

GLOBAL CONSTRUCTION

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AN INTERNATIONAL PERSPECTIVE ON THE ENERGY MARKETS AND ITS IMPACT ON CONSTRUCTION

INTRODUCTION

The Middle East and the Oil Price are in uncharted territory. There is widespread conflict throughout the region with proxy wars along sectarian lines underway in Syria, Iraq and Yemen coupled with an increase in domestic terrorism. Recent conventional wisdom says that during such periods the price of oil should rise if markets perceive a risk to global supplies.

But the oil prices have fallen as Organization of the Petroleum Exporting Countries (OPEC), and principally Saudi Arabia (normally the swing producer for oil prices) has increased production to try and stabilise prices and maintain market share. As a result Brent Crude (a major trading classification of sweet light crude oil that serves as a major benchmark price for purchases of oil worldwide) is currently US\$47/barrel having dropped as low as US\$44/barrel last month down from highs of US\$115/barrel 18 months ago. The price drop has been exacerbated by an increase in the value of the U.S. dollar.

Much has been written in the press as to the drivers of this strategy and whether attempts to gain market share by driving the U.S. shale industry into uneconomic territory with a by-product that the economies of regional rivals (e.g., Iran and Iraq) and other oil producing nations (e.g., Russia, which is allied with Iran in Syria), are significantly affected along with the other oil producing economies (e.g. Venezuela and Nigeria).

Oil is one of the few commodities that influences the cost of practically everything and whilst estimates are that OPEC will lose some US\$250 - US\$300 billion in revenue in 2015 (which may prove fatal to one or two of its member economies) other parts of the global economy will be winners as economies are boosted by lower energy costs. What does appear clear is that oil prices at this level cannot continue indefinitely without some socioeconomic shocks which may have regional and global effect.

Whilst many OPEC members have large fiscal reserves, these are finite and effects are already being seen in policy and economic decisions of the wealthier Gulf Cooperation Council (GCC) countries in the Middle East. Whilst Saudi Arabia, the UAE, Qatar and Kuwait can, with some economic adjustments and at the expense of their foreign reserves, weather a storm of this nature for a number of years, other countries in the region are less fortunate. Whether OPEC can survive this strategy in its current form remains to be seen.

Outside OPEC, the effects on countries such as Iraq and Iran (which need an oil price of US\$100+ to balance budgets) are significant. Coupled with regional insurgency and large swathes of the Middle East under the control of various rebel groups, there is an increasing likelihood of proxy sponsors or superpowers coming into armed contact (even unintentionally) with each other. Iran may see some economic cushioning due to a relaxation on sanctions and an inflow of inward investment.

Regional economies are having to go through a period of drastic re-adjustment with effects on state budgets, the cancellation of new projects, and a reduction or the removal of state subsidies for some of its citizens. Is this the new reality or a temporary blip whilst an economic battle is fought for market share?

Similarly the traditional fundamentals of 'who supplies who' are being altered. European nations are using less Russian oil and gas particularly as those supplies become a bargaining tool in Eastern European geopolitics and Russia has, in turn, enhanced its economic ties with India and China. Large consumers such as Japan have reduced their demand due to changing population demographics and increasing energy efficiencies.

Coupled with this is the increasing prospect of Canada and the U.S. becoming energy self-sufficient. Should the U.S. lift its ban on oil exports (recently passed by Congress but it is understood that it will be vetoed by the President) then supply patterns may alter further. As such, the Middle East has lost its major historical customer. It can attempt to try to take some of the European demand (through discounting) previously supplied by Russia. However, of greater concern will be whether or not Asia's growth will be able to replace the remainder of that market whilst the Middle East faces increased domestic demand (also often subsidised)?

New markets may also open up if they represent a diversification or an enhancement to security of supply. For example India and China have started to invest in Mozambique's new offshore gas fields taking over stakes from U.S. and European companies.

There are a number of significant challenges facing the oil producing economies if prices continue at US\$40 - US\$50 as higher production will not compensate for the loss of revenue and the resulting socioeconomic pressures. This is particularly so for those with growing populations and expensive 'cradle to grave' welfare systems for their nationals as well as those with security issues, widening deficits, and the increasing priorities of the basic functions of government and security. There has been some economic offset in more stable areas where governments have been able to reduce the cost of fuel subsidies as prices have fallen.

But the traditional oil producing nations are facing a significant reduction in income as the price of maintaining market share from new producers. The Middle East is likely to be down by US\$350 - US\$400 billion and Russia by US\$200 billion. Canada will be negatively affected to the tune of US\$40 billion, Latin America at US\$70 billion, and Africa at some US\$150 billion (which it can ill afford).

Conversely, it has been estimated that the traditional oil consuming economies will benefit significantly with the U.S. economy being boosted by some US\$170 billion, Europe by at least US\$300 billion and Asia by US\$400 billion. Similarly it has been estimated that a 1% drop in freight costs (relative to the value of a shipment) increases global trade by up to 2% and as fuel accounts for 50% of the cost of shipping. Thus, there should also be some increase in global trade. But as a counterweight, there has been a slowing in growth in the oil consuming nations (particularly China).

Potentially, in global GDP terms, in the short term, there may be little net difference, but if the above estimates are correct then it will involve a redistribution of wealth towards the developed world and parts of Asia.

It may however have the unfortunate side effect on some of the less stable political areas of the globe experiencing real fiscal hardship. It is a risk with global ramifications if it results in major political upheaval, regime, or economic collapse in many of the adversely affected economies. It will be the developed world that may have to intervene or bail out a collapsed economy (e.g., Venezuela).

Is this overly-apocalyptic? Oil prices were fairly stable around the US\$50/barrel from the end of the Second World War up to the early 70's and then again from the 80's until just over a decade ago, albeit the effect of inflation means that in real terms oil was more expensive. But for many of the oil producing economies, their populations, and their economic aspirations and demands are now much larger. It is likely though that lower prices may drive the need for technological innovation which may lead to an increase in supply or a lowering of production costs. The likelihood is that, short of some major shock or if insurgency were to disrupt oil supplies on a large scale, prices will remain nearer to their 50 year average than the peaks of the 1970's and the first decade of this century.

EFFECTS ON THE OIL & GAS INDUSTRY

In economic terms, oil is known an inelastic commodity as supply is often maintained (particularly in the short/medium term) if prices fall.

The conception of a new oil or gas project depends on whether the investor considers that the future price will cover both the initial capital investment required for production plus the variable cost of then operating the facility.

However, once that capital cost has been incurred, then even if the price drops below what was economically viable to get a return on the project as a whole, provided that the price is above the variable cost of operating the facility, then production is maintained as it will continue to generate a cash return.

So initially supply is not necessarily affected by a drop in price and it may in fact increase (further depressing the price) as an Owner tries to increase its revenue to offset for the drop in price.

This is particularly true for conventional oil wells as the life of a well may be measured in decades. The variable cost of pumping oil from a conventional onshore well, at US\$20 – US\$30 per barrel may still generate operating profits. And so it remains in production. However, where those variable costs exceed the price then supply will be affected.

So even though the price of oil has tumbled, production has generally been maintained even in high cost locations such as the Canadian tar sands or where significant capital costs have already been expended.

But what does happen more quickly is that new investment dries up if the price means that the overall capital and variable cost will not be recouped.

This has spelt hardship for the drilling and exploration companies and, in due course, may affect the engineering, procurement, construction (EPC) contractors as new projects fail to materialise. In addition, operators have slashed jobs and operating expense (OPEX) budgets including changed working and labour practices as they try to maintain margin.

However shale oil and gas is a different animal. This is because shale oil and gas wells have a much shorter life span than conventional wells. Production typically drops after the first year and a well may only have an ultimate life span of five to eight years.

As the costs of production may be relatively fixed there is a higher probability that as the productivity of a well decreases, its operating costs may begin to exceed the revenue generated.

Whilst the shale industry has embraced and developed new technologies, with an oil price at US\$50/barrel, the generation of financing to fund new wells may be difficult and as a well becomes less productive then the true effects on shale production may only be seen over the coming 12 – 18 months. US drilling rig counts have dropped from a peak of 1,700 in 2014 to 600 in 2015. Investors are showing a greater reluctance to finance already highly leveraged drillers.

On the flipside, as shale wells have a very quick lead in time, OPEC is going to have to keep oil prices at a level just below shale viability levels in the long term. It has been suggested that this viability level may not be that far north of US\$50.

Onshore production in the Middle East costs about US\$27/barrel, making oil at US\$40-US\$50/barrel still profitable. Russian production and other onshore production however needs approximately US\$50/barrel to break even. Offshore production is more expensive. In the North Sea, production can cost up to US\$80/barrel on older fields and any new development needs at least US\$60/barrel to break even.

The effect on the global oil industry has been marked with widespread redundancies as the oil majors have attempted to cut production costs. As with shale, new exploration and drilling works, particularly in higher cost locations (e.g., deepwater or the Arctic) have been practically halted.

It was reported that globally in the first quarter of 2015 more than US\$200 billion in oil and gas exploration and production (E&P) projects were cancelled as a consequence of falling prices. In turn, this will lead into a drop in viable projects for EPC contractors globally. However the lifting of sanctions in Iran may partially offset this as international oil companies take up the slack on a decade of under investment.

A notable cancellation cited as being a consequence of the “current economic climate prevailing in the energy industry” was the US\$6.5 billion Al Karaana project, planned to be the world’s biggest petrochemical plant between Royal Dutch Shell and Qatar Petroleum.

Elsewhere, in the UK, the North Sea has been hit particularly hard with multiple projects cancelled and up to 15% or 65,000 of its offshore industry workforce lost. An Aberdeen and Grampian Chamber of Commerce report identified that up to two thirds of North Sea oil and gas industry operators have been forced to cancel projects due to a fall in prices.

The North Sea has been hit particularly hard in part because of the high operating and production costs it experiences due to the maturity of the basins where it can cost up to US\$80/barrel to extract.

Norway has put on hold its Canadian Oil sands project.

Whilst the bigger oil producers located in the GCC equally require a higher oil price to balance the books, they are able to weather the storm of low prices for a longer time due to lower production costs and larger fiscal reserves.

There are ramifications throughout the entire supply chain from the large oil producing nations all the way down to small suppliers, affecting everything from the provision of components and equipment to design and research.

The outlook for the oil and gas industry with depressed prices will likely mean new projects are deferred. This will probably be until prices rise or until operators can develop and enhance designs and rework the costs to enable projects to become economically viable. It has been suggested however the quest to reduce cost may introduce a new wave of innovation and efficiency within the industry as operators look for optimal solutions, increased efficiencies and new ways to do business in order to remain competitive.

Coupled with this, Owners and EPC contractors are going to need to work harder to control budgets and overruns. Owners will increasingly need to control their costs and EPC contractors, who generally shoulder a significant part of the project risk, will need to become savvier in the control of those risks. Hitherto, the oil & gas industry has been more benign in settling claims and cost overruns with its limited number of EPC contractors than with other areas of construction. The cushion which allowed it to do that is no longer there, and on construction contracts that were signed when oil was at US\$150 and it is now at US\$50, Owners may well feel that they cannot afford any form of benevolence, regardless of the limited number of EPC players.

Going forward, all parts of the supply chain are going to have to increase their degree of collaboration and increase their use of benchmarking to spot project issues earlier so that appropriate mitigatory measures can be taken in addition to other project management tools.

EFFECTS ON THE CONSTRUCTION INDUSTRY

Construction is an industry whose prospects are closely tied to economic activity.

With the exception of construction directly related to the oil & gas industry, the global construction market is likely to be divided between areas of growth and areas of decline, divided broadly between oil consuming and oil producing nations.

The construction industry in oil consuming countries has the potential for growth. This will be due to an increase in economic growth because of increases in available revenue due to a reduction in energy costs. This should also lead to some reduction in inflation and increasing consumer sentiment. Care needs to be taken to ensure that a period of extended deflation is not entered into.

For Europe (and Northern Europe in particular), there is a weaker Euro and an increase in quantitative easing which should lead to improving prospects for the construction industry with office and commercial development at the forefront. The manufacturing industry (including the automotive industry) may also generate new opportunities in the medium term due to a reduction in energy costs and the increased global competitiveness due to the fall in the Euro against the U.S. dollar.

As European economies improve, the need for austerity may also reduce which will increase public spending on areas such as infrastructure and other public projects such as health, schools etc. Similarly although an influx of migrants will place considerable strain on finances, it will increase demand for low cost housing, schools etc.

The U.S. economy is showing some growth as unemployment falls, which will increase domestic consumer demand for goods but a strong dollar will impact exports. Nevertheless, there are likely to be capital cost cuts in the energy sector, so the U.S. may show relatively modest growth to its economy of 2% - 2.5%, but inflation should remain low.

It is also likely that developing countries will show economic improvement as a result of weaker energy costs and stronger U.S. and European economies that drive exports. India will benefit from a drop in inflation levels, allowing for a reduction in interest

rates which should boost economic activity. Another benefit realized in India, as well as Indonesia, is the opportunity to cut fuel subsidies.

Conversely oil producing regions such as the GCC may see a contraction in construction activity as fiscal budgets have to adjust to very significant drops in revenue. In Asia, this will include Malaysia where the government relies on energy for 20% of the economy.

It was recently reported in the UK press that the Saudi government had issued policy memos outlining austerity measures to be implemented across all ministries. One of these measures was to stop any new projects and another was that expenditure on existing budgets during the fourth quarter was not to exceed 25% of the agreed total. Saudi Arabia has the largest construction sector in the Middle East and so it is likely that some impact will be felt, if the above is true.

The construction industry in the Middle East has, notwithstanding the 2008 economic crash and its aftermath, generally benefited from healthy government budget surpluses which in addition to being invested in very significant infrastructure development has also seen a spate of trophy projects over the last decade.

Whilst Qatar will need to continue with its 2022 World Cup related projects and Dubai with its plans for the World Expo in 2020, it is likely that there will be a reduction to non-essential trophy projects such as museums. Rather, the focus will be on projects that will diversify the economy, involve job creation, social cohesion and also essential infrastructure. Existing trophy projects may be slowed.

It is also likely that there may be some delay in decision making relating to key projects whilst governments pay increasing attention to weighing the pros and cons prior to committing to expenditure. Similarly the public sector may face increasing constraints on authorising any deviations from budgets and contractors will need to pay increasing attention to their administration of government contracts.

GCC governments are beginning to issue bonds to cover subsidies, and recently have begun to approach the private sector. A number of governments have begun drafting and implementing Public Private Partnership (PPP) laws and frameworks to reduce current demands on the public purse and to allow the costs of capital investment to be deferred which may provide opportunity.

CONCLUSION

The fall in the price of oil and its consequences is akin to a Tale of Two Cities. It is not simply a result of OPEC strategy but is also coupled with weakening demand and currency fluctuations.

The oil producing countries face a number of challenges and some of them, e.g., Venezuela and Nigeria, are severe. For the remainder, there are also challenges.

For the Middle East where there are also very significant security challenges, recent history would appear to support the theory that further regime change will potentially cause more problems than it will solve. What the region requires at this juncture is stability and governments will need to work hard to ensure that undesirable elements are not allowed to take advantage of the economic challenges and their consequences.

The Middle East construction industry will need to adjust to a different environment (again) but there will hopefully be increased opportunity in Europe.

Whether current OPEC policy is correct or not, only time will tell. One thing that is reasonably certain is that oil not viably extractable from the ground now, will surely be extracted at some point in the future. It's simply a question of when. And hastening that point will be a challenge to the oil & gas industry that they will not shirk from striving for.

ABOUT THE AUTHOR

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