Liquidity Copiousness in Pakistani Islamic Banks: What can Banks Excess Liquid Assets Tell us?

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ABSTRACT

This paper investigates Excess Liquidity problem faced by the Islamic Banking Industry of Pakistan because the Shariah Compliant Money and Capital Markets are in infancy stage in Pakistan. Demand for Shariah Compliant Sovereign Securities is very high, while the supply is very restricted compared to Sovereign Securities available to Conventional Banks in Pakistan. The purpose of this research is to review the impact of Excess Liquidity on Profitability of Islamic Banks vs. Conventional Banks in Pakistan. The research is based on secondary data of Islamic & Conventional Banks for a period of 10 years ranging from 2008 to 2017. The study uses Descriptive and Inferential Statistics based on Independent t-test & GLM Mediation Model analysis. The findings of this research is that Islamic Banks in Pakistan have positive Excess Liquidity while Conventional Banks have negative Excess Liquidity. Profitability of Islamic Banks in Pakistan is low as compared to their Conventional Counterpart. The Solvency, measured through Total Asset to Total Equity (TATER) is found to differ significantly for Islamic Banks than Conventional Banks. Based on Mediation Analysis, it may be concluded that: (1) The liquidity copiousness in Pakistani Islamic Banks in the shape of Excess Liquidity does have a direct impact on the Profitability of Islamic Banks; whereas in case of Conventional Bank of Pakistan the comparable Liquidity does have direct impact on their Profitability; (2) In Islamic Bank, the Solvency mediates the relationship between Excess Liquidity & Profitability. The Solvency in conventional banks also mediates the relationship between comparable Liquidity and Profitability.

Keywords: Conventional Banks, Excess Liquidity, Islamic Bank, Profitability, Solvency

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1. INTRODUCTION

In contemporary world, commercial banks are a vital chunk of the modern banking & financial system. They generate pool of funds through depositors' accounts and used those funds to make available loans to the borrowers who may be a commercial enterprise or a single person (Kidwell, Blackwell, Whidbee & Sias, 2016). The funds deposited in banks are in either current, saving, or time-deposited accounts both in conventional and Islamic banks. For a current account deposit, only principal amount is payable by the conventional bank, whereas, in Islamic banks, the underlying contract is a Shariah-compliant loan agreement. The pooled amount is generated through savings or time-deposit accounts, interest earned by the depositors along with principal is payable by the conventional bank, whereas the underlying contracts are based on a Shariah-compliant partnership contract. Conventional Banks mostly generate income through interest-based loans, granted by them to individuals or businesses. Besides, traditional borrowing and lending business, the commercial banks provide some fee-based services. Whereas, Islamic Banks mostly generate income from individuals or businesses through different mode of partnerships namely Musharakah, Mudarabah, Diminishing Musharakah; or through shariah-compliant trading modes such as Murabaha, Salam, Istisna, Istijrar, and Tawarruq; or through shariah-compliant rent contracts like Ijarah or Ijarah-Wa-Iqtina (Usmani, 2016). Besides, the aforesaid transactions, the Islamic banks may also generate income through some fee-based services.

Regarding the Islamic Banking operations in Pakistan, Mr. Irfan Siddiqui, CEO, Meezan Bank during the opening session of a two-day World Islamic Finance Forum (WIFF-2018) and Mr. Junaid, CEO, Dubai Islamic Bank's interview published in Business Recorder, Financial Review 2018, stated that there are ample deposits available with Islamic Banks but its Shariah-Compliant deposit avenues are limited (Abbasi, 2018; Jabri, 2018). This does not only limit the deposit increasing ability of Islamic Banks but at the same time has resulted in the availability of excess liquidity and decreased profitability as this excess liquidity has a cost in the form of lost earnings from unutilized funds which is like a two-sided sword. At the one end, it hampers the growth, on the other, it increases the opportunity cost (Hasanovic & Latic, 2017; Islam,

Chandra-Paul, & Baser, 2015). Mufti Taqi Usmani during the opening session of a two-day World Islamic Finance Forum (WIFF-2018) had pointed out that there is excess liquidity available in Islamic financial institutions, and urged the government of Pakistan to work on creating avenues for its investment (Amir, 2018; *WIFF*, 2018). Usmani (2016) emphasized that there is a need of political will rather than just political wish for Islamic finance & banking to flourish (Khan, 2016). Hence, there is a need to research and understand why and how excess liquidity exists in Islamic Banks in Pakistan and what are its impact on profitability and solvency of Islamic Banks. In the World Islamic Finance Forum (WIFF-2018) organized by IBA CEIF, Mufti Muhammad Taqi Usmani & Meezan Bank President Irfan Siddiqui had highlighted the problem of excess liquidity faced by the Islamic Banking Industry in Pakistan and have suggested that the government should work on creating avenues for the deployment of the excess funds (Amir, 2018). Narayan & Phan (2017) have identified various research gaps including the need for researches to be conducted in the area of Sukuk. Furthermore, Hasanovic and Latic (2017) has mentioned that there is a need to study the issue of excess liquidity in the developing countries with their possible solutions. Pakistani Conventional Banks have been able to manage liquidity deficiency through liability management. Similarly, liquidity deficiency is a danger to organizations and may lead to liquidity risk and result in a contagious effect (Chagwiza, 2014). Finally, liquidity deficiency makes bank to take some steps as it places banks under pressure to pay-off their credits. Subsequently, they may restrict credit issuance by raising lending interest rates (Aikaeli, 2006).

The objectives of this research is to study the existence of significant differences between Excess Liquidity, Solvency, and profitability of Islamic Banks and Conventional Banks. To get the comparative analysis of the impact of the liquidity copiousness on profitability with the comparable Liquidity on profitability of conventional and Islamic banks in Pakistan. Also, to study the impact of the liquidity copiousness on profitability with mediating effect of solvency. This study is beneficial for the regulators, policymakers, bankers, customers, and prospective customers of Islamic banking. It will help the regulators, policymakers & bankers to focus on the problem of Excess Liquidity and come-up with the required and acceptable solution in the form of Shariah Compliant Sukuks.

2. LITERATURE REVIEW

People differ in their resource creation and accumulation as some have no or little amount of resources and others have abundance. Those having abundant resources usually search for a place to park their surplus resources. People sought to deposit their money with trustworthy people who can either be individual or institutions of influence related to religion or business. The idea of trust had the seeds of the banking system which provided the initiation of rudimentary banking system. For instance, Hazrat Zubair Ibn Awwam (May Allah be pleased with him), one of the richest companions of Holy Prophet Muhammad (S.A.W) was regarded as the trust-worthy safe keeper of peoples' deposits. He after receiving the amount as the loan invested the amount in trade (Usmani, 2001). This is one of the possible modes of finance utilized by private banks nowadays. In modern banking system, commercial banks are considered as depositary institutions that accept deposits, issue checks, and make loans to businesses and individuals. The banking system performs five basic functions i.e. accept deposits, grant loans, issue checkable deposit accounts, clear checks, and create deposit money (Melicher & Norton, 2017). According to Kidwell et al. (2016) banks face profitability versus safety issue. The main problem faced by banks' management is achieving the conflicting goals of being solvent and liquid on one side along with being profitable on the other. It is very challenging for banks to resolve this conflict. As banks can achieve liquidity by investing in treasury securities only. This strategy will enable bank management to have a sound sleep but at the expense of lower profits. Banks can earn high profitability if they invest in loans that have high-yield and at the same time have high-risk as well. This high profitability will result at the cost of better-quality loans or liquid investment, i.e., the banks eat well for the time being as a result of increased profitability but will have poor sleep because of the possibility of bank failure in the future caused by large loan losses or inadequate liquidity. So, liquidity and solvency have an interrelated relationship. Depositors' and creditors' expectations of extraordinary losses in the loan or investment portfolio of the banks have triggered most bank runs. Hence, this dilemma requires bank management to resolve this conflicting problem of profit maximization while maintaining adequate liquidity and capital. The theoretical

framework for this study is that the Liquidity Impacts Profitability directly and indirectly. Hence, Solvency mediates the relationship between Liquidity and Profitability (Kidwell et al., 2016) [Refer to Figure 1 in Annexure]. Bank Liquidity can be defined as the ability of the bank to manage the withdrawal of deposits and requests for the loan and settle other maturing liabilities on time. Liquidity management is crucial for the survival of banks. Otherwise, they may face failure due to inability to meet their legal commitments. One of the two reasons that have been cited by Kidwell et al. (2016) for bank failure is illiquidity. In case of illiquidity, banks may be operating profitably but unable to honor their liquidity commitments. The dilemma faced by the banks is profitability vs liquidity & solvency goals management. This dilemma is not easily resolved. The bank's target at maintaining adequate liquidity while maximizing profitability. To achieve this, banks have two approaches available i.e. asset management and liability management. In asset management, banks rely on cash-available and may sell assets to meet liquidity requirements, whereas, in liability management, banks may acquire required liquidity by borrowings (Kidwell et al., 2016; Mamati, Ayuma, & Mwirigi, 2017). The banks may utilize cash accounts for immediate payment of withdrawals without any cost. However, the banks may have to sell all other assets to convert them into cash to meet the liquidity requirements. The selling of these assets requires time and cost of selling along with the chances of losses due to a price below their acquisition cost. The assets held by banks are considered to have the following characteristics, firstly, investment in securities is considered to be superior to loans granted by the banks due to their higher marketability, secondly, investment in short term securities are considered to be more liquid than long term securities. Banks classify their assets into the following four categories for asset management, Primary Reserves, Secondary Reserves, Loans, and Investments. At a minimum, banks are required to hold enough primary reserves to satisfy reserve requirements and expected liquidity needs. Further, banks mostly hold additional primary and secondary reserves to meet at least part of any unexpected liquidity demands. The total amount of primary and secondary reserves that banks hold is related to several factors, such as reserve requirements, deposit variability, other sources of liquidity, loan commitments outstanding, bank regulations, and the risk appetite of the banks (Elliott, 2014; Kidwell et al., 2016). Liability management means that the banks may acquire the required liquidity from

borrowings. Banks usually take asset growth as inevitable and then consider liabilities as an adjusting variable. So, the banks buy funds in the money market, whenever banks need additional funds for liquidity or any other purpose (Elliott, 2014; Kallur, 2016; Kidwell et al., 2016). To borrow for Liquidity, the bank needs to be solvent. In the case of two firms holding similar assets, the one with more equity or lesser financial leverage will be able to borrow more with a low probability of becoming insolvent. Bank that relies less on borrowed funds will be able to acquire required liquidity through the issuance of new debt. Liquidity Management is essential for commercial banks, as they may experience either excess or deficient liquidity (Chagwiza, 2014). Excess Liquidity may have detrimental consequences and may lead to speculative transactions (Lannoo & Casey, 2005). When banks have excess liquidity they willingly advance credits and lower interest rates (Aikaeli, 2006). Similarly, liquidity deficiency is a danger to organizations and may lead to liquidity risk and result in a contagious effect (Chagwiza, 2014). Further, liquidity deficiency makes bank to take some steps as it places banks under pressure to pay off their credits. Subsequently, they may restrict credit granting and raise interest rates (Aikaeli, 2006). Khemraj (2010) has defined excess liquidity in the banking sector as total liquidity minus statutory liquidity. Excess liquidity is a sign of either an inefficient intermediation process or an existence of some dynamics which forces banks to have more than the required amount of reserve (Aikaeli, 2006). The availability/non- availability of investment opportunities to banks can either augment their growth or retard it (Khemraj, 2010). Qin & Pastory (2012) had described that measure of liquidity would indicate the level of liquidity at which the commercial banks are operating whether it is at a higher level or not. One of the reasons mentioned for the existence of excess liquidity is underdeveloped or infancy stage of money and capital markets (Amir, 2018). According to Khemra (2010), 'Excess Liquidity' is defined as total bank liquidity minus required bank liquidity; whereas the central bank in the individual country sets the required liquidity (or reserve) ratio. According to Koch & MacDonald (2015) 'Liquidity Gap' is defined as potential uses of funds minus potential sources of funds. Potential uses of funds is determined by adding maturity time deposits, forecasted new loans & forecasted deposits, and subtracting the required reserves. Potential sources of funds is determined by adding

Maturing investments and principal payments on loans. The liquidity gap can be positive or negative depending upon the number of uses and sources of funds. When the liquidity gap is negative sources of funds are more than the uses of funds, resulted in excess liquidity for banks. The excess liquidity is defined as abundance of unutilized funds and is calculated as 'Deposits – Cash Reserve Requirement – Financing or Loans – Investment'. A company is said to be solvent when its equity is more than its liabilities and its net asset is positive. A company becomes insolvent and legally bankrupt when its net assets are negative (Kidwell et al., 2016). The commercial banks use capital-to-total-assets ratio to measure solvency. This ratio is also quoted by (Koch & MacDonald, 2015) under the name of Equity-to-Asset ratio as a measure of solvency. One of the ratios in Financial Reporting and Analysis for measuring solvency is Financial Leverage which is calculated as Total Assets/Total Equity. Kidwell et al. (2016) have exhibited insolvency as one of two reasons for bank failure. A bank may become insolvent in a situation when its capital may deplete due to losses suffered on loans or investments. So, solvency has an impact on profitability as well. Also as discussed earlier, the depositors' and creditors' expectations about the extraordinary loss will impact solvency which in turn impact bank liquidity. According to Goodhart (2008) and Ferrouhi (2014) an insolvent bank can become illiquid and an illiquid bank can rapidly become insolvent. These interdependent relationships between liquidity and solvency have also been quoted by the International Monetary Fund (Monetary and Capital Markets Department, 2008). According to Koch & MacDonald (2015) whenever a group of presidents is cornered and requested to review past years' performance of their respective banks, most of them would either mention their bank's Return on Assets (ROA) or Return on Equity (ROE). Moreover, if these measures were higher than those of their peers' bank, they would not forget to mention the phrase 'high-performance bank' in their conversation. Net Income has also been quoted by Koch & MacDonald (2015) and Williams, Haka, Bettner, and Carcello (2012) as a measure of profitability. The following conceptual model has been developed based on a thorough literature review and the problem at hand. Liquidity impacts Profitability (Kidwell et al., 2016) and Solvency (Ferrouhi, 2014; Goodhart, 2008; International Monetary Fund, 2008; Kidwell et al., 2016). Finally, Solvency also has an impact on Profitability (Kidwell et al., 2016). So, Excess Liquidity Impacts Profitability directly. Further, Excess Liquidity also

impacts Solvency, and Solvency in return impacts Profitability [Refer to Figure 2 in Annexure].

The hypotheses for this study are:

H_{a1}: There is a difference between ***Excess Liquidity*** of Islamic Banks and Conventional Banks.

H_{a2}: There is the difference between the ***Solvency*** of Islamic Banks and Conventional Banks.

H_{a3}: There is the difference between ***Profitability*** of Islamic Banks and Conventional Banks.

H_{a4}: There is an impact of ***Excess Liquidity*** on the ***Profitability*** of Islamic Banks of Pakistan.

H_{a5}: There is an impact of ***Excess Liquidity*** on the ***Profitability*** of Conventional Banks of Pakistan.

H_{a6}: There is an impact of ***Excess Liquidity*** on the ***Profitability*** of Islamic Banks of Pakistan is mediated by ***Solvency***.

H_{a7}: There is an impact of ***Excess Liquidity*** on the ***Profitability*** of Conventional Banks of Pakistan is mediated by ***Solvency***.

The variables used in this study are measured as:

Profitability: Net Income (NI), Return on Assets (ROA) & Return on Equity (ROE)

Excess Liquidity: EL = Deposits – Cash Reserve Requirement – Financing or Loans – Investment, Excess Liquidity to Total Assets Ratio (ELTAR) & Excess Liquidity to Deposit Ratio (ELDR).

Liquidity: Investment to Total Assets Ratio (ITAR), Advances to Total Assets Ratio (ATAR), Investment to Deposit Ratio (IDR) & Advances to Deposit Ratio (ADR).

Solvency: Net Assets (NA), Total Asset to Total Equity Ratio (TATER) & Total Equity to Total Asset Ratio (TETAR).

3. METHODOLOGY

The research design for this study is exploratory (Cuthill, 2002). On basis of Islamic & conventional banks' secondary data, the relationships between excess liquidity, solvency, and profitability have been studied. The epistemology and ontology of the study are Post-positivism and Objectivism respectively. Only four full-fledged Islamic banks operating in the private sector in Pakistan have at least the last ten years' annual accounts available. So, these banks have been included in the study namely Meezan Bank Ltd, BankIslami Pakistan Ltd, Dubai Islamic Bank Ltd and AlBaraka Bank (Pakistan) Limited. While the fifth bank, MCB Islamic Bank Ltd started operations in 2015 as an Islamic banking subsidiary of MCB Bank Ltd, a conventional bank; however earlier, it had been operating as Stand-alone Islamic banking branches of MCB Bank Ltd. The qualitatively comparable conventional banks have been selected for this study to use balanced panel data. As Meezan Banks is a well-established Premier Islamic Bank, while Dubai Islamic Bank having its headquartered in Dubai, United Arab Emirates (Dubai Islamic Bank, 2018) and Al-Baraka Bank (Pakistan) Ltd is a subsidiary of Al Baraka Banking Group (ABG) Bahrain, so well established local and foreign banks like United Bank Ltd, Allied Bank Ltd, Habib Bank Ltd and Standard Chartered Bank (Pakistan) Ltd have been selected. Data related to Islamic and Conventional Banks' liquidity, solvency, size, and profitability is collected through the respective banks so the study is based on secondary data, for a period ranging from 2008 to 2017. The data have been analyzed using independent t-Test & GLM Mediation Model. One group comprises Islamic Banks, and the other is of Conventional Banks. There is a difference between of Islamic Banks and Conventional Banks. Independent t-Test has been used to test the statistically significant differences (Berkman & Reise, 2011) between Excess Liquidity, Solvency, & Profitability of Islamic Banks and Conventional Banks in Pakistan. The theoretical and conceptual models suggest mediation of Solvency between Excess Liquidity and Profitability, so to test the mediation effect GLM Mediation Model has been applied (VanderWeele, 2015).

3.1. Analysis

Scheduled Banks' Deposits Analysis: The deposits of all scheduled banks in Pakistan as of June 2018 amounts to PKR 12,649 billion. Out of which PKR 10,616 billion, 84% of the total scheduled bank's deposits comprises of deposits of Conventional Banks, and PKR 2,033 billion, i.e., just 16% constitute deposits of Islamic Banks.

Independent t-test: As the result of Independent t-test & Group Statistic for Excess Liquidity shows that p value < 0.001 which is less than the significance level $\alpha = 0.05$ [Refer to Table 1] the null hypothesis is rejected, and concluded that

2. The mean Excess Liquidity for Islamic Banks and Conventional Banks is significantly different, both in absolute values as well as in ratio terms.
3. The mean Excess Liquidity of Islamic Banks is more than that of Conventional Banks. This again shows that the Islamic Banks have more liquidity than that of Conventional Banks, so the need to develop the Shariah Compliant Money and Capital Markets in Pakistan is highlighted.

Table 1. Independent t-test's Result for Excess Liquidity

	statistic	df	P	Mean difference	SE difference
Excess Liquidity	-5.41	78.0	< .001	-99.179	18.3246
ELTAR	-8.88	78.0	< .001	-0.140	0.0158
ELDR	-8.78	78.0	< .001	-0.177	0.0202

Further, the result of Independent t-test & Group Statistics for Profitability shows a p-value < 0.001 which is less than the significance level $\alpha = 0.05$ [Refer to Table 2 in Annexure], so the null hypothesis is rejected, and it is concluded that

4. The mean profitability of Islamic Banks and Conventional Banks is significantly different, both in absolute values as well as in ratio terms.
5. The mean profitability of Islamic Banks is less than that of Conventional Banks.

Table 2. Independent t-test's Result for Profitability

	Statistic	df	p	Mean difference	SE difference
NI	9.53	78.0	< .001	13.1572	1.38037
ROA	8.42	78.0	< .001	0.0137	0.00162
ROE	6.28	78.0	< .001	0.1116	0.01778

Furthermore, the result of Independent t-test [Refer to Table 3] and Group Descriptive Statistics Solvency are: 1) individual items used in Solvency's calculation, namely, Total Equity and Total Asset; and 2) Solvency items, namely, TATER & TETAR. Except for TETAR, in which case p-value=0.387 which is greater than the significance level $\alpha = 0.05$, so fail to reject null hypothesis, whereas in cases of T Assets, T Equity and TATER the p-value is less than the significance level $\alpha = 0.05$, therefore, reject the null hypotheses, and it is concluded that

6. The mean T Assets mean Total Equity and mean TATER (solvency) of Islamic Banks and Conventional Banks are significantly different, whereas the mean TETAR (solvency) of Islamic Banks and Conventional Banks is not significantly different.
7. The mean T Assets and mean T Equity of Islamic Banks are significantly less than that of Conventional Banks. While the mean TATER of Islamic Banks is significantly more than that of Conventional Banks and the mean TETAR Islamic Banks is insignificantly less than that of Conventional Banks.

Table 3. Independent t-test's Result for Solvency

	Statistic	df	P	Mean difference	SE difference
T Assets	7.851	78.0	< .001	777.91399	99.08426
T Equity	10.941	78.0	< .001	76.55636	6.99748
TATER	-2.790	78.0	0.007	-2.30740	0.82708
TETAR	0.869	78.0	0.387	0.00791	0.00910

Mediation Analysis: To proceed with mediation analysis, the first of three conditions for using mediation are tested and results are reported as: The Predictor – EL significantly predict Criterion – NI in case of Conventional & Islamic Banks both, whereas the predictor – ELTAR & the Criterion – ROA, the predictor – ELDR & the Criterion – ROA, the predictor – ELTAR & the Criterion – ROE, & the predictor – ELDR & the Criterion – ROE do not have significant relationships. So, only the relationships among EL & NI for Conventional & Islamic Banks are tested for the remaining two conditions for using mediation model.

Based on regression analysis between independent & dependent variables, it is concluded that there is a significant relationship between EL & NI, whereas ELTAR & ROA, ELDR & ROA, ELTAR & ROE, and ELDR & ROE does not have any statistically insignificant relationship. Therefore, it can be concluded that only EL has an impact on NI for both Conventional & Islamic Banks separately. Mediation analysis is conducted after meeting the three conditions for using mediation in the proposed model, i.e. (1) Predictor – EL significantly predict Criterion – NI, (2) As EL significantly predict NA in the mediation Model, so the Predictor – EL is going to 'act through' Mediator – NA to influence Criterion – NI, & (3) As Mediator – NA significantly predict NI in mediation model, so the Predictor – EL is going to 'act through' NA to influence Criterion NI. The mediation analysis shows that the direct effect of EL on NI is insignificant ($p>0.05$) and the indirect effect of EL on NI mediated by NA is significant ($p<0.05$). Therefore, it can be concluded that there is a full mediation ef fect of NA between EL & NI for Conventional Banks and Islamic Banks respectively [Refer to Tables 4 & 5].

After running the mediation test, it was found that Direct Effect between EL & NI become statistically insignificant, whereas Indirect Effect between EL & NI through Mediator NA, was found to become statistically significant. Therefore, it can be concluded that NA does mediate the relationship between EL and NI for Conventional Banks and Islamic Banks, respectively.

Table 4. Indirect and Total Effects of EL on NI (Mediator-NA) for Conventional Banks

				95% C.I. (a)				
Type	**Effect**	**Estimate**	**SE**	**Lower**	**Upper**	**β**	**Z**	**P**
Indirect	EL ⇒ NA⇒ NI	-0.06	0.011	-0.08235	-0.0394	-0.802	-5.56	< .001
Component	EL ⇒NA	-0.31	0.04	-0.38035	-0.2328	-0.790	-8.15	< .001
	NA ⇒NI	0.20	0.03	0.14751	0.2497	1.015	7.62	< .001
Direct	EL ⇒ NI	0.02	0.01	-0.00355	0.0361	0.215	1.61	0.108
Total	EL ⇒ NI	-0.05	0.01	-0.06365	-0.0256	-0.588	-4.59	< .001

Table 5. Indirect and Total Effects of EL on NI (Mediator-NA) for Islamic Banks

				95% C.I. (a)				
Type	**Effect**	**Estimate**	**SE**	**Lower**	**Upper**	**β**	**Z**	**p**
Indirect	EL ⇒ NA ⇒NI	0.051	0.008	0.036	0.067	0.791	6.43	< .001
Component	EL ⇒ NA	0.20155	0.02655	0.1495	0.25359	0.768	7.59	< .001
	NA ⇒ NI	0.255	0.022	0.213	0.296	1.029	12.07	< .001
Direct	EL ⇒ NI	-0.00795	0.00554	-0.0188	0.00290	-0.122	-1.44	0.151
Total	EL ⇒ NI	0.04338	0.00763	0.0284	0.05834	0.668	5.68	< .001

Note. (a) Confidence intervals computed with method: Standard (Delta method)

Islamic Banking, which took momentum in early 2002 in Pakistan is still in its infancy stage, facing a number of problems. One such problem as evidenced from the analysis is the existence of Excess Liquidity. The underdeveloped or infancy stage of the money and capital market has been mentioned by Qin & Pastory (2012) as one of the many possible reasons for Excess Liquidity. Further supported by Aikaeli (2006) that Excess Liquidity is a sign of either an inefficient intermediation process or an existence of some dynamics which forces banks to have more than the required amount of reserve. Qin & Pastory (2012) had described that measure of liquidity would give an indication of the level of liquidity at which the

commercial banks are operating – whether it's at a higher level or not & one of the reasons mentioned for the existence of excess liquidity is underdeveloped or infancy stage of money and capital markets. Islamic Banks have granted more financing as compared to the advances granted by their counterpart i.e., Conventional Banks. This is in line with the findings of Lannoo & Casey (2005) and Aikaeli (2006). According to Kidwell et al. (2008a) the loans granted by the banks are mostly considered to be less liquid and riskier and hence carry the highest return and have the utmost profit. Although Islamic Banks have granted more financing, they still have very low profitability as compared to Conventional Banks in terms of both ROA and ROE. However, this low profitability is in line with the findings of Khemraj (2010a) that the availability/non-availability of investment opportunities to banks can either augment their growth or retard it.

Conventional Banks in Pakistan found to have negative liquidity because they have managed their liquidity through liability. According to Kidwell et al. (2008a), Elliott (2014), and Kallur (2016), the banks buy funds in the money market whenever they need additional funds for liquidity or other purposes. Liquidity management through liability means that the banks may acquire the required liquidity from borrowings. Banks usually take asset growth as inevitable and then consider liabilities as an adjusting variable.

There exists a full mediation effect of Solvency between Excess Liquidity & Profitability for Islamic Banks of Pakistan, and in Conventional Banks, a full mediation effect of Solvency between their comparable Liquidity and Profitability persists. The findings of mediation analysis for Conventional Banks are supported by the relationship quoted by Kidwell et al. (2008) which is liquidity and solvency have interrelated. Hence, the full Mediation Effect of Solvency on Liquidity and Profitability has been found to exist, as per the conceptual framework of this study.

4. CONCLUSIONS

The conclusions of this study are as follows:

i. Islamic Banks and Conventional Banks in Pakistan significantly differ in terms of Excess Liquidity, Profitability and Solvency.
ii. In Islamic Banks, Excess Liquidity does have a direct impact on Profitability, whereas in Conventional Banks, the comparable Liquidity does have a direct impact on Profitability.
iii. In Islamic Banks, the Solvency does mediate the relationship between Excess Liquidity and Profitability, whereas in Conventional Banks, the Solvency does mediate the relationship between comparable Liquidity and Profitability.

Recommendation

This study recommends that Sukuk should be available by the Government of Pakistan to increase the profitability of Islamic Banks. The elimination of Riba from Pakistan's economy would be made possible. To achieve the goal of Clause No 38-F of the Constitution of Pakistan, the state must make Pakistan Riba-free as soon as possible.

Limitation of the study

The limitation of the studies is that the dichotomy of Islamic and Conventional Banks get entangled as Conventional Banks have their stand-alone Islamic banking branches. However, the Conventional Banks operating Islamic Banking standalone branches do not report the financial results of their Islamic Bank Branches separately.

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Annexures:

Figure 1 - Theoretical Framework (Kidwell et al., 2016)

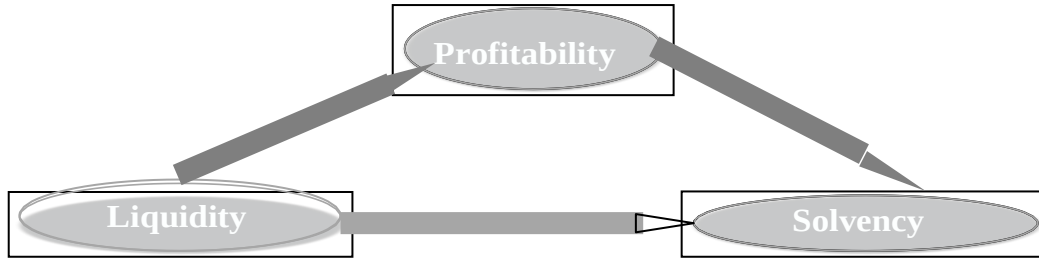

Figure 2 - Conceptual Framework of this Study