Chapter 42
Central Bank Digital Currency and Financial Stability in a Dual Banking System

Hichem Hamza
Islamic Economics Institute, King Abdulaziz University, Saudi Arabia

Khoutem Ben Jedidia
Higher Institute of Accountancy and Business Administration, University of Manouba, Tunisia & Islamic Economics and Finance Research Unit, University of Ez-zitouna, Tunisia

ABSTRACT

The digitization of payment and the development of private digital currencies have constrained central banks to examine the issuance of their own central bank digital currency (CBDC) in order to face the competition of the new peer-to-peer payment system and the decline of cash use. This chapter addresses the topic of CBDC and places the discussion within the context of dual banking intermediation and financial stability. The design of CBDC in term of accessibility, anonymity, interest rate, and payment mechanism depends on the cryptocurrency use and money characteristics regarding the use of cash and deposit. The CBDC Sharia compliant, free of interest or PLS-based, fulfilling money value stability might be a solution. The effects of CBDC on banking intermediation and financial stability depend importantly on the CBDC design and switch significance of banks deposit to CBDC but remain an open question given the pros and cons arguments. In a dual banking system, Islamic banks could limit the disintermediation effect and maintain financial stability under Sharia compliance.

INTRODUCTION

In the recent years, financial and payment systems are increasingly digitalized thanks to the technology innovations. In this regard, the private digital currencies such as cryptocurrencies are increasingly used in the payment transactions despite the volatility of their prices and the inefficiency of the four main cryptocurrencies, BitCoin, LiteCoin, Ripple, Dash (Caporal, Gil-Alana and Plastun, 2018). The fluctua-

DOI: 10.4018/978-1-6684-7460-0.ch042

tions of private cryptocurrencies exchange rates reinforce the speculative dimension of currency which is forbidden by *Sharia* (Albahouth, 2018). The development and proliferation of private digital currencies continue to be impressive and has constrained central banks to examine the competition coming from the new decentralized payment system. Central banks are likely not expected the velocity of the private digital currencies expansion and worry increasingly about their risks notably on payment and financial system. Risks to financial stability may eventually emerge as the new virtual currencies become more widely used (He et al., 2016). In this context, some central banks (England, Canada, China, Singapore, Sweden) are examining the idea of the issuance of their own Central Bank Digital Currency (CBDC) representing innovation in the payment system and a new form of money. Adopting a CBDC could be an appropriate policy response to curb the risks of private initiatives (Stevens, 2017). So, the declining use of cash in advanced economies and emerging market and the competition from private digital currencies are the main reasons of the CBDC issuance.

CBDC is defined as a new form of money, issued digitally by the central bank as a liability and intended to serve as legal tender and designed for retail payments (Mancini-Griffoli et al., 2018). CBDC would be backed by central bank assets. It would be supported by the credibility of the central bank and the rule of law (Panetta, 2018). There are several roles that CDBC can play such as improving the efficiency of the payment system and being an additional tool to control the monetary and financial system. The CBDC is considered as innovation given the fact that it gives access to central bank currencies for the general public[1]. The design of CBDC is crucial for its implementation success. The principal axes of the design are related to the accessibility, degree of anonymity, free or interest bearing, and centralized or decentralized payment system. From an Islamic perspective, a CBDC *Sharia* compliant as digital fiat currency is a legal tender. The CBDC is in conformity with the Islamic monetary system considering that money issuance should be done by the State which in return limits the excessive money creation and guarantee the money value stability. The CBDC *Sharia* compliant is free of interest or PLS-based which is equivalent to the CBDC interest-based in the conventional system.[2]

In a dual banking system, where Islamic banks[3] coexist with conventional banks, central banks need to evaluate the motivations and opportunities of CBDC issuance and determine which CBDC design fulfills the money functions. The impacts of CBDC on banking intermediation and financial stability depend importantly on the CBDC design and switch significance of banks deposit to CBDC but remain an open question given the pros and cons arguments for the CBDC issuance. There is no experience of CBDC which allow to well assess the macroeconomic effects of CBDC (Grym et al., 2017). Ward and Rochemont (2019) note that whether an array of models for issuing CBDC is under consideration, a "clear proposal is elusive" and the consequences of CBDC require careful assessment. The extent to which CBDC would impact the banking sector and financial stability remains uncertain and depends on the widespread of the substitution of bank deposit by CBDC (Stevens, 2017), the behaviour of economic agents over time, which probably depends also on the specific attributes of the CBDC (Engert and Fung, 2017; Panetta, 2018). Based on survey study, Barontini and Holden (2019) note that, although a majority of central banks are researching CBDCs, this work is primarily conceptual and only a few central banks intend to issue a CBDC in the short to medium term.

In fact, in the conceptual literature about the CBDC two opinions are suggested regarding CBDC challenges and implications for the financial system. First, given the development of private digital currencies and the risk of transfer of bank deposit to CBDC, commercial banks face challenges to their intermediation activity regarding the limitation of their resources and thereby the lending activity (Fung and Halaburda, 2016; Bech and Garrat, 2017; Meaning, Dyson, Barker and Clayton, 2018; Coeuré and

Related Content