Senate Standing Committee on Economics

ANSWERS TO QUESTIONS ON NOTICE

Treasury Portfolio

Additional Estimates - 25-26 February 2009

Question: aet 32

Topic: Nation Building & Jobs Plan –

GDP & Jobs Estimate Modelling

Hansard Page: E8 (25 February 2009)

Senator ABETZ asked:

Senator ABETZ—I have got one more. Can we just confirm that the GDP and jobs estimate provided for the various government stimulus policies, the Economic Security Strategy, COAG Reform, the Nation Building and Jobs Plan and Australian Business Investment Partnership, were the result of computable, general equilibrium modelling?

Dr Gruen—I think we have answered this question on many occasions. I have tried my best to explain how those estimates were derived. They were derived using an estimate of the fiscal multiplier and then an estimate of by how much an increase in GDP would translate into jobs. That is not the output of a general equilibrium model. We used the output of our general equilibrium model as one of the pieces of information that we relied upon when coming up with those estimates. But at the end of the day the way to think about them is that we looked at the literature, and the literature suggests a fiscal multiplier of between a half and one, which I think we quoted in the MYEFO, then that an increase of one per cent of GDP would translate over time into up to 75,000 jobs. So the answer to your question is that the jobs estimates are based on our assessment of the fiscal multipliers and our assessment of how much an increase in GDP translates into jobs. They are not the direct output of a general equilibrium model, although a general equilibrium model was used as one of the inputs into these estimates.

Senator BUSHBY—Presumably you ran those simulation packages through the general equilibrium model. What output did that actually give?

Dr Gruen—We do a variety of experiments with our model. I can take it on notice. As I say, it is one of the things that we do. There seems to be a sense that these things are definitive.

Senator BUSHBY—I understand you are saying you had a look at the overall figure and then took a lot of things into account, some of which are scientific and are giving you results for a modelling would, which once again is still only an estimate of what is going to happen.

Dr Gruen—Absolutely.

Senator BUSHBY—But there are other things which were less tangible that you built into it from what you have read and so on. What I think Senator Abetz was asking, and certainly I am interested in, is if you did run the packages through a general equilibrium model, what were the results that came out of it.

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Dr Gruen—Let me take that on notice. As I say, this is one of the things we do, but we do not treat it with the reverence that it seems to be treated with. The idea that we have this computer glowing in the corner and out of this computer comes these magic numbers—that is not how it works.

Answer:

Modelling the impact of economic policy using the Treasury Macroeconomic (TRYM) model

The Treasury Macroeconomic (TRYM) model is one of the many tools Treasury officials can use to assess the impact of government policy on the Australian economy. While the TRYM model can provide guidance on the quantitative impact of policy, the limitations of the model require that model results should always be considered in conjunction with other analysis.

The limitations of the TRYM model stem partly from its design. The TRYM model is a highly aggregated general equilibrium model of the Australian economy, designed to explain the aggregate impact of broad-scale policy changes. It is less suited to model the impact of more targeted policy, which may aim to impact components of the economy that have been aggregated in the TRYM model.

In addition, the TRYM model is explicitly designed to assess the impact of particular policy changes, such as changes to short-term interest rates. For non-standard policy changes, the mechanisms in the model through which policy may impact the economy are not necessarily well defined. The reported impact of such policy should be treated with a greater degree of uncertainty than that for more standard policy.

TRYM model results

While the impact of the Government's Nation Building and Jobs Plan reported in the Updated Economic and Fiscal Outlook - February 2009 (UEFO) is not explicitly based on TRYM model results, the impact of the package has been estimated using the TRYM model.

The TRYM model reports that the Nation Building and Jobs Plan would be expected to boost GDP growth over the medium term – by around half a percentage point in 2008-09 and by around three-quarters of percentage point in 2009-10. The model reports that the package would be expected to provide a boost to domestic consumption and investment, for both the public and private sectors.

It is likely that the TRYM model underestimates the impact of the package, particularly with regard to the cash transfers to households. In particular, the TRYM model has limited capacity to simulate the impact of transfer payments that target households with relatively high propensities to consume. As such, the impact of the targeted transfers, and thus the whole package, is expected to be greater than estimated by the model.

The modelled impact on employment largely depends on the extent and pace at which households spend the transfer payments – again TRYM has limited capacity to model the impact of the targeted transfers. Overall, the TRYM model reports the package would be expected to boost employment by between 70 000 and 90 000 jobs.

¹ The Treasury Macroeconomic (TRYM) model is a quarterly medium-sized general equilibrium model of the Australian economy. The TRYM model consists of around 30 estimated behavioural equations and around 100 accounting identities. There are almost 300 data series supporting the TRYM model.