Market Structure and Profitability Performance in the Banking Industry of CFA Countries: _ The Case Of Commercial Banks In Cameroon

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Abstract

The main objective of this study is to test empirically the Structure - Performance (S- P) hypothesis within the context of the Cameroonian Commercial banking system. The analysis is based on cross-sectional data collected from three dominant banks over the period between 1987 to 1999. Three accounting measures of bank's performance were utilised: return on capital (ROC), return on assets (ROA) and return on equity (ROE). To some extent, the models explain the dependent variables. The results indicate that the market concentration power is of paramount importance in the determination of bank profitability. Further, the positive impact of the loan to deposit ratio, (a measure of risk) is undetermined by the negative effect of the loan to total assets ratio and the operating costs on bank's profit rate. Lastly, the positive effects of bank's size, time and savings deposits to total deposit ratio and the 1994 CFA devaluation cannot be emphasized.

Keywords: Market structure, Monopoly power, Portfolio theory, Bank profit rate, CFA zone, Cameroon.

Introduction

A majority of work on commercial bank performance exist in the literature. However, just a few of these studies related to the profitability performance of commercial banks have been carried out in developing countries and in Africa, [Civelek and Al-Alami (1991); Agu (1992); Ali Abdula (1994); Chirwa (1997,1998)]. For the CFA zone countries, in spite of the recent episode of banking system problems and the mounting of financial sector reform measures, little or no adequate analysis has been done to examine the determinants of banking performance. This analysis is particularly important since the banking sector in francophone Africa has had some unsound deposit taking institutions. More specifically, the reform of the financial sector has not changed the oligopolistic structure of the banking sector as three or four major French banks dominate the sector. It is therefore, important to verify the hypothesis that the economic performance of banking system is a function of its market structure or monopoly power.

Corporate performance is the primary concern of management, investors and economic planners. This concern stems from the idea that the impact of performance of profit maximizing corporations on their

profitability and hence, their survival will have great impact on the county's economic growth. Therefore, a study of the determinants of corporate performance would help management, investors and governments to plan for unpleasant events (Ali Abdula 1994). Good management decision would be made in favour of factors that highly improve a firm's performance. Market structure in highly concentrated markets is believed to have a positive effect on corporate profit. However, high degrees of market share concentration are inextricably associated with high levels of profits at the detriment of efficiency and effectiveness of the financial system to due decreased competition(Bain, 1951; Gilbert, 1984; Smirlock , 1985; Evanoff and Fortier, 1988; Clark,1986; Molyneux and Forbes, 1995). Secondly, since commercial banks are the primary suppliers of funds to business firm, the availability of bank credit at affordable rates is of crucial importance for the level of investments of the firms, and consequently, for the health of the economy. In situation of increased concentration, the possibility of rising costs of credits is reflected to a reduction of the demand for bank loans and the level of business investments (Civelek and Al-Alami, 1991). The effect multiplies many folds in as much as bank management capitalizes on the market share concentration factor. Thus, the main objective of the paper is to analyse empirically, some of the determinants of banking performance by underlying the market share concentration variable, in a CFA franc zone country, such as Cameroon.

Evolution of the Cameroonian Banking Industry and Market Structure

Cameroon is a member of the CFA franc zone which regulates currency, credit and financial matters between France and a number of colonies in Africa. Although the franc zone was created during the colonial era, its present conception and organisation goes back to conventions which were signed by its members in 1972-73.

The banking system in the central African Monetary and Economic community (CEMAC) zone to which Cameroon belongs is composed of a common central bank, the Banque des Etats de l'Afrique centrale (BEAC) that represent the pivot of all other credit institutions existing with the sub zone. The BEAC determinates the monetary policy as regard credit for the CEMAC in close cooperation with the National monetary committees which are composed of representatives of respective ministries of finance of member countries. The banking system comprises of commercial banks, development bank and non-bank financial institutions.

Cameroon had one of the best banking system in French - speaking Africa which until the mid - 1980, succeeded in mobilizing private and public sectors deposits. Prior to oil production, the Cameroonian banking sector was dominated by French merchant banks and in the early 80s, American banks also gained interest in the sector. However the market structure of the banking industry remain unchanged maintaining an oligopolistic structure at the time. Four major Banks played active role and these were : Société Commerciale de Banque (SCB), Société Générale de Banque au Cameroun (SGBC), Banque

Internationale pour l'Afrique Occidentale - Cameroun (BIAOC) and Banque Internationale pour le Commerce et l'industrie du Cameroun (BICIC). These banks had relatively many bank branches. According to Agu (1992) , market structure is also measured by the number of bank branches. "Economic theory implies that a banking system consisting of numerous competiting banks will perform better in terms of output and prices than a banking system dominated by a few banks" (Agu, P.358).

However, with the up surge of the economic crisis in the second half of the 1980s, a great number of bank with foreign equity holdings, in particular the American banks, withdrew from Cameroon and some local subsidiary were sold. A lot changed in the banking sector of Cameroon since the onset of the economic crisis in 1986. In the mid-1987, the Cameroon banking system experienced tight bottlenecks in liquidity and a majority of the commercial banks were technically, insolvent. The government of Cameroon was forced to initiate some financial reform measures within the framework of its structural adjustment programme. Many banks were liquidated and or acquired between 1989 and 1992 (Atemnkeng, 1998). Following this, four particularly had-hit banks were closed. The merchant bank SCB was the first to be wound up but later taken over by Credit Lyonnais after an injection of some capital changing its identity to Societé Commerciale de Banque Credit Lyonnais Cameroun (SCB-CL). A number of banks of minor importance as well as the National Development Bank and the Banque Camerounaise de Développement were closed down in 1994.

The next step in the reorganisation of the banking sector took place in July 1991 with the merger of the BIAOC with the local subsidiary of the International Meridian Bank Ltd (1MBL). The new bank then operated under the name of Banque Meridian BIAO Cameoun (BMBC). Just as in the case of the merger of Credit Lyonnais with the former SCB the "bad debts" of all restructured or liquidated banks were absorbed by the National Debts Authority created in 1989 known in French acronym as Societé de Recouvrement de Creances (SRC). Despite the far reaching reforms, the banking system continued operating in a difficult context during the 1993/1994 financial year and the government had to proceed with the restructuring process with the support of the French Caisse Centrale de Coopération Economique (CCCE). In 1994/95, of the eight Commercial banks that existed in the country, only three among which were, SCB-CL, Amity Bank and the Caisse Commune d'Epargne et d'Investissement (CCEI) presently known as Afriland Bank presented convincing balance sheets. Some others like BMBC and Credit Agricole were completely shut down. With further reorganisation and withdrawal of some components by Banque Nationale de Paris (BNP), the BICIC had to operate under a new name, the Banque Internationale pour l'Epargne et le Credit (BICEC). In addition, in order to strengthen control and regulation in the financial system, the Banking Commission for Central Africa (COBAC) was in 1990 acting as a regional body in the CEMAC zone and replaced the National Banks and Financial Establishment control Commissions in the various members countries.

However, like in the 1970s, and 1980s, including the reform period the same banks as earlier

mentioned still dominated the market. In the late 1980s, BICIC, BIAOC, SGBC and SCB put together held 70.9% of the equity capital, 83.7% of all balance sheets, 79.4% of deposits and 92.5% of credits of the entire banking system. And between the period from 1990 to 2000, BICEC, SCB-CL and SGBC maintained over 50% in terms of equity capital, total balance sheets, deposits and loans respectively . This period also marked the entry of some new bank especially between 1997 and 2000 among which are Commercial Bank of Cameroon (CBC), CITIBANK, Union Bank of Cameroon (UBC) and ECOBANK increasing the number from six to ten banks. From the above statistics, there is an indication that the monopolistic or oligopolistic structure of the banking system had weakly changed following the liberalisation of banking conditions. Nevertheless, slight in monopoly power implies some degree of competition eminent in the banking industry. Finally, in terms of ownership of banks, as of June 1994 the state plays a major role but is not majority shareholder when all private agents are lumped together. In Cameroon, 85.6% of shares in the non-bank sector are state owned and overall the public sector holds an average 40.1% of shares in Commercial banks. An increasing presence of averaging 19.5% with majority being observed in Afriland and Amity Banks. As concerns foreign participation, the French interests are heavily felt with 65% Credit Lyonnais in SCB-CL, 36% of BNP in BICEC and 38.7% of Société Générale in SGBC making an average of 46% of French presence in the Cameroonian banking sector. Nevertheless , the French presence is lower as compared to the pre-reform period (Njinkeu, 1997).

Theoretical and Empirical Literature on Commercial Banks Profitability

Market Structure and Profitability

One of the most debated and tested relationships in industrial organisation literature is the profitability - concentration hypothesis conventionally referred to as the structure- conduct- performance (S C P) model.

The theoretical underpinning of this model commonly known as the collusion hypothesis rest on the pioneering works of Bain (1950, 1951) which were applied to the manufacturing sectors. This model was later introduced into the banking industry following Schweiger and Mcgee (1961) and has served as a fertile ground for empirical tests on the impact of market concentration on bank profitability. The economic theory surrounding the hypothesis is that certain market structures are conducive to monopolistic conduct, and this element is common in highly concentrated markets, enabling firms to raise prices above costs thereby making abnormal profits. The immediate effect of this monopolistic tendencies is reduced competition.

However, several interpretations have come up that do not support the SCP hypothesis following the fact that existing studies do not provide unique empirical conclusions or results. There is the efficient market or efficient Structure (E.S) hypothesis that chanllenges the SCP hypothesis. Proponents of E.S.

hypothesis Demsetz (1973), Peltzman (1977), Brozen (1982) and Smirlock (1985) hold that market concentration is not a random event but rather the result of firms with superior efficiency obtaining a large market share. They have attempted to demonstrate that no relationship exist between concentration and profitability, but rather between bank market share and bank profitability. Others like Berger (1995) and Maudos (1998) argue that market share, which is included in the profit regression to test the E.S. hypothesis is a proxy of the efficiency of firms. Proponents further postulate that differences in firm specific efficiencies within the markets create unequal market shares and high levels of concentration. Chirwa (1997, 1998) however, produce negative and statistically insignificant estimates which reject the Efficient market hypothesis. Adherents of the SCP hypothesis have raised several reasons why some studies do not find a positive and significant relationship between concentration and bank profitability. Clark (1986) asserts that the use of a single-equation model may depress the effect of the market concentration variable on the bank profitability. Rhodes and Rutz (1982) pointed out that the impact of market concentration upon bank management risk-return preferences must be taken into account. According to these others, bank management in concentrated markets is highly sensitive about showing high profits and therefore, has high tendency for a quite life. The failure of explicitly considering such a behaviour may produce weak relationship between concentration and profitability. Agu (1992) confirms the preceding statements suggesting that the significant relationship between the two variables may be due to the high degree of risk aversion for bankers in highly concentrated markets.

Bank Profitability and Policy Variables

Several models of the banking firm have been developed to deal with specific aspects of bank behaviour but none is acceptable as descriptive of all bank behaviour although the portfolio theory approach plays and important role (Clark, 1986). According to the Portfolio balance model of asset diversification, the optimum holding of each asset in a wealth holder's portfolio is a function of policy decisions determined by a number of factors such as the vector of rates of return on all assets held in the portfolio, a vector of risks associated with the ownership of each financial assets and the size of the portfolio (Agu, 1992). It implies portfolio diversification and the desired portfolio composition of commercial banks are results of decisions taken by the bank management. Further, the ability to obtain maximum profits depends on the feasible set of assets and liabilities determined by the management and the per unit costs incurred by the bank for producing each component of assets.

In accordance to the portfolio theory, many studies have introduced some useful variables in the profit function of commercial banks. Below is a brief review of the ones relevant to the formulation of the model in the present study.

Sinkey (1975) used multiple discriminate analyses to empirically identify the features of problem banks. He postulated that there are several factors, both financial and operational, that might be used to

diagnose possible problems in a bank's performance. The factors are assets composition, loan characteristics, capital adequacy, sources and uses of revenues, efficiency and profitability.

Several others have attempted to identify the characteristics of high- performance banks. Ford and Oslon (1978) asserted that the elements beyond the control of management contribute modestly in the banks rate of return. They reported that the financial determinants of high performance banks are: interest on deposits, gross loans to total deposit, gross charge- off to loans, municipal bonds, securities income to securities, payroll expense to employees, over head to earning assets, operating expenses to earning assets, loan loss provision to earning assets, loan income to gross loans, interest on deposits to time and saving deposits. Similar variables are included in the model of banks performance used by Baker (1978).

Arshadi and Lawrence (1987) using canonical correlation analysis (CCA) tested the relationship between the performance measures and set of endogenous financial and operational variables. The analysis indicated that the bank's cost structure measured as the ratio between salaries and wage expense to total asset, size and the composition of the bank credit are among the most important factors influencing the success of newly established banks in U.S.A.

In an interesting study Bourke (1989) attempts to appreciate the factors that are likely to influence the performance of the commercial banks in Europe, North America and Australia. Using a sample of 90 banks from 1972 to 1981, he controlled for differences in accounting standards and reporting in those countries by introducing the concept of value added. Two measures were used as proxies of this concept: 1) Pre-tax income plus staff expenses and 2) Pre-tax income plus staff expense plus loan losses. His results show that liquidity ratio (cash and bank deposit plus investment securities as percentage of total assets), concentration ratio(largest three banks of either total deposits or assets) and growth of money supply in each country are significant in determining commercial banks profitability.

Molyneux and Thorton(1992), applying the model used by Bourke(1989) undertook the study to banks in a eighteen European countries. They used standardized accounting data published by the International bank credit Analysis Ltd (IBCL) to account for differences in accounting policies. The results show strong positive relationship between concentration and each of six measures of performance such as : earnings before interest and tax (EBIT) / capital and reserve (Ç R), net profit (NP) /(C&R) , EBIT/(C&R+total borrowings), EBIT/ Total assets, (EBIT +staff costs)/ assets and (NP+staff costs + provision for loan loss) / total assets.

Ali Abdula (1994) on the other hand, using two accounting measures of banks performance (return on assets and return on equity) in Bahrain commercial banks found out that the gulf crisis, loan to deposit

ratio, operating costs, and bank size are inversely related to the two measures of performance, whereas a two bank concentration ratio, loan to total assets ratio, individual deposits to total deposits ratio and government ownership in bank's stocks are directly related to the banks profitability. Similar variables were included in a simple correlation analysis used by Agu (1992).

Lastly, studies that test the competing hypothesis of market concentration (ie the SCP) and the market share (or E.S.) by including these variables in the profit function of banks (see for instance, Gilbert, 1984; Smirlock 1985; Clark, 1986 ; Molyneux et al.1994; Molyneux and Forbes 1995; Maudos, 1998; and Chirwa(1997, 1998), have also considered most of the other variables in the studies reviewed above. The S C P hypothesis is supported by the significance of the coefficient of concentration measure and insignificance of the coefficient of market share. Contrarily the significance of the market share variable which is a proxy for efficiency and insignificance of the coefficient of the concentration measure would imply support for the efficient hypothesis.

Empirical Evidence

Data and Model Specification

The profitability measure generally used in empirical studies on corporate performance are the rate of return on asset (ROA), rate of return on capital (ROC) and rate of return on equity (ROE). However, most studies have made use of ROA and ROC or ROA and ROE. Chirwa (1997,1998) made use of all three measures and indicate satisfactory results with preference to ROA and ROC on the basis of R^2 and the F- statistics. In this study, all three measures are used. Net income before taxes is assumed to a relatively better indicator of banks performance (Civelek and AL- Alami, 1991).

The independent variables which enter into the model adopted in the study would include the following:

1 Index of market concentration (CONC), which is bank (i)'s Herfindahl-Hirschman index of market concentration .This is calculated for an individual bank as $(TDit/TD)^2$, where TDi is bank (i)'s total deposit; TD is total commercial banks deposits in the market.

2 Management of bank's capital (CAPAST) measured by the total capital of the bank to total assets.

3 Bank's loan portfolio (LOANAST) measured by the ratio between total loans and total assets.

4 Total advances to total deposit (LOATD) is used as a proxy of the bank's risk.

5 Bank size measure (LASSET) measured by the natural logarithm of the bank's total assets.

6 Expense control (OPEXTD) measured by operating expenses as a ratio of total deposits.

7 Compositions of the bank's deposits measured by:

   a) the ratio of time and savings deposits to total deposits (TMSDTD) and

   b) the ratio of demand deposits to total deposits (DDTD)

8 Since the period of study covers important economic reforms such as the financial reform from

the year 1990 and the 1994 currency devaluation, two dummy variables are considered. DF and DDV for the financial reforms and currency devaluation respectively.

In line with the methodological procedures set by the studies reviewed above ,the following mathematical relationship is adopted :

$$л_{it} = \infty + \sum_{j=1}^{n} \beta_j \chi_{it} + \mu$$

Where л is a measure of bank's performance taking either ROA ROC or ROE,α is the constant; β, the coefficients of the independent variables, χ are the independent variables defined above, and μ is the random disturbance term with a zero mean. The subscripts, i represents commercial banks and t the time period .Of the ten commercial banks, presently operating in Cameroon there are just three banks that existed before and after the crisis period. These are BICEC, SCB -CL and SGBC whereas the others entered the banking market in the 1990s. Therefore this survey is limited to the three commercial banks. As earlier mentioned, the market shares of the banks in terms of equity capital, advances and deposits etc, dominate the total market of the banking industry. The annual data used in the sample were collected from various publications and documents of BEAC and related institutions. These include the internal Documents of the Department of Control and Regulation and COBAC, and Reports of the National Credit Council of Cameroon and Etudes et Statistiques Economiques. The data cover the period between 1987 and 1999 for the three banks except for the SCB-CL where complete data were available only from 1990. Due to the number of banks included in the study and the number of the independent variables (ten), and similar to Bourke (1989), Molyneux and Thornton (1992) and Ali Abdula (1994), the data was pooled in order to increase the number of observations to 36. Thus, relatively sufficient degrees of freedom in the regression analyses could be obtained. The analysis of the pooled data is based on the cross-sectionnally heteroskedasticity and time-wise autoregressive model as explained by Kementa (1986) in the estimation of a linear regression.

The specification technique adopted involves that of Lee (1993) where the Spearman's rank correlation matrix of the dependent and independent variables is determined in order to detect the problem of multicollinearity. Table1 presents correlation matrix indicating a severe case of multicollinearity. The correlation of -1 between TMSTD and DDTD was overcome by using either variable. The case of 0.82 between LOANAST and LOANTD did not yield any problem permitting the inclusion of both variables in the model.

Table 1: spearman's rank correlation between the independent and the dependent variables

VARIABLES	ROA	ROC	ROE	CONC	LOANAST	LOANTD	DDTD	TMSDTD	OPEXTD	DF	DDV	CAPAST	LASSET
ROA	+1												
ROC	+0.74	+1											
ROE	+0.95	+0.79	+1										
CONC	+0.08	+0.06	+0.05	+1									
LOANAST	-0.38	-0.36	-0.41	+0.14	+1								
LOANTD	-0.15	-0.18	-0.18	+0.05	+0.83	+1							
DDTD	+0.31	+0.32	+0.35	-0.03	-0.62	-0.70	+1						
TMSDTD	-0.31	-0.32	-0.35	+0.03	+0.62	+0.70	-1	+1					
OPEXTD	-0.20	-0.41	-0.24	+0.06	+0.62	+0.79	-0.75	+0.76	+1				
DF	-0.09	-0.07	-0.08	+0.07	-0.33	-0.55	+0.18	-0.18	-0.34	+1			
DDV	-0.17	-0.45	-0.2	-0.09	+0.28	-0.02	+0.02	-0.02	+0.22	+0.13	+1		
CAPAST	+0.12	+0.09	+0.14	-0.05	-0.26	-0.23	+0.34	-0.34	-0.21	+0.14	-0.05	+1	
LASSET	+0.27	+0.2	+0.25	+0.14	+0.28	+0.38	+0.17	-0.18	+0.003	-0.54	-0.17	+0.14	+1

In this study the primary variable of interest is the CONC and it measures the degree of monopoly power in the banking industry. The interpretation of the signs of CONC and the other control variables are in conformity to existing studies. According to the traditional SCP hypothesis, the coefficient of CONC is positive. CAPAST also indicates the level of risk in business firms. Lower CAPAST is associated with high risk and hence theory advocates a negative relationship between capital asset ratio and profitability performance (Mitchell, 1984; Evanoff and Fortier, 1988). Other measures of risk are LOANAST and LOANTD with the former, loan portfolio, being criticised as a poor proxy for actual bank risk (Civelek and Al-Alami 1991). Portfolio theory postulates that risky investments are usually associated with higher returns than primary assets.

Economies of scale is assumed to have positive relationship with the firm's size. LASSET captures economies of scale and it is believed that as a company becomes large, it is better place to reap economies of scale. However, the impact of bank size on profitability can also be negative. Any positive influence on profits from economies of scale may be partially offset by greater ability to diversify assets resulting in a lower risk and a Lower required return in line with the portfolio theory (Evanoff and Fortier 1988; Smirlock 1985). This contrary has been provided by Civelek and Al-Alami (1991) and Ali Abdula (1994). Another explanation is that smaller banks are easy to manage in terms of control and coordination. The charges incurred in providing services to customers represent a reasonable proxy of the commercial banks operating efficiency. Thus OPEXTD is a cost to the banking firm and should negatively affect profits (Ali-Abdula 1994).

The composition of bank deposits is an important variable influencing a banking system's performance. The deposit mix by determining the liquidity needs of the banking system affects the volume of earning assets. DDTD measures the bank's relative cost of funds and being relatively inexpensive source of funds it should positively influence profitability (Evan off and Fortiers, 1998; Smirlock, 1985; and Agu (1992)). Contrarily, TMSDTD requires explicit cost to attract and because they are a more costly source of bank deposits, the greater the proportion of TMSDTD, the greater the cost of funds, and thus the lower the profit rate (Agu, 1992). Clark (1980) has argued that this variable represent a much more stable source of funds than do DDTD and therefore should positively affect profit rate (Agu, 1992, p.365). Lastly, we also include dummies for the financial reform period and the year 1994 to capture the effects of financial reform and currency devaluation respectively. The signs of the coefficients could not be determined a priory.

Estimation Results

Table 2 presents the results of the regression analysis of pooled data of ROC, ROA and ROE models. A number of different models were tested using the different variables and only the best models are reported. We excluded the capital-asset ratio and the dummy for financial reform variables which in all cases remain large insignificant and the results were improved. Furthermore, only results including the time and savings deposits to total deposits are reported as the results remain unchanged when alternatively the demand deposit to total deposit ratio is included in the models. The presence of heteroskedasticity was noticed, and corrected by a similar model suggested by white (1980). This involved a simultaneous correction of the problems of heteroskedasticity and autocorrelation.

Table 2: regression analysis results of the profit function of commercial banks

Variables	**ROC**		**ROA**		**ROE**	
	Coefficient	**t-statistics**	**Coefficient**	**t-statistics**	**Coefficient**	**t-statistics**
CONSTANT	7.255	0.580	-0.9351	-1.519	-19.8525	-1.279
CONC	0.9761	1.804[b]	0.0672	2.099[a]	1.4136	1.954[b]
LOANAST	-2.857	1.698[b]	-0.2386	-2.237[a]	-5.6173	-2.283[a]
LOANTD	2.0727	1.939[b]	0.1023	2.359[a]	2.4239	2.244[a]
LASSET	-0.2396	-0.492	0.0383	1.587	0.8445	1.356
OPEXTD	-13.6476	-1.611	-0.4101	-1.718[b]	-9.4149	1.6745[b]
TMSDTD	-0.5432	-0.316	0.0405	0.463	0.0568	0.934
DDV	-0.0568	-0.083	0.0505	1.493	-1.0461	1.431
R2	0.4229		0.4213		0.4082	
F	1.76		1.90		2.15	

Note: The 5 percent and 10 percent levels of significance are indicated by superscripts a an b respectively

Based on the summary statistics on table 2 above, the following remarks on the statistical significance

of the coefficients of the independent variables can systematically be made:

The relationship between commercial bank profits and concentration or market power is positive and the coefficient is statistically significant at the 5 percent and 10 percent level in the specifications. The result support the collusion or SCP hypothesis in the Cameroonian banking sector. Contrary to a priori expectations there is a negative relationship between profitability and the loan-asset ratio with the coefficients of LOANAST appearing significant at the 5 percent level in both the ROA and ROE models. Being a poor proxy for bank risk (Civelek and Al- Alami, 1991), the perverse results suggest that there is risk reduction behaviour among bank managers (Evan off and Fortier, 1988 ; Molyneux and Forbes 1995; Maudos , 1998).

Another important determinant of commercial bank profitability is the loan deposit ratio. It is a direct measure of bank risk (Civelek and Al- Alami, 1991) and according to the portfolio theory, risky investment are more profitable. The coefficients of LOANTD are positively related to profitability measures and statistically significant.

The coefficient of bank size is negative and insignificant in the ROC but turned out the positive in both ROA and ROE models. The coefficients are still insignificant and the results obtained here are similar to those of Chirwa (1998). However, some lesson could be obtained from this variable, LASSET indicating that the larger a bank, the more it reaps economies of scale and have greater diversification opportunities. As it is expected, the coefficient of operating expenses (i.e. salaries and other charges incurred) is negative and significant in both the ROA and ROE models. These results are in line with the findings of Ali Abdula (1994), that the cost of rendering services to customers in a bank erodes the profit of the bank.

We also observe a weak association between the deposit mix (i.e. time and saving deposits to total deposits ratio). From table 2, there seems to be no indication of any clear relationship between bank profitability and the ratio of time and savings deposits to total deposits. The coefficients of TMSDTD changed signs and is positive in both ROA and ROE models. Thus, the relationship between TMSDTD and banks profitability seems uncertain and confines to results of Agu (1992). Finally, the impact of the currency devaluation in 1994 seems to have weakly and positively influenced the bank profit rate as indicated in the ROA and ROE models.

Conclusions

Commercial banks have an important role to play in the economic development of a country. The effects of monetary policy could only be felt on the economy through the commercial banks. These banks were faced with chronic financial distress at the close of the 1980s. Despite their role, there is no

study on the performance of these banks. This paper should be seen as a first step, not the last word in this direction. The main purpose of this research is to provide empirical evidence on the determinants of profitability performance of the Cameroonian commercial banks over the period between 1987 and 1999 with the collusion hypothesis at the centre of inquiry. The study utilized cross-sectional data on three dominant commercial banks, BICEC, SCB-CL and SGBC in Cameroon. Three models were used, one that defines the banks performance in terms of returns on capital (ROC), a second defining it in terms of assets (ROA) and the third that defines the measure as a ratio between net profits and share holders equity (ROE). With respect to the collusion hypothesis, there is a positive relationship between market structure and banks profitability within the institutional context of the banking system in Cameroon. The role of market concentration in the determination of bank profitability is important. Further, overall result indicates that bank size, loan-deposit ratio and devaluation directly contributes to a banks profit rate where as the loan-asset ratio and operation expenses inversely affects banks profitability.

The results of study in general confirm the reported findings of some of the studies in the body of the paper. However, looking at the summary statistics, one notices a poor fit (i.e. an adjusted coefficient of determination or R^2) averaging 0.40. For this reason, further research is needed to virtually obtain all the determinants of banks profit rate.

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