

Modelling or muddling? Economic analysis of the PNG LNG Project

by Mark McGillivray

6 June 2018



Remnants of the former Panguna mine buildings, PNG (madlemurs/Flickr/CC BY-NC-ND 2.0)

‘[Double or nothing: the broken economic promises of the PNG LNG Project](#)’ is an April 2018 report by the Australia Jubilee Research Centre. It was authored by Paul Flanagan and Luke Fletcher.

It critiques the [2008 ACIL-Tasman macroeconomic modelling](#) of the Exxon-led PNG LNG project. As the report notes, this project since 2014 has shipped approximately 7.9 million tonnes of natural gas per year from the gas fields of the PNG Hela region, with this gas being liquefied at a plant close to Port Moresby and shipped to buyers in Asia.

A key prediction of the ACIL-Tasman modelling was that the LNG project would double PNG’s GDP. Other predictions regarding the impacts of the project in PNG included an 84 percent increase in household incomes, 42 percent increase in employment and an 85 percent increase in government expenditure.

‘Double or Nothing’ states that ‘the proponents [of the project] positioned it as a major transformational project for the PNG economy, based around the central claim of a doubling of GDP’ and that ‘caveats around assumptions [of the modelling] were lost’ (p. 5). It is true that some proponents did this, and that the claim influenced the approval of the project in 2009 and found its way into the 2011/12 PNG election campaign. But not all proponents did. Many were skeptical of the ACIL-Tasman modelling, although believing that with appropriate institutional and policy settings the project had the potential to transform the PNG economy and contribute to many positive economic and social benefits.

The report argues that these and other forecasts of beneficial impacts were wrong, spectacularly so in many cases. Some of its findings, alongside the predictions of the ACIL-Tasman modelling, are set out in the following table.

ACIL-Tasman model prediction

Double or nothing finding

A doubling of (100 percent % in) GDP	An increase of 10%.
An 84% increase in household incomes	A fall of 6%;
A 42% increase in employment	A fall of 27%;
An 85% increase in government expenditure	A fall of 32%
A 58% increase in imports	A fall of 73%.

The 'Double or Nothing' findings are based on its own economic modelling. This modelling compares actual economic outcomes to those that, according to the report, would likely have been observed in the absence of the LNG project. They are not comparisons of ACIL-Tasman modelled predictions against actual outcomes, but those predicted by the 'Double or Nothing' modelling against these outcomes. The comparisons in the above table are of one set of predictions against another.

How valid or empirically robust are the 'Double or Nothing' predictions? The predictions are based on an assumption, which is that in the absence of the LNG project, the PNG economy would have continued to grow at the rate it did between about 2005 and 2009. Would the economy have grown at this rate in the absence of the project?

If the answer to this question is 'no', then the 'Double or Nothing' conclusions are wrong. It is remarkably silent on the importance of this key assumption to its findings, with no real attempt to credibly justify or evaluate it.

Without such a justification, 'Double or Nothing' unfortunately adds little to understanding of the impacts of the PNG LNG project, and its findings must be taken with a pinch of salt.

Here is to hoping that, one day, there will be empirically robust and credible modelling of the impacts of the PNG LNG project so as to truly inform policy choices that can benefit the people of PNG.

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Link: <https://devpolicy.org/economic-analysis-of-the-png-lng-project-20180607/>