THE ROLE OF FINANCIAL SERVICES IN GHANA'S OIL AND GAS INDUSTRY: THE CASE OF OPERATOR EXTRA EXPENSE INSURANCE

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Abstract

The strike of crude oil in Ghana has a concomitant spark of the role of other sectors in the economy towards the realization of the benefits that ought to spawn from this naturally endowed resource.

The financial services sector, in this connection, insurance, is automatically stimulated to play no mean role in providing insurance services to cover the risks associated not only with the mainstream germane activities of extracting the oil and gas but also other ancillary services that support the exploration, development and production of black gold

This paper discusses the role of operator extra expense insurance in the oil and gas economy, which inter alia covers the extra expenses oil companies may have to incur to control wells out of control or experiencing blowouts or kicks

Keywords: Insurance, blowout, kick, control of well, hydrostatic pressure

Introduction

Insurance provides the security which is necessary to guard against the dangers of the means of production, potential losses or damage to personal or collective property and risks which threaten man's capacity to work. In fact, the development of any commercial or industrial activity depends on the ability to take on or pursue some continuous activity which is not hampered by fear of sudden interruption caused by accidental loss of materials or equipment utilized in that activity.

The normal oil and gas operator cannot afford to take risks which may wipe out his assets or capital. Therefore when he acquires a lease of an oil field, he must also buy immunity from the results of the dangers of the oil well exploding and getting out of control, pool or hydrocarbon fire, flammable vapor cloud explosion , pressure vessel explosion, leakage of flammable toxics or pollutants and associate liabilities to third party injuries and property damage. Technological developments in the oil and gas exploration and production coupled with increasing geographic diversity, increasing global warming and sub-sea difficulties create greater exposures to bigger risks and as such continue to sensitize oil and gas companies of the need to have immunity in the shape of insurance against these ever increasing perils. The BP oil spill in the Gulf of Mexico in April 2010, the Chevron oil spill in Brazil in November 2011and the capsize of an oil platform in Russia due to bad weather on the 18 of December 2011[1] are all critical pointers to an oil and gas operator of the essence of insurance in the business.

As an integral part of the financial services industry, the principal functions of insurance is to collect premiums, invest part of the premiums and pay claims. The investment of insurance premiums is made possible by the very nature of insurance contracts which characteristically, provide a time lag between the receipt of premiums from insurance policyholders and the payment of claims. This provides a leeway for insurance companies to invest and grow premiums collected from clients for the payment of future claims.

Thus, the oil and gas operator needs security for his assets and no security can be regarded as good security unless it is insured, and safely so. Again, credit is the lifeblood of industry and commerce but security is the foundation of credit and insurance an essential of security. The need for security increases as the amount of resources increases and hence insurance becomes more and more imperative. Insurance, a veritable and integral aspect of the financial services industry, is therefore critical to high-value, high-volume industries such as oil and gas and as such its importance in this connection cannot be overemphasized.

Conceptual framework

The financial services industry covers a broad spectrum of organizations that are involved in the management of financial resources. It is made up of numerous financial institutions that provide financial products and services to the public. Financial institutions include Banks, Savings and Loans Institutions, life and health insurers, property and casualty insurers, security brokers and dealers, private and state pension funds, and financial companies.

Banks accept deposits and create credits through the intermediation between lenders and borrowers as well as offer their customers numerous professional services such as dealing in securities, exchanging foreign currencies, providing corporate advice, arranging leasing, organizing international trade finance and offering risk management services. The stock brokerage, an investment dealer in the securities of a firm who, inter alia, liaises between buyers and sellers(institutional and retail investors) of securities to consummate investment transactions[2] in both the primary and secondary financial markets, plays no mean role in the financial services industry.

Insurance is *a* financial arrangement that redistributes the costs of unexpected losses. It is the pooling of fortuitous losses by the transfer of risks such as premature death, ill health, disability, personal liability, theft and destruction of property from a party called insured to another called insurer , the insurer agreeing to compensate the insured for such losses and to provide other financial benefits on their occurrence or to render services connected with such risks[3]. Pooling, the spreading of losses incurred by the few over the entire group so that in the process average loss is substituted for actual involves the grouping of large numbers of exposure units so that the law of large numbers can operate to provide an accurate prediction of future losses. Pooling therefore implies the sharing of the losses of the entire group and the prediction of future losses with accuracy based on the law of large numbers[4]. Insurance contracts always involve risk transfer from the insured to the insurer who characteristically, is in a stronger financial position to pay the loss than the insured.

Ghana's financial services sector can be congealed into three main categories namely banking and finance (which includes non-bank financial services and forex bureau,) insurance and financial and capital markets . The Ghana government's aim of revamping its financial services sector through the Financial Sector Strategic Plan (FINSSP) in 2003, has provided, inter alia, countless investment opportunities for the emergence of a plethora of universal, investment and development banks, insurance and reinsurance companies, mortgage finance institutions, venture capital and leasing companies, hire purchase and export finance companies, mutual funds, investment trusts and savings and loans companies[5]. This has contributed to annual increments in total assets of the banking industry and in 2008 this was 46.2% compared to 38.1% in 2007 a year earlier[6].

The regulatory and supervision of the players in the financial services industry geared towards strengthening and injecting sanity into it, is captured under FINSSP II with institutions such as Bank of Ghana, Securities Exchange Commission, ARB Apex Bank, the

Ghana Cooperative Credit Union Association and the National Insurance Commission playing central roles in this connection. Banks, nonbank financial institutions and forex bureau operate within the legal framework of the Bank of Ghana Act, 2002, Act 612, Banking Act, 2004, Act 673 and the Financial Institutions (Non-Bank) Law, PNDC Law 328. The Securities Exchange Commission governs the securities industry within the framework of the Securities Industry Law of 1993, PNDC Law 333. As a miniature central bank under the supervision of the Bank of Ghana, the ARB Apex Bank supervises rural and community banks in Ghana, itself being regulated by various Acts of parliament and legislative instruments including the ARB APEX Bank Regulation, 2007 (L.I .1825).

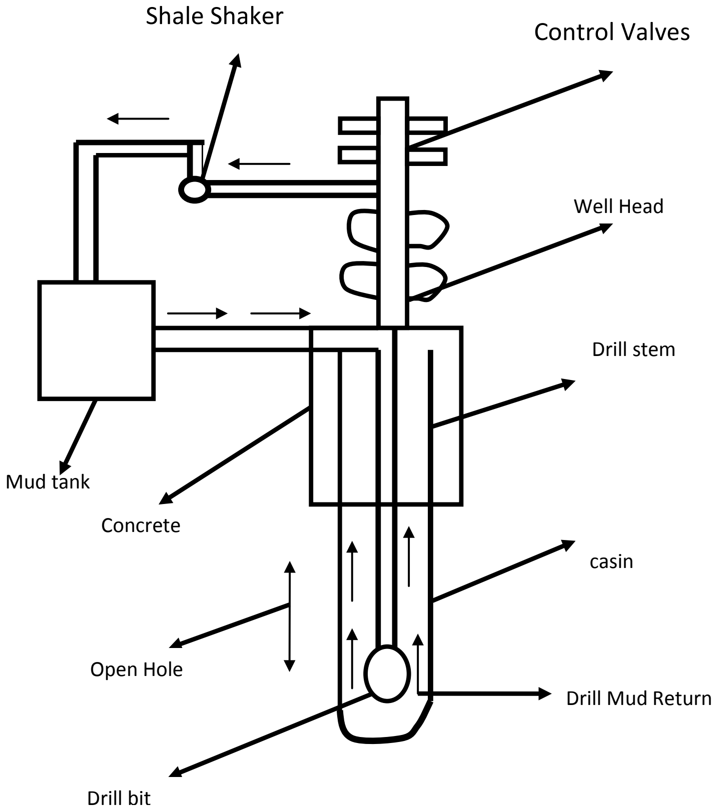
The government of Ghana has passed a number of laws to ensure the success of the financial sector reforms to wits The Long Term Savings Act, 2004, Act 679, Venture Capital Fund Act, 2004, Act 680, Insolvency Act, 2006, Act 723, Credit Reporting Act, 2006, Act 726, Insurance Act, 2006, Act 724 and Pensions Act, 2008, Act 766.

Ghana's National Insurance Commission, the sole regulator of insurance business in the country is obliged by statute to perform a series of functions stipulated under 2(2) of the Insurance Act,2006 as follows:

- To license insurers and insurance intermediaries who transact insurance business in Ghana.
- To approve and set standards for the conduct of insurance business and insurance intermediary business.
- To encourage the development of and compliance with the insurance industry's codes of conduct.
- To approve, where appropriate, the rate of insurance premiums and commissions in respect of any class of insurance.
- Provide a bureau to which complaints may be submitted by members of the public for resolution.
- Arbitrate insurance claims referred to the commission by any party to an insurance contract.
- Recommend to the Minister of finance proposals for the formulation of policies for the promotion of a sound and efficient insurance market in Ghana.
- Supervise and approve transactions between insurers and their reinsurers.
- Undertake sustained and methodical public education on insurance.
- Take action against any person carrying on insurance business or the business of insurance intermediaries without a license.
- Maintain contact and develop relations with foreign regulators and international associations of insurance supervisors and maintain a general review of internationally accepted standards for the supervision of insurers and insurers intermediaries.
- Supervise, regulate and control compliance with the provisions of the Insurance Act, 724, made under it and any other enactment relating to insurance.

Oil and gas operations are essentially categorized into exploration, drilling, production, transportation, refining, processing and marketing[7]. Exploration, the search for reservoir of oil, drilling, the penetration of a productive formation after the casing is set and production, the bringing of the well fluids to the surface[8] are the activities in oil and gas operations that throw up risks against which Operator Extra Expense insurance cover has to be effected.

Oil wells may be either on land or under water, offshore in the oceans. Thus, petroleum occurs in certain geologic formations at varying depths in the earth's crust and in many cases elaborate, expensive equipment is required to get it from there. The crude or unrefined oil is typically collected from individual wells by small pipelines. At the bottom of the drill stem in the diagram below is the drill bit which drills the hydrocarbon rock and dislodges it so that drilling fluid can circulate the fragmented materials back up to the surface.



Operator Extra Expense Insurance

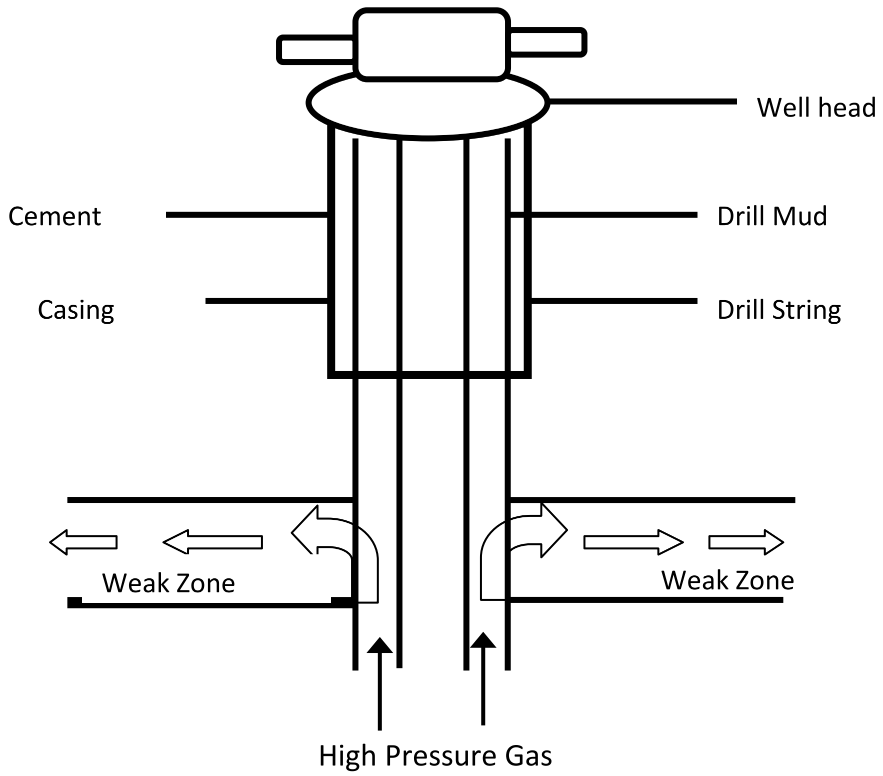
This is a specialized policy available to oil or gas well operators that covers the cost of regaining control of a well that has gone wild[9], a wild well being a well that has blown out of control and from which oil, water or gas is escaping with great force to the surface[10]. To prosecute drilling or production, it is important that the well be put under control first and the finance needed to do this is provided by the Operator Extra Expense Insurance. Although cover for controlling a wild well may be provided also by an Energy Exploration and Development (EED 8/86) policy, the Operator Extra Expense Insurance is essentially the policy form that has gained considerable currency lately, providing coverage for the expenses incurred in controlling an oil or gas well experiencing a kick or blowout.

Technical Aspects

A proper understanding of the meaning and coverage provided by this policy exacts a comprehension of certain terminologies. A blowout is an uncontrollable flow of gas, oil or other well fluids into the atmosphere or into an underground formation. A Blowout may occur when the formation pressure exceeds the pressure applied to it by the column of drilling fluid and rig members fail to take steps to contain the pressure.[11]. In other words, a blowout is a condition in which a well builds up sufficient pressure at the bottom of the hole and causes a sudden, forceful eruption or explosion which cleans out the well and causes it to go out of control. The implication is that a well experiences a blowout when the hydrostatic pressure of the drilling fluid(mud, water) being exerted downward is thrown into disequilibrium by the pressure exerted upward from below by the oil, gas or water in the wellbore. Hydrostatic pressure is the force exerted by a body of fluid at rest. It increases directly with the density and the depth of the fluid and in drilling, the term refers to the pressure exerted by the drilling fluid in the wellbore[12] . A well is therefore under control when the hydrostatic pressure is balanced such that necessary operations may be performed in the wellbore, the converse being the well out of control in which case the hydrostatic pressure becomes imbalanced due to gas, oil and saltwater penetrations such that operations may have to be stopped and the drilling fluid weighted up to regain control of the well. The expenses incurred in weighting up the drilling fluid is covered under an operator extra expense insurance.

Before a well blows out, it kicks. In other words, precedent to a blowout is a kick, that is an entry of water, gas, oil or other formation fluid into the wellbore during drilling, workover or other operations[13]. It occurs because the pressure exerted by the column of drilling or other fluids in the wellbore is not great enough to overcome the pressure exerted. by the fluids in a formation exposed to the wellbore. If immediate steps are not embarked upon to either control the kick or kill the well, a blowout ensures.

Quite apart from a blowout occurring above the ground surface, it could also take place underground in a situation where the pressure from the wellbore forces the formation fluids to penetrate a weaker zone in the neighborhood of the formation, an implosion rather than an explosion. The following diagram that shows the configuration of an oil and gas well depicts succintly an underground explosion.



The interpretation of what constitutes a blowout and wells having gone out of control could be a source of dispute between insurance companies and operators of oil and gas wells and this may end up in courts for judges' interpretations and final judgments. Where the insurance policy document does not explicitly define a blowout or ' well out of control', judges are apt to favour the operator in their judgment. In the US case *Creole Explorations Inc Vs Underwriters at Lloyd*'s(1964)[14], in which the policy document did not expressly define a blowout or well out of control, a well insured under the policy was alleged to have experienced a blowout in 1958 by the assured or operator. The supreme court adopted a definition for blowout which was in favor of the operator as: ‘a blowout occurs whenever pressure from the formation overcomes hydrostatic pressure exerted by the mud column and forces formation fluids to the surface’. In another case, Sutton Drilling Co. Inc Vs. Universal Insurance Co, the policy document patently defined a blowout as: ‘ a sudden uncontrollable expulsion of drilling fluid, gas, air, oil or water, from within the well erupting above the earth’s surface and resulting in the well completely out of control and rendering the use of any blowout preventer equipment inoperative or ineffective’.

To forestall potential ambiguities and disputes that may spawn from the interpretation of blowout or well out of control, most Operator Extra Expense Insurance policy define blowout thus:

‘sudden, accidental, uncontrollable and continuous expulsion from the well and above the surface of the ground of oil, gas or water due to encountering subterranean pressures and resulting in the well getting completely out of control’[15].

One realizes therefore that from insurance standpoint, a well is considered out of control when there is a continuous, unintended flow from the well of drilling fluid, oil, gas or water above or below the surface of the ground which cannot be promptly stopped by the use of the blowout preventer, and or storm chokes, wellheads, or safety valves installed in or on the well or which cannot be stopped by weighting up the drilling fluid or by the use of other conditioning materials in the well. Also, if the flow cannot be stopped by safely diverting it into production, the well is deemed out of control.

A well is deemed to have been brought under control if the flow stops, is stopped or can be safely stopped or can be safely diverted into production. Again, if the operator can resume hitherto operations such a drilling, deepening, servicing, working over, completing or reconditioning the well, it is deemed to have been brought under control. Apparently, this calls for incurrence of expenses and this is in the realm of operator extra expense insurance.

Basic Cover

The policy covers expenses incurred by an operator in regaining control of an oil or gas well or wells being drilled which become wild or get out of control resulting in a blowout. The policy is generally not a physical damage one but rather seeks to reimburse oil and gas operators for expenses they may incur to regain control of wells that may experience blowouts. Well(s) insured include oil and gas, injection or disposal wells while being drilled, deepened, serviced or worked over, completed or reconditioned, well(s) while producing, shut-in, plugged and abandoned. The insurer, subject to the policy’s limit of liability, terms and conditions, agrees to reimburse the insured for actual costs and expenses incurred by the insured in regaining or attempting to regain control of any well insured under the policy which gets out of control including any other well(s) that get(s) out of control as a direct result of a well insured under the policy getting out of control until the well(s) is (are) brought under control.

The expenses reimbursable under the policy include cost of materials and supplies required, the services of individuals or firms specializing in controlling of wells, directional drilling and similar operations necessary to bring the well(s) under control, including associated costs and expenses incurred at the direction of regulatory authorities to bring the well(s) under control.

The basic policy also covers re-drilling costs, where the well is lost as a result of a blowout. This covers the costs to re-drill the well to the depth at which control was lost and is limited to 130% of the original drilling cost[16]. Insurers reimburse insureds only for such costs and expenses as would have been incurred to restore or re-drill a well had the most prudent and economical methods been employed. No coverage is provided for restoration or re-drilling of any well whose flow can be safely diverted into production including by completing through drill stem left in the insured well or through a relief well(s) drilled for the purpose of controlling a well. The insurer will also not reimburse the insured for costs and expenses for drilling below the depth reached when the well became out of control in respect of producing or shut-in wells or below the geologic zone from which the well(s) was (were) producing or capable of producing.

Another segment of the basic policy is cover for pollution resulting from the well(s) including costs of cleanup. This part is essential since many countries have stringent laws respecting pollution and the policy pays where the operator incurs strict liability which means a claimant only has to prove that pollution has resulted without reference to the negligence of the operator. The insurer pays for the cost of remedial measures and or damages for death or bodily injury and or loss of or damage to or loss of use of third party property caused directly by seepage, pollution or contamination arising from wells insured under the policy. Also covered here is costs of or any attempt at removing, nullifying or cleaning up seepage, polluting or contaminating substances emitted from wells insured, including the cost of containing or diverting the substances. Costs and expenses incurred in the defence of any claim or claims resulting from actual or alleged seepage, pollution or contamination resulting from wells insured.

Additional Cover

Quite apart from what the basic cover provides, the insured has the option of purchasing additional coverage offered by the E.E.D form which includes underground blowout, making wells safe, deliberate well firing, extended re-drill, evacuation expenses and care, custody and control of drilling equipment. These find expression in endorsements attached to the basic policy.

The role in the financial services industry

Financial risk management is essential to all commercial investments and the oil and gas sector is no exception. The instrument of risk management which include insurance, reinsurance and other risk transfer instruments ensure the transfer or deflection of certain kinds of risk away from investors and lenders and thereby minimizing the cost financing projects, including oil and gas projects.

After a hard days' work while resting at home in the evening, it would be disheartening for an executive of an oil and gas company to be telephoned only to be told by the oil and gas well drilling contractor or operator that the well has begun experiencing a kick or a blowout. The anguish, agony and anxiety to know what next will become of the well throughout the night to daybreak as will be experienced by this company executive may reach its apogee in the absence of an operator extra expense insurance. With this insurance, however, one is assured that at least the extra expenses that may have to be incurred to keep the well under control for drilling or operations to proceed are reimbursable by the insurance company that issued this policy. Herein lies the essence of the policy in the financial services economy.

At least the oil and gas company has some security or immunity against the risks that could result in the stoppage of work. Thus , the confidence, guarantee and entrepreneurial spirit to source loans from financial institutions for the purposes of embarking on oil and gas exploration, development and production is not sublimed by the absence of security in the shape or character of insurance, and in this connection, operator extra expense insurance. In other word, the operator has confidence that his exposure to potential financial loss is well taken care of by this policy.

Again, financial institutions require Operator Extra Insurance to be effected by oil and gas operators or contractors as a conditionality or precondition to the granting of credits for oil and gas exploration, development and production. The policy plays an essential role in ensuring that an appropriate oil and gas finance structure is attained through the deflection of risks deemed unacceptable away from investors and lenders to the insurer. In fact, revenue exposure is of supreme concern to investors and lenders as far as the financing of oil and gas projects is concerned and as such are always interested in circumspectly reviewing risks and insurance covers against the risks before inserting clauses in lending contracts and the operator Extra Expense insurance satisfies this review completely.

The policy plays an important role in the oil and gas business through the provision of financial protection against a kick or blowout of a well. Cover for the ability to re-drill a well and continue operation in the aftermath of a blowout is provided by this policy to forestall loss of income or revenue, the flow of income being of supreme importance to a financier since the ability of the oil and gas operator to repay a load with interest hinges on the ability to continue operations to completion without let from kick or blowout.

It is therefore patent that the Operator Extra Expense insurance is necessary to assuage the real and imaginary risks of investors in their appraisal of the riskiness of oil and gas projects for the purposes of granting credits. The risks, as may be perceived by a prudent investor constitute the bargaining chip culminating in the insertion of conditions in lending agreements. Allied to this is that an Operator Extra Expense insurance goes a long way to reduce an operator’s costs of capital and augments his liquidity by minimizing the financial blows associated with the risk events of kick and blowout.

Conclusion

Insurance generally, and Operator Extra expense insurance in particular, plays no mean role in the financial services economy and as such must not be trifled with in our strike of oil. But then, there is a current dearth of expertise in the financial services industry in Ghana equipped with the knowledge and experience in the operational risks of the oil and gas sector to facilitate lenders’ evaluation of risks in the business. In fact, a lack of understanding of operational risks in the oil and gas business constitutes a critical hurdle to the oil and gas operator in the acquisition of both loans and insurance from the financial services industry. Insurers and financiers restrict poorly understood oil and gas operations or processes with loaded premiums and restrictive lending terms respectively. The need for capacity building in the financial services industry to ensure proper risk appraisal and the development of appropriate risks transfer instruments to handle risks in oil and gas projects in Ghana cannot therefore be overemphasized.

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