Bank Profitability in Angola: Exploring Fiscal and Monetary Policy Linkages, 2005–2013

Carlos Panzo (ORCID ID: https://orcid.org/0000-0002-1238-3200)

Assistant Professor at Business and Economics School, ISG, Lisbon, Portugal

Email of corresponding author: carlos.panzo@isg.pt

Abstract: Despite Angola's banking sector exhibiting high profitability by international standards, it performs relatively poorly in financial intermediation, especially when compared to other developing economies. This disconnect suggests that credit risk is not a primary driver of profitability, challenging conventional assumptions in the banking literature for emerging markets. This paper investigates the determinants of bank profitability in Angola using panel data from 11 commercial banks over the period 2005–2013. Employing panel regression techniques, the study explores the relationship between profitability and both bank-specific and macroeconomic factors. The findings reveal a strong correlation between bank profitability and fiscal and monetary policies. Specifically, the results highlight the role of indirect subsidies in the form of high yields on government bonds and favorable spreads in the foreign exchange market, which have significantly contributed to elevated net interest revenues. The analysis finds little justification for such high bond issuance - neither persistent fiscal deficits nor inflation targeting fully explain the government's approach to debt management. The study concludes that these policy choices were likely designed to support and protect Angola's nascent banking sector, with the broader aim of stimulating economic development. However, the data does not support the effectiveness of this strategy. Instead, the results suggest that the policy framework created perverse incentives, discouraging private sector lending and hindering the sector's contribution to long-term, inclusive growth. These findings carry important implications for banking sector policy design in Angola and similar developing economies seeking to balance profitability with meaningful financial intermediation.

Keywords: Angola; Bank Profitability; Financial Intermediation; Bond; Monetary Policy.

INTRODUCTION

Following the end of Angola's 27-year civil war in 2002, the government embarked on an ambitious national reconstruction programme in 2004, financed by significant oil tax revenues and substantial credit lines from China and Brazil. Between 2005 and 2013, the economy experienced relatively stable macroeconomic conditions: inflation steadily declined, the exchange rate remained broadly stable (except for a 20% devaluation during the 2009 oil price collapse), and the government recorded consistent fiscal surpluses, except for the 2009 financial crisis that led to an International Monetary Fund (IMF) Standby Agreement. In parallel, interest rates on treasury bills fell dramatically - from 19.3% to 3.1% - signalling a shift in public finance management. Yet, despite these developments, the banking sector's profitability surged even as financial intermediation remained weak, and several banks began experiencing liquidity and solvency challenges. During this period, Angola's banking sector remained exceptionally profitable, consistent with findings by Flamini, MacDonald, and Schumacher (2009), who noted that sub-Saharan African banks earned significantly higher returns on assets than their global counterparts.

However, in Angola, this profitability appears less attributable to traditional lending activities and more to indirect government subsidies - particularly through high-yield government bonds and substantial spreads in the foreign exchange markets. This study investigates the underlying factors driving the profitability of Angolan banks over the 2005–2013 period using panel data from 11 commercial banks. The central hypothesis posits that bank profitability is heavily influenced by fiscal and monetary policy, as well as government-created rent-seeking opportunities. While the credit-to-GDP ratio remained low, bank returns on assets and equity continued to rise, suggesting that traditional financial intermediation was not the main driver of profitability. Instead, the Angolan economy's dependency on imports and the central bank's strategy of stabilising the exchange rate through an ex-ante sterilisation mechanism created significant opportunities for foreign exchange gains, amplified by large spreads between the primary and secondary currency markets. The study further argues that the central bank's policy of accommodating foreign exchange demand, rather than letting the exchange rate adjust freely, resulted in an artificial stability that benefited the banking sector. Simultaneously, the government issued high-yield domestic debt despite macroeconomic fundamentals that would not typically warrant such rates.

Table 1: Angola Macroeconomic Indicators

Real Economy		**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
GDP, current prices	U.S. dollars (Billions)	36,97	52,38	65,27	88,54	70,31	83,80	111,79	128,05	136,71
GDP per capita, current prices	U.S. dollars	1 862,42	2 561,86	3 099,09	4 081,69	3 146,80	3 641,44	4 716,25	5 245,02	5 436,52
Real GDP Growth	Percent of GDP	15,00	11,50	14,00	11,20	0,90	4,90	3,50	8,50	5,00
Oil Production	Barrels (Millions)	452,56	488,31	605,88	673,21	676,74	641,25	602,72	633,62	620,94
Oil Price (Angola)	U.S. dollars	51,33	63,06	70,88	95,64	61,81	79,53	111,57	112,21	109,14
Fiscal Indicators										
General government revenue	Percent of GDP	39,30	46,40	46,70	50,50	34,50	43,48	48,84	45,90	41,06
General government total expenditure	Percent of GDP	26,53	30,60	38,13	52,67	45,01	39,39	37,40	37,21	37,05
Fiscal balance	Percent of GDP	6,50	6,60	14,50	14,20	-4,70	3,40	8,70	4,60	-0,30
General government gross debt	Percent of GDP	33,46	18,73	21,04	31,38	56,30	37,16	29,56	26,69	33,15
Treasury Bills Issued	U.S. dollars (Billions)	1,39	0,06		17,40	5,20	1,11	3,50	4,50	3,17
Bond Issued	U.S. dollars (Billions)	0,55	0,37		4,29	4,78	1,35	1,08	3,60	5,27
Monetary Indicators										
Inflation, end of period consumer prices	Percent change	18,53	12,21	11,78	13,17	13,99	15,32	11,38	9,04	7,69
Credit in the banking sector	Percent of GDP		6,43	10,26	12,02	22,81	25,19	27,82	29,05	30,20
Deposits in the banking sector	Percent of GDP		14,66	18,30	39,10	41,25	32,54	33,00	29,50	31,24
Treasury bills Interest rate	Rate	34,10	7,27	14,99	14,89	20,88	11,55	6,80	5,08	3,64
Lending interest rate	Rate	67,72	19,51	17,70	12,54	15,68	22,54	18,76	16,66	15,81
Balance of Payments Indicators										
Foreign Exchange Rate	KZ/USD	80,80	80,20	75,00	75,10	79,30	91,90	93,90	95,50	96,50
Foreign currency wholesell	U.S. dollars (Billions)	3,20	8,20	11,20	17,90	13,20	19,30	27,50	32,20	32,20
Exports	U.S. dollars (Billions)		31,87	44,40	63,91	36,01	50,60	67,31	71,09	68,25
Imports	U.S. dollars (Billions)		8,78	13,67	20,98	16,51	16,67	20,23	23,72	26,34
Current account	U.S. dollars (Billions)	5,14	10,69	10,58	7,19	-7,57	7,51	13,09	13,85	8,35
Capital and financing account	U.S. dollars (Billions)		-3,72	-6,28	-0,72	-5,15	1,65	4,02	8,89	0,49
Net foreign reserves	U.S. dollars (Billions)	4,14	7,32	9,63	15,38	9,08	18,80	26,32	30,83	31,17

Source: Banco Nacional de Angola, EIU & IMF

To explain this paradox, the study explores three hypotheses: that high yields were needed to finance fiscal deficits, that they were a monetary tool to contain inflation, and that they were intended to foster the growth of a nascent banking sector. Empirical and theoretical analysis suggests that the first two hypotheses are not supported by Angola's fiscal and monetary context during the period. Instead, the promotion of the banking sector appears to have been a deliberate policy objective, as reflected in national plans that emphasised financial sector development as a tool for economic diversification. Nevertheless, whether this strategy yielded the intended social and economic benefits remains an open question. The paper, therefore, adopts a two-pronged analytical approach: first, to assess whether banking sector profitability was a deliberate outcome of government policy, and second, to determine whether this profitability translated into higher credit provision to the economy, as measured by the transformation ratio of credit to deposits. The analysis ultimately seeks to understand whether the benefits of promoting the banking sector, via high interest rates and foreign exchange spreads, justified the policy trade-offs involved in terms of economic efficiency and broader development goals.

Table 2: Angola Banks Consolidate Indicators

Growth and Dimension	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Deposits Growth	64,30	70,10	45,40	59,30	65,10	13,80	39,00	8,80	16,90
Credit Growth	44,00	102,70	82,90	59,10	59,30	15,60	25,00	26,30	14,20
Assets Growth	47,00	63,80	62,10	93,30	29,20	19,70	24,20	15,40	12,30
Capital Adequacy and Assets Quality									
Regulatory capital to risk-weighted assets	19,40	18,50	21,90	23,90	19,50	18,60	18,50	18,30	19,50
Capital (net worth) to risk-weighted assets	16,10	15,30	15,00	16,00	14,70	17,90	14,30	13,60	14,30
Foreign Exchange loans to Total Credit	72,70	71,40	69,90	61,90	65,30	64,90	50,90	42,70	37,80
Non-performing Loans to Gross Credit	6,40	4,80	2,90	2,50	2,60	8,20	2,40	6,80	9,70
Provisions to Capital	9,20	8,80	4,90		11,60	3,80	3,50	4,60	
Sectorial Distriution of Credits									
Credit to Public Sector to Total Credit	10,00	7,10	8,10	10,10	9,40	4,40	5,40	5,70	3,70
Credit to Private Sector to Total Credit	89,10	92,60	91,90	89,90	90,60	95,60	94,60	94,30	96,30
Performance									
Return Equity (ROE)	34,20	28,80	23,60	25,60	36,50	32,10	21,60	12,50	10,90
Return on Assets (ROA)	3,10	2,70	2,70	2,50	3,40	3,00	2,60	1,60	1,40
Interest Margim to Gross Income	58,60	47,40	56,10	57,60	26,70	68,20	67,30	59,80	62,50
Expenses to Income	62,50	64,50	73,60	0,00	45,50	84,00	90,20	99,40	99,60
Other interest Income to Average Assets	40,10	47,90	44,40	37,70	34,50	38,10	40,90	48,10	51,70
Gross interest Income to Average Assets	9,60	8,80	8,40	7,60	7,80	7,60	7,20	6,40	6,03
Productivity and Efficiency & Solvency and Liquidty									
Operating costs to Gross interest Income	40,10	47,90	44,40	37,70	34,50	38,10	40,90	48,10	51,70
Operating costs to Average Assets	3,90	4,20	3,70	2,90	2,70	2,90	3,00	3,10	3,10
Net Credit to Client Deposits	39,90	45,40	54,00	55,90	55,80	60,60	59,50	65,50	63,30
Liquid Assets to Total Assets	47,10	34,40	46,10	42,20	31,40	32,00	28,10	26,30	30,10
Liquid Assets to Short Term Liabilities	84,10	59,80	63,10	48,60	56,90	38,60	35,40	33,70	36,90

Source: Banco Nacional de Angola & Bank's Financial Statements

Although bank profitability in Angola was exceptionally high during the period under review, the data suggest that this did not translate into a commensurate expansion of credit to the private sector. Despite robust growth in both GDP and GDP per capita from 2005 to 2013, Angola's credit-to-deposit ratio remained significantly below that of comparable economies. In 2007, for example, credit-to-deposit ratios ranged from 21% in Congo to over 300% in Denmark, with median figures for developing countries situated

between 70% and 80%. Angola's performance, by contrast, fell well below this benchmark, indicating that the banking system's ability - or willingness - to channel deposits into productive private sector lending was severely limited. This inefficiency in financial intermediation, coupled with excess liquidity in the banking system, suggests that the primary drivers of bank profitability were non-lending activities, particularly those tied to foreign exchange operations and sovereign debt instruments. Furthermore, structural factors such as high default risk, weak contract enforcement, immature risk management capabilities within banks, and a shortage of credible borrowers constrained the expansion of credit. These dynamics raise important questions about the role of government policy in shaping the financial sector.

While government intervention in nascent banking systems can be justified, particularly in post-conflict economies, the Angolan case presents an ambiguity: whether the high yields on government securities and exchange rate spreads were the result of a deliberate, strategic subsidy aimed at building banking sector capacity, or whether they reflected a form of regulatory capture in which government policy was shaped to benefit a small group of financial institutions. In either case, the outcome was a banking sector characterised by high profitability, low intermediation, and weak linkages to real sector development. The effectiveness and sustainability of this model remain deeply contested. By analysing these mechanisms and testing the two central hypotheses - first, that bank profitability was driven by government-created rents, and second, that such profitability did not lead to increased credit provision - this paper contributes to a broader understanding of the intersection between public policy and financial sector development in resource-dependent, post-conflict economies. The findings have significant implications not only for Angola, but also for other countries in sub-Saharan Africa facing similar challenges of economic diversification, financial deepening, and post-conflict reconstruction.

LITERATURE REVIEW

Research into bank profitability and its determinants has traditionally focused on key performance indicators such as returns on assets (ROA), returns on equity (ROE), and net interest margins. Scholars have explored both bank-specific factors - typically under the control of internal management - and broader macroeconomic variables. Bank-specific determinants include liquidity levels, capital adequacy ratios, overhead costs, and bank size, while macroeconomic influences are often categorised into industry-specific factors and general economic conditions, including regulatory frameworks and the wider economic environment.

A foundational study in this area is the work of Flamini, MacDonald and Schumacher (2009) from the IMF's Africa Department. Their empirical analysis investigates the determinants of bank profitability in sub-Saharan Africa (SSA) using a dataset of 389 banks across 41 countries between 1998 and 2006. Their results support the implementation of higher capital requirements to enhance financial stability and reveal that many SSA banks report returns well above global averages. This paper seeks to apply and adapt Flamini et al.'s methodology to Angola's unique context, to identify whether similar determinants hold and to explain any observed divergences, particularly by examining the relationship between banking sector profitability and government economic policy.

Complementing this line of inquiry, Al-Haschimi (2007) examines net interest margins in ten SSA countries using panel regression models. His findings highlight that credit risk and operating inefficiencies are significant drivers of variations in net interest margins, whereas macroeconomic variables appear to exert limited influence. Further exploring structural constraints in African banking, Andrianova, Baltagi, Demetriades, and Fielding (2011) question why African banks lend so little. Employing a modified input-output model, they identify moral hazard - linked to strategic defaults—and adverse selection—due to the scarcity of viable investment projects—as key constraints on credit expansion. In a more country-specific case, Nkurunziza, Nyamoya and Ndikumana (2012) investigate financial system performance in Burundi, concluding that despite apparent bank profitability, significant inefficiencies exist. These include fragmented financial markets, discriminatory lending practices, suboptimal resource allocation, and inadequate regulatory oversight, all of which may obscure the true health of the sector.

Outside the African continent, Demirgüç-Kunt and Huizinga (1998) assess how both bank-level and country-level factors shape profitability and interest margins across 80 countries from 1988 to 1995. Their results confirm that banking sector performance is highly sensitive to macroeconomic and regulatory conditions. Notably, they find that foreign-owned banks often outperform domestic ones in developing countries, though the opposite may occur in more advanced economies. Similarly, Saunders and Schumacher (2000),

in their comparative study of the US and six EU countries over the same period, find congruent results. Their study also underscores a fundamental trade-off: efforts to reduce the cost of financial services may compromise bank solvency, highlighting the delicate balance policymakers must navigate.

The role of the state in financial sector development has also been explored extensively. Stiglitz (1994) offers a compelling theoretical framework identifying seven key market failures that justify government intervention in financial markets. His analysis stresses the unique nature of financial markets, arguing that certain forms of intervention can enhance both market functionality and overall economic performance. This paper builds on Stiglitz's insights, particularly in the context of Angola, where government policy appears to have significantly shaped banking sector profitability. Nevertheless, Stiglitz cautions that while intervention may be justified, its historical outcomes have often been mixed. This caution is echoed by Arestis (2005), who critically assesses the financial liberalisation thesis. Arestis argues that the ideological premise underpinning financial liberalisation lacks empirical grounding and supports Stiglitz's contention that uncritical faith in market mechanisms is misguided, particularly in developing economies. Liquidity risk is another factor widely discussed in the literature, given its importance in a bank's ability to respond to funding pressures. Bourke (1989) posits a positive relationship between liquidity and profitability, as greater liquidity can provide a cushion against financial shocks and support earnings stability.

Aligned with this body of research, the present paper argues that financial intermediation is indispensable for economic growth and that governments in developing countries have a critical role in supporting nascent financial systems. Since the pioneering work of Goldsmith (1969) and Shaw (1973), subsequent empirical studies—most notably by Cecchetti and Kharroubi (2012)—have reinforced the link between financial development and productivity growth. However, Cecchetti and Kharroubi also highlight a turning point beyond which financial expansion may hinder rather than help growth, a phenomenon observable in both developed and developing economies. This nuanced perspective underscores the importance of carefully calibrated financial sector policies.

In sum, the literature reviewed here provides the theoretical and empirical foundations for this study's investigation into Angola's banking sector. While drawing on established frameworks, this paper aims to contribute to the literature by analysing how government policy has shaped banking profitability in Angola, and whether this profitability translated into greater financial intermediation and, by extension, economic development.

DATA AND METHODOLOGY

Table 3. Descriptive Statistics

Variable Name	Observations	Mean	Standard Deviation	Min	Max
ROA	96	2.34	1.70	-4.28	8.07
ROE	96	24.17	17.78	-61.38	70.60
Size	96	5.15	0.58	3.45	6.05
Equity	96	11.09	5.51	2.21	32.93
Credit	96	48.17	17.67	2.28	82.13
Cost	96	57.15	35.99	21.17	268.75
NII	96	3.78	1.63	0.00	9.73
OOI	96	3.12	1.38	0.47	7.59
Leverage	96	12.52	6.22	3.04	45.27
Liquidity	96	40.08	18.08	4.17	94.74
GDPgr	99	10.79	7.66	2.40	22.60
Inflation	99	12.56	3.07	7.69	18.53
Interest	99	13.02	9.20	3.10	34.10
ExRate	99	2.05	7.33	-7.47	16.70
SpreadFx	99	1.80	2.50	0.03	8.19

This paper carries out a study based on an unbalanced panel data of 11 commercial banks. The Angola Development Bank was excluded because it is a government financial institutional whose credit policy is determined by the authorities, not following industry and macroeconomic tendencies. New banks were also excluded due to insufficient time series data, and it should be noted that their weight in the analysis is insignificant and so their exclusion does not affect the results. The balance sheet and income statements from the 11 banks are fully audited and available at the banks' websites, as well as at the Bankscope database, and were used for firm-specific information. The Angolan central bank provided the information on the industry and balance of payments. The macroeconomic data was collected from the International Monetary Fund's International Financial Statistics and Global Source Dataset.

Based on the preceding descriptive discussion, in this section we shall explore the relative importance of the different factors in determining banking sector's profitability using the econometric method, of the following form:

$$ROA = \alpha + \sum \beta X^J + \sum \beta X^n + \mu \quad (1)$$

$$ROE = \alpha + \sum \beta X^J + \sum \beta X^n + \mu \quad (2)$$

Here, ROA (or ROE) is the return on asset (or equity) of a bank i, α is the regression intercept, β is the correlation coefficient of the independent variables, X^J is the vector of bank-specific factors and X^n is the vector for macroeconomic factors, while μ is the error term.

To evaluate bank-specific risks, the following factors are considered:

Net Interest Revenue: Measures the difference between the equivalent interest and earnings on loans and interest and costs on deposits over the total average assets. This is supposed to be the main source of a bank's profitability as it is generated from financial intermediation which constitutes the heart of a banks function, by taking deposits from savers and transforming them into loans to investors. Therefore, net interest revenue (NNI) is expected to be positively related to the banking sector's profitability, and to actually explain most of its variation within the model. However, in the case of Angola, the low level of lending to the private sector may affect NNI´s ability to impact bank returns on asset and equity. It is important to point out that NNI captures both interest and earnings from loans to the private sector and those from government bonds.

Other Operational Revenue: This indicator captures all other bank revenue not directly related to loan concessions to the private sector or to the acquisition of government bonds. Here, fees and commissions on other transactions are recorded, as well as those on money transfers, deposits and withdrawals. Hence, other operational revenue (OOI) is expected to be positively related to the banking sector's profitability. For Angola, OOI is even more relevant because it captures the stream of earnings from commissions charged on foreign exchange transactions and - most importantly - the gains from exploiting the spread between primary and secondary foreign exchange markets. In Angola this foreign exchange revenue comprises by far the highest proportion of revenue for all banks.

Credit Risk: Measures the financial intermediation level of banks by evaluating the ratio between loans to the private sector and deposits plus short term funding. In the financial economics literature, it is well established that poor enforcement of lender's rights, high levels of asymmetric information between lenders and borrowers and weakness of the judicial system increases credit risk (Flamini, MacDonald and Schumacher, 2009). The idiosyncrasies of credit risk in the African context is even better described by Andrianova, Baltagi, Demestriades and Fielding (2011) when analysing the question of why African banks lend so little, highlighting issues with moral hazard, consistent with intentional loan defaults, and adverse selection, due to the lack of good projects. Following the capital asset pricing model, the required profitability of credit is expected to be directly proportional to the expected risk of credit concession. As anticipated and illustrated in the problem section, the reasons for the low level of lending in Angola are mainly associated with high default rates, given the historical trend, and a lack of progress in the quality of regulations guaranteeing contract enforcement.

Cost-to-Income Ratio: Measures the overhead costs relative to gross revenue, with higher ratios indicating lower levels of cost efficiency (Beck, Demirgüç-Kunt, Levine, 2007). Hence, given the fact that efficiency means enhanced industrial performance, a negative relation is expected to exist between cost-to-income ratio (COST) and bank profitability. In the case of Angola, bank efficiency is expected to be low, thus very detrimental to profitability. The financial economics literature on African financial markets supports this observation and indeed Angola is not expected to be an exception.

Size: This indicator measures a bank's total assets (in log form). The impact of a bank's size on its profitability is ambiguous and the literature does not draw a decisive conclusion. Flamini, MacDonald and Schumacher (2009) argue that, to the extent that governments are less likely

to allow large banks to fail, a risk approach to size would predict that bigger banks would require lower profits. However, if a larger bank has a significant proportion of the domestic market and operates in a non-competitive environment, lending rates may remain high and consequently larger banks may enjoy higher profits. In the case of Angola, size is expected to follow the results of the previous research on bank profitability in sub-Saharan Africa, with size being ambiguously related to returns on assets and equity.

Equity: Captures the level of a bank's capital ratio, by demonstrating the share of capital plus retained earnings over total assets. Theoretically speaking, bank's capital is an important determinant for returns on assets and equity. However, in a scenario where capital requirements are high and suffer from regulatory costs due to the reserve coefficient (frequent changes in the coefficient by the central bank), it can elucidate a regulatory risk and has actually been negatively related with banks profitability. In the case of Angola, following the 2009 financial crisis, the country experienced a balance of payment crisis that led the central bank to adjust the reserve coefficient more often than usual and historically observed. This might have caused a negative impact on the profitability of the banking sector but unfortunately due to data unavailability this hypothesis cannot be tested.

Liquidity: Defined here as liquid assets (cash and deposits at central bank) over the bank's obligations with deposits and money market debt, in line with data available from the individual bank's financial statements. It is expected that liquidity negatively affects bank profitability because both cash and deposits in the central banks do not bear any interest. Furthermore, it is argued that a high level of liquidity is detrimental to profitability because it is obtained at the expense of those liabilities (deposits) not being transformed into interest bearing assets (loans).

Leverage: Defined as total average assets over equity (share capital and retained earnings). Assuming the premises of the theory of the capital asset pricing model, it is expected that leverage positively affects bank profitability. Given that a bank derives profits from the difference between its borrowing costs and the earnings on its investments, the more it borrows, the more earnings potential is has (via loans, trading positions and by taking the risk of underwriting securities) therefore as leverage rises the banking sector's profitability should also increase. Nonetheless, as a bank's losses on its investments may consume into its underlying capital - eventually making it insolvent, the relationship may become negative if the probability of value at risk increases.

According to Al-Haschimi (2007), the macroeconomic environment has only a limited effect in net interest margin in SSA economies. Indeed, other studies provide support to this conclusion using other country specific research such as Chirwa and Mlachila (2004) for Malawi and Beck and Hesse (2006) for Uganda. To evaluate macroeconomics risks, the following factors are considered:

Real GDP Growth: Bank profitability is positively sensitive to real GDP growth and its sensitivity has been extensively covered in the financial economics literature. However, there is no widely accepted model relating GDP performance, or any other macroeconomic variable, to bank profitability. Again, following the capital asset pricing model, business cycle volatility inflicts higher risk due to increases in loan defaults and therefore decreases the profitability of the banking sector. In the case of Angola, a weak but positive relationship between real GDP growth and bank profitability is expected. Here, it can be argued that the banking sector's profitability is a result of real GDP growth, not the other way around, due to lower banking sector contribution to the production process through weak financial intermediation.

Inflation: A bank's spreads and consequently its profitability is generally positively sensitive to price variations, particularly in developing economies. Empirical studies suggest that in less mature financial markets, inflation does not reflect evenly in borrowing and lending rates, as far as borrowers incur an 'inflation illusion', thus the banking sector's spread and profitability might be correlated with inflation (Honohan, 2003). In the case of Angola, the consumer price index (CPI) is expected to be positively related to bank profitability, with a stronger link than prophesized by the literature due to its impact on the local currency value. In an imperfectly competitive environment, higher inflation imposes pressure on currency value, ceteris paribus widening further the spread between primarily and secondary exchange markets.

Interest Rate: The market interest rate is the yield on the Angolan 91-day treasury bills and central bank paper at the end of year. A positive relationship between interest rate and bank's profitability is expected to exist because it affects directly net interest revenue. In the dealership model developed by Ho and Saunders (1981), interest margins rise with the variance of interest rates as a result of the intermediation risk faced by banks. In the case of Angola, the net interest revenue is affected mostly by

earnings from government bonds because the remunerations from loans to private sector is constrained by the credit expansion. As illustrated before, credit to private sector is lower than in other developing countries, such as South Africa, and did not expand in line with both real GDP growth and banking sector's deposits.

Exchange Rate: The exchange rate is the end of year local currency's value against the US Dollar. A positive relationship between the exchange rate and the banking sector's profitability is expected to exist. Firstly, there is an effect on other operational revenue due to the number of transactions executed by importers to meet their obligations with foreign suppliers and international firms operating locally, eager to expatriate gains to parent company headquarters. Secondly, the gains from exploiting the primary and secondary foreign exchange market spreads constitutes a determinant for the banking sector's profitability. Thus, a positive relationship between currency depreciation and bank gross interest revenue and profitability is expected to prevail.

REGRESSION ANALYSIS AND RESULTS

This paper examines the determinants of bank profitability in Angola, using level panel data for 11 commercial banks over the period covering 2005 to 2013, applying a panel data regression technique to the econometric specification. Notwithstanding the fact that cross-sectional data is ample, the time series information accessible is still narrow. However, the results are still robust and allow to infer and validate conclusions that are compatible with financial economic theory and empirical evidence.

Table 4: Forms (1) and (2) Estimation Results

Pooled OLS regression								
	ROA				ROE			
Specification:	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
NII	0.277***	0.305***	0.254**	0.269***	-0.187	0.344	-0.140	0.002
	(2.938)	(2.922)	(2.512)	(2.795)	(-0.257)	(0.412)	(-0.152)	(0.003)
OOI	0.257***	0.223**	0.213*	0.221*	0.798	0.030	0.458	0.500
	(2.772)	(2.424)	(1.809)	(1.921)	(0.951)	(0.038)	(0.412)	(0.497)
Cost	-0.022***	-0.023***	-0.026***	-0.024***	-0.293***	-0.293***	-0.303***	-0.278***
	(-3.296)	(-3.270)	(-4.007)	(-4.113)	(-3.783)	(-3.664)	(-4.510)	(-3.991)
Credit	-0.006	-0.009		-0.005	-0.088	-0.153		-0.129
	(-0.858)	(-1.072)		(-0.630)	(-1.029)	(-1.407)		(-1.355)
Inflation	0.107**		0.087*	0.085*	1.901***		1.335***	1.313***
	(2.554)		(1.849)	(1.862)	(3.439)		(2.845)	(3.063)
ExRate	0.012	0.068***	0.011	0.018	-0.315*	0.883***	0.130	0.289
	(1.129)	(3.542)	(0.435)	(0.693)	(-1.743)	(3.883)	(0.627)	(1.539)
GDPgr		0.054**	-0.010	0.000		1.187***	0.423	0.685**
		(2.093)	(-0.350)	(0.008)		(3.359)	(1.351)	(2.399)
Size			-0.300	-0.208			-0.789	1.806
			(-0.817)	(-0.499)			(-0.191)	(0.493)
Constant	0.694	1.489**	2.748	2.243	20.456**	32.447***	23.311	11.286
	(0.718)	(2.149)	(1.121)	(0.869)	(2.129)	(5.131)	(0.797)	(0.428)
Observations	96	96	96	96	96	96	96	96
Number of ID	11	11	11	11	11	11	11	11
R- squared overall	0.667	0.654	0.688	0.676	0.592	0.586	0.603	0.613
R- squared between	0.637	0.633	0.718	0.669	0.527	0.530	0.564	0.558
R- squared within	0.755	0.735	0.744	0.754	0.662	0.652	0.658	0.676
chi2	99.30	86.14	105.1	103.3	93.03	117.9	128.1	118.4
p-value	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Robust z-statistics in parentheses								
*** p<0.01, ** p<0.05, * p<0.1								

The findings also support the anticipated complexities and qualifications of the Angolan macroeconomic environment, characterised by a fiscal policy excessively dependent on oil revenues and a monetary policy constrained in its ability to influence aggregate demand, due to (i) high levels of dollarization (the economy functioning under a dual currency regime) and (ii) weak transmission mechanism channel (severely limiting the central bank's ability to use conventional monetary policy instruments to pursue inflation targeting objectives).

Tables 4, 5 and 6 report the results of regressions of the banking sector's profitability, measured by returns on assets and on equity as a share of total assets. The models (1) and (2) form the basis of the estimations. Due to data limitations, the well-known and vastly used Arellano-Bond (1991) two-step General Method of Moments (GMM) approach to solve errors and biases was not applied here. Rather, a panel linear Ordinary Least Squares and Generalized Least Squares (GLS) with random effects and fixed effects approaches are preferred and analogously applied. The regressions using pooled, random and fixed effects are running on both forms (1) and (2).

Table 5: Forms (1) and (2) Estimation Results

GLS regression (random effect)								
	ROA				ROE			
Specification:	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
NII	0.277***	0.305***	0.254***	0.269***	-0.187	0.344	-0.140	0.002
	(5.376)	(5.718)	(4.655)	(4.963)	(-0.287)	(0.523)	(-0.209)	(0.004)
OOI	0.257***	0.223***	0.213**	0.221***	0.798	0.030	0.458	0.500
	(3.945)	(3.230)	(2.566)	(2.699)	(0.974)	(0.035)	(0.451)	(0.500)
Cost	-0.022***	-0.023***	-0.026***	-0.024***	-0.293***	-0.293***	-0.303***	-0.278***
	(-8.226)	(-8.104)	(-7.278)	(-6.520)	(-8.733)	(-8.611)	(-6.921)	(-6.208)
Credit	-0.006	-0.009*		-0.005	-0.088	-0.153**		-0.129*
	(-1.272)	(-1.731)		(-0.972)	(-1.430)	(-2.389)		(-1.936)
Inflation	0.107***		0.087*	0.085*	1.901***		1.335**	1.313**
	(4.039)		(1.868)	(1.858)	(5.621)		(2.357)	(2.352)
ExRate	0.012	0.068***	0.011	0.018	-0.315**	0.883***	0.130	0.289
	(1.164)	(3.668)	(0.401)	(0.676)	(-2.406)	(3.801)	(0.395)	(0.865)
GDPgr		0.054***	-0.010	0.000		1.187***	0.423	0.685*
		(3.046)	(-0.376)	(0.010)		(5.339)	(1.250)	(1.906)
Size			-0.300	-0.208			-0.789	1.806
			(-0.826)	(-0.533)			(-0.175)	(0.391)
Constant	0.694	1.489***	2.748	2.243	20.456***	32.447***	23.311	11.286
	(1.223)	(2.887)	(1.053)	(0.821)	(2.890)	(5.194)	(0.721)	(0.349)
Observations	96	96	96	96	96	96	96	96
Number of ID	11	11	11	11	11	11	11	11
R- squared overall	0.667	0.654	0.688	0.676	0.592	0.586	0.603	0.613
R- squared between	0.637	0.633	0.718	0.669	0.527	0.530	0.564	0.558
R- squared within	0.755	0.735	0.744	0.754	0.662	0.652	0.658	0.676
chi2	243.4	220.3	226.6	232.4	158.7	152.3	156.4	164.9
p-value	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
z-statistics in parentheses								
*** p<0.01, ** p<0.05, * p<0.1								

Table 4 reports the results for the pooled ordinarily least squares (OLS) regressions for 4 different specifications, including both bank-specific factors and macroeconomic determinants. Table 5 reports the results for the GLS random effect regressions for the same specifications. The random effects approach is appropriate when an unobserved effect is thought to be uncorrelated with all the explanatory variables. The potentially resulting serial correlation over time can be dealt with a generalized least squares estimation. Finally, table 5 reports the results for the regressions with fixed effect for the same 4 specifications.

Table 6: Forms (1) and (2) Estimation Results

Fixed effect regression								
	ROA				ROE			
Specification:	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
NII	0.310***	0.341***	0.299***	0.310***	0.404	0.955	0.356	0.530
	(3.664)	(3.664)	(3.287)	(3.689)	(0.724)	(1.453)	(0.478)	(0.934)
OOI	0.285**	0.250**	0.232*	0.241*	1.800*	1.036	0.572	0.724
	(2.731)	(2.343)	(1.950)	(2.109)	(2.155)	(1.190)	(0.556)	(0.795)
Cost	-0.019**	-0.019**	-0.023***	-0.021***	-0.261***	-0.258***	-0.326***	-0.294***
	(-3.116)	(-3.085)	(-4.040)	(-4.326)	(-3.581)	(-3.495)	(-6.222)	(-5.687)
Credit	-0.008	-0.011		-0.008	-0.113	-0.182		-0.129
	(-0.978)	(-1.162)		(-0.876)	(-1.070)	(-1.365)		(-1.158)
Inflation	0.109**		0.068	0.072	1.883***		0.715	0.771
	(2.797)		(1.258)	(1.251)	(3.713)		(1.389)	(1.316)
ExRate	0.014	0.074***	0.016	0.026	-0.307	0.888***	0.108	0.268
	(1.392)	(3.657)	(0.562)	(0.841)	(-1.737)	(3.731)	(0.391)	(1.026)
GDPgr		0.058**	-0.019	-0.001		1.183***	0.046	0.350
		(2.237)	(-0.398)	(-0.016)		(3.557)	(0.084)	(0.763)
Size			-0.623	-0.392			-11.141	-7.335
			(-0.753)	(-0.488)			(-1.068)	(-0.757)
Constant	0.360	1.135	4.314	3.067	14.713	26.480***	87.523	66.950
	(0.368)	(1.535)	(0.801)	(0.578)	(1.534)	(4.176)	(1.290)	(1.013)
Observations	96	96	96	96	96	96	96	96
Number of ID	11	11	11	11	11	11	11	11
R- squared overall	0.630	0.613	0.623	0.618	0.533	0.525	0.443	0.473
R- squared between	0.528	0.511	0.514	0.494	0.367	0.359	0.168	0.205
R- squared within	0.759	0.740	0.755	0.762	0.671	0.662	0.679	0.694
F	18.53	14.42	18.25	14.15	19.02	13.04	50.56	48.60
p-value	6.97e-05	0.000209	6.07e-05	0.000160	6.20e-05	0.000322	5.20e-07	5.21e-07
Robust t-statistics in parentheses								
*** p<0.01, ** p<0.05, * p<0.1								

As pointed out previously, the specifications were run for both returns on assets and on equity, however, the focus of this paper's analysis is on understanding the banking sector's profitability from a ROA perspective, as it is preferred in the financial economics literature to fully grasp the determinants of profitability.

The regression's estimates fit the panel data fairly well. For the pooled ordinary least square, Chi squared tests show that the null hypothesis of joint insignificance of the parameters is rejected for all specifications. The overall R-Squared indicates that the specifications tend to explain more than 65% of banking sector's profitability. For the generalized least square models (random effects), the chi-squared tests allow to reject the null hypothesis of joint insignificance of parameters. The overall R-Squared indicates that the specifications tend to explain more than 65% of banking sector's returns on assets. For the fixed effect, the F-test allows us to draw similar conclusions. The overall R-Squared indicates that the specifications tend to explain more than 51% of banking sector's returns on assets.

RESULTS: BANK-SPECIFIC FACTORS

Net Interest Revenue: The results for the pooled OLS regressions confirm the assertion that net interest revenue is very significant (even at 1%) and positively related to ROA. This result is robust in all specifications and provides evidence that the banking sector's profitability in Angola is determined by net interest revenue. To the extent that earnings from loans to the private sector are constrained by the low level of credit extended to the economy (see figure 4), it can be concluded that the banking sector's profitability was strongly influenced by the yield on government bonds. The same specifications run both on GLS and on fixed effects produce similar results to the OLS regressions.

Other Operational Revenue: Other operational revenue is very significant (even at 1%) and positively related with ROA. The pooled OLS regressions' results, and indeed those from both GLS and fixed effects regressions, support the consensus that other operational revenue is crucial for banking sector profitability in Angola. Following the hypothesis argued in the present paper, fees and commissions charged by banks are decisive for returns on assets. Furthermore, other operational revenues are significantly boosted by gains originated from exploiting the spread between primary and secondary markets. As illustrated previously in this paper, the foreign exchange market grew massively in the period under study from roughly USD 3.5 billion in 2005 to USD 19.3 billion in 2013 (see figure 5).

Credit Risk: The credit risk is statistically insignificant for all the specifications when run on panel OLS, GLS random effects and fixed effect. Furthermore, the result suggests a negative relationship between credit risk and returns on assets and equity. This result seems to contradict the capital asset pricing model that predicts that higher required returns on assets are associated with bearing higher risks. While our statistics are ex-post, the theory is of course ex-ante. It would be expected that risk-averse shareholders target adjusted returns and seek larger earnings to compensate for higher credit risk (Flamini, MacDonald and Schumacher, 2009). However, a deeper analysis of the banking sector's performance in Angola resolves the puzzle by demonstrating that low levels of credit to the private sector are consistent with a statistically insignificant contribution to banking sector profitability. As discussed before (see figure 4), despite persistent real GDP growth (10.9% on average for the period 2005 to 2013), credit over deposits plus short term funding actually decreases to 23.7% in 2013 from 92.2% in 2007. As explained by other studies on economies in SSA, higher defaults on loans and weaker judicial systems and legal frameworks to resolve disputes between lenders and borrowers are detrimental to the banking sector's predisposition to grant credit to the private sector. In the case of Angola, the regression's results suggest that banks have in fact reduced financial intermediation between depositors and investors while enjoying earnings income from government bonds and other operational revenue from a persistently expanding economy, as illustrated by growth in real GDP.

Cost-to-Income Ratio: The specifications run on OLS, GLS random effects and fixed effect suggest a very significant and negative relationship between costs to income and bank profitability in Angola. As predicted equally by the literature and empirical evidence, the banking sector's profitability diminishes with higher cost-to-income ratios, meaning that efficiency is indeed a determinant for higher returns on assets. As can be seen from the consolidated financial indicators on Angolan banks (see table 5), the cost-to-income ratio is high, suggesting that banks are not efficient in the financial intermediation process. However, this result should not come as a surprise given the results from other research conducted on countries in SSA and hence the observation that Angolan banks carry on average more cash than those institutions in South Africa, Nigeria or Portugal (see figure 2).

Size: Size is also statistically insignificant on panel OLS, GLS random effects and fixed effect for all the specifications. The result is not necessarily surprising because in the financial economics literature the impact of a bank's size on its profitability is ambiguous in developing economies. Flamini, MacDonald and Schumacher (2009) argue that, to the extent that governments are less likely to allow a big bank to fail, a risk approach to size would predict that bigger banks would require lower profits. Nonetheless, the regressions on the data available do not trace a significant relationship although, in the case of Angola, it is expected that a positive relationship exists given the notion that a bigger bank is in a much better position to exploit the opportunities offered in the market.

Liquidity & Leverage: The financial economics literature and empirical evidence advocate liquidity and leverage as important factors when understanding the performance of the banking sector. In the case of Angola, it is observed that neither indicator affects returns on assets or on equity. For leverage, a low and stable ratio is detected throughout the sample, for the period from 2005 to 2013. The liquidity indicator is stable and relatively high when compared with those from other developing economies and substantially higher than the international norm. Omitted specifications demonstrated that neither indicator is statistically significant for bank profitability. This result does not come as a surprise given that Angolan banks carry more cash than in the average developing country and engage less aggressively in financial transformation than those from other economies in SSA.

RESULTS: MACROECONOMICS FACTORS

Real GDP Growth: According to the regression's results, real GDP growth is positively but weakly related to the banking sector's profitability. That its significance is not overwhelming supports the idea that in the

economies of SSA, macroeconomic variables tend to be poor indicators for bank performance. In the case of Angola, real GDP growth was not accompanied by stronger banking activity in financial intermediation, thus it is not surprising to observe a weak relationship between economic activity and the banking sector's profitability. Following the strong economic growth verified over the period of 2005 to 2013, the banking sector's profitability should be enhanced only through the concession of loans, however risk-averseness prevented it from do so.

Inflation: The impact of inflation on the profitability of the banking sector in Angola is expected to be positive and regression results from the different specifications, run on OLS, GLS random effects and fixed effects, seem to support this perception. This is consistent with two explanations derived from the imperfect competition condition: (i) banks are able to transfer to customers the total cost of inflation, resulting in higher returns on assets and equity due to the fact the panel data collected from annual financial statements is expressed in accounting nominal values, and (ii) higher inflation imposes pressure on the value of the local currency, ceteris paribus widening the spread between primarily and secondary exchange markets, contributing to the banking sector's profitability.

Interest Rate: The regression's results described above are consistent with the picture portrayed in the table 5, where the banking sector's performance diminished considerably from 2010 to 2013. It is important to highlight this trend started immediately after the Angolan Government introduced changes to the debt management framework, leading to the interest rate on government bonds falling to 3.1% in 2013 from 19.3% in 2010. Over the same period, the banking sector's consolidated ROA and ROE decreased to 1.5% and 13.7% in 2013 from 3.4% and 33% in 2010, respectively. Credit growth continue is tendency of anaemic performance, falling to 14.2% in 2013 from 15.6%, while deposit growth actually accelerated to 16.9% in 2013 from 13.8% in 2010. Furthermore, the share of long term deposits over total deposits actually increased to 46% in 2013 from 38.7% in 2010. The analysis from table 5, combined with the regression's results, depicts clearly the link between bank profitability and fiscal policy management.

Exchange Rate: The regression results from the different specifications, run on OLS, GLS random effects and fixed effects, suggest that the exchange rate is positively related to bank profitability in Angola. However, this result is statistically significant only in the absence of inflation, reinforcing the view that inflation does also affect bank's profitability by putting pressure on the local currency value. Nonetheless, exchange rate significance being observed in the absence of inflation as an explanatory variable, for both returns on assets and equity, is completely in line with the hypothesis that foreign exchange operations and transactions do explain much of the banking sector's performance in Angola.

CONCLUSIONS AND POLICY IMPLICATIONS

Banking systems differ significantly in their structure, size, and operation across countries, shaped by varying macroeconomic conditions, regulatory frameworks, judicial efficiency, tax regimes, and levels of financial development. Against this backdrop, this paper examined the determinants of bank profitability in Angola over the period from 2005 to 2013, using panel data from 11 commercial banks. The analysis focused on testing the hypothesis that Angolan bank profitability is strongly influenced by fiscal and monetary policies—specifically through indirect government subsidies, high government bond yields, and the spread between the primary and secondary foreign exchange markets.

The findings provide substantial support for this hypothesis. While some results are consistent with broader literature on banking in sub-Saharan Africa, the paper also highlights several idiosyncratic features of the Angolan financial system that are not adequately addressed in existing studies. Most notably, the analysis shows a strong and statistically significant link between "other operational revenue," derived primarily from foreign exchange market activity, and bank profitability. Fees and commissions on foreign exchange transactions, especially the 3% spread on spot operations and the differential between the primary and secondary markets, emerged as major contributors to returns on assets. The level of the nominal exchange rate also demonstrated a significant positive relationship with bank profitability.

These findings are aligned with the structural characteristics of the Angolan economy, which remains heavily reliant on oil exports. During the period under study, oil revenues accounted for around 80% of government tax income. With limited non-oil activity, most goods and services are imported, requiring substantial foreign currency intermediation. Banks, therefore, play a critical role in channelling foreign currency between the state (through the central bank and treasury) and importers, including multinational companies seeking to repatriate profits.

Given this structure, monetary and exchange rate policies have become central to the banking sector's profitability. A policy shift to reduce the revenue derived from foreign exchange transactions—bringing them closer to regional norms—would pressure banks to reorient their income strategies toward net interest revenue. This shift, combined with a more efficient interest rate environment and a stable exchange rate path, could support economic activity. However, without significant restructuring of bank operations, particularly through the expansion of credit portfolios, such a transition would reduce banks' return on assets and equity. The results also affirm that bank profitability is closely tied to yields on Angolan government bonds. Despite generally positive fiscal balances during the study period, government borrowing through local bond markets remained substantial. This led to rising interest rates, which in turn crowded out private sector lending. The banking sector's credit transformation ratio declined from 92.2% in 2007 to just 23.7% in 2013, while credit to GDP remained stagnant at 24%—a figure considerably below regional peers. These patterns indicate that net interest revenue, mainly sourced from government bond holdings, was a key driver of profitability, rather than lending to the real economy.

To understand the rationale for such high government bond issuance despite strong fiscal positions, three hypotheses were considered. The first - that high deficit prompted the government to borrow excessively - was rejected based on data showing that fiscal surpluses dominated the period, aside from 2008 and 2009. Similarly, the second hypothesis - those monetary authorities raised interest rates as an anti-inflationary measure - proved unconvincing, due to Angola's weak monetary policy transmission mechanisms and the ineffectiveness of the credit channel. The third and most plausible hypothesis suggests that the government pursued a strategy to support its nascent banking sector by ensuring it had access to high-yield, low-risk instruments. Whether this was the result of a deliberate policy or the influence of the banking sector on fiscal authorities remains unclear.

The idea of protecting a developing financial sector is not without precedent. As highlighted by Dasgupta and Stiglitz (1988), the financial sector benefits from a "learning-by-doing" process, and temporary protection may be justified to build capacity. However, Angola's approach, which appears to rely on indirect subsidies through high bond yields and exchange rate spreads, is atypical. While this strategy may have been partially driven by the goal of expanding access to finance for the private sector, as stated in national development plans, the outcomes fell short of expectations. As the analysis has shown, Angolan banks faced limited incentives to extend credit to the private sector. First, the risk-adjusted returns on government bonds were often sufficient to meet shareholder expectations, reducing the need to take on the higher risk associated with private lending. Second, high default rates and a weak judicial system for contract enforcement further discouraged private sector lending. These dynamics resonate with the findings of Andrianova et al. (2011), who argue that moral hazard and adverse selection are key reasons African banks lend so little.

The implications of this study suggest that the Angolan government must recalibrate its approach if it wishes to promote the development of a banking sector that contributes meaningfully to economic growth. A more robust legal and regulatory framework is needed to support lending, including judicial reforms that enable the enforcement of contracts and dispute resolution. In parallel, the government should consider mechanisms to manage credit risk, such as guarantee funds and improved credit information systems. Addressing the spread between the primary and secondary foreign exchange markets is also essential, even if doing so may trigger temporary inflationary pressures. Policymakers must weigh these trade-offs through a medium to long-term lens.

On the fiscal front, efforts should be made to gradually reduce the issuance of government bonds to the level required for legitimate deficit management, avoiding the crowding out of the private sector. At the same time, measures to deepen the government bond market and lay the groundwork for a corporate debt market should be advanced. Such actions would ultimately lower yields on government bonds and shift bank incentives toward private lending. These changes would create the necessary conditions for banks to treat private lending as their primary business line. Increased credit to the private sector would also support the establishment of essential financial infrastructure, such as credit bureaus and discount houses, which would improve secondary market liquidity and help stabilize interest rates. Over time, this would lead to a healthier, more diversified financial system. Lastly, the government should consider facilitating consolidation within the banking sector to promote the emergence of stronger institutions. Drawing lessons from Nigeria's experience, Angola could attract strategic equity investors capable of turning around underperforming banks and introducing best practices in governance, risk management, and operational efficiency. Investments in technology—particularly core banking systems and digital platforms—would also enhance efficiency, scalability, and the overall sustainability of the sector.

In sum, while Angola's banking sector has benefited from unique macro-financial conditions, these same conditions have hindered its contribution to broad-based economic development. Reforms focused on legal infrastructure, monetary policy, fiscal discipline, and institutional strengthening are critical to unlocking the sector's potential. This paper finds that aligning banking profitability with productive lending, rather than public debt servicing or speculative arbitrage, is essential for long-term economic transformation.

REFERENCES

[1] AL-HASHIMI, A. 2007. Determinants of Banks Spreads in Sub-Saharan Africa. Draft.

[2] ANDRIANOVA, S., BALTAGI, B., DEMESTRIADES, P., & FIELDING, D. 2011. Why Do African Banks Lend So Little. University of Leicester Working Paper No.11/19.

[3] ARESTIS, P. 2005. Financial Liberalisation and the Relationship between Finance and Growth. CEPP Working Paper No. 05/05.

[4] ATHASASOGLOU, P., DELIS, M. & STAIKOURAS, C. 2006. Determinants of Banking Profitability in Southern Eastern European Region. Bank of Greece Working Paper 06/47.

[5] BECK, T., DEMIRGÜÇ-KUNT, A., & LEVINE, R. Financial Institutions and Markets across Countries and over Time – Data and Analysis.

[6] CECCHETTI, S., & KHARROUBI, E. 2012. Reassessing the Impact of Finance on Growth. BIS Working Paper 381.

[7] DEMIRGÜÇ-KUNT, A. & HUIZINGA, A. 1998. Determinants of Commercial Bank Interest Margins and Profitability: Some International Evidence. World Bank Economic Review 13, 379-408.

[8] EMRAN, M., & STIGLITZ, J. 2008. Financial Liberalization, Financial Restraint, and Entrepreneurial Development.

[9] FLAMINI, V., MACDONALD, C., & SCHUMACHER, L. 2009. The Determinants of Commercial Bank Profitability in Sub-Saharan Africa. IMF Working Paper 09/15.

[10] OSINUPEDI, F. 2012. The Nigerian Bank Consolidation of 2005: A Case for Scale in Banking? The Heinz Journal, volume 9, issue 2.

[11] GARZA-GARCIA, J. 2010. What Influences Net Interest Margins? Developed versus Developing Countries. Banks and Bank Systems, volume 5, issue 4.

[12] GELOS, G. 2006. Banking Spreads in Latin America. IMF Working Paper 06/44.

[13] NKURUNZIZA, J., NYAMOYA, P., & NDIKUMANA, L. 2012. The Financial Sector in Burundi. National Bureau of Economic Research. Working Paper 18289.

[14] SAUNDERS, A & SCHUMACHER, L. 2000. Determinants of Banks Interest Rate Margins: An International Study. Journal of International Money and Finance 19, 813-832.

[15] OBILOR IBE, S. 2013. The Impact of Liquidity Management on the Profitability of Banks in Nigeria. Journal of Finance and Bank Management, pp 37-48.

[16] STIGLITZ, J. 1994. The Role of the State in Financial Markets. The International Bank for Reconstruction and Development / World Bank.

Received on 13-06-2025 Accepted on 20-07-2025 Published on 26-08-2025