

JAIZ TAKAFUL INSURANCE LIMITED

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



Building a better
working world

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 of N537 million or 537% of the statutory minimum capital of N100 million. 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 N529 million, implying the shareholder funds coverage of economic capital is 111%. Typically, companies target a minimum coverage of between 120% - 150%, depending on the business size.
- ▶ 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.
- ▶ With a return on equity consistently above risk free rate over the last 3 years, the business is adding positive value to shareholders

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The Board of Directors,
Jaiz Takaful Insurance Limited.
39, Awolowo Road
Ikoyi
Lagos

May 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 Jaiz Takaful Insurance Limited (“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 Jaiz Takaful Insurance Limited 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 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 We illustrate in the table below how Jaiz Takaful books have developed over the year 2021 to 2022.

(N'000)	2021	2022	YoY Movement
Gross Contribution Written	786,553	870,571	11%
Gross Contribution Income	719,036	990,310	38%
Retakaful Expenses	161,924	232,457	44%
Net Contribution Earned	616,666	847,980	38%
Fees & Commission Income	43,584	64,451	48%
Net Underwriting Income	660,250	912,431	38%
Profit before Tax	135,939	359,698	165%
Income Tax	-	-	0%
Profit after Tax	135,939	359,698	165%

There was a significant increase in profit after tax by 165%, arising largely from a 64% and 61% increase in underwriting profit and investment income respectively.

3. Business Overview

3.1 Contribution History

Gross Contribution Written (GCW) has increased with a compounded annual growth rate of 5% from the year 2020 to 2022.

Line of Business	2020		2021		2022	
	₹' 000	%	₹' 000	%	₹' 000	%
Motor	307,304	41%	264,782	34%	227,134	26%
Accident	181,214	24%	293,441	37%	232,983	27%
Agriculture	15,996	2%	24,626	3%	51,148	6%
Marine	51,694	7%	84,474	11%	109,487	13%
Fire	126,720	17%	100,918	13%	173,246	20%
Engineering	68,619	9%	18,312	2%	76,573	9%
Total	751,547	100%	786,553	100%	870,571	100%
% Increase (YoY)			4.7%		10.7%	

Line of Business	2021	2022	YoY Movement
Motor	264,782	227,134	-14.22%
Accident	293,441	232,983	-20.60%
Agriculture	24,626	51,148	107.70%
Marine	84,474	109,487	29.61%
Fire	100,918	173,246	71.67%
Engineering	18,312	76,573	318.16%
Total	786,553	870,571	10.68%

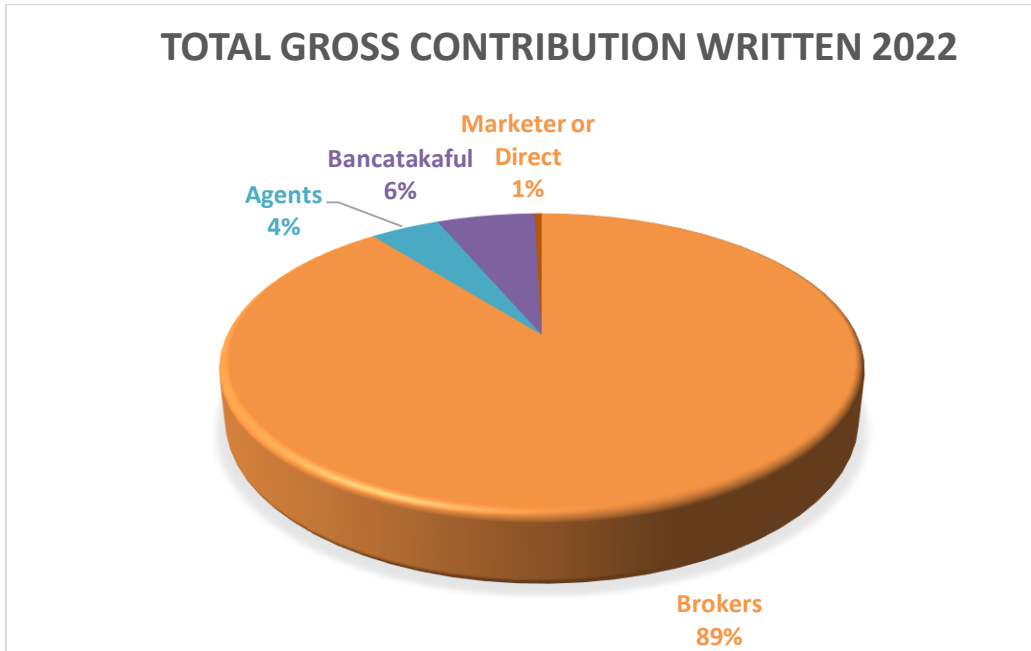
3.1.1 The GCW increased for all the lines of business from 2021 to 2022 except for Motor and Accident leading to a total increase of 10.7% between the years.

Agriculture is currently contributing the least to the total portfolio.

3.2 Distribution Channel

The chart below indicates four (4) channels through which Gross Contribution Written are channeled in.

Experience data shows that a significant proportion of business written by Jaiz Takaful came through Brokers which contributed 89% of the total Gross Contribution Written. Agents contributed 4%, Bancatakaful contributed 6% and Marketers brought in 1% of the total GCW.



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 higher than the risk - free rate over the 3 years under review.

Year	Shareholders Fund ₹'000	Return on Equity (as published in the Accounts) %	Risk Free Rate %
2020	50,163	153%	13%
2021	185,102	73%	12%
2022	537,147	67%	14%

4. Pricing & Premium Adequacy

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

	2020 N'000	2021 N'000	2022 N'000
Gross Contribution Income (GCI)	569,964	719,036	990,310
Net Contribution Income (NCI)	454,109	616,666	847,980
Gross Contribution Written (GCW)	751,547	786,553	870,571
Net Contribution written (NCW)	598,534	618,700	615,661
Net Claims Incurred	106,145	116,029	46,541
Wakalah Fee Expense (Agency Fee)	225,465	235,966	261,171
Acquisition Expense	43,881	74,064	108,648
Investment Income	9,770	15,968	25,674
Claims Ratio	23%	19%	5%
Wakalah Fee Expense Ratio	50%	38%	31%
Acquisition Expense Ratio	10%	12%	13%
Combined Ratio	83%	69%	49%
Investment Income (% NPI)	2%	3%	3%

Based on the above analysis over a 3-year period, it is noted that there has been a consistent decrease in the combined ratios of Jaiz Takaful below 100% which demonstrates pricing adequacy.

There is a risk however that at some point, the insured policyholders begin to ask for more value

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

5. Assets, Liabilities Management

5.1 Insurance Liability

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

Reserves	Gross Reserve (N'000)	Retakaful Assets (N'000)	Net Reserve (N'000)
Claims	121,176	(33,882)	87,294
UPR	289,479	(85,653)	203,826
Total	410,655	(119,535)	291,119

5.2 Insurance Assets

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

Assets	Insurance Funds			
	2022 (N'000)	%	Regulatory Maximum	Meet requirement
Government Sukuk	260,000	29%	Minimum of 20% of policy-holders funds	Yes
Cash & Cash equivalent	637,962	71%	Maximum of 25% of total cash amount domiciled in a CBN regulated institution	Yes
Total	897,962	100%		

The asset mix appears appropriate to ensure the insurance liabilities are met as they fall due.

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 the shareholder/insurance liability coverage over the last 3 years

Year	2020 (N'000)	2021 (N'000)	2022 (N'000)
Technical Liabilities (Net of Reinsurance)	454,495	487,648	291,119
Shareholders Fund (Free Assets)	50,163	185,102	537,147
Balance Sheet Solvency Ratio	11%	38%	185%

There was a significant improvement in the Balance sheet solvency ratio from 2021 to 2022 hence giving comfort that liability obligations will be met when they fall due. We highlight the regulatory solvency position below.

6.1.2 Regulatory Solvency

We show in the table below that the company's admissible assets exceeded the regulatory capital requirement of N100mn throughout the 2 years under review.

Year	2021 (N'000)	2022 (N'000)
Technical Liabilities (Net of Reinsurance)	487,648	291,119
Free Assets (allowing for admissible rules)	644,106	894,202
Minimum Capital Requirement	100,000	100,000
Capital Adequacy Ratio (CAR)	644%	894%
Regulatory Solvency Ratio	132%	307%

6.2 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 a 20% more than expected level of claims

Year	2022- unstressed (N'000)	2022 - Stressed (N'000)
Technical Liabilities (Net of Reinsurance)	291,119	315,354
Free Assets (allowing for admissible rules)	894,202	869,967
Minimum Capital Requirement	100,000	100,000
Capital Adequacy Ratio (CAR)	894%	870%
Regulatory Solvency Ratio	307%	276%

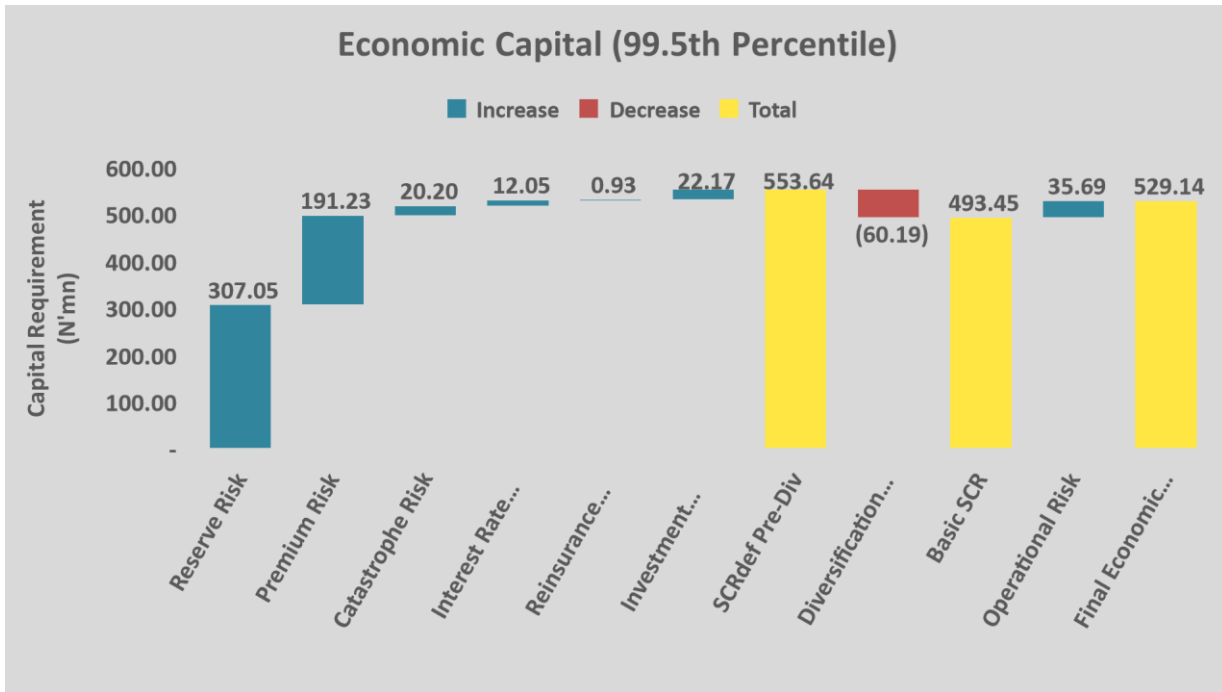
While the regulatory solvency ratio falls to 276%, the Company would still meet its minimum capital requirement in the event of this extreme scenario.

7. Economic Capital

- 7.1.1 The technical figures (technical liabilities, Retakaful 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 2.3 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 N529 million which is less than the shareholders' funds of N537million.
- 7.1.11 This implies Jaiz Takaful has sufficient capital 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. Retakaful Management Strategy

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

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

2020 Accident Year

N'000

Class of Business	Motor	Accident	Agric	Marine	Fire	Engineering	Total
Outflow							
Retakaful Contribution	6,319	42,722	1,838	16,443	35,941	12,592	115,855
Inflow							
Retakaful Commission	-	13,217	361	7,843	14,897	5,696	42,014
Retakaful Recoveries (Incl IBNR)	20,187	30,485	153	865	762	1,049	53,501
Total Inflow	20,187	43,702	514	8,708	15,659	6,745	95,515
Value for Money Ratio	319%	102%	28%	53%	44%	54%	82%

2021 Accident Year

₪'000

Class of Business	Motor	Accident	Agric	Marine	Fire	Engineering	Total
Outflow							
Retakaful Contribution	15,437	37,765	4,096	29,888	52,567	22,171	161,924
Inflow							
Retakaful Commission	819	9,193	819	9,884	18,767	4,921	44,403
Retakaful Recoveries (Incl IBNR)	6,069	27,135	261	1,692	7,319	2,869	45,346
Total Inflow	6,888	36,328	1,080	11,576	26,086	7,790	89,749
Value for Money Ratio	45%	96%	26%	39%	50%	35%	55%

2022 Accident Year

₪'000

Class of Business	Motor	Accident	Agric	Marine	Fire	Engineering	Total
Outflow							
Retakaful Contribution	2,749	65,160	24,014	33,068	85,463	22,003	232,457
Inflow							
Retakaful Commission	-	13,818	4,962	12,029	27,109	6,533	64,451
Retakaful Recoveries (Incl IBNR)	1,353	19,984	2,029	2,346	3,263	4,906	33,882
Total Inflow	1,353	33,802	6,991	14,375	30,372	11,439	98,333
Value for Money Ratio	49%	52%	29%	43%	36%	52%	42%

8.1.2 There is a decreasing trend in the value for money ratio from 82% (2020) to 42% (2022). Significant decrease in the Accident and Fire ratios contributed to this decrease. A positive value for money ratio

is optimal, the higher the value, the better. This implies the Retakaful arrangement for all the lines of business are optimal.

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

8.1.4 The above suggests that the treaty arrangement are optimal. Details of the current Retakaful arrangement are provided in Appendix 3.

8.2 Retakaful 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 Jaiz

Jaiz Takaful reinsures three (3) reinsurers, namely Waica Reinsurance, African Reinsurance and Zep Reinsurance Company which have stable ratings.

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

Reinsurer	Credit Rating
Waica Reinsurance Corporation.	B+
African Reinsurance Corporation.	A
Zep Reinsurance Company	BBB

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.
- ▶ We are thus of the opinion that the company would be able to meet policyholder obligations if and when they fall due and is 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.

10. New Business Plans

10.1 Business Plan Production

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

Jaiz Takaful has plans to grow at about 68.72% and 8.57% in 2023 and 2024 respectively. We illustrate the forecast in the table below. This seems quite ambitious given a historical average growth rate of 8% and the current economic constraints. It is recommended that Jaiz reviews the projected GCW as the year progresses.

Line of Business	2022	2023		2024	
	₹' 000	₹' 000	YoY Growth	₹' 000	YoY Growth
Motor	227,134	398,560	75.47%	432,722	8.57%
Accident	232,983	292,800	25.67%	317,897	8.57%
Agric	51,148	87,451	70.98%	94,947	8.57%
Marine	109,487	375,168	242.66%	407,325	8.57%
Fire	173,246	185,343	6.98%	201,230	8.57%
Engineering	76,573	129,512	69.14%	140,613	8.57%
Total	870,571	1,468,833	68.72%	1,594,733	8.57%

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 7.1) 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	2022 - Actual	2023	2024
Gross Contribution Written	870,571	1,468,833	1,594,733
Gross Contribution Earned	990,310	1,300,763	1,555,514
Retakaful Contribution	(232,457)	(336,411)	(347,066)
Net Contribution Earned	757,853	964,352	1,208,449
Commission income	64,451	102,472	104,694
Net Underwriting income	822,304	1,066,824	1,313,142
Gross claims incurred	113,272	198,857	236,543
Claims recoveries	(66,730)	(97,407)	(114,518)
Net claims incurred	46,542	101,449	122,025
Underwriting expenses	(173,099)	(133,156)	(144,569)
Total Underwriting Expenses	219,641	234,605	266,594
Investment income	25,674	33,066	46,040
Wakalah fee & Other Expenses	(268,641)	(325,191)	(388,879)
Profit before income tax	359,696	540,094	703,709
Income tax expenses	-	-	-
Profit for the year	359,696	540,094	703,709

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

ASSETS & LIABILITIES	2022 - Actual	2023	2024
TOTAL ASSETS	1,049,352	1,372,426	1,583,375
Liabilities			
Takaful Contract Liabilities	410,656	625,711	695,918
Trade payables	100,601	100,601	100,601
Other payables	948	948	948
Total Liabilities	512,205	727,260	797,467
Takaful Fund	369,840	369,840	369,840
Contingency reserves	171,067	279,086	419,828
Fair Value Reserves	(3,760)	(3,760)	(3,760)
Shareholder's equity	537,147	645,166	785,908
Total liabilities and shareholder's equity	1,049,352	1,372,426	1,583,375

The projected solvency margins are as shown below.

Year	2022 - Actual	2023	2024
Technical Liabilities	291,121	466,423	524,322
Shareholders Fund (Free Assets)	537,147	645,166	785,908
Solvency Margin	185%	138%	150%

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 N537 million or 537% of the statutory minimum capital of N100 million. Hence the business is well 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 N529 million, implying the shareholder funds coverage of economic capital is 111%. Typically, companies target a minimum coverage of between 120% - 150%, depending on the business size.
- 12.4 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.
- 12.5 With a return on equity consistently above risk free rate over the last 3 years, the business is adding positive value to shareholders
- 12.6 We are delighted to have conducted this Financial Conditioning Report for Jaiz Takaful Insurance Limited. We hope you find this helpful for preparing and submitting a report to NAICOM.
- 12.7 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 Jaiz Takaful Insurance Limited. 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 Jaiz Takaful Insurance 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 - REVENUE ACCOUNTS - BASE SCENARIO

2023 PROJECTIONS ASSUMING FULL BUSINESS PLAN								
REVENUE & EXPENSES	2023						Total	2022
	Motor	Accident	Agric	Marine	Fire	Engineering		
INCOME								
Gross Contribution Written	398,560	292,800	87,451	375,168	185,343	129,512	1,468,833	870,571
Gross Contribution Earned	332,597	275,513	80,782	326,979	174,143	110,750	1,300,763	990,310
Retakaful Contribution	(13,338)	(63,508)	(22,408)	(142,763)	(66,327)	(28,067)	(336,411)	(232,457)
Net Contribution Earned	319,259	212,004	58,374	184,216	107,816	82,682	964,352	757,853
Commission income	0	14,464	4,630	51,932	22,359	9,087	102,472	64,451
Net Underwriting income	319,259	226,468	63,004	236,148	130,176	91,769	1,066,824	822,304
EXPENSES								
Gross claims incurred	68,286	82,654	6,540	14,759	10,369	16,249	198,857	113,272
Claims recoveries	(22,564)	(52,939)	(1,756)	(11,694)	(3,593)	(4,861)	(97,407)	(66,730)
Net claims incurred	45,722	29,715	4,784	3,064	6,776	11,388	101,449	46,542
Underwriting expenses								
Commission paid	25,564	30,048	6,731	38,501	19,021	13,291	133,156	173,099
Maintenance expense	0	0	0	0	0	0	0	0
Total Underwriting Expenses	25,564	30,048	6,731	38,501	19,021	13,291	133,156	173,099
Total Expenses	71,286	59,763	11,515	41,566	25,797	24,679	234,605	219,641
Underwriting profit	247,973	166,705	51,489	194,583	104,379	67,090	832,219	602,663

2024 PROJECTIONS ASSUMING FULL BUSINESS PLAN								
REVENUE & EXPENSES	2024						Total	2023
	Motor	Accident	Agric	Marine	Fire	Engineering		
INCOME								
Gross Contribution Written	432,722	317,897	94,947	407,325	201,230	140,613	1,594,733	1,468,833
Gross Contribution Earned	419,098	310,644	93,570	401,492	194,032	136,679	1,555,514	1,300,763
Retakaful Contribution	(13,228)	(70,441)	(24,108)	(127,894)	(81,071)	(30,323)	(347,066)	(336,411)
Net Contribution Earned	405,870	240,203	69,462	273,598	112,961	106,355	1,208,449	964,352
Commission income	0	16,042	4,981	46,523	27,330	9,817	104,694	102,472
Net Underwriting income	405,870	256,245	74,443	320,121	140,291	116,172	1,313,142	1,066,824
EXPENSES								
Gross claims incurred	86,046	93,193	7,576	18,122	11,553	20,053	236,543	198,857
Claims recoveries	(28,432)	(59,689)	(2,034)	(14,359)	(4,003)	(5,999)	(114,518)	(97,407)
Net claims incurred	57,613	33,504	5,541	3,763	7,550	14,054	122,025	101,449
Underwriting expenses								
Commission paid	27,755	32,624	7,308	41,801	20,651	14,430	144,569	133,156
Maintenance expense	0	0	0	0	0	0	0	0
Total Underwriting Expenses	27,755	32,624	7,308	41,801	20,651	14,430	144,569	133,156
Total Expenses	85,368	66,128	12,849	45,564	28,201	28,484	266,594	234,605
Underwriting profit	320,501	190,118	61,594	274,557	112,090	87,688	1,046,548	832,219

Appendix 3 - Retakaful Arrangement

CLASS OF BUSINESS	RETENTION/DEDUCTIBLE	TREATY	U/W CAPACITY
GENERAL ACCIDENT			
Burglary Business Premises	N15,000,000 30Lines	450,000,000	465,000,000
Burglary Private Premises	N10,000,000 30Lines	300,000,000	310,000,000
Cash-in-Transit-Banks	N10,000,000 25Lines	250,000,000	260,000,000
Cash-in-Transit-Others	N7,500,000 25Lines	187,500,000	195,000,000
Cash-in-safe- Banks	N9,000,000 25Lines	225,000,000	234,000,000
Cash-in-safe- Others	N7,500,000 25Lines	187,500,000	195,000,000
Goods-in-Transit - Own goods	N6,000,000 20Lines	120,000,000	126,000,000
Goods-in-Transit - General goods	N10,000,000 20Lines	200,000,000	210,000,000
Goods-in-Transit - All Risk	N10,000,000 20Lines	200,000,000	210,000,000
Fidelity Guarantee (Per Person)	N8,000,000 25Lines	200,000,000	208,000,000
Fidelity Guarantee (Per Firm)	N15,000,000 25Lines	375,000,000	390,000,000
Personal Accident - Any one person	N10,000,000 30Lines	300,000,000	310,000,000
Personal Accident - Known Accumulation	N20,000,000 30Lines	600,000,000	620,000,000
Public Liability	N10,000,000 30Lines	300,000,000	310,000,000
Product Liability	N6,000,000 30Lines	180,000,000	186,000,000
Builders/Owners Liability	N6,000,000 30Lines	180,000,000	186,000,000
FIRE	N100,000,000 25 Lines	2,500,000,000	2,600,000,000
1st Layer			
Working Excess of Loss	N25,000,000 Xs N10,000,000		35,000,000
2nd Layer			
CAT Excess of Loss	N65,000,000 Xs N35,000,000		100,000,000
Marine Cargo	N30,000,000 25 Lines	750,000,000	780,000,000
Marine Hull	N30,000,000 25 Lines	750,000,000	780,000,000
ENGINEERING	N50,000,000 20 Lines	1,000,000,000	1,050,000,000
ENGINEERING (Oblig)	After the utilization of Surplus treaty	3,000,000,000	3,000,000,000
Excess of Loss			
Motor (Saloon car)	1st layer		
	N15,000,000 Xs N5,000,000		20,000,000
	2nd Layer		
	N48,000,000 Xs N20,000,000		68,000,000
Motor (Third party bodily injury/Death,workmen	N48,000,000 Xs N5,000,000		
Deductible (for All 4 X 4 pick up, jeeps and trucks 2m, 3m for Mas Transit, Ecowas Brown cad, Truck and Trailers, Buses and jeeps)	Xs 2m, 3m		

APPENDIX 4 - PROJECTION ASSUMPTIONS

1. Commission Rates

a.

Class	AGENTS	BROKERS	BANCASSURANCE
Motor	6.25%	12.50%	5.00%
Accident	10.00%	20.00%	8.00%
Agric	7.50%	15.00%	6.00%
Marine	10.00%	20.00%	8.00%
Fire	10.00%	20.00%	8.00%
Engineering	10.00%	20.00%	8.00%

b. Retakaful Commission

Year	Motor	Accident	Agric	Marine	Fire	Engineering
Commission Income	0%	23%	21%	36%	34%	32%

c. Other Assumptions

Year	2023	2024
Investment Income*	3%	3%

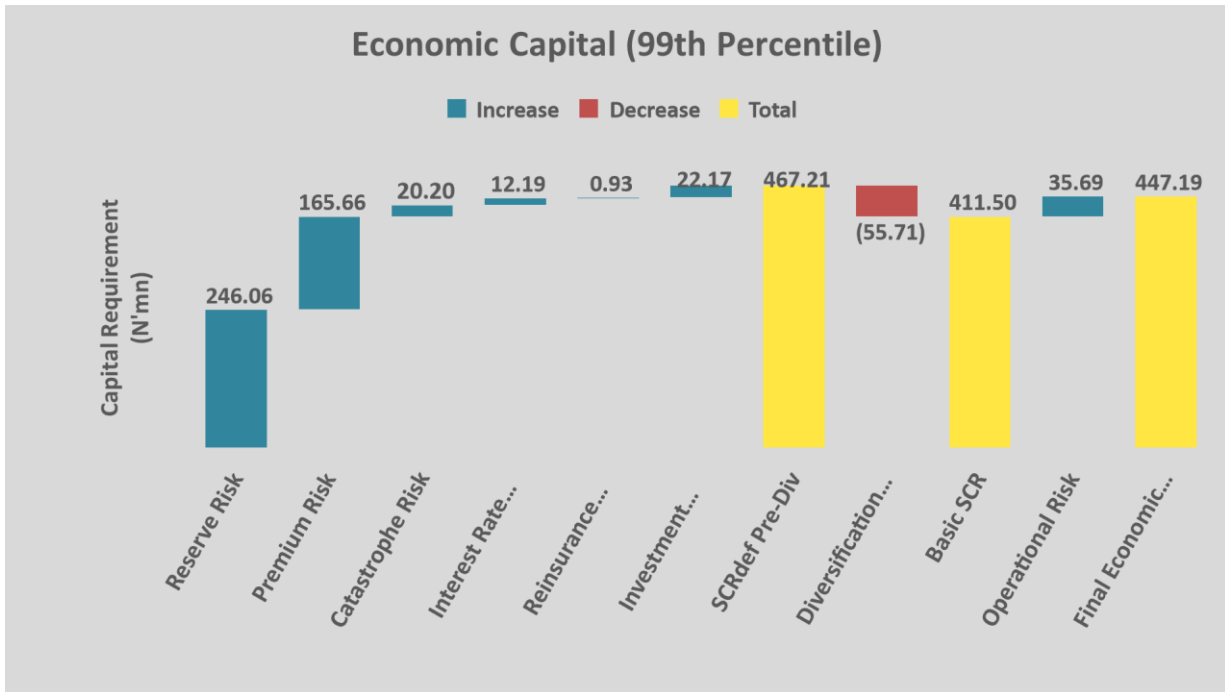
*Derived from the historical weighted average returns

APPENDIX 5 - COMBINED RATIO TABLE

	Year	Motor	Accident	Agric	Marine	Fire	Engineering	Total
Gross Contribution Written	2019	193,125	168,185	4,140	22,012	45,086	12,793	445,341
	2020	307,304	181,214	15,996	51,694	126,720	68,619	751,547
	2021	264,782	293,441	24,626	84,474	100,918	18,312	786,553
	2022	227,134	232,983	51,148	109,487	173,246	76,573	870,571
Retakaful Contribution	2019	(1,516)	(24,280)	-	(6,538)	(25,570)	(4,432)	(62,336)
	2020	(6,319)	(42,722)	(1,838)	(16,443)	(35,941)	(12,592)	(115,855)
	2021	(15,437)	(37,765)	(4,096)	(29,888)	(52,567)	(22,171)	(161,924)
	2022	(2,749)	(65,160)	(24,014)	(33,068)	(85,463)	(22,003)	(232,457)
Gross Contribution Earned	2019	125,110	131,627	1,532	14,804	40,373	15,108	328,554
	2020	229,967	176,352	10,286	36,846	80,501	36,012	569,964
	2021	293,738	179,706	16,691	71,041	109,812	48,048	719,036
	2022	236,947	244,792	56,040	124,412	267,928	60,191	990,310
Net Contribution Earned	2019	123,595	107,347	1,532	8,265	14,804	10,675	266,218
	2020	223,648	133,631	8,447	20,403	44,560	23,420	454,109
	2021	283,676	157,091	13,914	52,753	78,062	31,170	616,666
	2022	240,896	200,322	38,497	106,601	214,684	46,980	847,980
Incurred Claims (Gross)	2019	91,474	124,628	153	2,180	3,354	3,861	225,650
	2020	63,350	113,098	270	2,940	6,856	(2,293)	184,221
	2021	36,934	116,093	10,842	1,665	20,757	9,692	195,983
	2022	20,906	67,943	8,346	2,350	462	13,265	113,272
Incurred Claims (Net)	2019	60,522	64,491	153	(2,999)	2,705	3,216	128,088
	2020	50,244	52,945	16	2,940	3,707	(3,707)	106,145
	2021	25,023	61,439	10,041	(27)	12,730	6,823	116,029
	2022	4,480	5,515	4,480	1,014	2,147	11,714	29,350
Commission Received	2019	-	10,902	368	4,619	12,274	3,731	31,894
	2020	-	13,217	361	7,843	14,897	5,696	42,014
	2021	819	9,193	819	9,884	18,767	4,921	44,403
	2022	-	13,818	4,962	12,029	27,109	6,533	64,451
Underwriting expenses	2019	8,425	29,897	39	2,690	1,792	528	43,371
	2020	22,152	32,690	1,399	7,157	15,312	7,185	85,895
	2021	31,922	41,571	3,508	12,636	18,396	9,615	117,648
	2022	24,113	73,681	8,417	26,133	27,028	13,727	173,099
Acquisition expenses	2019	-	-	-	-	-	-	(43,371)
	2020	-	-	-	-	-	-	(85,895)
	2021	-	-	-	-	-	-	(117,648)
	2022	-	-	-	-	-	-	(173,099)
Claims Ratio (Net)	2019	0%	60%	10%	36%	18%	30%	48%
	2020	0%	40%	0%	14%	8%	16%	23%
	2021	4%	39%	72%	0%	16%	22%	19%
	2022	9%	3%	12%	1%	1%	25%	3%
Acquisition Expense Ratio	2019	7%	18%	21%	23%	71%	30%	4%
	2020	10%	15%	12%	3%	1%	6%	10%
	2021	11%	23%	21%	7%	1%	18%	13%
	2022	10%	33%	11%	15%	0%	19%	14%
Combined Ratio	2019	7%	78%	31%	13%	89%	60%	52%
	2020	10%	54%	12%	18%	9%	22%	33%
	2021	15%	62%	94%	7%	17%	40%	32%
	2022	19%	36%	22%	16%	1%	44%	18%

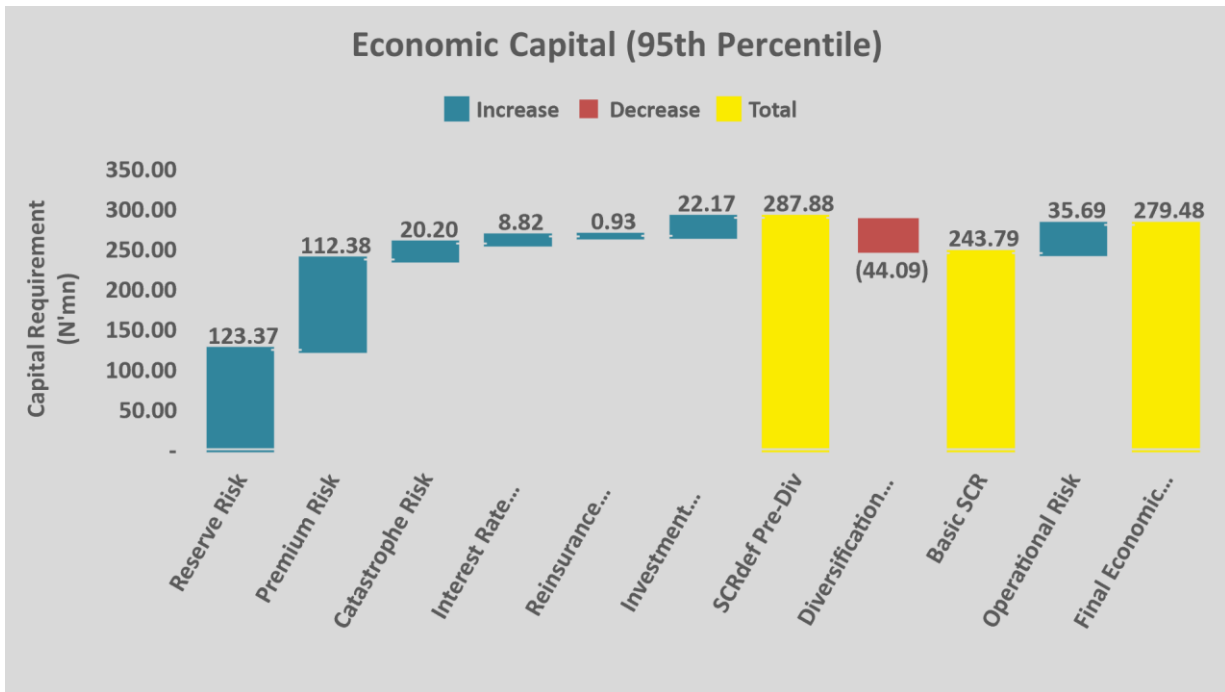
APPENDIX 6: ECONOMIC CAPITAL RESULTS AT 99% CONFIDENCE LEVEL

Should the confidence level be lowered our confidence level to 99%, the total economic capital requirement reduces to N447 million which represents about 120% 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 N279 million which represents about 192% 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 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 Investment Sukuks.
- 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 Investment Sukuks of varying durations.
- V. The stresses used are shown in table 3 above at various confidence levels to all Investment Sukuk yields of varying duration according to the Company Investment Sukuk 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; 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 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 Retakaful 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 Retakaful 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 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.

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

TP_{nt} 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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