Economic Modelling on Estimated Effect of TPP on New Zealand Economy

The Ministry of Foreign Affairs and Trade (MFAT) commissioned a study by a team of internationally respected and experienced trade modellers to estimate the economic impact of TPP, focussing on New Zealand. In this study, Strutt, Minor and Rae [1] estimated the impact of TPP, in terms of goods and services trade and economic growth, on New Zealand compared to a world without TPP (the "baseline"). The modelling took into account trade flows between New Zealand, other TPP members, and the rest of the global economy.

Based on the modelling the New Zealand Government's assessment of the overall impact of TPP on New Zealand's economy, once key outcomes have been fully implemented, was that New Zealand's real GDP would be projected to increase by at least 0.9%, or NZ$2.7 billion annually, by 2030.

Background on modelling

The modelling utilised the well-established, internationally recognised Computable General Equilibrium (CGE) approach to modelling to estimate the impacts of TPP. This is a common approach by which economists seek to capture the effects of changing trade barriers (such as under a Free Trade Agreement like TPP). CGE model results rely on assumptions and are subject to data limitations, and hence are better suited to indicating the size and direction of effects rather than providing precise estimates.

We are confident that the CGE modelling reported on here is of the highest standard possible. This modelling does not, however, capture the full potential economic consequences of TPP – for example, the impact of increasing copyright term from 50 to 70 years in New Zealand. These other impacts have been addressed separately (see www.tpp.mfat.govt.nz for example).

The researchers modelled the economic impact of TPP by first estimating how New Zealand's economy would be expected to develop as part of the global economy in the absence of TPP (the "baseline"), and comparing this to the case where TPP liberalised trade in goods and services in four areas. The result of the CGE model takes account of the complex adjustments that might take place in an economy following changes in policies and regulations and consequential effects on prices, trade flows and resource allocation in the economy. The four ways in which TPP was assumed to liberalise trade were:

- Reductions in tariffs and quota barriers on goods trade.
- Reductions in non-tariff barriers (NTBs) on goods trade.

[1] Anna Strutt, Peter Minor and Allan Rae, "A Dynamic Computable General Equilibrium (CGE) Analysis of the Trans-Pacific Partnership Agreement: Potential Impacts on the New Zealand Economy", 28 September 2015.

- Improved trade facilitation measures.
- Reductions in barriers on services trade.

Non-tariff Barriers

The $2.7 billion GDP increase from 2030 figure was reached based on a conservative review of the results of the study, which actually projected a potential 1.4% ($4.16 billion) increase to New Zealand's real GDP in 2030. Specifically, the Government assumed the contribution to GDP gains from the reduction of non-tariff barriers (NTBs) on goods trade would be less (by half) than that estimated by the report.

We consider that the data and techniques used throughout the modelling are amongst the best available. Existing data on NTBs has limitations, however. While the removal or lessening of NTBs can represent one of the most significant outcomes from trade agreements, and the impact of NTBs on global trade is well-documented, available data and approaches to modelling NTBs are not as developed as for, say, the liberalisation of tariff barriers. For this reason the Government took a conservative approach to considering the benefits of reductions of goods NTBs under TPP.

Notwithstanding this cautious approach, the Government expects that the reduction of NTBs under TPP will have a significant positive impact for the New Zealand economy that could easily reach or exceed the order estimated by the study.

These results are presented in the table below, together with the Government's conservative assessment of the potential gains from the removal of goods NTBs.

	Modelled outcome (Strutt et al.)	Proportion of total, in modelled outcome	Government treatment of results
Tariffs	$624 million	15%	$624 million
Trade Facilitation	$374 million	9%	$374 million
Services NTBs	$250 million	6%	$250 million
Goods NTBs	$2,912 million	70%	$1,456 million (half modelled outcome)
Total	$4,160 million	100%	**$2,704 million**

Note: Dollar values here are in real 2007 New Zealand dollars (not discounted present value).