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Islamic Banking Liquidity Management in Bangladesh: *Sukuk*

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Abstract:- The entire banking industry either conventional or Islamic banks is crucial requirement to maintain liquidity position by effectively and cautiously. This article tries to explain the necessity of proper Islamic securities for liquidity management in Islamic banking industry of Bangladesh. Also this paper attempt to explore the newly formed *sukuk* bond structure and its further developing aspect in Bangladesh. In analysis, this paper finds issuing *the Shariah*-compliant *sukuk* seems beneficial for liquidity management in Islamic banking industry. Moreover, this Islamic bond helped to Islamic banks to maintaining required Statutory liquidity ratio (SLR) with the central bank as well as supporting implementation of developing and infrastructure government projects. The study suggested some possible recommendation includes *shariah*-based regulatory and implementing authorities; secondary vibrant Islamic bond market; fiscal initiatives like tax exemption, waiver on source-tax on *sukuk; mudarabah* for BGIIB like bond and *musharakah* principle underlying contracts for government public private partnership (PPP) projects would be pondered for the greater economic activities and GDP growth.

Keywords: Islamic Bank, Liquidity Management**,** *Sukuk*, *Shariah*, *Ijarah*, *Mudarabah*, *Musharakah*, SLR.

I. INTRODUCTION

Bangladesh is one of the speediest emerging economies both in South Asia and the overall world. As per 2022 census report, about 91.04 percent of Bangladeshi population is following Islam as their religious belief, whereas the minorities are among Hindus (7.95%), Buddhist (0.61%), Christians (0.30%), others (0.12%). Being Islamic majority, *Shariah*-based banking is expanding rapidly in Bangladesh.

Islamic banking started in 1983 in Bangladesh, is increasingly contributing economic development through financial sector. Islamic banks can provide efficient banking services to the nation if they are supported with appropriate banking laws, and regulations (Sarker, M. A. A. 1999). Since emergence, Islamic financing (*shariah*-based banks, financial institutions-FIs, insurance companies) are spreading, and conventional banks, FIs, insurance companies are also providing branch or window *shariah* operation.

Liquidity management turns undoubtedly most crucial task for banks. Problem with access to liquidity management instruments constitutes one of the most serious problems and largest challenges for Islamic banks (Iwona Sobol, 2013). Considering liquidity management as most crucial concern, proper government security for *shariah*-compliant banks is very highly required for Bangladesh also.

Increasing Islamic banking activities in Bangladesh always require and look for potential liquidity management tool for efficiently handling excessive surplus Islamic liquidity. With only government Islamic security-Bangladesh Government Islamic Investment Bond (BGIIB) till FY[1]20, Islamic banks could not properly manage their ample liquid assets due to certain limitation of BGIIB. The first sovereign investment *Sukuk*[2] introduced in FY21 got huge feedback. Investors' deep interest in Islamic securities was disclosed through the auction result of first *sukuk*; it was over-subscribed nearly by six times. The similar scenarios were observed in the second and third *sukuk* also, reflecting bright prospect of this newly formed bond in Bangladesh Islamic sector.

[1] FY refers to Fiscal Year, starting from July of a particular year and ending at June of the following year in Bangladesh.
[2] *Sukuk*(كصكو), the plural of Arabic word *ṣakk*(كص); mean 'legal instrument', 'deed' or 'check' in Arabic language. As per Islamic financial concepts, *sukuk* refer to any document representing a contract or conveyance of rights, obligations or monies done in conformity with the *Shariah;* which differ from conventional bonds in terms of structure, rate, legal rights and underlying contracts. Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) identifies *sukuk* securities of equal norm showing integral ownership of tangible assets, usufructs, services, or equity of a certain investment.

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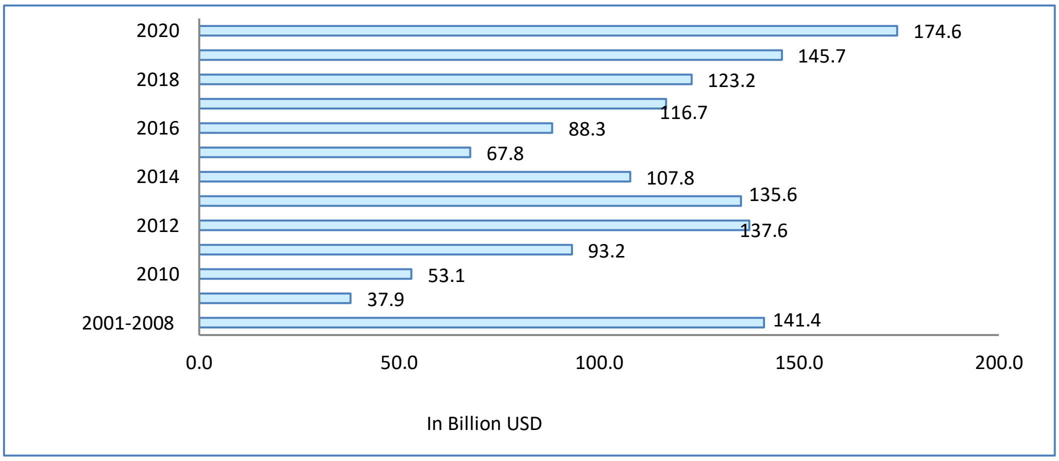

Chart-01: Global *Sukuk* Issuance

Source: International Islamic Financial Market (IIFM) *Sukuk* Report (2021).

Sukuk, refer to Islamic financial certificate complying with *shariah*-law, differ from conventional bonds respective to structure, rate, rights and contracts; is increasingly issuing worldwide. Global sovereign *sukuk* issuance has increased by 19.8% in 2020 and stood at USD 174.6 billion (Chart-01). International Islamic Financial Market (IIFM) Sukuk Report (2021), states this steady trading during 2020 was due to issuances from Asia, Gulf Cooperation Council-GCC, and Africa.

In Bangladesh, *sukuk* has recently issued, whereas 1st and 2nd *sukuk* based *Ijarah*-mode, and 3rd *sukuk* on *Istisna'a* and *Ijarah* principle emerged at FY21 & FY22; received oversubscribed feedback from institutional and individual level. It implies investors' deep interest and brighter prospect of *sukuk* bond. Islamic bond issuance is utilizing in implementing Bangladesh government developing and social projects such as safe water supply, primary education and rural infrastructure, which would definitely contribute positively to the economic growth. Besides, that increasing issuance would solve liquidity management problem of Islamic banking.

Therefore, in this study, we will seek whether issuing *shariah*-compliant *sukuk* is returning with benefits like supporting finances to government projects, impacting financial sector; and will identify possible new recommendations regarding implementing and adoption of this bond. To do so, we will follow certain descriptive statistics tools and analysis.

The followings are as proceeds: section 2 provides a brief of literatures and section 3 narrates research objectives. Then section 4 discusses about methodological approach of the work with variables list and data sources. Next, section 5 supplies with a discussion of the analysis, findings and recommendations. Finally section 6 concludes the study with remarks.

II. LITERATURE REVIEW

For this research, extensive literature is reviewed and studied for clearly understanding the process of liquidity management by Islamic banking sector in Bangladesh as well as other countries. As liquidity management carries much intricacy; so scholars and researchers are actively working find out the risks, challenges and prospects containing with this mechanism for *shariah* banking. Among various published works (Articles, Journal, studies, publications and etc.), the followings suffice this research quest and assist in attaining objectives of this work.

A. Islamic liquidity management (ILM)

Sobol, I. (2013) discussed about liquidity management practices in Islamic banking and stated the variousliquidity risks in this sector. The author also identified selected instruments used by Islamic banks for ILM. In that research, commodity *murabaha* and *ijara sukuk* as instruments, were analyzed and found containing many drawbacks such as hardly trading in secondary market, and inability to trade across countries.

Ismal, R. (2010) tried to assess liquidity risk management (LRM) practices in Indonesian Islamic banking industry for the timeline of 2000-2007. The paper illustrated LRM index (100-scale) by individual asset-liability index and LRM policies. According to the author, this mechanism provided 'good' grade for three Islamic banks (capturing 82% of total market share) in Indonesia. However, researcher suggested progressive actions by regulators and participants to optimize LRM practices in Indonesia.

Mohamad, A. A. S., Mohamad, M. T., & Samsudin, M. L. (2013) empirically tried observing Malaysian Islamic banking liquidity management process in response to changing on several factors. The study used dynamic panel data estimation technique for 17 Islamic banks. The authors proved that macro-control variables impacted ILM behavior; and it was affected by level of bank management and Malaysian economic cycle. They recommended some policies including consistency between purpose and goal of

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advances, and stable competitive rate of return of bank deposits with reducing gap period from long-term funding to short-term depositing.

Akhtar, M. F., Ali, K., & Sadaqat, S. (2011) attempted to evaluate liquidity risk management with comparative analysis between conventional and Islamic banking in Pakistan over period of 2006-2009. The authors investigated solvency risks (proxied by cash to total assets) through firm sizes, networking capital, ROE, ROA, capital adequacy based on secondary data. The study resulted that bank sizes and net-working capital had insignificant positive impact in both banking practices, while capital adequacy for conventional and ROA for Islamic banking had positive significant influence.

Ali, S. S. (2013) used three measures of liquidity for analyzing risk management practices of Islamic banks across countries, and comparison with conventional banking. Author suggested new instruments and infrastructure for liquidity risk management and proposed fresh approaches for this.

B. Islamic liquidity management (ILM): Sukuk

Wilson, R. (2008) attempted to examine different *sukuk* structure including *murabahah* (fixed return) and *ijara* (variable return). Besides, author also looked at potential other more novel *sukuk* based on *musharakah* partnership contractsand explored pricing issues (London Inter-bank offer rate as benchmarks). The study concluded that SPVs are prerequisite while GDP-based pricing benchmarks might result in greater payments stability for sovereign debt.

Ahmad, N. W., Ripain, N., Bahari, N. F., &Shahar, W. S. S. (2015) aimed to supply insights regarding growth and prospect of *sukuk* in Malaysia. The authors emphasized on *sukuk* growth as well as role in time of financial crisis, while concluded with outpacing movement with larger opportunities.

Kusuma, K. A., & Silva, A. C. (2014) identified key issues preventing development of *sukuk* global market. This policy research working paper offered approaches for domestic *sukuk* market development with accessing internationally. Domestic marketing needed to establish well-functioning money market, efficient primary markets and securities-offering regimes, robust and diversified investor-base, infrastructure for trading, price-transparency, and clearing & settlement, derivatives market and risk hedging tools and credible regulatory framework. Internationally accessing required, policy makers or potential *sukuk* issuers should consider legal foundation, taxation, governance, and obligors' credit rating.

C. ILM in Bangladesh: Sovereign Investment Sukuk

Islam, M. M., & Chowdhury, H. A. (2009) focused on comparative liquidity analysis between Islamic (here IBBL) and conventional bank (AB bank ltd.) of Bangladesh over period of 2003-2006. Considering short-term, long-term and maturity-wise liquidity, estimation was done through calculating liquidity gap. The result showed that in shorter-term, Islamic bank comparatively performed better than the conventional one. While examining key performance indicators (KPIs), authors found that profitability ratio had greater impact on liquidity situation, whereas for both banks, KPIs like EPS, P/E ratio, ROE, ROA had strong role in measuring liquidity-extent.

Das, B. C., Chowdhury, M. M., Rahman, M. H., & Dey, N. K. (2015) targeted to depict liquidity-management of Private commercials banks (PCBs) in Bangladesh with profitability analysis. The researchers used deposit, advance, profit, ADR & profit growth of three generation-based banks for the calculation. The paper concluded proper liquidity-management enhanced profitability, while excess liquidity decreased it.

Rahman, M. L., & Banna, S. H. (2015) accessed liquidity risks in Bangladesh by comparative estimation between conventional and Islamic banking (three of the each type). The authors considered variables-bank sizes, ROE, ROA, capital adequacy, net working capital and secondary data of the period 2007-2011. Liquidity risk was proxied by cash to total asset ratio. The study found insignificant positive impact of bank sizes and net working capital for Islamic, whereas size negatively impacted conventional banks' risk. ROA had positive influence over traditional banks risk, while that was inconclusive for Islamic banks.

Sarker, Md. Abdul Awwal. and *et al* (2019) discussed about liquidity management instruments for Islamic banks in Bangladesh. In this special research work based on empirical survey, authors explored ILM various aspects and new financial instruments for *shariah* based banks. Researchers highlighted instruments used by the Central Banks of Bahrain and Malaysia and concluded with recommending instruments for Bangladesh which are Bangladesh Government Islamic Treasury Bill (BGITB), Bangladesh Government *Ijarah Sukuk* (BGIS) and Unrestricted *Wakala*h alternative to Repo and Reverse Repo.

Sarker, M., & Awwal, A. (2015) narrated various Islamic monetary policy instruments by OIC central banks' and examined *shariah* based instruments of Malaysia, Sudan, Bahrain, Iran and Bangladesh. For Bangladesh, researcher recommended two new monetary policy instruments: Central Bank *Mudaraba Sukuk* (CBMS) and Government *Murabaha Sukuk* (GMS). As per study, non-tradable CBMS might be issued weekly to Islamic banks' and non-bank Islamic financial institutions' (NBIFIs) for OMOs-open market operations which could enhance income generating activities and assist in efficiently managing excess liquidity. Besides, non-tradable GMS should be applied with govt. T-bills/bonds for financing imports of food & non-food items say petroleum.

Rahman, A. (2021) critically evaluated challenges and prospects of *sukuk* in Bangladesh from identifying legality and inevitability of this *shariah*-compliant Islamic bond. Authors proposed a *sukuk* structure for application considering its jurisdictions, investors, and economic circumstances.

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Ullah, M., Miah, M. N., Arefin, M. S., & Alamin, M. (2022) descriptively analyzed the underlying prospects of *sukuk* bond in Bangladesh. The study covered Muslim population, economy size, Islamic banking size and their excess liquidity, per capita income, institutional infrastructure, formation of national *Shariah* board and trend of *Sharia*h-based indexes for identifying necessity of this bond in Bangladesh. The researchers recommended that institutional capacity as well as market infrastructure should be developed with implementation of an Islamic capital market & a *sharia*h-based regulatory and supervisory structure.

The above discussion, has implied importance of Islamic banks liquidity management-ILM and confirmed *sukuk* as an effective instrument for Islamic money market of Bangladesh as well as other countries. Considering these, this study will seek for answering the question: Is recently issued *sukuk* worth of removing or preventing problem of Islamic banks regarding their ILM?

III. STUDY OBJECTIVES

In case of Islamic banks' excess liquidity management, Sovereign Investment *sukuk i*s an optimistic and inspiring financial introduction. Besides, this Islamic bond is also being used in implementing many government social projects. With these aspects, this study paper targets to verify the necessity of Sovereign Investment *sukuk* in efficient liquidity management by Islamic banks in Bangladesh. So, followings are the main objectives of this paper:

- Introducing Islamic banking sector of Bangladesh and its excess liquidity situation;
- Presenting various liquidity indicators for justifying scope of applying *sukuk*;
- Representing structure of recently issued *sukuk* and their implications;
- Recommending some policies and possible new *sukuk* for improving financial sector from macro-economic viewpoint.

IV. METHODOLOGY OF THE STUDY

A. Method

This study mainly aims for identifying various implications of newly issued *sukuk* and their future scope for enhancement and more utilization of this distinguished Islamic security in Bangladesh. For the purpose, this paper will follow descriptive analysis approach for denoting the research findings. Graphical and tabular based descriptive statistics would be used and applied for analyzing research results. Software packages of Microsoft Excel, Microsoft Word are heavily used in this study for analysis.

B. Variables selection

This study selects some variables appropriate for explaining the research objectives. These variables are mainly taken as annual (time-series) statistics of different fiscal years and/or calendar years. Here are the details of selected variables:

Total deposits: It comprises of demand deposits and time (term) deposits of the banking industry. At least five fiscal years total deposits data of overall and Islamic banking are collected;

Total investments: Advances and bills are added for denoting Investments. Previous five fiscal data of overall and Islamic banking investment are gathered;

Agriculture credit: Disbursing of credit flows are used from five previous fiscal years;

Remittance: Earnings of expatiates from five previous fiscal years are used;

Excess liquidity: Subtracting required level from total liquid assets is excess/surplus liquidity. Five year of previous fiscal years data is collected;

BGIIB bond: Net balance = (sale-financing) of BGIIB bond is calculated from FY04 to onwards;

Liquidity Indicators: Data of liquidity indicators id collected from 2013 to onwards; Here are used four types of indicators; Liquidity coverage ratio(LCR), Liquidity asset ratio, Liquid assets to short-term liabilities and Net stable funding ratio (NSFR).

BGIS: Net issuance or balance of BGIS (Bangladesh Government Investment *Sukuk*) from FY20 to onwards is used.

C. Data sources & Collection

For qualitative and theoretical ideas, relevant literatures including articles, journals, working paper and newspaper reports are searched. On the other hand, quantitative statistics/information are collected from numerous secondary sources, mainly from International Islamic Financial Market (IIFM) *Sukuk* Report (2021), quarterly publication and annual report of Bangladesh Bank (BB), Prudential and Structural Islamic Financial Indicators (PSIFIs) of Islamic Financial Services Board and etc.

V. ANALYSIS AND DISCUSSIONS

This section exhibits the analysis results and would provide a discussion of the findings regarding the research objectives and targets.

A. Islamic banking sector of Bangladesh

Islamic banking activity is accelerating at present time worldwide. In the global banking assets, Islamic banking has almost 6% share as per the report of Financial Services And Investment Intelligence. Since inception in 1983, Islamic banking is gaining significance and enhancing market share in Bangladesh banking sector. As of FY22, 10 full-fledged Islamic banks, 9 Islamic-branch and 14 Islamic-window of conventional banks are operating in Bangladesh, whereas total branches are 2207 (20.13% of overall banking branches).

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Operating for almost four decades, Islamic banking deposit and investment have reached at BDT 4123.41 billion and 3818.29 billion as of end FY22.The market share of deposit and investment are 26.19% and 28.52% respectively as on FY22, indicating strong hold of market position. In addition, excess liquidity of Islamic banks is BDT 260.09 billion (13.74% market share) as of end June, 2022. This implies Islamic banks excessive surplus liquidity problem due mainly to absence of proper monetary policy instrument and its utilization. As available government securities (T-bills/bonds) are interest bearing nature, Islamic banks could not invest on these money market tools and suffer since long from surplus liquid assets problem.

Comparative market performance of Islamic banks during current and previous fiscal years, and their market share with overall banking industry during last five years data is presented on Table-01 and Table-02. From those tables, it is cleared that Islamic banks are focusing on broader sense of business as financing in multiple sectors like agriculture, small and medium enterprises-SMEs.

(In Billion BDT)

Items	FY21		FY22	
	Overall banking	Islamic banking	Overall banking	Islamic banking
Total deposits*	13504.14	3681.63	15743.78	4123.41
Total investment (loans & advances in conventional)**	11905.16	3279.43	13387.26	3818.29
Remittances	2101.31	751.38	1815.80	693.47
Total excess liquidity	1696.51	363.65	1892.68	260.09
Total number of branches	10788	1802	10963	2207
Total agricultural credit@	255.11	51.76	288.24	63.80

Table 01: Performances of Islamic banks comparing Overall banking in Bangladesh (FY21 & FY22)
*excludes Inter-bank and Govt. deposits;

Source: Various issues of quarterly publication, Bangladesh Bank.

** includes advances & bills (import and inland);
@ Agriculture credit means disbursing credit flow (period-wise);

As Islamic banks follow *shariah*-compliant investment and product; respective to operational risks, challenges and obstacles are more complicated compared to conventional types. With these, Islamic banks are showing their capability since emergence, and contributing in economic growth by routing deposits to right financing.

(In Percent)

Items	FY18	FY19	FY20	FY21	FY22
Total deposits	23.21	23.77	24.67	27.26	26.19
Total investment	23.93	24.26	25.03	27.55	28.52
Remittances	33.66	31.45	47.88	35.76	38.19
Total excess liquidity	6.63	7.20	6.69	21.44	13.74
Agriculture Credit	40.16	37.13	13.90	20.29	22.14

Table 2: Islamic banks' share in banking sector of Bangladesh (FY18 to FY22)

Source: Various issues of quarterly publication, Bangladesh Bank.

B. Recently issued sukuk in Bangladesh

For expanding *shariah* based financing in development activities, Government of Bangladesh (GoB) on October 08, 2020 introduced Bangladesh Government Investment *Sukuk* (BGIS) Bond by notifying 'Bangladesh Government Investment *Sukuk* Guidelines, 2020'. Accordingly, government had issued three sukuk (BGIS) bond under *Ijarah* and *Istisna'a* mode from banking source (Islamic banks, Islamic windows, Conventional banks) and non-banking sources (Individual Investor, Others). *Sukuk* certificates held by banks and non-bank financial institutions-NBFIs on own account qualify as approved securities for SLR requirement.

Sukuk rent (profit) to be paid on a semi-annual basis, and investors will receive profit at 4.69% for 1st *sukuk*, 4.65% for 2nd *sukuk*, 4.75% for 3rd *sukuk* on their total investment (fixed on rate of 06 month BGIIB). Three parties are involved in *sukuk* named as originator, special purpose vehicle (SPV) and investors. Bangladesh bank (BB) acts as SPV on behalf of Finance division, Ministry of Finance (originator), had issued BDT 80.0 billion through 1stSukukin FY21. BB as SPV also had issued 2nd and 3rd *sukuk* during FY22 each of BDT 50.0 billion.

1st *sukuk* was issued by two tranches auctions for 05 year tenor project 'Safe Water Supply to the Whole Country'. On December 28, 2020, first auction for BDT 40.0 billion was held and received oversubscribed response amounting BDT 151.53 billion, while second auction for issuing another BDT 40.0 billion on June 09, 2021 also received oversubscribed response extent of BDT 327.26 billion. So, 1st *sukuk* was over-subscribed nearly by six times (considering both tranches auction).

During FY22, government again notified offer of *Ijarah sukuk* for two other projects of 05 years tenor each. Accordingly, BDT 50.0 billion was funded with 2nd *sukuk* issuance on December 30, 2021 for 'Need Based Infrastructure Development of Government Primary Schools Project (1st Phase)'.During 2nd *sukuk* auction for BDT 50.0 billion, oversubscribed feedback was identified of BDT 233.04 billion. So, 2nd *sukuk* auction got feedback by 4.6 times oversubscription. Moreover, 3rd *sukuk* auction of BDT 50.0 billion was held on April 20, 2022 for developing project named 'Important Rural Infrastructure Development Project on Priority Basis-3 (IRIDP-3)', but that was oversubscribed response by BDT 123.06 billion (3rd *sukuk oversubscribed* by 2.5 times).

Excessive oversubscription from 1st, 2nd and 3rd *Sukuk* auction implies client's deep interest and bright prospect of *sukuk* bonds in Bangladesh, which should be identified and utilized properly in government infrastructure projects implementation. As of end June 2022, the outstanding balance of *sukuk* stood at BDT 180.0 billion. Chart-02 indicates *sukuk* issuance during FY21 and FY22 by source-wise.

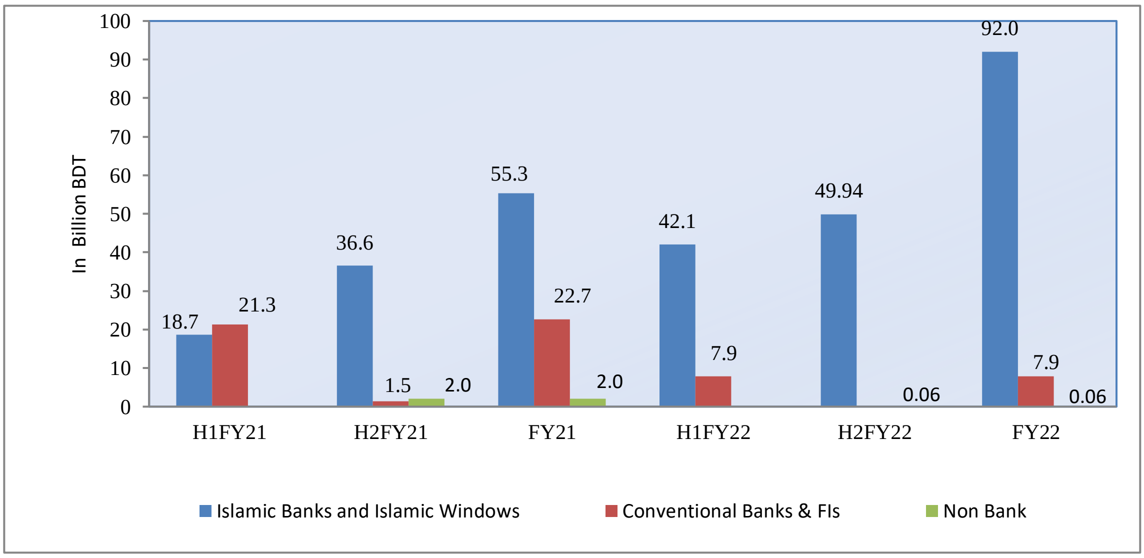

Chart 02: Issuance of *Sukuk* by source-wise (FY21 & FY22)

Source: Debt Management Department, Bangladesh Bank

C. Liquidity Indicators of Islamic banking

For identifying banking industry capacity, liquidity indicators act significantly. Actually these indices show bank's potency of fulfilling its financial obligation in short-term. We have calculated and showed four types of ratio[3] used as liquidity indicators worldwide, which are: liquid asset ratio, liquid assets to short-term liabilities, liquidity coverage ratio (LCR), and net stable funding ratio (NSFR).

Below chart-03 depicts that liquid asset ratio remained above 20 percent till 2018, whereas this slightly declined and roamed around 15 percent from 2019 to 2021; highlighting Islamic banking having liquid asset enough for any cash demands. Liquid assets to short-term liabilities exhibits upward nature from 2013 to 2017, but decreased during 2018-2020, and experienced sharp decline in 2021. This denoted higher short-term deposit withdrawal pressure in 2021 due to economic slower pace by adverse effect of Covide-19.

Liquidity coverage ratio (LCR), measures bank's need for liquid assets in a stressed situation over following 30 calendar days; and minimum requirement for LCR must be greater or equal to 100%. From Chart-04, LCR maintained by Islamic banking never goes down to 100% during 2015 to 2021[4], showing strong holding of liquidity against any disturbances or crisis. On the other hand, NSFR indicates bank's requirement of liquid assets in stressed environment over one year period; and minimum requirement of NSFR is greater than 100%. We can see that Islamic banking well maintained the NSFR ratio above 100% during reporting timeline, appearing Islamic banking having necessary resources for one-year time horizon in case of financial adversities or shocks.

[3] liquid asset ratio = liquid asset/ total asset, liquid assets to short-term liabilities= liquid asset/short-term liabilities, LCR= high quality liquid assets/ total net cash outflows over next 30 calendar days, NSFR= Available stable funding (ASF)/ Required stable funding (RSF) over a one-year horizon.

[4] During 2013-2014, LCR & NSFR data not available.

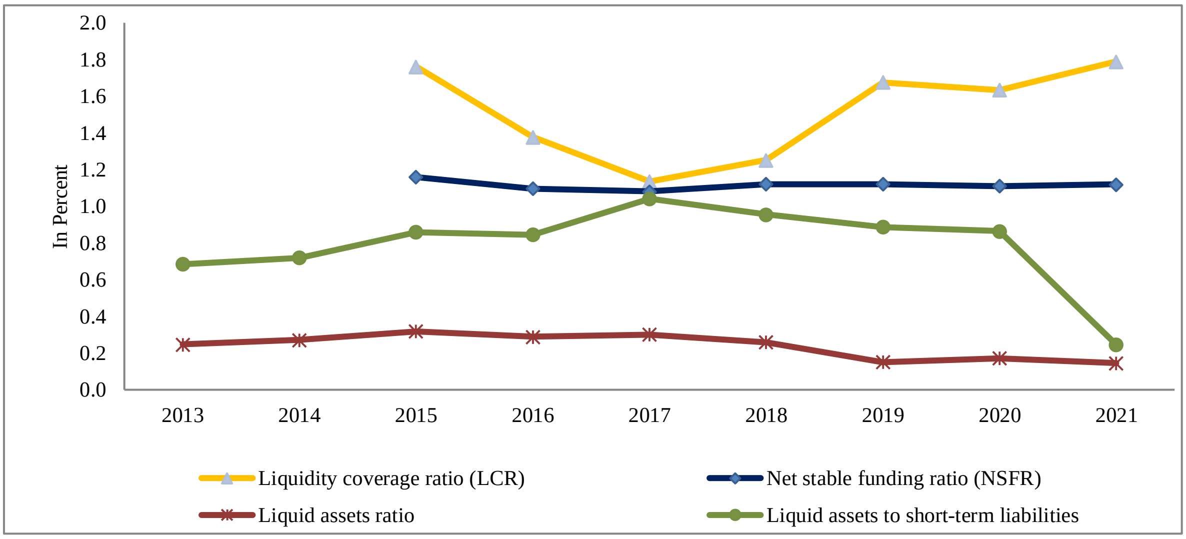

Chart-03: Liquidity indicators of Islamic banking (2013-2021)

Source: Prudential and Structural Islamic Financial Indicators (PSIFIs), Islamic Financial Services Board

D. Excess liquidity & scope of sukuk

From previous section, we observe that Islamic banking liquidity condition is quite better position. If we look into year-wise excess liquid asset of Islamic banking, then it would assist in drawing conclusion on liquidity managing of Islamic banks.

From chart-04, compared to overall banking sector, it is observed that Islamic banking have been experiencing upward liquid excess assets with slight fall during 2017-2018. In 2020, Islamic banking excess liquid asset positioned at BDT 296.4 billion (14.5% compared to overall banking). Probably, Covide-19 impacted negatively to private credit growth which assisted in increasing excess liquid assets. Thus Islamic banks liquidity management got ineffective and complex as there were less government securities appropriate for investment other than *sukuk*.

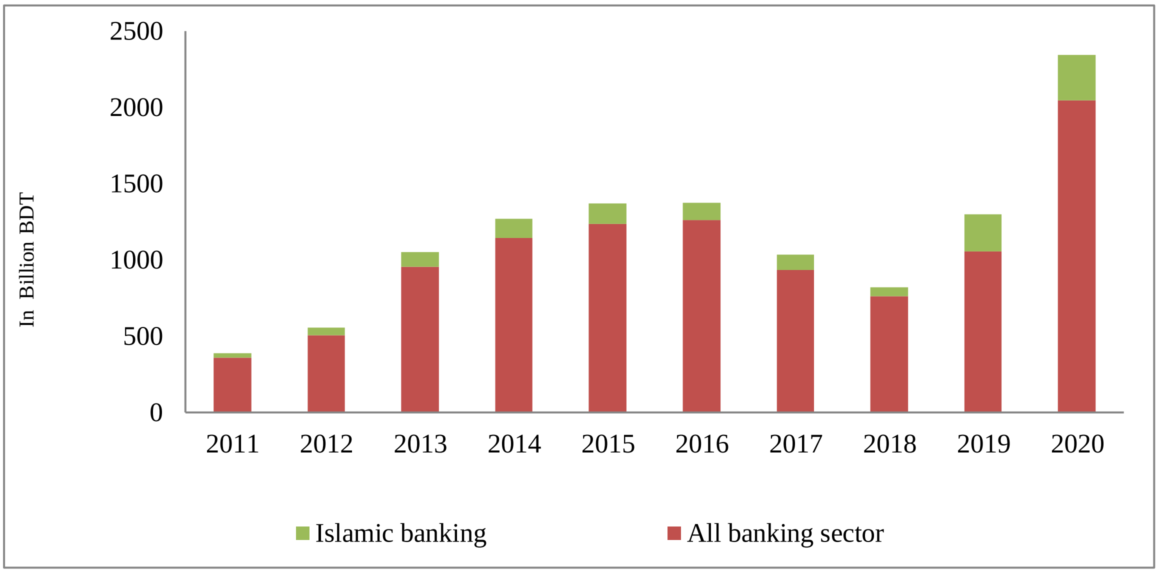

Chart 4: Excess liquidity of banking sector & Islamic banking (2011-2020)

Source: Various Issues of Annual Report, Bangladesh Bank

As o chart-05, Islamic banking deposits experience positive association with their excess liquidity, except for the year 2016, 2017 and 2018. But excess liquidity again caught the affirmative trend from 2019. Because, in 2019 Bangladesh Bank (DOS circular no- 05, dated 17/09/2019) instructed Islamic banks to keep advance-deposit ratio (ADR) within maximum 90% (89%+1% of special consideration).

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As of end 2020, deposits and excess liquid assets stood at BDT 3207.8 billion and BDT 296.4 billion respectively; this implies scope of introducing appropriate government islamic securities in Bangladesh like *sukuk* bond. Ample liquidity needs to be correctly observed and mopped up with *sukuk* like bond and securities efficiently for enhance liquidity management capacity of Islamic banking.

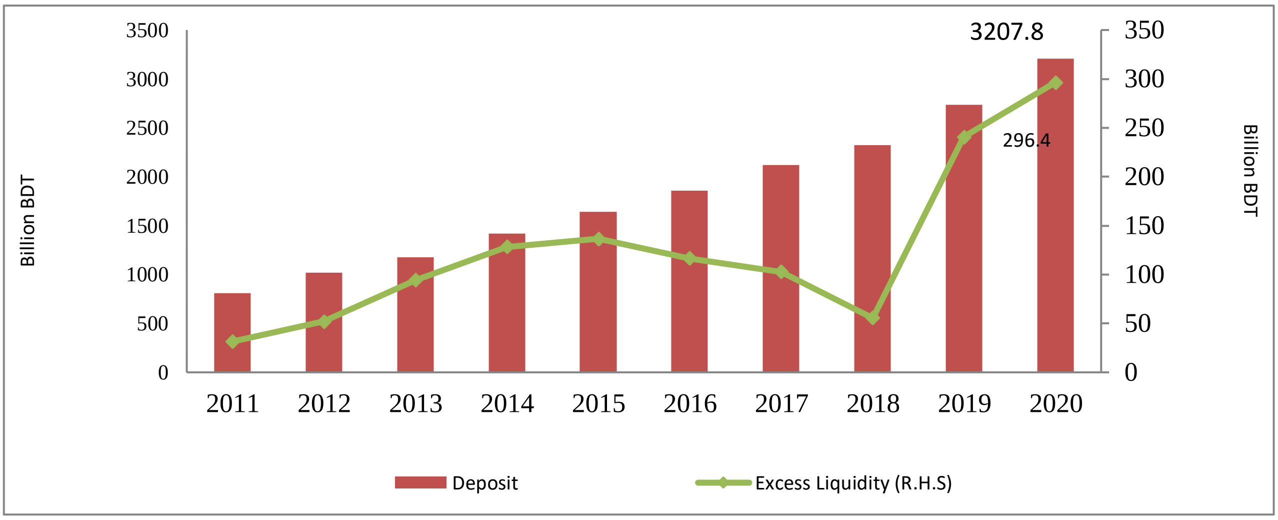

Chart-05: Islamic banking total deposits & excess liquidity (2011-2020)

Source: Various Issues of Annual Report, Bangladesh Bank.

E. Sukuk implications in financial markets

As newer financial market tools and securities, *sukuk* provided with outstanding performance and response. The reason behind this could be excess liquid assets of Islamic banks and/or Bangladesh being a Muslim majority. However, surely excess liquidity of Islamic banking was mopped up through *sukuk* issuance as before there was only limitedly presence of *shariah*-based instrument-Bangladesh Government Islamic Investment Bond (BGIIB).

Secondly, government social and infrastructure projects are being implemented by Islamic financing made way for rightly resource mobilization, which would ultimately ensure fiscal management efficiently and effectively than before.

Thirdly, Islamic banks required statutory liquidity ratio (SLR) with BB is prescribed to at least 5.5 percent of their total demand and time liabilities (deposit), excluding inter-bank items (effective from 1 February 2014), whereas the same is assigned for conventional banks is 13.0 percent. This implies unavailability of *shariah*-compliant monetary policy instruments. But this distorting market norm might be changed as issuance of *sukuk* enhancing in future timeline. Thus raising SLR rate in future for Islamic banks will rationalize the money market competition.

Lastly, Islamic banking liquidity management-ILM is broadly influenced through emergence of *sukuk* and its utilization in the money market. In financial sector, only government security was Bangladesh Government Islamic Investment Bond (BGIIB)[5] till FY20. So, Islamic banks were dependent on BGIIB for approved securities as SLR requirement. BGIIB has limitation which is government cannot virtually borrow money from BGIIB only provides guarantee against this pool of fund as government has no any *shariah*-compliant project. So, Islamic banks invest on BGIIB (sale) and in need borrow from that fund (financing). Since introduction in FY04, there remains a significant yet idle balance (net) = (sale – financing) in government account [BDT 157.5 billion in FY21], implying unavailability of *shariah*-compliant monetary instruments. Chart-06 depicts trend of sale, financing and net balance of BGIIB during FY04 to FY21. So, issuing *sukuk* has supplied with scope of financing idle balance of Islamic banks fund into efficient sectors and thus assists in managing their liquidity.

[5] BGIIB, introduced in FY04 firstly with 6 months bond based profit/loss sharing principle, is a pool of fund formed by Islamic banks & individuals where government provides guarantee against this fund.
BGIIB by bondholders follow *mudarabah* principle for financing that security, whereas borrowers avail fund at provisional profit rate on concerned banks *mudarabah* short-notice deposits a/c with adjustment after finalizing a/c and profit rate.

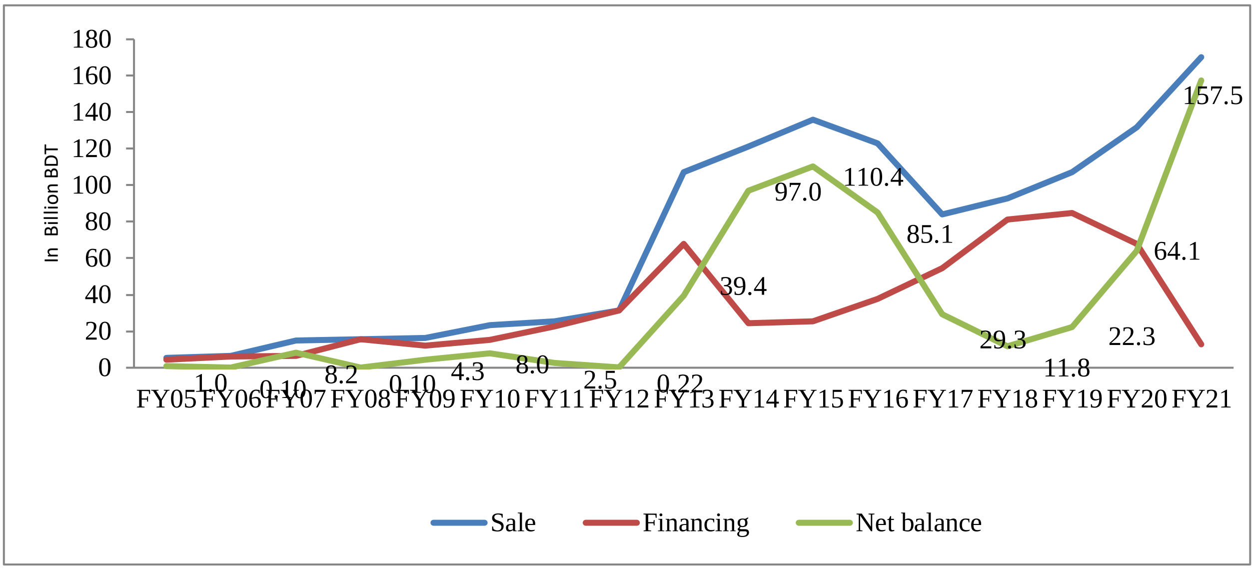

Chart 6: Sale, financing and net balance of Bangladesh Government Islamic Investment Bond (BGIIB)

Source: Various issues of Annual report, Bangladesh Bank

F. Policies regarding Sukuk

For greater financial implication and public interest in Islamic banking and their investment products, newer and updated fruitful policies are to be applied and introduced in Bangladesh by appropriate authorities. Recently *Sukuk* experienced much oversubscribed feedback from institutional as well as individual investors. Considering these, upgraded form of *Sukuk* could be emerged and implementing agenda including *Shariah*-based regulation, secondary market development should be introduced for broader usages of this beautiful Islamic bond.

Policies and changes may be following:

- By introducing and developing *Shariah*-based regulatory and implementing authorities, government could make easier for *Shariah*-compliant Investment and their usages in Bangladesh.
- Developing secondary market for Islamic securities would enhance the transaction motion applied for *Shariah*-compliant product and Islamic banking liquidity management thus gets fruitful implication.
- Government initiatives such as taxpayers exemption facilities against *Sukuk* investment, waiver on source-tax deduction; should be more exercised and introduced for betterment of *Sukuk* like bond usages and investment.
- At present, 1st and 2nd *Sukuk* issuance were based on *Ijarah* principle contract, whereas, 3rd *Sukuk* was based on *Istisna'a* and *Ijarah* principle underlying contract. So, new *Sukuk* issuance and their utilization can be done by based on *mudarabah* principle contract or *musharakah* principle underlying contract.
- *Mudarabah* principle contract-based *Sukuk* would be like existing BGIIB bond, where there are capital-provider (*rab-al-maal*) and entrepreneur (*mudarib*). Moreover, *musharakah* principle underlying contract *Sukuk* could be applied for government public private partnership (PPP) projects.

VI. CONCLUDING REMARKS

Our concern throughout this research work was related to Islamic banking liquidity management and sovereign investment *Sukuk* as its tools in Bangladesh. Growing share in banking sector and having excess ample liquid assets make complicated for Islamic banks properly liquidity managing as there was only one government security-BGIIB till FY20.

With issuance of *Sukuk* in FY21 & FY22, banking sector observes greater interest in institutional as well as individual investors for this newer form of securities. With considering the fact, we see there were multiple implications by *Sukuk* on financial sectors, while excess liquid assets with better liquidity indicators pave the way for scope of *Sukuk* issuance and its up-gradation.

Therefore policies and changes such as introducing *Shariah*-based regulatory and implementing authorities and Secondary vibrant Islamic bond market, are required highly. Besides, fiscal initiatives like tax exemption, waiver on source-tax on *Sukuk* like Islamic bonds would be highly appreciated. Moreover, with recently issued *Istisna'a* and *Ijarah* principle underlying *Sukuk*; *Mudarabah* principle contract-based *Sukuk* (much like as existing BGIIB bond) and *musharakah* principle underlying contract *Sukuk* for government public private partnership (PPP) projects should be introduced and applied.

With implementing government projects through Islamic excess liquidity will help to efficiently utilize or transfer these idle money/cash flow into effective demanding places, and thus Islamic liquidity management may enhance its capacity as well as competency. Developing projects like rural sector and primary level infrastructure, water supply and etc. should be financed more by Islamic *Shariah*-based bonds for increasing GDP growth and contributing economy.

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