

A VIEWPOINT ON ENERGY TRADE DYNAMICS IN ASIA:

DOLLAR & YUAN PRICING OF OIL &
THE IMPACT OF EXCHANGE RATES ON THE OIL INDUSTRY

ANAS ALHAJJI, PHD MANAGING PARTNER

Energy Outlook Advisors, LLC.

16th Shanghai Derivative Market Forum & 1st IEF-SHFE Industry Advisory Committee

May 29, 2019, Shanghai, China

Exchange Rates, Oil, and OPEC

I will answer two questions:

1. What is the impact of currency exchange rates on the oil industry?

2. Why does OPEC price its oil in US dollar?

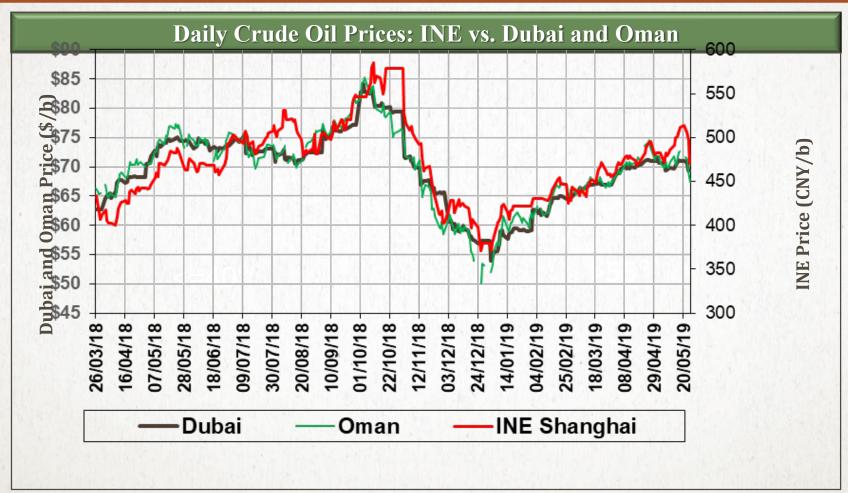
What is the Impact of Exchange Rates on the Oil Industry?

Impact of Exchange Rates on the Oil Industry

Globally, oil is priced in US dollar. Higher dollar reduces oil demand and increases oil supply.

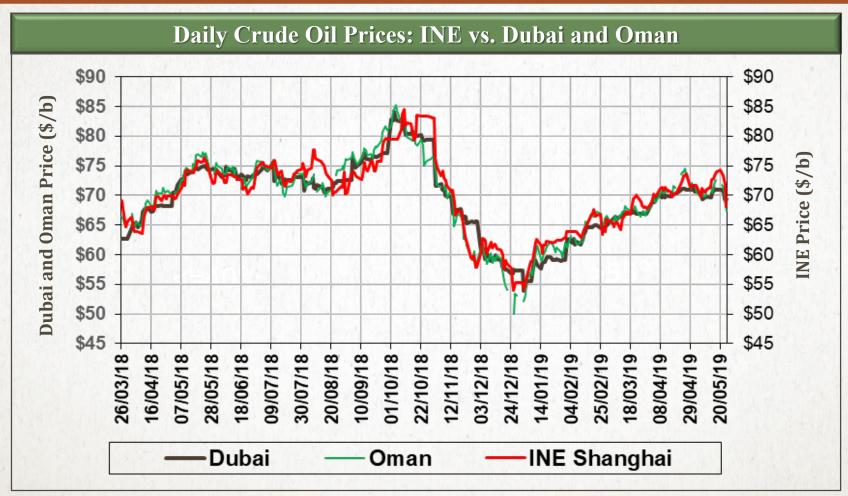
- 1. Higher dollar increases the cost of oil imports in countries with depreciating currencies. Higher cost leads to lower demand growth for oil. OPEC does not like to see lower demand growth.
- 2. Higher dollar reduces the cost of producing oil in the areas with depreciating currencies since most costs are paid in local currencies: North Sea, Russia, and China
- 3. Higher dollar increases the purchasing power of oilproducing countries that pegged their currencies to the US
 dollar, leading to higher spending on E&P as they feel richer
 and can import tools and equipment at lower costs (and higher
 imports of goods from China)

INE's Yuan-Denominated Crude is Highly Correlated with Dollar-Denominated Dubai and Oman Crude Markers



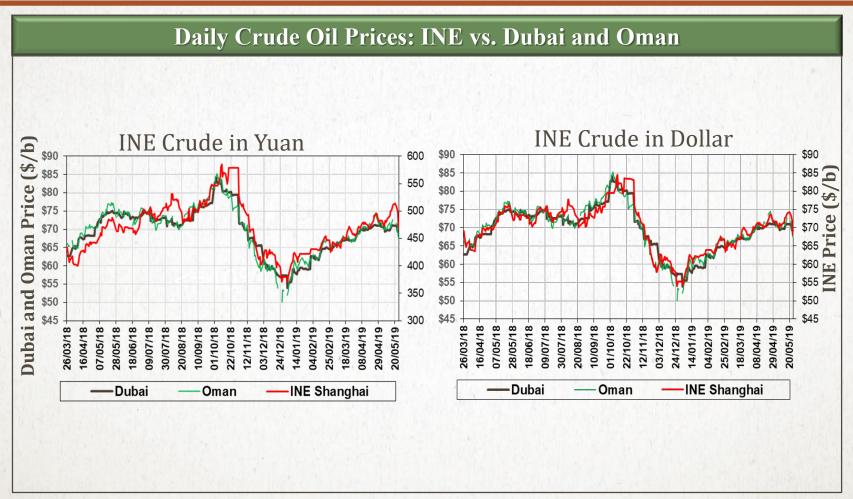
Source: EOA, 2019. UBS, Platts, and Bloomberg 2019

The Correlation Becomes Stronger Once Exchange Rates Are Conspired



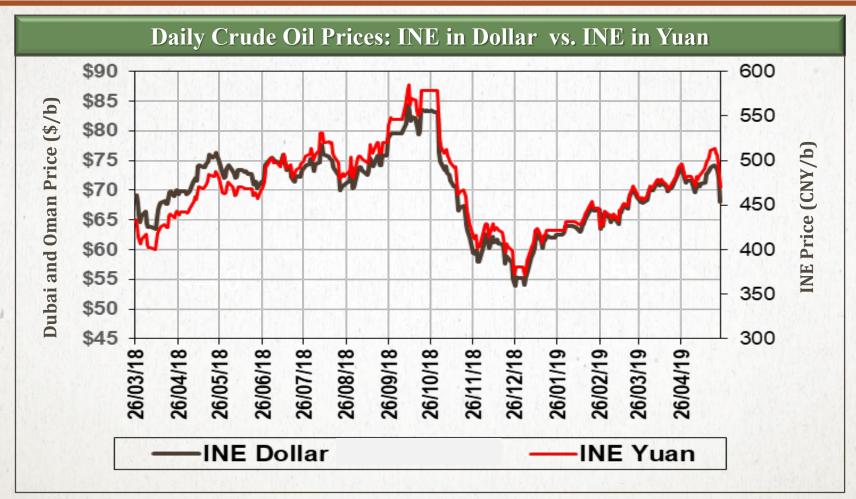
Source: EOA, 2019. UBS, Platts, and Bloomberg 2019

Exchange Rates Matter: The Correlation Becomes Stronger Once Exchange Rates Are Considred



Source: EOA, UBS, 2019. Platts, and Bloomberg 2019

The Impact of Exchange Rates on INE Pricing



Example On the Impact of Exchange Rates on China

| RMB Devaluation Increases the Cost of Oil Imports | | |
|---|-----------------|---------------|
| | Late March 2018 | Late May 2019 |
| \$ Oil Price | \$70.00 | \$70.00 |
| RMB Exchange Rate | 6.27 | \$6.90 |
| Price in RMB | 438.90 | 483.00 |
| | | |
| Difference Per Barrel in RMB | | 44.10 |
| | | |
| China Crude Imports (mb/d) | 10.5 | 10.5 |
| | | |
| Additional Cost Due to RMB | | |
| Devaluation in Millions of | | |
| RMB/Day | | 463.05 |
| Additional Cost Due to RMB | | |
| Devaluation in Millions of | | |
| RMB/Year | | 169,013.25 |
| Additional Cost Due to RMB | | |
| Devaluation in Millions of | | |
| US \$/Year | | \$24,494.67 |

Impact of Exchange Rates: Main Trackways

- 1. Once we account for exchange rates and time lags, INE crude is highly correlated with Dubai (more than 90%), emphasizing the idea that crude price discovery remains mostly in US dollar.
- 2. Yuan devaluation increases the cost of imported oil substantially and might reduce oil demand
- 3. Higher dollar reduces demand and increases supply

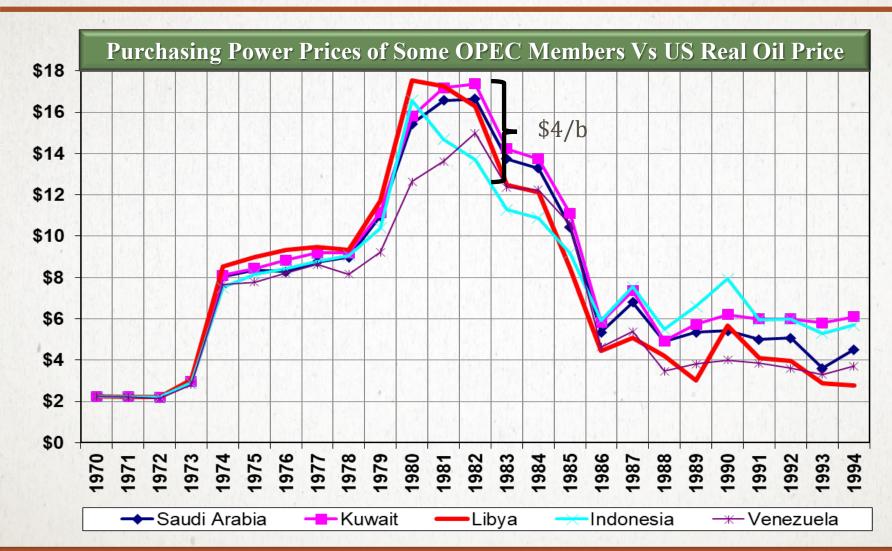
Why Does OPEC Price its Oil in US Dollar?



1. Economic Factors

- 1. Pricing oil in currencies that do not have enough liquidity to cover world oil trade is expected to cause oil shortages and imbalances. Liquidity and global acceptance is essential for pricing oil in a certain currency.
- 2. Problems of pricing oil in a single currency are the same.
- 3. Benefits from pricing oil in a basket of currencies are limited as US dollar will continue to dominate
- 4. OPEC members will not agree on a basket of currencies. They have different trading partners and the benefits vary widely
- 5. A none-dollar pricing might cause an economic shock in the US, which will reduce the demand for oil, and

Although Oil Prices are the Same, Oil Producer's Purchasing Power is Different (old data but relevant)



2. Technical Factors

- 1. Which currencies will be included in the basket? Why? Who decides?
- 2. What are the factors that determine the weight of each currency in the basket?
- 3. How to monitor the basket and the price of each currency?
- 4. How often should OPEC review the basket?
- 5. How often should OPEC change the currencies in the basket or the weight of each currency?

In short, success of the basket is very costly

3. Political Factors

- 1. Any switch to other currencies is, at the end, a political decision
- 2. The dollar is a symbol of America's strength, and the US will not let others disregard this symbol.
- 3. OPEC members are part of the world community. Its leaders fully understand the political ramifications of pricing oil in a currency other than the dollar.

Conclusions and Takeaways

- 1- We have to distinguish between pricing oil in US dollar and receiving revenues in non-US dollar. When it comes to pricing, only one currency is needed. The impact of two or three currencies is limited as arbitrage will force prices to merge
- 2- OPEC has no choice but to continue pricing oil in US dollar for several factors
- 3- Any future pricing of oil in non-US dollar requires a change in the global financial system and global leadership



aalhajji@energyoutlookadvisors.com

@anasalhajji

www.anasalhajji.com