CONCEPT NOTE

Financial Innovation and Shadow Banking

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Background

The term 'shadow bank' was coined in 2007 by Paul McCulley to describe risky off-balance-sheet vehicles devised by banks to sell loans repackaged as bonds,[1] and the term 'shadow banking' drew attention with the onset of the 2007-09 global crisis to indicate destabilizing concerns associated with the 'securitizing mortgage loans'. The key intention of identifying shadow banking during the crisis was to highlight the necessity of regulating and supervising the activities to escape potential financial instability. However, over time, the economic and stability benefits of shadow banking have been acknowledged. The thoughts on 'shadow banking' evolved with the changing scope and risk-taking ventures by banks and financial institutions, however, despite similarities the term is not interpreted uniformly and there are wide[2] and narrow[3] versions of interpretation. There are also narrow and broad definitions to measure the size of shadow banking.[4] Because the definitions, the entities, and the nature of products that are considered shadow are not same in different jurisdictions, the size may not always be comparable in a precise form.

Shadow banking is neither illegal nor unethical, these are simply less regulated. There is no doubt that several new forms of 'structured' credit intermediation have flourished in recent years and complexities increased along with the associated risks. However traditionally, the shadow financial market in the developing countries is less complex than that of the developed countries as it involves fewer entity types and fewer steps of financial intermediation.[5] In

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[1] Paul McCulley, referred 'shadow banking' as "the whole alphabet soup of levered up non-bank investment conduits, vehicles, and structures which roughly describes the world of structured finance, which creates and utilizes these types of conduits, vehicles and structures collectively mean 'special purpose entities"[referred by Steven L. Schwarcz in his address on 'Regulating Shadow Banking' in the Symposium on Review of Banking and Financial Law 2011-12:https://scholarship.law.duke.edu/cgi/viewcontent.cgi article].

[2] "Shadow banking involves ways of taking deposits, extending credit, and making payments that do not use the conventional and traditional banking methods; and very often these ways of taking deposits, extending credit and making payments are not regulated or, at least not regulated very much [Steven L. Schwartz, 2012, 'Regulating Shadow Banking, The Review of Banking and Financial Laws': https://scholarship.law.duke.edu]

[3] "There are three basic instruments of the shadow banking industry: money market funds, repos and collateralized securities issued by structured finance vehicles" [Gorton, Gary, and Andrew Metrick, 2010, Regulating the Shadow Banking System, Brookings Papers on Economic Activity, pp. 261–97].

[4] For example, the shadow banking/non-bank financial intermediary assets using three measures of FSB vary widely: 51 trillion or 14% of total(narrow), 114 trillion (intermediate), and 184 trillion or 49% of total(broad) [Financial Stability Board, 2020, Global Financial Report on Non-Bank Financial Intermediation, January, FSB]

[5] Adrian, T., and Ashcraft, A. B, 2016, 'Shadow banking: A Review', 'Banking Crises', Palgrave Macmillan UK.

developing countries, shadow banking expanded and came into focus mainly in the context of addressing the challenge of financial exclusion of the vulnerable sections of the society.

In most developing countries, shadow banking provides alternative payment services, savings instruments, and credit to the underserved sectors; thus shadow banking is also seen as an approach to address unmet demand for the financial services or the demand-supply gap that is not always possible to be addressed by the regulated banking institutions. Alongside greater regulatory burden and compliance requirements, financial technology (Fintech) contributed significantly to the decline of traditional banking and the expansion of shadow banking over the years.[6] The greater trend of adopting and recognizing innovative technology in the context of Covid-19 is adding to the contribution of the Fintech in the financing activities and drawing fresher attention to the benefits and concerns of shadow banking. The concept note is about putting forward a few open proposals with the goals of streamlining and sustaining shadow banking innovative financing products that have emerged and are evolving in the financial arena of the country.

Financial Innovation and Shadow Banking

Evolving technology and innovation are said to be the main catalysts for the development of shadow banking. Technology-driven financing products and innovations within an environment of low or very limited regulatory and compliance requirements have enabled entities and banks to deliver payment, savings, and credit facilities quickly and at lower costs. To utilize financial services as a tool for poverty reduction, several types of innovative financial measures are implemented commonly across the region as part of broader financial inclusion strategies. And, there are opinions that these kinds of shadow nature of banking may not necessarily be the sources of instability, rather sometimes these are essential for financial stability and crucial for sustainable finance and growth.[7]

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[6] "A quantitative model suggests that regulation accounts for roughly 60% of shadow bank growth, while technology accounts for roughly 30%" [Greg Buchak, Gregor Matvos, Tomasz Piskorskic, Amit Serud , 2018, Fintech, regulatory arbitrage and rise of shadow banks Journal of Financial Economics, v-130, Issue 3, December 2018, Pages 453-48].

[7] Tasky (2019) illustrated Dr. Atiur Rahman, former governor of BB's view in his article on shadow banking and quoted "Financial inclusion, supports financial stability by providing banks with a more diversified funding and loan base. Individual financial institutions, in other words, are more resilient when they draw their funds from myriad small savers rather than just a few big firms or entities, and when they lend to a multiplicity of small borrowers rather than just a few big corporate clients." [Glenn Tasky, 2019, Shadow Banking, Financial Technology (Fintech), and Financial Inclusion, SEACEN Financial Stability Journal, Vol-1, 2019: https://www.seacen.org].

During the Covid-19 pandemic, technology has created new opportunities for digital financial services to accelerate and enhance financial inclusion, and the role of digital financial inclusion became vibrant in mitigating the economic and social impact of the ongoing Covid-19 crisis. There are now ample pieces of evidence to show that digital finance is crucial for financial inclusion; these innovations are complements to the traditional banking and financial services; and these services are faster, more efficient, and cost-effective for reaching lower-income households and small, micro, and cottage enterprises. However, the developments are also accompanied by stability risks, cybersecurity concerns, and consumer protection fears that require special attention to the management and policymakers. Moreover, technology-driven innovations are bringing fresher challenges to the existing anti-money laundering frameworks in the financial sector.[8] However, imposing stringent regulations and supervisions might be counterproductive and may further incentivize shadow banking activities.[9] Rather, a regulatory approach would be required for a delicate balance of promoting innovations and stability risk minimization [10]

In Bangladesh, technology-driven innovation and shadow banking expansion are mainly associated with financial inclusion drives. Technology adaption helped to promote mobile banking, agent banking, and other digital payment and financing services in recent years and especially in the Covid-19 situation. The Covid-19 disruption prompted market players and the policymakers of the country to encourage technology-driven financial services and, financial services through Automated Teller Machine (ATM), Point of Sale Terminal (POST), Mobile Financial Service (MFS) Providers, and Agents started expanding readily. As of June 2020, 15 banks were offering mobile financial services and 24 banks were already in agent banking operations throughout the country, and there were notable growths in the number of agents, registered

[8] "The changing technology based payment and financing patterns are bringing enormous convenience to the banks and clients, however offenders are using these to launder money and causing new challenges to the traditional counter-money laundering system" [BIBM, 2017, Money Laundering in New Payment Systems: Bangladesh Context, BIBM].

[9] "Implementation of more stringent regulation and compliance requirement in the coming days might further push the banks and financial institutions to shift part of their activities outside the regulated environment and therefore increase shadow banking activities" [Sheng, Andrew and Nd Chaw Soon, 2016, 'Shadow Banking in China: An Opportunity for Financial Reform', Fung Global Institute Limited, Wiley.com]

[10] "Policymakers will also need to consider novel approaches to ensure high-quality supervision and regulation, support the safe use of innovative technologies while ensuring that regulation remain proportionate to the risks. Fortunately, supervisors across countries have recognized the need to adapt regulatory approaches that strike the right balance between enabling financial innovation and address challenges and risks to financial integrity, consumer protection, and financial stability." [IMF, 2020, The Promise of Fintech- Financial Inclusion in the Post Covid-19 Era, No-20/09, IMF: https://www.imf.org/en/Publications/Departmental-Papers-Policy-Papers/Issues/2020/06/29/]

clients, and number & volume of MFS transactions.[11] Some banks are extensively working to introduce newer digital products[12] and experimenting with digital solutions.[13] A few green banking ventures of the financial sector of Bangladesh are innovative solutions that have notable implications for the financial inclusive drives.[14] The success and sustainability of these initiatives would be remarkable in reaching the unreachable with the banking and financial services by the formal sector market players of Bangladesh. Practically, destabilizing shadow innovations are hardly present in the inclusive finance landscape of the country.

Despite notable beneficial feature and stability attributes of the technology-driven inclusive drives, there are concerns that the absence of monitoring may tempt less regulated players to get into risky endeavors that promise very high returns. Sometimes, some risky activities and malpractices may take place at the levels that are outside the regulatory or the management purview of the banking operations. It is also not easy for banks to have control over all the activities that are outsourced for cost-effective service delivery.[15] With the absence of adequate consumer protection and monitoring measures, regulated banks may come across reputational risk, credit risk, and crime risks.[16] These shadow banking entities and activities are not risky inherently, however, under certain circumstances, these entities/agents may become fragile and might be subject to panics.[17] Shadow banking can affect the stability of the banking sector when

[11] BIBM (2020) Review of the Sustainable Banking Operations by Banks in Bangladesh, September, BIBM, Dhaka.

[12] The City Bank, along with bKash, launched the country's first collateral-free instant digital loan service; Bank Asia has decided to form a subsidiary Digital Bank subject to necessary approval from the regulator.

[13] Standard Chartered Bank (SCB) piloted first LC transactions in Bangladesh using blockchain; SCB, bKash, and Valyou of Malaysia are at the final stage of commercial testing of blockchain based cross-border remittance service.

[14] Around 80% clients of the green finance are CMSMEs, and 70% belong to the rural areas [BIBM Review, 2020].

[15] For example, banks commonly receive complaints from customers about getting fake notes from ATM booths; third parties upload money in ATMs and there are scopes to manipulate.

[16] In agent banking operation, the agent is the flag-bearer of that bank in the locality, therefore, any unlawful activities by the agent, in turn, will diminish the image and reputation of the concerned Bank; loan proposals processed by Agents/Agent banking outlets are not subject to same extent of scrutiny/regulation as that of traditional loan proposal, which in turn, may cause deterioration of overall asset quality of the Bank.

[17] "Use of mobile apps has made informal cross-border remittance transactions vibrant and extremely easy; sometimes, remitters and recipients do not even know that these services (without engaging a bank) are illegal" [Habib, Shah Md Ahsan, 2017, Ensuring Greater Penetration of MFS in Remittances, Financial Express]; a recent news of fund embezzlement by the employees of a digital mobile banking service under Bangladesh Post office is a terrible incident for the fast growing digital financial services industry; the continuation of such incidences may cause panic and affect the confidence of the people on the services.

there is significant market interconnectedness[18] between banks and nonbanks, and there are scopes of maturity and liquidity transformation.[19]

Country Context and Open Proposals

In the context of Bangladesh, the financial sector is dominated by banks. The activities of NBFIs engaged in leasing, infrastructure finance, housing finance, securities activities, etc. are growing however this market component is yet to achieve the expected level of maturity. MFIs have been playing notable roles in offering financial access to a considerable portion of the rural population; and the insurance market, the key protectors of financial compensation and losses, are evolving. Operations of these institutions (banks, NBFIs, MFIs, and insurance companies) are regulated and supervised[20], however not all these institutions are regulated and monitored following uniform stringent criteria like regulatory arrangement, supervisory arrangement, reporting arrangement, capital and prudential requirements, consumer protection arrangement, and access to regulatory support. Other than these recognized financial sector market players, the postal department of the government and the cooperatives of the country have been engaged in some forms of financing activities for long. These entities (postal department and cooperatives) are not regulated or monitored following standard financial sector regulatory criteria. MFS providers and mobile payment service providers or operators are relatively new in the financial arena and are increasingly getting involved with the financial institutions to deliver technology-driven financial services. Though these entities have regulatory and supervisory arrangements, these are hardly under capital and prudential requirements, consumer protection arrangements, and access to regulatory support in case of financial distress.

Capital market-related activities like services by the brokerage houses, merchant banks, and alternative investment funds are recognized shadow banking activities throughout the globe. Banks of the country are adequately regulated and NBFIs also appears to be regulated following standard financial sector regulatory criteria, however, certain linkage activities of these entities

[18] Regulated banking institutions have serval programs and arrangements with the non-bank entities like MFIs, insurance companies, mobile financial and mobile network service companies etc.

[19] MFIs that issue exclusively short-term microcredit cannot adversely affect systemic stability but it is very difficult to ensure that all MFIs are utilizing deposit and funds from banks to finance micro lending; because of the week monitoring arrangement, there are anticipations that MFIs are diverting funds for many other enterprise development long term investments); a section of MFIs may face liquidity problem as well as default risk as they borrow short term from banks and fund providers like PKSF but utilize the funds for non-Agri and non-micro credit operations.

[20] Financial sector regulators include Bangladesh Bank (BB), Micro Credit Regulatory Authority (MRA), Insurance Development and Regulatory Authority (IDRA), and Bangladesh Securities and Exchange Commission (BSEC).

may have shadow elements/components like mobile financial services, agent banking activities, linkage credit of banks, and NBFIs, factoring, etc.[21]

The above-mentioned entities and activities are different in terms of regulatory stringency and have less regulated or shadow components and elements. However, all less regulated financial services do not have uniform destabilization impacts and need to be delicately regulated to accrue the beneficial impacts in addressing financial exclusion and poverty of the country. Innovative and technology-focused financial inclusion drives have become an even more powerful development tool in the context of the Covid-19 situation to support vulnerable enterprises, households, and individuals. Inadequate regulation and monitoring of these activities might cause instability while too stringent regulation may deny benefits.[22] Especially, the regulatory and monitoring arrangement is needed to ensure transparency, customer identification, and mandatory redress of customer complaints. Besides, certain issues of distortions due to differential regulatory implications in the innovative financing market should not dis-incentivize the ongoing movements. In this country context, the concept note put forward the following open proposals:

Proposal 1: Intending to consolidate financial stability efforts, Bangladesh needs to map payment, deposit, and credit services by the shadow banking entities and as part of their activities by adopting a set of suitable definition (narrow to broad) based on certain regulatory criteria: regulatory arrangement, supervisory arrangement, reporting arrangement, capital and prudential requirements, consumer protection arrangement, and access to regulatory support. Shadow entities and shadow activities need to be categorized based on their beneficial impacts (financial inclusion, socio-economic development) and stability risks (liquidity risk, leverage risk, interconnectedness and contagion risk, crime risk, etc.) and their movements should be under continuous monitoring.

Proposal 2: For fair market competition and efficiency, all innovations for financial inclusion should have similar regulatory and business incentives. MFS providers should be brought under uniform but soft regulatory control (mainly to follow certain procedures and furnishing certain information) or monitoring management for ensuring transparency and customer protections. Agent banking activities and linkage arrangements should be under monitoring scanner by the regulated banks/NBFIs to handle reputation and crime risks under a given ‘guidance framework’ adopted by stakeholders’ consultations.

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[21] Habib, Shah Md Ahsan, 2019, Shadow Banking Series, Financial Express, November, Dhaka.
[22] According to Dr. Atiur Rahman, “the absence of adequate regulation may allow a credit bubble to develop, causing a generalized financial crisis, but if regulation is too stringent, many creditworthy people will be denied access to all financial services.” [Tasky, 2019].

Proposal 3: Management of banks and financial institutions should set up their monitoring, capacity development, disclosure, and customer protection arrangement to handle risks associated with their shadow banking activities and elements like mobile banking, agent banking, and linkage programs. Regarding linkage events and interconnectedness, the less regulated entities should be under continuous monitoring of the regulated banks and financial institutions for their own sake. Considering contagion risk, consortiums of MFS, and agent banking service providers should undertake collective efforts and a uniform risk management approach.

In conclusion, monitoring and risk management initiatives on the part of market players (banks/NBFIs) would be the best way to escape possibilities of confronting stringent regulatory framework by the ongoing financial innovations associated with mobile banking, agent banking, and other financial inclusion drives targeting smaller enterprises and vulnerable sections of the society.