

April 2017

Does the Portfolio Business Model Spell the End of Long-Term Oil-Indexed LNG Contracts?

Executive Summary

Howard Rogers

Historically the cornerstone of the LNG industry has been the practice of contracting the output of liquefaction plants to buyers for 25 years or so, for a price directly related to crude oil prices with a minimum 'take or pay' of 90% of Annual Contract Quantity. Such contracts historically had destination constraints (i.e. the buyer did not have the right to re-sell/divert LNG cargoes to third party destinations). Over the past 20 years or so, the LNG market has become more flexible. In 2015 Spot and Short-term contracts comprised 22.7% and 5.4% of all volumes sold respectively. It is widely anticipated that this share will increase as (particularly) more US LNG export projects come onstream between 2017 and 2020.

Over the period from 1980 to the present the following market developments introduced more flexibility into the LNG industry business model structure: a) the waves of market liberalisation, in North America (1980s), the UK (1990s), and North West Europe (2008 onwards); b) the 'tight' LNG market in the 2006 to 2008 created the incentive to re-direct to Asia, LNG cargoes originally destined for Europe; c) the development of new LNG supply projects to offset US and UK domestic production decline; d) the divergence in regional price references post 2010 and the scale of the re-direction of LNG towards Asia in this period; e) the emergence, at scale, of US LNG export projects with a fundamentally different business model and destination flexibility; and, f) the prospect of large new LNG supply volumes over the period to 2021 looming large on the horizon coupled with Asian LNG buyers' desire to move away from oil-indexed LNG prices in new long-term LNG contracts. This introduction of more flexibility into the LNG industry has developed against a backdrop of a growing number of active LNG exporting and importing countries (18 and 35 respectively in 2016).

Applying the trading skills from their gas, energy and commodity trading teams to the 'web' of LNG supply sources and destination markets, a group of 'portfolio players' emerged – mainly the upstream majors with large LNG businesses. These sell LNG to utility buyers or on European hubs (or other portfolio players or traders) through a range of long, medium, short term contracts and spot cargoes with no specific supply source. The underlying proposition is that the synergies to be had from applying advanced mathematical valuation and real-time optimisation (through hedging and cargo diversion) based on applied option pricing theory (and judgement) produces additional **extrinsic** values over and above the **intrinsic** value of simply pairing supply sources and destination markets. LNG traders have formed 'asset-light' versions of the same business model.

At present the outlook for Asian LNG prices is uncertain: buyers want 'low' prices but with no clear idea of an alternative to oil indexation as a price formation mechanism (other than a hybrid of some oil combined with European and US hub price), and LNG trading indices are as yet insufficiently liquid to provide a reference for LNG contract pricing. The LNG market is entering a 'soft' period and may even experience a 'glut' of supply until the early 2020s.



Despite the period to 2021 being a challenging one for all LNG supply-side players, the prospects for the portfolio players look promising in respect of their participation in the projects which will form the next LNG 'growth surge' on the mid 2020s.

The comparative advantages of the **majors** amongst the portfolio players compared with the independents and smaller players are:

- Their already well-developed portfolio of LNG supply sources and destination markets – which would allow them to see higher value in new LNG projects (intrinsic and extrinsic value) relative to the stand-alone player.
- Their ability (and preference) to raise lower cost debt finance on their balance sheets rather than on a project-specific non-recourse basis.
- The US with its cost base and lower risk project execution advantages is likely to provide many of the 'next wave' LNG projects and this plays further to the LNG portfolio player majors' skillset.
- In practical, transactional terms this would translate into the Majors amongst the portfolio players:
 - Taking FID on projects where they are the upstream and liquefaction participants, without long term offtake contracts immediately downstream of the liquefaction plant;
 - Signing long term contracts for LNG from third party liquefaction projects (or in the case of US LNG projects long term tolling offtake agreements).
 - In either case the rapid access to lower cost debt and ability to offer better terms for long term offtake (due to portfolio synergy) place them in a stronger position vis a vis the independents.
 - Having secured new supply ex-liquefaction plant, the major portfolio players can then:
 - Sell the LNG on whatever price formation basis they can agree with buyers;
 - Choose a range of short, medium and long term contracts as well as spot sales to suit their own and buyers' risk preferences, rather than the dictates of banks (which would be the case in non-recourse project financing).

We have already seen examples of the major portfolio players taking large offtake positions on US LNG export projects and BP taking all the supply from the Mozambique Coral LNG Project (conditional on its eventual FID). The next step would be the direct investment in upstream and liquefaction plant by large players without project finance. ExxonMobil and Qatar's Golden Pass project or BP's Mauritania project could provide such examples.

The corollary of the above logic is that, in a world where oil-indexation may be fading and the scale of the next LNG supply wave may be smaller than that of the late 2010s, independents and their banks may require a business model strategic 'reset'. If non-Majors and energy sector banks do not adapt to this transition they may be 'left on the starting blocks' in the next LNG wave.