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The purpose of the study is to investigate the relationship between the shareholder

wealth and bank performance in terms of solvency. Bank solvency is measured in

this study with the help traditional financial performance measurement indicator named as Bankometer. This indicator consists on different ratios. While

shareholder wealth is measured by the Economic value added method, which is

consider a modern performance indicator. In this research eight year's data from

the period of 2007 to 2014 is collected. In this study four banks are selected for

analysis from each category like public bank (Bank of Khyber), private bank (KASB), Islamic bank (Meezan bank) and foreign bank (Standard charter bank).

These banks are selected on the basis of availability of data during the study time

period. To measure shareholder wealth, EVA is calculated through the difference

of NOPAT and Capital charge. While Bankometer is calculated with the help of

Capital assets ratio, equity assets ratio, capital adequacy ratio, non-performing loans to loans ratio, cost to income ratio and loans to assets ratio, to calculate banks solvency. Research found that all the banks are providing shareholder

wealth. Foreign banks are providing more shareholder wealth than others, followed by Islamic, public and private banks respectively. While findings of

Bankometer show that public banks and foreign banks are leading in terms of

solvency followed by Islamic and private banks. It is also found that there is no

relationship between shareholder wealth and banks performance in terms of solvency, because both shareholder wealth measurement and Bankometer are two

KEYWORDS: Economic value added, Bankometer, Solvency,

different approaches of financial analysis.

### **Research Article**

# Debt Paying Ability and Shareholders' Wealth of Banking Industry: A Comparative Study of Bankometer and EVA Approach.

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### ABSTRACT

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## Introduction.

Banks inhabit a leading and vital position in the growth of a country. In this regards, the role of coherent and resourceful financial sector is essential as it ensures proficient use of financial resources and also facilitates the large investments and more fruitful allocation of capital, which directs to higher income growth. Strong financial structure confirms the growth and bright future of a country. Banks are the back bone of any economy. Banks are always available to meet the requirements of agriculture, industrial and all other sectors and regions of the economy. Strong banking is mandatory to provide better services to business community as well as to the Government. Businesses are highly dependent on it. Financial credibility of a country is also

Shareholder.



linked with it. This sector also helps in economic growth of a country. Fintech have created lot of opportunities as well as difficulties for the existence of banks. Digital innovation makes a difference and boosts an economy. A sustainable banking sector expand Banking sector is measured as it is to be vital font of financing for the most business.

Central Bank of Pakistan regulates the banking sector. Banking sector of Pakistan consists of public banks, private banks, foreign banks, specialized banks, and Islamic banks. A lot of opportunity for investors to make investment in banking sector and get sound return as a dividend. It is very crucial to make a better choice for investment. Many factors should be considered while making investment, such as return of investment, solvency, liquidity, revenue, profits, business condition, and financial leverage and so on.

## Literature review.

Asif et al (2015) examined the Islamic banks performance of Pakistan and Malaysia. Comparison factors were profitability and liquidity. The sample size of the study was consisted on all complete Islamic banks operating in Pakistan, five banks from Malaysia from 2006 to 2011. Ratios analyses were performed to get the results of comparison. The said study concluded that the performance of Malaysian banks were much better than Pakistani banks. Following comparison factors were taken, such as, profitability, earning per share and loan to deposit ratios return on assets & equity, current ratio, loans to assets ratio and investment to deposit ratio.

Kattel (2014) reviewed and examined Nepal's banking industry. By using the Bankometer approach to analyze the solvency of commercial banks. The study was taken as a set some private and joint venture banks. The evidence of finding proved that private banks solvency is much better than joint venture banks of Nepal. Another study, Fayed (2013) analyzed the business performance of conventional and Islamic banks of Egypt. Such study had used the ratios analysis. Liquidity, credit risk and profitability ratios had used to the measure the performance. This study concludes with the supremacy of commercial banks over Islamic banks in terms of profitability, risk management, liquidity and solvency.

Another comparative analysis study of Islamic and conventional banking was conducted by Usman & Khan (2012) with respect to liquidity and profitability. This study was made on three Islamic banks, named as Bank Islamic, Mezan Bank Ltd, and Albaraka); three conventional banks, named as KASB, Faysal Bank, and Bank of Khyber. Paired t-test has shown the dominance of Islamic banking in terms of high growth rates, profitability and better liquidity position with respect to commercial banking.

Assessment of solvency of public and private banks of India by Makkar & Singh (2012). This study assessed the performance of 37 Indian commercial banks (public and private) by using Bankometer approach. This study found better solvency position of private banks as compared to public banks of India. These results were quite similar to Kattel (2014). Nimalathasan.et al (2012) has applied the Bankometer appraoch on the Srilankans commercial banks to check the finalcail soudness of sampled commercial banks. The purpose of the study was to gauge economic development of Srilanka through the analysis of security of its banking system. Study used the data of selected commercial banks from 2006 to 2010 for investigation. Finding of the study proved the better solvency of state (public) banks as compared to private banks. Further, this study emphsizes the imporatnce of bankometer in order to avoid insolvency issues through better management of operaitons.



Aman and Zaman (2010) examined the credit risk performance of public, private and foreign banks. They have concluded that foreign banks have better performance in term of credit ultilization followed by the private banks and puplic banks. Ahmad et al. (2010) evaluated the performance and customer satisfaction of conventional and Islamic banking. The study used the data of 22 commercial and 5 Islamic banks to get the results. Bankometer approaches were applied on the data to reach on conclusion. While structured questionnaire was developed to determine customer satisfaction. This study conclude that financial performance of commercial banks were good in profitability and liquidity, while Islamic banks were leading in terms of solvency and credit risk management.

Similar comparison of Islamic and commercial banking was conducted by Safiullah (2010). The banks' performance measured through efficiency, productivity, profitability, liquidity and solvency. Results of study have indicated that Islamic banks are performing better with respect to commercial banks in terms of business efficiency, productivity, profitability, liquidity and solvency.

Awan (2009) investigated the Islamic and commercial banking system of Pakistan. Ratio analysis was used in order to check the financial performance of banks. Finding of ratios analysis were encouraging for Islamic banking and analysis showed a positive trend of growth in future. Results were quite supporting to the previous studies made before 2009, that performance of Islamic banking was better than commercial banks in deposits, financing,



The structure of the hypotheses adopted in this paper is provided as follow:

## **Research Design and Method:**



Shareholders' wealth and solvency are two major concepts in the field of corporate finance. Both play a significant role to judge the financial health and performance of a company. Solvency measure the financial soundness of a company. It assesses the company ability to meet its long term financial burden (liabilities). Study uses Bankometer approach to measure the solvency of the banking sector. Shareholders are the main players of corporate environment. They always looking higher returns and searching solvent companies for their investment. Shareholders' wealth measured by the market value of the company's stock (Market price of the share). Economic Value Added (EVA) approach is used to measure the shareholders wealth. In short, solvency ensures a company can survive and thrive over the long term, which, in turn, contributes to maximizing shareholders' wealth.

Study uses the comparison method of these two approach which one gives a better insight to shareholders to measure the performance of banking sector. Ultimately, performance gives a path to make an investment decision. This study uses secondary data which is collected from banks annual reports. The sample period is taken from 2007 to 2014.

Bankometer was developed by Shar *et al* (2010) by following the recommendations of IMF in their working occasional paper (Owen. Evans et al. 2000) with slight changes of limits, percentages and weights of CAMELS and CLSA stress test.

Following method has been used by Bankometer to calculate banks solvency.

S = 1.5\* CA+1.2\*EA +3.5\* CAR+0.6\*NPL+0.3\*CI+0.4\*LA

Numerical Figures (1.5, 1.2, 3.5, 0.6, 0.3, and 0.4) shows weighted importance of these ratios in the determination of the banks solvency through Bankometer Approach. This formula of Bankometer provides the same results as provided by Shar, et, al (2010) in their primary research on Bankometer.

Where 'S' indicate solvency,

- CA shows capital assets ratio. It is the ratio between total share capitals divided by total assets of the bank. Parameter for CA is that its value should be greater than 4% (C/A>=04%). If it is low, then it will not include in solvency calculation.
- EA shows equity assets ratio. It is the ratio between net assets (equity) divided by total assets of bank. For Bankometer this ratio should be more than 2% (E/A>= 02%). In case of less than 2%, it will not consider for solvency.
- CAR means capital adequacy ratio. The capital adequacy ratio shows the ratio of banks capital and risk weighted assets. For well-functioning of bank CAR should be 8% to 40% (40 %=< CAR>=08%), Otherwise it will be excluded from Bankometer.

The banking sector of Pakistan is divided into Islamic banks, private banks, public banks, and foreign banks. The study selected one bank from each category to make equal participation of category. Following banks are included to analyze the solvency and shareholders wealth such as, Meezan Bank Limited (Islamic bank), KASB Bank Limited. (Private bank), Standard Charter Bank Limited (foreign bank) and Bank of Khyber (public bank)

## Data analysis and results,

Bankometer Approach:



**Capital Assets Ratio (CA)** 

The above graph and table show that almost all the banks have > 4% CA ratio that is required by said approach (Bankometer). MEBL is the only bank with < 4% CA ratio after 2011 because increase in its assets is greater than increase in its capital. Which indicate that stake of the owners in MEBL total assets is minimizing and badly affects the creditworthiness of the bank and investors' self-confidence.



### **Equity Assets Ratio (EA)**





It is another indicator of the Bankometer. Such ratio of BOK, MEBL and SCBPL is stable during the analysis period. While said ratio of KASBB is decreasing rapidly since 2009. It means that its equity is decreasing with respect to its assets.

The main reasons of this decline are heavy accumulated losses and discount on issue of right shares, which decreased its equity. Since 2012 severe decline in EA ratio has been observed and it is not full filling the EA criteria of Bankometer.

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|--------------------|------|------|------------|-----------|------|-------|-------|------|
| <b>Banks/Years</b> | 2007 | 2008 | 2009       | 2010      | 2011 | 2012  | 2013  | 2014 |
| BOK                | 31%  | 17%  | 17%        | 19%       | 23%  | 25%   | 24%   | 23%  |
| MEBL               | 11%  | 10%  | 13%        | 12%       | 15%  | 14%   | 12%   | 12%  |
| SCBPL              | 11%  | 10%  | 12%        | 12%       | 13%  | 14%   | 17%   | 19%  |
| KASBB              | 12%  | 9.0% | 3.5%       | -3.6%     | 0.1% | -0.6% | -4.1% | -    |

Capital Adequacy Ratio (CAR)

CAR is a most important indicator of the Bankometer, which can be analyzed through its maximum weight of 3.5.

The above result shows that BOK has maximum CAR with respect to other banks, because its Common Equity Tier 1 capital is increasing due to increase in its unappropriated profits and general reserves. This shows strong solvency position of bank because its total risk weighted assets are low as compared to total eligible regulatory capital. It means that more part of risk weighted assets are financed by Bank's regulatory capital.

## Non-Performing Loans to Loans Ratio (NPL)

| <b>Banks/Years</b> | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|--------------------|------|------|------|------|------|------|------|------|
| BOK                | 9%   | 3%   | 8%   | 2%   | 1%   | 2%   | 2%   | 1%   |
| MEBL               | 1%   | 2%   | 4%   | 3%   | 3%   | 1%   | 0.4% | 0.5% |
| SCBPL              | 5%   | 12%  | 7%   | 7%   | 5%   | 4%   | 1%   | 2%   |
| KASBB              | 1%   | 7%   | 7%   | 6%   | 4%   | 7%   | 7%   | -    |

All the banks NPL ratio results have decreasing trend since 2008 except KASB Bank. It means that other banks have an effective management of their non-performing loans with better recovery of their loans and interest revenues.

| Cost to Income Ratio (CI) |      |      |      |      |      |      |      |      |
|---------------------------|------|------|------|------|------|------|------|------|
| <b>Banks/Years</b>        | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| BOK                       | 76%  | 87%  | 88%  | 91%  | 80%  | 79%  | 78%  | 80%  |
| MEBL                      | 71%  | 77%  | 72%  | 75%  | 72%  | 77%  | 78%  | 78%  |
| SCBPL                     | 65%  | 65%  | 68%  | 71%  | 66%  | 67%  | 58%  | 62%  |
| KASBB                     | 93%  | 114% | 141% | 134% | 147% | 98%  | 96%  | -    |

## Cost to Income Datio (CI)

It is noted from above table and graph that all the banks have high percentage of Cost to Income ratio. It means that they are unable to control their cost. SCBPL has minimum CI ratio, followed by MEBL, BOK and KASB Bank respectively. Although the decision criteria regarding the inclusion of CI ratio in Bankometer is less than 40%, so it will not be included in Solvency calculation. If any bank has less than 40% value, then it will increase its goodwill and solvency.

| Banks/Years | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|-------------|------|------|------|------|------|------|------|------|
| BOK         | 34%  | 40%  | 30%  | 36%  | 33%  | 32%  | 33%  | 32%  |
| MEBL        | 51%  | 47%  | 34%  | 35%  | 35%  | 32%  | 39%  | 40%  |
| SCBPL       | 47%  | 47%  | 40%  | 43%  | 36%  | 34%  | 34%  | 31%  |
| KASBB       | 61%  | 62%  | 50%  | 52%  | 40%  | 34%  | 36%  | -    |

Loans to Assets Ratio (LA)

With respect to loan to assets ratio almost all the banks have decreasing trend. To improve solvency it should be less than 65%, so it will be included in calculation of solvency.

It is observed that KASB Bank has maximum LA ratio from 2007 to 2011, because more advances was made by bank through Loans, cash credits, running finances.

| Solvency (S):      |      |      |      |      |      |      |      |      |
|--------------------|------|------|------|------|------|------|------|------|
| <b>Banks/Years</b> | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| ВОК                | 171% | 114% | 113% | 119% | 130% | 135% | 126% | 119% |
| MEBL               | 78%  | 72%  | 77%  | 75%  | 82%  | 70%  | 66%  | 64%  |
| SCBPL              | 102% | 103% | 98%  | 101% | 96%  | 97%  | 105% | 112% |
| KASBB              | 92%  | 94%  | 58%  | 54%  | 65%  | 55%  | 64%  | _    |

Above indicator of the BOK is so strong and playing a leading role in the solvency. CBPL and



MEBL are also working in the same pace. These banks are declared as super sound banks because their S value is more than 70 %. Average value of S for BOK is 128%, SCBPL is102% and MEBL is 73%.



BOK is leading due to its high Capital Adequacy ratio and Equity to Assets ratio as compared to other banks.

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|--------------------|------|-------|---------|----------|-------|-------|-------|-------|
| <b>Banks/Years</b> | 2007 | 2008  | 2009    | 2010     | 2011  | 2012  | 2013  | 2014  |
| BOK                | 1812 | 4645  | 1178    | 1467     | 4103  | 3751  | 3321  | 5470  |
| MEBL               | 3048 | 5642  | 4785    | 7988     | 12669 | 12384 | 12767 | 17290 |
| SCBPL              | 9106 | 41437 | 7996    | 12470    | 20242 | 11178 | 12655 | 14957 |
| KASBB              | 2064 | 5491  | 2354    | 3038     | 2404  | 3808  | 2284  | -     |

Economic Value Added (EVA)

Economic Value Added (EVA) means shareholders wealth maximization. Banking sector of Pakistan has a lot of opportunity for local as well as foreign investors. The above results are showing the evidence and confidence of the investors. Ranking of banks through EVA results are from high to low SCBPL, MEBL, BOK and KASB Bank respectively.





EVA percentage trend of SCBPL is greater than other banks. Whereas, MEBL is showing increasing trend since 2012, which is showing increasing shareholder wealth maximization ability of MEBL and very healthy potential of Islamic Banking in Pakistan. Increasing result of MEBL shows good efficiency and performance of banks management, that they are earning maximum return on their available funds.

## Conclusion

The study concluded that both approaches are important for shareholders to make an investment decisions. Indeed a solvent company has a better ability to produce net income and sustain operations. Such abilities ultimate can lead to long-term growth in stock prices, which further enhance the shareholders' wealth. On the other hand, an insolvent company may face to reduce dividends, financial distress, decline revenues, increase operating expenses, reduce goodwill or even go bankrupt, which can harm for shareholders' wealth. Conversely, a company is solvent and efficiently managing its operations, its stock price is likely to rise, boosting shareholders' wealth. On the other hand, if solvency is at risk, the company's financial condition might deteriorate, reducing shareholder wealth even if the company is still operating.



## References

- Ahmad, K., Rehman, K., & Saif, M., I. (2010). Islamic Banking Experience of Pakistan: Comparison between Islamic and Conventional Banks. International Journal of Business and Management, 5(2), 137-143.
- Aman, Q., & Zaman, K. (2010) Credit Risk Performance of Private, State Owned and Foreign Banks on the Economy of Pakistan (Econometric Approach), International Research Journal of Finance and Economics, issue 57, 47-58
- Khan, M., A., Ali, M., & Khan, M., A. (2015). Gauging Profitability and Liquidity of Islamic Banks:Evidence from Malaysia and Pakistan. International Journal of Accounting and Financial Reporting, 5 (1), 75-90.
- Awan, A. (2009). Comparison Of Islamic And Conventional Banking In Pakistan, Proceedings 2nd CBRC, Lahore, Pakistan, November 14.
- Fayed (2013). Comparative Performance Study of Conventional and Islamic Banking in Egypt. Journal of Applied Finance & Banking, 3 (2), 1-14.
- Gul, S., Irshad, F., & Zaman, K. (2011).Factors Affecting Bank Profitability in Pakistan.The Romanian Economic Journal 39.
- Kattel, K. (2014). Evaluating the Financial Solvency of Selected Commercial Banks of Nepal: An Application of Bankometer. JOURNAL OF ADVANCED ACADEMIC RESEARCH (JAAR), 1 (1), 88-95.
- Makkar, A. & Singh, S. (2012) "Evaluating the Financial Soundness of Indian Commercial Banks: An Application of Bankometer". Paper presented at National Conference on Emerging Challenges for Sustainable Business, June 1-2, IIT Rurkee, Uttrakhand, pp. 118-132.
- Nawaz, S. (2015). Bank Islamic is going to take over KASB Bank in line with an amalgamation scheme prepared by the State Bank of Pakistan (SBP), stock filings by the two banks said on Tuesday. Karachi: The Express Tribune.
- Hilbers, P., L., C., Leone, A., M., Gill, M., S., & Evens, O. (2000). Macro prudential Indicators of Financial System Soundness, International Monetary Fund. pp. 1-49.
- Reddy, R., Rajesh, M., & Reddy, T., N. (2011). Valuation through EVA and Traditional Measures an Empirical study. International Journal of Trade, Economics and Finance, 2(1), 19-23.
- Safiullah. M. (2010) Superiority of Conventional Banks & Islamic Banks of Bangladesh: A Comparative Study, International Journal of Economics and Finance, 2(3).
- Usman, A., & Khan, M. (2012). Evaluating the Financial Performance of Islamic and Conventional Banks of Pakistan: A Comparative Analysis, International Journal of Business and Social Science, 3(7).