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Performance Evaluation using CAMELS Model: A Comparative Study on Private Commercial Banks in Bangladesh

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Abstract

Bank is very aged organization that is contributing toward the improvement and development of any countries economy and given so crucial importance in modern world's service industry. The banking segment is the mainstay of any economy. The present study is an attempt to gauge and compare the performance of the banking sector through CAMELS Rating System. In this study, thirteen conventional private commercial banks have been chosen as samples to meet the purpose of the study. Data has been collected from the banks' annual reports for the period of 2016 to 2018 and the market disclosure. The findings from this research study showed that NCC Bank was at the top position on the basis of CAMEL rating system among all sampled banks. It is found that on an average the Capital Adequacy ratio of all banks is much higher than the benchmark of 10% as mandated by Bangladesh Bank. The average Capital Adequacy Ratio (CAR) and profit per employee (PPE) of Meghna Bank is the highest and the efficiency of this bank is also much higher compared to other banks. Again the NPLs of Uttara Bank (6.33%) is higher than other banks. Estimating the profitability ratios, it can be observed that for long-term period, Uttara Bank's profitability is outstanding on an average as compared to other banks. However, the discoveries from this paper will absolutely help the researchers and analysts to understand financial statement analysis in a deepness manner and also provide a uniform basis for identifying those institutions requiring special supervisory attention.

Keywords: Bank, CAMELS, Performance Evaluation, Bangladesh.

Introduction

The banking sector plays a vital role in the economy of the country, working as an intermediary between all or any industries, including agriculture, construction, textiles, manufacturing, and so on (Dash & Das, 2009). As a result, the banking system adds value and its total growth aids in the growth of the economy, which becomes increasingly important for a country. Since the banking sector has such a large impact on the economy as a whole, it is crucial to analyze, assess, and monitor its performance.

Many scholars have attempted to contribute to the development of a financial performance assessment using the CAMELS framework and its six components for a variety of financial institutions (Roman & Argu, 2013; Rozzani, & Rahman, 2013). Several scholars were constrained to analyzing financial success using only five variables (Sangmi & Nazir, 2010; Muhmad & Hashim, 2015). Other researchers looked at capital adequacy, asset quality, liquidity, and earnings in order to measure the financial performance's security. As a result, the study addresses a gap in the knowledge of CAMELS framework financial performance in Bangladeshi commercial banks by first analyzing all CAMELS framework indicators, then evaluating financial performance, and finally comparing the banks and their performance across the study period. This study has picked thirteen of Bangladesh's most well-known commercial banks for these purposes, which have never been compared in any previous research. These well-known banks are City bank, Meghna bank, Mercantile bank, Mutual Trust bank (MTB), National Bank litimed (NBL), NCC bank, One bank, Prime bank, Pubali bank, Southeast bank, Standard bank, Trust bank, Uttara bank. The current study will be useful for bank managers to improve financial performance and stakeholders to judge bank managers by exploring and evaluating the financial performance of Bangladeshi commercial banks from 2016 to 2018.The CAMELS framework with its six components was chosen to attain this goal, as this research will provide a thorough review of the institutions' financial performance.

Literature Review

Prasad et al. (2011) analyze the financial performance of Indian public banks from 2006 to 2010 using the CAMEL approach and grade the banks based on their financial performance. They have ranked Andhra bank as first and Central bank of India at the bottom most position. And, according to Prasad (2012), there were no substantial differences between private sector banks and public sector banks during his study period, and the same was true for managerial efficiency and liquidity. Malhotra (2013) conducted a similar study of Indian public banks from 2007 to 2011, excluding the State Bank Group, and discovered that Baroda Bank ranked first in terms of asset quality and liquidity, while United Bank ranked last due to inefficiency in management, poor earnings quality, and poor assets. In a similar line, Muhmad & Hashim (2015) used the CAMELS framework system to assess the financial performance of several Malaysian banks from 2008 to 2012, with the study sample consisting of both local and foreign institutions. The findings revealed that capital adequacy, asset quality, earnings, and liquidity have an impact on performance, as opposed to management quality, which has no impact on performance. Muktuf & Hazim (2020) used the CAMELS framework to assess the financial performance of banks in Iraq from 2014 to 2018, finding that the bank achieved the third arrangement for its overall financial performance, allowing for the effects of the CAMELS system's combined classification at the time of research.

According to a study by Elizabeth and Ellot (2004), all financial performance measures (return on assets, interest margin, and capital adequacy) are strongly and positively connected with customer satisfaction. To assess a bank's financial performance, financial reports such as a cash flow statement, income statement, balance sheet, statement of changes in notes, and equity to the financial statement must be prepared on a regular basis (Salhuteru & Wattimena, 2015). To assess the comparative conditions of commercial banks, Reddy (2012) used an improved version of the CAMEL ranking methodology. According to the research, the top three performing banks among all banks during the research period were China Trust Commercial Bank, Mashreq Bank, and Bank of Ceylon in terms of high liquidity and capital adequacy, while Development Credit Bank, American Express Bank, and Catholic Syriyan Bank were the bottom three banks in terms of low assets, low capital adequacy, earnings quality, and poor management quality. Daud (2013) discovered that income diversity and income-generating assets had a negative influence on the return on assets of banks when using the CAMELS approach to analyze the effect of diversity in banking on the basis of return on assets of banks.

Golam (2014) used the CAMELS rating system to measure the return on assets in two large Bangladeshi banks. Consumer feedback and satisfaction were graded based on asset quality, capital adequacy, liquidity quality, earnings quality, and management quality in that survey. According to Muljawan (2005), the banking sector had a great chance of being able to drive for the long term in order to make a contribution to the economy through intermediation. As a result, it can be concluded that by mobilizing public funds through banks, investment activities can be further supported. As a result, financial organization managers should pay close attention to any universal costs that could result in a bank failure, as this could result in severe losses for all financial industry stakeholders. That’s why there is a crucial importance to monitor the financial performance of this section. On the basis this literature review the current study is going to explore and evaluate financial performance several commercial banks Bangladesh.

Methodology

The CAMEL framework is an internal guiding device for evaluating financial services companies' accuracy, reliability, and performance on a case-by-case basis. According to Sarker (2005), the CAMELS approach uses financial analysis to evaluate bank financial evaluations. The study analyzed secondary data from sample banks' annual reports and market disclosures to identify numerical performance indicators related to CAMEL ratings, with the goal of examining financial strength in terms of capital adequacy, asset quality, management capacity, earning ability, liquidity, and sensitivity. In 1993, Bangladesh's central bank established the CAMEL rating framework to assess various banks' financial performance using a ranking system and to identify financial entities that require particular supervision.

The present study has been conducted to evaluate the financial performance of thirteen privately-owned commercial banks currently operating in Bangladesh. This study is predominantly based on secondary data which has been collected from the financial statements and annual reports of respective banks from online for the period of2016 of 2018. In this study, the CAMEL rating framework was utilized to rank the selected banks based on their performance. Various sub-parameters of the CAMEL model that are connected with distinct dimensions of financial performance analysis have been evaluated for the aim of this study. Banking Regulation and Supervision Agency for measuring diverse performance indicators of banks use financial ratios so that they can evaluate financial soundness and vulnerability.Collected data was analyzed through MS Excel and SPSS (v 22) software.

CAMELS System

CAMELS is an abbreviation for 6 strictures, capital adequacy (C), asset quality (A), management efficiency (M), earnings (E), liquidity (L) and sensitivity to the market risk (S), to live the banking and finance performance (Wanke et al., 2016). CAMELS is an prolongedmethod to the CAMEL systemthat was introduced in the USA in 1979 to assessbanks’ soundness (Roman and Sargu, 2013; Christopoulos et al., 2011). Later, CAMEL has been extended and used as a way to assess the soundness and financial performance of banks for the supervisory authorities in several countries (Roman and Sargu, 2013). The financial weakness and soundness were measured by the International Monetary fund (IMF) using five major handful parameters of monetary system soundness with shortening of CAMEL (capital adequacy, asset quality, management quality, earningssize and liquidity). However, it's been protracted to integrate the “S” parameter which replicates the sensitivity of bank to the aberrations within the market (Roman and Sargu, 2013). This “S” measures the sensitivity to plug risks like rate of interest, exchange and inflation riskwhich captures the organization’s risk (Gasbarro et al., 2002; Karim et al., 2018). In present time, CAMELS converts an assessment technique for banks’financial performance (Roman and Sargu, 2013). Consistent with the report of IMF (2000), the IMF and International Bank for Reconstruction and Development advocated the utilization of CAMELS as a valuable measure for economic system stability.

Table 1. CAMELS Parameter

Parameter	Definition
Capital adequacy (C)	Based on the bank asset value, capital adequacy is a computation of the capital required to control risk.
Asset quality (A)	Asset quality is that the instability of soundness banking induced by unsettled bank assets suffering from high nonperforming loans.
Management efficiency (M)	Management evaluates the company's efficiency in order to reduce costs and raise earnings in order to avoid bank collapse.
Earnings (E)	Earning may be a measure of profitability and there's an assessment of earnings and their level of relationship with peers during which the target is to gauge the impact of internally made funds on the bank capital.

Liquidity (L)	The capability and ability of banks to repay and reimburse short-term debts is referred to as liquidity.
Sensitivity to market risk (S)	Sensitivity to market risk refers to how resistant a bank's assets, liabilities, and net worth are to changes in market circumstances such as interest rates, exchange rates, and inflation risk.

Source(s): Collected from 9the literature review (Sahut and Mili, 2011; Peltonen et al., 2015; Altan et al., 2014; Karim et al., 2018; Munir et al., 2017)

Results and Discussions

Capital Adequacy

The capital adequacy ratio is the solvency ratio. The minimum of the rates of the capital adequacy for guaranteeing a banks' ability to absorb is a reasonable level of the losses before they become insolvent (Arabi, 2013). Recognizing the importance of capital adequacy, Bangladesh Bank (the country's central bank) has required all banks in the country to reach a capital adequacy level of 10%, which is in line with the Basel Committee's recommendations.

Table 2 is assembled based on the each sub-parameter's ranking of their average ratios of the composite capital adequacy. It expresses the bank's financial capabilities and strength. A lower composite group rank indicates that banks are performing better in financial sectors. Based on the results above, The Meghna Bank took the first position under the composite capital adequacy ratio with the group average of 1.00. This bank is in first position in total equity to total asset ratio, total debt to total assets ratio, total debt to total asset ratio and government securities to total investment ratios. On the other hand, one bank is in last position considering the composite ranking of capital adequacy with the group average of 11.00 due to lowest score in TE/TA despite CAR having larger than regulatory requirement.

Table 2. Capital adequacy ratios and rankings of sample banks

Banks	CAR		TE/TA		TD/TA		GS/TI		GROUP	
	Result	Rank	Result	Rank	Result	Rank	Result	Rank	Result	Rank
City	13.42	5	7.52	6	18.61	13	84.77	6	7.50	7
Meghna	18.88	1	11.99	1	0.00	1	94.90	1	1.00	1
Mercantile	13.28	6	6.38	10	8.53	9	83.81	7	8.00	10
MTB	12.82	7	5.97	11	8.83	10	89.17	3	7.75	9
NBL	14.04	3	10.93	2	2.18	3	82.70	8	4.00	2
NCC	12.62	8	7.35	8	5.56	6	86.24	5	6.75	4
One	11.93	12	5.41	12	11.24	11	80.16	9	11.00	13
Prime	17.04	2	8.91	3	11.55	12	94.63	2	4.75	3
Pubali	12.17	11	6.68	9	4.31	5	65.49	13	9.50	12
Southeast	12.38	10	7.37	7	6.03	7	77.68	11	8.75	11
Standard	11.13	13	7.58	5	0.62	2	78.18	10	7.50	8
Trust	13.87	4	4.96	13	8.05	8	88.19	4	7.25	5
Uttara	12.49	9	7.75	4	2.88	4	75.60	12	7.25	6

Note: CAR = Capital Adequacy Ratio, TE = Total Equity, TA= Total Assets, GS= Govt.Securities, TI= Total Investment

Table 3. Asset quality ratios and rankings of sample banks

Banks	FIN-A/TA		TI/TA		NPL/TL		FA/TA		LLP/TL		TL/TA		GROUP	
	Result	Rank	Result	Rank	Result	Rank	Result	Rank	Result	Rank	Result	Rank	Result	Rank
City	96.49	5	8.58	13	5.32	4	1.08	6	3.44	1	71.39	8	6.17	5
Meghna	97.60	2	10.25	11	5.69	7	0.72	3	1.39	8	68.77	11	7.00	7
Mercantile	97.51	3	13.54	5	2.09	2	1.13	8	0.90	10	77.73	1	4.83	1
MTB	94.67	9	12.31	9	5.39	5	1.41	9	1.92	6	74.69	5	7.17	8
NBL	97.64	1	13.42	7	9.50	13	0.61	2	0.65	13	77.23	2	6.33	6
NCC	95.41	7	13.92	4	5.80	8	1.09	7	2.43	3	72.29	7	6.00	4
One	94.90	8	10.80	10	4.91	3	0.76	4	2.26	4	74.76	4	5.50	2
Prime	89.45	13	8.86	12	6.16	10	2.36	12	0.87	11	70.03	10	11.33	13
Pubali	89.62	12	14.07	3	5.46	6	0.92	5	1.10	9	66.12	12	7.83	10
Southeast	96.48	6	17.19	1	5.87	9	2.45	13	1.81	7	70.15	9	7.50	9
Standard	92.71	11	13.54	6	1.98	1	2.02	11	0.83	12	73.42	6	7.83	11
Trust	97.41	4	12.44	8	7.90	12	0.22	1	2.21	5	75.92	3	5.50	3
Uttara	93.68	10	15.09	2	6.33	11	1.61	10	2.79	2	62.54	13	8.00	12

Note: FIN-A= Financial Assets, TA= Total Assets, TI= Total Investment, NPL= Non-Performing Loans, LLP= Loan Loss Provision, TL= Total Loan.

Asset Quality

The quality of assets is seen as a critical factor in assessing a bank's performance. The poor quality of assets and the low liquidity are the reasons for the failure of banks (Jha&Hui, 2012). The losses arising from fluctuating loans pose the greatest danger to banks in general. Therefore, banks are always trying to keep the non-performing loans at a lower level (Ongore&Kusa, 2013).

Table 03 represents the results of each sub-parameters' ranking with composite asset quality. According to the results, the Mercantile bank stood in the first position in composite ranking of asset quality with the average of 4.83. On the other hand, Prime Bank limited is in last position because of their unhealthy asset decisions. This banks average score is 11.33. Among the banks, NBL is in last position considering the non-performing loan status.

Management Efficiency

Because of the management's overall view of the bank's numerous operations, management quality has a significant influence in shaping the bank's destiny (Jha&Hui 2012). The ability of management (M) to determine, monitor, and control the risks of operations, as well as to assure safe, proper, and effective operation in accordance with regulations, is what defines its quality.The bank's prosperity is connected to the quality of its management (Ghasempour& Salami, 2016).

Table 04 represents the results of management efficiency capabilities of the selected banks in which the first position grabbed by Prime Bank Limited. But the Bank needs to pay attention on their operating expenses. On the other hand, Southeast Bank limited is in last position because of their uncontrolled operating expenses and low LD ratio.

Table 4. Management efficiency ratios and rankings of sample banks

Banks	PPE		FB/TA		OI/OE		TL/TD		GROUP	
	Result	Rank	Result	Rank	Result	Rank	Result	Rank	Result	Rank
City	1.91	8	18.61	1	1.72	12	1.13	1	5.25	3
Meghna	60.66	1	0.00	13	1.74	11	0.83	12	9.25	11
Mercantile	7.89	6	8.53	5	2.11	7	0.99	5	6.75	7
MTB	1.22	9	8.83	4	1.99	9	1.00	3	6.25	5
NBL	11.36	5	2.18	11	24.19	1	1.00	4	4.50	2
NCC	1.18	10	5.56	8	2.48	5	0.91	9	6.50	6
One	16.07	3	11.24	3	2.12	6	0.98	6	7.00	8
Prime	14.68	4	11.55	2	1.80	10	1.04	2	4.25	1
Pubali	2.22	7	4.31	9	2.05	8	0.88	11	10.00	12
Southeast	0.93	13	6.03	7	2.89	2	0.90	10	7.50	9
Standard	1.13	12	0.62	12	2.67	3	0.93	7	7.50	10
Trust	1.01	11	8.05	6	2.67	4	0.93	8	5.75	4
Uttara	20.51	2	2.88	10	1.63	13	0.78	13	10.50	13

Note: PPE= Profit Per Employee, FB= Borrowed Funds, TA= Total Assets, OI=Operating Income, OE=Operating Expense, TL= Total Loan, TD= Total Deposit.

Earnings

The ability of the banks to make appropriate earnings helps them to expand their business, and maintain competitiveness. Earnings are also a significant aspect in determining their long-term viability (Baidoo, Amankwah&Tobazza, 2014). The earnings indicate the bank's ability to absorb the losses, increase capital and support its various operations (Desta, 2016).

From table 5, we can see that Uttara Bank Limited took the first position in terms of earnings parameter of CAMELS rating. It scores 4.2 in average. But this should control its operating

Table 5. Shows the earnings ratios and rankings of the sample banks

Banks	ROA		ROE		EBIT/TA		NII/TA		NON-II/TA		GROUP	
	Result	Rank	Result	Rank	Result	Rank	Result	Rank	Result	Rank	Result	Rank
City	0.62	11	8.26	12	2.06	8	2.83	3	1.50	11	9.00	10
Meghna	0.26	13	2.20	13	2.00	11	2.89	2	1.82	8	9.40	11
Mercantile	1.00	2	15.66	1	2.17	6	1.43	12	2.69	1	4.40	2
MTB	0.78	5	13.06	3	2.20	5	2.36	8	2.06	5	5.20	3
NBL	1.01	1	9.21	9	2.26	4	1.74	10	2.12	4	5.60	5
NCC	0.75	6	10.27	6	2.59	1	2.37	7	1.97	7	5.40	4
One	0.52	12	9.68	7	2.02	10	2.37	6	1.47	13	9.60	12
Prime	0.74	7	8.36	11	1.95	13	2.60	4	1.79	9	8.80	9
Pubali	0.84	4	12.51	4	2.16	7	2.20	9	2.01	6	6.00	6
Southeast	0.65	10	8.80	10	2.56	2	1.36	13	2.56	2	7.40	8
Standard	0.70	9	9.24	8	1.99	12	1.61	11	1.56	10	10.00	13
Trust	0.73	8	14.69	2	2.43	3	2.39	5	1.49	12	6.00	7
Uttara	0.91	3	11.67	5	2.04	9	3.01	1	2.31	3	4.20	1

Note: ROA= Return on Asset, ROE= Return on Equity, EBIT= Earnings Before Interest and Taxes, TA= Total Asset, NII= Net Interest Income , NON-II= Non Interest Income expenses and non-interest income for better financial performance. And Standard bank is in last position among all the banks because of their lower earnings quality with the average score of 10.0.

Liquidity

Liquidity is one of the factors that determine the level of the performance of banks. It refers to a bank's ability to meet its obligations and deal with unexpected depositor withdrawals (Roman &Şargu, 2013). The bank will lose money if the management does not appropriately exploit liquidity (sangmi&Nazir, 2010).

Sensitivity to Market Risk

There is an indirect relationship between the size of the bank and its sensitivity to the market risks which is the risk of failure because of the poor conditions of the market where one increases, the other decreases. As a result, the larger the bank's assets are in comparison to the industry, the less vulnerable it is to market risks, resulting in the bank's avoidance of failure. Dincer et al. (Dincer et al., 2011).

We didn't include commodities risks in table 07 because all of the sample banks have zero (zero) risk. The table can be summarized as follows: Meghna bank is in top place due to lower market risk than the rest. However, Pubali bank has the lowest IRR, Prime bank has the lowest EPR and Mercantile Bank has the lowest FER. On the other hand, the Southeast bank is in the lowest position because of highly unfavorable equity position risk. Standard bank has the highest interest risk among the selected banks.

Table 6. Shows the liquidity ratios of the sample banks, as well as their rankings

Banks	LA/TA		LA/SL		LA/TD		GS/TA		GROUP	
	Result	Rank	Result	Rank	Result	Rank	Result	Rank	Result	Rank
City	0.57	8	0.95	10	0.90	3	0.07	13	8.50	10
Meghna	6.07	1	1.04	5	7.31	1	0.10	9	4.00	2
Mercantile	0.57	6	1.08	3	0.73	9	0.11	4	5.50	4
MTB	0.60	5	1.01	9	0.81	6	0.11	6	6.50	6
NBL	0.40	12	0.77	12	0.52	12	0.11	5	10.25	12
NCC	0.63	4	1.01	8	0.79	7	0.12	2	5.25	3
One	0.67	3	1.02	7	0.89	4	0.09	11	6.25	5
Prime	0.56	9	1.02	6	0.83	5	0.08	12	8.00	8
Pubali	0.57	7	1.10	2	0.76	8	0.09	10	6.75	7
Southeast	0.53	11	0.91	11	0.68	10	0.13	1	8.25	9
Standard	0.15	13	1.06	4	0.19	13	0.11	8	9.50	11
Trust	0.53	10	0.70	13	0.65	11	0.11	7	10.25	13
Uttara	0.82	2	2.76	1	1.02	2	0.11	3	2.00	1

Note: LA= Liquid Assets, TA= Total Assets, SL= Short-term Liabilities, TD= Total Deposit, GS= Govt. Securities.

Table 7. The sensitivity of market risk amount and rankings of sample banks

Banks	IRR		EPR		FER		GROUP	
	IRR	Rank	EPR	Rank	FER	Rank	AVG	Rank
City	3.15	9	58.4	12	27.13	11	10.67	12
Meghna	0.87	4	10	3	10	3	3.33	1
Mercantile	0.55	3	33.92	10	2.19	1	4.67	3
MTB	1.21	5	12.34	4	22.16	8	5.67	4
NBL	0.53	2	13.52	5	12.58	6	4.33	2
NCC	2.24	7	27.23	9	7.81	2	6.00	5
One	4.28	12	14.4	6	10.85	4	7.33	9
Prime	3.25	10	1.65	1	19.47	7	6.00	6
Pubali	0.21	1	14.61	7	52.1	12	6.67	7
Southeast	3.35	11	81.63	13	24.9	10	11.33	13
Standard	6.54	13	2.28	2	12.02	5	6.67	8
Trust	2.21	6	46.92	11	72.2	13	10.00	11
Uttara	2.49	8	22.52	8	22.6	9	8.33	10

Note: IRR= Interest Rate Risk, EPR= Equity Pricing Risk, FER= Foreign Exchange Risk

If we see Table 06, we can find that Uttara limited took the first position in terms of liquidity parameter of CAMELS rating. It scores 2.0 in average due to highest liquid asset. And Trust Bank Limited is in last position among all the banks because of their lower liquid asset It scores of 10.25 in average. However, Meghna Bank is in first position in terms of liquid assets to total assets ratio and liquid assets to total deposit ratio but Uttara banks are missing the opportunity for higher gain due to stock of high liquid asset.

Composite CAMELS Ranking

The Table 8 depicts the overall performance under CAMELS rating analysis of the thirteen chosen banks. It shows the results of

Table 8. The composite CAMELS ratings of sample banks and their rankings

SR.	Banks	C	A	M	E	L	S	AVG	Composite Rank
1	City Bank	7	5	3	10	10	12	7.83	9
2	Meghna Bank	1	7	11	11	2	1	5.50	4
3	Mercantile	10	1	7	2	4	3	4.50	2
4	MTB	9	8	5	3	6	4	5.83	5
5	NBL	2	6	2	5	12	2	4.83	3
6	NCC	4	4	6	4	3	5	4.33	1
7	One	13	2	8	12	5	9	8.17	10
8	Prime	3	13	1	9	8	6	6.67	6
9	Pubali	12	10	12	6	7	7	9.00	11
10	Southeast	11	9	9	8	9	13	9.83	12
11	Standard	8	11	10	13	11	8	10.17	13
12	Trust	5	3	4	7	13	11	7.17	7
13	Uttara	6	12	13	1	1	10	7.17	8

Note: C= Capital Adequacy, A= Asset Quality, M= Management Capability, E= Earnings, L= Liquidity, S= Sensitivity to Market Risk

developing the composite rating to examine the overall performance of the selected commercial banks. In terms of consolidated results, the table shows that NCC Bank outperformed all other banks and was rated first with a composite average of 4.33, followed by National Bank Limited and Mercantile Bank Ltd. However, Standard Bank has occupied the last position among all the selected banks with composite average of 10.17. It necessitates rigorous supervision by authorities and regulatory agencies.

Conclusion

The CAMEL rating approach is regarded as a useful tool for determining a bank's financial strengths and shortcomings. This analysis helps to point out possible weaknesses and suggest necessary corrective measures to overcome weaknesses and thus improve the overall performance of a bank. This study has been conducted to examine the performance of 13 selected private commercial banks in Bangladesh during the period of 2016 to 2018 with respect to CAMEL ratios. It is found that on an average the Capital Adequacy ratio of all banks is much higher than the benchmark of 10% as mandated by Bangladesh Bank. The average CAR of Meghna Bank is the highest (18.88 %) among all the banks. As the NPLs of Uttara Bank (6.33%) is much higher than other banks, Bangladesh Bank should look after the bank and suggest corrective measures to overcome potential losses due to increase in NPLs. The profit per employee (PPE) of Meghna Bank is the highest and it can be inferred that the efficiency of Meghna is much higher as compared to other banks. Estimating the profitability ratios it can be observed that for long-term period, Mercantile Bank's profitability is outstanding on an average as compared to other banks. Uttara Bank has maintained comfortable liquidity position although excessive liquidity may affect profitability. However, the findings from the study can be helpful for the management of these selected banks to improve their financial performance and formulate policies that will improve their overall performance. Although, the scope of this study is limited to thirteen selected banks only but this study is equally beneficial to all the banks in Bangladesh since it has identified some specific areas for banks to work on.

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Conflict of interest

The authos declare there is no conflict of interest.

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