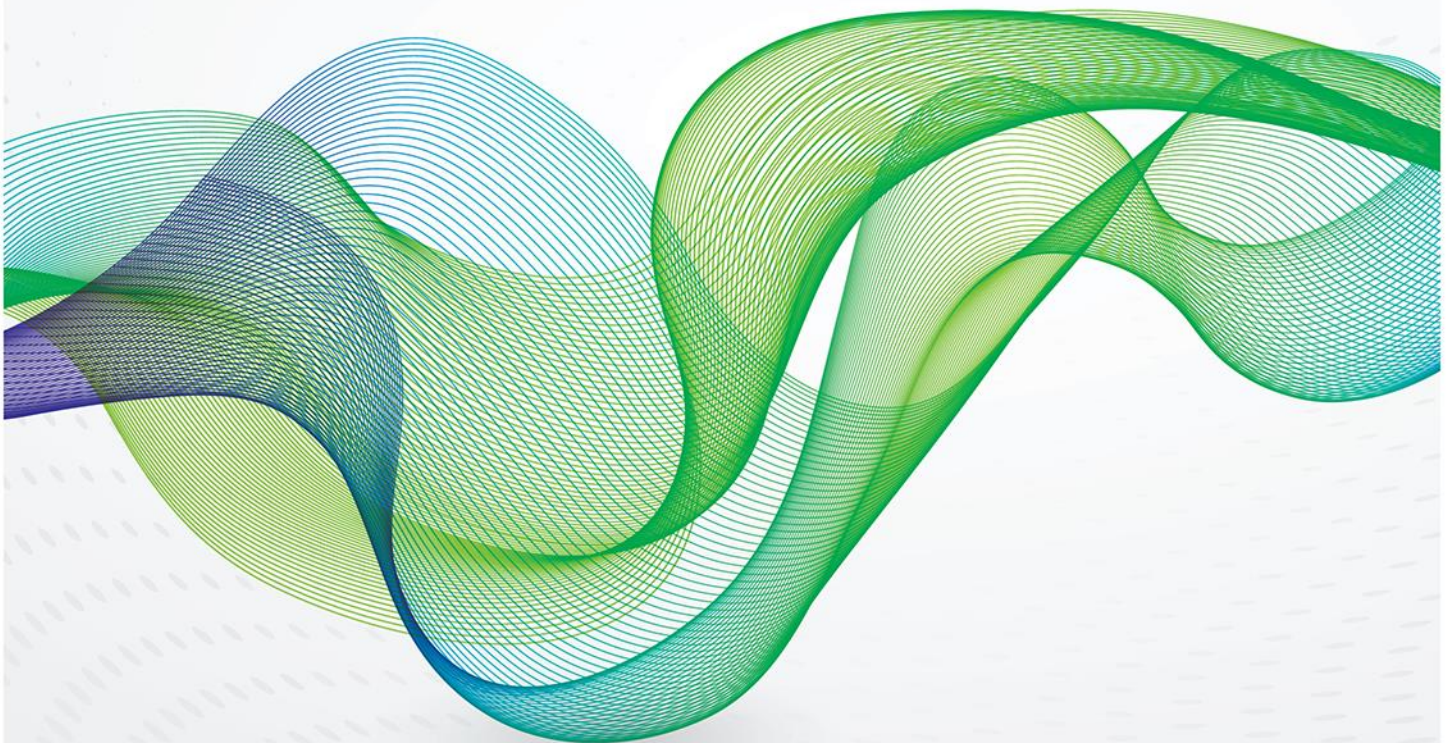




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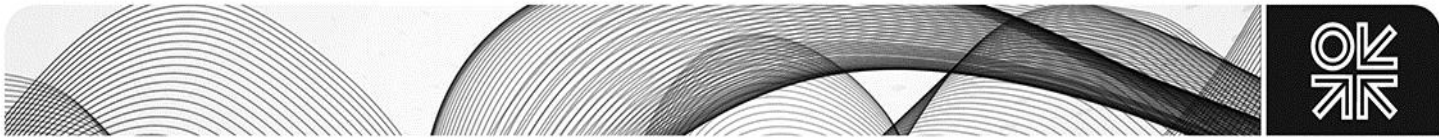
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# Are Asian LNG Spot Prices Finally Decoupling from Oil?



OXFORD ENERGY COMMENT

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The decoupling of spot prices and oil linked prices in the European gas market at the beginning of this decade is now well known and was thoroughly documented by Howard Rogers and Jonathan Stern in multiple papers and presentations in the last 10 years. As the chart below shows, from mid-2009, the NBP price decisively decoupled from the oil indexed Russia to Germany price.<sup>1</sup> As European markets liberalised there were growing calls from buyers to renegotiate the oil linked contracts and move to market pricing – a process which has now been completed in most of Europe, outside the Iberian Peninsula, Turkey and Southeast Europe – as noted in the recently published IGU Wholesale Price Survey 2019.<sup>2</sup>

**Figure 1: European Oil Linked and Spot Prices**



Source: Argus Media

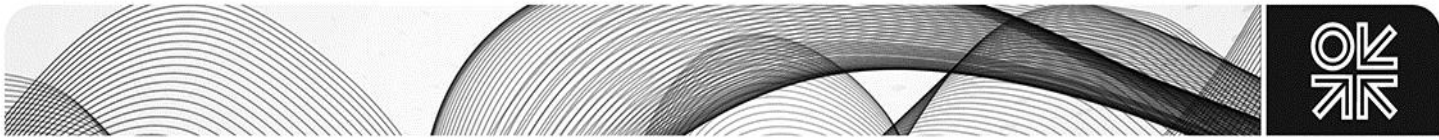
Prices in Europe only started to converge again in 2015 as oil prices collapsed. The NBP price is more volatile than the oil linked price, reflecting the seasonality of demand and the occasional supply disruptions.

As yet spot prices in Asia have yet to see any systematic decoupling from oil linked prices. Asian markets have not gone through the liberalisation process that Europe did and the key LNG markets of Japan, Korea and Taiwan are almost totally dependent on LNG, with no diversity of pipeline supply and domestic production as Europe has. In addition, there are no liquid trading hubs where there is reliable price formation, although there are multiple benchmarks from the price reporting agencies and the trades on the JKM futures contract are growing. The figure below confirms that there has been no systematic decoupling of spot prices from oil linked prices, although the spot price<sup>3</sup> does exhibit more volatility, reflecting in part the seasonality of demand.

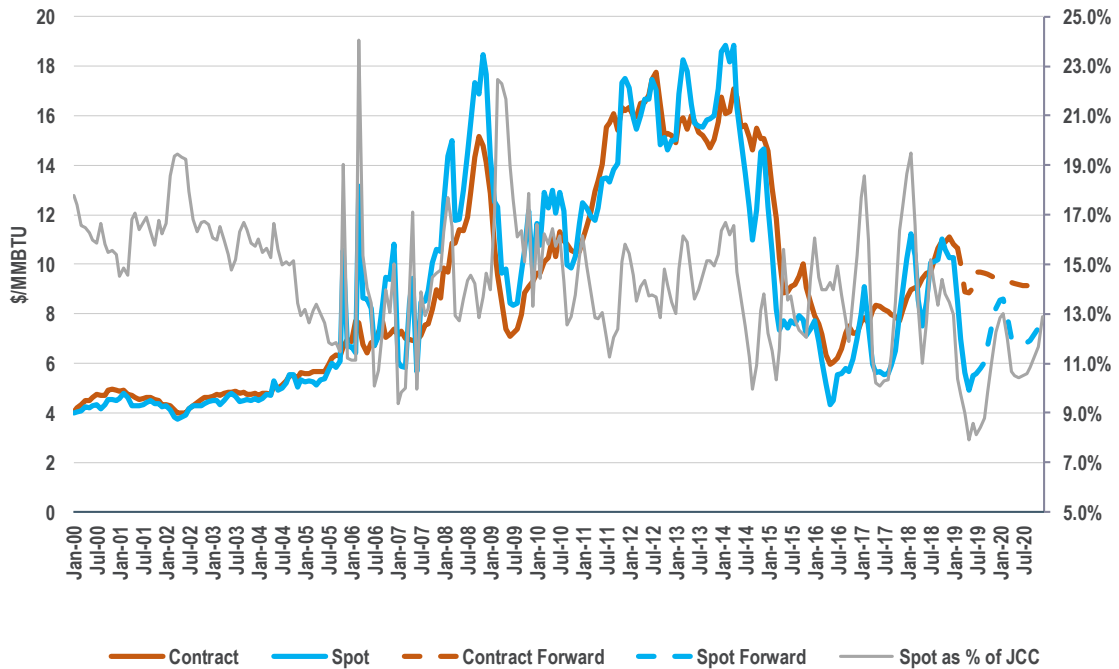
<sup>1</sup> Russia to Germany price as published by Argus through October 2013 and thereafter 88.42% of the new Argus Europe Oil Index, consistent with the pre-November 2013 Russia to Germany price divided by the Argus Europe Oil Index.

<sup>2</sup> International Gas Union, Wholesale Gas Price Survey 2019 (Madrid, IGU, 2019), <https://www.igu.org/publications-page>

<sup>3</sup> Spot price is average of ANEA and the METI spot arrival price



**Figure 1: Japan Contract and Spot Prices**



Source: Argus Media and METI

In the middle of 2014 spot prices began declining well below oil linked prices as LNG demand weakened but then oil prices also fell sharply, with prices recouping. Average spot prices in 2016 and 2017 were around \$1 less than average contract prices, while in 2018 they were around the same average level.

However, in early 2019 spot prices began to fall sharply, from over \$10 in January to less than \$5 by May. Oil prices were above \$70 leading to Japan contract prices above \$10 – spot prices were less than 8% of JCC. The forward curve for Brent<sup>4</sup> suggests that the Japan Crude Cocktail (JCC) price – typically \$2 below Brent – will fall to \$65 by the end of 2019 and \$62 by the end of 2020. This suggests contract prices in the high \$9 in 2019 and low \$9 in 2020.<sup>5</sup> In contrast, the forward curve for Japan spot<sup>6</sup> is much lower, averaging \$6.60 for the second half of 2019 (although this assumes a sharp rise to over \$8 by December) and averaging \$7.40 in 2020 – against a contract price of \$9.20. As a percentage of JCC, spot prices average just below 11% from now until the end of 2020 based on the forward curves, compared to 14% between beginning of 2012 and the end of 2018. The recently published IGU Wholesale Gas Price Survey also noted that spot LNG rose to 30% of LNG imports in 2018, a rise of 7 percentage points over 2017, suggesting more liquidity in the market.

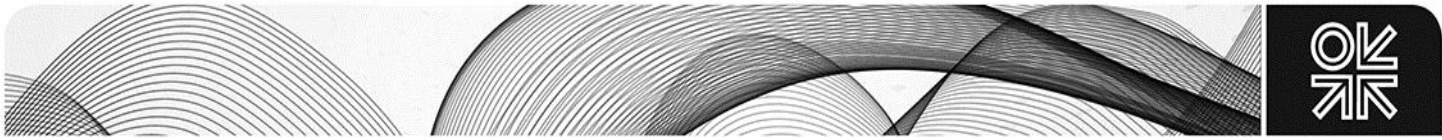
It should be noted that, against the background of a continuing rise in LNG supply coming on over the next 18 months, probably in excess of demand growth,<sup>7</sup> that there seems little in the fundamentals to support a rise in spot prices through 2019 of over \$3. At the moment 2019 is looking more like a repeat of 2016, when prices averaged just under \$6.

<sup>4</sup> As at May 8 2019

<sup>5</sup> Calculated as 12.33% of JCC plus \$1.18 – based on a regression of JCC – lagged three months which was the best fit – and Japan contract prices from January 1992 to date – R<sup>2</sup> of 96.5%. Data source is Argus Media.

<sup>6</sup> Using JKM futures – source CME

<sup>7</sup> Also noted by BP in its first quarter 2019 results on April 30. <https://www.bp.com/en/global/corporate/news-and-insights/press-releases/first-quarter-2019-results.html>



It is true to say that spot prices and contract prices might converge again as the LNG markets tighten, maybe in 2021 and 2022. Oil linked prices still dominate the Asian LNG markets and will still have, through the contracts, a major competitive influence in a tight market. In Europe in 2009 and 2010 it was the supply surplus, with weakening demand, which triggered the decoupling. Oil linked pricing in Europe in 2010 was still more important than spot or hub pricing, so the contract influence remained for a few years, but that has largely disappeared now. While Asian markets lack the liberalisation push that was happening in Europe in the early 2010s, it may still be true that Asian LNG spot prices have finally begun decoupling from oil prices.

If the decoupling is for a prolonged period then the next question is what are the potential consequences? While the Asian markets are not liberalising to the same extent as we saw in Europe some 10 years or more ago, if we are entering a significant period of divergence for say 1 to 2 years, then this might accelerate the determination of buyers to move to market prices. This may also be accompanied by price reviews which could lead to arbitrations. Certainly, with a number of major LNG contracts expiring in the next 2 to 3 years, the pricing terms for any possible renewal may focus more on market prices. What these market prices are remains an open question, however. Will there be national hubs, a spot price JKM-type benchmark or a more remote trading price such as Henry Hub, NBP or TTF?