INSURERS' CAPITAL ADEQUACY: THE NIGERIAN EXPERIENCE

Soga Ewedemi* and Wondon Lee**
* Clarion University of Pennsylvania, USA
**Daegu University, Korea, and Clarion University of Pennsylvania

Abstract

New minimum share capital requirements were stipulated by the Insurance Act, 2003 for the insurance industry in Nigeria. The industry was still recovering from the significant increase in the capital requirements when in 2005, the government announced new but higher increases that would take effect in early 2007. It is evident that many insurance institutions were not in a position to satisfy the new minimum paid-up capital mandated, and a significant amount of restructuring, including mergers is taking place. This study is designed to explore the rationale for the current stipulation, the process of determining the requirements, and to examine the adequacy of the latest stipulated minimum capital requirement. In this study, the Nigerian insurance industry environment is discussed, and the issues of capital adequacy in general are examined. Moreover, the special considerations regarding capital adequacy with particular reference to the country are highlighted.

Introduction

In order to strengthen the insurance industry financially, government regulators prescribe minimum capital requirements as well as solvency capital requirements. While the stipulations for these financial capital requirements are not limited to insurance companies, the need for the government to protect the insuring public necessitates some measure of strict supervision. One way by which supervision is exercised is to ensure that not only are the minimum capital requirements met at the incorporation of an insurance company, but also that capital is adequate at all times to settle all outstanding and expected losses. It is always a challenge to determine the one minimum capital requirement that would adequately protect the policyholders for all the insurance companies issuing a line of business. The optimal capital requirement should neither be too low that it is inadequate for the larger insurance companies, nor too high to create a financial burden on the smaller companies. While a high minimum capital require-

* Dr. Soga O. Ewedemi Ph.D., is MBA Director and professor of Finance at Clarion University.
** Dr. Wondon Lee is Associate Professor of Insurance.

ment may serve to discourage ventures with inadequate capital from entry into the industry, raising the minimum capital requirement for all existing companies does not appear to protect adequately all the insuring public, nor provide for optimal allocation of capital at the macro-economic level. The European insurers, apparently with the establishment of the European Union, have discussed the same problem extensively, and have prospected for solutions that might be acceptable to the member nations. It has been suggested that the simplistic nature of the European rules may penalize companies that are financially strong at the micro-economic level, while shareholders' equity allocation may be sub-optimal at the macro-economic level (Trainar, 2006).

Background Details

Insurance followed the British traders and firms that came to Nigeria to establish business at the beginning of the 20th century. Initially, the merchant companies represented the British Insurers as their agents, and subsequently, branch offices were established. It was contended that insurance started in Nigeria to serve the British and foreign merchants, and there was little effort to provide insurance for the indigenes. The end of World War II increased the level of trading between Britain and Nigeria, and that was partly responsible for the rapid development in insurance. The period of 1950 to 1968, when many prominent Nigerians became executives in the foreign companies and Nigerian individuals and institutions started their insurance companies and insurance brokerage firms, was referred to as the Era of Consolidation.

It was alleged that the alien insurance companies did not invest in Nigeria but devised means to siphon their premiums out of the country mostly through reinsurance agreements. This resulted in a government promulgation, establishing the Nigerian Insurance Corporation of Nigeria (NICON) in 1969. NICON was authorized to insure government property. In addition to its authority to participate in other forms of insurance, NICON was given a legal cession of 10% of insurance business transacted by other insurers in Nigeria. Nigeria received significant earnings from the oil boom of the early 70s. From 1970 to 1975, premium income increased by 410% to N123 million (equivalent to US$196.27 million). Similarly, the following 10 years, 1975 to 1985 witnessed an increase of 497.5% in premium income to N611.6 million (or US$611.85 million). Nigeria became the largest insurance market in Africa, and the period of 1969 to 1985 was labeled the Golden Age of Insurance.

While NICON enjoyed the 10% legal cession of the insurance business of other insurers, it was observed that NICON was not equipped to devote adequate attention to the reinsurance part of the business. Consequently, Nigerian Reinsurance Corporation (Nigeria Re) was created by the government for the sole purpose of reinsuring all the other insurers. The legal cession was doubled to 20% when Nigeria Re was established, and NICON had to develop other lines of insurance business to make up for the loss of the reinsurance business. It has

been suggested that the loss of the reinsurance business was beneficial for NICON because it was compelled to strive for growth elsewhere rather than wait complacently for the mandatory legal cession from other insurers.

Uche and Chikeleze contended in 2001 that the legal cession of 20% to Nigeria Re had outlived its usefulness, as Nigeria Re dominated the reinsurance industry because of its sheer size. Nigeria Re was launched as a device to ensure some reduction in the amount of reinsurance premium exported, thereby increasing the available capital in the insurance industry. However, Nigeria Re's complete domination was not in dispute as the company accounted for over 80% in each instance, of the assets, the gross premiums, and the insurance fund of the reinsurance industry.

Following the institution of the Structural Adjustment Program (SAP) in 1986, the Nigerian currency was devalued, and although the premium income continued to increase in terms of the local currency, Naira (N), the premium income of N23.02 billion reported in 2000 had a value merely US$210 million. Nigeria, the largest insurance market in Africa, as a consequence of the depression resulting from the SAP, declined substantially. By 1997, the insurance industry contributed only 0.86% to the Gross Domestic Product, Nigeria dropping to the 74th rank in the world.

The Table below shows the number of Underwriting Companies and Brokerage Companies registered for 1986 to 2000:

Table I - Underwriting and Broking Firms 1986-2000

Year	Underwriting Companies	Broking Companies
1986	85	140
1987	89	140
1988	91	197
1989	105	252
1990	109	292
1991	135	332
1992	134	365
1993	132	396
1994	140	429
1995	134	448
1996	133	412
1997	134	448
1998	127	454
1999	124	452
2000	120	352

The practice of insurance, as in most former British colonies, was patterned after the British insurance system. In fact, as it is the practice in Britain, Nigerian insurance companies extend their territorial automobile coverage to Europe including the former U.S.S.R, Canada and several other nations, but not the United States (the litigious proclivity in the U.S. was the primary reason given for this).

Literature Review

Several articles have been written on capital adequacy and solvency, including Castries (2005), Drzik (2005), and Liebwein (2006). Trainar's 2006 article entitled "The Challenge of Solvency Reform for European Insurers" outlined problems that parallel the Nigerian situation. Trainar contended that well-intentioned industry supervisors might jeopardize the health of financially sound insurers through imposition of ill-advised solvency requirements. Arguing that a new formula to measure solvency margin should not be based solely on underwriting risk nor should it be a lump sum, Trainar indicated that there had been some consensus that the formula should incorporate not only the underwriting risk, but also the interest rate risk, market risk and asset liability mismatch risk. In fact, it has been suggested that the market might be a better indicator of exposure risk than the variables that are normally considered in the determination. However, Trainar also stated that the VaR has been proposed as a common yardstick for measuring solvency. Perhaps this is where this study will deviate from the study by Trainar, as VaR appears to have been discredited as a reliable measure because of the inconsistent results it gives.

When capital adequacy is imposed on the insurance industry with minimal warning on account of the provision of the law authorizing regulators to modify the requirements, unless the imposed minimum capital is optimal, the industry as well as the policyholders may not be appropriately served. Trainar also suggested that solvency assessment could be modernized to improve efficiency. Developing a country-specific model would not only provide greater security for the policyholders, it would also simplify the task of the regulators. It is expected that such a model would have universal applicability tailored specifically to incorporate the economic and regulatory climate. The research appears to be timely as European Insurers take on the task of reform of company solvency, referred to as Solvency II.

Trainer cautioned that solvency requirements should serve as a 'shock absorber, and not as an axe'. He suggested that the threshold should not be inviolable, and that a reasonable amount of time, neither too short nor too long, should be allowed for companies to rebuild margin. In addition, he believes that the reinsurance contracts, based on the risk rather than a lump sum, should be taken into consideration.

Castries (2005) contends that capital is perhaps more important to insurers in their operations than to any other industry. He wrote, "capital functions as a basic commodity that must be optimally exploited. And like all commodities, capital responds to the supply and demand dictates of the market." He argues that the cheap cost of capital towards the end of the last decade led to "non-optimization of capital adequacy requirements". The easy access to capital encouraged the relaxation of the underwriting standards and mis-pricing of risk. With the termination of easy access to capital, the industry was forced to revert to prudent underwriting.

Liebwein (2006) argued for internal risk models not only for the purposes of specifying the appropriate capital adequacy requirement, but also as a tool to foster the risk management process. He indicated that the general requirement for internal risk models in Solvency II had not been finalized.

Drzik (2005) outlined the fact that the pricing cycle of the 90s forced insurers to prospect for higher return through greater investment. Unfortunately, the events of September 11, 2001 coupled with increasing reserves for asbestos liability cases and other environment related litigation together reduced the industry capital by about $50-100 billion. In addition, short-term financial markets also robbed the insurance industry of another $100 billion in capital. Finally, the longest period of disinflation resulted in further loss of the industry capital. Drzik warned against the resistance of traditionalists in adopting models, mixed signals from management, overselling of the accuracy of models by 'evangelists', and a structure that may be too centralized or too decentralized.

Schiro (2005) believes that the insurance industry capital bases were depleted as a result of the combination of the 2002 market decline and persistent low yields on bonds. He argues for locating the capital adequacy models below the level of the CEO, and that the process should neither be too complicated nor too simplistic.

To ensure that capital adequacy stipulation is effectively adhered to, von Bombard (2005) discussed the necessity to harmonize the definition of capital. Agreement on what should be included and excluded would facilitate the process of evaluation of capital adequacy.

Bate et. al. (2006) emphasized that the primary objectives of regulation in the insurance industry are consumer protection, market stability, and competitive efficiency. They believe that stochastic modeling might be useful in capital adequacy regulation, but recommended a pre-commitment approach as it may be more advantageous. The authors warned that stochastic modeling may inappropriately hinder the primary objectives outlined above.

Guidelines on Recapitalization and Consolidation in Nigeria

The Insurance Act, 2003 increased significantly the minimum capital requirements for the Nigerian insurance and reinsurance industry. Included in the Act is a provision that the government could modify the requirements as might be deemed fit. Many insurance executives believe that the industry erred in acceding to this provision, thereby finding themselves at the mercy of the government. It was contended that consultation on the increase was minimal, and that the increase was ill-timed given that the industry was still recovering from the requirements imposed in 2003. The table below shows the old and new capital base with the percentage increases:

Table II - Old and New Capital Requirements

	Old Capital Base	New Capital Base	Increase in Percentage
Life Insurance	N150 million	N2 billion	1,233.0%
General Insurance	N200 million	N3 billion	1,400.0%
Composite	N350 million	-	-
Reinsurance	N350 million	N10 billion	2,757.0%

The new guidelines which were effective from the 28th February 2007, defined capital base as "paid up capital and reserves unimpaired by losses". The capital base is comprised of "Paid up share capital, statutory reserves, share premium, and general reserves less unpublished losses of the current year - profit and loss account, etc.". Since 10% of the minimum paid up share capital is required as a statutory deposit, the Table below shows that the statutory deposit increased significantly by the same percentage as increase in the capital base:

Table III - Change in Statutory Deposit

	Old	New	Percentage Increase
Life Insurance	N15 million	N200 million	1,233.0%
General Insurance	N20 million	N300 million	1,400.0%

As 'palliatives' to insurance companies, the government would grant tax incentives and will fast-track the recapitalization/consolidation process. In addition, the Commissioner of Insurance award would be given to the first 10 companies to meet the recapitalization requirements. Only mergers and outright acquisitions/takeovers are permitted, thus precluding group arrangements.

Gross Premium Income

The Nigerian Insurers Association (NIA) comprising the Chief Executive Officers of the well established insurance companies, compiles data from its members. The Table below gives some indication of the level of total written premiums of the member companies for the stated lines of business. The amounts are in the Nigerian currency, Naira. The exchange rate of the Naira without any consideration of the Purchasing Power Parity is approximately N135 to $1.

Table IV - Premiums Incomes from Direct Business for Member Companies of the Nigerian Insurers Association (NIA) 1996-2005

Year	Motor	Fire	General Accident	Marine, Aviation, & Transit	Workmen's Compen-sation & Employer's Liability	Misc., Burglary, Fidelity, etc.	Total
	000000	000000	000000	000000	000000	000000	000000
1996	4,135.5	2,154.3	1,235.0	3,033.3	286.6	7,311.6	18,156.3
1997	5,168.4	2,196.9	1,462.0	2,382.0	286.0	4,276.5	15,771.8
1998	5,437.2	2,606.9	1,471.5	3,421.1	203.7	2,470.9	15,611.0
1999	5,451.0	2,651.8	2,001.8	4,548.7	365.5	1,300.1	16,318.9
2000	6,496.0	3,158.3	2,623.9	3,749.5	510.0	4,218.3	20,755.9
2001	8,652.6	3,595.3	3,320.9	8,425.9	600.6	1,599.7	26,195.0
2002	10,597.9	4,597.6	4,524.5	13,264.6	908.9	1,688.1	35,581.6
2003	13,552.7	5,920,2	6,376.0	15,696.4	1,559.2	2,066.0	45,170.4
2004	14,817.8	7,248.9	8,509.9	20.824.7	694.3	4,385.1	56,480.6
2005	16,222.1	9,373.9	10,384.6	20,905.1	1,305.6	4,320.2	62,511.4
1996 to 2005 Percent. Increase							
	292.3%	335.1%	740.9%	589.2%	355.5%	-40.9%	244.3%

While the Motor and Fire Direct premiums grew steadily during the period 1996 to 2005, for most of the other lines, 1998 appears to be the low year, and significant increases have occurred in all the lines up to 2005, the last year for which the data are available. It will be observed that General Accident premiums increased substantially from N1.472 billion in 1998 to N10.385 in 2005, an increase of 605.72% in 7 years. The percentage increase from 1996 is even higher at 740.9% as shown at the bottom of Table.4. For Workmen's Compensation and Employers' Liability, the increase from the low year of 1998 is 540,9% for only 7 years while the table shows a percentage increase of 355.5% from 1996. Similarly, the percentage increases from the low premium year of 1999 (6 years) and since 1996 for Miscellaneous including Burglary and Fidelity are 232.3% and -40.9%, respectively. It will be observed that the Miscellaneous Line dropped 41.5% in one year, 1996 to 1997.

While the data are for member companies of the Nigerian Insurers Association, it is suggested that they represent practically the entire industry. Inflation might contribute to some of the volatility, but this is expected to represent a minute portion.

The table below is the comparative statistics for premiums, claims, and management expenses for the lines of business shown in Table IV,

Table V - Comparative Statistics of Premiums, Claims and Management Expenses for Member Companies of the Nigerian Insurers Association (NIA) 2001-2005 in million Naira

		2001 million	2002 million	2003 million	2004 million	2005 million
Motor	**Premium**	7,350.2	8,799.7	11,598.5	13,821.7	15,300.6
	Claims	1,442.8	1,953.2	2,327.5	3,036.6	3,456.8
	Expenses	2,260.0	3,793.9	4,643.4	4,398.0	5,674.9
Fire	**Premium**	2,432.4	2,653.5	3,665.4	4,785.1	6,209.3
	Claims	544.9	801.7	844.6	1,156,7	1,067.2
	Expenses	860.8	1,326.6	1,914.3	1,813.4	2,792.0
General	**Premium**	2,685.6	3,569.1	5,269.0	7,325.5	8,745.3
Accident	**Claims**	524.0	700.1	1,782.4	1,799.0	2,171.3
	Expenses	905.9	1,477.9	2.203.0	2,385.5	3,478.5
Marine,	**Premium**	3,569.1	4,448.0	5,636.8	5,709.8	7,664.8
Aviation,	**Claims**	56.6	735.1	725.8	1,020.1	1,336.8
& Transit	**Expenses**	825.3	1,593.6	2,176.1	3,133.7	3,267.3
WC &	**Premium**	334.7	526.4	1,739.6	546.2	914.9
Employers	**Claims**	61.6	164.5	247.2	117.8	167.1
Liability	**Expenses**	54.5	287.8	679.6	130.2	349.8
Misc.	**Premium**	1,276.7	1,250.6	963.6	3,009.2	3,315.0
	Claims	237.8	274.2	145,7	680.1	504.6
	Expenses	237.4	490.2	489.5	1,168.2	1,087.0
Totals	**Premium**	17,648.8	21,247.3	28,872.9	35,197.7	42,149.9
	Claims	2,867.7	4,628.7	6,073.1	7,810.2	8,702.6
	Expenses	5,143.9	8,970.1	12,105.8	13,029.0	16,649.4

In Table V, the premiums are net of reinsurance, and the claims "are under policies relating to current years net of reinsurance recoveries". After the reinsurance adjustment, the net increase in premiums for the 4 years, 2001 to 2005, grew by 138%, which is equivalent to an annual geometric mean growth rate of 24.3%. For the same period, the annual geometric mean growth rates for Claims and Expenses are 31.2% and 34.1%, respectively.

Impact of the 2007 Requirements

As the effective date of the 2007 requirements approached, the expectation was that many companies would fold as they would encounter difficulty in raising the required capital. Only seven (7) companies ceased operations. The industry has however undergone significant restructuring. Twenty-six (26) insurance companies were acquired, while thirty-nine (39) companies merged into fifteen (15) new companies. Of the 120 companies operating in 2000 as shown in Table I, the insurance industry has shrunk to 49 companies in November 2007. The two government-owned insurance companies NICON and Nigerian Re have not been recertified as they are being evaluated for capital adequacy. The 20% legal cession to Nigerian Re has been abolished, and the rest of the industry perceives the move as fostering competitiveness.

Although the industry was thrown into turmoil with the prescribed requirements, it is evident that the resultant restructuring has provided significant financial strength to generate renewed confidence in the stability of the industry. The prevailing view is that the imposed requirements, although opposed as being too drastic, have resurrected the industry in improving the capital adequacy of the companies to the extent that, for the moment, the industry appears to be on a sound financial footing.

Conclusion

With the significant change from year to year in the premiums, claims and expenses for the entire industry, it is not surprising that an individual company's variability would be more dramatic. The data for the firms reflect the expected variability. At first glance, the high volatility suggests that the more stringent capital adequacy requirements may be advisable to provide better predictability and lower the variability. Whatever the cost of the on-going restructuring permeating the industry, there is consensus that capital adequacy has improved, providing greater stability and confidence in the insurance industry. As the industry becomes more financially stable, it is expected that it would be possible to develop a model that will be effective in determining the appropriate capital adequacy requirements.

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