The Perfect Storm:

Why oil prices have plunged and its financial and economic impact

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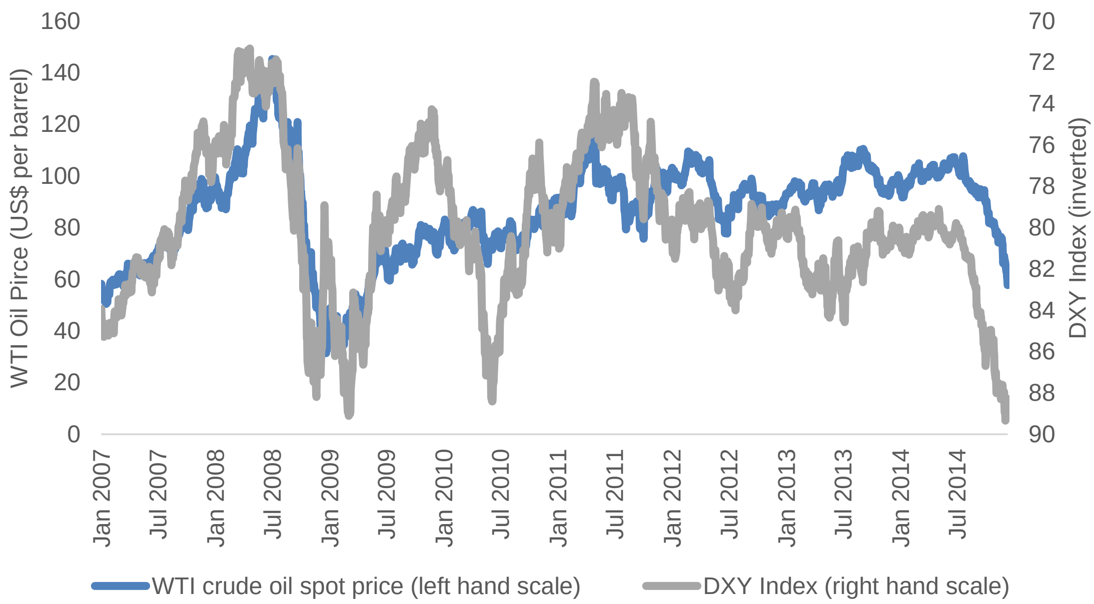
Oil prices have plunged more than 40% since the end of June 2014, far exceeding investor expectations, which has weighed heavily on the Energy sector and Canadian equities as a whole. In this Market Insight, we review the confluence of factors that have led to the significant oil price moves. We also discuss our outlook for oil and the potential economic and financial market implications of lower crude oil prices. While lower oil prices certainly disadvantage many oil producers and other companies that are connected to the industry, there are a number of beneficiaries to lower oil prices, namely corporations that are heavy users of oil and gasoline, as well as consumers and net oil-importing countries that stand to benefit from improved fiscal balance sheets.

REASONS BEHIND THE DROP

STRONG APPRECIATION OF THE U.S. DOLLAR

With economic data in the U.S. showing further improvement, the U.S. has demonstrated its resilience and relative strength compared to other major global economies particularly Europe, Japan and China. The strength of the economy, specifically the improvement in labour markets, led the U.S. Federal Reserve Board (Fed) to terminate QE3 at the end of October and to impart a more hawkish stance in that quarter’s FOMC statement. The Fed’s tone stands in sharp contrast to the that of other major central banks, namely the European Central Bank (ECB) and the Bank of Japan (BoJ). The BoJ has already initiated unprecedented levels of QE and the ECB may have to follow suit as deflation concerns in the region continue to mount. The handover of policy easing from the Fed to the ECB and BoJ, which arguably created a more palatable environment for investors, is one of the main reasons for the U.S. dollar’s strength. A stronger U.S. dollar has weighed heavily on oil prices as that is the currency in which oil is priced.

Figure 1: U.S. dollar strength has been a major factor on oil prices

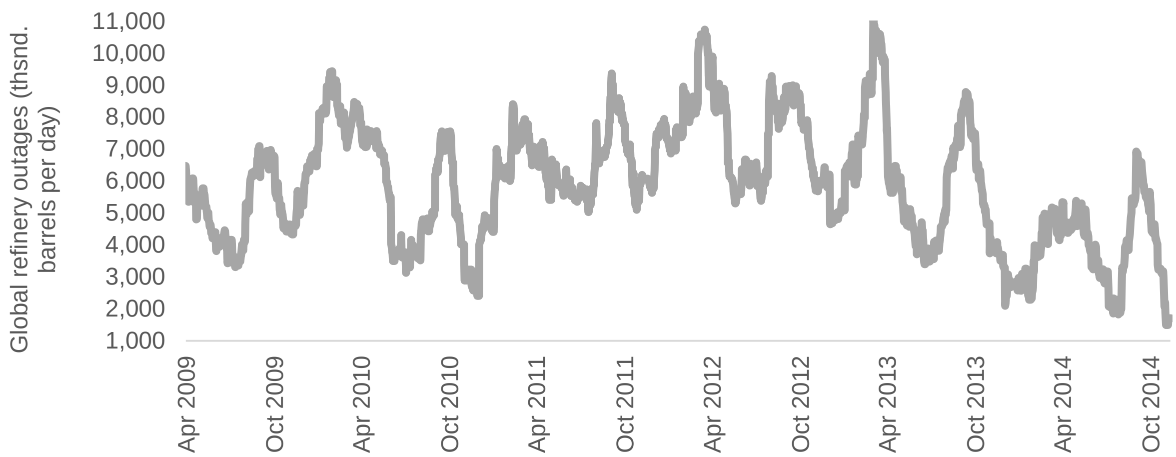


Source: Bloomberg, December 11, 2014. DXY measures the value of the U.S. dollar relative to the majority of its most significant trading partners. Bloomberg West Texas Intermediate Cushing Crude Oil Spot Price.

SEASONAL TIMING

Maintenance peaks at refineries take place in April and October, resulting in the shutdown of distillation capacity and a reduction of demand for crude oil during those months. In October 2014, these shutdowns reduced demand by approximately five million barrels per day, over 5% of global demand. Weak oil prices caused by these shutdowns tend to have a short-term impact as refineries traditionally come back online within a few weeks.

Figure 2: Global refinery outages: distillation capacity unavailable

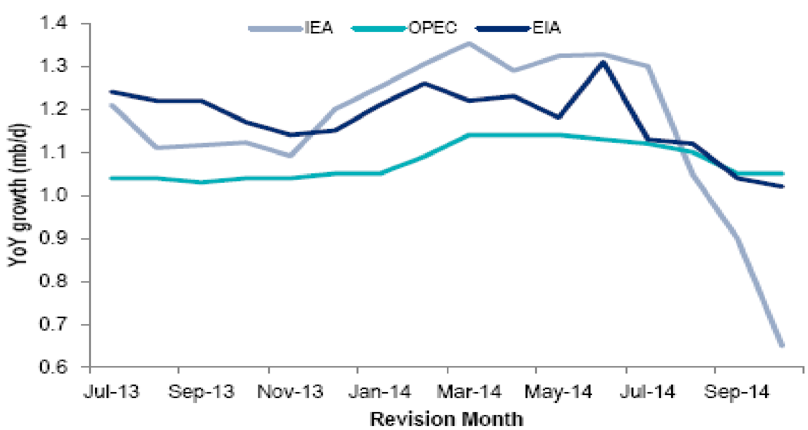


Source: Bloomberg, data to December 12, 2014. Total global crude distillation unit outage

DETERIORATING DEMAND, ROBUST SUPPLY

Gross domestic product (GDP) is the greatest cyclical driver of oil demand growth. With the European economy mired in stagnation, Asia, particularly China, offers the greatest potential for incremental demand. However, the economic growth rates for both Asia and China have been downgraded this year. In response, the International Energy Agency (IEA) significantly downgraded its forecast for world crude demand growth in 2014 – from a robust growth rate of 1.4 million barrels/per day as recently as June 2014 down to just 700,000 barrels/per day as of September 2014. The IEA also cut its 2015 forecast by 230,000 barrels in December from its previous forecast in November – its fourth cut in five months.

Figure 3: Forecasts have been downgraded due to lower growth

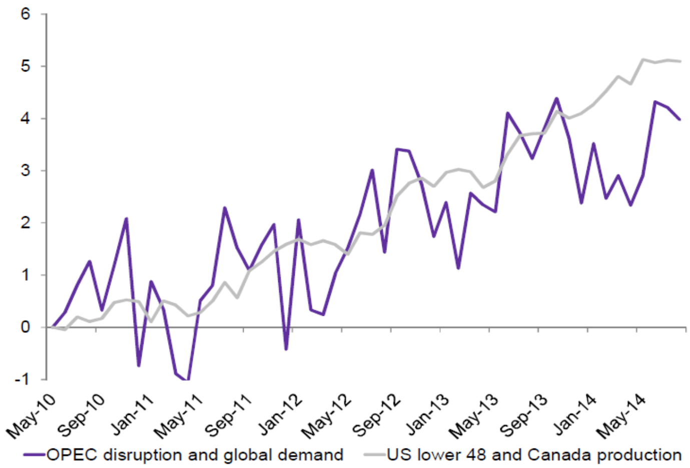


Source: Barclays Research, as of November 2014

While demand has deteriorated, supply has grown, which has been a further catalyst for oil prices to trend lower. Lower supply disruptions from OPEC has accompanied stronger production from non-OPEC producers such as the United States and Canada (Figure 4).

Figure 4: Fewer OPEC disruptions, weak demand, strong non-OPEC production led to a surplus

Changes relative to May 2010 (million barrels per day)



Source: Goldman Sachs, October 26, 2014.

In less than 10 years, the U.S. has evolved from being the world's largest importer of petroleum products to the world's second-largest net exporter, including natural gas liquids. The technological advancements in the extraction of tight, or shale, oils and gas has led to this remarkable rise.

Prices have also been affected by the rapid and unexpected increase in crude oil production from Libya. Over the past few years, Saudi Arabia had responded to the changes in Libya's production levels during the country's civil war. In 2011, when Libya went offline, Saudi Arabia ramped up production. In 2012, Libya returned to the markets, resulting in an offsetting reduction in output by Saudi Arabia. In late 2013, Libya increased production and Saudi Arabia again adjusted its production. In June, however, Saudi Arabia failed to respond to rising Libyan production. The overall increase in supply, with no reduction in output, has altered the dynamic in terms of OPEC's role as 'first-mover swing producer' (meaning they are the first one to react to any supply and demand imbalances), a role it has held in the past. The supply-demand balance has shifted from OPEC to U.S. shale, with the latter arguably filling the role to resolve any supply-demand imbalances. The recent OPEC meeting on November 27 is testament to this point, however, Saudi Arabia could be testing both the resiliency of U.S. shale production and the resistance of other OPEC producers. As the lowest-cost producer and one with considerable reserves, Saudi Arabia can afford to test the prices to a point where U.S. producers and higher cost OPEC producers become either unprofitable or unable to support their domestic budgets.

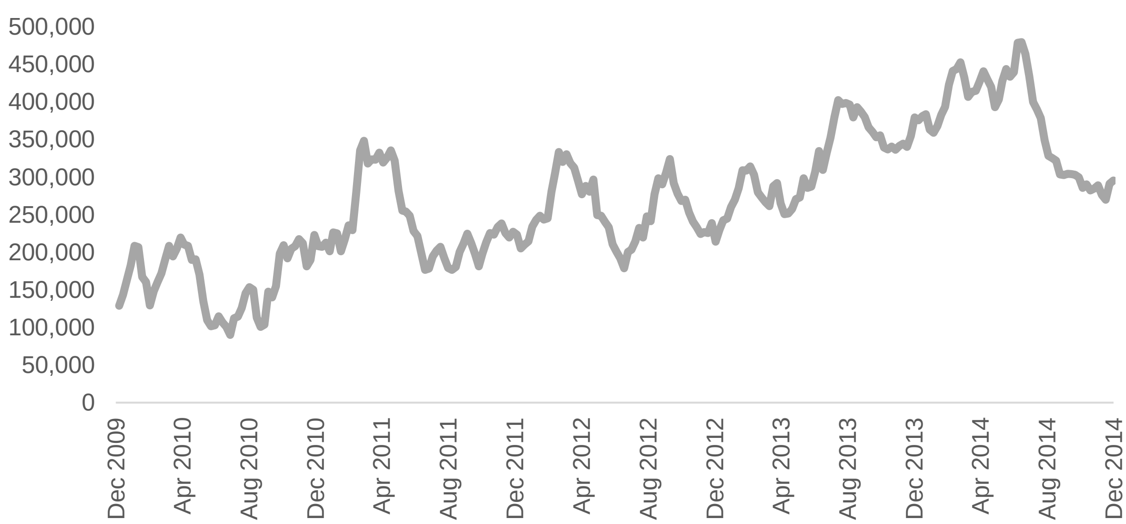
MARKET MISINTERPRETATION OF RESPONSE FROM SAUDI ARABIA

Saudi Arabia surprised markets in October by reducing its official selling prices (OSPs) to six-year lows for buyers in Asia. Prices fell precipitously as OPEC, and primarily Saudi Arabia, failed to provide explicit communication on its output policy prior to the November 27 OPEC meeting. Then, in early December, Saudi Arabia cut its OSPs again to both Asia and the United States, which fueled further uncertainty. With excess crude supply in the markets, we believe that investors misinterpreted the Saudi price cuts as a price war to save market share. We believe the price cuts were predominantly driven by significant shifts in regional pricing, which constitutes a shift in the pricing of different types of crude oil and the need to restore the competitive pricing relationships for different types of crude. The differences also reflect higher freight costs, particularly to Asia, which need to be offset by lower crude prices.

MAGNIFIED FINANCIAL MARKET REACTION

Over the last six months, while U.S. equities were hitting record highs, combined open interest (which represents the number of futures contracts outstanding) in West Texas Intermediate (WTI) and Brent crude was plummeting to the lowest level in almost two years. The tumbling of oil prices and the uncertainty around OPEC's output policy led to a number of hedge funds and other investors reducing their exposures and some producers lifting their hedges. After the OPEC meeting on November 27, prices fell further as traders continued to sell their positions as increased supply led investors to believe that price pressures would continue. We believe that the sell-off was an overreaction and the current oil price does not reflect what market fundamentals would suggest.

Figure 5: Combined open interest in crude oil plunged



Source: Bloomberg, December 9, 2014. Bloomberg CFTC NYME crude oil net non-commercial combined positions.

VIEW FROM AGF GLOBAL RESOURCES TEAM

We believe that going forward, we will see increased volatility in crude oil pricing and wider trading ranges as a result of OPEC's recent decision not to act in response to falling crude oil prices. This uncertainty will enter into North American oil investment decisions and on some oil opportunities outside of North America. Our expectation of ongoing price volatility reflects some of the numerous and offsetting factors impacting global oil markets:

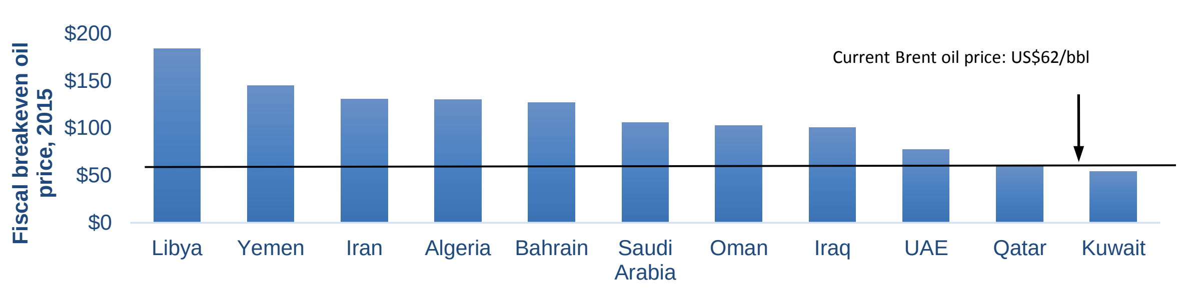
1. Geopolitical risk still impacts much of global production. In recent years, oil supply disruptions have not been higher since the Gulf War in the early 1990s (excluding any disruptions due to OPEC policy changes). Libyan production of roughly 1 million barrels per day (up from 400,000 bbls/day earlier in the year) is coming from a country in the midst of a civil conflict – with two governments and two oil

ministers. In Iraq, while ISIS fighters have not focused on oil production, they remain on the edge of the northern oil fields. Tensions with Russia also continue and the extension of Iranian nuclear negotiations could lead to an increase in sanctions by Congress, a development that could see support for oil prices over the next couple of years. AGF believes that the market continues to underestimate geopolitical risk and overestimate the sustainability of production.

2. Current prices remain below industry marginal costs, which are estimated to be between US$65-US$80 per barrel (based on full-cycle costs for the majority of production). With technological advancement (e.g. horizontal multi-stage fracturing), the key pricing dynamic has shifted away from OPEC, particularly Saudi Arabia, towards the pace of technological improvement in shale extraction, which argues for higher oil prices.

3. Many OPEC members need higher prices to balance their fiscal domestic budgets and any lengthy period of lower prices and constrained domestic spending raises the risk of increasing civil strife, which governments want to avoid. Many governments may be willing to accept lower prices in the short term because they are aware of how quickly OPEC (mainly Saudi Arabia) can respond to restore imbalances.

Figure 6: MENA oil exporters' fiscal breakeven oil prices (US$/bbl)



Source: Bloomberg. Current Brent oil price, December 15, 2014, intraday.

4. Existing global oil supply naturally declines at 5-6% annually, which represents an estimated 4.5-5.5 million barrels per day. This is even more pronounced in U.S. unconventional production, where decline rates are generally near 30%. Without ongoing capital investment, production naturally declines quickly.

5. Lower oil prices stimulate oil demand. This ignores the approximate growth in demand of more than one million barrels per day that is expected to continue to occur mostly from EM countries as GDP per capita is expected to increase.

6. OPEC spare capacity is estimated at only 3.5-4.5 million barrels per day, or approximately 5% of total oil supply, which is not a huge buffer for a world with considerable geopolitical risk. This supports higher prices.

We expect continued volatility in the short term as the market searches for a bottom. Tax-loss selling and portfolio adjustments at year end may potentially lead prices lower still. However, barring a global recession, which we estimate as being a very low probability, **we believe that now marks an opportune time to find quality energy companies at attractive valuations**.

ECONOMIC AND FINANCIAL MARKET IMPLICATIONS OF LOWER CRUDE OIL PRICES

In North America, while the Energy sector has been winded from the blow to crude oil prices, the broad economy should stand to benefit.

CANADA

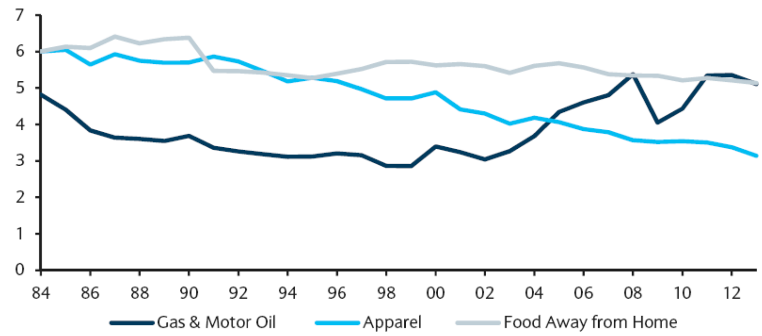
The negative impact of lower oil prices includes decreased government revenues, layoffs and reduced capital spending within the Energy sector and other sectors that had been feeding off higher oil prices (e.g. railways). This will be particularly difficult on government coffers in resource-rich provinces such as Alberta, Saskatchewan and Newfoundland and Labrador, which have revenue projections based on much higher oil prices (closer to US$100). While the oil and gas sector makes up only 6% of Canada's GDP, capital expenditures from the sector would be significantly impacted as the sector has accounted for 20% of all private sector capital expenditures over the past three years. However, if we look at the economy as a whole, the effects could be more muted due to the considerable increase in consumer spending as a result of lower gasoline prices. While the Bank of Canada has estimated that lower oil prices will cut Canadian economic growth by one-third of a percentage point in 2015, the effect of higher non-energy exports (as a result of a weaker Canadian dollar) could help to partially offset the impact of lower oil prices. With the absence of higher oil prices supporting inflation, this could lead the Bank of Canada to remain on hold longer than expected.

UNITED STATES

While Energy only makes up approximately 9% of the market capitalization of the S&P 500 Index, energy-related capital expenditures are more concerning when it comes to longer-term growth prospects as they represent approximately 30% of all capital expenditures[1]. Yet, similar to Canada, the resultant gain in consumer savings would more than outweigh the weakness in the Energy sector. According to Citi Research, each US$0.01 decline in gasoline prices adds approximately US$1 billion to consumers' discretionary income. With gasoline prices per gallon falling approximately 70% in the past three months, it would suggest that consumer spending would increase by approximately 0.7%[2]. This should also benefit companies that operate in the restaurant, entertainment, apparel, furniture and electronics industries.

[1] Barclays, November 6, 2014
[2] Citi Research, November 27, 2014.

Figure 7: Gasoline crowds out household spending (percent of household expenditures)

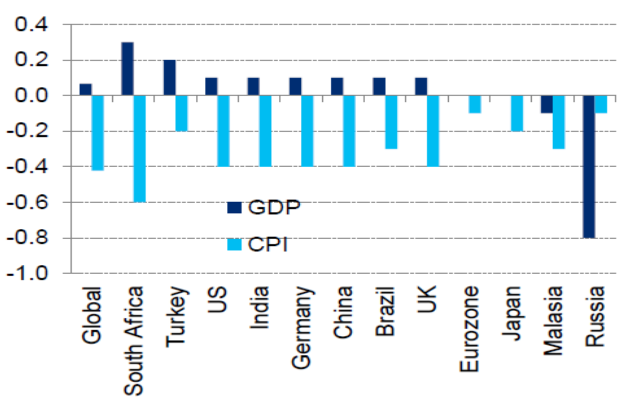


Source: BLS, Barclays Research, November 6, 2014.

In addition, according to the U.S. Energy Information Administration, industrial enterprises used 23% of all petroleum products consumed in the U.S. in 2013. Consequently, lower fuel prices have benefited many energy-intensive companies that need fuel for their transportation needs (airlines and trucking companies) or machinery operation. Benefits to railroad companies may be more muted as lower demand for petroleum products will result in less rail traffic.

Depending on how long oil prices remain low, the effect of a stronger U.S. dollar could lead inflation to undershoot targets and potentially result in the Fed having to push back its first rate hike. This also puts more pressure on other central banks including the ECB, which is already contending with extremely low inflation. This could pressure the ECB into an outright QE program, which would offer support for European equities.

Figure 8: Sensitivity of 2015 GDP growth and CPI to US$10 fall in oil prices



Source: Citi Research using OEF global model

GLOBAL

In Japan, the combined effects of lower oil prices, moderate growth in nominal per-capita wages and employment and a delay in the consumption-tax hike would give GDP a boost through an increase in real purchasing power for Japanese consumers. Additional easing measures could also benefit the economy and financial markets if inflation undershoots the BoJ’s projections.

Emerging markets can benefit from lower commodity prices as it results in lower inflation, however, weaker commodity prices are typically associated with lower risk appetites, which weigh more on oil exporters than oil importers. This could lead to an easing bias in a number of countries such as Brazil, Chile, Turkey, Korea and Thailand but could lead to higher rates in Hungary, Indonesia and Russia. It is important to conduct country-specific analysis as lower commodity prices will impact each EM country's fiscal balances and inflation rates differently.

SUMMARY

The sharp contraction in oil prices has been the result of a number of factors, including a strong U.S. dollar, seasonal timing, supply and demand pressures and, arguably, an overreaction by markets. The impact of lower oil prices on the global economy and financial markets is mixed, however, investment opportunities are still plentiful when combined with careful analysis. While we believe that current oil prices are not sustainable over the medium term as price volatility has overshot sustainable levels, the volatility marks another step in the evolution of the global energy market. The abundance of U.S. supply is changing the dynamics of global energy pricing. U.S. crude oil export policy remains a limiting factor but this is increasingly attracting government attention and analysis. While any policy changes will likely be gradual rather than immediate, they will have far reaching implications for global energy pricing and petrochemical markets.

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