COMMERCIAL BANK LENDING IN ETHIOPIA

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ABSTRACT

Ethiopia is a bank-dominated economy. Two public sector and sixteen private sector commercial banks cater to the financial needs of the businessmen in the country, with a branch network of 2,661 branches, and a capital of 1.45 billion US Dollars as of June 2015. This paper on commercial bank lending in Ethiopia tries to analyze the trends in lending by public sector and private sector banks; evaluates the growth rates in advances as well as gross domestic credit; and correlates the deposits mobilized with the advances granted in the recent decade. This study is fully secondary data based, from the official website and database of the central bank of the country. It uses, in addition to descriptive statistical tools, trend analysis, compounded annual growth rates, as well as correlation measures for data analysis. Findings are presented in the form of summary data tables, charts and graphs with appropriate explanations. Major findings of the study include: mixed trends are found in total advances by public and private sector commercial banks – with public banks dominating the lending scenario in the recent years; lending by private banks showed downward trend since 2010; very high positive correlation existing between deposits mobilized and advances disbursed by the Ethiopian banking industry; and a compounded annual growth rate of 22.7% is registered by all commercial banks in the recent decade. The study is highly significant as it is a pioneer work on the commercial bank lending in Ethiopia. It would be useful to the businessmen, banking industry as well as to the policymakers. Since the industry is somewhat young and emerging, the study suffered with the limitation of analyzing data only for a decade or more, and as such future work with extended datasets could be a possibility.

Keywords: CAGR, Commercial Banks, comparative study, Ethiopia, Lending.
JEL Classification: G21, E51, N27, O16, O55

Introduction:

Banks are public financial institutions with a mandate to use the deposits generated from the public for the purpose of granting loans and advances to the public – especially to those business enterprises who are in need of funds for their operations and expansion. They play more significant role in economic growth of developing nations. In bank-dominated economies, the role of commercial banks are paramount – in providing the much-needed funds to the business public, as being the major and probably only source of funds for them in the absence of a well-developed capital market.
Ethiopia is a developing nation – one among the Next Eleven, after the BRICS. It would be interesting to know that Ethiopia performed consistently well by registering sustained economic development in the recent decade (as observed in Kannan & Sudalaimuthu, 2015). Ethiopia's banking industry is fast growing – as evidenced by the number of banks started up in the last two decades, since liberalization in the country. Ethiopia opened the gates of banking to private natives only in 1994, and since then there have been 16 private banks that have been in the fray now. As of June 2015, Ethiopia has two public sector commercial banks with 1,097 branches and 16 private sector commercial banks with a branch network of 1,564 branches all over the country. The industry garnered the capital of 550 Million US Dollars (equivalent in the local currency, Ethiopian Birr) by the public sector commercial banks, and around 850 Million US Dollars by the private sector commercial banks in the country. Table 1 given below summarizes the banking industry in Ethiopia as it existed in June 2015:

Commercial Banks' Network in Ethiopia: as of June 2015

Sl.	Name of the Bank	Estt.	Sector	Branch Network				Paid in Capital	
				In AA**	Region*	Total	% Share	Million Birr	% Share
1	Commercial Bank of Ethiopia	**1964**	Public	192	785	977	37%	10,716.4	37%
2	Construction & Business Bank	**1975**	Public	51	69	120	5%	731.2	2%
	State-owned Commercial Banks			**243**	**854**	**1,097**	**41%**	**11,447.6**	**39%**
3	Awash International Bank	**1994**	Private	112	95	207	8%	2,540.3	9%
4	Dashen Bank	**1995**	Private	88	76	164	6%	2,377.2	8%
5	Bank of Abysinia	**1996**	Private	72	64	136	5%	1,594.3	5%
6	Wegagen Bank	**1997**	Private	56	63	119	4%	2,061.9	7%
7	United Bank	**1998**	Private	66	62	128	5%	1,475.0	5%
8	Nib International Bank	**1999**	Private	65	50	115	4%	1,925.3	7%
9	Cooperative Bank of Oromia	**2004**	Private	35	106	141	5%	1,058.7	4%
10	Lion International Bank	**2006**	Private	38	50	88	3%	601.6	2%
11	Oromia International Bank	**2008**	Private	49	103	152	6%	771.7	3%
12	Zemen Bank	**2008**	Private	2	5	7	0%	650.0	2%
13	Bunna International Bank	**2009**	Private	35	47	82	3%	559.3	2%
14	Berhan International Bank	**2009**	Private	39	32	71	3%	622.3	2%
15	Abay Bank	**2010**	Private	19	70	89	3%	591.0	2%
16	Addis International Bank	**2011**	Private	22	10	32	1%	399.6	1%
17	**Debub Global Bank**	**2012**	Private	9	13	22	1%	202.6	1%
18	**Enat Bank**	**2012**	Private	6	5	11	0%	392.1	1%
	Private-owned Commercial Banks			**713**	**851**	**1,564**	**59%**	**17,822.9**	**61%**
	GRAND TOTAL (Public + Private)			**956**	**1,705**	**2,661**	**100%**	**29,270.5**	100%
** In AA: In Addis Ababa, the capital city.									
* Region: In rest of Ethiopia, other than Addis Ababa.									
Source: National Bank of Ethiopia, Quarterly Bulletin, Vol.32 (4)									

Table 2 below presents a summarized view of the lending by Ethiopian commercial banks in the recent 5 years, along with the mean, standard deviation, coefficient of variation, the average proportion of each bank in total lending, and the compounded annual growth rate.

Table 2: Bank-wise Advances Disbursed from 2009-10 to 2013-14, with descriptive statistics & CAGR

Advances Disbursed	2009-10	2010-11	2011-12	2012-13	2013-14	MEAN	PROP.	S.D.	C.V.	CAGR
Commercial Bank of Ethiopia	10,697.00	17,796.80	31,940.30	27,365.90	32,184.10	23,996.82	55%	9444.66	39.36%	31.7%
Construction & Business Bank	494.30	367.20	460.80	548.20	1,288.00	631.70	1%	372.74	59.01%	27.1%
Public Banks Sub-Total	**11,191.30**	**18,164.00**	**32,401.10**	**27,914.10**	**33,472.10**	24,628.52	56%	9640.62	39.14%	31.5%
Awash International Bank	2,955.70	4,654.00	2,467.20	2,961.50	1,944.60	2,996.60	7%	1016.96	33.94%	-9.9%
Dashen Bank	2,231.80	2,912.00	3,632.40	2,917.30	3,757.50	3,090.20	7%	620.03	20.06%	13.9%
Bank of Abyssinia	2,139.80	2,497.90	2,101.70	2,252.60	1,534.20	2,105.24	5%	354.68	16.85%	-8.0%
Wegagen Bank	2,189.40	2,612.00	2,556.50	3,031.30	2,070.90	2,492.02	6%	380.23	15.26%	-1.4%
United Bank	2,283.70	2,557.10	2,358.10	2,210.40	2,085.40	2,298.94	5%	175.94	7.65%	-2.2%
Nib International Bank	1,066.80	1,645.00	2,093.40	2,429.60	3,382.80	2,123.52	5%	869.77	40.96%	33.4%
Old Pvt Banks Sub-Total	**12,867.20**	**16,878.00**	**15,209.30**	**15,802.70**	**14,775.40**	15,106.52	34%	1479.66	9.79%	3.5%
Cooperative Bank of Oromia	572.40	660.20	669.00	332.90	803.90	607.68	1%	174.48		8.9%
Lion International Bank	355.00	472.90	568.80	601.80	567.00	513.10	1%	100.61		12.4%
Oromia International Bank	424.00	649.40	786.70	816.40	787.30	692.76	2%	163.68		16.7%
Zemen Bank	367.60	817.40	579.50	1,195.30	1,149.90	821.94	2%	357.83		33.0%
Bunna International Bank	155.50	312.40	254.20	690.90	484.00	379.40	1%	211.11		32.8%
Berhan International Bank	224.20	309.50	472.80	532.40	679.30	443.64	1%	180.56		31.9%
Abay Bank	-	152.30	453.00	686.50	806.80	419.72	1%	342.71		74.3%
Addis International Bank	-	-	159.60	232.50	222.90	123.00	0%	115.72		18.2%
Debub Global Bank	-	-	-	104.40	271.50	75.18	0%	118.69		
Enat Bank	-	-	-	6.00	479.40	97.08	0%	213.74		
New Private Banks	**2,098.70**	**3,374.10**	**3,943.60**	**5,199.10**	**6,252.00**	4,173.50	10%	1610.02	38.58%	31.4%
All Private Banks Sub-Total	14,965.90	20,252.10	19,152.90	21,001.80	21,027.40	19,280.02	44%	2529.36	13.12%	8.9%
Total Banking Industry	**26,157.20**	**38,416.10**	**51,554.00**	**48,915.90**	**54,499.50**	43,908.54	100%	11629.40	26.49%	20.1%

Source: National Bank of Ethiopia Annual Reports

Purpose & Scope of the Study:

The purposes of the study are: (i) to analyze the trends in lending by public sector and private sector commercial banks in Ethiopia, (ii) to evaluate growth rates in commercial bank lending, and compare it with that of gross domestic credit in the country; and (iii) to correlate the advances by commercial banks in Ethiopia with the deposits mobilized. The study is confined to data availability from official sources, viz., the National Bank of Ethiopia. Accordingly it studies the data pertaining to lending for the decade from 2005 to 2014, and gross domestic credit for 35 years from 1979 to 2014.

Brief Review of Literature:

The study by Paul Ojeaga et al. (2013) investigates the effect of bank lending on growth in Nigeria using a sample of data from 1989 to 2012; 23 years the method of estimation used in the study is the quantile regression estimation method. It was found that commercial bank lending was having a negative effect on growth while institutions were not sufficiently protecting customers from the negative effect that often arise when banks liquidate. Central bank policies were found to be minimizing bank losses and helping to drive economic growth in general. The policy implication of the finding is that lower interest rates and less stringent conditions are likely to increase bank lending in general and this could have far reaching effect in driving growth in Nigeria.

William F. Bassett and Egon Zakrajsek reviewed recent developments in business lending by commercial banks in 2003, and concluded that despite the appreciable deterioration in asset quality and the reduced demand for credit by business borrowers over the past several years, commercial banks have remained highly profitable and well capitalized. In contrast to the 1990-91 period, when large losses held down banks' earnings and eroded their capital, during the recent recession banks were well positioned to lend to creditworthy business customers willing to pay the higher loan fees and lending spreads that banks have increasingly demanded as part of their improved risk management. The economic slowdown and the tightening of credit standards, however, sharply reduced the number of creditworthy firms. Meanwhile, the customers that remained creditworthy generally had less need for external funds.

Motivated by the frequently observed link between commercial property price volatility and banking crises, Davis & Zhu (2004) in their paper entitled “Bank lending and commercial property cycles: sme cross-country evidences” investigated at a macroeconomic level the determination of commercial property prices and the interaction between commercial property prices and bank lending. The researchers develop a reduced-form theoretical model which suggests bank lending is closely related to commercial property prices and that commercial property can develop cycles given plausible assumptions, where the cycles are largely driven by the dynamic linkage between the commercial property sector, bank credit and the macro-economy. Cross-country empirical analysis based on a sample of 17 developed economies, using a unique dataset collected by the BIS, confirms the model’s predictions. An investigation of determinants of commercial property prices shows particularly strong links of credit to commercial property in the countries that experienced banking crises linked to property losses in 1985-95. Further studies of dynamic interaction suggest that commercial property prices are rather “autonomous”, in that they tend to cause credit expansion, rather than excessive bank lending boosting property prices. In addition, GDP has an important influence on both commercial property prices and bank credit. The work has implications for risk management and prudential supervision.

The research study by Olusanya et al. (2012) takes a look at determinants of lending behaviour of commercial banks in Nigeria: a Co-integration analysis between 1975 to 2010. However, the study make use of secondary data and series of Econometrics techniques were adopted, to justify the long run relationship between Commercial bank and its lending behaviour over the period of analysis. Moreover, the study investigates the level of commercial banks loan advances in Nigeria and to also examine those various determinants of commercial banks’ lending behavior in Nigerian. More so, the model used is estimated using Nigerian commercial bank Loan and advances (LOA) and other determinants such as Volume of deposits (Vd), annual average exchange rate of the naira to dollar (Fx) for the period of thirty-seven (37) years, Investment Portfolio (Ip), Interest rate (lending rate) (Ir), Gross domestic product at current market price (Gdp) and Cash reserve requirement ratio (Rr). However, the model result reveals that there is positive relationship between Loan and advances and Volume of deposits, annual average exchange rate of the naira to dollar, Gross domestic product at current market price and cash reserve requirement ratio except Investment portfolio and Interest rate (lending rate) that have a negative relationship. It was also revealed from the result that there is a long run relationship between Loan and advances and all the explanatory variables in the model and this shows that commercial bank has a lot of impact of their lending behaviour. Finally the study recommend and conclude that commercial bank should endeavour to create more deposit in other to improve their lending behaviour and should enforce the most easily realizable policies and good credit management in every situation.

Betubiza and Leatham (1995) did, in their study entitled "Factors affecting Commercial Bank Lending to Agriculture", a tobit econometric procedure to examine the effect of selected demand and supply factors on non-real estate agricultural lending by commercial banks in Texas. Their Results show that banks have reduced their agricultural loan portfolios in response to increased use of interest sensitive deposits after deregulation, Moreover, almost half of this decrease came from banks that stopped making agricultural loans. Also, results show that banks affiliated with multi-bank holding companies lend less money to agriculture relative to their assets than do independent banks.

Charles P. Himmelberg and Donald P. Morgan (n.d.) in their paper "Is Bank Lending Special?" conclude that bank lending is still special, at least for some business borrowers. Smaller, lower-quality borrowers still require intensive screening and monitoring by intermediaries. Some such firms can borrow from insurance companies, but many do not. Only firms with easily secured assets seem able to borrow from finance companies. For the remainder of firms, bank lending is still special. Of course, the existence of a lending channel also requires that monetary or regulatory policy actually change the supply of bank loans.

A Capgemini report on "Impact of Regulations on Bank Lending" (2014) found that the regulatory pressure is imposing a negative cost on banks, which is hampering credit growth of the sector and is preventing banks from taking part in a sustainable economic recovery.

The researchers identified the gap in literature as there is no significant study on the trends in commercial bank lending in Ethiopia. Hence, they determined to carry out this wholly secondary data based study.

Methodology:

The study is fully based on secondary data. Data for the study is obtained from the official website of the National Bank of Ethiopia (the central bank of the country), and from the official databases maintained by the bank. Appropriate computations, such as trend analysis, growth percentages, compounded annual growth rate, mean, standard deviation, coefficient of variation, and correlation are made by the researcher using Microsoft Excel 2010 package. For the purpose of data analysis, presentation and interpretation, appropriate tables are drawn, as well as the charts and graphs as fit.

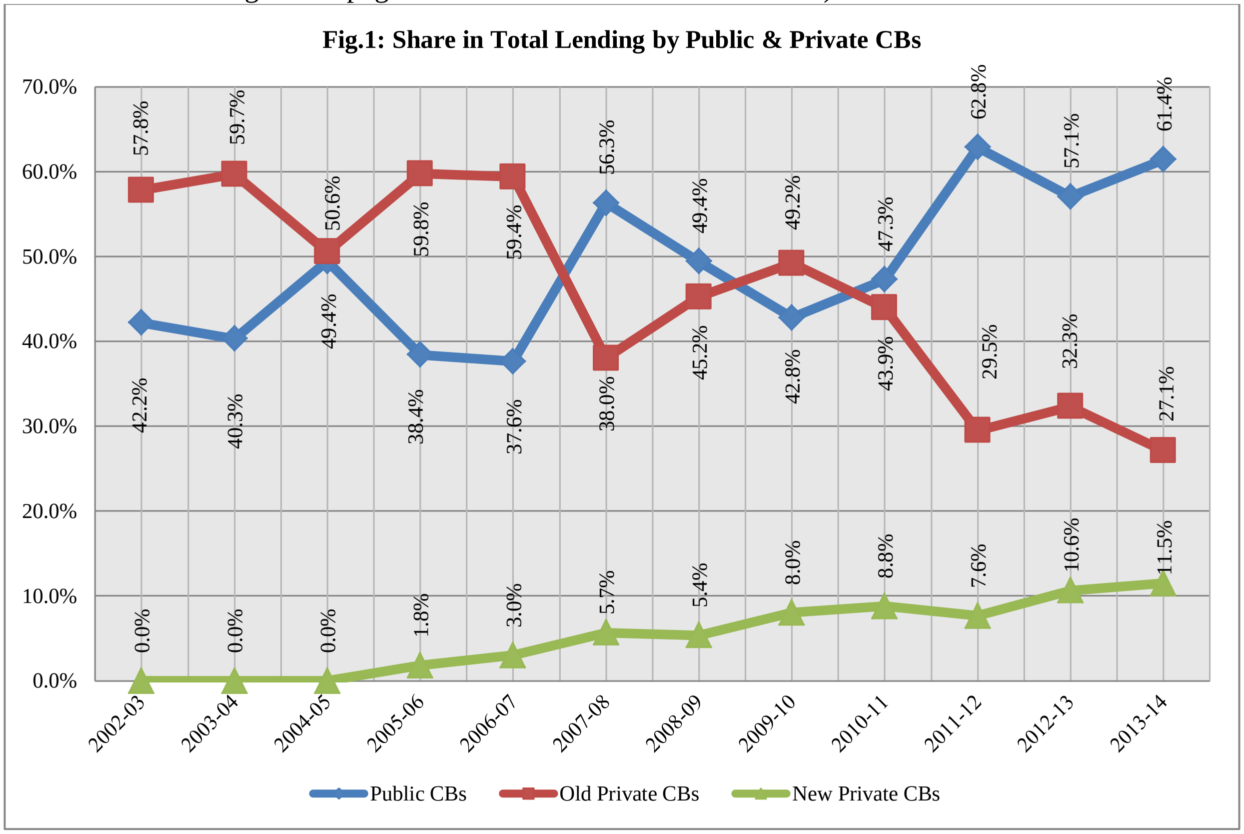
Results and Discussion:

This chapter in the paper presents the data analysis and discusses the details. It is sub-divided thus: (a) Comparative analysis of public and private sector commercial bank lending; (b) growth trends in lending by public and private sector commercial banks; (c) correlation analysis of lending by public and private sector commercial banks; (d) borrower category-wise descriptive statistics and compounded annual growth rate analysis; (e) Analysis on advances performance with reference to deposits mobilized and total assets of commercial banks; and (f) Analysis of growth trends, compounded annual growth rate, and correlation measure between Gross Domestic Credit and Commercial Bank Advances in Ethiopia.

Comparative analysis of public and private sector commercial banks' lending:

For the purpose of this analysis, commercial banks in Ethiopia are taken under three categories, viz., (1) Public sector commercial banks (two in number); (2) Old private sector commercial banks (six in number) – this group refers to the private sector commercial banks which were operational prior to

2000; and (3) New private sector commercial banks (ten in number) – this group refers to the private sector commercial banks which commenced operations from 2004 one by one till 2012. (A cross-reference with table given in page 2 will make this classification clear).



Source: National Bank of Ethiopia Annual Reports

As shown in figure 1 in the previous page, the lending by public sector and old private sector commercial banks have undergone mixed trends in the reported period of 12 years from 2002-03 to 2013-14. The lending by public sector commercial banks registered a lesser proportion of lending in the earlier years (from 2002-03 to 2006-07), thereafter it started showing market capture except for one year, viz., 2009-10. The lending scenario got dominated by public sector banks in 2011-12 with a two-third share (62.8%) and almost near that in 2013-14 (61.4%). Contrary to this, old private sector commercial banks showed domination of the loans market in the early period but got succumbed in the later years. The reasons that can be attributed to this paradigm shift in the lending trends could be: (a) Private commercial banks were asked to invest 27% of their lending in NBE bills from April 2011, thus curtailing their lending capacity to a great extent; (b) the rapid expansion of branch network by public sector banks, especially by the Commercial Bank of Ethiopia led to a stiff competition for the private sector banks in mobilizing the deposits from the general public and business enterprises, which also constrained their lending capacity to a considerable extent; and (c) the introduction of 40:60 principle (which required the borrowers to repay 40% of loan in the first year of borrowing, and the balance 60% to be repaid in the remaining loan tenure) affected the morale of the borrowers heavily and thus created a sort of liquidity crisis for them in the initial year of borrowing. The new private banks which started operating in 2004, 2008, 2009, 2010 and 2012, have showed certain inroads in lending scenario of the country, thus showing a marginally progressing trends in lending from 2005-06 to 2013-14.
Summary descriptive statistics and compounded annual growth rate on lending by public and private sector commercial banks in Ethiopia for 12 years from 2002-03 to 2013-14 are presented in table 2 below.

Table 2: Summary Data on Commercial Bank Lending in Ethiopia (2002 to 2014)

Descriptive Statistics	Public Banks (2)	Old Private Banks (6) *	New Private Banks (10) **	All Private Banks (16)	All Comm. Banks (18)
MEAN	14,127.33	10,296.47	2,034.13	12,330.59	26,457.93
S.D.	11,583.39	5,036.70	2,178.89	6,996.97	18,182.14
C.V.	82.0%	48.9%	107.1%	56.7%	68.7%
CAGR	31.1%	18.3%	52.4%	22.1%	26.7%

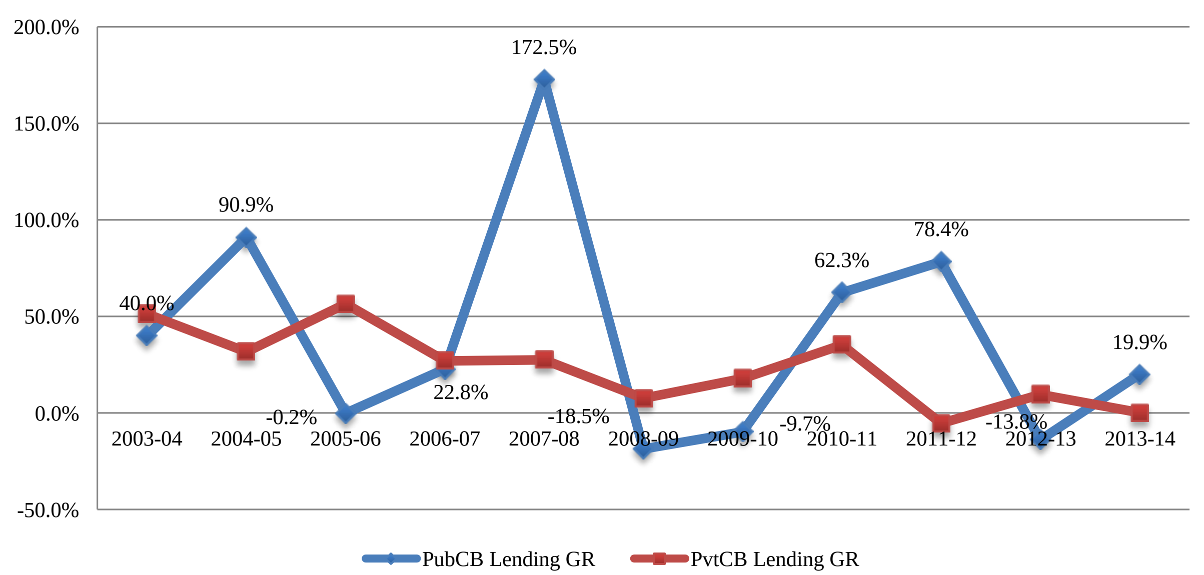
Source: National Bank of Ethiopia Annual Reports
**** operational prior to 2000; ** started functioning 2004 onwards***

As presented in table 2 above, the mean value of the 2 public sector banks is 14,127.33, which is a shade greater than the corresponding value for the 6 old private banks (10,296.47) and a lot larger than for the 10 new private banks (2,034.13). This indicates the dominance of the lending scenario by the public sector commercial banks during the study period. The standard deviation values for public banks is 11,583.39 indicating higher variability compared to old private banks (5,036.70) and new private banks (2,178.89). The co-efficient of variation points to greater variations in new private banks' lending (107.1%), compared with public sector banks' lending (82%), and old private sector banks' lending commanded higher consistency among the groups with 48.9% coefficient of variation measure. The compounded annual growth rate for the public sector banks is 31.1%, while that of old private banks is 18.3%, of new private banks is 52.4%. The CAGR for all private banks is 22.1% which is a shade lower than that of public sector banks' 31.1%, as well as the CAGR for all commercial banks (which is at 26.7%). This analysis indicates: (a) greater lending power of public sector banks as substantiated by mean values; (b) greater consistency in lending by old private sector banks as indicated by the coefficient of variation values; and (c) higher compounded annual growth rate for new private sector banks and for public sector banks as supported by CAGR measures.

Growth trends in lending by public and private sector commercial banks:

Figure 2 given below presents the growth trends in lending by public and private sector commercial banks in Ethiopia for 11 years from 2003-04 to 2013-14.

Fig.2: Growth Trends in Public and Private CB Lending (2003 to 2014)



Source: National Bank of Ethiopia Annual Reports

Growth trends in lending by public and private sector commercial banks for 11 years from 2003-04 to 2013-14 are presented in figure 2 above. A careful look at the graphical presentation reveals that the public sector banks had highly oscillating growth trends in lending in the reported period, as evidenced by highs (172.5% in 2007-08 & 90.9% in 2004-05) and lows (-18.5% in 2008-09 and -13.8% in 2012-13). As against this, the private sector commercial banks had a comparatively smoother growth trends in the said 11-year period, of course showing a declining trend in general (from 56.4% in 2005-06 to -5.4% in 2011-12).

Correlation analysis of lending by public and private sector commercial banks:

Table 3 below presents the summary of correlation analysis conducted on different variables.

Table 3: Correlation Analysis

Sl.	Correlation between	and	Period of Study	Correlation Value	Remarks
1	Advances disbursed by all Commercial Banks	Deposits mobilized by all Commercial Banks	1998 to 2014	**0.9954**	Very High Positive correlation
2	Growth rates in Advances disbursed by all commercial banks	Growth rates in Deposits mobilized by all commercial banks	1998 to 2014	**0.6438**	Positive correlation
3	Total lending by Public commercial banks	Total lending by Major Private commercial banks	2002 to 2014	**0.8498**	Highly positive correlation
4	Total lending by Public commercial banks	Total lending by all Private commercial banks	2002 to 2014	**0.9097**	Highly positive correlation
5	Total lending by Public commercial banks	Total lending by all commercial banks	2002 to 2014	**0.9871**	Very High Positive correlation
6	Total lending by Private commercial banks	Total lending by all commercial banks	2002 to 2014	**0.9644**	Very High Positive correlation
7	Deposits mobilized by all Commercial Banks	Deposits mobilized by Private Commercial Banks	1992 to 2013	**0.9930**	Very High Positive correlation
Source: National Bank of Ethiopia Annual Reports					

As can be observed from table 3 above, there is absolute positive correlation (0.9954) between advances and deposits of all commercial banks in Ethiopia, as well as (i) between deposits mobilized by all commercial banks and by private commercial banks (0.9930), (ii) between total advances of public banks and of all commercial banks (0.9871), and (iii) between private banks' advances and all commercial banks' advances (0.9644). Again there is very high positive correlation (0.9097) between lending by public banks and by private banks, and highly positive correlation (0.8498) between lending by public banks and by old private banks in Ethiopia. The correlation between growth rates of advances and deposits of all commercial banks (0.6438) is also found to be significantly positive.

Borrower category-wise descriptive statistics and CAGR analysis:

Table 4 in the next page summarizes the descriptive statistics and compounded annual growth rate for commercial bank advances disbursed during 2005 to 2014.

Table 4: Descriptive Statistics & CAGR for Commercial Banks Advances Disbursed (2005 to 2014)

Borrower category	MEAN	S.D.	C.V.	MIN	MAX	RANGE	CAGR
Public Enterprises	6,273.70	5,755.25	92%	307.40	15,171.70	14,864.30	29.5%
Cooperatives	5,225.52	3,523.67	67%	1,231.40	12,116.30	10,884.90	25.0%
Private & Individuals	21,561.35	10,400.79	48%	6,888.50	36,846.60	29,958.10	20.5%
Total	**33,060.57**	**18,747.97**	**57%**	**9,433.00**	**59,519.20**	**50,086.20**	**22.7%**

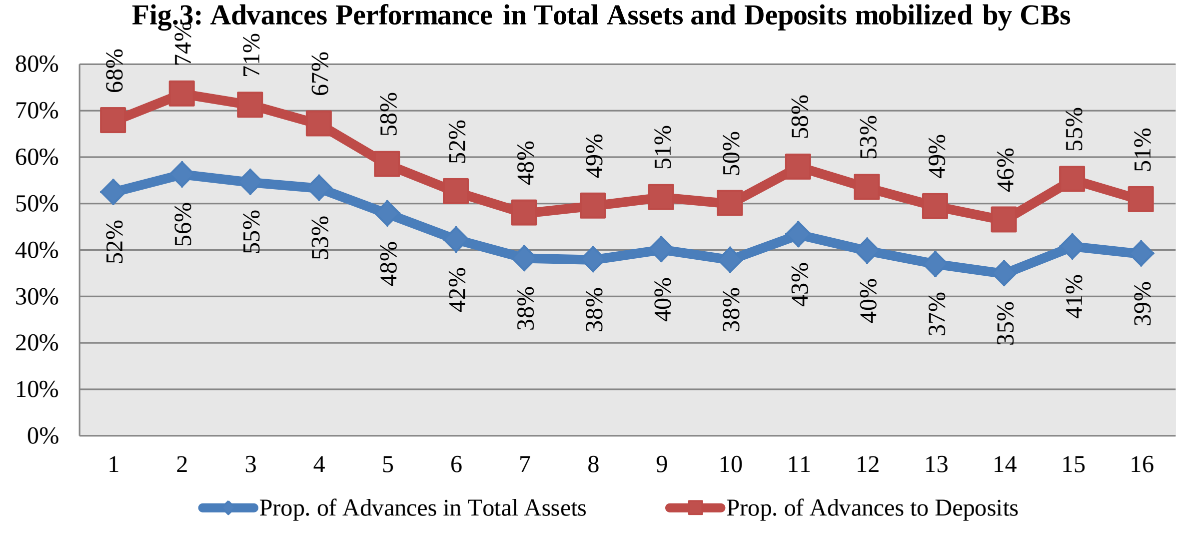
Source: National Bank of Ethiopia Annual Reports

Table 4 above presents the descriptive statistics and CAGR for Advances by all commercial banks from 2005 to 2014. As observed in the table, private & individual borrowers commanded high mean value (21,561.35) and standard deviation (10,400.79) – way above the other borrower-categories. This category (private & individual borrowers) showed higher consistency in borrowing (as evidenced by lower coefficient of variation 48%), as against 92% for public enterprise borrowers. The compounded annual growth rate is high for public enterprises (29.5%), while it is comparatively low for private & individuals (20.5%). This analysis points to the domination of private and individual borrowers in the commercial bank lending scenario in Ethiopia.

Analysis on Advances Performance w.r.t. Deposits and Total Assets:

Figure 3 below charts the proportion of advances in total assets, and in deposits mobilized by Ethiopian commercial banks for 16 years from 1998-99 to 2013-14.

Fig.3: Advances Performance in Total Assets and Deposits mobilized by CBs



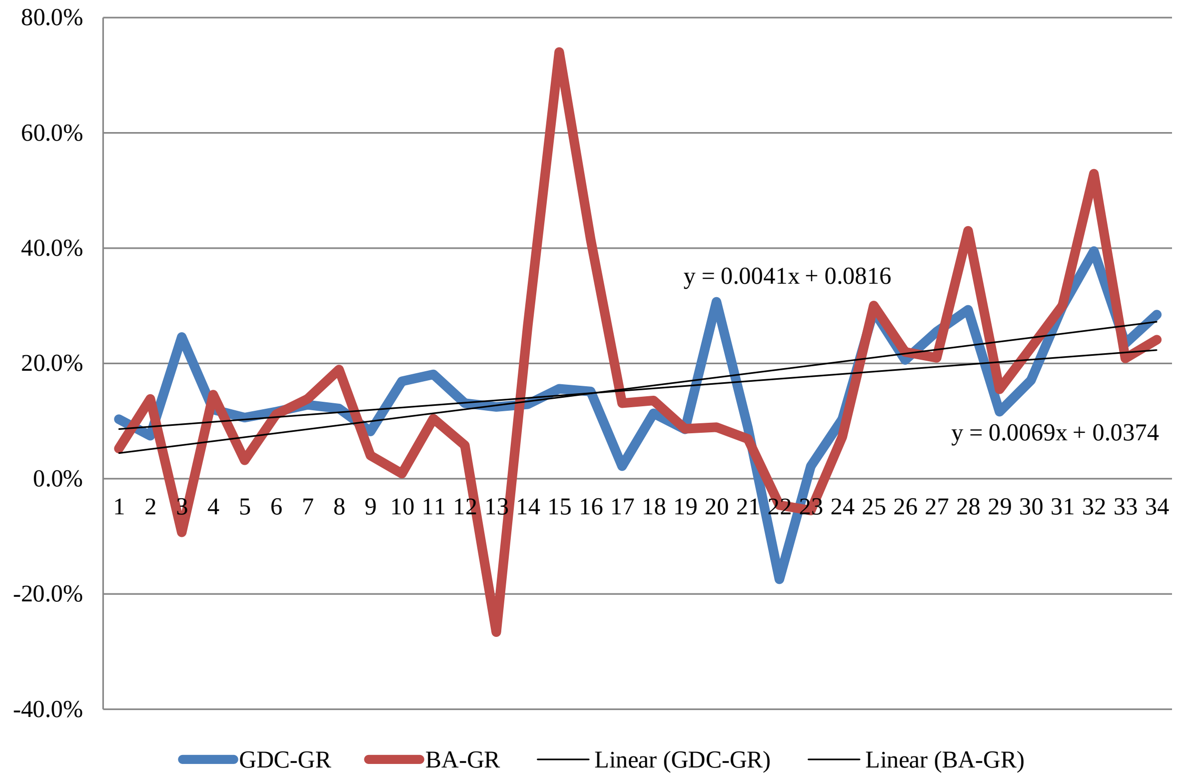
Source: National Bank of Ethiopia Annual Reports

Figure 3 in the previous page presents the proportion of advances in total assets, and in deposits mobilized by Ethiopian commercial banks. Accordingly, the proportion of advances to deposits had high (74%) in 1999-2000 and a low (46%) in 2011-12. It can be observed that the proportion of advances to deposits showed a generally declining trend over the 16-year reporting period. As to the proportion of advances in total assets of Ethiopian commercial banks showed similar pattern (almost parallel to that of advances-deposits trend), with the high (56%) and the low (35%) falling exactly in the same years. This parallel trend points to the dominance of deposits (as part of total assets, i.e. total liabilities) in determining the level of advances in the country. Ethiopian commercial banks depended mainly on deposits for creating their advances, which matches with the theory "loans create deposits; deposits are children of loans".

Growth trends, CAGR, and Correlation between GDC and CBA:

Figure 4 below presents the growth trends in gross domestic credit (GDC) and commercial bank advances (CBA) for 34 years from 1979 to 2014.

Fig.4: Growth Trends in Gross Domestic Credit (GDC) and Commercial Bank Advances (CBA) - 1979 to 2014



Source: Authors' own computation based on National Bank of Ethiopia Reports

Figure 4 above presents the growth trends in gross domestic credit and in commercial bank advances for a 34-year period from 1979 to 2014. Accordingly, the growth rates of gross domestic credit are found to be less oscillating that that of commercial banks' advances. Commercial banks' advances had a low growth rate of -26.7% which is almost immediately followed by a high growth rate of 74%. The linear trend for commercial bank advances is somewhat marginally progressing than that of gross domestic credit.

Table 5: CAGR and Correlation measure between Gross Domestic Credit and Commercial Bank Advances in Ethiopia (from 1979 to 2014)

	Gross Domestic Credit	Commercial Bank Advances
CAGR (Compounded Annual Growth Rate)	**14.94%**	**14.45%**
Correlation between GDC and CBA	**0.9982**	
Source: Authors' Own computation based on National Bank of Ethiopia Reports		

Table 5 above presented the compounded annual growth rate for gross domestic credit at 14.94%, and for commercial bank advances at 14.45% - which have almost similar CAGR as such. This is further supported by the correlation measure which stood at absolute positive value at 0.9982, thus indicating perfect harmony between gross domestic credit and commercial bank advances. This analysis goes on to substantiate that Ethiopian economy is in fact a bank-dominated economy.

Major Findings of the Study:

1. There is a paradigm shift in lending trends of public sector and of private sector commercial banks, with the former garnering major share in lending in the recent years, while the latter had dominance on the field in the earlier period. The lending trends are generally found to be somewhat oscillating too.
2. In the 12-year period (from 2003 to 2014), public sector banks had highly oscillating growth trends in lending as compared to that of private sector banks which was somewhat balanced though gradually declining over time.
3. There is found to be high degree of positive correlation between advances and deposits of all commercial banks, that of advances of public sector and of private sector banks, and that of deposits of public and private sector commercial banks.
4. There is dominance of private and individual borrowers in the commercial bank lending scenario in Ethiopia, with lending to public enterprises showing higher degree of variability.
5. The trend of proportion of advances in (i) total deposits, and (ii) total assets of commercial banks is found be parallel, and indicates the supremacy of deposits in creating advances in the country.
6. The growth rates of gross domestic credit are found to be less oscillating that that of commercial banks' advances. Both gross domestic credit and commercial bank advances are found to be having very similar (near) compounded annual growth rates, and absolute positive correlation between them also points to the perfect harmony between the two.

Conclusion to the study:

This paper on commercial bank lending in Ethiopia attempted to analyze the trends in lending by public sector and private sector banks; to evaluate the growth rates in advances as well as gross domestic credit; and to correlate the deposits mobilized with the advances granted in the recent decade. This study is fully secondary data based, from the official website and database of the central bank of the country. It used, in addition to descriptive statistical tools, trend analysis, compounded annual growth rates, as well as correlation measures for data analysis. Findings are presented in the form of summary data tables, charts and graphs with appropriate explanations. Major findings of the study include: mixed trends are found in total advances by public and private sector commercial banks – with public banks dominating the lending scenario in the recent years; lending by private banks showed downward trend since 2010; very high positive correlation existing between deposits mobilized and advances disbursed by the Ethiopian banking industry, between public sector and private sector advances, and between public sector and private sector deposits mobilized; a compounded annual growth rate of 22.7% is registered by all commercial banks in the recent decade; and there is perfect synchronization between commercial bank advances and gross domestic credit in the country.

Significance of the Study:

This study is a kind of pioneer attempt, since there is no study of this magnitude on the lending scenario of Ethiopian Banking industry. This study is believed to be highly significant for different stakeholders, viz., the commercial banks in Ethiopia, the central bank (National Bank of Ethiopia), the business public, as well as to the policymakers of the country. Based on the data available as of date, the study tried to analyze the lending scenario of Ethiopia in multi-perspectives. This will be a useful effort for the academics as well as banking and finance researchers.

Limitations of the study and scope for further research:

The study had to consider limited datasets available, since the private banking started in Ethiopia only in 1994, and by 2000 only 6 private banks were in operation. As many as 10 private commercial banks commenced their operations after 2004, till 2012. This restricted the extent of data availability for this kind of research, especially this being highly secondary data based one. Future attempts may be made by these and other researchers to elaborately analyze the lending scenario with larger datasets and in-depth information. Currently there was some lacunae in databases maintained in the country – such as non-availability of information on lending to various categories of borrowers like large, medium, small and micro industries in the country.

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