

Equity strategy | Banking sector | Ghana

Walking A tightrope

HOLD

USD 0.29m

Monthly value traded (ttm)

GHS 0.80 Current price	GHS 0.81 Fair value	+1.3% Upside/(downside)
ROaE 18.4% On FY2021 EPS	P/B 0.4x On 102022 NAV (LTM)	14.1% Dividend yield FY2021
USD 63.1m Market cap	USD 17.7m Free float market o	28.1% cap Free float

GHS 0.91/ 0.70

12-month high/low

Performance (-8.0% YTD, 0% 1y)





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CalBank's earnings momentum has moderated in recent years as the double whammy of the financial sector clean-up and the COVID-19 pandemic have impacted credit growth. In 2022 however, we envisaged a post pandemic economic recovery which we anticipated will fuel credit expansion and support bottom line growth. Instead, hyperinflation and a liquidity squeeze are likely to reduce margins further, while elevated yields on risk-free assets have negatively impacted the bank's valuation. Notwithstanding the above, CAL's balance sheet remains quite nimble to adapt to the volatile outlook. Consequently, we initiate coverage on CAL with a HOLD recommendation and an FV of GHS 0.81 per share and TP of GHS 0.89 per share.

NIMs to compress further on inflation outlook

We estimate that net interest margin will average 8.5% over the next five years, down from an average of 9.4% in the last three years. Our forecast is driven by our view that rising inflation will force cost of funds to re-rate faster than yields on investments. Ghana's May 2022 inflation came in at 27.6%. Meanwhile, the most recently minted 3-year bond came in at 25.0% while short-term risk-free rates are averaging around 25.8%. This supports our thesis of yields on investments repricing slower. In addition, as interest rates remain elevated, we expect credit growth to slow down, reducing margins even further.

Discounted multiples are not enough to suggest upside potential

CAL is currently trading at a PB ratio of 0.4x, indicating a 63.0% discount to book value. However, the bank's R0aE has dipped from 25.7% in 2017 to 18.4% in FY2021. Meanwhile, cost of equity has surged by 960bp 31.1%. In light of this, we are of the view that the discount on multiples is justified.

Balance sheet is nimble and can adapt

In our opinion, CAL's balance sheet is robust to weather the volatile outlook but also nimble enough to adapt to a change in Ghana's macroeconomic trajectory. Asset quality has improved considerably since 2020 with the NPL ratio improving by 230bp to 11.2% post-pandemic. Provisioning adequacy has also increased from 67.2% in FY2020 to 77.7% in FY2021. Furthermore, with nearly 50% of assets held in government securities and loan-to-deposit ratio at 55.9% as at 102022, CAL's balance sheet is capable of responding quickly and taking advantage of improved macroeconomic conditions should that occur.

HOLD for now

Despite the resilience of the balance sheet and the strong earnings growth in 102022, elevated yields on risk-free assets provide a high hurdle rate for equity valuations. In our opinion, R0aE will continue to trail CoE in the medium-term and thus, provides justification for the discounted multiples.

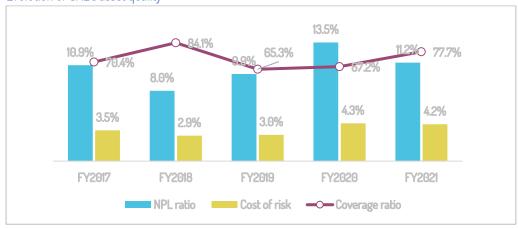


Investment thesis

Has the dust really settled?

CAL's asset quality has improved considerably in line with the broader industry. The NPL ratio, cost of risk and provisioning adequacy have all normalised to pre-pandemic levels, suggesting that the worst may be over.

Evolution of CAL's asset quality



Source: IC Insights

Despite the encouraging trend, we are concerned about how much of this data is masked by restructured loan portfolios and if the situation is worse than the numbers suggest.

For starters, while we are pleased by the reversal of the central bank's directive in 2020 to reduce provisioning of loans in the OLEM category from 10% to 5%, we are concerned by the extension of the moratoria on restructured loans. The Bank of Ghana has extended the loan repayment moratoria deadline to 31 December 2022. This suggests that, restructured loans which previously would have been considered impaired are now current. According to CAL's management, 5% of the loan book was restructured in 2020 and if we are to assume the bear case scenario post the moratorium, the bank's NPL ratio could go up by 250bp to 14.0%, exceeding management's guidance of 10.0%.

We are also concerned about the bank's net on-balance sheet position which has been in negative territory since 2017 suggesting a possible foreign exchange mismatch in the asset-liability mix. Given the volatile outlook of the local currency and the depressed macroeconomic backdrop, we struggle to see where CAL can deploy its FX liabilities in the near-term.

Evolution of net on-balance sheet position (GHS bn)



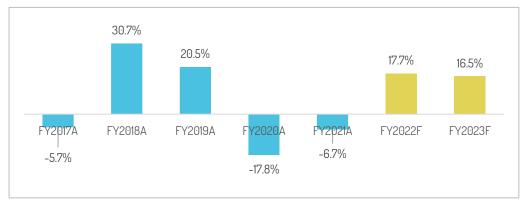
Source: CAL Bank Annual Reports

Growth will moderate for a little while longer

After two consecutive years of credit tightening, CAL in a surprising turn of events reported a 20.9% YTD increase in net loans and advances at the end of 102022, ahead of its 15% – 20% guidance for the year. However, we are of the view that this rate of credit growth is unsustainable in the near term given the macroeconomic backdrop. Hyperinflation from surging food and energy prices exacerbated by the Russian–Ukrainian war has warranted further hikes in the monetary policy rate and pushed interest rates higher.

Over the last five months, rates on short-term local currency treasury securities have increased by 11.5pp amid a 450bp hike in the monetary policy rate. As a result, we expect the bank's asset allocation to favour government securities, slowing the rate of risk asset creation as management weighs the impact of rising inflation and interest rates against asset quality. We also anticipate a softening in loan growth due to weaker growth opportunities and higher financing costs given the high inflation environment. Consequently, we expect loan book growth to moderate in the near-term, impacting margins adversely.

Evolution of net loan book growth rate



Source: IC Insights

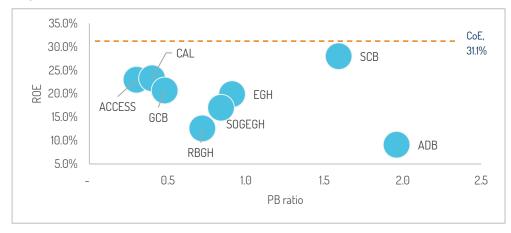
So, what will be the key growth drivers in the near-term?

In our opinion, non-funded income from fixed income and currency trading as well as fees and commissions from off-balance sheet transactions will be the main revenue drivers. Given the elevated yields and volatile currency market we anticipate trading income to benefit from the economic uncertainty. However, while these inflows may prove to be sticky in the short-term, in our opinion, they are not enough to prevent margin compression.

Do discounted multiples suggest potential upside?

CAL is currently trading at a discount of 63.0% to its book value. Clearly, as a profitable going concern, this suggests a misalignment between market pricing and intrinsic value. However, in our opinion, we believe the discount on the bank's multiples is justified.

Graph of PB vs ROE



Source: IC Insights

Following the recapitalisation in 2018, CAL's R0aE declined to 19.8% and further to 18.4% in FY2021 as the challenging macroeconomic conditions impacted the bank's ability to sweat the balance sheet. Regulatory restrictions on dividend payments have also curtailed the ability to improve R0aE by returning excess capital to shareholders. Consequently, R0aE has lagged cost of equity for more than three years.

Evolution of ROaE vs CoE



Source: IC Insights

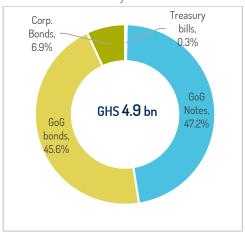
With our assumption of near-term margin compressions and muted growth, we do not envisage a sharp recovery in R0aE anytime soon and therefore consider the discount on CAL's multiple to be fair given the higher CoE.

A nimble balance sheet can force a re-rating

Notwithstanding all the concerns raised above, we are impressed by the nimbleness of CAL's balance sheet and how it can quickly adapt to the volatile macroeconomic outlook.

Given the times, we are pleased to see that 44.6% of the bank's assets are held in risk-free instruments and even more delighted about the maturity profile of these securities.

Investment securities by asset class



Source: CAL Bank Annual Report

FY2021 maturity profile of investment securities



Source: CAL Bank Annual Report

Furthermore, the bank's liquidity ratios remain very encouraging and lends further credence to CAL's ability to adapt to any changes in the macroeconomic environment.

Evolution of liquidity ratios



Source: IC Insights

While we maintain our view that current economic conditions will lead to margin compression and muted earnings growth, we admit that the outlook remains extremely volatile and CAL's ability to respond quickly to any variations in economic conditions could force a positive re-rating if there should be a faster-thanestimated recovery in Ghana's economic fortunes.

Sensitivity analysis on credit growth and impact on fair value and target price

2022 Gross Loan book growth

	-10%	10%	20%	30%	40%
Fair value	0.66	0.76	0.81	0.86	0.91
Target price	0.73	0.84	0.89	0.95	1.0

Source: IC Insights

Valuation panel

We used the discounted dividend model and the residual income valuation model to determine the intrinsic value of CAL. We also adopted a multi-factor regression-based valuation in which we estimated CAL's P/B using bank specific and market factors given the wide disparity in trading multiples.

For CAL, we favour the discounted dividend model due to the bank's consistency in paying dividends. The discounted dividend model also incorporates future cash flows. However, the other models in our opinion had some inherent challenges. Based on our outlook, CAL consistently generated a negative residual income, weakening the justification for using the residual income approach. Our relative valuation model which uses a selection of explanatory variables against peer group P/B ratios, does not fully capture future cash flows and is significantly biased to current market conditions.

Valuation inputs - Cost of Capital

Parameter	Value	Note
Risk-free rate	24.20%	Based on the average current yield on actively traded five- year government of Ghana local currency bonds
Market risk premium	6%	Historical evidence suggests a long-term average risk premium of around 5%, in developed markets. There is very little historical evidence from frontier markets though due to their short, volatile and transitional histories. In our view, arguments can be made for a higher or lower risk premium. Nevertheless, to the extent that the risk premium is relative measure, and accepting that local risk-free rates are not entirely risk-free, we choose to use a narrow range of 4–6% across all our models for the sake of consistency.
Beta	1.153	We calculate betas using daily, weekly, monthly and quarterly data over a one to three-year period. We employed betas that are statistically significant with the highest coefficient of determination.
Cost of Equity	31.1%	We employ the capital asset pricing model to determine the CoE.

Valuation summary (GHS/share)

DDM	RI	PB ¹
0.81	1.54	0.81

Intrinsic value determined using the estimated P/B based on the regression model. Date of valuation is 3/06/2022

Dividend forecast and fair value calculation

Year to Dec (GHS m)		2022F	2023F	2024F	2025F	2026F
Net Income		258.6	313.7	389.6	446.5	516.7
Expected Dividend adjusted for 8% withholding tax		95.2	115.4	143.4	164.3	190.1
Discounting factor		0.86	0.65	0.50	0.38	0.29
Present value of dividend		81.4	75.3	71.3	62.3	55.0
Terminal Value						558.7
Sum of PV of future dividend	345.3					
PV of Terminal Value	161.6					
Equity Value	506.9					
Shares in issue (m)	626.6					
Fair value per share (GHS)	0.81					
Upside/(downside)	1.3%					

Residual Income Valuation and fair value calculation

Fiscal year-end 31 Dec (GHS m)		2022F	2023F	2024F	2025F	2026F
Beginning book value		1,286.7	1,476.4	1,686.6	1,950.7	2,241.4
Equity cost/charge		400.4	459.4	524.8	607.0	697.5
Net income		258.6	313.7	389.6	446.5	516.7
Excess equity/residual income		(141.8)	(145.8)	(135.2)	(160.5)	(180.8)
Discounting factor		0.86	0.65	0.50	0.38	0.29
Present value of residual income		(121.3)	(95.1)	(67.3)	(60.9)	(52.3)
Terminal Value at exit P/B of 1.1x1						2,837.4
PV of terminal value						257.9
PV of terminal value in excess of equity						74.6
Equity invested	1,286.7					
Sum of Present value of residual income	(396.8)					
PV of Terminal Value in excess of equity	74.6					
Equity value (GHS)	966.1					
Shares in issue (m)	626.6					
Fair value (GHS/share)	1.54					
Upside/(Downside)	92.5%					

 $^{^{1}}$ P/B exit ratio for recent precedent bank transactions averaged at 1.60x. Average P/B ratio on the market at the time of valuation stood at 0.76x

Multi Factor Linear Regression

	ROE	CoR	MC	DVT	P/Ba	P/Br
CAL	23.3	0.5	501.3	175.6	0.37	0.38
EGH	19.9	0.7	2,451.4	13.6	0.87	0.88
GCB	20.7	1.4	1,340.9	42.4	0.47	0.47
SCB	28.0	-1.3	2,735.6	4.8	1.50	1.50
SOGEGH	17.0	0.7	843.9	12.0	0.80	0.70

Source: IC Insights

Notes:

ROE – Return on equity (%), CoR – Cost of Risk (%), MC – Market Cap (GHS m), DVT= Average daily value traded in the last 6 months (GHS k)

P/Ba - Actual P/B ratio, P/Br - regression estimates of P/B ratio

Dependent variable is P/B, independent variables are R0E, CoR, MC, and DVT. Regression results indicate strong relationship between variables with $R^2=0.98$

Assumptions and value drivers

	FY2021A	FY2022F	FY2023	FY2024F	FY2025F	FY2026F
Loans and advances (net) (GHSm)	2,239.5	2,635.7	3,069.2	3,519.9	4,886.6	6,813.3
Loan growth (%)	-6.7%	17.7%	16.5%	14.7%	38.8%	39.4%
Customer deposits (GHSm)	5,161.9	6,142.7	7,125.5	7,980.6	8,778.7	9,656.5
Deposit growth (%)	24.0%	19.0%	16.0%	12.0%	10.0%	10.0%
Net interest margin (%)	7.8%	7.4%	7.7%	8.6%	9.2%	9.6%
NIR growth (%)	66.6%	15.7%	19.1%	16.6%	15.9%	17.2%
NIR contribution (%)	37.0%	35.7%	36.2%	36.5%	37.4%	37.4%
OPEX growth (%)	2.7%	23.6%	17.6%	7.7%	10.5%	14.2%
Cost-to-income ratio (%)	43.7%	45.0%	45.0%	42.0%	41.0%	40.0%
Cost of risk (%)	-4.2%	-3.5%	-3.0%	-2.8%	-2.6%	-2.6%

Loan growth

- > Loan book contracted in FY2020 FY2021 due to weak macroeconomic conditions brought on by the pandemic
- A strong pick-up in credit growth in 102021 to moderate as the Russian-Ukrainian war threatens economic recovery and stokes hyperinflation
- We forecast a return to pre-pandemic levels post FY2024.

Net loan book growth

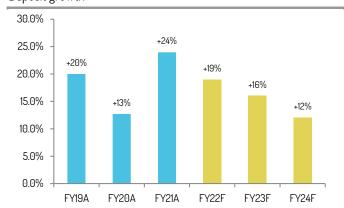


Source: IC Insights

Customer Deposit growth

Deposit growth forecasted to average 13.4% over the next 5 years benefiting from the flight to safety following the aftermath of the financial sector clean-up. Deposit growth is likely to moderate post 2022 on the assumption of a reversal in the cash reserve ratio to 10% from 12% releases liquidity

Deposit growth

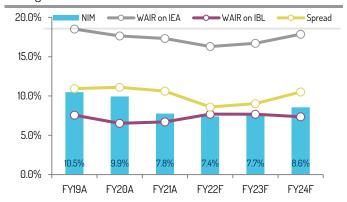


Source: IC Insights

Pricing

- NIMs to compress in the near-term as cost of funds re-price faster that asset yields
- Cost of funds to remain elevated in FY2022 and FY2023
- NIM recovery expected post 2022 as yields normalise and loan book begins to expand at pre-pandemic levels

Pricing

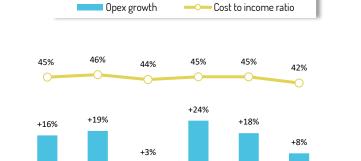


Source: IC Insights

OPEX growth and cost to income ratio

> CIR to pick-up in FY2022 and FY2023 due to the impact of inflation but normalise thereafter

Operational efficiency



FY22F

FY23F

FY24F

FY19A
Source: IC Insights

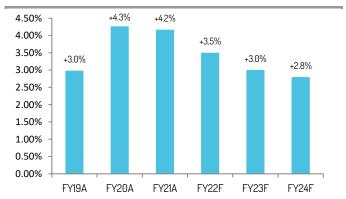
FY20A

FY21A

Cost of risk

CoR to moderate in the near-term as impact of the pandemic on asset quality levels out amid low credit growth

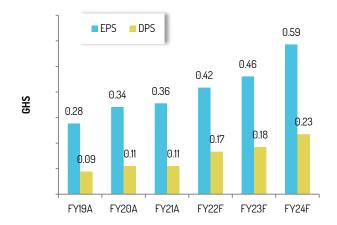
Cost of risk



Source: IC Insights

30.0%

Gallery

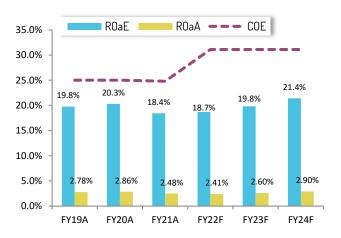


Source: CAL Bank Annual Report, IC Insights

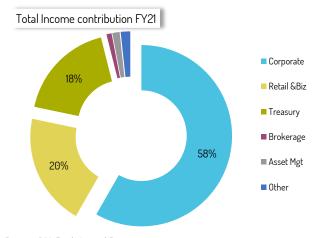


NAV

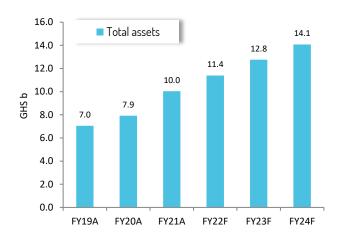
2.50



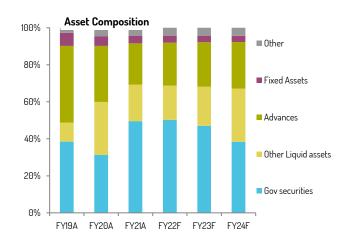
Source: CAL Bank Annual Report, IC Insights



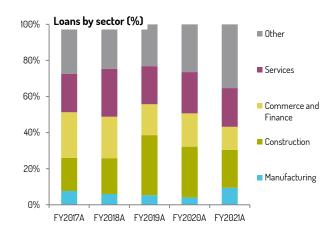
Source: CAL Bank Annual Report



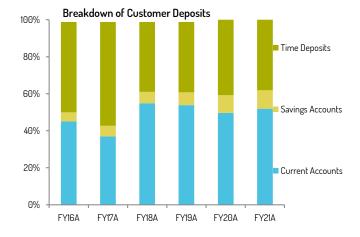
Source: CAL Bank Annual Report, IC Insights



Source: Company Filings; African Alliance Research



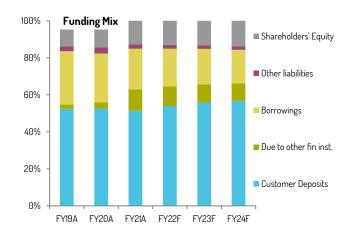
Source: Company Filings; IC Insights



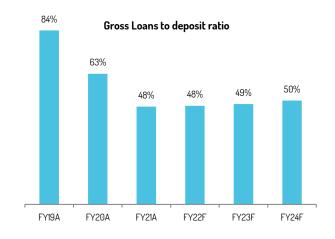
Source: Company Filings; IC Insights



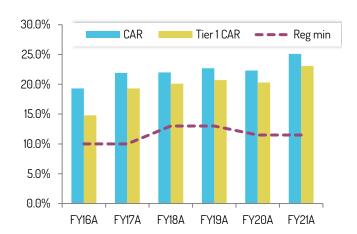
Source: Company Filings; IC Insights



Source: Company Filings; IC Insights



Source: Company Filings; IC Insights



Source: Company Filings; IC Insights

Financials

Income statement

12 months to December GHSk	2019A	2020A	2021A	2022F	2023F	2024F	2025F	2026F
laboration and	012.4	007 /	0007	1,000,0	1 / 5 / 1	1.001.0	1705.0	10022
Interest income	912.4	927.4	980.7	1,268.0	1,454.1	1,601.0	1,705.2	1,903.3
Interest expense	(394.3)	(404.5)	(511.1)	(692.5)	(782.3)	(830.1)	(844.5)	(896.0)
Net interest income	518.1	522.9	469.5	575.6	671.7	770.9	860.7	1,007.3
Non-interest income	78.3	165.7	276.2	319.5	380.6	443.6	514.0	602.2
Total operating income	596.4	688.6	745.7	895.0	1,052.4	1,214.5	1,374.7	1,609.5
Impairment loss and bad debts	(86.1)	(86.8)	(82.4)	(94.4)	(96.3)	(105.0)	(124.1)	(170.8)
Operating expenses	(267.4)	(317.1)	(325.8)	(402.8)	(473.6)	(510.1)	(563.6)	(643.8)
Profit before tax	242.9	284.6	337.5	397.8	482.5	599.4	686.9	794.9
Taxation	(69.5)	(70.8)	(114.7)	(139.2)	(168.9)	(209.8)	(240.4)	(278.2)
Profit after tax	173.4	213.8	222.9	258.6	313.7	389.6	446.5	516.7
Proposed dividend	55.7	68.8	68.9	103.4	125.5	155.8	178.6	206.7
Weighted shares in issue (m)	626.6	626.6	626.6	626.6	626.6	626.6	626.6	626.6
Earnings per share (GHS)	0.28	0.34	0.36	0.41	0.50	0.62	0.71	0.82
Dividends per share (GHS)	0.09	0.11	0.11	0.17	0.20	0.25	0.29	0.33
Payout ratio (%)	32.1%	32.2%	30.9%	40.0%	40.0%	40.0%	40.0%	40.0%

Balance sheet

12 months to December GHSk	2019A	2020A	2021A	2022F	2023F	2024F	2025F	2026F
Cash with BoG	597.8	1,430.2	1,307.7	1,372.3	1,873.3	3,161.2	3,434.7	3,206.6
Investment securities	2,710.7	2,482.3	4,974.0	5,720.1	6,006.1	5,405.5	4,864.9	4,378.5
Net loans & advances to customers	2,920.0	2,401.0	2,239.5	2,635.7	3,069.2	3,519.9	4,886.6	6,813.3
Intangible Assets	28.8	46.0	75.1	112.2	154.0	200.1	250.1	306.9
Fixed assets	504.2	418.5	413.0	430.9	454.3	482.9	516.2	557.6
Other assets	287.0	1,146.6	1,030.7	1,114.4	1,205.7	1,305.2	1,413.9	1,532.4
Total assets	7,048.5	7,924.6	10,040.0	11,385.6	12,762.6	14,074.9	15,366.3	16,795.2
Customer deposits	3,694.5	4,164.3	5,161.9	6,142.7	7,125.5	7,980.6	8,778.7	9,656.5
Due to other banks	164.5	261.7	1,146.5	1,203.8	1,264.0	1,327.2	1,393.5	1,463.2
Borrowings	2,028.1	2,098.2	2,214.3	2,325.0	2,441.2	2,563.3	2,691.5	2,826.0
Other liabilities	186.6	267.6	230.6	237.8	245.3	253.1	261.3	270.0
Total liabilities	6,073.7	6,791.8	8,753.3	9,909.2	11,076.0	12,124.2	13,125.0	14,215.7
Stated capital	400.0	400.0	400.0	400.0	400.0	400.0	400.0	400.0
Retained earnings	189.5	248.7	390.7	515.7	686.7	902.2	1,137.0	1,410.5
Statutory reserve fund	288.4	340.1	393.9	458.6	497.8	546.5	602.3	666.9
Other reserves	385.3	484.1	496.0	560.6	599.8	648.5	704.4	768.9
Total shareholder's equity	974.8	1,132.8	1,286.7	1,476.4	1,686.6	1,950.7	2,241.4	2,579.5
Total liabilities and shareholders' equity	7,048.5	7,924.6	10,040.0	11,385.6	12,762.6	14,074.9	15,366.3	16,795.2

CAMEL analysis

12 months to December	2019A	2020A	2021A	2022F	2023F	2024F	2025F	2026F
Capital Adequacy								
Total CAR	22.7%	22.3%	25.1%					
Equity to total assets	13.8%	14.3%	12.8%	13.0%	13.2%	13.9%	14.6%	15.4%
Equity to gross loans	31.2%	42.9%	52.5%	50.2%	48.6%	48.4%	40.6%	33.9%
Asset Quality								
NPL to gross loans	9.9%	13.5%	11.2%					
NPL to total equity	31.7%	31.5%	21.4%					
Coverage ratios	65.3%	67.2%	77.7%					
Cost of risk	3.0%	4.3%	4.2%	3.5%	3.0%	2.8%	2.6%	2.6%
Management Efficiency								
Cost to income	44.8%	46.1%	43.7%	45.0%	45.0%	42.0%	41.0%	40.0%
Cost to average assets	4.3%	4.2%	3.6%	3.8%	3.9%	3.8%	3.8%	4.0%
Staff expenses to operating expenses	50.3%	45.0%	47.2%	51.0%	50.0%	47.0%	47.0%	47.0%
Earnings and Profitability								
ROaE	19.8%	20.3%	18.4%	18.7%	19.8%	21.4%	21.3%	21.4%
ROaA	2.8%	2.9%	2.5%	2.4%	2.6%	2.9%	3.0%	3.2%
Interest Spread	10.9%	11.1%	10.6%	8.6%	9.0%	10.5%	11.5%	11.6%
Net Interest Margin	10.5%	9.9%	7.8%	7.4%	7.7%	8.6%	9.2%	9.6%
Average cost of funds	7.6%	6.5%	6.7%	7.7%	7.7%	7.4%	6.9%	6.7%
Liquidity								
Liquid assets to total deposits	85.7%	88.4%	99.6%	96.5%	93.9%	92.0%	81.6%	68.2%
Gross loans to customer deposits	84.5%	63.4%	47.5%	47.9%	48.7%	50.5%	62.9%	78.9%

Abbreviations

General		Currencies	
Α	actual / reported	BWP	Botswana pula
bn	billions	EGP	Egyptian pound
BPS	book value per share, equivalent to NAV	GBP	British pound
CoE	cost of equity	GHS	Ghanaian cedi
DPS	dividends per share	KES	Kenyan shilling
DY	dividend yield	LSL	Lesotho loti
E	expected	MAD	Moroccan dirham
EPS	earnings per share	MUR	Mauritian rupee
F	forecast	MWK	Malawian kwacha
FY	financial year	NAD	Namibia dollar
FCY	Foreign currency	NGN	Nigerian naira
FY0n	financial year 200n	RWF	Rwandan franc
k	thousands	SZL	Swazi lilangeni
LCY	local currency	TND	Tunisian dinar
m	millions	TZS	Tanzanian shilling
mth, mths	month, months	UGX	Ugandan shilling
NAV	net asset value per share	USD	United States dollar
ntm	next twelve months	XOF	West African CFA franc
PAT	profit after tax	ZAR	South African rand
PBT	profit before tax	ZMK	Zambian kwacha
ROaA	return on average assets		
R0aE	return on average equity		
ttm	trailing twelve months		
WACC	weighted average cost of capital		

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