The Oil Price Crush and Oil Frontiers: the stakes and the escape strategy for Ghana

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1.0. Introduction

The black gold is under severe pressure which has been blamed on several factors including increasing US domestic oil production, increasing shale production, Saudi's strategy to maintain its market share, and low demand for oil in the Euro Zone and Asia. Oil prices have crushed as a result, reported at a five year low of US$66 per barrel of Brent Crude Oil and $65 per barrel of WTI.

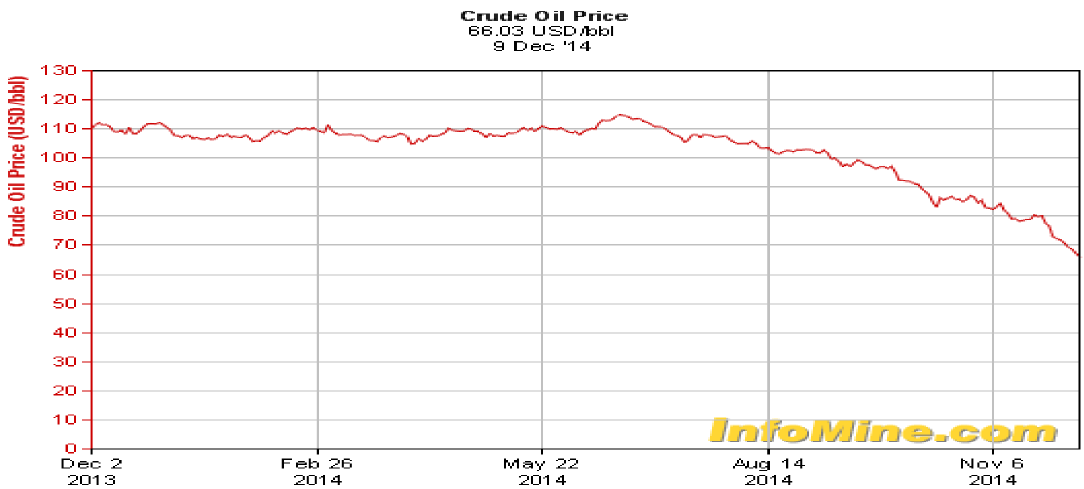

Figure 1: Brent Crude Oil Price Trend
Source: InfoMine.com

The effects of the crush have been two folds. First, it has put pressure on the budgets of oil producing countries compelling them to cut spending and reviewing benchmark oil prices. Second, it has put pressure on the investments of oil companies forcing increased discussions for mergers, acquisitions and slushing of planned exploration spending. These effects have greater implications for the oil and gas industry in particular, as well as for the whole world. Frontier countries such as Ghana that have built higher expectations of the promise of oil are not spared. Particularly, some of the oil frontiers are developing new petroleum laws and are divided between the objectives of maximizing revenues or attracting investments. The oil crush therefore provides important lessons for these countries to appreciate the current and future implications of their policies and to be able to address them.

2.0. Ghana and the Oil Price Crush

Ghana's parliament is about to consider a new Petroleum Bill to repeal the old PNDC Law 84, which has governed the oil and gas sector since 1984. The Bill seeks to increase the fiscal rates as well as introduce new fiscal terms. For example, the Bill increases carried participating interest from the current contractual 10% on exploration and development to a minimum of 15%. The new terms introduced in the Bill are capital gain tax and bonuses.

There is no doubt that with proven commercial reserves and commencement of commercial production, Ghana's risk profile has reduced significantly and should position the country to demand more for its oil and gas resources. However, given that more than 70% of Ghana's hydrocarbon basins remain unlicensed, one wonders whether Ghana's strategy to generate more revenues from the few exploration areas in future is unlikely to adversely affect its objective of attracting investments upstream. The oil crush therefore provides space for Ghana and other oil frontiers to reconsider their strategies in a way that balances their revenue capture objectives with investment objectives.

2.1. Oil prices affect oil investments in many ways

Project economics based on the Net Present Value of future revenues is an important benchmark deriving investment decisions. Kosmos Energy for instance estimated its revenues for the Ghana Jubilee Project based on the 12-month un-weighted arithmetic average of the first-day-of-the-month price for the preceding twelve months, adjusted for anticipated market premium. With actual prices falling three years after the estimation, current revenues are already adversely affected. Therefore in spite that Kosmos recorded a net income of $137 million in the third quarter of 2014, this was much lower than the $215 million recorded same time in 2013. One of the major reasons for the decline in revenues is the decline in the company's realized price from $112.52 in the third quarter of 2013 to $95.26 same time in 2014. Oil prices are now below $70 per barrel, and the effect could be more serious by end of the year.

Also, oil companies suffer from asset valuation for the purpose of borrowing to finance investments. The oil crush no doubt has negatively impacted on oil companies to the extent that some are writing down the carrying value of their assets. This further reduces their bank-borrowing base as price assumptions regarding future oil revenues change, undermining their ability to repay their debts. They lose their negotiation strength as well. The overall effect of the crush if extended over a longer period could reduce upstream investments greatly.

Already, Tullow Oil is going through many challenges although they may all not be attributed to the current oil price crush. Tullow oil shares have been reported to have lost by 43% since the start of the year due to lack of big exploration success and its failure to secure a deal to sell down part of its stake in the Ghana TEN project. Tullow's market capitalization has therefore fallen from more than £11bn in 2011 to £4.4bn, prompting speculations of a possible take over by some of the big companies. In July 2014, Tullow reported a net loss for the first half of the year after writing off more than $400m in exploration costs. It is also reported to be planning a cut in its 2015 spending from between $800 million to $1 billion annually over the past two years to $300 million due to worsening market conditions largely attributed to the oil crush.

2.2. Will the Ghana TEN project suffer?

The Jubilee fields continue to produce quality crude oil increasing marginally annually. Ghana and its partners are however very hopeful of increasing production when the TEN project is completed by 2016. But all may not be well as project economics begin to realign to market conditions. It has been reported that TEN project economics was based on an oil price of $80 per barrel. With oil prices below $70 per barrel, industry watchers are skeptical about the schedule of the TEN project. Tullow Oil has assured that it would apply a greater share of its capital in 2015 to its core oil projects in West Africa including the Ghana TEN project estimated to cost the project partners $4.9 billion and expected on-stream in 2016. However, this is at the expense of other projects in other countries. Tullow Oil has operations in Kenya, Uganda and Mauritania. It is not clear yet however, what the strategy of its partners in the project will be as uncertainty about market conditions continues.

It is still good news that the Operator of the project, Tullow Oil and GNPC consider the project a high priority for them given that they both need higher production levels to meet financial commitments in other projects. Tullow for instance has largely funded some of its Africa's operations with revenues from Jubilee, whilst GNPC has outlined ambitious investment projects to position itself as a major player in the industry. However depending on how long the oil crush holds, circumstances may warrant a review of plans by the partners.

2.3. Ghana Government Revenues Falling

The oil crush increases the economic cost of the financial budgets of producing countries. The effects on the budget however differ by country. The Table below shows break-even oil prices required to balance the budgets of some producing countries.

Table 1: Break-even price for balancing the Budget of Selected Oil Producers

Producer	Oil price to balance Budget
Kuwait, Qatar and the United Arab Emirates	$90 per barrel
Iran	$136 per barrel
Venezuela and Nigeria	$120 per barrel
Russia	$101 Per barrel

Although the Government of Ghana has already estimated down its 2015 oil price to $93 per barrel from a realized price of $107 per barrel in 2014, the effect of the price crush may not affect Ghana much. Unlike the countries referenced above, Ghana does not heavily depend on oil revenues to finance its budget.

With average oil production of 100,000 barrels, annual oil revenues have risen from $444 million in 2011 to $709 million in 2013. By end of third quarter 2014, oil revenues stood at $780 million, about 1% of GDP and expected to end the year at 1.2% of GDP according to the Government's 2015 Budget and Economic Policy Statement. The projections for 2015 is put at $1.2 billion but this is unlikely if the trend in oil prices continue into next year (See Figure 2 for Jubilee Oil Price Trend). Also, importing all of its oil consumption, the Government's Budget will get fiscal relief through a reduction in petroleum price subsidies.

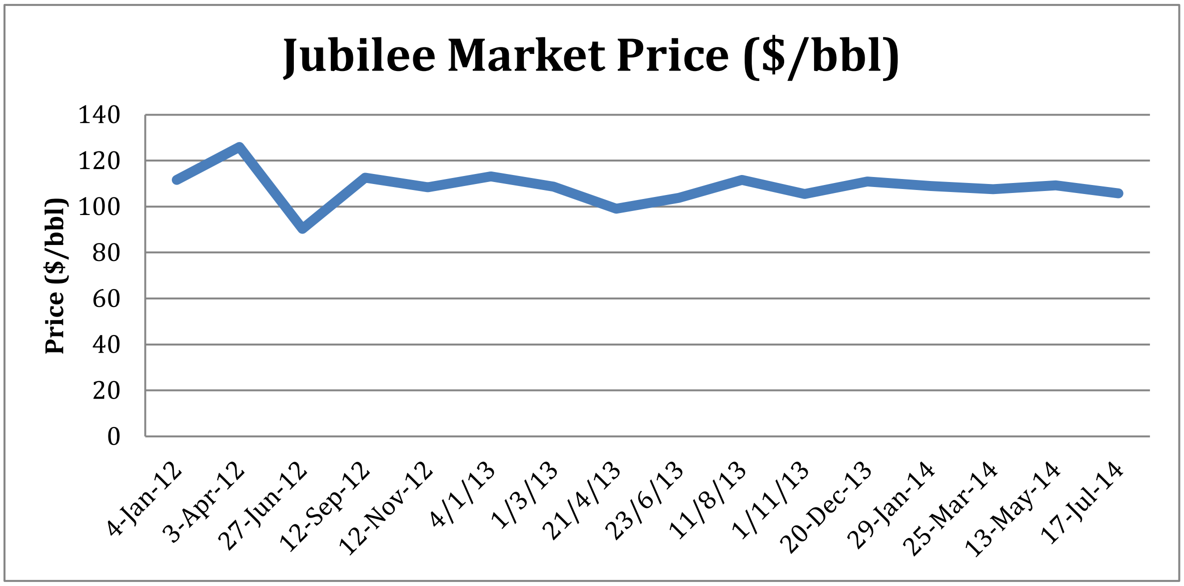

Figure 2: Quarterly Jubilee Oil Prices
Source: Ministry of Finance – Annual Reports on the Petroleum Holding Fund, 2012, 2013, 2014.

However, it is important to recognize that major capital projects in Ghana are being financed from oil revenues given that the bulk of the government's budget goes to wages, goods and services. For instance, of the total budget of GHC5.8 billion for the Ministry of Education in 2014, capital budget was only GHC276 million of which oil revenues constituted GHC103.5 million. Similarly, of the total capital budget of GHC233.6 million for the Ministry of Food and Agriculture, oil revenues were GHC52.1 million. For the same year, 78% of the capital budget for the Ministry of Fisheries and Aquaculture came from oil revenues. Furthermore, Government's new Infrastructure Investment Fund (GIIF) relies on 25% of the oil revenues allocated to the annual budget; and any drastic fall in revenues could affect the investment plan of the government. Thus, in spite of the modest levels of oil revenues, it has become a major source of financing the Government's capital budget. In this case, the oil price crush could greatly affect the development fortunes of the country.

3.0. Addressing Oil Crush Risks

3.1. Addressing Budgetary Effects

There are measures the Government of Ghana can fall on to address the budgetary effects of oil the current oil price crush as well as future ones.

First, the common practice during unexpected price crush is to reduce spending. This measure however affects welfare as planned social investments often suffer in favour salaries and emoluments.

Second, depending on the size of oil reserves and given the level of capacity, increasing oil production is the preferred measure. However, Ghana's reserve replacement is very slow and therefore this measure can be sustained only when there are many successful discoveries and significant investment in the development of new discoveries.

Third, the behavior of oil prices is cyclical. It is therefore important to save against downward price risks. The Government must seek to grow the Ghana Stabilization Fund by investing it in instruments abroad and deploying it to balance the budget in times of price crush. The current set up of the Stabilization Fund is unlikely to address these risks as the size of oil revenues to the Budget increases due to the more discretionary and non-scientific determination of the maximum cap on the Fund. This is fueled by the fact that Government's budgetary plans are based on short-termism whilst significant oil price cycles are short to medium-term.

3.2. Addressing Investment Effects

On holding current upstream investments and attracting new ones, Government must institute market-based policies that could attract investments in a market that is becoming more fluid and where profits are under serious threat. Government can start this by passing an investment friendly petroleum law, which will not only be attractive but also protective of investments. Some of the proposals for the consideration of Government are:

i. Creating a fiscal system that automatically results in a higher government-take under higher oil prices and lower government-take under lower prices. Ghana has additional oil entitlement in its fiscal regime and this must be encouraged. Government should however model it to be more progressive and not regressive. This is more preferable to investors than blanket taxes.
ii. Creating a mechanism for reviewing contractual terms when there is a significant change in oil prices that could likely cause economic disequilibrium. The most preferred method for determining this is based on the rate of return. That is, when the rate of return at any time falls below the project rate of return, a review might be warranted.
iii. Using the bid system for new acreages to increase or decrease fiscal terms to reflect price movements at the time of negotiating contracts.
iv. Providing fiscal incentives when there is a price crush to keep contractors in operations and thereby maintain jobs. For instance, the British Government has announced a decrease in corporate taxes from 32% to 30%, effective Jan 1, 2015, to encourage production during the current price crush.