would be designed to have cash-like properties, including zero remuneration. Central bankers and holders of central bank money got used to banknotes representing a risk-free, short-term financial asset with a zero nominal yield, regardless of the level of nominal interest rates. While some consider this feature of banknotes to be an anomaly that could be solved with CBDC (and the discontinuation of banknotes), others argue instead that it is important to preserve this cash-like feature when issuing CBDC. This debate neglects the fact that zero remuneration of CBDC would have different implications depending on the interest rate environment (i.e. depending on whether short-term nominal rates are at 10%, 3%, 0%, or -0.5%).

We propose the adoption of a two-tier remuneration approach to CBDC in order to relieve the tension between two fundamental objectives; (i) to offer CBDC to citizens (in quantities sufficient for it to be used as means of payment) at interest rates that are never lower than those on banknotes (i.e. never below zero); and (ii) to protect financial stability and the effectiveness of monetary policy. The two-tier approach would also allow central banks to offer CBDC in an elastic and unconstrained way to other holders, such as corporates or foreigners. In doing so, it would also make it possible to overcome the perceived dichotomy between 'retail' and 'wholesale' CBDC.

A key quote from the article:

Applying tiered remuneration to CBDC would have a number of key advantages. First, it would allow the retail payment function of money to be assigned to CBDC holdings below the threshold (tier one CBDC), while the store of value function would be assigned to tier two CBDC, which would essentially be dis-incentivised through a less attractive remuneration rate. Indeed, central bank money should not become a large-scale store of value (i.e. a major form of investment), as in that case the central bank would effectively become an intermediary for private savings (a development that would have no particular justification). Second, it would make CBDC attractive to all households, as reliance on tier one CBDC would never need to be disincentivised by negative remuneration. Third, it would help prevent excessive structural and cyclical bank disintermediation. Finally, it would preserve the ability to apply Negative Interest Rate Policy (NIRP), as tier two remuneration could always be applied in such a way that it does not undermine the monetary policy stance.

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