CONSOLIDATED HALLMARK INSURANCE PLC

FINANCIAL CONDITION REPORT FOR NON-LIFE BUSINESS AS AT 31ST DECEMBER 2022

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EXECUTIVE SUMMARY

This report provides an overview of the Financial Condition of the Company. We also understand that this report will form part of the Company's submission to NAICOM. The report has been prepared in accordance with the General Insurance Business Actuarial Reports Guidance Notes (GN12v5.0) published by the Institute and Faculty of Actuaries.

The following are the key conclusions of the report.

- Overall, this report demonstrates that the Company remains adequately capitalized with a strong and conservative investment portfolio to support current and projected liabilities while maintaining compliance with regulatory requirements.
- As at 31st December 2022, the business had shareholder funds N9.5 billion or 315% of the statutory minimum capital of N3billion. Hence the business is well capitalized from the current regulatory point of view.
- We estimate the economic/risk-based capital required to support the business as at 31st December 2022 as N2.8 billion, implying the shareholder funds coverage of economic capital is 334%. Typically, companies target a minimum coverage of between 120% - 150%, depending on the business size.
- The level of excess capital both on a statutory basis and economic capital basis shows that the company has capacity to write more business and take more risk in search for enhanced return.
- We investigated the asset mix of the business, in relation to its liability profile and in relation to the regulatory policyholder asset mix rules and found the asset mix appears sufficient to meet the policyholder's liability as they fall due.
- We note that Consolidated Hallmark Insurance Plc has an aggregate combined ratio slightly below 100% implying optimal underwriting. However, the business still needs to continuously monitor and employ strategies to maintain this ratio below 100%. Potential options available are a reduction of expenses, a more prudent selection of underwriting risks taken and an upward review of pricing margins.

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The Board of Directors,
Consolidated Hallmark Insurance Plc
266, Ikorodu Road
Obanikoro,
Lagos

June 2023

FINANCIAL CONDITION REPORT FOR NON-LIFE BUSINESS AS AT 31ST DECEMBER 2022.

Dear Sir,

Introduction, Purpose, and Limitations

1.1 We are pleased to present our Financial Condition Report ("FCR") for Consolidated Hallmark Insurance Plc ('the Company") as at 31st December 2022.

Purpose:

1.2 This report sets out the outcome of our assessment of the criteria stipulated in the Guidance note (GN12v5.0), issued by the Institute and Faculty of Actuaries, to the extent relevant to Consolidated Hallmark Insurance Plc for the year ended 31st December 2022.

1.3 This report is prepared solely for the purpose of providing an overview of the current financial condition of the Company. We understand that this report will form part of your submission to NAICOM. This report is not to be used for any other purpose other than that described above and should not be distributed to any other parties other than NAICOM.

Limitations:

1.4 Management is solely responsible for the contents and submission of the Financial Conditions Report.

1.5 Because our assessment does not constitute either an audit or a review made in accordance with International Standards on Auditing or International Standards on Review Engagements (or relevant national standards or practices), we do not express any Insurance on the financial statements, the financial conditions or the ability of the entity to continue as a going concern for the foreseeable future.

1.6 Had we performed additional procedures, or had we performed an audit or review of the financial statements in accordance with International Standards on Auditing or International Standards on Review Engagements (or relevant national standards or practices), other matters might have come to our attention that would have been reported to you.

1.7 Our report has been prepared based on certain assumptions and is subject to certain limitations. These have been described in Appendix 1 - Reliance and Limitations.

2. Developments in the Business

2.1 We illustrate in the table below how Consolidated Hallmark books have developed over the year 2021 to 2022.

	2021	2022	YoY Movement
Gross Written Premiums	10,024,047,477	12,061,936,819	20%
Gross Premium Income	9,777,260,944	11,047,899,515	13%
ReInsurance Expenses	4,239,089,403	4,893,972,774	15%
Net Premium Income	5,538,171,542	6,153,926,739	11%
Fees & Commission Income	529,017,764	714,526,206	35%
Net Underwriting Income	6,067,189,306	6,868,452,945	13%
Underwriting profit	1,812,691,816	2,259,154,609	25%
Investment Income	587,842,871	752,385,146	28%
Profit before Tax	764,215,523	1,366,310,052	79%
Income Tax Expense	122,060,185	386,258,245	216%
Profit after Tax	642,155,338	980,051,807	53%

There was a significant increase in profit after tax by 53% arising largely from a 20% increase in Gross Written Premiums which culminated in a 25% and 28% increase in underwriting profit and investment income respectively.

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3. Business Overview

3.1 Premium History

Gross Written Premium (GWP) has increased with a compounded annual growth rate of 13.4% from the year 2020 to 2022.

Line of Business	2020		2021		2022	
	₦	%	₦	%	₦	%
Motor	2,119,709,788	22.6%	2,252,874,867	22.5%	2,767,423,356	22.9%
General Accident	1,287,197,418	13.7%	1,292,547,421	12.9%	1,565,664,134	13.0%
Bond	179,317,737	1.9%	257,269,450	2.6%	484,366,403	4.0%
Marine	602,842,800	6.4%	801,591,243	8.0%	799,608,359	6.6%
Aviation	928,595,260	9.9%	1,126,657,231	11.2%	1,093,006,282	9.1%
Fire	1,118,385,673	11.9%	1,218,006,625	12.2%	1,774,305,987	14.7%
Engineering	514,272,756	5.5%	473,752,395	4.7%	929,863,755	7.7%
Oil & Gas	2,627,092,274	28.0%	2,601,348,245	26.0%	2,647,698,543	22.0%
Total	**9,377,413,706**	**100.0%**	**10,024,047,477**	**100.0%**	**12,061,936,819**	**100.0%**
% Increase (YoY)			6.9%		20.3%	

Line of Business	2021	2022	YoY Movement
Motor	2,252,874,867	2,767,423,356	23%
General Accident	1,292,547,421	1,565,664,134	21%
Bond	257,269,450	484,366,403	88%
Marine	801,591,243	799,608,359	0%
Aviation	1,126,657,231	1,093,006,282	-3%
Fire	1,218,006,625	1,774,305,987	46%
Engineering	473,752,395	929,863,755	96%
Oil & Gas	2,601,348,245	2,647,698,543	2%
Total	**10,024,047,477**	**12,061,936,819**	**20%**

3.1.1 Between 2021 and 2022, the GWP increased for all the lines of business, except for Aviation and Marine, leading to a total increase of 20% between the years.

3.2 Distribution Channel

The chart below indicates three channels through which gross written premiums are channeled in. Experience data shows that a significant proportion of business written by Consolidated Hallmark came through Brokers which contributed 93% of the total Gross Written Premiums, Marketers brought in 6% and Agents contributed 1%, Marketers brought in 6% of the total GWP.

3.3 Financial Performance

3.3.1 We illustrate below that the company's return on equity as published in the Annual Financial Statements has been consistently lower than the risk-free rate over the 3 years under review. This implies there is a lot more scope to utilize the shareholder funds to generate better returns. Potential options will include reduction in expenses, all other things being equal, more prudent risk selection, possible business expansion, and optimal investment allocations.

Year	Shareholders Fund ₦'000	Return on Equity (as published in the Accounts) %	Risk Free Rate %
2020	8,126,240,232	5%	13%
2021	8,668,928,927	1%	12%
2022	9,453,557,772	10%	14%

4. Pricing & Premium Adequacy

We illustrate in the table below how premium income has been utilized from 2020 to 2022.

	2020 N	2021 N	2022 N
Gross Premium Income (GPI)	9,239,932,402	9,777,260,944	11,047,899,515
Net Premium Income (NPI)	5,381,560,476	5,538,171,542	6,153,926,739
Gross Written Premium (GWP)	9,377,413,706	10,024,047,477	12,061,936,819
Net Written Premium	5,519,041,781	5,784,958,074	7,167,964,045
Net Claims Incurred	1,785,759,231	1,923,939,883	2,061,770,210
Management Expenses	1,794,138,119	1,745,727,614	2,228,062,316
Acquisition Expense	1,627,838,689	1,801,539,841	1,833,001,918
Investment Income	608,376,462	587,842,871	752,385,146
Claims Ratio	33%	35%	34%
Management Expense Ratio	33%	32%	36%
Acquisition Expense Ratio	30%	33%	30%
Combined Ratio	97%	99%	99%
Net Investment Income Ratio (% NPI)	11%	11%	12%

Based on the above analysis over a 3-year period, Consolidated Hallmark's overall claims experience has been between 30% to 35%. However, it is noted that the combined ratios have been relatively stable, hovering around 99% largely because of high expense ratios above 60%. The company needs to continuously monitor and employ strategies to maintain this ratio below 100%. Potential options available are a reduction of expenses and a possible upward review of pricing margins.

Metric	Definition
Claims Ratio	Net Claims Expenses/ Net Premium Income
Management Expense Ratio	Management Expenses / Net Premium Income
Acquisition Expense Ratio	Acquisition Expenses / Net Premium Income
Combined Ratio	Sum of Claims, Management and Acquisition Expense Ratio
Investment Income (%NPI)	Investment Income / Net Written Premium

5. Assets, Liabilities Management

5.1 Insurance Liabilities

We illustrate in the tables below, the breakdown of the Insurance liabilities of the business as at the end of the reporting period.

Reserves	Gross Reserve (₦)	Reinsurance Assets (₦)	Net Reserve (₦)
Claims	2,852,726,509	(1,562,873,899)	1,289,852,611
UPR	3,476,295,041	(1,159,980,388)	2,316,314,653
Total	**6,329,021,551**	**(2,722,854,287)**	**3,606,167,264**

The net reserves increased from N2.4bn to N3.6bn between 2021 and 2022 mainly as a result of the 13% increase in gross earned premiums.

5.2 Insurance Assets

We illustrate below the composition of the assets backing the Insurance liabilities.

Assets	Insurance Funds				
	Assets Classification	2022 (₦'000)	%	Regulatory Maximum	Meet Requirement
CASH AND CASH EQUIVALENTS	Fixed Deposit below 90days	525,103,432	8%	No limit	Yes
FINANCIAL ASSETS -AT AMORTIZED COST	Fixed Deposit above 90days	1,930,281,941	30%	No limit	Yes
INVESTMENT PROPERTIES	Building	*1,265,226,470*	*20%*	Maximum of 25% of Policyholders fund.	Yes
REINSURANCE ASSETS	Current Assets	2,672,537,931	42%	No limit	Yes
	TOTAL	6,393,149,77	100%		

The asset mix appears appropriate to ensure the insurance liabilities are met as they fall due and is compliant with asset admissibility requirements.

6. Capital Management & Adequacy

Definitions

Metric	Definition
Capital Adequacy Ratio (CAR)	Free Assets/Minimum Capital Requirement
Balance Sheet Solvency Ratio	Shareholders' Funds/Technical Reserves
*Regulatory Solvency Ratio	Free Assets/Technical Reserves

**Free assets include allowance for admissibility rules*

6.1.1 Balance Sheet Solvency

We illustrate in the table below that from 2020 to 2022, the company has a sufficient balance sheet solvency ratio.

Year	2020 (N'000)	2021 (N'000)	2022 (N'000)
Technical Liabilities (Net of ReInsurance)	2,061,994,978	2,440,680,868	3,606,167,264
Shareholders Fund (Free Assets)	8,126,240,232	8,668,928,927	9,453,557,772
Balance Sheet Solvency Ratio	**394%**	**355%**	**262%**

The solvency ratios give comfort that liability obligations will be met when they fall due. We highlight the regulatory solvency position below and discuss risk-based solvency in section 8.

6.1.2 Regulatory Solvency

We show in the table below that the company's admissible assets exceeded the regulatory capital requirement of N3bn throughout the 3 years under review.

Year	2020 (₦)	2021 (₦)	2022 (₦)
Technical Liabilities (Net of ReInsurance)	2,061,994,978	2,440,680,868	3,606,167,264
Free Assets (allowing for admissible rules)	7,532,475,734	8,114,259,306	8,290,849,037
Minimum Capital Requirement	3,000,000,000	3,000,000,000	3,000,000,000
Capital Adequacy Ratio (CAR)	**251%**	**270%**	**276%**
Regulatory Solvency Ratio	**365%**	**332%**	**230%**

6.1 Stress Scenario for 2022 Results

In this section, we examine the impact of some defined stresses, on the solvency ratios of the business, to investigate resilience of the capital level.

The table below shows the impact on the solvency ratios of having 20% more than the expected level of claims

Year	2022 (₦)	2022 - Stressed (N)
Technical Liabilities (Net of Reinsurance)	3,606,167,264	4,176,712,566
Free Assets (allowing for admissible rules)	8,290,849,037	7,720,303,735
Minimum Capital Requirement	3,000,000,000	3,000,000,000
Capital Adequacy Ratio (CAR)	**276%**	**257%**
Regulatory Solvency Ratio	**230%**	**185%**

While the regulatory solvency ratio falls to 185%, the Company is still expected to meet its minimum capital requirement in the event of this extreme scenario.

7. Economic Capital

7.1.1 The technical figures (technical liabilities, reInsurance assets, etc.) estimated for balance sheet purposes are our 'best' estimate and broadly reflect the 'mean' of possible outcomes. However, in the course of time these estimates may fluctuate adversely as a result of unexpected realities.

7.1.2 It is prudent and best practice to estimate the extent to which the best estimate can be exceeded due to possible adverse situations and establish the corresponding risk capital, called economic capital. This is the amount of capital that a financial company requires to stay solvent given the riskiness of its assets and operations.

7.1.3 The key risks the company is exposed to are underwriting risk, market risk, counterparty risk and operational risk, they are described and discussed in appendix 6 of the report.

7.1.4 We have calculated for each of the risks, the amount of capital required as at year end 2022 at 95%, 99% and 99.5% level of confidence.

7.1.5 This report discusses in detail capital requirements at 99.5%, which is equivalent to a 1-in-200 event. Put differently, this is the capital required to sustain the company should extreme events that are expected to occur once every 200 years, occur in 2022. Such events would typically lead to large 'unexpected' losses that could significantly affect the fortunes of the company. The results at 95% (1 in a 20year event) and 99% (1 in a 100year event) are shown in appendix 5 and 6 of the report.

7.1.6 We have adopted the following methods in calculating the Economic capital:

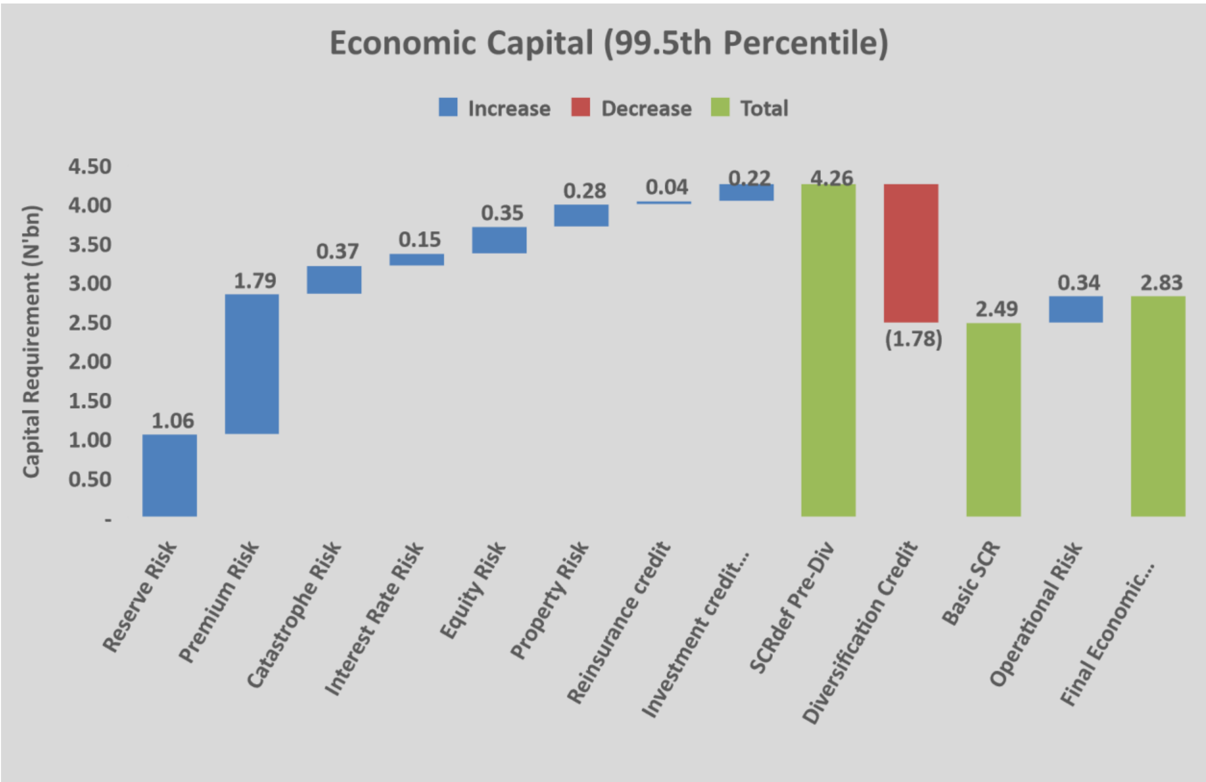
- Value at Risk → this was applied to Market risk and Credit risk
- Stochastic approach using Bootstrapping → this was applied to non-Life reserving and premium risks.
- Solvency II standard formula approach was adopted for operational risk

Detailed explanation of each of the risks including derivation of the stresses applied are given in appendix 6 of the report.

7.1.7 In order to recognize that each individual risk event is unlikely to occur in the same year, aggregation of capital requirements was done. This has the effect of reducing the total required capital – technically called a diversification. The assumed correlation matrix is shown in appendix 7.

7.1.8 The calculations were based on same data used to prepare the IFRS valuation as at 31 December 2022 and asset information shown in section 2.1 of this report.

7.1.9 The following results at 99.5% confidence level were obtained.



7.1.10 As shown in the table above, the total Economic Capital required in connection with the business profile as at 31st December 2022 was N2.8 billion which is less than the shareholders' funds of N9.5billion.

7.1.11 This implies Consolidated Hallmark has capital excess which provides the management with capital flexibility to conduct its business plan over the forward-looking period considering inherent material risks (such as catastrophes) and in anticipation of continued difficult operating conditions in Insurance, credit and financial markets.

8. Reinsurance Management Strategy

8.1.1 The Company's reInsurance arrangements are summarized in Appendix 3.

For each line of business, we illustrate the 'value for money' being the ratio of total reInsurance inflow (i.e., commission income, reInsurance recoveries) to total reinsurance outflow/cost.

2020 Accident Year

N'000

Class of Business	Motor	Accident	Bond	Marine	Aviation	Fire	Engineering	Oil & Gas	Total
Outflow									
Reinsurance Cost	21,617,542	677,377,629	71,273,021	364,788,477	420,449,359	606,799,175	179,976,544	1,516,090,178	**3,858,371,925**
Inflow									**-**
Reinsurance Commission	1,646,040	104,890,233	2,914,127	66,872,655	32,955,008	133,246,764	50,049,339	2,713,202	**395,287,368**
Reinsurance Recoveries (Incl IBNR)	51,543	194,856	1,918	66,953	18,183	642,955	44,063	38,160	**1,058,629**
Total Inflow	**1,697,583**	**105,085,089**	**2,916,045**	**66,939,608**	**32,973,191**	**133,889,719**	**50,093,402**	**2,751,362**	**396,345,997**
Value for Money Ratio	**7.9%**	**15.5%**	**4.1%**	**18.4%**	**7.8%**	**22.1%**	**27.8%**	**0.2%**	**10.3%**

2021 Accident Year

₦'000

Class of Business	Motor	Accident	Bond	Marine	Aviation	Fire	Engineering	Oil & Gas	Total
Outflow									
Reinsurance Cost	26,139,260	710,101,306	76,181,105	471,740,859	848,196,677	726,118,417	308,466,431	1,072,145,348	**4,239,089,403**
Inflow									
Reinsurance Commission	2,511,888	171,406,247	19,469,345	124,659,046	-	136,560,727	74,410,511	-	**529,017,764**
Reinsurance Recoveries (Incl IBNR)	73,889	374,961	4,177	393,106	20,000	663,197	54,201	53,607	**1,637,137**
Total Inflow	**2,585,777**	**171,781,208**	**19,473,522**	**125,052,152**	**20,000**	**137,223,924**	**74,464,712**	**53,607**	**530,654,901**
Value for Money Ratio	**9.9%**	**24.2%**	**25.6%**	**26.5%**	**0.0%**	**18.9%**	**24.1%**	**0.0%**	**13%**

2022 Accident Year

₦' 000

Class of Business	Motor	Accident	Bond	Marine	Aviation	Fire	Engineering	Oil & Gas	Total
Outflow									
Reinsurance Cost	27,581,311	749,776,760	157,486,197	562,863,376	674,550,472	861,432,927	266,442,638	1,593,839,093	**4,893,972,774**
Inflow									
Reinsurance Commission	29,175,426	192,857,317	63,583,479	139,282,610	-	184,056,937	104,767,879	802,558	**714,526,206**
Reinsurance Recoveries (Incl IBNR)	44,099	578,630	13,487	223,349	54,933	390,874	106,017	151,486	**1,562,875**
Total Inflow	**29,219,525**	**193,435,947**	**63,596,966**	**139,505,959**	**54,933**	**184,447,811**	**104,873,896**	**954,044**	**716,089,081**
Value for Money Ratio	**105.9%**	**25.8%**	**40.4%**	**24.8%**	**0.0%**	**21.4%**	**39.4%**	**0.1%**	**14.6%**

8.1.1 There is a slight increase in the value for money ratio from 13% (2021) to 15% (2022). The increase in value for money ratios for all classes of business which contributed to the increase in the value for money for this year. A higher value for money ratio signifies a better reinsurance arrangement for the company. However, we note that Consolidated Hallmark's value for money ratio have been below 15%

for the three (3) years under review due to the relatively minimal recovery on reinsurance, this suggests that the treaty arrangement may not be optimal for the Company's current risk portfolio.

8.1.2 The value for money ratios, however, does not take cognizance of other benefits reinsurance provides e.g. granting the company capacity to underwrite bigger risks than it would ordinarily have been able to take on due to its Plc capital resources.

8.1.3 We recommend that Consolidated Hallmark carries out a reinsurance optimization exercise to investigate the optimal reinsurance arrangement for the risk portfolio. Further details of the current reinsurance arrangement are provided in Appendix 3.

8.2 Reinsurance Management

8.2.1 Basis and Methods of Retention Levels

The retention limit and the associated product lines were established in liaison with the reinsurers.
In setting these limits, the following were taken into consider:

- The nature and quality of the business
- Regulations imposed the regulatory body
- Risk appetite of Consolidated Hallmark

While Consolidated Hallmark reinsures with three (3) reinsurers, majority of its businesses are with African Reinsurance, Continental Reinsurance and WAICA Reinsurance which have stable ratings.

Illustrated in the table below is the list of Reinsurers and their ratings:

Reinsurer	Credit Rating
Waica Reinsurance Corporation	B+
Continental Reinsurance	B+
African Reinsurance Corporation.	A

9. Financial Condition as at 31st December 2022

- We have illustrated above that the company has sufficient funds to meet its insurance contract liabilities under stressed conditions.

- The investment portfolio is highly liquid and broadly matches the profile of the company's liabilities.

- Consolidated Hallmark's value for money ratio have been below 15% for the years under review and this suggests suboptimal reinsurance arrangement.

- We are thus of the opinion that the company would be able to meet policyholder obligations if and when they fall due and is also able to withstand stressed scenarios as evidenced by the stress tests.

9.1.1 We recommend that the company should:

- Explore other distributions channels such as digitization and bancassurance to write its business to widen its reach and increase its penetration in the market.
- Continue to explore strategies to improve the combined ratio of the business to within 100% levels.
- Carry out a reinsurance optimization exercise to investigate the optimal reinsurance arrangement for the risk portfolio.

10. New Business Plans

10.1 Business Plan Production

The table below indicates the year-on-year growth for the various lines of businesses.

Consolidated Hallmark has plans to grow at a compounded annual growth rate of 38% between 2022 and 2024. We illustrate the forecast in the table below. This seems quite reasonable due to the current economic constraints.

Line of Business	2022	2023		2024	
	₦	₦	YoY Growth	₦	YoY Growth
Motor	2,767,423,356	4,544,919,753	64%	5,453,950,999	20%
General Accident	1,565,664,134	2,516,668,030	61%	3,020,027,825	20%
Bond	484,366,403	503,614,058	4%	604,342,110	20%
Marine	799,608,359	1,354,817,296	69%	1,625,794,853	20%
Aviation	1,093,006,282	1,706,458,909	56%	2,047,768,449	20%
Fire	1,774,305,987	2,563,480,287	44%	3,076,203,021	20%
Engineering	929,863,755	1,079,122,095	16%	1,294,957,744	20%
Oil & Gas	2,647,698,543	4,949,919,573	87%	5,939,954,998	20%
Total	**12,061,936,819**	**19,219,000,000**	**59%**	**23,063,000,000**	**20%**

11. Solvency Projections

11.1 The Projection Process

We have projected the income statements for each of the years 2023 and 2024 assuming claim and expense patterns to date continue into the future, and adopting the premiums projected for each of the years.

The exercise led to projected technical liabilities at the end of each year and a corresponding balance sheet. We have assumed that new money accruing into the fund will be invested in money market instruments.

We report our projected solvency ratios herein, we have also stressed these ratios in anticipation of adverse events and commented accordingly.

11.2 Data and Assumptions

11.2.0 The most recent portfolio status and the corresponding valuation dataset formed the base of the projection.

11.2.1 Projections of technical reserves i.e., outstanding claims and unexpired premium reserves are based on the projected sales volume and the historical information at our disposal. The target sales volume information (as detailed in Section 10.1) was provided by the Company.

11.2.2 The unexpired premium reserves were projected for each line of business assuming risk would occur uniformly throughout the year.

11.2.3 The outstanding claims reserves were projected using the projected earned premiums and the projected claims settlement patterns as determined in the most recent valuation exercise.

11.3 Projection results

The following results were obtained.

INCOME STATEMENT (N'000)	2022 - Actual	2023	2024
Gross Written Premium	12,061,937	19,219,000	23,063,000
Gross Premium Income	11,047,900	17,636,638	22,051,216
Reinsurance Cost	(4,893,973)	(7,070,361)	(8,775,542)
Net Premium Income	**6,153,927**	**10,566,277**	**13,275,674**
Commission income	714,526	1,032,808	1,256,609
Net Underwriting income	**6,868,453**	**11,599,084**	**14,532,283**
Gross claims incurred	(3,931,378)	(6,752,864)	(8,487,375)
Claims recoveries	1,869,608	2,895,458	3,614,788
Net claims incurred	**(2,061,770)**	**(3,857,406)**	**(4,872,587)**
Underwriting expenses	2,547,528	4,126,574	5,015,452
Total Underwriting Expenses	**(4,609,298)**	**(7,983,980)**	**(9,888,039)**
Investment income	752,385	1,054,980	1,248,838
Other Operating Income	582,833	601,747	712,321
Management Expenses	(2,228,062)	(3,234,547)	(4,044,177)
Profit before income tax	1,366,306	2,037,284	2,561,226
Income tax expenses	(386,258)	(410,202)	(515,696)
Profit for the year	**980,048**	**1,627,082**	**2,045,530**

The revenue accounts showing the breakdown of underwriting results by line of business for each year is shown in Appendix 3.

ASSETS & LIABILITIES (N'000)	2022 - Actual	2023	2024
TOTAL ASSETS	17,042,562	22,232,452	26,985,560
Liabilities			
Technical Reserves	6,329,022	9,443,346	11,544,673
Trade payables	384,219	457,221	544,093
Other payables	875,764	1,226,069	1,716,497
Total Liabilities	**7,589,004**	**11,126,636**	**13,805,262**
Share Premim	168,934	168,934	168,934
Share capital	5,420,000	5,420,000	5,420,000
Contingency reserves	2,799,201	3,375,771	4,067,661
Other reserves	167,840	193,016	221,968
Retained earnings/accumulated losses	897,583	1,948,095	3,301,735
Shareholder's equity	**9,453,557**	**11,105,816**	**13,180,298**
Total liabilities and shareholder's equity	**17,042,562**	**22,232,452**	**26,985,560**

The projected solvency margins are as shown below.

Year (Figures in '000)	2022 - Actual	2023	2024
Technical Liabilities (Net of Reinsurance)	3,606,167	5,102,792	6,257,891
Shareholders Fund (Free Assets)	9,453,557	11,105,816	13,180,298
Solvency Margin	262%	218%	211%

12. Conclusion and Recommendations

12.1 Overall, this report demonstrates that the Company remains adequately capitalized with a strong and conservative investment portfolio to support current and projected liabilities while maintaining compliance with regulatory requirements.

12.2 As at 31st December 2022, the business had shareholder funds of N9.45 billion or 315% of the statutory minimum capital of N3billion. Hence the business is adequately capitalized from the current regulatory point of view.

12.3 We estimate the economic/risk-based capital required to support the business as at 31st December 2022 as N2.8 billion, implying the shareholder funds coverage of economic capital is 334%. Typically, companies target a minimum coverage of between 120% - 150%, depending on the business size.

12.4 The level of excess capital both on a statutory basis and economic capital basis shows that the company has capacity to write more business and take more risk in search for enhanced return.

12.5 We investigated the asset mix of the business, in relation to its liability profile and in relation to the regulatory policyholder asset mix rules and found the asset mix appears sufficient to meet the policyholder's liability as they fall due.

12.6 We note that Consolidated Hallmark Insurance Plc has an aggregate combined ratio slightly below 100% implying optimal underwriting. However, the business still needs to continuously monitor and employ strategies to maintain this ratio below 100%. Potential options available are a reduction of expenses and a more prudent selection of underwriting risks taken and an upward review of pricing margins.

12.7 We are delighted to have conducted this Financial Conditioning Report for Consolidated Hallmark Insurance Plc. We hope you find this helpful for preparing and submitting a report to NAICOM.

12.8 We will naturally be delighted to discuss it with you and make necessary presentations.

Yours sincerely,

....

Wise Chigudu
Partner
Fellow, Institute of Actuaries, England.
FRC/2022/PRO/NAS/00000024119

APPENDIX 1- RELIANCE & LIMITATIONS

Reliance

In carrying out this work we have relied upon the financial statements, business plans and other information (including discussions with the Management) provided by Consolidated Hallmark Insurance Plc. The liability information used was the same as that used in the IFRS actuarial valuations. Where stated in this report we have reviewed this data for reasonableness, but we have not verified the accuracy of the information provided to us.

This report takes into account data made available as at 31 December 2022.

In some instances, we were unable to obtain granular information so had to make approximations in certain instances about the composition given knowledge of certain details during the normal end of year valuation process.

Limitations

Our understanding is that this is a Board report that could be used to demonstrate regulatory compliance with NAICOM, when requested.

This report must be contained in its entirety, as individual sections, if considered in isolation, may be misleading.

Except with the consent of EY, the report and any written or oral information or advice provided by EY must not be reproduced, distributed or communicated in whole or in part to any other person or relied upon by any other person other than NAICOM.

The report may be distributed to the Senior Management of Consolidated Hallmark Insurance Plc for the purpose of discussing its contents.

Actuarial estimates are subject to uncertainty from various sources, including changes in claim reporting patterns, claim settlement patterns, judicial decisions, legislation, and economic conditions. It should therefore be expected that the actual emergence of profits will vary, perhaps materially, from any estimates.

The report is subject to the terms and limitations, including limitation of liability, agreed when commencing this exercise.

Building a better working world

APPENDIX 2 – REVENUE ACCOUNTS - BASE SCENARIO

2023 PROJECTIONS ASSUMING FULL BUSINESS PLAN (N' 000)										
	2023									
REVENUE & EXPENSES	Motor	Accident	Bond	Marine	Aviation	Fire	Engineering	Oil & Gas	Total	2022
INCOME										
Gross Written Premium	4,544,920	2,516,668	503,614	1,354,817	1,706,459	2,563,480	1,079,122	4,949,920	19,219,000	12,061,937
Gross Earned Premium	4,034,276	2,277,584	482,745	1,229,987	1,576,278	2,336,290	1,153,024	4,546,453	17,636,638	11,047,900
Reinsurance Cost	(56,162)	(1,139,942)	(187,096)	(704,723)	(933,964)	(1,362,423)	(435,212)	(2,250,840)	(7,070,361)	(4,893,973)
Net Premium Income	3,978,114	1,137,643	295,649	525,263	642,314	973,867	717,813	2,295,613	10,566,277	6,153,927
Commission income	32,402	274,645	24,501	180,760	91,454	314,319	113,006	1,720	1,032,808	714,526
Net Underwriting income	4,010,516	1,412,287	320,150	706,024	733,768	1,288,186	830,819	2,297,334	11,599,084	6,868,453
EXPENSES										
Gross claims incurred	(2,118,061)	(2,205,393)	(35,117)	(436,779)	(158,263)	(1,041,806)	(295,138)	(462,307)	(6,752,864)	(3,931,378)
Claims recoveries	167,541	945,250	18,015	381,474	65,744	943,416	199,705	174,313	2,895,458	1,869,608
Net claims incurred	(1,950,521)	(1,260,142)	(17,102)	(55,305)	(92,519)	(98,390)	(95,433)	(287,994)	(3,857,406)	(2,061,770)
Underwriting expenses										
Commision paid	(548,618)	(486,060)	(97,266)	(261,664)	(329,579)	(495,101)	(213,539)	(597,506)	(3,029,335)	(1,710,519)
Maintenance expense	(526,309)	(134,134)	(21,887)	(57,098)	(70,130)	(90,243)	(43,993)	(153,444)	(1,097,239)	(837,009)
Total Underwriting Expenses	(1,074,927)	(620,194)	(119,154)	(318,763)	(399,710)	(585,344)	(257,533)	(750,950)	(4,126,574)	(2,547,528)
Total Expenses	(3,025,448)	(1,880,337)	(136,255)	(374,068)	(492,229)	(683,734)	(352,965)	(1,038,944)	(7,983,980)	(4,609,298)
Underwriting profit	985,069	(468,050)	183,895	331,956	241,539	604,451	477,853	1,258,390	3,615,104	2,259,151

2024 PROJECTIONS ASSUMING FULL BUSINESS PLAN (N' 000)										
	2024									
REVENUE & EXPENSES	Motor	Accident	Bond	Marine	Agric	Fire	Engineering	Oil & Gas	Total	2023
INCOME										
Gross Written Premium	5,453,951	3,020,028	604,342	1,625,795	2,047,768	3,076,203	1,294,958	5,939,955	23,063,000	19,219,000
Gross Earned Premium	5,125,320	2,888,178	570,972	1,575,322	2,005,389	2,919,534	1,213,965	5,752,535	22,051,216	17,636,638
Reinsurance Cost	(72,521)	(1,440,008)	(197,028)	(930,771)	(1,140,174)	(1,613,827)	(450,905)	(2,930,308)	(8,775,542)	(7,070,361)
Net Premium Income	5,052,799	1,448,171	373,944	644,551	865,215	1,305,707	763,060	2,822,228	13,275,674	10,566,277
Commission income	41,841	346,939	25,802	238,741	111,646	372,319	117,081	2,240	1,256,609	1,032,808
Net Underwriting income	5,094,640	1,795,110	399,746	883,292	976,861	1,678,026	880,141	2,824,468	14,532,283	11,599,084
EXPENSES										
Gross claims incurred	(2,690,878)	(2,796,633)	(41,535)	(559,410)	(201,347)	(1,301,888)	(310,737)	(584,948)	(8,487,375)	(6,752,864)
Claims recoveries	212,851	1,198,661	21,308	488,578	83,641	1,178,935	210,260	220,554	3,614,788	2,895,458
Net claims incurred	(2,478,027)	(1,597,972)	(20,227)	(70,833)	(117,706)	(122,953)	(100,476)	(364,394)	(4,872,587)	(3,857,406)
Underwriting expenses										
Commision paid	(658,348)	(583,277)	(116,720)	(314,000)	(395,499)	(594,127)	(256,250)	(717,013)	(3,635,233)	(3,029,335)
Maintenance expense	(668,646)	(170,094)	(25,888)	(73,129)	(89,222)	(112,772)	(46,319)	(194,149)	(1,380,219)	(1,097,239)
Total Underwriting Expenses	(1,326,993)	(753,371)	(142,608)	(387,130)	(484,721)	(706,898)	(302,568)	(911,163)	(5,015,452)	(4,126,574)
Total Expenses	(3,805,020)	(2,351,343)	(162,835)	(457,962)	(602,426)	(829,851)	(403,045)	(1,275,556)	(9,888,039)	(7,983,980)
Underwriting profit	1,289,620	(556,234)	236,911	425,330	374,435	848,175	477,097	1,548,911	4,644,244	3,615,104

APPENDIX 3 - REINSURANCE ARRANGEMENT

CONSOLIDATED HALLMARK INSURANCE PLC					
2022 REINSURANCE TREATY CAPACITY					
CLASS OF BUSINESS	**TYPE OF TREATY**	**NET RETENTION**	**NO OF LINES**	**TREATY LIMIT**	**TOTAL CAPACITY 2022**
		NAIRA			
FIRE					
FIRE & SPECIAL PERILS/CON.LOSS					
CATEGORY 'A' RISKS (100% of Gross Line)					
Services such as Schools, hospitals. Residential and Office buildings. Cement Plants and stone crushing activities. Salt works and refineries. Desalination Plants. Beverage manufacturing and bottling		350,000,000.00	23	8,050,000,000.00	8,400,000,000.00
CATEGORY 'B' RISKS (75% of Gross Line)					
Hotels. Sale of goods (including showrooms and departmental stores). Rolling mills, metallurgical plants. Electrical Industry. Chemical plants (except petrochemical industry. Food. Power plants. Rubber. Oil mills for cotton seeds.	SURPLUS	262,500,000.00	23	6,037,500,000.00	6,300,000,000.00
CATEGORY 'C' RISKS (60% of gross line)					
Foam, plastics. Explosives, matches. Paper, Leather. Wood processing, chipboard manufacturing. Grain silos, mills, fodder factories. Warehouses, open air storage. Cold stores. Textiles. Cotton risks(i.e producing and processing of raw cotton, semi finished and finished products of cotton). Manufacturing textile companies which include manufacturing of leather gaments. Animal feed	SURPLUS	210,000,000.00	23	4,830,000,000.00	5,040,000,000.00
FIRE EXCESS OF LOSS: 120,000,000 Xs 80,000,000 (1st layer) 150,000,000.00 xs 200,000,000 (2nd Layer)	WORKING XOL				
POLITICAL VIOLENCE & TERRORISM	SURPLUS	250,000,000.00	10	2,500,000,000.00	2,750,000,000.00
PVT EXCESS OF LOSS: 120,000,000 Xs 80,000,000 (1st layer) 50,000,000.00 xs 200,000,000 (2nd Layer)	WORKING XOL				
MARINE CARGO	SURPLUS	100,000,000.00	25	2,500,000,000.00	2,600,000,000.00
MARINE CARGO EXCESS OF LOSS: 50,000,000 Xs 50,000,000	WORKING XOL				
MARINE CARGO CAT XOL:500,000,000 Xs 75,000,000	CAT XOL				
MARINE HULL	SURPLUS	50,000,000.00	35	1,750,000,000.00	1,800,000,000.00
ENGINEERING					
CONTRACTOR ALL RISKS, PLANT ALL RISKS ,ERECTION ALL RISKS, ELECTRONIC EQUIPMENTS/ COMPUTER ALL RISKS ,MACHINERY BREAKDOWN, LOSS OF PROFIT FOLLOWING MACHINERY BREAKDOWN, BOILER INSURANCE	SURPLUS	300,000,000.00	20	6,000,000,000.00	6,300,000,000.00
				TPL Limit:N500m	
BOILER AND PRESSURE VESSELS AND CON. LOSS COMBINED	SURPLUS	150,000,000.00	20	3,000,000,000.00	3,150,000,000.00
				TPL Limit:N250m	
MACHINERY BREAKDOWN AND CON. LOSS COMBINED	SURPLUS	150,000,000.00	20	3,000,000,000.00	3,150,000,000.00
				TPL Limit:N250m	
DETERIORATION OF STOCK FOLLOWING MACHINERY BREAKDOWN(DOS to be written in conjuction with a relevant MBD policy)	SURPLUS	150,000,000.00	20	3,000,000,000.00	3,150,000,000.00
				TPL Limit:N250m	

ELECTRONIC EQUIPMENT AND INCREASED COST OF WORKING COMBINED	SURPLUS	150,000,000.00	20	3,000,000,000.00	3,150,000,000.00
				TPL Limit:N250m	
ERECTION ALL RISKS AND CONSTRUCTION MACHINERY COMBINED	SURPLUS	300,000,000.00	20	6,000,000,000.00	6,300,000,000.00
				TPL Limit: N500m	
CONTRACTORS' ALL RISKS AND CONTRACTORS' PLANT , MACHINERY AND EQUIPMENT COMBINED	SURPLUS	300,000,000.00	20	6,000,000,000.00	6,300,000,000.00
				TPL Limit: N500m	
CONTRACTORS' PLANT MACHINERY AND EQUIPMENT	SURPLUS	75,000,000.00	20	1,500,000,000.00	1,575,000,000.00
				TPL Limit: N125m	
ENGINEERING XOL 120,000,000 Xs 80,000,000(1st Layer) 100,000,000 Xs 200,000,000 (2nd Layer)	EXCESS OF LOSS				
BOND	QUOTA SHARE	87,500,000.00	35/65	162,500,000.00	250,000,000.00
PERFORMANCE, ADVANCE PAYMENT					
BID,CUSTOMS,SUPPLY & MAINTENANCE					
MOTOR THIRD PARTY EXCESS OF LOSS. 25,000,000 xs 1,500,000 (1st layer) 40,000,000 xs 26,500,000 (2nd layer)	EXCESS OF LOSS				
MOTOR OWN DAMAGE COVER					
PRIVATE CARS					UNLIMITED
COMMERCIAL VEHICLES					UNLIMITED
MOTOR CYCLES, TRICYCLES					UNLIMITED
GENERAL ACCIDENT					
BURGLARY (PRIVATE & BUSINESS PREMISES)	SURPLUS	80,000,000.00	23	1,840,000,000.00	1,920,000,000.00
FIDELITY GUARANTEE	SURPLUS	80,000,000.00	30	2,400,000,000.00	2,480,000,000.00
ALL RISKS	SURPLUS	80,000,000.00	30	2,400,000,000.00	2,480,000,000.00
GOODS IN TRANSIT	SURPLUS	80,000,000.00	30	2,400,000,000.00	2,480,000,000.00
PERSONAL ACCIDENT/GROUP PERSONAL ACCIDENT	SURPLUS	80,000,000.00	30	2,400,000,000.00	2,480,000,000.00
PROFESSIONAL INDEMNITY	SURPLUS	80,000,000.00	30	2,400,000,000.00	2,480,000,000.00
MONEY (cash in transit, cash in safe,cash on counter,cash in personal custody)	SURPLUS	80,000,000.00	30	2,400,000,000.00	2,480,000,000.00
DIRECTORS' AND OFFICERS' LIABILITY	SURPLUS	80,000,000.00	23	1,840,000,000.00	1,920,000,000.00
PRODUCT LIABILITY	SURPLUS	80,000,000.00	23	1,840,000,000.00	1,920,000,000.00
PUBLIC LIABILITY	SURPLUS	80,000,000.00	30	2,400,000,000.00	2,480,000,000.00
WORKERS' COMPENSATION	SURPLUS	80,000,000.00	30	2,400,000,000.00	2,480,000,000.00
EMPLOYER'S LIABILITY	SURPLUS	80,000,000.00	30	2,400,000,000.00	2,480,000,000.00
OCCUPIER'S LIABILITY	SURPLUS	80,000,000.00	30	2,400,000,000.00	2,480,000,000.00
BUILDER'S LIABILITY	SURPLUS	80,000,000.00	30	2,400,000,000.00	2,480,000,000.00
	SURPLUS	80,000,000.00		-	80,000,000.00
GENERAL THIRD-PARTY LIABILITY	SURPLUS	80,000,000.00	23	1,840,000,000.00	1,920,000,000.00
PERSONAL ACC (INCLUDING GROUP PERSONAL ACCIDENT) CAT XOL. 50,000,000 Xs 20,000,000	CAT. XOL				
PUBLIC LIABILITY WORKING EXCESS OF LOSS 40,000,000 Xs 40,000,000	WORKING XOL				

APPENDIX 4 – PROJECTION ASSUMPTIONS

1. Commission Rates

a.

Class	AGENTS	BROKERS	Marketers
Motor	6.25%	12.50%	6.25%
General Accident	10.00%	20.00%	10.00%
Bond	10.00%	20.00%	10.00%
Marine	10.00%	20.00%	10.00%
Aviation	10.00%	20.00%	10.00%
Fire	10.00%	20.00%	10.00%
Engineering	0.00%	20.00%	20.00%
Oil & Gas	6.25%	12.50%	6.25%

b. Reinsurance Commission

Year	Motor	Accident	Bond	Marine	Aviation	Fire	Engineering	Oil & Gas
Commission Income	58%	24%	13%	26%	10%	23%	26%	0%

c. Other Assumptions

Year	2023	2024
Investment Income*	5%	5%
Tax	20%	20%
Management Expenses	18%	18%

**Derived from the historical weighted average returns*

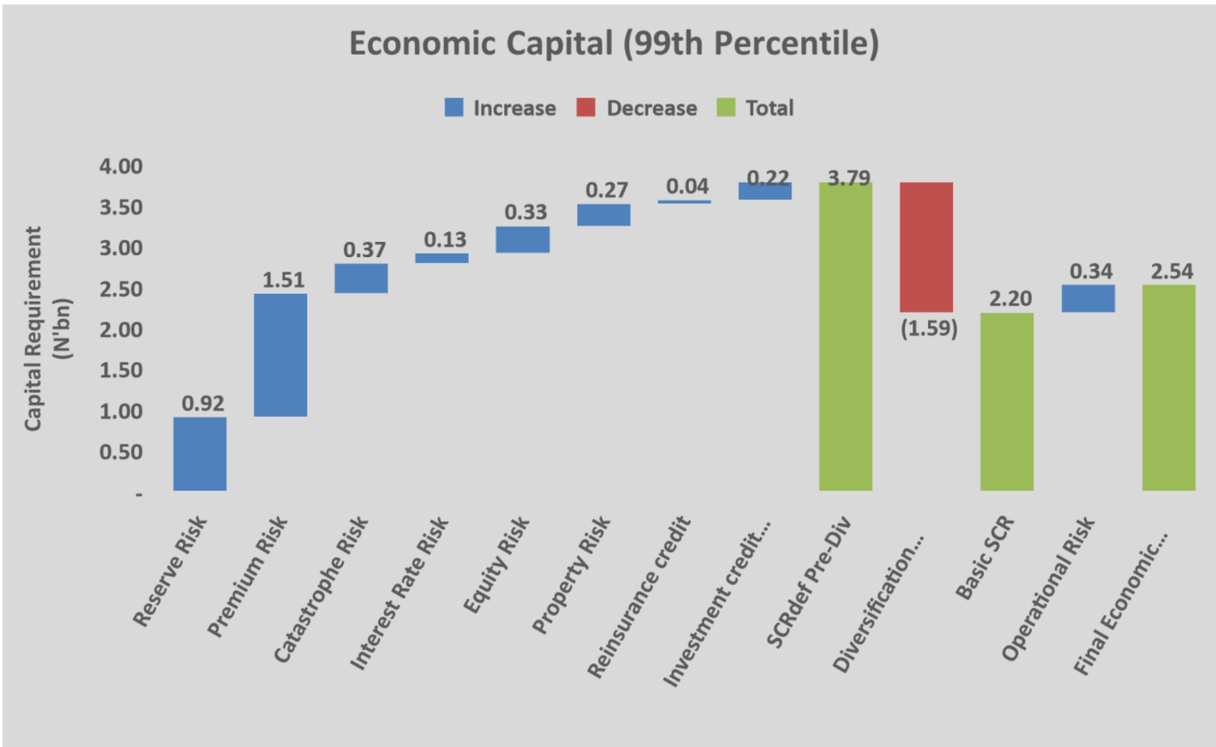
APPENDIX 5 – COMBINED RATIO TABLE

	Year	Motor	Accident	Bond	Marine	Aviation	Fire	Engineering	Oil & Gas	Total
Gross Written Premiums	2018	1,782,316	859,881	131,688	478,342	305,404	1,008,118	348,826	1,861,221	6,775,797
	2019	2,005,379	1,105,412	223,407	598,145	812,112	1,092,345	419,871	2,129,277	8,385,947
	2020	2,119,710	1,287,197	179,318	602,843	928,595	1,118,386	514,273	2,627,092	9,377,414
	2021	2,252,875	1,292,547	257,269	801,591	1,126,657	1,218,007	473,752	2,601,348	10,024,047
	2022	2,767,423	1,565,664	484,366	799,608	1,093,006	1,774,306	929,864	2,647,699	12,061,937
Reinsurance Cost	2018	(13,048)	(396,308)	(36,101)	(258,379)	(151,472)	(422,458)	(91,220)	(870,435)	(2,239,421)
	2019	(61,936)	(498,929)	(87,443)	(314,091)	(422,036)	(723,270)	(127,598)	(1,122,233)	(3,357,536)
	2020	(21,618)	(677,378)	(71,273)	(364,788)	(420,449)	(606,799)	(179,977)	(1,516,090)	(3,858,372)
	2021	(26,139)	(710,101)	(76,181)	(471,741)	(848,197)	(726,118)	(308,466)	(1,072,145)	(4,239,089)
	2022	(27,581)	(749,777)	(157,486)	(562,863)	(674,550)	(861,433)	(266,443)	(1,593,839)	(4,893,973)
Gross Earned Premium	2018	1,630,216	828,264	109,555	563,847	311,102	974,660	250,313	1,813,680	6,481,636
	2019	1,970,951	1,029,603	181,526	577,827	736,075	1,158,739	342,722	2,080,453	8,077,896
	2020	2,129,256	1,208,349	195,125	584,754	870,743	1,007,571	606,381	2,637,752	9,239,932
	2021	2,117,850	1,313,617	273,439	793,970	1,133,192	1,157,961	445,888	2,541,345	9,777,261
	2022	2,449,032	1,484,685	389,312	810,204	1,112,779	1,601,218	614,997	2,585,673	11,047,900
Net Earned Premium	2018	1,617,168	431,956	73,453	305,468	159,629	552,201	159,093	943,246	4,242,215
	2019	1,909,015	530,674	94,082	263,737	314,039	435,469	215,124	958,220	4,720,360
	2020	2,107,638	530,971	123,852	219,965	450,294	400,772	426,405	1,121,662	5,381,560
	2021	2,091,710	603,515	197,258	322,229	284,995	431,842	137,422	1,469,200	5,538,172
	2022	2,421,451	734,909	231,825	247,341	438,228	739,785	348,554	991,834	6,153,927
Incurred Claims (Gross)	2018	603,849	487,476	4,930	2,194,594	562,326	487,893	59,309	370,071	4,770,448
	2019	734,425	636,929	38,003	178,466	240,713	1,044,013	106,084	337,485	3,316,118
	2020	569,022	896,449	(28,697)	142,380	160,894	840,299	269,538	199,127	3,049,011
	2021	1,230,417	1,658,836	6,321	512,160	5,219	(70,757)	(49,304)	343,001	3,635,894
	2022	1,148,738	2,534,474	41,509	23,012	124,438	(128,063)	151,243	36,028	3,931,378
Incurred Claims (Net)	2018	592,240	91,959	2,543	434,783	363,631	64,557	23,320	210,102	1,783,134
	2019	651,892	(58,762)	25,752	117,285	126,024	434,616	24,322	226,169	1,547,299
	2020	551,139	775,244	(19,490)	(84,989)	179,794	(222,919)	214,021	392,959	1,785,759
	2021	1,096,749	1,003,368	(254)	127,063	(125,507)	(393,323)	(575)	216,419	1,923,940
	2022	1,091,801	1,589,790	34,117	101,072	205,609	(924,445)	52,569	(88,741)	2,061,770
Commission Received	2018	7,752	93,450	1,847	38,630	41,360	113,709	36,616	23,020	356,385
	2019	183,084	157,358	16,981	103,954	58,311	190,253	51,360	339,143	1,100,445
	2020	1,646	104,890	2,914	66,873	32,955	133,247	50,049	2,713	395,287
	2021	2,512	171,406	19,469	124,659	0	136,561	74,411	0	529,018
	2022	29,175	192,857	63,583	139,283	0	184,057	104,768	803	714,526
Underwriting expenses	2018	397,373	226,500	24,327	136,554	75,936	253,870	68,637	437,412	1,620,609
	2019	526,227	277,198	48,391	137,932	131,418	266,291	107,149	491,791	1,986,398
	2020	522,452	285,802	40,817	124,372	231,713	247,577	132,910	450,277	2,035,920
	2021	555,178	334,763	66,811	205,277	298,149	294,296	107,095	509,466	2,371,036
	2022	566,707	349,399	90,041	193,751	384,787	381,964	151,100	429,779	2,547,528

	Year	Motor	Accident	Bond	Marine	Aviation	Fire	Engineering	Oil & Gas	Total
Management expenses	2018	0	0	0	0	0	0	0	0	(1,529,427)
	2019	0	0	0	0	0	0	0	0	(1,716,473)
	2020	0	0	0	0	0	0	0	0	(1,794,138)
	2021	0	0	0	0	0	0	0	0	(1,745,728)
	2022	0	0	0	0	0	0	0	0	(2,228,062)
Claims Ratio (Net)	2018	37%	59%	5%	389%	181%	50%	24%	20%	42%
	2019	37%	62%	21%	31%	33%	90%	31%	16%	33%
	2020	26%	146%	16%	39%	40%	56%	50%	35%	33%
	2021	52%	166%	0%	39%	44%	91%	0%	15%	35%
	2022	45%	216%	15%	41%	47%	-125%	15%	-9%	34%
Management Expense Ratio	2018	0%	0%	0%	0%	0%	0%	0%	0%	36%
	2019	0%	0%	0%	0%	0%	0%	0%	0%	36%
	2020	0%	0%	0%	0%	0%	0%	0%	0%	33%
	2021	0%	0%	0%	0%	0%	0%	0%	0%	32%
	2022	0%	0%	0%	0%	0%	0%	0%	0%	36%
Acquisition Expense Ratio	2018	24%	31%	31%	32%	22%	25%	20%	44%	30%
	2019	37%	55%	36%	64%	36%	71%	43%	57%	48%
	2020	25%	33%	33%	23%	41%	23%	24%	41%	30%
	2021	26%	27%	26%	25%	103%	34%	19%	35%	33%
	2022	20%	21%	11%	22%	88%	27%	13%	43%	30%
Combined Ratio	2018	61%	52%	34%	174%	249%	37%	35%	66%	108%
	2019	71%	66%	63%	108%	77%	170%	55%	80%	117%
	2020	51%	179%	49%	62%	81%	78%	74%	76%	97%
	2021	52%	193%	26%	64%	147%	125%	19%	49%	99%
	2022	65%	238%	26%	63%	135%	-98%	28%	34%	99%

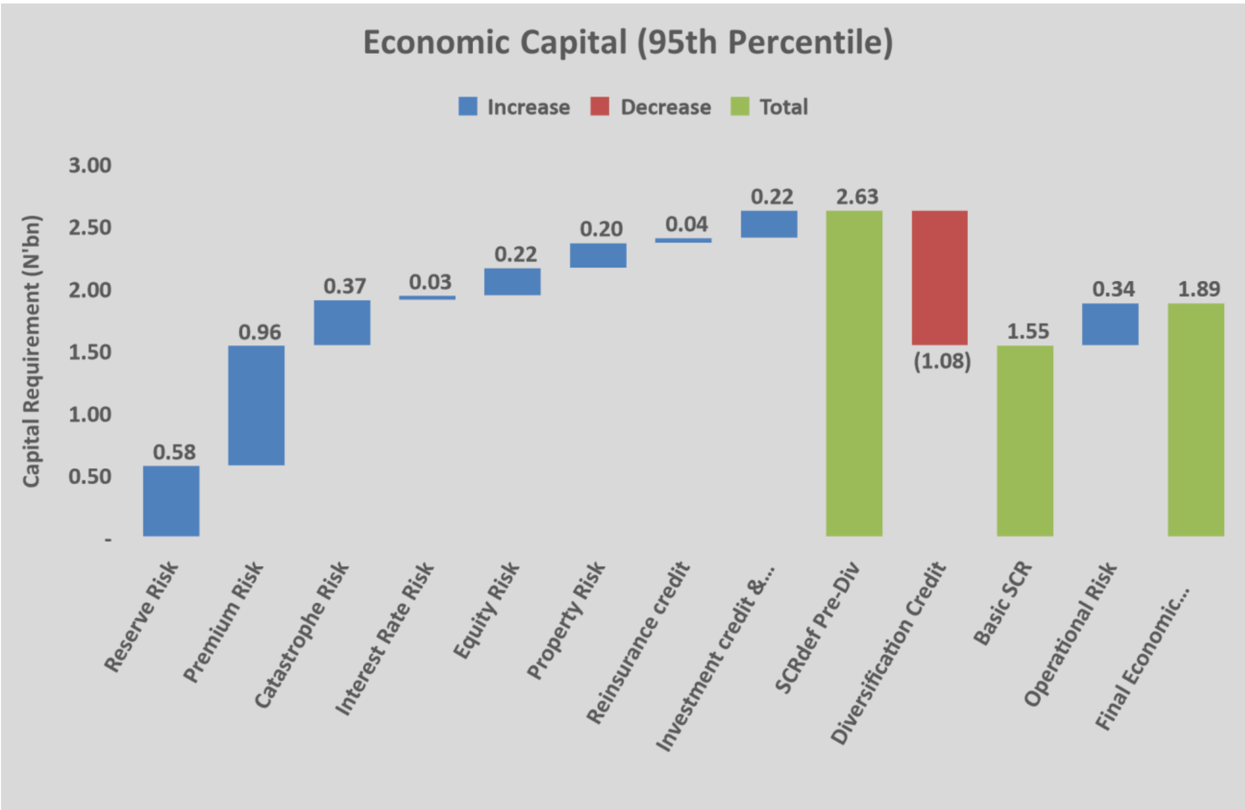
APPENDIX 6: ECONOMIC CAPITAL RESULTS AT 99% CONFIDENCE LEVEL

Should the confidence level be lowered our confidence level to 99%, the total economic capital requirement reduces to N2.5 billion which represents about 372% of the shareholder funds as at December 31, 2022.



APPENDIX 7: ECONOMIC CAPITAL RESULTS AT 95% CONFIDENCE LEVEL

Should the confidence level be lowered our confidence level to 95%, the total economic capital requirement increases to N1.89 billion which represents about 501% of the shareholder funds as at December 31, 2022.



Appendix 8: Economic Capital Methodology & Stress Level Derivation.

We present below, detailed explanation on how each of the risk were modelled including stress levels derivation.

A. MARKET RISKS

1.1 Market risk is defined as the potential for adverse change in the net assets (Market Value of assets less Market Value of liabilities) due to movements in market factors such as equity prices, interest rates, property prices and foreign exchange.

1.2 The company's Insurance funds are mainly invested in money market instrument and hence have a very low exposure to market risks.

1.3 The market risk capital requirement $\boldsymbol{C_{Mkt}}$ for each risk was calculated using the following formula:

$$C_{Mkt} = (A_{Mkt} - A_0)$$

Where C_{Mkt} – capital calculation for market risk

A_{Mkt} – stressed assets value

A_0 – base market value of assets

1.4 The stresses applied for the market risk module were as follows:

Asset class	Stress level @ 95%	Stress level @ 99%	Stress level @ 99.5%
Equity	24.06%	35.90%	37.38%
Property	15.72%	21.64%	22.38%
Interest rate	29.1%	40.12%	41.5%

1.5 The above stresses were obtained by using a combination of fitting historical data of various market indices (were available) to find the appropriate stress level and benchmarking against the Solvency II widely used stress levels.

1.6 The details of the derivation and computation are contained below for each sub-risk module.

1.7 Equity risk

I. This is the sensitivity of assets, liabilities and financial investments to fluctuations in the level or volatility of the market prices for equities.

II. The company is invested in both quoted and unquoted equities. Both types of equities were stress tested.

III. The level of stress was derived by considering the historical distribution of the total return Nigerian Stock Exchange (''NSE'') index and fitting a distribution to determine the stress level at the various confidence levels.

IV. We fitted the NSE historical index values from January 1985 to December 2020. The normal distribution was a good fit for the data. Using the normal distribution, we determined stress levels of 29%, 40% and 41% for confidence levels of 95%,99% and 99.5% respectively.

V. We also checked how frequently historical annual returns have fallen or been close to the 29.1%, 40.12% and 41.5% levels. In 2008, the stock index fell by about 46% and in 2011 also fell by about 23%.

VI. Both the quoted and unquoted equities were assumed to be similarly affected by any declines in stock market. This assumption would need to be revisited in the next assessment.

1.8 Interest Rate risk

I. Interest rate risk is caused by the sensitivity of the value of any assets, liabilities and financial investments to fluctuations in the term structure of interest rates or interest rate volatility, whether valued by mark-to-model or mark-to-market techniques.

II. Stresses were determined by constructing the term structure of interest rates by referencing the 12-month, 3-year, 5 year, 7 year, 10 year and 20 year yields from the Federal Government Bonds.

III. The historical returns were fitted to distributions to determine the best fit distribution. The normal distribution was a good fit. The normal distribution was used instead in order to apply some consistency with the other market risk stresses.

IV. As the local term structure of interest rates show a flat yield curve; a flat stress level was applied to bonds of varying durations.

V. The stresses used are shown in table 3 above at various confidence levels to all bond yields of varying duration according to the Company bond holdings.

VI. The stressed yields were applied using the formula: current yield x (1+Upward stress) OR current yield x (1+Downward stress).

VII. The capital requirement was then determined by adopting the stress level (between the upward and the downward stress) that resulted in a higher capital requirement i.e. Interest

Rate capital requirement = Max {0; Upward stress capital; Downward stress capital}

1.9 The overall market risk capital was then derived by combining the equity, property and interest rate risk capital using the suggested correlation matrix below.

$$C_{Mkt} = \sqrt{\sum CorrMkt_{ij} * C_{Mkt_i} * C_{Mkt_j}}$$

Where C_{Mkt} - overall market risk capital calculation including equity, property and interest rate

C_{Mkt_i} - capital for i-th risk (i could be any of the three risks)

C_{Mkt_j}- capital for j-th risk (j could be any of the three risks)

1.10 The correlation matrix used is shown in Appendix 7

1.11 Non-Life Insurance risks

The non-life Insurance risks modelled were:

- Reserving risk
- Premium risk
- Catastrophe risk

I. Reserving risk

This is one of the sources of underwriting risk for general Insurance.

Reserve risk results from fluctuations in the timing and amount of claim settlements.

The reserve risk methodology was as follows:

- We used the bootstrap approach to calculate the mean and standard deviation of losses.
- We then used the mean and standard deviation to derive the parameters of the lognormal distribution which was used to estimate the 95th, 99th and 99.5th percentiles of the reserve distribution.
- Reserve capital is the difference between each of the following percentiles; 95^{th} -percentile, 99^{th} -percentile or 99.5^{th} -percentile of the distribution and the 50^{th} -percentile (Best estimate).

II. Premium risk

This is another source of underwriting risk for General Insurance.

Premium risk results from fluctuations in the timing, frequency and severity of insured events. It relates to the unexpired risks on existing contracts. Premium risk includes the risk that premium provisions turn out to be insufficient to compensate claims or need to be increased.

The premium risk methodology was as follows:

- Average loss ratios were derived from the expected loss ratio in the business plan (pricing)
- Historical loss ratios were investigated and deviations from the mean studied.
- The lognormal distribution was fit (which was the best fit) to the deviations

III. Catastrophe risk

This is the Catastrophe modelling approach for the general Insurance business.

It covers mainly high severity and low frequency catastrophic events e.g. floods, hurricanes, large accidents impacting on all general Insurance lines of business insured by the Company.

There have been no major catastrophic events in Nigeria recently hence the data to use in determining the risk capital was scarce.

The catastrophe risk methodology was therefore as follows:

- The 2021 loss ratios were increased by 1000% for all lines of business to resemble a catastrophic-like event
- A 1% probability of occurrence was applied to determine the final capital requirement.

B. CREDIT RISK

I. Credit risk arises as a result of the unexpected default, or deterioration in credit standing, of an insurer's counterparties or debtors.

II. The scope of the calculation under this risk module covered possible defaults by banks; where cash and cash equivalents are held by the Company, defaults by reinsurers compromising reInsurance recoveries and the inability by debtors to pay their dues.

III. The following exposures to counterparties were used:

- Banks → cash and cash equivalent holdings
- Reinsurers → estimated reInsurance recoveries over the next 12 months
- Debtor → amounts owed.

IV. The expected losses given default were calculated using the latest credit ratings and associated probabilities of default for the different counterparties. A combination of local agencies and the S&P default rates were used for the bank holdings as per the following table:

Table 5

Rating Scale	Default Probability
AAA	0.00%
AA+	0.00%
AA	0.02%
AA-	0.03%
A+	0.05%
A	0.05%
A-	0.06%
BBB+	0.09%
BBB	0.15%
BBB-	0.24%
BB+	0.32%
BB	0.48%
BB-	0.96%
B+	1.98%
B	3.13%
B-	6.52%
Unrated	26.53%

V. The above default rates were applied to both the banks and reinsurers' counterparties to the Company.

VI. The formula used was: Estimated exposure x Probability of Default x Loss Given Default.

VII. We assumed a 100% loss given default, which is a conservative assumption.

C. OPERATIONAL RISK

I. This is the risk of loss arising from inadequate or failed internal processes, or from personnel and systems, or from external events.

II. Operational risk is generally a material risk and one of the major causes of organizational failure.

III. There are several approaches used to assess Operational risk namely;

- Basic indicators or some Standard Formula – this is a simpler approach and largely defined by regulatory bodies. It is transparent and a well-known approach.
- Scenario approach – qualitative scenario assessments of the operational risks as defined by management through the risk heat map are transformed into quantitative assessments to determine the overall operational risk capital
- Statistical or Loss Distribution Approach – this uses a lot of statistics. The amount of possible losses and frequency of losses are modelled separately and then combined to determine the overall capital requirement. This approach relies on the availability of credible historical and forward-looking data.
- The Structural or Causal approach – this is the most complex and recently researched approach. It also relies on understanding the interdependencies across risks in addition to the data availability.

IV. We adopted the standard formula approach due to Plc quantity of data available. The approach took into account the earned premium, technical provisions and Base capital calculated before operational risk.

V. The formula used to compute the capital requirement was as follows:

$$C_{op} = \text{Min}\,\{0.3 * BSCR,\ BOp\} + 0.25\ \times\ Exp_{nl}$$

Exp_{nl} is the amount of annual expenses incurred during the previous 12 months in respect of non-linked business

$BSCR$ is the preliminary capital required before allowing operational risk and, for the risk requirements it is defined as:

$$\text{CR Op} = \sum(C_{ins} + C_{Mkt} + C_{Credit})$$

BOp is the basic operational risk requirement for all business and is determined as follows:

$$BOp = Max\left\{Op_{premiums};\ Op_{provisions}\right\}$$

Where

$$Op_{premiums} = 0.03 \times\ Earn_{nl}\ + Max\ \{0, 0.03\ \times\ [Earn_{nl} -\ 1.1\ \times pEarn_{nl}]\}$$

and $Op_{provisions} = 0.03\ \times Max\ \{0, Tp_{nl}\}$

$Earn_{nl}$ are the gross premiums earned during the previous 12 months.

$pEarn_{nl}$ are the gross premiums earned during the 12 months prior to the previous 12 months.

TP_{nl} are the technical provisions

VI. In the future, we recommend the following be recorded at granular level:

- Frequency of occurrence of all risk scenarios captured in the Risk Heat Map
- Identification of new exposures and new likelihood percentages after mitigation efforts have been applied.

This would improve how operational risk is quantified.

APPENDIX 8 – CORRELATION MATRICES

Correlations for Market risks have been derived using actuarial judgement and referencing correlations being used in other jurisdictions for new solvency regimes.

Local market relevance was taken into account before applying these correlations.

As a rule of thumb, the following thought process was applied:

Correlation coefficient	Interpretation
0%	Independent
25%	Weakly correlated
50%	Moderately correlated
75%	Strongly correlated
100%	Dependent

The correlation matrices used for diversification are shown below.

Market risk correlations

Parameters						
$Corr_{ij}$	Mkt_{int}	Mkt_{eq}	Mkt_{prop}	Mkt_{sp}	Mkt_{conc}	Mkt_{fx}
Mkt_{int}	**100%**	0%	0%	0%	0%	25%
Mkt_{eq}	0%	**100%**	25%	75%	0%	25%
Mkt_{prop}	0%	25%	**100%**	50%	0%	25%
Mkt_{sp}	0%	75%	50%	**100%**	0%	25%
Mkt_{conc}	0%	0%	0%	0%	**100%**	0%
Mkt_{fx}	25%	25%	25%	25%	0%	**100%**

Comments:

- Equity vs Property – the local stock and property markets have seen low correlations.
- The drop in equity values seem not to affect the property values, hence a weak correlation assumption.
- Interest rate vs Equity/Property – no correlation was assumed if under the interest rate stress an increase in interest rates triggered a capital requirement (as opposed to a decrease in interest rates). 50% correlation was assumed if the decrease in interest rates would trigger a capital requirement under the interest rate stress.
- Spread, concentration and foreign exchange risks were not modelled.

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