Title: Relationship between Oil and Natural Gas Prices

Name

Student ID

Course Title

University Affiliation

Relationship between Oil and Natural Gas Prices

The assertion that an increased trade in liquefied natural gas having accelerated the markets in North America, Asia and Europe, which were previously segmented markets, is by all chance undisputed. *This paper articulates the relationship between oils and natural gas and why they are uncorrelated in pricing*.

In the past decades, markets for natural gas have countersigned intense changes. This was because of the liberalization of most parts of the global settings, reformation of the supply chains which were previously vertically integrated and the continuously falling transportation costs in global gas market (DeVany and Walls 1995).

Besides, on the basis of supply, natural gas upon extraction is often found mixed together with oil in the wells. Natural gas was simply flared on the olden days before it could be transported and this was done till pipelines were made capable of transporting them. Until then, competition was a story, (Davis and Killian, 2008). At that particular point, natural gas was extracted separately and started competing with fuel oils for heating in factory operations. A century later, the completion placed the two fuels as energy sources in towns (Yergin, 1991). This scenario took shape until the federal power commission (FPC) imposed priced regulatory measures on natural gas which saw a dramatic drop in supply of the same.

From the above scenario, if both the markets are free from the controls, either in terms of pricing or quantity, then the two commodities should show some relationships in pricing.

Crudes are also priced according to the high volume crude streams which are compared in terms of their quality as per their API gravity.

The question as to why these two products correlate or otherwise yet they have totally different uses and even operate in separate markets and why this study is worth it is rightfully justified in this paper. Firstly, the connection between these products helps the international

energy majors in fathoming price movements between the two commodities, the behaviour in their pricing, facilitation of project planning and maximization of their profits.

Presumably, changes in technological advancement and policy making have affected crude oil and natural gas pricing (Blas and Hoyos, 2009). Many industrialists have the notion that natural gas has their prices more closely connected with coal prices.

Markets in the United Kingdom have seen their liberalization for 15 years and for the records, they have since had the link between natural gas and oil prices shoot over time. This has since been dubbed as the aftermath of decoupling natural gas price from oil price (Panagiotidis and Rutledge 2007). Hypothetically, the prices of natural gas and oils do not correlate due to a number of reasons which includes among other factors, the difference in the industrial organizational sector. This hypothetical base explains why there is dynamics in natural gas markets.

There is a play-level model designed to analyse both natural gas and crude oil from lower onshore sources which were 48 in number.

The table is as shown below:

Table 9.2. Technically recoverable U.S. natural gas resources as of January 1, 2010 trillion cubic feet

Proved Reserves	Unpro	oved Resources	Total Technically
			Recoverable Resources
Lower 48 Onshore	230.0	1250.2	1480.3
Non Associated			
Natural Gas			
Tight Gas	87.9	422.7	510.7
Northeast	5.2	51.8	57.0
Gulf Coast	24.3	96.8	121.1
Midcontinent	7.4	22.1	29.5
Southwest	3.4	24.5	27.9
Rocky Mountain	47.6	222.0	267.6
West Coast	0.0	7.5	7.5
Shale Gas	60.6	481.8	542.3
Northeast	7.1	216.5	223.6
Gulf Coast	10.9	129.7	140.6
Midcontinent	15.4	39.8	55.2
Southwest	26.5	46.1	72.6
Rocky Mountain	0.7	37.4	38.1
West Coast	0.0	12.2	12.2
Coalbed Methane	18.6	122.2	140.8
Northeast	2.5	4.1	6.5
Gulf Coast	1.3	2.2	3.5
Midcontinent	0.7	38.3	38.9
Southwest	0.5	5.8	6.2
Rocky Mountain	13.6	61.6	75.2
West Coast	0.0	10.3	10.3
Other	63.0	223.5	286.5
Northeast	7.0	29.2	36.2
Gulf Coast	10.9	101.2	112.0
Midcontinent	20.3	26.5	46.8

Southwest	16.9	18.6	35.5
Rocky Mountain	7.3	35.0	42.3
West Coast	0.6	13.1	13.7
Lower 48 Onshore	18.4	146.2	164.6
Associated-Dissolved			
Gas			
Northeast	0.4	0.6	0.9
Gulf Coast	1.7	23.9	25.6
Midcontinent	1.7	12.3	14.0
Southwest	8.3	40.4	48.7
Rocky Mountain	4.1	45.9	50.0
West Coast	2.1	23.2	25.3
Lower 48 Offshore	15.0	262.6	277.6
Gulf (currently	14.2	218.4	232.5
available)			
Eastern/Central Gulf	0.0	21.5	21.5
(unavailable until			
2022)			
Pacific	0.8	10.4	11.2
Atlantic	0.0	12.4	12.4
Alaska (Onshore and	9.1	271.7	280.8
Offshore)			
Total U.S.			272.5

The bottom line of this assessment is the detailed economic analysis of prospective projects in identified fields, heightened oil recovery ventures and resources that have not yet been discovered. Notably, the projects that are not economically viable, as per this table, are established based on the disposal resource development constraints which in one way or another stimulate the existence and the prospects of the infrastructure of oil and gas industries.

Another notable explanation for the rise in crude oil prices is the prompt increase in the use of natural gas in refining and exploration of petroleum prices. In the event of gas prices embarking on sustainable rise while oil prices holding steadily, it is likely that more fuel-switching ability could be on the rise in the long run (Costello, Huntington, and Wilson, 2004). It is however suggested that oil prices will relatively be cheaper than oil prices in the future.

Conclusively, the uncorrelated prices in oil and natural gas is immense, courtesy of the named factors and the future endeavours to make their prices match in the marketing trends may prove tricky owing to the dynamics in both supply and exploitation.

References

- Blas, et al. "Oil- gas price link to weaken." Financial Times (June 11,2009): 28.
- Costello, Ken, G Huntington H and F Wilson J. "After the Natura Gas Bubble." Energy <u>Journal</u> (2005): 9-110.
- Davis, Lucas W and Kilian Lutz . "Alloctive Cost of Price Ceilings." <u>Lessons from the US</u>

 <u>Residential Market for natural gas</u>. 2008.
- De , Vany, S A and D Walls W. <u>The Emerrging New Order in Natural Gas; Mrket versus</u>
 Regulation. Wesport: Quorum Books, 1995.
- Yergin and Daniel. <u>The Prize</u>; <u>The Epic Quest for Oil, Money ans Power</u>. NY, New Yoyk: Free press, 1991.

http://en.wikipedia.org/wiki/Correlation does not imply causation