

2017 International Crude Oil Market Trend Analysis and Price Forecasting (Postprint)

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Date: 2017-03-08T00:00:00+00:00

Abstract

In 2017, the compliance level of production cut agreements between OPEC and non-OPEC countries will be the most significant variable affecting international oil price trends. Both the supply and demand sides of the international oil market face considerable uncertainty; the recovery pace of U.S. shale oil production, the rebound strength of oil demand in OECD countries, and the driving effect of emerging economies on oil demand will all influence the rebalancing status of the oil market. Furthermore, uncertainty regarding U.S. interest rate hikes, the level of speculative activity in the market, and geopolitical “black swan” events will all increase the short-term volatility of oil prices. Through an independently developed comprehensive oil price analysis and forecasting system, this article predicts that international oil prices in 2017 will maintain narrow-range fluctuations, with an average annual Brent crude price of \$56/barrel, an average annual WTI crude price of \$55/barrel, and the average price spread maintained at approximately \$1/barrel.

Full Text

International Crude Oil Market Trend Analysis and Price Forecast in 2017

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Abstract

In 2017, the implementation progress of the OPEC and non-OPEC production cut agreement will be the biggest variable affecting international oil price trends. Both the supply and demand sides of the international oil market face significant uncertainties: the recovery speed of U.S. shale oil production, the rebound strength of OECD countries' oil demand, and the pull effect of emerging economies on oil demand will all influence the rebalancing of the oil market. Additionally, uncertainties surrounding U.S. interest rate hikes, the level of market speculation, and geopolitical "black swan" events will increase short-term oil price volatility. Using our independently developed comprehensive oil price analysis and forecasting system, we predict that international oil prices will maintain narrow-range fluctuations in 2017, with Brent crude averaging \$56 per barrel annually and WTI crude averaging \$55 per barrel annually, keeping the average price spread at approximately \$1 per barrel.

Keywords: international crude oil market, oil price forecast, trend analysis

Review of 2016

In 2016, international crude oil prices showed an overall upward trend, with Brent crude averaging \$44 per barrel annually and the average price spread with West Texas Intermediate (WTI) narrowing to \$1 per barrel. By the end of 2016, the monthly average price ratio of WTI to Brent had increased by 40% year-on-year, marking the largest annual increase since 2009.

During the first half of 2016, international oil prices rebounded linearly, primarily due to upstream oil and gas investment cuts by producing countries, slowing production growth, and the faster-than-expected exit of non-OPEC capacity (particularly U.S. shale oil) from the market. In the second half of 2016, oil prices fluctuated upward, with Brexit, armed conflicts in producing countries, oil worker strikes, and the U.S. presidential election serving as the main drivers of short-term market volatility. At the end of 2016, OPEC and non-OPEC producers reached a joint production cut agreement, pushing international oil prices to their annual peak.

1. Market Situation Assessment for 2017

After nearly two years of low oil prices hovering near the bottom, major global oil-producing countries began jointly cutting crude production, boosting market confidence in further price recovery. In 2017, the crude market's focus will center on new changes in global oil supply and demand dynamics driven by OPEC's production cuts, though the contest between OPEC nations and the U.S. shale oil industry remains far from over.

1.1 2017 as a Critical Year for Future Market Direction Overall, global crude oil supply and demand will be essentially balanced in 2017, depending

primarily on the effectiveness of joint OPEC and non-OPEC production cuts and further growth in global oil demand.

Specifically, world oil demand will see modest growth in 2017, but OECD countries' oil demand remains weak. According to OPEC forecasts, global oil demand will reach 95.56 million barrels per day in 2017, an increase of 1.15 million barrels per day compared to 2016. OECD and non-OECD countries' demand are expected to increase by 150,000 and 1 million barrels per day respectively, reaching 46.85 and 48.71 million barrels per day [1].

Among OECD countries, strong overall economic performance is expected to drive a 200,000 barrel per day increase in Americas demand to 25 million barrels per day. Europe's overall demand is projected to remain stable at 13.91 million barrels per day due to high tax policies and alternative energy development. Asia-Pacific OECD countries' oil demand is expected to decline to 7.94 million barrels per day.

In non-OECD countries, oil demand growth will primarily come from China, India, the Middle East, and African nations. China's and India's oil demand are expected to increase by 270,000 and 160,000 barrels per day respectively, reaching 11.5 and 4.49 million barrels per day. Latin America, benefiting from solid economic growth (particularly in Brazil), is expected to see oil demand increase by 70,000 barrels per day to 6.54 million barrels per day. The Middle East is projected to see overall oil demand increase by 110,000 barrels per day to 8.11 million barrels per day due to transportation fuel demand growth.

Global oil supply will decrease slightly. According to OPEC forecasts, 2017 global oil supply will be 95.43 million barrels per day, slightly below global oil demand. Following the 171st OPEC Ministerial Conference, OPEC will implement the 14th production cut target during the first half of 2017 in accordance with the "Algiers Agreement," limiting production to 32.5 million barrels per day. Compared with October 2016 production levels, this requires a total cut of 1.2 million barrels per day, with Saudi Arabia, Iraq, and the UAE making the largest reductions at 486,000, 210,000, and 139,000 barrels per day respectively. Meanwhile, non-OPEC supply will increase slightly, with 2017 production expected to grow by 300,000 barrels per day to 56.5 million barrels per day.

OECD countries' commercial oil inventories will rise modestly compared to 2016. According to EIA forecasts, 2017 OECD commercial oil inventories will cover nearly 66 days of demand, remaining at a five-year high [2]. Weak OECD oil demand growth is the main reason for high inventory levels, creating pressure on oil price increases.

1.2 Main Factors Affecting Oil Supply and Demand

1.2.1 Global Economic Recovery Slower Than Expected; Developed Economies Face Upside Risks In 2017, global macroeconomic demand remains sluggish, with an unstable economic recovery. Following President Trump'

s inauguration, U.S. economic policies will be highly uncertain, with noticeably weak market confidence. Brexit has caused a sharp slowdown in UK economic growth, dragging down the entire eurozone economy. Emerging and developing economies continue their positive economic trajectory, serving as the main driver of global economic growth. Both the IMF and United Nations have downgraded their world economic growth forecasts in their latest 2016 reports. According to IMF projections, global economic growth will be 3.4% in 2017, with developed economies growing at 1.8% and emerging markets and developing countries at 4.6%. Growth in emerging markets and developing Asian economies continues to cool, with 2017 projected at 6.3%. Middle East and North Africa oil-producing regions are expected to maintain 2016' s growth rate of 3.2% [3,4].

(1) U.S. economic growth will recover slowly, with domestic shale oil posing a threat to market balance. Following President Trump' s inauguration, the U.S. entered a new Republican administration cycle. The Trump administration' s reform focus will likely center on expanding infrastructure investment, reducing taxes, and increasing employment to boost the economy. Meanwhile, the Federal Reserve will continue raising interest rates gradually. Overall, the U.S. employment market is robust, the real estate market is improving, and consumer spending remains strong. However, risks persist, including high public debt levels constraining fiscal policy, potential international trade conflicts from protectionist policies, and the impact of a strong dollar on U.S. exports. In energy policy, Trump favors relaxing restrictions on traditional energy sources, promoting an “energy revolution,” and increasing oil and gas resource extraction. This will benefit the U.S. energy industry and expand domestic crude production capacity. Particularly with current oil price recovery, the U.S. shale oil industry' s breathing space has increased further, creating pressure on global oil market balance and restraining price increases.

(2) The eurozone economy will remain sluggish, facing recession risk. In 2017, the eurozone faces more difficult economic conditions and severe challenges. Brexit' s damage to European economic integration will further expand, with eurozone economic fundamentals deteriorating, declining investment attractiveness, and competitive advantages diminishing. Separatism and populism continue to spread, exacerbating Europe' s political risks. Additionally, major elections in Germany, France, and the Netherlands in 2017 will intensify political uncertainty, potentially triggering economic deceleration and debt deflation risks that could lead to overall deterioration of Europe' s economic environment. According to IMF forecasts, eurozone economic growth will slow further to 1.5% in 2017, with Germany and Spain seeing larger declines to 1.4% and 2.2% respectively. The UK, affected by Brexit, will see growth slow markedly to just 1.1%. Europe' s weak economic situation will further suppress oil demand growth.

(1) China. Under reform measures to liberalize the service sector, China' s economy will continue rebalancing from investment to consumption and from industry to services. In 2017, China' s supply-side reforms will deepen further, with noticeable effects in reducing overcapacity and deleveraging, and the

economy will bottom out and stabilize. However, vigilance is needed against expanding contradictions between domestic overcapacity and demand structure upgrading. According to IMF forecasts, China's economic growth will be 6.2% in 2017, with domestic oil demand continuing modest growth.

(2) Other emerging and developing Asian economies. These economies are expected to maintain strong growth. Improved trade conditions and proactive economic policies and tax structural reforms will support continued growth in India's consumption and investment, with Indian economic growth projected to remain robust at 7.6% in 2017. The "ASEAN-5" (Indonesia, Malaysia, Singapore, Thailand, and Philippines) will also see accelerated economic growth at 5.1%.

(3) Latin America and the Caribbean. This region's economic recovery is expected to consolidate in 2017 with 1.6% growth. Brazil, due to reduced political and policy uncertainty and fading economic shock impacts, is projected to grow 0.5%. Venezuela, suffering from sustained low oil prices, faces worsening macroeconomic imbalances and balance-of-payments pressures, with its recession deepening further to -4.5% growth in 2017. Other oil producers like Ecuador will see economic growth decline by 2.7% due to falling oil exports.

(4) Commonwealth of Independent States. Economic prospects will improve, with IMF forecasting overall CIS growth will increase significantly to 1.4% in 2017. Among oil importers, Ukraine's growth will accelerate with improved external economic conditions and domestic reform results. Belarus's economic contraction is expected to lessen in 2017. Among oil exporters, Kazakhstan and Azerbaijan will see gradually accelerating economic growth due to oil price recovery. Russia, after experiencing dual shocks from oil prices and sanctions, has begun stabilizing, with positive growth for the first time since 2014, projected at 1.1% in 2017.

1.2.3 Potential Repeal of the Dodd-Frank Act; Market Speculation Forces May Resurge At the end of 2016, President Trump and his transition team proposed repealing the Dodd-Frank Act, signaling that the existing financial regulatory system may be dismantled and rebuilt. Since its implementation in 2010, the Dodd-Frank Act has greatly restricted speculation in oil markets. Once loosened, major investment banks will inevitably re-enter oil futures trading, increasing market speculation and volatility.

The U.S. Commodity Futures Trading Commission (CFTC) crude oil futures position reports show that in 2016, non-commercial traders' average position ratio remained high at 53%, with non-commercial net long positions averaging 15%. Overall, the market remains cautious about sustained oil price increases—non-commercial traders' long positions did not increase with rising oil prices in 2016 but instead declined. This indicates that during market downturns, speculative forces' role in driving price increases is quite limited.

In 2017, if OPEC production cuts prove effective, liquidity of speculative funds

and activity of speculative forces in crude markets will further strengthen. However, due to strong expectations of U.S. dollar appreciation, the possibility of significant capital outflows from oil markets cannot be ruled out, which would further increase crude market volatility.

1.2.4 Strong Expectations of U.S. Interest Rate Hikes; Dollar Will Appreciate Further Since the U.S. ended quantitative easing in 2014, the dollar has entered an upward channel, with the Dollar Index rising from 80 to over 100 by early 2017. In 2017, the U.S. domestic macroeconomic outlook is relatively optimistic, with unemployment expected to decline further, supporting the strong dollar's fundamental factors. Following his election victory, President Trump promised increased fiscal spending, which may increase U.S. inflation and overheating risks, prompting the Federal Reserve to accelerate interest rate hikes. In 2017, Federal Reserve rate hikes are essentially a foregone conclusion, with uncertainty only regarding timing and magnitude. Additionally, further depreciation of the British pound following Brexit and the difficulty of boosting the euro and yen mean the dollar's appreciation potential is expected. The only uncertainty stems from policy implementation after Trump takes office. Overall, market expectations for a stronger dollar are optimistic, which will suppress oil price increases to some extent.

1.2.5 Geopolitical Situation Remains Unstable; Russia's Voice in Oil Market Strengthens In 2017, geopolitical risks remain concentrated in the Middle East and Africa. The ongoing Israeli-Palestinian conflict, Syrian civil war, political disorder in Libya and Egypt, presidential elections in Iran and other countries, deteriorating political conflict in South Africa, and the dispute between Saudi Arabia and Egypt over the "return" of the Tiran and Sanafir islands all continue to create uncertainty, undoubtedly affecting the Middle East-Africa political landscape and world oil prices.

Additionally, Russia's influence in the Middle East continues expanding. As the U.S. strategically tightens its posture in the region, Russia is strengthening diplomatic relations and expanding its influence. At the end of 2016, with Russian military support, the Syrian turmoil reached a turning point. Simultaneously, Russia-Turkey relations were repaired. Particularly in the new round of OPEC production cuts, Russia also committed to reducing output by approximately 300,000 barrels per day—Russia's first participation in OPEC cuts in nearly 15 years. These actions demonstrate Russia's proactive engagement in Middle Eastern affairs, undoubtedly increasing its dominance in Middle Eastern oil matters.

2. 2017 International Oil Price Forecast

Through comprehensive analysis of market factors and 梳理 of uncertainties, we applied our independently developed oil price comprehensive analysis and forecasting system to make the following predictions (Figure 1 [Figure 1: see

original paper]): In 2017, international oil prices will maintain narrow-range fluctuations, remaining in a bottom-recovery phase with overall levels approximately \$10 per barrel higher than in 2016. Specifically, Brent crude will average \$56 per barrel annually, WTI crude will average \$55 per barrel annually, and the average spread will narrow to \$1 per barrel.

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