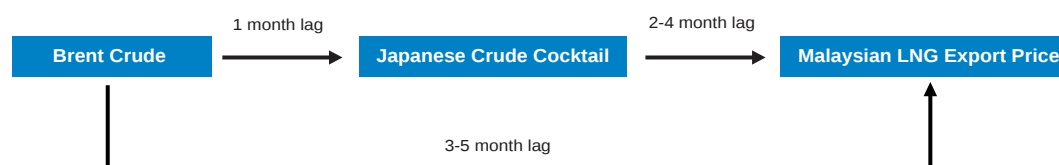


The Pricing of Malaysia's LNG Exports

Oil prices (Brent) have declined significantly from a peak of USD115 per barrel in mid-June 2014 to a low of USD57 per barrel by March 2015. Such a steep fall in oil prices have had a negative impact on the prices of other commodities, including LNG, which comprised 8.4% of Malaysia's total exports in 2014. In the past, the prices of Malaysia's LNG exports have broadly trailed oil prices with a lag of 3 to 5 months. The latest figure though, shows a decline in Malaysia's LNG prices by only 5.5%, compared to the 49% fall in oil prices since June 2014. This short article provides some explanation to this trend.

Historically, Malaysia's LNG export prices have been linked to oil prices, albeit with a lag (Figure 1). Malaysia's LNG exports are typically priced using the Japanese Crude Cocktail (JCC)¹ as a benchmark. As the JCC moves in line with other global crude benchmarks, such as Brent crude, it is a useful proxy for Malaysia's LNG pricing. The terms of the contracts are reviewed periodically every 3 to 5 years, based on a *formula-based pricing mechanism*², in line with the price trends in the LNG market.

Figure 1:
Historically, Malaysian LNG exports are priced using the JCC prices as a benchmark



Source: Staff Estimates

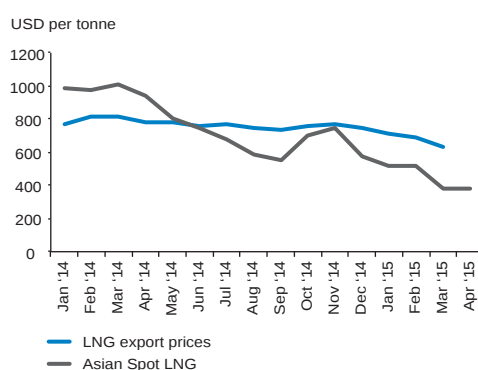
Since LNG prices are indexed to oil prices, LNG prices are expected to decline in line with the decline in oil prices. However, there are factors that may prevent Malaysia's LNG contract prices from experiencing a decline of similar magnitude:

- i) The stability of Malaysia's LNG contract prices as opposed to the volatile spot market prices (Figure 2).
- ii) The elevated demand from Japan post 2011, which led to a weaker pass through between oil and LNG prices (Figure 3). Prior to the Fukushima incident, there was a consistent price lag between oil and LNG prices of 3 months (The 3-month rolling correlation was high at 0.87). Following the Fukushima incident, the pricing lag began to vary with a variable lag of between 3 to 5 months. Of late, the correlation between LNG prices and Brent crude oil prices has weakened to just 0.4 to 0.6 (using a 3 to 5 month rolling correlation).

¹ The JCC is the average price of twenty different types of Japan's crude oil imports.

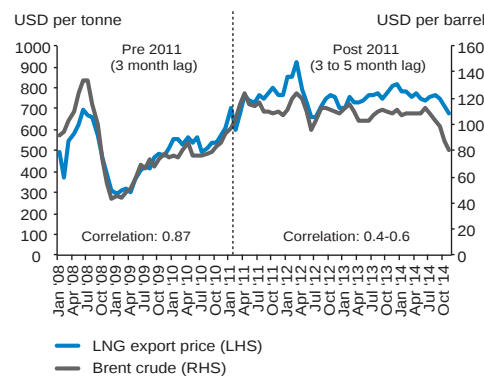
² This pricing mechanism is more applicable to LNG cargoes sold on a contractual basis. Prices are usually the result of direct and confidential negotiations between the buyer and seller, using oil prices as a benchmark. The price of Asian LNG (including Malaysian) contracts can be estimated using a linear formula: LNG price = Slope*Oil price + Constant (Source: ANZ Research).

Figure 2:
Malaysian LNG export prices is less volatile compared to Asian Spot LNG



Source: MATRADE and Platts

Figure 3:
Malaysian LNG prices remained elevated since 2011



Source: MATRADE and Bloomberg

The Fukushima incident led to the shutdown of all 48 operational nuclear plants in Japan, resulting in a surge in Japan's LNG imports to supply the country's electricity needs. Malaysia is one of the major exporters of LNG to Japan, being the nearest LNG exporter to the country.

Continued uncertainties surrounding Japan's nuclear plant restarts is expected to provide support to Malaysia's LNG prices. Over the long term, the timing and feasibility of the nuclear plant restarts hinges on the Japanese government's ability to overcome both regulatory hurdles and negative public sentiments over the usage of nuclear power.

In the near term, Malaysia's LNG prices are therefore expected to be supported by continued demand from Japan. From June 2014 to March 2015, although Brent crude prices declined³ by 49%, Malaysia's LNG prices declined by only 5.5% over the same period⁴.

Conclusion

Historically, while a close relationship existed between LNG and crude oil prices, this relationship has weakened post-Fukushima disaster, due to elevated demand from Japan. As a result, the decline of LNG prices has been less severe than expected. In addition, the contractual nature of Malaysia's LNG exports ensures price stability opposed to the more volatile LNG spot prices.

³ Brent crude prices averaged USD112 per barrel in June 2014, and declined to USD 57 per barrel by March 2015.

⁴ Malaysian LNG export prices averaged RM2,448 per tonne in June 2014, and declined to RM2,314 per tonne by March 2015.