## Lytton Advisory Quarterly

### Economics, Infrastructure and Finance

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#### Welcome

In this edition we run the gamut of economic issues from big strategic ones – the China FTA and climate change – to the applying cost benefit analysis. It highlights the need for clarity in analysis. **Craig Lawrence, Principal.** 



# Do We Really Need Cost Benefit Analysis?

Craig Lawrence

Recently major capital expenditures are being commissioned by governments across Australia with a startling lack of transparency. The public absence of economic cost benefit analysis of significant infrastructure investments means the general public cannot determine whether the expenditures on these projects deliver the largest economic return to the people or even whether the economic return is actually positive.

Two recent cases in point in Queensland highlight this: the Toowoomba Second Range Crossing (TSRC) project and the Bus and Train (BAT) Tunnel project.

Neither Projects Queensland, the Department of Transport and Main Roads nor Infrastructure Australia have public information about the economic returns expected from TSRC. However the Commonwealth and State Governments are committed to spending \$1.6 billion constructing this project.

Similarly the BAT Tunnel project was announced with an indicative budget of \$5 billion. The delivery model had not been established.

It was expected to shave \$1.4 billion off an earlier cross river scenario. Would it be madness if we saved \$1.4 billon in cost and reduced benefits by more than that amount? How does the public get to know?

So does it really matter whether governments spend billions of dollars without public economic justification? Do we really need to know whether the project option selected is the one that maximizes the economic welfare of our community?

A transparent economic cost benefit analysis lays this bare for all to see. So do we really need CBAs? Absolutely.

## China Australia Free Trade Agreement

Dr Alistair Robson

The People's Republic of China (China) exports and imports more goods and services with Australia than any other country. In 2013 Australia traded \$151 billion of goods and services to China, with Iron Ore, Coal and Gold being the dominant products exported. This is \$22 billion or 28% higher than the previous year. The second largest trade relationship was with Japan at \$50 billion.

The economy of China is vast at \$10 trillion in 2013 and growing around 7%. It accounts for about a quarter of Australia's total trade at \$151 billion in 2013. In addition, the country has been a source of significant foreign investment for purposes spanning residential development through to shares of major mining companies.

As part of a long running series of bilateral Free Trade Agreements (FTA's) with other countries such as the USA, Korea and Japan; Australia has been negotiating with China on a FTA since mid-2005. These negotiations have involved 21 rounds

of talks, demonstrating the complexity of any agreement. Despite the word "free" being part of FTA there will remain some restrictions on politically sensitive industries, and the entirety of these will be brought to light in any final signed FTA agreement between the two countries.

Negotiations on the China-Australia FTA were concluded in late 2014. Both trade ministers signed a declaration of intent towards a final agreement subsequent to these negotiations. The FTA is expected to be finally agreed upon between both countries in 2015, and may be operational this year as well.

The benefits of a FTA are lower tariffs (tax on exports) on both the goods Australia exports to China and goods Australia imports from China. It allows producers in either country to concentrate production in industries where they can produce cheaper than the other – known as comparative advantage in economic literature.

Given the size and growth of bilateral trade between Australia and China the potential benefits are enormous to the Australian consumers and businesses. Examples of industries expected to benefit include many agricultural industries, such as dairy, meat and wine, in addition to numerous service industries. Some service companies will have enhanced market access to the Chinese market, and Chinese companies can invest up to \$1,078 million without approval from the Foreign Investment Review Board.



There will also be an enhanced dispute resolution in place through an Investor State Dispute mechanism. The tourist and industries needing cheap labour will benefit as well through 5,000 visas for Chinese nationals to either work or holiday in Australia. Cheaper imports from China to Australia of clothes and textiles and more foreign investment from China can be expected.

While there are potentially significant benefits of a FTA between China and Australia there are costs. These costs may fall hardest on industries such as manufacturing. Despite the potential costs UNSW senior lecturer of International Business Dr Jane

Qiu believes the FTA will be a net positive for the Australian economy.



Free Trade Agreements are a second best solution to free trade. They tend to distort trade towards countries which have a FTA and away from those which don't. Many international economists recommend agreements between all countries, such as the current Doha round.

Alistair Robson (Phd Economics, UQ) is Director of Australia China Business Futures. A former treasury official, he also worked in several economic agencies.

### **Managerial Economics**

Craig Lawrence

Commercial analysis can benefit from economic thinking. Businesses can profit by applying economic principles and techniques in their operations. Typically this is around analysis of data and examination of markets.

Data mining is basically about extracting insights from large pools of information that businesses collect as a normal part of their operations. There are a lot of different software options and statistical techniques that can be used.

Often a missing piece is the question driving the analysis. Economics provides some of these questions because the discipline has been looking at the operation of firms and markets for a very long time

Businesses make significant capital investments and strategic decision with long term impacts. In some cases this draws on business managers' professional experience – a gut call in the absence of evidence. Valuable and necessary in fast paced commercial environments. However not always satisfactory for some risk averse boards and owners.

Managing risk requires not only a data driven approach but one that asks the right questions.

## **Applying Economics to Climate Change**

Craig Lawrence

Sometimes it feels like Australia is one of the few places in the Pacific where climate change is not really being taken all that seriously at the political level. The discussion such as it is here is about politically challenging the scientific evidence. The support of many federal and state leaders could be described as tepid at best regarding the broad scientific consensus.

So how important is the impact of climate change on transport infrastructure? Very important for developing countries it seems, particularly the Pacific island nations. At the beginning of 2014 I completed a present cost analysis of this at a river crossing in the Solomon Islands. It looked out over a 25-year period.

In the absence of downscaled climate forecasts and detailed hydrological data a scenario analysis was developed. Baseline asset performance in the absence of climate change was assessed against a range of climate change scenarios using actual flood event and cost data.

This created estimates of days service lost as well as maintenance, repair and replacement costs. Five

different socio-economic impacts driven by service levels were also assessed identifying wider economic costs.

The upshot is that just at this one crossing the economic present cost of climate change is equivalent to around 5% of the current national transport budget.

Any climate change adaptation measure that fully mitigates that for less cost will increase economic welfare.

The analysis provides a rational basis for an adaptation budget when considering possible engineering design changes. Imagine the consequences of not taking any change into account.

With Queensland writing climate change out of town planning and the national level seeking to pay polluters rather than introduce a proper market mechanism, how serious can we really be in Australia about addressing it?



#### **About Us**

Craig Lawrence is the founder and principal of Lytton Advisory. He established this practice to help businesses and governments make astute capital investment decisions. We use economics to analysis commercial and public policy issues. Lytton Advisory is based in South East Queensland, operates nationally and takes on international assignments.

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