Financial Performance of UAE Banking Sector- A Comparison of before and during Crisis Ratios

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Abstract—Prior to the outbreak of recent global economic crisis, the banking sector of UAE had enjoyed double digit growth, but the global crisis restricted the massive growth of UAE banks. This paper contributes to emerging body of research by examining the financial performance indicators of the banks and identifying whether the financial performance indicators of UAE banks have been impacted by the Global economic crisis. This paper studies all banks listed on Abu Dhabi Stock Exchange. The study covers a period of 2005 to 2010, which has been classified into before crisis, during crisis and after crisis period. The performances of the banks have been measured by financial ratios. Leverage, Liquidity and Profitability ratios of UAE banks have been calculated and analyzed to draw interpretations. To find out the impact of crisis on these ratios a difference in the before and during the crisis period have been analyzed by Wilcox on test. The results of the study concludes that the recent global crisis has impacted UAE bank's financial performance specially the profitability measured by Return on Assets and Return on Equity. All profitability ratios of bank have decreased during the crisis period. Liquidity of banks has also decreased during the crisis period especially in terms of cash & portfolio Investments to deposits. On the contrary the Leverage ratios of UAE's baking sector have increased during the crisis period as compared to the pre crisis period.

Index Terms—Banking, global crisis, before and during crisis study, UAE, financial ratios.

I. INTRODUCTION

The recent global financial crisis is commonly viewed as the worst financial crisis since the Great Depression of the 1930's which has impacted almost all the global markets across the world. [1] From 2005-2007, the banking sector of UAE has seen a growth greater than 30% in their loan books. Loans grew at a 5-year CAGR of 32% to reach USD 609 billion at the end of 2008, while total deposits grew at a slower pace with a 5-year CAGR of 27% to reach USD 725 billion at the end of 2008. [2] During the global crisis, the UAE bank's profitability and growth was severely hampered due to reduced wholesale funding availability, pressure on investment securities portfolios, plummeting local real estate markets, withdrawal or deferrals of loan agreements of real estate projects etc. Our paper contributes to an emerging body of research by identifying whether the profitability, liquidity and leverage of UAE banks have been significantly impacted by the Global economic crisis by drawing a comparison between the before crisis and during crisis period. To our knowledge this is the first study which

Manuscript received July 20, 2012; revised August 30, 2012. Anupam Mehta is with Institute of Management Technology, Dubai, UAE. (e-mail: aupamarora.delhi@gmail.com). examines the overall banking sector of UAE and makes comparison between the before crisis and during crisis financial performance of the banks in UAE. The paper gives

II. REVIEW OF LITERATURE

The review of literature has been divided in to two parts; the first part gives the details of various studies conducted on UAE banking sector and the second talks about the researches done on drawing the comparison of before and after global crisis.

Hassan and Al-Mazrooei (2007) examined the UAE bank's risk management practices and techniques. [3] Zaabi (2011) studied the emerging market (EM) Z-score model to predict bankruptcy major Islamic banks in the UAE. [4] Zaki, Bah and Rao (2011) explored the probability distress prediction of UAE financial institutions. [5] Al-Tamimi (2012) examined the relationship between corporate governance practices of UAE national banks and performance level. [6]

This part covers the review of major studies assessing the impact of Global financial crisis. Xiao (2009) examined the performance of French banks during 2006–2008. [7] Beltratti and Stulz (2009) concluded that the banks with more shareholder-friendly boards performed worse during the crisis. [8] Wang (2009) examined the relation between insider ownership and bank performance in the United States before and during the recent financial crisis. [9] Dietrich and Wanzenried (2011) examined factors that affect the profitability of Swiss commercial banks over the period from 1999 to 2009 by using the before-crisis period of 1999–2006 and the crisis years of 2007-2009. Their results provide evidence that the financial crisis did have a significant impact on banks profitability. [10] Berger and Bouwman (2010) studied the monetary policy affect total bank liquidity Creation and difference in impact before and after the crisis. They found that liquidity creation tends to be high prior to financial crises. [11] Vazquez and Federico (2012) studied the bank funding structures and concluded that the banks with weaker structural liquidity and higher leverage in the before-crisis period were more likely to fail afterward. [12] Cornett, M. (2009) concluded that during the financial crisis of 2007-2009 the banks with more illiquid asset portfolios, increased their holdings of liquid assets and decreased lending [13] From review of literature it can be concluded that may studies have been conducted in the area of economic crisis in developed countries but very few studies have been conducted in Gulf countries or Middle East. Moreover, hardly any study has been conducted to measure the impact of financial crisis on overall financial performance of UAE's banking sector. The goal of this paper is to unfold the impact of global financial crisis in leverage, liquidity and the profitability areas of UAE's banking sector.

The paper adds to the body of knowledge by empirically chalking out the financial performance areas most affected the by Economic crisis.

III. RESEARCH METHODOLOGY

A. Hypothesis

The study undertakes the following hypothesis

 H_0 : There is no significant difference between the before crisis and during crisis Profitability ratios of banks.

 H_1 : There is a significant difference between the before crisis and during crisis Profitability ratios of banks.

 H_0 : There is no significant difference between the before crisis and post crisis Liquidity ratios of banks.

 H_1 : There is a significant difference between the before crisis and during crisis Liquidity ratios of banks.

 H_0 : There is no significant difference between the before crisis and during crisis Solvency and leverage Ratios.

 H_1 : There is a significant difference between the before crisis and during crisis Solvency and leverage Ratios.

B. Data and Variables

The scope of the study includes all banks listed on Abu Dhabi Stock Exchange. The total numbers of banks under study are 13. The list of banks studies in the current research have been given in Appedix-1. This study takes banking sector as the numbers of Islamic banks on the list are very small and meaningful conclusion cannot be concluded. For the purpose of the study, review of 6 year has been made from 2005 to 2010. The choice of number of years is based on the availability of the data. The six year period has been divided into three parts – before crisis, during crisis and after crisis. Although it is difficult to say, what is the exact time period for the start of crisis, as it varies in different parts of the world. Based on the previous studies, two data sets have been taken. The data set I take 2005-06 as before crisis period, 2007-2009 as during crisis period and 2010 have been taken as after crisis. [18] Data set -II, takes 2005-07 as before crisis period, 2008-2009 as during crisis period and 2010 has been taken as the after crisis period. In both the data sets, the after crisis period remains the same. Since 2011 results were not available, so only 2010 has been taken as after crisis period. The study is based on the secondary data obtained from the audited balance sheets and profit & loss accounts of the respective banks and Abu Dhabi Stock Exchange Website.

For the purpose of current research, the financial performance of the banks will be examined in the area of leverage, Liquidity and profitability. There are many ways in which the Liquidity, Leverage and profitability of the banks can be studied. Most common way of measuring the financial performance of bank is to calculate its ratios and compare with the past to make interpretations (Oberholzer and Westhuizen, (2004) [14]. Moreover using ratios as financial performance indicator of banks have been highly and commonly used in the banking literature.

Liquidity: Liquidity ratios measure the ability of the bank to meet the short term financial obligations. Higher liquidity ratios indicate relatively good cash position. Most commonly three ratios- Loan to deposit ratio, Cash & Portfolio Investment to Deposits and loan to total assets are used to measure the liquidity of the banks. Profitability -The earnings ratios or the overall profitability ratios indicates how efficient the concern is in utilizing the assets. For the purpose of measuring profitability Return of Assets, Return on Equity and Earning per share have been taken. Long term Solvency-Solvency ratios are termed as gearing or leverage ratios. A higher leverage ratios indicates high bankruptcy and financial distress and but enable the firm to enhance profitability by inserting the debt in the capital structure. In current study, Debt to Equity and Total Debt to total Assets ratio have been used as a proxy for leverage or solvency position. A list of variables and the formula used for their calculation have been given in table I.

TABLE I: KEY INDICATORS USED TO ASSESS BANKING SECTOR

Performance area	Formula used	Symbol
	Return on Equity=Net profit/Shareholder Equity %	ROA
Overall Profitability	Return on Assets= Net profit/ total assets	ROE
	Earnings per share= Net profit/ No of outstanding	EPS
Liquidity	Cash & Portfolio Investment to Deposits	CPID
	Loan to Asset Ratio =Loans/Total Assets	LAR
	Loans/Deposits=Loans/Deposits	LDR
Financial Leverage	Debt Equity ratio =Total Debt / Shareholder Equity	DER
	Total Debt to Total Assets Ratio=Total debt /Total Assets	DTAR

C. Statistical Methods and Tools

The previous studies on assessing the impact of crisis through ratios analysis used T test for comparing the before crisis to after crisis (Kesimli and Gunay (2011), Apak and Uyar (2009). For applying the parametric test, the data must satisfy the normality assumption. Since the data in this study does not satisfy the condition of normality so the non parametric (Engkuchik and Kaya, 2012) has been used. [15][16] The related samples have been tested by Wilcox on signed-rank test, non-parametric equivalent to parametric T test, where normality assumption is not a prerequisite, to assess the differences. [18]

IV. EMPIRICAL RESULTS

To analyze the financial performance of UAE banks, the Liquidity, Leverage and Profitability ratios have been calculated for before crisis, during crisis and after crisis period and then analyzed with the help of statistical tools. The results of the study have been given in two parts: Part–A brings out the year wise comparison of banking sector for all the ratios considered under the study. Part – B analyses the results derived from rank test (the non parametric test) for all variables

A. Year wise Comparison of Financial Ratios of Banking Sector The graphs bring out the year by year change in all the banks considered under the study from 2005 to 2010.

TABLE II: CASH & PORTFOLIO INVESTMENT TO DEPOSITS(CPID)

•	DATA SET-1	DATA SET-II
AFTER CRISIS	0.374	0.374
CRISIS	0.397	0.346
BEFORE CRISIS	0.443	0.462
All YEARS		0.408

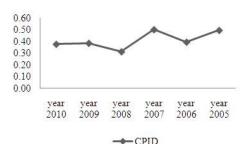


Fig. 1. Average CPID of banks

CPID ratio during the crisis period and before crisis period has been given in Table II. The CPID ratio before crisis (for the years 2005-2007) is higher than the CPID during the crisis period. The CPID has gone down from 0.50 in 2007 to 0.31 in 2008, bringing out the tremendous decrease in the liquidity position of banks during the crisis years. In year 2010, the CPID started recovering and increased slightly to 0.374 but still it is low as compared to before crisis period of data set-I. This indicates that the banks liquidity had deceased during the crisis period. Also the banking sector's mean CPID is still lesser than before crisis.

TABLE III: LOAN TO TOTAL ASSET RATIO(LTAR)

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	DATA SET-1	DATA SET-II			
AFTER CRISIS	0.684	0.684			
CRISIS	0.680	0.708			
BEFORE CRISIS	0.618	0.619			
All YEARS	0.	660			

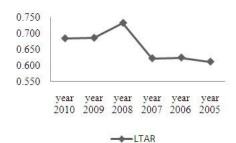


Fig. 2. Average LTAR of banks

LTAR reflects the proportion of banks loans as compared to the total assets. A higher ratio indicates the utilisation of funds in less liquid but more profitable assets. The fig. 2 shows that LTAR of banks was 0.62 in 2005-06 and increased slightly to 0.64 during 2007. In year 2008, the LTAR has increased tremendously from 0.64 to 0.74. This is because of the real estate and constructions boom, the banks were still expanding the loans. But this increase in LTAR could not be sustained and during the crisis year of 2009 it came down to 0.69 and further decreased in after crisis period. This indicates that the banks have restricted the expansion of loans after 2008 and continuously increasing the liquidity by reducing the LTAR year by year.

TABLE IV: LOANS TO DEPOS ITS RATIO(LDR)

	DATA SET-1	DATA SET-II
AFTER CRISIS	0.970	0.970
CRISIS	0.988	1.027
BEFORE CRISIS	0.909	0.906
All YEARS	0.9	958

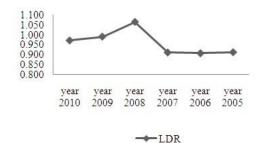


Fig. 3. Average LDR of banks

Another ratio used to measure the liquidity position of banks is LDR (Loan to deposits ratio). It reflects the utilisation policy of the bank. A very high LDR indicates that the banks have been deploying more funds in Loans. It results in lesser liquidity but more profitability as more funds have been allocated to Loan (more profitable) whereas low ratio indicates more liquidity but low profitability. For UAE banks, the LDR was 0.91 for 2005-07 but in 2008 the LDR hits 1.06. But like LTAR, the bank's loan expansion could not be sustained and global recession lead to the decrease in the loans expansion reducing the LDR and increasing the liquid funds.

TABLE V: RETURN ON EQUITY(ROE)

	DATA SET-1	DATA SET-II
AFTER CRISIS	12.9%	12.9%
CRISIS	14.6%	12.2%
BEFORE CRISIS	18.6%	18.8%
All YEARS	1	6%

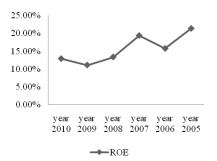


Fig. 4. Average ROE of banks

The Fig. 4 depicts that the ROE of the UAE banks have started decreasing from 2007 to 2009. The ROE was highest in year 2005. In year 2009 when the crisis was at is its peak the ROE decreased to its lowest in all the five years to 11%. As the markets started recovering in 2010 the ROE of the banks raised marginally to 12.87%. The summary table brings out that the before crisis ROE is higher than the crisis period. The table also shows that the ROE is recovering in 2010, but still is very low as compared to before crisis period.

TABLE VI: RETURN ON ASSETS(ROA)

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	DATA SET-1	DATA SET-II				
AFTER CRISIS	2.1%	2.1%				
CRISIS	2.2%	1.9%				
BEFORE CRISIS	3.4%	3.2%				
All YEARS	3	%				

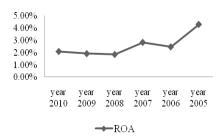


Fig. 5. Average ROA of banks

The ROA, which measures the overall profitability, has shown a downward turn right form 2005 and continuously falling till year 2009(except in year 2007). The ROA of the banks is lowest in 2008. The table IV shows that the before crisis the ROA was 3% but during the crisis it has decreased to 1.9% in data set-I and 2.20% in data set-II. The bank's profitability has recovered a bit in post crisis period (2.10% in 2010 as compared to 1.2% in 2009) but still it is very low.

TABLE VII: EAMINGS PER SHARE(EPS)						
DATA SET-II DATA SET-II						
AFTER CRISIS	0.54	0.540				
CRISIS	0.52	0.485				
BEFORE CRISIS	0.75	0.694				
All YEARS	0.:	598				

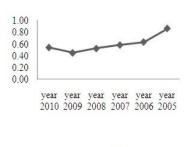


Fig. 6. Average EPS of banks

-EPS

Fig. 6 shows that the before crisis EPS is very high as compared to the crisis period. During the before crisis period, the EPS was as high as 0.86 which has been reduced to 0.52 in 2008 and 0.45 in 2009. Like other profitability ratios the EPS has also shown the sign of recovery in 2010.

TABLE VIII: DEBT EQUITY RATIO(DER)						
DATA SET-II DATA SET-II						
AFTER CRISIS	5.675	5.675				
CRISIS	6.025	5.951				
BEFORE CRISIS	5.140	5.484				
All YEARS	5.	671				

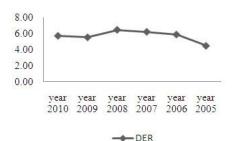


Fig. 7. Average DER of banks

The DER ratio depicts the proportion of debt and equity. Higher ratio indicates the more leverage and high risk. The trend line shows that the DER was 4.44 and 5.84 in before crisis period. During the crisis period, the banks DER increased to 6.17 in 2007 to its peak in 6.41 in 2008. The crisis period DER is higher than the Before crisis period. As shown in table number-VIII DER was highest during the crisis period as compared to before and after crisis under both data sets.

TABLE IX: TOTAL DEBT TOTAL ASSETS RATIO(TDTA)					
DATA SET-1 DATA SET-I					
AFTER CRISIS	0.837	0.837			
CRISIS	0.841	0.840			
BEFORE CRISIS	0.798	0.814			
All YEARS	0.0	326			

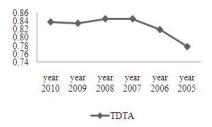


Fig. 8. Average TDTA of banks

The Total debt to total assets is other measure of leverage. There is a steep increase in TDTA from 2005 to 2007. During the crisis period the TDTA stabilised at 0.84. In 2010 it further decreased to 0.837. The table IX clearly shows that the crisis TDTA was higher as compared to both before crisis and after crisis period.

B. The Results of Wilcoxcon Signed Rank Test that Compares the Before Crisis Period Ratios with Crisis Ratios.

This section analyses the results of rank test on the pair sample differences of financial ratios. The table X gives the results of test for Data set-I and table XII gives the results for Data set-II.

Under the assumption regarding the start of the crisis (2007 to 2009) in data set -I, we find out that the negative mean rank of ROE is higher than the positive mean ranks and Z score is not statistically significant. For data set-II, the results given in table XII clearly shows that the negative mean ranks of ROE is higher than the positive mean ranks for the selected banks. As given in table XII the Z score is based on the negative ranks and the asymp sig. shows that the Z score is significant at 1% level. The Z score based on the negative ROE mean indicate that during crisis ROE is lesser than the before crisis ROE. Thus we can conclude that ROE of banking sector was severely hampered during the crisis period for data set-II. That indicates that during the crisis period had adversely affected the average ROE of UAE banks. Hence based on the crisis and before crisis period taken in data set-1, we reject the null hypothesis that ROE of banking sector was not affected during the global crisis. Results of the study are similar to studies done on GCC banks. (Parashar and Venkatesh, 2010)^[19].

TABLE X: RANKS TEST RESULTS(DATA SET-I)

	Ranks			
		N	Mean Rank	Sum of Ranks
ROEduringcrisis - ROEbeforecrisis	Negative Ranks	7	8.14	57
	Positive Ranks	5	4.20	21
	Ties	1		
	Total	13		
ROAduringcrisis - ROAbeforecrisis	Negative Ranks	11	7.55	83
	Positive Ranks	2	4.00	8
	Ties	О		
	Total	13		
EPSduringcrisis - EPSbeforecrisis	Negative Ranks	10	7.10	71
	Positive Ranks	3	6.67	20
	Ties	О		
	Total	13		
CPIDduringcrisis - CPIDbeforecrisis	Negative Ranks	8	7.44	59.5
	Positive Ranks	5	6.30	31.5
	Ties	О		
	Total	13		
LTARduringcrisis - LTARbeforecrisis	Negative Ranks	3	4.33	13
	Positive Ranks	10	7.80	78
	Ties	О		
	Total	13		
LDRduringcrisis - LDRbeforecrisis	Negative Ranks	4	4.75	19
	Positive Ranks	9	8.00	72
	Ties	О		
	Total	13		
DERduringcrisis - DERbeforecrisis	Negative Ranks	2	6.50	13
	Positive Ranks	11	7.09	78
	Ties	О		
	Total	13		
TDTAduringcrisis - TDTAbeforecrisis	Negative Ranks	1	6.50	6.5
	Positive Ranks	11	6.50	71.5
	Ties	1		
	Total	13		

TABLE XI: TEST STATISTICS (DATA SET -I)

	TABLE AL TEST STATISTICS (DATA SET -1)							
	Test Statistics ^c							
-	ROEduringcris	ROAduringcris	EPSduringcrisi	CPIDduringcrisi	LTARduringcrisi	LDRduringcrisi		·
	is -	is -	S -	S -	s -	s -	DERcrisis -	TDTAcrisis -
	ROEbeforecris	ROAbeforecris	EPSbeforecrisi	CPIDbeforecrisi	LTARbeforecrisi	LDRbeforecrisi	DERbeforecris	TDTAbeforecri
	is	is	S	S	S	S	is	sis
Z	-1.415 ^a	-2.622ª	-1.783 ^a	979 ^a	-2.275 ^b	-1.853 ^b	-2.271 ^b	-2.569 ^b
Asymp. Sig. (2-tailed)	.157	.009	.075	.328	.023	.064	.023	.010

a. Based on positive ranks.

TABLE XII: RANKS TEST RESULTS (DATA SET-II)

	BLE XII: RANKS TEST R	N	Mean Rank	Sum of Ranks
ROEduringcrisis - ROEbeforecrisis	Negative Ranks	11	7.45	82
	Positive Ranks	2	4.50	ç
	Ties	0		
	Total	13		
ROAduringcrisis - ROAbeforecrisis	Negative Ranks	12	7.42	89
	Positive Ranks	1	2.00	2
	Ties	0		
	Total	13		
EPSduringcrisis - EPSbeforecrisis	Negative Ranks	10	7.20	72
	Positive Ranks	3	6.33	19
	Ties	0		
	Total	13		
CPIDduringcrisis - CPIDbeforecrisis	Negative Ranks	10	6.50	65
	Positive Ranks	1	1.00	1
	Ties	2		
	Total	13		
LTARduringcrisis - LTARbeforecrisis	Negative Ranks	1	1.00	1
	Positive Ranks	12	7.50	90
	Ties	0		
	Total	13		
LDRduringcrisis - LDRbeforecrisis	Negative Ranks	1	5.00	5
	Positive Ranks	12	7.17	86
	Ties	0		
	Total	13		
DERduringcrisis - DERbeforecrisis	Negative Ranks	3	10.33	31
	Positive Ranks	10	6.00	60
	Ties	0		
	Total	13		
TDTAduringcrisis - TDTAbeforecrisis	Negative Ranks	1	5.50	5.5
	Positive Ranks	9	5.50	49.5
	Ties	3		
	Total	13		

b. Based on negative ranks.

The second profitability ratio, mean negative ranks of ROA is higher than the positive mean ROA with a Z score statistically significant at 1% level for both data sets, indicating that the ROE of banking sector is lesser than the pre criris ROE. Hence we can conclude that the ROA has decreased during the crisis period under both data sets. Thus

we reject the null hypothesis that ROA of banking sector has not been impacted during the crisis period.

The ROA of the banks has been reduced as due to the impairment of assets and reduced margins and increased losses

TABLE XIII: TEST	T STATISTICS	(DATA	SET_II)

	ROAduringeris EPSduringerisi CPIDduringeris LTARduringeri LDRduringerisi								
	ROEduringcris	is -	s -	is -	sis -	S -	DERcrisis -	TDTAcrisis -	
	is - ROE	ROAbeforecris	EPSbeforecrisi	CPIDbeforecris	LTARbeforecri	LDRbeforecrisi	DERbeforecrisi	TDTAbeforecri	
	beforecrisis	is	S	is	sis	S	S	sis	
Z	-2.551 ^a	-3.041 ^a	-1.852a	-2.847 ^a	-3.113 ^b	-2.831 ^b	-1.013 ^b	-2.265 ^b	
Asymp. Sig. (2-tailed)	.011	.002	.064	.004	.002	.005	.311	.024	

- a. Based on positive ranks.
- b. Based on negative ranks.
- c. Wilcoxon Signed Ranks Test

The third Profitability Ratio, EPS also has negative means rank higher than the positive mean rank for UAE banking sector. The Z score (-1.852) for data set I for and data set-II -1.78) is based upon the negative means as indicated in table XI and XIII which means the EPS during crisis has decreased as compared to before crisis period and the decrease is statistically significant at 10% level of significance under both data sets. Hence we can conclude that the EPS has reduced during the crisis irrespective of the assumption as to the start of crisis period. Thus we reject the null hypothesis that EPS of banking sector has not been impacted during the crisis. The results of the study are similar to previous studies. (Dietrich and Wanzenried, 2011)

The Liquidity of the banks measured by CPID ratio has negative ranks higher than the positive ranks. The Z score for data set-I is -0.98 and for data set II is -2.85. As shown in table no-XI and XIII, the Z score for both data sets is based negative rank but the value of Z score is significant (1%) for data set II only. That means the CPID decrease is significant only when we assume the start of the crisis in 2008 instead of 2007 in data set -I.

The LTAR of banks has positive ranks more than the negative rank as given in table X and have Z score of -2.275 for data set I and -3.113 for data set –II which is statistically significant at 5% and 1% level of significance. This shows that the LTAR has increased during the crisis period, hence decreasing the liquidity. This also indicates that the banking sector has utilized the funds more in Loans as compared to having the Liquid assets. Hence we reject the null hypothesis that during crisis period, the LTAR has not been impacted.

The LDR also have similar results. The positive ranks are more than the negative ranks and the Z score is significant at 10% level of significance for data set-I and 1% level of significance for data set-II. This further testifies that the banks have utilized more Loans during the crisis period as compared to before crisis period. This also indicates the aggressiveness of banks and the expansion of loan even during the crisis period. Thus we reject the null hypothesis that LDR of banking sector has not been impacted during the crisis.

The leverage of banks measured by DER has positive ranks more than the negative ranks and the Z score is significant in data set-I only. That means we reject the null

hypothesis that the DER is not impacted by crisis only under the assumption that the crisis period started during 2007. Whereas the results of pair differences for data –II are insignificant.

The leverage, measured in terms of TDTA has increased during the data set I as well as data set-II of crisis period, indicating that the increase in leverage during the crisis period. The pair differences in DER were significant with Z value significant at 1% for both data sets. The results of the study indicate that the UAE banks playing aggressive in spite of economic recession and increased debt during the crisis period. Thus we reject the null hypothesis that the TDTA of UAE's banking sector has not been affected by the global crisis.

Based on the results of the current research, we can conclude that all the liquidity, profitability and leverage ratios have been impacted by the crisis for both data sets(Except DER for data set-II and ROE & CPID for Data set-I).

V. CONCLUSION

Based on the results of the statistical analysis, this study concludes that the financial performance of UAE banking sector has been impacted by global crisis. The profitability of the UAE banks has been significantly impacted by global crisis especially the overall returns generated on total assets. Like the banks all over the world, the UAE's banking sector also witnessed the fall in profits. The reduced profitability is primarily due to the reduced margins, slower growth and growing NPA's. This paper also puts forward the impact of global crisis on the banking sector's liquidity. The liquidity decreased during the crisis especially the Cash & Portfolio Investments have reduced a lot, severely impacting the banks liquidity during the 2008-09 crisis periods. The Leverage of banking sector also increased Future research is recommended after incorporating more number of years after crisis period. The researchers can further explore the impact of crisis separately on Islamic and Non Islamic banks.

APPENDIX

List of banks studied in the current research.

- 1) Abu Dhabi Islamic Bank
- 2) National Bank Of Abu Dhabi
- 3) Abu Dhabi Commercial Bank
- Commercial Bank International P.S.C
- 5) First Gulf Bank
- 6) Union National Bank
- 7) Bank Of Sharjah
- 8) Sharjah Islamic Bank
- 9) United Arab Bank
- 10) Invest Bank
- 11) National Bank of Ras Al Khaimah
- 12) National Bank of Fujairah
- 13) National Bank of Umm Al- Qaiwain

REFERENCES

- [1] M. Brunnermeier, "Deciphering the Liquidity and Credit Crunch 2007–2008," *Journal of Economic Perspectives*, vol. 23, Iss: 1, pp. 77–100, 2009.
- [2] S. Kapur, (2010) UAE banking sector's assets largest in GCC. [Online]. Available http://www.emirates247.com. (Assessed on Jan 2.2012).
- [3] H. Hassan Al-Tamimi and F. Al-Mazrooei, "Banks' risk management: a comparison study of UAE national and foreign banks," *Journal of Risk Finance*, vol. 8, Iss: 4, pp. 394 409, 2007.
 [4] Obaid Saif H. Al Zaabi, "Potential for the application of emerging
- [4] Obaid Saif H. Al Zaabi, "Potential for the application of emerging market Z-score in UAE Islamic banks," *International Journal of Islamic and Middle Eastern Finance and Management*, vol. 4, Iss: 2, pp. 158 – 173, 2011.
- [5] E. Zaki, R. Bah, and A. Rao, "Assessing probabilities of financial distress of banks in UAE," *International Journal of Managerial Finance*, vol. 7, Iss: 3, pp. 304 – 320, 2011.
- [6] H. Al-Tamimi, "The Effects of Corporate Governance on Performance and Financial Distress: The Experience of UAE National Banks," *Journal of Financial Regulation and Compliance*, vol. 20 Iss: 2, 2012.
- [7] Y. Xiao, "French Banks Amid the Global Financial Crisis," IMF Working Paper, 2009.
- [8] A. Beltratti and R. M. Stulz, Why Did Some Banks Perform Better during the Credit Crisis? A Cross-Country Study of the Impact of Governance and Regulation, Working Paper at SSRN: (online) Available: http://ssrn.com/abstract=1433502 2009.
- [9] X. Wang, "Insider Ownership and Bank Performance: Evidence from the Financial Crisis of 2007-2009," Project Master's Degree, Simon Fraser University, Canada, 2010.
- [10] A. Dietrich and G. Wanzenried, "Determinants of bank profitability before and during the crisis: Evidence from Switzerland," *Journal of*

- International Financial Markets, Institutions and Money, vol.21, pp. 307-327, Issue 3, July, 2011
- [11] A. Berger and C. Bouwman. (2010) Bank Liquidity Creation, Monetary Policy, and Financial Crises. http://web.mit.edu/cbouwman/www/downloads/BergerBouwmanFinC risesMonPolicyAndBankLiqCreation.pdf [Assessed on 6th Feb 2012].
- [12] F. Vazquez and P. Federico. (2012) Bank Funding Structures and Risk: Evidence from the Global Financial Crisis, IMF Working Paper, [Online]. Available: http://www.imf.org/external/pubs/ft/wp/2012/wp1229.pdf. [Assessed on: Mar 14, 2012]
- [13] M. Cornett, J. McNutt, P. Strahan, and H. Tehranian. (2011). Liquidity Risk Management and credit supply in the Financial Crisis. [Online]. Available: http://ssrn.com/abstract=1601992. vol. 101, issue 2, pp. 297–312.
- [14] M. Oberholzer and G. Westhuizen, "An empirical study on measuring efficiency and profitability of bank regions," *Meditari Accountancy Research*, vol. 12, Issue: 1, 2004, pp. 165 – 178.
- [15] I.G Kesimli and S. G. Gunay, "The impact of the global economic crisis on working capital of real sector in Turkey," BEH - Business and Economic Horizons, vol. 4, Issue 1, January 2011, pp. 52-69.
- [16] S. Apak and M. Uyar (2009), "The Earnings per Share and Inventory Turnover Ratios In The Global Financial Crisis: A Comparative Study For Food and Textile Sectors In Istanbul Stock Exchange," International Journal of Social Sciences and Humanity Studies, vol. 1, no. 1, pp. 1309-8063 [Online].
- [17] Engkuchik and Kaya, "The Impact of the Asian Crisis on Stock Market Liquidity: Evidence from the Malaysian Stock Exchange," *International Journal of Business and Social Science*, Special issue April, vol. 3, no. 8, 2012, pp. 120-127.
- [18] X. Lou and R. Sadka, Liquidity Level or Liquidity Risk? Evidence from the Financial Crisis, [Online]. Available: www.ssrn.com/abstract=1622885, 2010. [citied:Feb 22, 2012.]
- [19] S. P. Parashar and J. V. Venkatesh, "How did Islamic banks do during global financial crisis?," *Banks and Bank Systems*, vol. 5, Issue 4, pp. 54-62, 2010.



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