

between before Basel III implementation and after Basel III implementation. Table V shows NPLR affects ROE negatively before and after implementing Basel III, but it affects 4.3% less after implementing Basel III.

TABLE V COEFFICIENT SUMMARY TABLE, BASEL III EFFECTS ON ROE

ROE*	Coefficient		P-Value	
	Before	After	Before	After
(Constant)	.683	-5.042	.926	.085
NPLR	-1.175	-1.132	.189	.004
LATD	-.957	-.141	.447	.596
PPT	-3.099	1.725	.417	.515
LLP	-.813	-.481	.202	.124
CAR	.675	.010	.343	.487
Bank Size	.249	.426	.586	.105
TDA	3.864	2.342	.280	.125
GDP	-38.799	4.110	.646	.802

*ROE dependent variable

Furthermore, after following Basel III NPLR affects ROE significantly whereas before following it affects insignificantly. That means that before Basel III NPLR could predict the variance of ROE with 81.1% probability but after 99.6% probability. LATD and LLP both have negatively insignificant effects before and after implementation Basel III, but they affect ROE less after Basel III.

E. Basel III applications effect on ROA

Table VI shows a comparison between before Basel III implementation and after implementation of Basel III for dependent variable ROA.

TABLE VI COEFFICIENT SUMMARY TABLE, BASEL III EFFECTS ON ROA

ROA	Coefficients		P-Value	
	Before	After	Before	After
(Constant)	.411	-.223	.159	.651
NPLR	-.060	-.080	.087	.204
LATD	-.012	.058	.805	.216
PPT	-.031	.576	.832	.219
LLP	-.052	-.034	.040	.519
CAR	.057	.001	.045	.774
Bank Size	-.010	-.002	.559	.972
TDA	-.131	.050	.343	.846
GDP	-4.215	2.423	.205	.400

*ROA dependent variable

Table VI shows NPLR affects ROE negatively before and after implementing Basel III, but it affects 2.0% more after

implementing Basel III. Furthermore, NPLR affects ROE insignificantly both before and after implementing Basel III but this insignificance level is more after Basel III. That means that before Basel III NPLR could predict the variance of ROA with 91.3% probability but after 79.6% probability. LATD, PPT and TDA have negative insignificant effects before implementing Basel III but positive insignificant effects after implementation Basel III. On the other hand, LLP and Bank size has a negative impact before and after implementing Basel III whereas LLP has significant impact before Basel III but insignificant impact after Basel III.

V. CONCLUSION

The main purpose of the study is to examine the impact of credit risk on the profitability of commercial banks of Bangladesh. The result shows that credit risk ratio NPLR has a significant negative impact on ROE. Besides the credit risk ratio, the study also found that loan loss provision ratio and macroeconomic variable GDP has a significant negative impact on profitability ratio ROE. GDP has the most significant impact on ROE. One unit increases in GDP causes 12.399 unit decreases in ROE where one unit increases in LLP and NPLR causes .502 units & .491 unit decreases in ROE respectively. The result also shows that NPLR, LATD, PPT and LLP have a significant impact on profitability ratio ROA. NPLR and LLP have negative impact on ROA where LATD and PPT have positive impact on ROA of all selected commercial banks of Bangladesh. The loan loss provision has the most significant negative impact on ROA as it is liable to decrease .029 unit ROA for one unit increase in LLP where one unit increase in NPLR reduce .025 unit ROA. The regression result for Basel III effect describes that NPLR has a significant negative impact on ROE, but this impact is less than that of before Basel III. From the result, it can be seen that after implementing Basel III, the impact of all variables on ROE has reduced except bank size. Furthermore, before Basel III, LATD, PPT, TDA and GDP have a negative impact on ROA but after Basel III, they affect ROA positively. After implementing Basel III, the impact of non-performing loans has increased on the return on assets. From the overall analysis, it can be said that the credit risk ratio NPLR has a significant impact on the profitability of commercial banks of Bangladesh. As several literature and this study shows that non-performing loan has a negative effect on profitability, the management need to take appropriate steps such as enact regulations and force everyone to follow these regulations, trained the employee on credit risk management, introduce credit rating system to minimize non-performing loan that helps banking sector to ensure financial soundness. Further research may be performed by considering all the commercial banks of Bangladesh for more time period and including more variables such as Operating cost to loan (OCL) ratio (total operating cost/total loan), Return on Risk Adjusted Capital (RORAC) calculated as (net income/ risk weighted assets), and Risk Adjusted Return on Capital (RAROC) calculated as (expected return/ value at risk) and so on.

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