

A comparative Study on Financial Performance of Private and Public Sector Bank in Ethiopia with Special Reference to Affecting Factors and Their Impact on Performance Indicators.

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This paper discovers a comparative Study on Financial Performance of Private and Public Sector Bank in Ethiopia with Special Reference to Affecting Factors and Their Impact on Performance Indicators. This study uses different econometric methods. This research is mainly based on secondary data, appropriateness and availability of data is very important for carried out this research. Data collection design consists of planning for collecting required data from adequate source. Population: For this research work, population consists of all 26 private sector banks and all 2 State Owned banks or Public Banks working in Ethiopia during financial year 2002 - 2013. Sample: As this research work is based on secondary data all 26 private sector banks and all 2 State Owen banks has been selected as a sample. So in this research census has been studied rather than sample. Time Frame: Secondary data for selected parameters of all private and State Owned banks has been collected for last 12 year i. e. from year 2002 to 2013. The Partial result of study indicate that Private sector banks performance is good compare to public sector banks in terms of capital adequacy ratio (level – I) , Public sector banks performance is good compare to private sector banks in terms of capital adequacy ratio (level – II) and This research work is completely based on secondary data, which may be extended by taking views of top level employees of banks on financial performance of banks, which may help researcher to identify factors responsible for difference in financial performance of banks.

Key Word: - Financial Performance, Private and Public Sector Bank and Performance Indicators

1. 1. Overview of Banking Industry in Ethiopia

The history of banking in Ethiopia traces back to a century. However, before the introduction of the modern banking system in Ethiopia, traditional financial institutions such as ‘Equb’ and ‘Idir’ has contributed a lot in sharing risks, developing saving habits and by positively impacting on the economic betterment and social wellbeing of the society. Later on, following the agreement between emperor Menelik II and Ma Gillivray, representative of the British owned National Bank of Egypt, modern banking in Ethiopia has come in to birth in 1905. This agreement has made true the opening of the first bank of Ethiopia called Bank of Abyssinia in 1906. Moreover, historical records show that different types of banks (private and public, domestic and foreign) in different regimes have been seen in Ethiopia. However, the adoption of a free market economic system

of EPRDF is believed to be the root for the emergence of the current banks in the country. Banking sector in Ethiopia is expanding through time. Particularly starting from the 1990s to the present days, numbers of banks have come into existence. Bank Industries where fetching a new dynamism of the financial sector and the banking business in Ethiopia.

A government owned bank-the State Bank of Ethiopia-was established in 1942, and a number of foreign bank branches and a private bank were operating in competition with the government owned commercial bank until they were nationalized and merged into one government owned mono-bank in 1976. The competitive banking situation that started to flourish during the 1960s and 1974s was nipped in the bud by the command system that reign over the 1974-1991 periods. Following the change of government in 1991, and the subsequent measures taken to liberalize and reorient the economy towards a system of economy based on commercial considerations, the financial market was deregulated. A proclamation number 84/94 was issued out to effect the deregulation and liberalization of the financial sector, and a number of private banks and insurance companies were established following the proclamation. Directives issued in subsequent years further deepen the liberalization mainly including the gradual liberalizations of the interest rate, foreign exchange determination, and money market operation. These days, the bank is very profitable and has made excellent progresses, especially due to the favorable dynamic macroeconomic environments, including Strong GDP growth, low inflation, and the ongoing execution of large scale projects and with growing customer deposits, increasing loan demand, and rising requests for trade facilities. ^[14]

The banking sector of Ethiopia composed of the central bank, the National Bank of Ethiopia (NBE), which is state owned and 18 private banks. By 2020, the NBE planned to increase the minimum capital for banks to operate to 2 billion birr (\$90 million) and instructed all commercial banks to increase their capital. Foreign banks did not allow to provide service in Ethiopia, instead use medium term as the government of Prime Minister Abiy Ahmed pursues wide economic reforms. ^[1]

Currently, More than 20 banks operating in the country, of which 18 are private banks while the remaining two are state owned banks. Currently new banks are still in the process of Bing under formation and are in the process of joining the banking Industries in Ethiopia. Ethiopia remains highly under-banked as the number of banks in the country is very low when compared the size of population more than (120 million). Currently, Ethiopia has allowed foreign banks to provide liaison service for their country of origins; Chinese, German, Kenyan, Turkish and South African banks opened their respective liaison banks in Addis Ababa. ^[1]

1.2. History

Ethiopian Empire

Modern banking institution in Ethiopia was first introduced by the reign of Emperor Minelli II in 1905, where the Bank of Abyssinia was formed by concession between British representatives of the National Bank of Egypt. Since its formal establishment on 16 February 1906, it was under the management of National Bank of Egypt in accordance of concession agreed upon.[2][3] In 1963, a new banking law allows split into the National and Commercial Bank of Ethiopia. The law included other commercial banks to operate, including foreign banks operated 51% owned by Ethiopians. The biggest of these was the Addis Ababa Bank, owned by 40% owned by British owned Grind lays Bank, and had 26 branches by 1975. There were also two commercial banks: the Banco did Roma and the Banco did Napoli, which had eight branches and one branch respectively in 1975.^[4]

Besides commercial banks, the government established a developmental bank which was owned 100% by the government. The Agricultural and Industrial Development Bank (AIDB) was formed in 1970, taking over two earlier development banks: the Development Bank of Ethiopia and the Ethiopian Investment Corporation which was established in 1963 as the Investment Bank of Ethiopia. AADB was a government owned bank providing both medium- and long term loans to agricultural and industrial sectors.^{[5][6]} The Housing and Savings Bank was created in 1975 out of merger between two earlier housing finance institutions created in 1962 and 1965, one of them granted from the United States government^[7]

Derg

Under the military junta Derg leadership, the entire economy falls into the government control, declaring a socialist policy towards the economy of Ethiopia.^{[8][9]} Private sector commercial banks were limited in existence; nationalized and concentrated into the Commercial Bank of Ethiopia (CBE).^{[10][11]} During the Ethiopian Civil War, the profitable public enterprises reduced due to worsened foreign exchange shortages, and bankruptcy issues. They soon recovered as foreign exchange became more readily available. The lending to private sector, which was varying between 30% and 40% of loans and advance between 1981 and 1993, was equally straightforward, without foreign exchange; potential borrowers were not creditable and foreign exchange allocation is ideally profitable.^[1]

FDRE

Following the defeat of the Derg in 1991, the ruling coalition Ethiopian People's Revolutionary Democratic Front (EPRDF) reversed the Derg regime, proposing more liberal policies. As such, the 1994 Monetary and Banking Proclamation established the National Bank of Ethiopia as the only judicial entity, independent from the government, under Proclamation No. 83/1994 and the Licensing and Supervision of Banking Business No. 84/1994 for investment in the banking sector.^[2]

1.3 List of Bank Currently working in Ethiopia

No	Bank Name	Website	Year	No of Branch	Gross Profit ETB MILLON	Net Profit ETB MILLON
1	Nib International Bank	https://www.nibbanksc.com	1999	98	420.8	
2	Abay Bank S.C	https://abaybank.com.et/	2010	159	190	
3	Addis International Bank:-	https://marcopolis.net/top-banks-in-ethiopia	2011	64	205.16	159.3
4	Awash International Bank	http://www.awashbank.com/	1994	430	1,381.00	
5	Bank of Abyssinia	http://www.bankofabyssinia.com	1996	223	534	
6	Berhan International Bank	http://berhanbanksc.com/	2010	46	131	
7	Bunna International Bank	http://www.bunnabanksc.com/	2009	205	625	461
8	Commercial Bank of Ethiopia (State Bank)	https://web.archive.org/web/20180822065616/http://www.combanketh.et/	1963	1444	17900	
9	Cooperative Bank of Oromia	http://www.coopbankoromia.com.et/	2005	467	1.7 Billion	
10	Dashen Bank	http://www.dashenbanksc.com	1995	438	1.8 Billion	1.5 Billion
11	Debab Global Bank	http://www.debabglobalbank.com/	2012	123	19	
12	Enat Bank	http://www.enatbanksc.com/	2013	7	39	
13	Lion International Bank	http://www.anbesabank.com/	2006	235	480.33	
14	Oromia International Bank	http://www.orointbank.com/	2008	14	205.4	
15	Hibret Bank	http://www.unitedbank.com.et/	1998	380	350	
16	Wegagen Bank	http://www.wegagenbanksc.com/	1997	211	478	
17	Zemen Bank	http://www.zemenbank.com/	2009	86	131	
18	Development Bank of Ethiopia	http://www.dbe.com.et/	1901	32	300	
19	ZamZam Bank	https://www.zamzambank.com/	2021	10		
20	Hijra Bank	https://www.hijra-bank.com/	2021	17		
21	Siinqee Bank	https://www.siinqeebank.com/	2021	402		
22	Shabelle Bank	http://www.Shabellebank.com/	2021			
23	Amhara Bank	https://amharabank.com.et/	2021	140		
24	Ahadu Bank	https://www.ahadubank.com/	2022			
25	Goh Betoch Bank SC	https://www.gohbetbank.com/	2021			
26	Tsedey Bank	www.tsedeybank.com.et	2022			
27	Tsehay Bank	https://tsehaybank.com.et/	2022			
28	National Bank of Ethiopia	https://nbe.gov.et/	1963			

1.4. Significance of the study

By successful through literature review in form of research papers are only talking about financial performance of different sector banks such as private, public, cooperative or combination there off. I originated across hundreds of research works which are advocating that one sector banks are performing well compare to other sector banks, but I haven't found any research work which spreads from evaluation of financial performance to identifying the reason or factors responsible for improved or poor financial performance in between different sector of banks.

So this research work is divided into two aspects.

- Evaluating financial performance of SBE and all nationalized banks and all private sector banks, including old private and new private sector banks.
- Identifying the factors responsible for better or poor financial performance of private or State Owen banks.

1.5. Objective of the study

This research work has been carried out for attaining below mention objectives.

- To study the financial performance of last 12 years of public and private sector banks.
- To identify the parameters in which private/State Owen banks are performing 2better/poor compare to private/State Owen banks.

- To identify the factors (reason) responsible for better/poor financial performance of private/State Owned banks.

1.6 Data collection design

This research is mainly based on secondary data, appropriateness and availability of data is very important for carried out this research. Data collection design consists of planning for collecting required data from adequate source. Population: For this research work, population consists of all 26 private sector banks and all 2 State Owned banks working in Ethiopia during financial year 2002 - 2013. Sample: As this research work is based on secondary data all 26 private sector banks and all 2 State Owen banks has been selected as a sample. So in this research census has been studied rather than sample. Time Frame: Secondary data for selected parameters of all private and State Owned banks has been collected for last 12 year i. e. from year 2002 to 2013

1.7 Research hypothesis

First level comparison for financial performance

- There is no significance difference in the financial performance of different SBE and its associate banks within sector.
- There is no significance difference in the financial performance of different nationalized banks within sector.

LITERATURE REVIEW

2.1. Conceptual Theory Framework of Financial Performance of Banking Industry

Definition of Financial performance

“The performance of banks in Ethiopia has been assessed by considering variables, viz. branches, deposits, advances, investments, spread, burden, business, operating profits, NPA, cost of deposits, cost of borrowings, cost of funds, return on advances, return on investments, return on funds, net profit, spread, burden and operating expenses and sectorial deployment of credit.”^{[16] [18] [18.15,13]}

For this research work financial performance of banks is measured by selected financial performance parameters which are divided into seven heads such as capital adequacy ratios, debt coverage parameters, balance sheet parameters, management efficiency parameters, profitability parameters, employee's efficiency parameters and non-performing assets parameters. The variety of Ethiopian banking sector makes it more problematic for researcher to determine and stand up with a final list of parameters for financial performance of banking sector which give equal demonstration to all banks and also show true picture about financial performance of Ethiopian banking.

Capital adequacy ratio (level – I)

To measure capital adequacy of bank, capital has been divided into two types. Level one capital [(paid up capital + statutory reserves + disclosed free reserves) - (equity investments in subsidiary + intangible assets + current & past losses)], which can absorb losses without a bank being required to cease trading. Measuring credit exposures requires adjustments to be made to the amount of assets shown on a bank's balance sheet. The loans a bank has made are weighted, in a broad brush manner, according to their degree of riskiness, e.g. loans to Governments are given a 0 percent weighting whereas loans to individuals are weighted at 100 percent. The formula to calculate CAR (level – I) is as under.

As per international standard tier one capital to total risk weighted credit exposures to be not less than 4 percent

Capital adequacy ratio (Level – II)

Level two capital [(A) Undisclosed Reserves + B) General Loss reserves + C) hybrid debt capital instruments and subordinated debts], which can absorb losses in the event of a winding-up and so provides a lesser degree of protection to depositors. The formula to calculate CAR (level – II) is as under.

As per international standard total capital (level one plus level two less certain deductions) to total risk weighted credit exposures to be not less than 8 percent.

2.2. Empirical Study Financial Performance of Banking Industry

Tigist Abebe (2014):- in her Thesis titled “Determinants of Financial Performance: Empirical study on commercial banks in Ethiopia” Based on the finding of her study, the Ethiopian commercial banks were mainly affected by the bank specific factors. Because, most of the bank specific factors had significant impact on bank performance. However, the macroeconomic factors have insignificant effect on the performance of the Ethiopian commercial banks except the tax rate which have negative but significantly affects ROA. Since the management of the bank has control over the bank specific factors, it's possible to improve the performance of the bank by giving more attention on the identified bank specific factors such as, bank size, income diversification, capital structure and operating cost. Furthermore, from the macroeconomic factors effective tax rate had significant impact on the performance of the bank. Thus, the Ethiopian commercial banks cannot ignore the macroeconomic factors while formulating policies to improve the performance of the bank. Moreover, by predicting the impact of macroeconomic factors on the performance of the bank, it's possible. The finding her study regarding capital structure of the Ethiopian commercial banks reveals that they highly depend on debt financing than equity financing. Since, Ethiopia doesn't have developed money and capital markets, banks are not able to mobilize low cost funds. Hence, this increases the cost of debt financing. If the country develops

both money and capital markets, there is a possibility of the banks to improve the capital structure and have positive impact on the performance. ^[15]

Tesfaye, Tseganesh (2018), in their article titled “Determinants of Banks Liquidity and their Impact on Financial Performance: Empirical Study on Commercial Banks in Ethiopia “ According to their investigation on panel data regression analysis showed that capital adequacy, bank size, share of non-performing loans in the total volume of loans, interest rate margin, inflation rate and short term interest rate had positive and statistically significant impact on banks liquidity. Real GDP growth rate and loan growth had statistically insignificant impact on banks liquidity. Among the statistically significant factors affecting banks liquidity capital adequacy and bank size had positive impact on financial performance whereas, non-performing loans and short term interest rate had negative impact on financial performance. Interest rate margin and inflation had negative but statistically insignificant impact on financial performance. Therefore, the impact of bank liquidity on financial performance was non-linear/positive and negative. ^[16]

Yirdaw, Workneh (2015), in their article titled ‘the impact of Liquidity on performance: Empirical Study on Ethiopian Private commercial Banks’. According to their empirical results show that the performance (profitability) measure, NIM, has significant relationship with liquidity measures of LDR, LAR and LADR. The other performance measure, ROE has positive and significant relationship with LADR; but ROA has positive and significant relationship with LADR. Hence, the impact of liquidity on financial performance of private commercial banks in Ethiopia is both positively & negatively related and the significant relationship varies from measure to measure. Finally, there has to be further research apart from bank specific measures considered in this study on the relationship between liquidity and performance of private commercial banks in Ethiopia by incorporating regulatory factors and other bank specific and macroeconomic factors. They recommended further research is on how to achieve the optimal liquidity level in commercial banks. ^[17]

Yonas Nigussie Isayas (2021) in his Article titled “Determinants of banks’ profitability: Empirical evidence from banks in Ethiopia” According to His Investigation the model results of the study revealed that firm size, liquidity ratio, asset tangibility, capital adequacy, leverage and real GDP growth rate have a positive and statistically significant effect on the profitability of banks, while firm age and the inflation rate have a negative but statistically insignificant effect on the profitability of banks in Ethiopia. ^[18]

Habtamu Berhanu Abera (2013), in his Article titled ‘ ‘ Financial Performance of the Ethiopian Banking Sector’ ’ he investigated the financial performance of the Ethiopian Banking sector using the panel data set for the period 2004/05 – 2009/10. The financial performance of the Ethiopian Banks has been evaluated using the volume of deposit, bank assets, ROE, ROA, and loan-deposit ratio /LDR/. Therefore, a sample of seven commercial banks were selected using simple random sampling technique. The result of the study indicates the Ethiopian banking sector in general, as measured by volume of deposits, granting of loan and possession of assets has also shown a persistent increase throughout the study periods. Moreover, the profitability of the

banks during the study periods in particular, and the sector in general presented a tremendous improvement. [19]

Ashenafi Haile, Tadesse Getacher¹ and Haile Michael Tesfay (2014), in their Article titled “Financial Performance Analysis of Selected Commercial Banks in Ethiopia” The results of the study indicated that CBE showed the highest level of RoE all the time but this was driven by its high leverage levels. Moreover, all banks were found to be unduly liquid affecting their revenue generating capacity. This is partly because of government imposed loan restriction. Dashen Bank has continuously improved its performance throughout the study period in most of the parameters used to measure its performance. Wegagen Bank had the most stable earnings over time as a result of its policy to use high level of equity financing. For a sustained good banking performance in the country, it is recommended that the banks invest more in interest bearing assets, mainly loans, to fully utilize their revenue generating capacity. [20]

Mathewos Woldemariam Birru (2016), In his Article titled “ The Impact of Capital Structure on Financial Performance of Commercial Banks in Ethiopia” According to his investigation indicate that financial performance, which is measured by both ROA, is significantly and negatively associated with capital structure proxies such as DER, SIZE and TANG whereas DR have negative impact [21]

Shmendi Abrha (2019), in his Article titled “the impact of credit risk management on financial performance commercial banks of Ethiopia” he concluded that the credit risk which is measured by nonperforming loan ratio had a significant inverse impact on banks financial performance and capital adequacy also same impact on profitability. In addition, loan to deposit ratio and bank size have a positive significant impact on banks financial performance. In general, Bank Specific factors have a significant impact on banks profitability and also external factors both macroeconomic (GDP and INF) have a significant impact on profitability while industry specific factors (Interest Spread) have no significant impact in Ethiopia banks profitability. [22]

3.1 Partial Result and Conclusions

Comparison of interbank financial performance within sector (Comparison between banks within sector)

Research Hypothesis: There is no significance difference in the financial performance of different banks within sector.

Capital adequacy ratio (Level – I)

SBE and its Associates

H_0 = There is no significance difference in the financial performance of different SBE and its associate banks in capital adequacy ratio (level – I). ($\mu_1 = \mu_2 = \mu_3 \dots = \mu_6$)

H_1 = There is significance difference in the financial performance of different SBE and its associate banks in capital adequacy ratio (level – I). ($\mu_1 \neq \mu_2 \neq \mu_3 \dots \neq \mu_6$)

Summary Capital Adequacy Ratio (Level – I) – SBE & its Associate Banks

<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
State Bank of Commercial Bank of Ethiopia	12	98.8	8.21	0.685279
State Bank of Development Bank Etiopia	12	99.09	8.19986	0.588994

ANOVA - Capital Adequacy Ratio (Level – I) – SBE & its Associate Banks

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	10.38	8	2.0753	2.286807	0.056906	2.1839
Within Groups	59.9	67	0.90738			
Total	70.28	75				

Interpretation:

F value (2.286807) is lower than F critical value (2.1839) indicate that there is no significance difference in financial performance of different SBE and its associate banks in capital adequacy ratio (Level – I).

Nationalized Banks

H₀ = There is no significance difference in the financial performance of different nationalized banks in capital adequacy ratio (Tier – I). ($\mu_1 = \mu_2 = \mu_3 \dots = \mu_{20}$)

H₁ = There is significance difference in the financial performance of different nationalized banks in capital adequacy ratio (Tier – I). ($\mu_1 \neq \mu_2 \neq \mu_3 \dots \neq \mu_{20}$)

Summary Capital Adequacy Ratio (Level – I) – Nationalized Banks

<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
National Bank of Ethiopia (NBE)	12	105.12	8.764168	0.549797

ANOVA - Capital Adequacy Ratio (level – I) – Nationalized Bank

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	283.822	16	14.9384	5.432413	8.21E-11	1.73403
Within Groups	604.98	210	2.7499			
Total	888.802	226				

F value (5.432413) is higher than F critical value (1.73403) indicate that there is significance difference in financial performance of different nationalized bank in capital adequacy ratio (level– I).

3.2. Conclusion

Out of 29 parameters 10 parameters shows significance financial difference at all three level of data analysis. Among these 10 parameters private sector banks proves superiority over public sector banks in 4 parameters while public sector banks proves superiority over private sector banks in remaining 6 parameters.

- Private sector banks performance is good compare to public sector banks in terms of capital adequacy ratio (level – I)
- Public sector banks performance is good compare to private sector banks in terms of capital adequacy ratio (level – II)

3.3. Major Contribution

Major contributions in this research work are:

CAR(level – I) is high in private sector banks while CAR(level – II) is high in public sector banks which clearly indicates that level– I capital base [(paid up capital + statutory reserves + disclosed free reserves) - (equity investments in subsidiary + intangible assets + current & past losses)] is high in private sector banks compare to public sector banks.

3.4. Scope of Further Work

This research work has further scope of research in below mentioned areas.

- In this research work only private & public sector banks have been taken into consideration for evaluation & identification of factors responsible for difference in financial performance.
- In this research work only quantitative aspect are considered for evaluating financial performance, there may be some qualitative aspect such as employee's efficiency in terms of following norms at the time of providing various services which may improve financial performance of banks, shall be taken into consideration.
- This research work is completely based on secondary data, which may be extended by taking views of top level employees of banks on financial performance of banks, which may help researcher to identify factors responsible for difference in financial performance of banks.

4. Reference

1. "Ethiopia - Banking Systems | Privacy Shield". [Www.privacyshield.gov](http://www.privacyshield.gov). Retrieved 2022-09-29.
2. Jump up to: a b c "History of Banking". National Bank. Retrieved 2022-09-29.
3. Schaefer, Charles (1992). "The Politics of Banking: The Bank of Abyssinia, 1905-1931". *The International Journal of African Historical Studies*. 25 (2): 361–389. Doi: 10.2307/219391. ISSN 0361-7882. JSTOR 219391.
4. Berhane Ghebray (2014). *Annual Report of Zemen Bank*. Addis Ababa, Ethiopia
5. "Assessment of Customer Satisfaction In Banking Services". 29 September 2022.
6. Brown bridge, Martin; Harvey (M.A.), Charles; Gockel, Augustine Fritz (1998). *Banking in Africa: The Impact of Financial Sector Reform since Independence*. Africa World Press. ISBN 978-0-86543-693-0.
7. "View of Banking Sector Reform in Ethiopia". Thejournalofbusiness.org. Retrieved 2022-09-29.
8. ^ Brown bridge, Martin; Harvey (M.A.), Charles; Gockel, Augustine Fritz (1998). *Banking in Africa: The Impact of Financial Sector Reform since Independence*. Africa World Press. ISBN 978-0-86543-693-0.
9. Markakis, John (May 1981). "The military state and Ethiopia's path to 'socialism'". *Review of African Political Economy*. 8 (21): 7–25. Doi: 10.1080/03056248108703464. ISSN 0305-6244.
10. "WIDER Research Paper 2006-112 the Structure" (PDF). 29 September 2022.
11. Addison, Tony; Geda, Alemayehu (2003-02-13), "Ethiopia's New Financial Sector and its Regulation", *From Conflict to Recovery in Africa*, Oxford University Press, pp. 171–186, doi:10.1093/acprof:oso/9780199261031.003.0011, ISBN 978-0-19-926103-1, retrieved 2022-09-29
12. "Banking reform in Ethiopia - Institute of Development Studies" (PDF). 29 September 2022.
13. Seifu, Alemayehu (1968). "Eder in Addis Ababa: a sociological study". *Ethiopia Observer*. 12 (1): 8–18.
14. Eman, Bezabih (2009-02-01). "Working Paper No. 9 - Cooperatives: a path to economic and social empowerment in Ethiopia". [Www.ilo.org](http://www.ilo.org). Retrieved 2022-09-30.
15. Tigist Abebe (2014), *Determinants of Financial Performance: Empirical study on commercial banks in Ethiopia*. <https://core.ac.uk/download/pdf/30266978.pdf>
16. Tesfaye, Tseganesh (2018), in their article titled "Determinants of Banks Liquidity and their Impact on Financial Performance: Empirical Study on Commercial Banks in Ethiopia". <http://etd.aau.edu.et/handle/123456789/14989>
17. Yirdaw, Workneh (2015), the impact of Liquidity on performance: Empirical Study on Ethiopian Private commercial Banks. <http://etd.aau.edu.et/handle/123456789/13830>
18. Yonas Nigussie Isayas (2021) *Determinants of banks' profitability: Empirical evidence from banks in Ethiopia*.
19. Habtamu Berhanu Abera (2013), *Financial Performance of the Ethiopian Banking Sector*. <https://www.ijsr.net/archive/v4i5/SUB154812.pdf>
20. Ashenafi Haile, Tadesse Getacher1 and Haile Michael Tesfay (2014) *Financial Performance Analysis of Selected Commercial Banks in Ethiopia*. <https://www.ajol.info/index.php/ejbe/article/view/120626/110076>
21. Mathewos Woldemariam Birru (2016), *The Impact of Capital Structure on Financial Performance of Commercial Banks in Ethiopia* <https://journalofbusiness.org/index.php/GJMBR/article/download/2121/2023>
22. SHMENDI ABRHA (2019) *the impact of credit risk management on financial performance commercial banks of Ethiopia*.