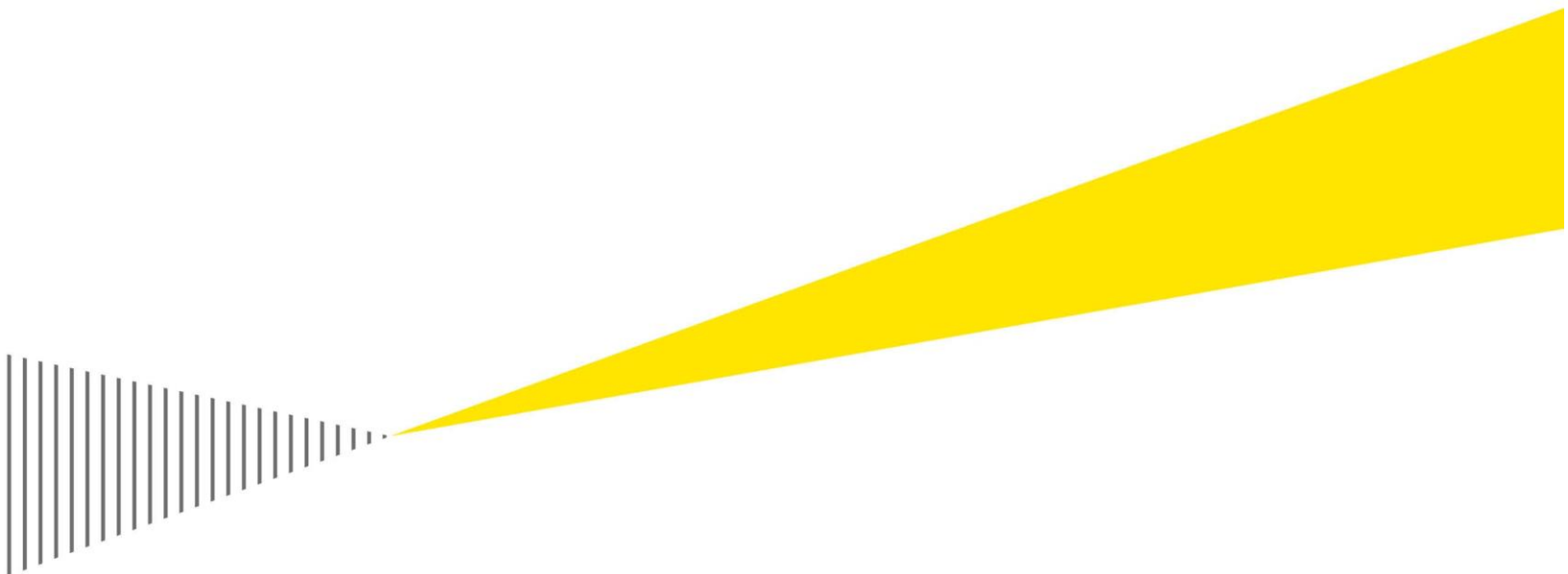


UNITRUST INSURANCE COMPANY LIMITED

FINANCIAL CONDITION REPORT FOR NON-LIFE
BUSINESS AS AT
31ST DECEMBER 2024



Building a better
working world

EXECUTIVE SUMMARY

This report presents a comprehensive overview of the financial condition of the Company. It is important to note that this document will be included as part of the Company's submission to the National Insurance Commission (NAICOM).

The preparation of this report adheres to the guidelines set forth in the General Insurance Business Actuarial Reports Guidance Notes (GN12v5.0), as published by the Institute and Faculty of Actuaries. Additionally, it complies with Paragraph 6.5.5 of the Prudential Guidelines for Insurers and Reinsurers issued by the regulatory authority, NAICOM.

This report aims to provide stakeholders with a clear understanding of the Company's financial health and its alignment with regulatory standards.

The following are the key conclusions of the report.

- ▶ As of December 31, 2024, the business balance sheet solvency ratios from 2022 to 2024 reflect a strong financial position, with a solvency ratio exceeding 280%. The Capital Adequacy Ratio (CAR) is currently at 456%, significantly above regulatory requirements, indicating a robust capital position and financial stability.
- ▶ It is noted that Unitrust Insurance Company Ltd financial performance from 2023 to 2024 demonstrates substantial growth, with insurance revenue increasing by 78% and profit after tax rising by 51%
- ▶ It is noted that Unitrust Insurance Company Ltd anticipates a growth of at least 19.4% in 2025 through diversification and improved service delivery.
- ▶ We estimate the economic/risk-based capital required to support the business at 31st December 2024 as N2.43 billion, a coverage of 1274% of the shareholder's Funds of N30.97 billion. The company thus holds a cushion above its economic capital which enhances its ability to meet its obligations to policyholders in adverse scenarios.
- ▶ As of December 31, 2024, Unitrust Insurance Company Ltd assets and liabilities reserves indicate a solid financial position, with incurred claims reserves and methodologies for calculating premium and claim reserves ensuring accuracy and reliability. The company maintains adequate reserves to cover claims during the reporting period.
- ▶ As of December 31, 2024, Unitrust Insurance Company Ltd.'s assets and liabilities reserves indicate a solid financial position, with incurred claims reserves and methodologies for calculating premium and claim reserves ensuring accuracy and reliability. The company maintains adequate reserves to cover claims during the reporting period.
- ▶ The Pricing and premium adequacy information was not available across all classes of business at the time of this review. While this has limited the scope of analysis in this area, it is acknowledged that data collection and documentation processes are evolving. Enhancing the availability of such information in future will support a more complete and robust assessment in subsequent reviews.

- ▶ Unitrust Insurance Company Ltd follows a robust Reinsurance Management Framework that ensures all arrangements are thoroughly documented and executed to guarantee the recoverability of claims. The company's reinsurance strategy is designed to align with the Board's risk appetite while optimizing capacity and ensuring regulatory compliance. This approach demonstrates positive value for money across all lines of business.

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APPENDICES

The Managing Director
Unitrust Insurance Company Limited
Unitrust House, Plot 105B,
Ajose Adeogun Street,
Victoria Island,
Lagos.

May 2025

FINANCIAL CONDITION REPORT FOR NON-LIFE BUSINESS AS AT 31ST DECEMBER 2024

Dear Sir,

Introduction, Purpose and Limitations

1.1 We are pleased to present our Financial Condition Report ("FCR") for **UNITRUST INSURANCE COMPANY LTD** ("the Company") as at 31st December 2024.

Purpose:

1.2 This report presents the findings of our assessment regarding the criteria established in the Guidance Note (GN12v5.0) issued by the Institute and Faculty of Actuaries, as well as the Prudential Guidelines for Insurers and Reinsurers 2022. The evaluation is conducted in relation to UNITRUST INSURANCE COMPANY LTD for the financial year ending 31st December 2024.

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 in accordance with Guidance Note GN12V5.0

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 assurance 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 The Nigerian economy has faced considerable challenges, particularly marked by the depreciation of the Naira, which experienced a decline from N951 in January 2024 to N1,549 in December 2024. This significant drop has resulted in a subsequent increase in the prices of goods and services, adversely affecting major companies within the country and leading to the exit of several firms from the market.

In December 2024, the Nigerian Senate passed legislation aimed at increasing the minimum capital requirements for all insurance and reinsurance firms. The revised proposed Minimum Capital Requirements (MCR) are detailed in the table below:

	Initial Capital (N 'billion)	New Capital (N 'billion)
General Insurance	3	15
Life Insurance	2	10
Reinsurance	10	35

Barring any further changes, these adjustments are expected to take effect upon passing through the house of representatives, accent to the bill by the Presidency, the issuance of implementation guidelines by the National Insurance Commission (NAICOM), along with the establishment of a compliance deadline.

Furthermore, the regulator in 2024 issued an exposure draft on "Risk Based Capital Regulation", which is designed to ensure that insurers and reinsurers maintain a capital adequacy level that aligns with their respective risk profiles.

Notwithstanding the current economic climate Unitrust Insurance Company Ltd has demonstrated remarkable growth in profit, as elaborated in Section 2.2.

2.2 The table below illustrates how Unitrust Insurance's books have developed over the year 2023 to 2024.

(NGN'000)	2024	2023	YoY Movement
Insurance Revenue	12,327,517	6,918,625	78%
Insurance Service Expense	(13,061,790)	(4,952,303)	164%
Net expenses from reinsurance contracts held	2,285,491	(745,291)	407%
Insurance Service Result	1,551,218	1,221,029	27%
Investment Return	4,452,953	3,141,191	42%
Net insurance finance expenses	(44,925)	(89,368)	-50%
Other Income	62,524	49,515	26%
Other Operating Expenses	(2,158,657)	(1,492,390)	45%
Profit before Tax	3,357,537	2,429,556	38%
Income Tax	(378,437)	(648,815)	42%
Profit after Tax	2,979,100	1,780,741	67%

The financial performance of the insurance service has shown significant improvement, primarily driven by a 78% increase in insurance revenue. This growth is further supported by a positive net expense from reinsurance contracts held, despite a substantial rise in insurance service expenses, which increased by 164%.

The overall profit before tax experienced a substantial increase of 38%, primarily attributed to a 42% rise in investment returns and a 50% reduction in net insurance finance expenses, despite a significant 45% increase in other operating costs.

Additionally, profit after tax demonstrated remarkable growth of 67%, supported by a 42% decrease in income tax, which further enhanced overall profitability.

The combination of increased revenue, effective cost management, and favorable tax conditions highlights Unitrust's strong financial performance and improved operational efficiency for 2024 in comparison to 2023.

3. Business Overview

3.2 Company Overview

Unitrust Insurance Company Limited is an insurance company established in 1981 and licensed in 1986 in Nigeria to operate as an insurer. Unitrust Insurance presently carries out all forms of general/non-life insurance transactions including Oil & Gas

3.3 Principal Activities

Unitrust Insurance Company Ltd. engages in a variety of insurance services, including:

- Marine insurance
- Motor insurance
- Travel insurance
- Engineering insurance
- Fire insurance etc.
- Energy Oil and Gas
- Agric Insurance
- Aviation Insurance

The company anticipates a revenue growth of an average of 19.4% in GWP by 2025, across all lines of business. It experienced a 51% growth in profit after tax from 2023 to 2024, driven by a greater focus on improved revenue lines, enhanced market visibility, and overall profitability.

3.4 Shareholding Structure

Below is the list of companies holding 5% or more ownership in Unitrust Insurance Company Ltd

1. **T.Y. Holding (Nig) Limited**- 3,776,074,446 shares (75% ownership)
2. **Chagoury Ronald** - 380,410,849 shares (8% ownership)
3. **Unitrust Investments Limited** - 380,410,849 shares (8% ownership)
4. **Mrs. Grace Danjuma** - 250,738,815 shares (5% ownership)

Collectively, these companies hold 96% of the total shares of Unitrust Insurance Company Ltd.

4. Recent Experience and Financial Performance

	2024 Actual	2023 Actual	2024 Budget	Actual vs Budget (%)
	N'000	N'000	N'000	
Insurance Revenue	12,327,517	6,918,625	10,513,861	17%
Insurance Service Expense	(13,061,790)	(4,952,303)	(6,599,225)	98%
Net expenses from reinsurance contracts held	2,285,491	(745,801)	(1,450,406)	258%
Insurance Service Result	1,551,218	1,221,029	2,464,230	37%
Investment Return	4,452,953	3,141,191	1,311,515	240%
Net insurance finance expenses	(44,925)	(89,368)	(177,295)	75%
Net insurance and investment result	5,959,246	4,272,852	3,613,896	65%
Other Income	62,524	49,515	59,728	5%
Other Operating Expenses	(2,158,657)	(1,492,390)	(2,447,446)	12%
Profit before Tax	3,357,537	2,429,556	1,209,123	178%
Income Tax	(378,437)	(648,815)	(205,551)	84%
Profit after Tax	2,979,100	1,780,741	1,003,572	197%

In 2024, insurance revenue outperformed the budget by 17%, with actual revenue of N12 billion compared to the budgeted N10 billion. However, insurance service expenses significantly exceeded expectations, with 98% adverse variance actual expenses were N 13 million versus the N 6 million budget. As a result, despite the increase in revenue, profit before tax was above target, recording a 178%.

Unitrust actively monitors underperforming portfolios and employs various risk mitigation strategies, including client profiling, reinsurance, and rating adjustments, to manage exposure to loss-making areas.

4.2 Investment Performance

The net investment results increased from N4.27 billion in 2023 to N5.96 billion in 2024. The analysis shows that Unitrust surpassed the budgeted investment result by 240%.

Other operating expenses rose by 45% in 2024, from N1.5 billion to N2.2 billion, due to inflation and rising service costs.

5. Valuation of Assets and Liabilities

5.1 The table below illustrates Unitrust's assets and liabilities reserves as at 31st December 2024.

Reserves	Liability (N)	Assets (N)	Net (N)
Incurred Claims	2,962,465,816	(2,219,374,351)	743,091,465
ULAE	38,537,601		38,537,601
Risk Adjustment	178,505,839	(85,962,650)	92,543,188
Remaining Coverage (Excluding Loss Component)	3,231,891,609	(1,630,415,010)	1,601,476,599
Remaining Coverage (Loss Component)	696,785,701		696,785,701
Total (31 December 2024)	7,108,186,566	(3,935,752,011)	3,172,434,554

The incurred claims reserves for each class of business and present a summary of the results below.

Liability Table

Class of Business	LIC (PVFCF) N		ULAE N	LIC (RA) N	LIC N
	Outstanding Reported Claim N	Gross IBNR N			
Motor	178,512,280	200,952,601	5,497,810	4,981,632	389,944,323
General Accident	540,215,683	132,334,932	7,624,008	60,832,456	741,007,079
Bond	0	2,516,429	47,672	41,886	2,605,987
Marine	143,783,820	152,397,719	4,249,016	12,688,453	313,119,008
Fire	627,407,218	329,729,418	12,189,406	75,001,902	1,044,327,945
Engineering	204,312,764	136,388,218	4,519,067	19,583,738	364,803,787
Oil & Gas	160,039,167	151,170,294	4,379,737	5,331,632	320,920,829
Agriculture	2,150,000	555,273	30,884	44,139	2,780,297
Total	1,856,420,932	1,106,044,884	38,537,601	178,505,839	3,179,509,256

Asset Table

Class of Business	ARIC (PVFCF) N		ARIC (RA) N	ARIC N
	Outstanding Reported Reinsurance Recoveries N	Reinsurance Assets IBNR N		
Motor	5,686,985	23,466,893	879,809	30,033,687
General Accident	143,972,775	42,837,279	13,631,598	200,441,652
Bond	0	598,036	40,433	638,469
Marine	54,276,732	95,370,918	10,320,727	159,968,376
Fire	303,499,615	232,183,444	36,320,704	572,003,763
Engineering	112,744,127	61,490,362	12,793,620	187,028,109
Oil & Gas	95,904,960	1,045,556,640	11,853,528	1,153,315,127
Agriculture	1,505,000	280,586	122,232	1,907,819
Total	717,590,193	1,501,784,159	85,962,650	2,305,337,002

Premium Liability and Asset Table

Class of Business	LRC N	ARC N	NET N
Motor	803,131,236	(88,078,088)	715,053,148
General Accident	285,483,114	(71,254,758)	214,228,356
Bond	4,284,814	(768,759)	3,516,055
Marine	380,404,139	(180,830,809)	199,573,330
Fire	759,732,912	(791,876,606)	-32,143,694
Engineering	428,180,030	(285,444,225)	142,735,804
Oil & Gas	556,649,062	(202,950,137)	353,698,925
Agriculture	14,026,302	(9,211,628)	4,814,674
Total	3,231,891,609	(1,630,415,010)	1,601,476,599

5.2 The methodologies utilized for calculating Premium and Claim Reserves, focusing on the Liability for Remaining Coverage (LRC), Risk Adjustment Margin, Unallocated Loss Adjustment Expense, and Claims Reserves have been summarized below:

5.2.1 Liability for Remaining Coverage (LRC)

- The reserves consist of Advance Premium (AP) and Deferred Acquisition Cost (DAC).
- The 365th (time apportionment) method is adopted to calculate the Unearned Premium Reserve (UPR), based on the unexpired insurance period (UP) for each policy.

5.2.2 Risk Adjustment Margin

- The Value at Risk approach is employed to compute the risk adjustment margin at 75th

percentile confidence level.

5.2.3 Claims Reserves

Claims reserves are composed of Outstanding Claims Reported (OCR) and Incurred But Not Reported (IBNR). The methodologies for calculating IBNR reserves include:

- Inflation Adjusted Basic Chain Ladder (IABCL): Adjusts historical losses for inflation and projects future claims based on historical data.
- Bornhuetter-Ferguson Method: Combines estimates from IABCL and assigns weights based on the number of claims reported, particularly useful for underdeveloped cohorts.
- Loss Ratio Method: Provides a simple estimate based on historical loss ratios, applied where data is insufficient for statistical methods.
- Expected Loss Ratio methodology was adopted in reserving for the large loss.
- Large losses are isolated and reserved separately to prevent skewing of data patterns. Parameters for defining large losses vary by business class, with specific thresholds established based on statistical analysis.

5.2.4 Unallocated Loss Adjustment Expense (ULAE)

ULAE on outstanding claims is calculated in accordance with IFRS 17 standards, with a Volume Factor of 1.89% and a Completion Scale of 50%. The total ULAE reserves amount to N38 million across various classes of business.

5.2.5 Inflation and Discounting

Official inflation indices are adopted for calculations, with future expected cash flows for claim payments discounted using the yield curve provided by the Nigerian Actuarial Society.

The methodologies presented in this report establish a comprehensive framework for the valuation of reserves, ensuring both accuracy and reliability in the context of various influencing factors. Additionally, these methodologies are fully aligned with the new IFRS 17 standard, demonstrating Unitrust's commitment to adhering to the latest regulatory requirements and best practices in financial reporting.

5.3 Adequacy of Reserves

Portfolio	2024 Expected Experience A	Actual Experience B	Utilization of reserves C = A - B	Utilization Percentage
Motor	198,938,088	111,792,335	87,145,753	56%
General Accident	420,447,415	334,873,037	85,574,378	80%
Fire	588,137,909	5,491,852,885	-4,903,714,976	934%
Engineering	275,685,161	61,661,253	214,023,908	22%
Marine	183,907,493	77,926,847	105,980,646	42%
Oil & Gas	208,463,123	47,661,252	160,801,871	23%
Bond	2,096,070	-	2,096,070	0%
Agriculture	411,481	-	411,481	0%
Total	1,878,086,740	6,125,767,608	-4,247,680,868	326%

The table above presents the utilization of reserves as of December 31, 2024, on a portfolio basis. The total expected experience was N1.9 billion, while the actual experience amounted to N6.1 billion, resulting in a negative difference of N4.2 billion. This indicates that the actual utilization exceeded expectations by 326%, suggesting that the company faced higher claims or expenses than anticipated across its portfolios.

The observed situation primarily stemmed from a significant increase in the utilization of the Fire portfolio. In 2023, a substantial loss amounting to N 5.3 billion was recorded, with the payment being made in 2024. It is essential to emphasize that this loss constitutes a one-off event that is infrequent and does not represent a regular occurrence within Unitrust's trends.

The significant discrepancies observed between expected and actual experiences across the Fire portfolios can be attributed to substantial losses incurred in 2023.

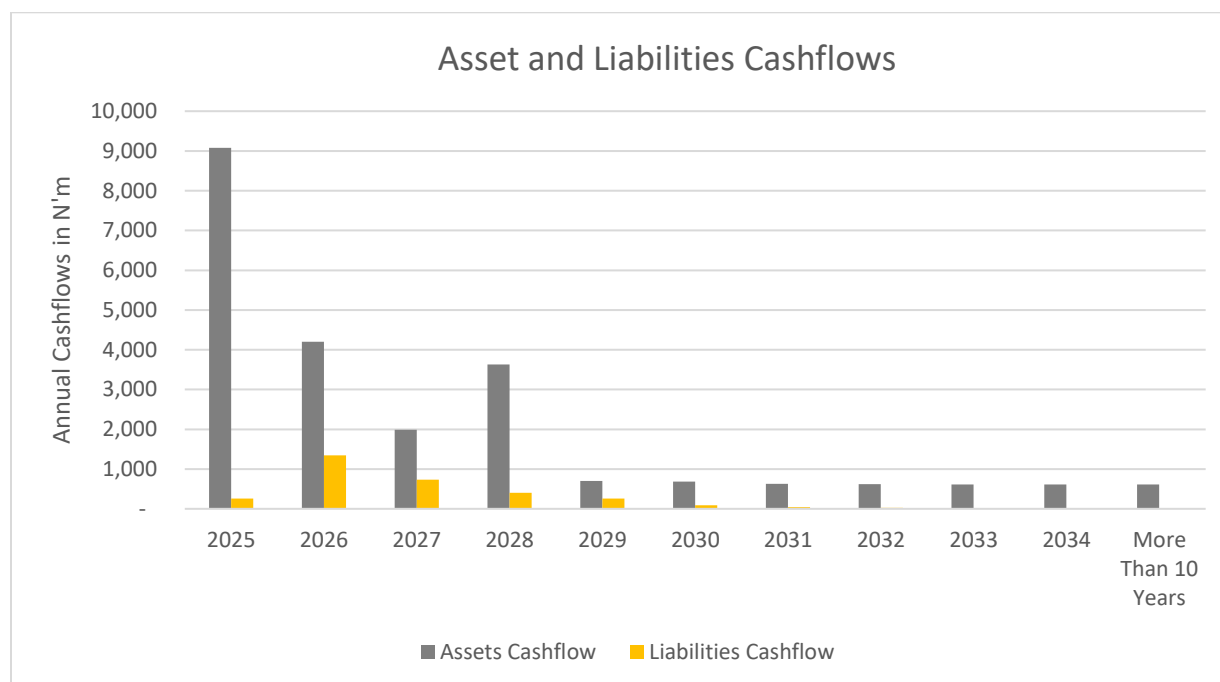
Furthermore, UNITRUST's historical patterns of claims lag have adversely affected the claims experience, resulting in the current overutilization of reserves.

The table below presents a comparison of the reserves relative to 2023, highlighting a significant increase of 285%. This substantial growth can be attributed primarily to the rise in earned premiums across each portfolio, as well as proactive measures taken to mitigate the impact of any potential large losses.

Reserves	Liability (N)	Assets (N)	Net (N)
Total (31 December,2024)	7,108,186,566	(3,935,752,011)	3,172,434,555
Total (31 December,2023)	4,408,343,144	(3,583,479,405)	824,863,739
Percentage Movement	61%	10%	285%

6. Asset and Liability Management

The illustration below presents the projected cash flows for assets and liabilities from 2025 to 2035, providing valuable insights into the financial management strategy over this period:



The asset cash flow analysis indicates a significant inflow of N9. 1billion anticipated in 2025, reflecting a robust liquidity position at the outset. Notably, about 53% of this cash flow is derived from cash and cash equivalents, underscoring the organization's strong liquidity management. The remaining portion of the cash flow is generated from a diversified portfolio, including equity investments, bonds, and reinsurance assets.

The liabilities cash flow also decreases over the years but at a slower rate compared to assets. Starting at N 254.5 million in 2025, it declines to N 16.1 million by 2033. This gradual decline suggests that while the entity may be managing its liabilities effectively, the cash outflows are still significant relative to the diminishing cash inflows from assets.

Both assets and liabilities cash flows show a marked decline in subsequent years.

The cash flow from assets significantly exceeds that of liabilities, which is a positive indicator of financial health and liquidity. This surplus is utilized for reinvestment, operational needs, or to bolster reserves.

7. Capital Management and Adequacy

7.1.1 Balance Sheet Solvency

We illustrate in the table below that from 2022 to 2024, the company has a more than sufficient balance sheet solvency ratio.

Year	2022 (N'000)	2023 (N'000)	2024 (N'000)
Technical Liabilities (Net of Reinsurance)	1,853,449	1,127,213	3,172,435
Shareholders Fund (Free Assets)	8,465,117	11,238,373	13,686,729
Balance Sheet Solvency Ratio	457%	997%	431%

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.

7.1.2 Capital Adequacy Ratio

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	2022 (N'000)	2023 (N'000)	2024 (N'000)
Technical Liabilities (Net of Reinsurance)	1,853,449	1,127,213	3,172,435
Free Assets (allowing for admissible rules)	8,465,117	11,238,373	13,686,729
Minimum Capital Requirement (MCR)	3,000,000	3,000,000	3,000,000
Risk Based Capital (RBC)	N/A	N/A	934,808
Maximum of RBC and MCR	3,000,000	3,000,000	3,000,000
Capital Adequacy Ratio (CAR)	282%	375%	456%

Unitrust Insurance Company Ltd currently maintains a Capital Adequacy Ratio (CAR) of 456%. This figure significantly exceeds the regulatory requirements, indicating a robust capital position. The high CAR suggests that Unitrust Insurance Company Ltd possesses a substantial capital buffer relative to its risk exposure, thereby enhancing its financial stability. As a result, NAICOM can monitor Unitrust Insurance Company Ltd without imposing any additional financial requirements at this time.

In 2024, NAICOM introduced the Risk-Based Capital framework, which determines the minimum amount of capital that insurance companies, including the company, must hold. The RBC framework assesses various types of risks, including underwriting, credit, market, and operational risks, to establish appropriate capital requirements tailored to the specific risk profiles of each institution.

This was introduced in 2024, hence not applicable to prior years.

The table provides a comprehensive representation of how the company's Capital Adequacy Ratio may be influenced by the implementation of the new minimum capital requirements under the Risk-Based Capital Framework.

Year	2024 - New MCR (N'000)
Technical Liabilities (Net of Reinsurance)	3,172,435
Free Assets (allowing for admissible rules)	13,686,729
Minimum Capital Requirement (MCR)	15,000,000
Risk Based Capital (RBC)	934,808
Maximum of RBC and MCR	15,000,000
Capital Adequacy	91%

The analysis above shows that Unitrust did not meet the optimal capital adequacy ratio of 200% set by NAICOM.

DEFINITIONS

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

*Free assets include allowance for admissibility rules

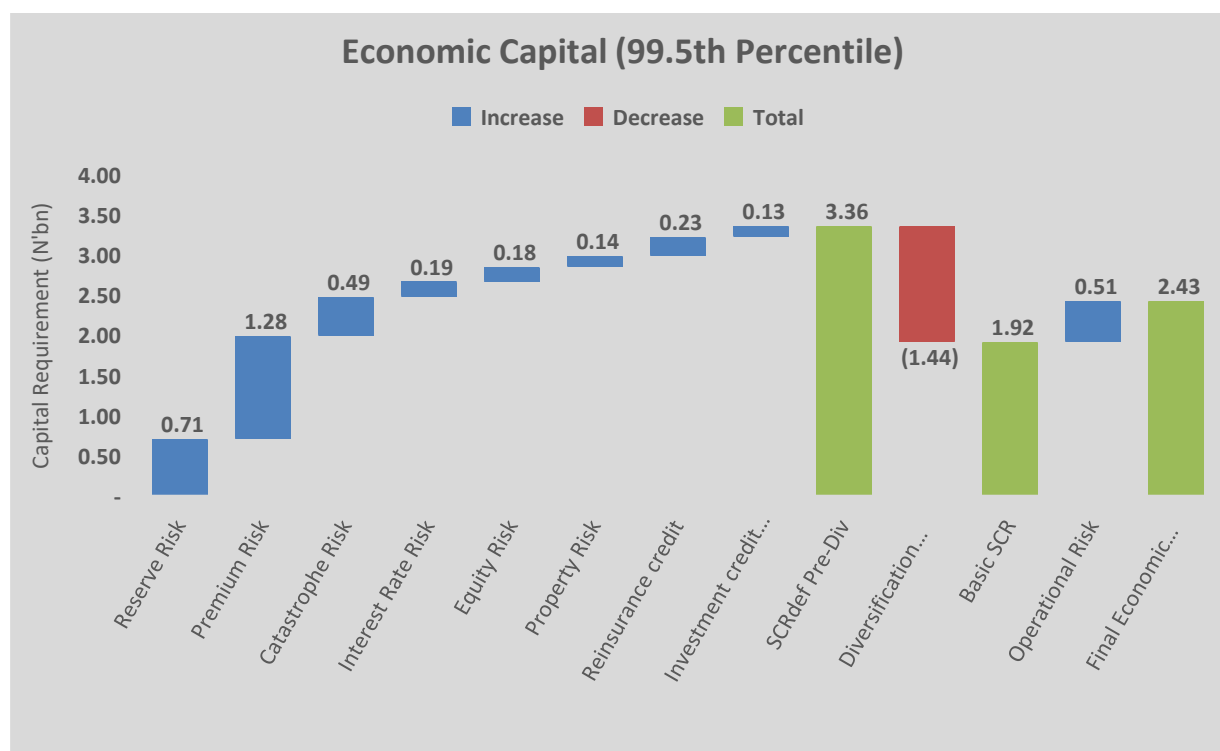
7.2 Economic Capital

- 7.2.1 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.
- 7.2.2 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.
- 7.2.3 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.
- 7.2.4 We have calculated for each of the risks, the amount of capital required as at year end 2024 at 95%, 99% and 99.5% level of confidence.
- 7.2.5 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 2024. 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.
- 7.2.6 We have adopted the following methods in calculating the Economic capital:
- ▶ Value at Risk à this was applied to Market risk and Credit risk
 - ▶ Stochastic approach using Bootstrapping à 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.

- 7.2.7 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.
- 7.2.8 The calculations were based on same data used to prepare the IFRS valuation as at 31 December 2024 and asset information shown in section 2.3 of this report.
- 7.2.9 The following results at 99.5% confidence level were obtained.

Risk Type		Capital Requirement (N)
Non-Life Insurance Risk	Reserve Risk	709,152,571
	Premium Risk	1,284,061,973
	Catastrophe Risk	486,810,264
	Lapse Risk	-
	SCR _{nl} Pre-Div	2,480,024,807
	SCR _{nl} Div Credit	883,553,257
	SCR _{nl} Post Div	1,596,471,551
Market Risk	Interest Rate Risk	190,270,367
	Equity Risk	182,268,162
	Property Risk	137,637,000
	Spread Risk	-
	Currency Risk	-
	Concentration Risk	-
	SCR _{mkt} Pre-Div	510,175,528
Counterparty Default Risk	SCR _{mkt} Div Credit	192,509,256
	SCR _{mkt} Post Div	317,666,272
	Reinsurance credit	234,177,245
	Investment credit & Debtors	134,509,066
	SCR _{def} Pre-Div	368,686,311
	SCR _{def} Div Credit	-
	SCR _{def} Post Div	368,686,311
Undiversified BSCR		2,282,824,133
Diversification Credit		362,852,191
Basic SCR		1,919,971,943
Operational Risk		511,336,806
Final Economic capital		2,431,308,748
Shareholders' Funds		30,970,013,674
% of Economic Capital		1274%



7.2.10 As shown in the table above, the total Economic Capital required in connection with the business profile at 31st December 2024 was N2.43 billion which is less than the shareholders' funds of N30.97 billion.

This suggests that Unitrust Insurance Company Ltd has an excess of capital, providing management with the flexibility to implement its business plan over the forward-looking period. This flexibility is crucial given the inherent material risks, such as catastrophes, and in anticipation of continued challenging operating conditions in the insurance, credit, and financial markets.

8. Pricing & Premium Adequacy

8.1 The table illustrates how premium income has been utilized from 2023 to 2024.

	2023 N'000	2024 N'000
Net Insurance Revenue	3,873,717	6,053,667
Net Claims Incurred	2,030,285	3,066,853
Acquisition Expense	593,194	601,609
Investment Income	968,063	1,577,660
Claims Ratio	52%	51%
Acquisition Expense Ratio	15%	10%
Combined Ratio (Net)	68%	61%
Investment Income (% NPI)	25%	26%

Net Insurance Revenue = Insurance Revenue less net expenses from reinsurance contracts held

Net Claims & Attributable Expenses = Incurred claims and other incurred insurance service expenses less recoveries of incurred claims and other insurance service expense.

The analysis of net insurance revenue reveals a consistent upward trend, increasing from 3.9 million in 2023 to N6.1 million in 2024 indicating Unitrust's effectiveness in generating adequate premium income. This growth reflects the Company's success in attracting and retaining policyholders, enhancing its market position and financial stability.

The combined ratio, an essential indicator of premium adequacy, improved from 68% in 2023 to 61% in 2024. A ratio below 100% signifies profitable operations, with premiums sufficiently covering claims and expenses. The 2024 ratio highlights Unitrust's effective management of underwriting and operational costs, reinforcing the adequacy of its premium income and demonstrating the Company's commitment to financial health and operational efficiency.

The investment income as a percentage of Net Insurance Revenue has shown a consistent upward trend, rising from 25% in 2023 to 26% in 2024.

Metric	Definition
Claims Ratio	Net Claims Expenses/ Net Insurance Revenue
Management Expense Ratio	Management Expenses / Net Insurance Revenue
Acquisition Expense Ratio	Acquisition Expenses / Net Insurance Revenue
Combined Ratio	Sum of Claims, Management Expense and Acquisition expense ratio
Investment Income (%NPI)	Investment Income / Net Insurance Revenue

9. Reinsurance Management Strategy

9.1 Reinsurance Arrangement and Exposure Limits

All reinsurance treaties must meet the following requirements:

- ▶ Insurance and reinsurance business must be domesticated.
- ▶ Foreign placements are permitted only through reinsurance, subject to NAICOM's prior approval.
- ▶ Reinsurers must have a good reputation, at least three years of claims handling experience, and an acceptable Financial Strength Rating (FSR) from a recognized agency.
- ▶ The company shall not accept risks without the necessary financial capacity or reinsurance support to cover potential claims.
- ▶ Reinsurance premiums must be paid according to the contract terms when support is obtained.

9.2 Reinsurance Treaties and Arrangement

- ▶ Treaty slips must be fully signed by all participating reinsurers.
- ▶ Reinsurance treaty cover notes and addenda for the upcoming year must be submitted to NAICOM by December 31 of the preceding year, along with:
 - Signed slips of all reinsurance arrangements.
 - Evidence of premium remittance for the last four quarters.
 - Proof of payment of Minimum and Deposit (M&D) premiums for the upcoming year.
 - Financial Strength Ratings of foreign reinsurers.

9.3 Requirements for Treaty Renewals

- ▶ Up-to-date statistics, including outstanding loss figures as of September.
- ▶ Comments on treaty performance progress.
- ▶ Expected Premium Income (E.P.I) for the coming year by class of business.
- ▶ Details of major losses affecting the treaty.
- ▶ Risk profiles and natural hazard accumulation figures for each zone.
- ▶ Measures to control flood exposure.
- ▶ Payments must be made on all accounts up to the 3rd quarter.
- ▶ Advance payment of Minimum and Deposit premiums for the renewal year.
- ▶ Information on large claims and portfolio profiles to assess the appropriateness of the current reinsurance program.

9.4 General Requirements for Foreign Facultative Reinsurance Arrangements

- ▶ All foreign facultative placements must comply with Section 72 (4) of the Insurance Act 2003, requiring prior approval from the Commission.
- ▶ An Approval-in-Principle (AIP) must be obtained for facultative reinsurance abroad, followed by Post Placement Reports for a Certificate for Offshore Reinsurance (COR).
- ▶ If using a reinsurance broker, a letter of authority must be issued to appoint them for that specific risk, ensuring compliance with local content requirements as mandated by NAICOM.

9.5 Premium Remittance Process

- ▶ Treaty Surplus: Upon receiving a demand note from reinsurers, the company will issue a cheque or transfer the amount due promptly.
- ▶ Treaty Excess of Loss: After pricing negotiations, the company will pay a Minimum & Deposit premium upon receiving a demand note, with adjustments made at year-end for any additional premiums.
- ▶ Facultative Outwards: After signing the offer slip, the company will forward its closings to obtain the reinsurance guarantee policy and remit the amount due accordingly.

9.6 Exposure to the Five Largest Reinsurance Partners

The following is an overview of Unitrust's top five reinsurance partners:

Reinsurer	Country	Proportional Treaty Premium (₦'000)	Non-Proportional Treaty Premium (₦'000)	Facultative Premium (₦'000)	% of Total Reinsurance Premiums
African Reinsurance Corporation	NIGERIA	253,538,347	20,263,682	518,678,874	38%
Continental Reinsurance Plc	NIGERIA	169,025,565	13,509,121	277,952,289	25%
WAICA Reinsurance Corporation Plc	NIGERIA	118,317,895	9,456,385	1,106,212,745	18%
FBS Reinsurance Co. Ltd Nigeria	NIGERIA	67,610,226	5,403,649	101,854,429	10%
Zep Reinsurance Company	NIGERIA	27,044,090	2,161,459	-	4%

9.7 Reinsurance value for money.

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.

2022									
Class of Business	Motor	Accident	Bond	Marine	Fire	Engineering	Oil & Gas	Agriculture	Total
Outflow									
Cash Paid to Reinsurers	2,070	220,646	6,435	130,720	965,824	166,988	1,085,254	322	2,578,259
Inflow									
Reinsurance Contract Assets(AIC)	7,976	169,642	2,667	62,132	717,620	61,971	44,534	63	1,066,605
Value for Money Ratio	385%	77%	41%	48%	74%	37%	4%	19%	41%

2023									
Class of Business	Motor	Accident	Bond	Marine	Fire	Engineering	Oil & Gas	Agriculture	Total
Outflow									
Reinsurance Cost	30,726	326,400	5,636	105,469	1,300,784	245,094	1,021,739	9,061	3,044,908
Inflow									
Reinsurance Contract Assets(AIC)	11,483	231,564	2,255	65,925	1,970,689	128,100	64,662	2,474	2,347,828
Value for Money Ratio	37%	71%	40%	63%	152%	52%	-6%	27%	77%

2024									
Class of Business	Motor	Accident	Bond	Marine	Fire	Engineering	Oil & Gas	Agriculture	Total
Outflow									
Reinsurance Cost	341,873	575,851	9,752	617,088	2,284,680	498,163	1,935,300	11,143	6,273,850
Inflow									
Reinsurance Contract Assets(AIC)	30,034	200,442	638	159,968	572,004	187,028	1,153,315	1,908	2,305,337
Value for Money Ratio	9%	35%	7%	26%	25%	38%	60%	17%	37%

The data presented in the tables above demonstrate that Unitrust's reinsurance arrangements are optimal, as the reinsurance value for money across all lines of business has consistently remained positive over the three-year review period with the exception Bond portfolio in 2024.

However, there was a notable decline in the percentage from 77% in 2023 to 37% in 2024. It is recommended that Unitrust engage in a reinsurance optimization exercise to enhance the robustness of its reinsurance strategy, thereby contributing to an overall increase in profitability.

10. Risk Management

10.1 Risk Governance

Unitrust's describes the risk governance structure and the roles and responsibilities of staff in risk management.

The overall responsibility for managing operational risk resides with the Board through its Audit, Risk Management, and Compliance Committee. To ensure consistent and prudent management of operational risks, this responsibility is divided as follows:

- ▶ **First line of defence - Risk management and ownership**
The Business units, including executive management and staff, manage daily operations. Their key responsibilities include:
 - ▶ Identifying emerging risks and conducting annual risk assessments.
 - ▶ Implementing controls to mitigate risks.
- ▶ **Second line of defence - Risk Oversight**
This line provides independent oversight of key risks (e.g., counterparty default, market, operational, and underwriting risks). Led by the Chief Risk Officer, it establishes policies, coordinates monitoring activities, and identifies trends.
- ▶ **Third line of defence - Assurance Functions**
This line evaluates the effectiveness, adequacy, and consistency of the organization's risk management, internal controls, and governance processes. Internal Audit provides independent assurance to the Board and senior management on the overall effectiveness of the risk management framework.

10.2 Risk Governance Committees

Unitrust has established several management-level committees to oversee various activities, including:

- ▶ Board of Directors
- ▶ Board Enterprise Risk Management Committee
- ▶ Management Enterprise Risk committee
- ▶ Chief Risk Officer
- ▶ Risk identification through:
 - ▶ Business units support area liaison
 - ▶ Project teams

10.3 Risk Management Process

Risk management is embedded in the Company's business strategy and planning cycle and is one of the strategic priorities of the organisation. The Company's business and risk strategy are as follows:

- ▶ Maintaining documented policies and procedures of the control of risk and provision of suitable information, training, and supervision

- ▶ Clearly defining the roles, responsibilities, and reporting lines within the company for Enterprise Risk Management
- ▶ Maintaining risks register linked to the company's business, strategic and operational objectives.
- ▶ Performing an effective review of management's risk assessments and the internal control
- ▶ Including ERM issues when writing reports and considering decision.

10.4 Key Personnel

The following individuals hold managerial responsibility for the risk management framework:

- ▶ Chief Risk Officer
- ▶ Internal Auditor

10.5 Review and Compliance Mechanisms

The risk management framework undergoes annual reviews by Management, with primary responsibility resting on the CRO. The Chief Risk Officer is responsible for conducting comprehensive risk assessments, including identification, analysis, and evaluation of risks, as well as designing effective control measures to manage those risks. Key duties include maintaining risk registers, preparing bi-monthly risk dashboard reports for the Management Enterprise Risk Committee, analyzing control failures, and ensuring compliance with applicable laws and regulations while providing access to internal audit functions.

The Internal Auditor is responsible for auditing risk control measures to ensure their effectiveness and implementation, complementing the risk management function. Key duties include conducting risk-based audits, performing pre-disbursement audits, verifying quarterly management accounts, reporting internal control weaknesses to the Board Audit Committee, and collaborating with external auditors.

11. Conclusion and Recommendations

- 11.1 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.
- 11.2 As of December 31, 2024, the business balance sheet solvency ratios from 2022 to 2024 reflect a strong financial position, with a solvency ratio exceeding 280%. The Capital Adequacy Ratio (CAR) is currently at 456%, significantly above regulatory requirements, indicating a robust capital position and financial stability.
- 11.3 In preparation for the newly proposed capital requirements there would be need to improve capital adequacy. We recommend that proactive steps are taken to increase capital ahead of when the new capital requirements would be in force.
- 11.4 It is noted that Unitrust Insurance Company Ltd financial performance from 2023 to 2024 demonstrates substantial growth, with insurance revenue increasing by 78% and profit after tax rising by 51%
- 11.5 It is noted that Unitrust Insurance Company Ltd anticipates a growth of at least 19.4% in 2025 through diversification and improved service delivery.
- 11.6 We estimate the economic/risk-based capital required to support the business at 31st December 2024 as N2.43 billion, a coverage of 1274% of the shareholder's Funds of N30.97 billion. The company thus holds a cushion above its economic capital which enhances its ability to meet its obligations to policyholders in adverse scenarios.
- 11.7 There was a decrease in the reinsurance value for money, declining from 77% to 37% in 2024, although it remains positive. It is recommended that the client undertake a reinsurance optimization exercise to further enhance its reinsurance program. The projected cash flows for assets and liabilities demonstrate UNITRUST's strong liquidity position and effective financial management strategy. The anticipated surplus in asset cash flows relative to liabilities indicates a healthy financial outlook, allowing for reinvestment and operational flexibility
- 11.8 Unitrust employs a structured approach to ensure premium adequacy, balancing competitive pricing with the need to cover expected claims and expenses. The combined ratio has improved significantly, indicating effective management of underwriting and operational costs, further supporting premium adequacy.
- 11.9 Unitrust Insurance Company Ltd follows a robust Reinsurance Management Framework that ensures all arrangements are thoroughly documented and executed to guarantee the recoverability of claims. The company's reinsurance strategy is designed to align with the Board's risk appetite while optimizing capacity and ensuring regulatory compliance. This approach demonstrates positive value for money across all lines of business.
- 11.10 We are delighted to have conducted this Financial Conditioning Report for Unitrust Insurance Company Ltd. We hope you find this helpful for preparing and submitting a report to NAICOM.
- 11.11 We will naturally be delighted to discuss it with you and make necessary presentations.

Yours sincerely,



.....
Miller Kingsley, FNAS, FSA
Fellow, Nigerian Actuarial Society
Fellow, Society of Actuaries, USA
FRC/2012/NAS/00000002392

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 Unitrust Insurance Company Ltd. 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 2024.

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 UNITRUST INSURANCE COMPANY LTD Limited 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.

Appendix 2 - Reinsurance Arrangement

		SURPLUS TREATY		
CLASS	RETENTION	LINE NO.	TREATY CAPACITY	UNDERWRITING CAPACITY
SURPLUS				
FIRE	300000000	30	900000000	930000000
Terrorism Extension	200000000	5	1000000000	1200000000
Local Facultative acceptance	50.00% OF TREATY CAPACITY			
MARINE CARGO	200000000	10	2000000000	2200000000
Local Facultative acceptance	50.00% OF TREATY CAPACITY			
MARINE HULL	100000000	30	3000000000	3100000000
Local Facultative acceptance	50.00% OF TREATY CAPACITY			
CAR / EAR	250000000	20	5000000000	5250000000
MB/PAR/EE	150000000	25	3750000000	3900000000
BPV	100000000	25	2500000000	2600000000
	10 LINES ADDITIONAL CAPACITY SUBJECT TO SPECIAL ACCEPTANCE			
Local Facultative acceptance	50.00% OF TREATY CAPACITY			
MISC. ACCIDENT.				
Burglary / Housebreaking	75000000	50	3750000000	3825000000
Personal Accident				
Per Person	75000000	40	3000000000	3075000000
Per Known Accumulation	75000000	50	3750000000	3825000000
Cash-In-Transit/Safe	75000000	50	3750000000	3825000000
All Risks	75000000	50	3750000000	3825000000
Fidelity Guarantee				
Per Person	50000000	40	2000000000	2050000000
Per Firm	50000000	50	2500000000	2550000000
Goods-In-Transit				
Own Goods	50000000	50	2500000000	2550000000
General Goods	50000000	50	2500000000	2550000000
Professional Indemnity	50000000	40	2000000000	2050000000
Builder's Liability	50000000	50	2500000000	2550000000
Occupier's Liability	50000000	50	2500000000	2550000000
Property Damage	50000000	50	2500000000	2550000000
Public Liability	50000000	50	2500000000	2550000000
Employer's Liability	50000000	50	2500000000	2550000000
Product Liability	50000000	50	2500000000	2550000000
Director's & Officers Liability	40000000	20	800000000	840000000
GTPL (Bodily Injury / Death)	25000000	50	1250000000	1275000000
Local Facultative acceptance	50.00% OF TREATY CAPACITY			
	NO FAC. ACCEPTANCE FOR D & O			
QUOTA SHARE				
BONDS	180000000	60/40	120000000	300000000
	NO FAC ACCEPTANCE EXCEPT ON REFFERAL			
AGRIC	150000000	30/70	350000000	500000000
	75000000		175000000	250000000
	50.00% OF TREATY CAPACITY			
EXCESS OF LOSS.	DEDUCTIBLES.		TREATY CAPACITY	U/W CAPACITY
Fire Catastrophe Xol	200000000		1000000000	1200000000
Marine Cargo Xol - 1st Layer	200000000		200000000	400000000
Marine Hull	50000000	-	50000000	100000000
Motor/EL/WC/GTPL - 1st Layer	10000000	-	15000000	25000000
Motor/EL/WC/GTPL - 2nd Layer	25000000	-	25000000	50000000
Motor TPBI Only - 3rd Layer	50000000	-	50000000	100000000
Motor GTPL/PL/EL/WC Only - 3rd Layer	50000000	-	250000000	300000000
Oil & Gas				
Operational Risks	USD1,000,000.00	-	USD318,250,000.00	USD319,250,000.00
Construction Risks.	USD500,000.00	-	USD318,250,000.00	USD318,750,000.00
Deductible Buy Back on Oil & Gas.				
Oil & Gas (Run Off Accounts for 2023 Only)	USD750,000.00		USD750,000.00	USD1,500,000.00

PANEL OF REINSURERS				
FOREIGN COVER				
REINSURERS	PROPORTION			NON-PROPORTIONAL
	SURPLUS			XOL
	FIRE		CAR/ENG/MARINE CARGO	
AFRICAN REINSURANCE	37.50%		37.50%	37.50%
CONTINENTAL REINSURANCE	25.00%		25.00%	25.00%
WAICA REINSURANCE	17.50%		17.50%	17.50%
FBS - REINSURANCE	10.00%		10.00%	10.00%
ZEP-REINSURANCE	4.00%		4.00%	4.00%
NCA - REINSURANCE	2.50%		2.50%	2.50%
NIGERIA REINSURANCE	2.00%		2.00%	2.00%
AVENTI REINSURANCE	1.50%		1.50%	1.50%
	100.00%		100.00%	100.00%
LOCAL COVER				
REINSURERS	PROPORTION			
AFRICAN REINSURANCE	55.00%	Leading		
CONTINENTAL REINSURANCE	20.00%			
WAICA REINSURANCE	17.50%			
FBS - RE	6.50%			
NIGERIA REINSURANCE	1.00%			
	100.00%			
AGRIC INSURANCE				
CONTINENTAL REINSURANCE	50.00%	Leading		
WAICA REINSURANCE	30.00%			
FBS REINSURANCE	20.00%			
	100.00%			
OIL & GAS BROKERS				
YOA & GALLAGHER RE				
OIL & GAS REINSURERS				
THOMAS MILLER SPECIALTY	32.50%	Leading		
WAICA REINSURANCE	5.00%			
SIRIUS INTERNATIONAL SYNDICATE 1945	10.00%			
ARCH	18.50%			
AEGIS	10.00%			
HAMILTON	10.00%			
BARENTS	10.00%			
FBS RE	1.50%			
NIGERIA RE	1.50%			
CONTINENTAL RE	1.00%			
	100.00%			
Buy Back Reinsurers - 2023 Run Off				
WAICA - RE	100.00%	Leading		

APPENDIX 3 - Risk Based Capital (RBC)

- A. The Risk based capital was computed in line with the exposure draft on the Risk Based Capital Regulation 2024.

The risk-based capital requirement includes capital for the insurance risk, market risk, credit risk and operational risk and shall be calculated in accordance with the following formula:

$$RBC = \sqrt{((Insurance\ Risk\ Capital)^2 + ((Market\ Risk\ Capital)^2 + (Credit\ Risk)^2 + Operational\ Risk\ Capital}$$

I. MARKET RISKS

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.

Equity Risk	Asset	Capital Charge
	Shares in Listed Companies	30.00%
	Shares in Unlisted Companies	40.00%
Property Risk		
	Investment Property	25.00%
	Owner Occupied Property	25.00%
	Leasehold Property	35.00%
Foreign Currency Risk		
	USD	4.50%
	Euro/Pound	6.00%
	Other Foreign Currency	8.00%

II. Non-Life Insurance risks

Schedule 1 (a) – Insurance Risk – Non-Life

Class of Business	Premium Reserve— Risk Charge	Claims Reserve— Risk Charge
Aviation Insurance	39.00%	29.00%
Engineering Insurance	8.00%	4.00%
Marine Insurance	7.00%	8.00%
Energy Insurance	8.00%	4.00%
Liability Insurance	9.00%	9.00%
Motor Insurance	8.00%	9.50%
Personal Accident	6.00%	9.00%
Workmen's Compensation	18.00%	19.00%
Health and Medical	15.00%	13.00%
Theft Insurance	5.00%	4.00%
Fire Insurance	8.00%	7.00%
Agricultural Insurance	7.00%	7.00%
Bond Insurance	9.00%	27.00%
Miscellaneous Insurance	8.00%	7.00%
Catastrophic Risk	2.00%	2.00%

III. CREDIT RISK

Schedule 3- Credit Risk

Asset Type	Capital Charge
Government Securities	0.00%
Corporate Bonds	12.00%
Commercial Paper	12.00%
Loans to Policyholders	0.00%
Secured Loans	10.00%
Loans to Directors, Employees and Agents	30.00%
Mortgaged loans	5.00%
Term Deposits	0.00%
Cash and Cash Equivalents	0.00%
Outstanding Premiums	
Less than 30days	30.00%
More than 30days	100.00%
Receivables from unrelated parties	
Less than 30days	10.00%
More than 30days but less than 90days	25.00%
More than 90 days	100.00%
Receivables from related parties	100.00%

IV. OPERATIONAL RISK

The operational risk capital shall be used by an insurer as the cushion against losses that may arise from failed processes, systems and people.

The operational risk capital shall be computed as thirty percent of the square root of the sum of the squares of the capital required for insurance risk, market risk and credit risk.

APPENDIX 4 - Capital Adequacy Ratio Range and Implication

Level	Solvency	Description	NAICOM Intervention
Level 1	$x = > 200\%$	Solvency margin (x) is at least 100% above the regulatory minimum solvency requirement of 100%	No action required, normal review of returns continues
Level 2	$x = 150\% - < 200\%$	Solvency margin (x) is between 50% and 99% above the regulatory minimum solvency requirement of 100%	Normal review and intensive monitoring until the Company returns to Level 1
Level 3	$x = 100\% - < 150\%$	Solvency margin (x) is between 0% and 40% above the regulatory minimum solvency requirement of 100%	Query the management and Board regarding the issues raised by analysts and examiners as well as intensive monitoring as determined by the regulator
Level 4	$x \leq 100\%$	Solvency margin (x) is less than the regulatory minimum solvency requirement of 100%	Require the insurer to immediately inject additional funds/capital as well as intensive monitoring as determined by the regulator

Appendix 5: 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

- i. 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.
- ii. The company's insurance funds are mainly invested in money market instrument and hence have a very low exposure to market risks.
- iii. The market risk capital requirement 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

- iv. 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%

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

b. 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.

c. 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: $\text{current yield} \times (1 + \text{Upward stress})$ 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}

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

$$C_{Mkt} = \sqrt{\sum \text{CorrMkt}_{ij} * C_{Mkt_i} * C_{Mkt_j}}$$

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)

e. The correlation matrix used is shown in Appendix 7

d. 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; 95th-percentile, 99th-percentile or 99.5th-percentile of the distribution and the 50th -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 Catastrophe 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 2024 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.

e. 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.

f. 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 limited 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:

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

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

$$BOp = \text{Max} \{Op_{premiums}; Op_{provisions}\}$$

Where

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

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

$Earn_{nl}$ 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 6 - 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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