

RISK MANAGEMENT AS A STABILISING FACTOR IN THE NIGERIA OIL AND GAS INDUSTRY CONTENT DEVELOPMENT ACT 2010¹

Four key things stand out from the above topic and these are:

1. Economic Protectionism/Resource Nationalism and Business Development under the Nigerian Oil and Gas Industry Content Development Act 2010 (“NOGICDA”)
2. Market and Capacity Utilization under the Insurance Act 2003
3. Implication and Impact of Local Risk Retention
4. Risk Management and Insurance/Reinsurance placement models

As can be seen, the first subject is what I have listed last, as it is necessary to do so within the context of the theme of this workshop, which is about maximizing opportunities and benefits of the NOGICDA 2010. Knowing also that I am at a forum with an audience that is knowledgeable in insurance with centuries of combined experience, it is necessary to create an appropriate platform for our insurance lingua. I will, therefore, start with the socio economics of oil and its industry.

ECONOMIC PROTECTIONISM/RESOURCE NATIONALISM & BUSINESS DEVELOPMENT

Given that the theme of this seminar is about maximizing opportunities and benefits of the NOGICDA 2010 (hereafter referred to shorthand as the Nigerian Content Act or Local Content Act interchangeably), the starting point must be in its framework. NOGICDA defines itself as “An Act for the development of Nigerian content in the Nigerian Oil and Gas Industry ...”² It requires that any entity as defined³ or otherwise involved on projects, operations, activities or transactions

¹ A paper presented by Adetola Adegbayi, LL.B, LL.M, BL, ACII, ACI Arb at a Workshop organized by the Nigerian Council of Registered Insurance Brokers on “Maximizing the Opportunities and Benefits of the Nigerian Oil and Gas Industry Content Development Act 2010 on Tuesday, 27th September 2011 at the Sheraton Hotel & Towers, Ikeja, Lagos.

² The Preamble to the Nigerian Oil and Gas Industry Content Development Act (“NOGICDA”) 2010

³ S.2 states “All regulatory authorities, operators, contractors, subcontractors, alliance partners and other entities

in the Nigerian oil and gas industry must consider Nigerian content as an important part of overall project development and management philosophy. It goes to state that Nigerian independent operators⁴ must be given first consideration in the award of oil blocks, fields and lifting⁵, with exclusivity being given to Nigerian indigenous companies⁶ for works on land and swamp areas⁷. The clear intention of the Act is, therefore, to create an enabling environment for indigenous entrepreneurship to develop and thrive within one major sector of the economy. This nationalism remains a phenomenon, with different lives dating back to 1971 when Nigeria joined the Organization of Petroleum Exporting Countries (“OPEC”)⁸. This nationalism is also echoed in the proposed Petroleum Industry Bill 2009 which, by legislation, vests oil and gas resources in the Sovereign State of Nigeria⁹, with the aim of promoting Nigerian Content and local social responsibility. The rationale for this is that, because oil is mined from public land, traditional public land ownership right must be respected and usage of the public land deserves financial reward, whether in terms of royalties, rents, profits etc. Thus, production of oil and gas means depleting a public asset base for which income should be collected and used to create other assets to secure future income when the natural resource is gone¹⁰. In this vein, NOGICDA expects to protect this resource nationalism by contracts signed within the oil industry¹¹. Vesting of a right is, however, ineffective unless one has the ability to uphold and exercise the right. In extraction of mineral resources, that is then a question of ability to purchase engineering capacity, which is a question of economic capital required for man and machines. The inability of the land owner to work the land

⁴ As opposed to Oil majors – international and multinational oil companies.

⁵ S.3(1) NOGICDA 2010

⁶ S.3(2) NOGICDA 2010

⁷ This gave a major thrust to marginal oil fields operations being controlled by indigenous companies.

⁸ The objective of OPEC is “to coordinate and unify petroleum policies among member countries, in order to secure fair and stable prices for petroleum producers, an efficient, economic and regular supply of petroleum to consuming nations and a fair return on capital to those investing in the industry.

⁹ S.1 Petroleum Industry Bill 2009 states that “Property and Sovereign ownership of petroleum within Nigeria, its territorial waters, the continental shelf, the exclusive economic zone and the extended continental shelf vest in the Sovereign State of Nigeria for and on behalf of the people of Nigeria”

¹⁰ Every Oil Producing nation has a local content rule whether backed by legislation or contract. Norway prefers to hedge bargaining position by means of insight and competence to control the industry; Canada and the gulf states have rigid major shareholding law, with anti-fronting legislation; Brazil also has rigid requirements on capital investment. Other countries are Russia, Australia, United Kingdom, Trinidad and Tobago.

¹¹ S.6 NOGICDA 2010

has been the bane of the oil industry and continues to handicap the effectiveness of various contracting methods adopted in order to ensure that the nation and its people derive revenue and capital benefits from the oil industry. As the concept of public land ownership suggests, the Federal Government is the major invested partner in virtually all exploration and production ventures, holding proportions ranging from 49% to 60% of the oil land assets for the people of Nigeria; but such co-venturing brings with it the challenges of capital funding; an economic capital risk that the government continues to grapple with till today¹²

There are two main contracting methods within the oil industry. One is the Joint Operating Agreement (“JOA” – a type of joint venture) which attempts to split cost of exploration & production and also share the revenue in line with proportions held. The drawback in the JOA is, however, that there is unequal financial capacity, as, oftentimes, the minority shareholder is more financially capable and more diverse in ability to pool funds together and also supply engineering capacity. The other is the Production Sharing Contract (“PSC” – a type of profit sharing or rent collection) method which requires the operating partner to finance the cost of exploration and production, take out the “cost oil¹³” and share the “profit oil”. Here, also, whilst the financial contribution of the Federal Government is paid for in crude, the balance of payment is often fraught with allegations of financial impropriety because of unequal accounting management/financial audit access - usually leading to what is commonly referred to as “gold plating” of costs by the operating company, which brings it into direct conflict with the government.

Whilst the owner of the natural resource must recognize and complement the financial and engineering contributions of the operating partners, the quest to gain as much control as possible over the oil and gas industry remains a continuing goal; but, without the skills and resources to extract and manage the oil and gas assets by itself, the owner is usually at a net loss, with whatever advantage gained filtering away on the heels of technical and financial

¹² Much like the insurance industry itself

¹³ “Cost Oil” means that the cost of extraction is taken from crude rather than cash, so accounts are adjusted for this.

incapacity¹⁴. The NOGICDA attempts to address these issues by targeting expenditure lines streaming out of the Oil and gas industry in creating an enabling environment for indigenous companies to gain from the opportunities presented within the industry's supply chain.¹⁵ For insurance broking the expenditure line requires 100% spend, whilst for marine insurance, general insurance and life insurance, it is 40%, 70% and 100% spend respectively. The issue of expenditure targeting then brings us to the next point on market and capacity Utilization.

MARKET AND CAPACITY UTILIZATION UNDER THE INSURANCE ACT 2003

The oil and gas industry is about high stakes and reward. To appreciate this, we must be familiar with how the sector is divided.

The oil and Gas industry is divided¹⁶ as follows:

1. Upstream
 - a. Oil Exploration and Development
 - b. Gas Exploration and Development
2. Midstream
 - a. Oil Transportation and Gas Transmission
 - b. Gas Processing
 - i. Liquefied Natural Gas (LNG)
 - ii. Gas to Liquid (GTL)
 - iii. Compressed Natural Gas (CNG)
 - c. Derivative Processing/ Production
 - d. Oil Refining
3. Downstream
 - a. Gas Distribution and Sale
 - b. Petroleum Product Distribution and Storage
 - c. Petroleum Product Retail

¹⁴ Also much like the insurance industry

¹⁵ S.11(3) provides that "all operators, alliance partners and contractors shall comply with the minimum Nigerian Content for the particular project, item, service or product specification set out in the schedule to the Act.

¹⁶ As listed within the overview of the PIB by the PIB Interagency Project Team in July 2009.

On the Upstream and Midstream side, which is the key area for the Nigerian content debate, there are, as at end of year 2010¹⁷, 6 main partners of the JV under JOA¹⁸, 18 main partners under the PSC¹⁹ and 2 service contracts²⁰. The following statistics give a snapshot of the business and revenue profile for 2010²¹

S/N	Activity Type	Value
1	Seismic Data Acquisition	2,700.00 SQKM
2.	Seismic Data Processing	14,862.65SQKM
3.	Total Wells Drilled	96
4.	Total Rigs Hired	25
5.	Barrels of Crude produced	896,043,406 or 2.45mbpd
6.	Natural Gas produced	2,392.83 BSCF ²²
7.	Natural Gas Utilized	1,811.27 BSCF
8.	Natural Gas Flared	581.57 BSCF
9.	Crude Oil and Condensate lifted	899,403,074 or 2.46mbpd ²³
10.	NGL Production	1.265mMT ²⁴
11.	LPG Production	0.161mMT
12.	LPG Lifting	0.148Mmt
13.	Petroleum Refining	4,404,360.00 MT
14.	Petroleum Product Movement from Refineries	4,508,493.71MT ²⁵
15.	Petroleum Product imported	6,639,752.22MT ²⁶

Whilst there isn't clear statistics, Nigeria reportedly has 500 oil fields and 5,284 oil wells²⁷ strewn around and about the Niger Delta. 55% of the fields are reportedly

¹⁷ NNPC 2010 Annual Statistical Bulletin

¹⁸ Shell, Mobil, Chevron Texaco, Nigeria Agip Oil Company, Total Exploration & Production Nigeria and Pan Ocean

¹⁹ Addax, ConocoPhillips, New Cross, Esso (under ExxonMobil), Nigeria Agip Exploration, Total Upstream, Ocean Energy, China National Petroleum Development Company, Petrobras, Shell Nigeria Exploration & Production Company, Nigeria Agip Oil Company, Centrica, BG, Shell Nigeria (SNUD), OANDO, Texaco Outer and Chevron Texaco

²⁰ Agip Energy and Natural Resources (AENR) and Nigeria Petroleum Development Company/AENR

²¹ Note 15, ibid

²² Billion Cubic Standard Feet

²³ Of this, NNPC lifted 43% (388,786,763 barrels or 1.07mbpd)

²⁴ MPN/NNPC Venture at 51% and 49% respectively

²⁵ Value of ₦62.13bn was exported

²⁶ Cost was put at US\$5.5bn with consumption per region as follows: (1) SW = 41.54%; (2) SS = 23.87%; (3) NC = 16.64%; (4) NW = 5.92%; (5) FCT = 4.92%; (6) NE = 4.35%; (7) SE = 2.77%

onshore, 193 of which are producing and 23 plugged-in and abandoned. In terms of revenue contribution to GDP, the oil industry contributed 15.38% of the ₦21.07 trillion recorded for the year ended December 2010, i.e., ₦3.24trillion (or US\$21.6billion)²⁸. If we then extrapolate average premium spend from overall revenue at 1.5%, we can estimate the oil and energy insurance market size at about US\$324m (₦48.6bn). As average 77.5% is meant to be spent within the marine, general, life and insurance broking market, we can then roughly estimate that US\$251.6m (₦37.6bn) is meant to be retained in Nigeria. Excluding life premium and other non-special risks insurances²⁹, available current industry estimate puts 100% GPI at US\$252m (₦37.8bn) on overall portfolio sum assured value of US\$180bn (₦27tn).³⁰

From a risk management viewpoint, the question that immediately pops out is whether or not the market has the capacity to retain portfolio risk value of US\$180bn or ₦27tn? The key element of capacity as we know it is a question of available capital, whether directly owned or bought from reinsurers. Although there is a paucity of statistical information which makes planning difficult, available market capacity on own capital, defined as a proportion of net asset value of an insurance company, is about US\$1.9bn (see Fig.1³¹) on 100% terms, which, using a prudential rule of thumb on 5% of NAV per line of business, puts pure own capacity at about US\$98m.

²⁷ Source: NAPIMS. According to NNPC 2010 annual statistical data, 1,054 wells (excluding some PSC and indigenous wells) were listed as active. SPDC site listed 1,000 producing wells.

²⁸ Compare value of Nigeria's external reserve at US\$33.4bn, according to the CBN HY2011 statistics

^{29,29} Motor Insurance, Workers Compensation and Marine Cargo

³⁰ From Leadway Assurance internal risk profile - Gross Premium Income increased by about 25% in 2010 against prior year 2009, whilst sum insured value increased by 71% in 2010 against prior year 2009.

³¹ NIA Annual Digest 2009 (Published 2010) – There is no public digest or available statistics yet for 2009 and Y10 results are still being released as at the time of report. Conversion was US\$ at 132,117 and 130 to NGN1 respectively for A/CY

Fig.1

Insurers' Capital Source	2006	2007	2008	Y/Y AGR	Y/Y AGR
Paid Up Capital	47,659,783,000.00	100,485,435,000.00	131,080,593,000.00	53%	23%
Share Premium	14,022,401,000.00	42,571,742,000.00	72,370,996,000.00	67%	41%
Reserves	49,402,002,000.00	60,041,026,000.00	47,848,897,000.00	18%	-25%
B/L of P&L	6,088,029,000.00	3,158,455,000.00	4,324,317,000.00	-93%	27%
Total	117,172,215,000.00	206,256,658,000.00	255,624,803,000.00	43%	19%
US\$	887,668,295.45	1,762,877,418.80	1,966,344,638.46	50%	10%
		700,000,000.00	6,900,000,000.00		
		18,000,000,000.00	180,000,000,000.00	98,317,231.92	

When we then position pure own capacity on portfolio sums insured, what we find is that the market capacity is just about 1%, which assuming a maximum portfolio loss of 20% or US\$36bn, puts pure capacity at about 0.27%³². Very few insurers, however, accept risk for their own capital alone³³ and would usually purchase the ability to retain more risks by leaning on reinsurance capital. As reinsurance is an international business, it is therefore important to also consider available international reinsurance capacity and, in particular, that capacity that is supporting the Nigerian market, bearing in mind that the National Insurance Commission defines capacity broadly as follows:

“Capacity = Net retention Plus Reinsurances (include treaties, quota share, line-slip, excess of loss treaties and facultative reinsurance arrangements)”³⁴

For 2010, overall international market capacity for oil and gas insurance was put at US\$6.9bn³⁵. When positioned on 100% terms against portfolio value, available

³² Estimated total number of issued policies is about 80.

³³ Apart from the big reinsurers such as Munich Re, Swiss re, Hannover Re and some insurers like Allianz.

³⁴ NAICOM Letter dated 27th April 2009 and Paragraphs 3.1, 3.2 and 4.0 of the NAICOM Guidelines on Oil and Gas Business 2010. Para 3.1 states that “local capacity” shall be defined as the aggregate capacity of all Nigerian registered insurers and reinsurers which shall be fully exhausted prior to any application for approval to reinsure any Nigerian Oil and Gas risks overseas”. Para 3.2 states that: “an insurer’s capacity for oil and gas policies shall be the net retention of that insurer plus its reinsurance treaty capacity. The reinsurance treaty capacity of a consortium of insurers is also acceptable. Any other reinsurance facility, other than treaty is acceptable as an insurer’s capacity, provided there is evidence that the risk has attached and cover provided by an acceptable security.”

³⁵ US\$3.405bn for Upstream and US\$3.5bn for Downstream from JLT Limited Research

international market capacity would be about 10%. As we know, insurers do not assume total sums insured value and usually attempt to calculate probabilities of a loss to total portfolio by testing the numbers in terms of risk diversity and policy plurality. As such, an international insurer writing risks from different countries of the world would, rather than take a 20% portfolio MPL, assume a much lower portfolio loss using a plural factor of about 20 points conservatively across policies, thus pushing capacity to about 38%. Of course, such capacity can be further stressed by 150% across more diverse revenue lines³⁶, depending on how soft or hard the market is, to yield a theoretical capacity of about 58%. Since capacity for any particular insurer is constant for any given insurance period, lending such capacity to the Nigerian market means a single count per policy risk, given the nature of contracting within the Nigerian oil industry³⁷. Therefore, considering the capacity of international insurers and reinsurers granting their capacities to Nigerian insurers, it is estimated that about US\$700m capacity is available, half of that being the capacity of 2 of the largest world insurers³⁸ and the remaining from a number of Lloyd's market syndicates and other international company markets with variable capacities of between US\$30m and US\$100m. Overall, one can then roughly estimate that Nigerian market has the capacity to accept directly US\$798m worth of risk on variable line basis (Fig.2).

Fig. 2

SIV/Loss Limit	Available Capital	Capacity	Div/Plural Factor	Per Risk Run
180,000,000,000.00	1,966,344,638.46	1.092%	1	1.092%
36,000,000,000.00	98,317,231.92	0.273%	4	1.092%
180,000,000,000.00	6,900,000,000.00	3.833%	3	11.500%
36,000,000,000.00	700,000,000.00	1.944%	20	38.889%
			Inherent Total	39.981%

³⁶ Say general property, engineering etc.

³⁷ Concept of shared venture risk and commonality of assets

³⁸ Ace Global Markets at US\$250m and Chartis at US\$200m

Since S. 49(1) of the NOGICDA provides that all operators as specified in S.2 of the Act “shall insure all insurable risks related to its oil and gas business operations or contracts with an insurance company through an insurance broker registered in Nigeria under the provisions of the Insurance Act, it is pertinent that any insured and any intermediary must carry out “capacity” assessment in line with the Insurance Act 2003³⁹. It is pertinent to point out that the NAICOM Guidelines on Oil and Gas Insurance Business 2010 stipulates prudential standards which, in summary, require that an insurer’s retention, whether whole or within a reinsurance arrangement, must not be more than 5% of the insurer’s shareholders funds for operational risks and 2.5% for project construction.⁴⁰ This in effect means that the aggregate capital allocated to oil and gas risk must not be more than 5% of shareholders funds.⁴¹ This provision is a starting point for any risk management of the underwriting acceptance process by any insurer interested in writing oil and gas insurance.

IMPLICATION AND IMPACT OF LOCAL RISK RETENTION

Whilst there is a tendency to hype the premium opportunity, insurance, unlike any other industries, is a business of risk taking and the premium opportunity is inherently about risk value and loss estimations/probabilities rather than pure “manufactured” profits. In calculating market capacity, therefore, insurers must be focused on the everyday words of risk – identification, assessment, mitigation/control and transfer. Since risk presents itself as an opportunity and a

³⁹ Section 65(7) of the Insurance Act provides that “a person who intends to insure any other³⁹ property located in Nigeria, whether movable or immovable, or any insurable interest or liability in relation thereto, shall place such an insurance with all insurer registered in accordance with this Act who may, subject to the provisions of this Act, reinsure such property or liability overseas where the Nigerian insurance industry lacks capacity to retain the risk. In addition, Section 72(1) further provides that “no person shall transact ... insurance or reinsurance business with a foreign insurer or reinsurer in respect of any life, asset, interest or other properties in Nigeria classified as domestic insurance³⁹ unless with a company registered under this Act”. These sections must further be read in conjunction with S.50 of NOGICDA which recognizes the power of the National Insurance Commission to assess capacity and determine its exhaustion before granting approval to any oil industry player to insure abroad, whilst operating within the bounds of the variable scheduled limits of 40% for marine, 70% for non-marine and 100% for life insurance respectively.

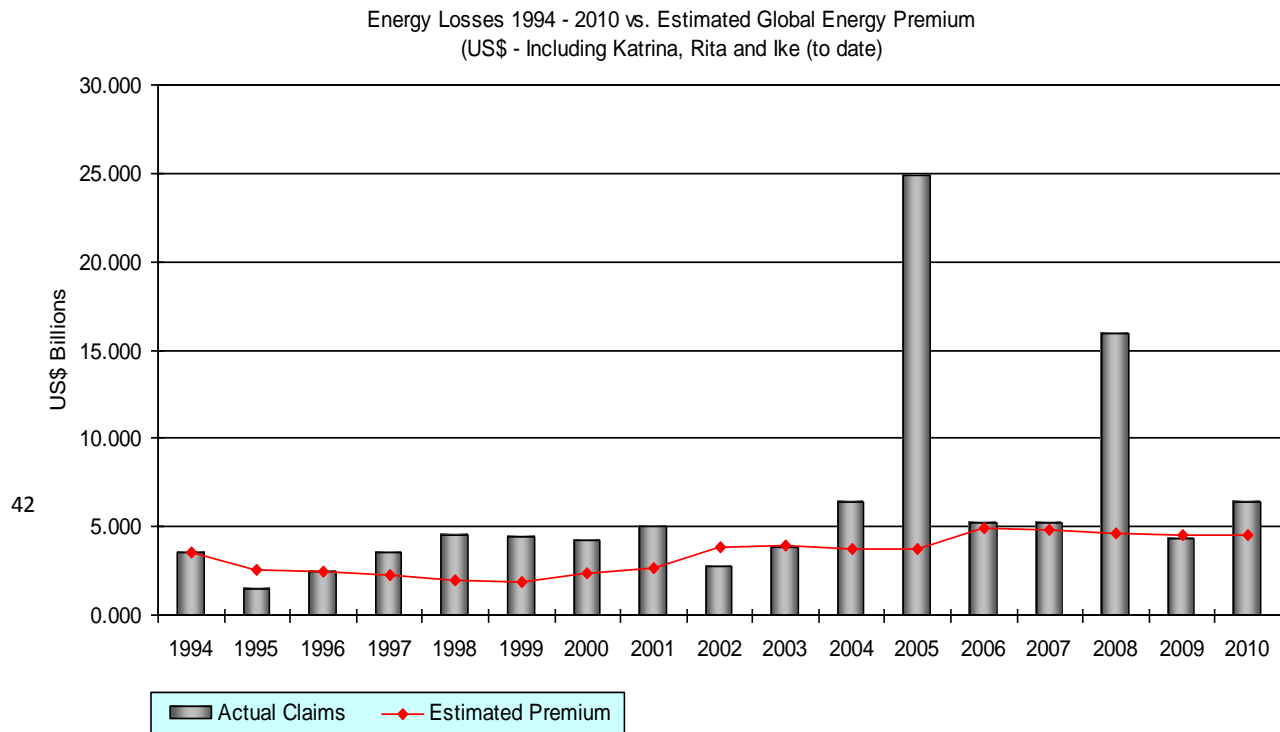
⁴⁰ Para 11 of the NAICOM Guidelines on Oil & Gas Insurance Business

⁴¹ Unfortunately, as the guidelines were issued late in December 2010, the effect of these prudential standards was not felt for 2011 renewal and the industry awaits its application in 2012.

threat to an insurer, the key strategy is in its acceptance process as earlier mentioned. The important question is: does an insurer consider US\$36bn value and avoid accepting the risk altogether or takes an nth of it (say US\$360m) and determine that the minimum premium (say US\$2.52m) is not worth the effort for the risk value of equal amount on per policy basis, assuming a loss on a single policy could easily wipe out the portfolio premium given the level of retentions currently being kept under various reinsurance arrangements of Nigerian insurers?

As the Nigerian insurance market is only just getting into the thick of Nigerian content, it is important to assess the risks identified and presented for underwriting acceptance using historical data from the international market. From available statistics, it would appear that oil insurance is a cyclical business with few good underwriting profit years, more tailored towards achieving break even points, with infrequent, though heavy loss years (See Figs. 3 and 4)

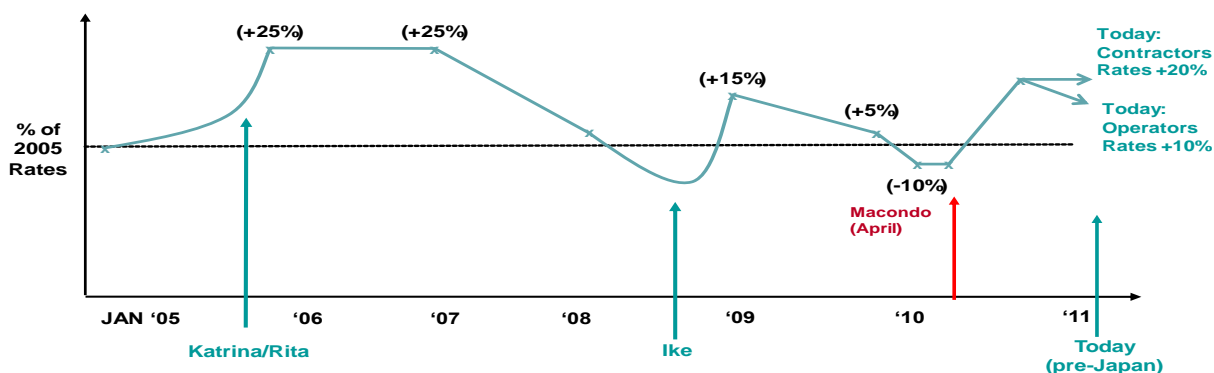
Fig. 3



⁴² Graph credit – JLT Specialty Limited, Crutched Friars, Londo

Fig. 4

International Offshore Exposures - Non-Catastrophe Market

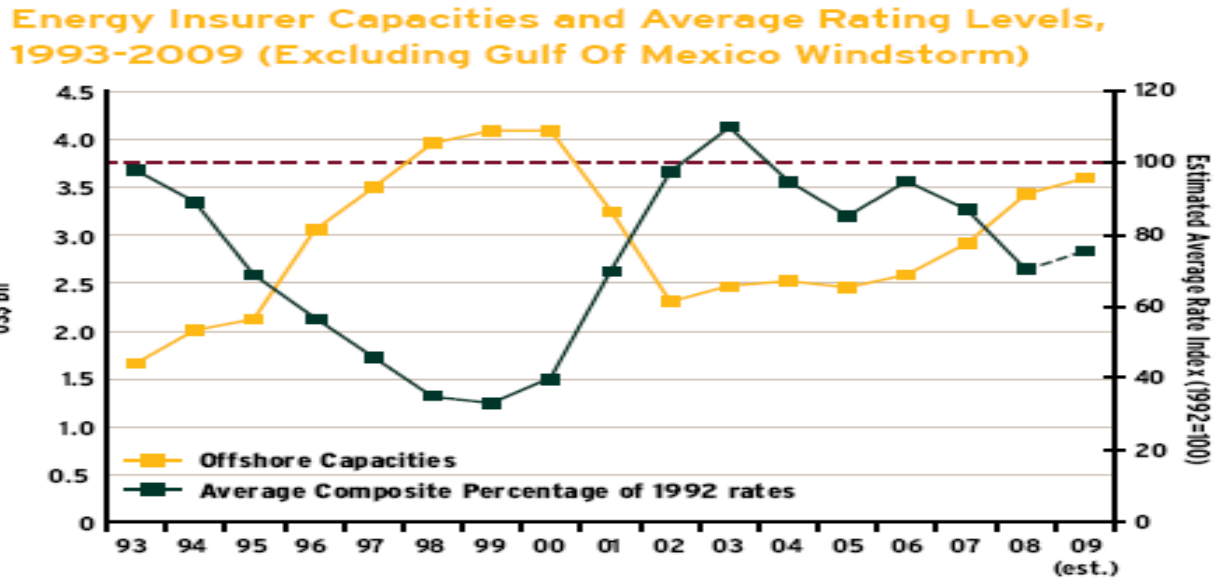


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On a risk assessment basis, it would appear against commonsense to accept such a risk, but the argument is that losses have been better contained within West Africa, which, unlike other parts of the world, is not subject to severe weather hurricanes. However, given the high level of reinsurance deductibles and retentions being kept by Nigerian insurers under various reinsurance arrangements, attritional losses, when aggregated, could become catastrophic for their balance sheets. Equally, as Nigerian insurers depend on capacity from foreign markets, the effect of the international loss cycle shows in the minimum premium charged per risk ceded and in capacity movements (Fig. 5) for or against risks ceded.

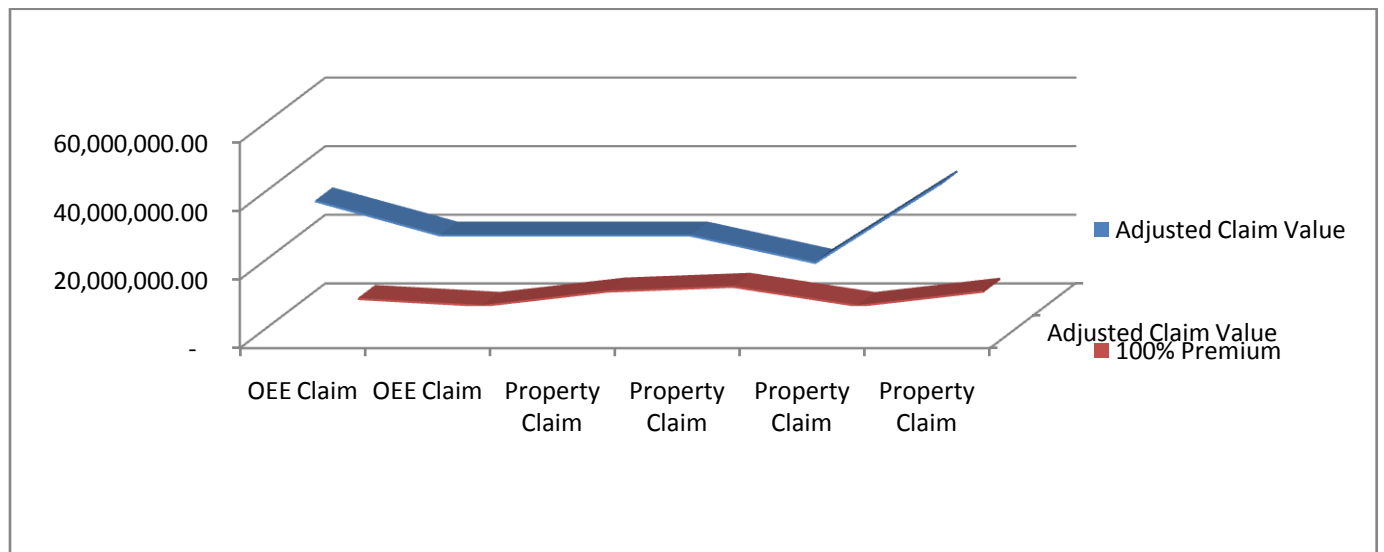
⁴³ Graph Credit – JLT Specialty Limited, Crutched Friars, London.

Fig. 5



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Taking typical Nigerian claims samples for 2 active years, we see the following picture (Fig. 6)



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⁴⁴ Graph Credit – JLT Specialty Limited, Crutched Friars, London.

The above snapshot gives a picture of the implication of Nigerian content on the business of risk underwriting. Given a loss ratio of over 1200%, it would take 5 to 8 good underwriting years to break even and turn marginal underwriting profit, provided the market adopts a conservative risk management model, which conserves good year premiums for the lean years and makes a marginal reserve⁴⁶ release every 9th or 10th year of the underwriting cycle. This is not to say that the market does not have capacity, however, it is to say that capacity is so fluid and fungible within the insurance industry that it is difficult to entrench a fixed retention capacity and it is in careful organic growth and appropriate risk management and underwriting acceptance strategy that the insurance industry can begin to reap the reward of local content. Like the oil industry itself, insurers are bedeviled by capital source and capital flight, thus bringing us neatly to the last section of this paper.

RISK MANAGEMENT AND INSURANCE/REINSURANCE PLACEMENT MODELS

As risk presents as threat and opportunity for an insurer, its risk management should support its financial capacity and must be robust enough to enable it meet its insurance contract obligations whilst delivering returns to shareholders in a way that enhances the reputation of the insurer and promotes the image of the industry as a whole.⁴⁷

How does an insurer ensure that its risk management is rewarding and enduring? The best starting point is to take a typical capacity risk⁴⁸ with SI of US\$6bn and loss limit of US\$4bn, i.e. using an MPL of 67%. Then give 70% of that to the local market at US\$2.8bn with equivalent premium of US\$8.4m. The next point is to consider overall available facultative capacity of the Nigerian market at estimate

⁴⁵ Graph Credit - Leadway Assurance Company Limited Statistics - Combined actual figure is US\$197m, with premium of US\$16m. A particular claim was US\$30m, with premium of US\$37,812.

⁴⁶ NIA 2009 statistics (published 2010) showed a dip in technical reserve, despite involvement in oil insurance. See Note 19, *ibid*.

⁴⁷ Local emphasis tends to concentrate on the short term need to deliver profit against long term business sustainability/profitability

⁴⁸ Capacity risks are risks with potential for total loss, typically offshore production units, a Floating, Production, Storage and Off-take ("FPSO") for example.

US\$798m, bearing in mind that total international market capacity is US\$3.405bn for upstream energy. The result is that the following (Fig.7) will emerge and we immediately see a misalignment in economic risk capital⁴⁹.

Fig. 7

Typical Capacity Risk	Values	Nigerian Retention - US\$
	US\$	70%
Sum Insured	6,000,000,000.00	4,200,000,000.00
Loss Limit	4,020,000,000.00	2,814,000,000.00
Own Capital		98,317,231.92
Reinsurance Facility		700,000,000.00
Retention Error Margin		2,015,682,768.08
100% International Market	3,405,000,000.00	
Market Gap	615,000,000.00	

What is immediately apparent is that market capacity is finite and insurers will potentially retain on their books risks that their balance sheets cannot carry for some years to come. This even more so given the current fairly similar excess of loss reinsurance facilities available in the market with very high each and every loss deductibles, meaning that insurers will take at a top/primary layer and also at the bottom excess (Fig. 8).

Fig.8

Policy Limit	X
Original Deductible	X - 5
First Layer Excess	Y = X - 5 - 2.5
Reinsurance Limit	Z = (Y - 7.5)
Bottom Excess/EM	A = Z - Y
Absolute Net Retained	B = Y + A

⁴⁹ Economic Risk Capital means the amount of capital required by an insurer to ensure support any risk that it accepts tested against economic realities (capital market performance, for example) rather than accounting and regulatory rules to give a realistic representation of solvency.

Since the value of an insurance contract is in the future payment of its liability, it is pertinent to consider models of managing the risk acceptance process in order to close potential policy credit risk gaps. One way is to limit retentions and classify net asset value on the basis of economic risk capital. Another way is by grading insurance companies' financial strength, possibly by assigning a capital adequacy ratio to each company and/or eventually assigning a financial strength rating grade. The former allows the insurer to estimate the true worth of its own capacity and the latter allows consumers to know how volatile an insurer's capital is within any current environment and what level of confidence it represents.

In managing risk also, consumers should be allowed to work with insurers in creating alternative risk transfer (ART) models, using self insured retentions through captive insurance formations⁵⁰. To appreciate this proposal, it is worth learning from the history of oil insurance⁵¹ which shows that the commercial market has never been able to fully absorb the risks presented by the oil industry at a realistic price and it has been by careful use of ART products that synergy is found within a consolidated and fairly cohesive market for both consumers and providers of insurance within the oil and gas industry.

Nigerian Content is laudable and much needed, but the insurance industry requires a pragmatic approach to its development and the starting point is to face the fact that commercial market capacity is finite and there is need to be creative (possibly within a BOX structure⁵²) in order to grow premium volume whilst mitigating the risk of insolvency. The quote below from the international oil industry is instructive:

“1970 was indeed a difficult time for the insurance managers of oil companies ...losses on the so-called energy insurance underwriters presented oil companies with difficult decisions. Given limited overall insurance capacity and extremely high premiums, most oil companies were

⁵⁰ All major international oil companies have insurance captives to manage their group risk. Notable of which are Solen Insurance, Omnium Insurance Limited, Eni Insurance Limited, OIL Limited, Ancon, Sooner and, much recently The Wheel Insurance.

⁵¹ OIL Insurance Limited Bermuda was formed December 1970 in answer to lack of commercial insurance capacity, though excess protections are still bought from the commercial market.

⁵² A Leadway Assurance internal risk model ...

faced with the reality of dealing with very large "self-insured" retentions. Some simply elected to become totally "self-insured" and began establishing catastrophe reserves on their own balance sheets in order to protect their income statements against the shock impact of large uninsured losses. A study team representing various oil companies ... quickly realized that the capital & surplus of the petroleum industry was many times greater than the net worth of the commercial insurance industry. Accordingly, the study team concluded that the petroleum industry should form its own vehicle to provide insurance coverage ... and decided to explore the concept of a mutually supported "spread loss" ...".

What is of key importance from the above quote for the protection and development of Nigerian content in insurance is the strong need for long term reserving in order to protect income stream. The industry is currently poor on reserves, as premiums from oil insurance are treated like general short term business leaving insurers to declare annual profits whilst exposing their balance sheets to IBNER⁵³ losses.

In summary, insurers must be pragmatic about risk acceptance and reinsurance deductible by admitting that commercial insurance/reinsurance market capacity is finite. Once the reality check is done and the fact accepted the following measures may be considered and adopted:

- Own Capital should be appropriately valued for risks accepted⁵⁴
- Capital adequacy ratio should be determined, either alone or together with financial strength rating
- Premium should be reserved on long term liability basis to protect against portfolio loss
- ART products should be integrated as part of overall risk acceptance process
- An overall BOX structure risk acceptance model should be determined to order to close credit gaps.

⁵³ Incurred But Not Enough Reported.

⁵⁴ The international market currently prices the risk, without taking into account country loss exposure to premium basis.