Response to the
Productivity Commission Draft Report
on
Economic Impacts of Migration and Population Growth
From
Sustainable Population Australia
Thursday, February 09, 2006
Author Dr John R. Coulter

> *Recognising the fallacy of misplaced concreteness is particularly important to establishing economics for community, because community is precisely the feature of reality that has been most consistently abstracted from in modern economics. The need is not for one more theorem squeezed out of the premises of methodological individualism by a more powerful mathematical press, but for a new premise that reinstates the critical aspect of reality that has been abstracted from – namely, community.*
> *From reference (2) page 43.*

In July 2005 the Treasurer, Peter Costello, asked the Productivity Commission to investigate and report on the Economic Impacts of Migration and Population Growth. There were six terms of reference all relating to productivity and population growth with an emphasis on population growth through migration.

The Productivity Commission is the principal review and advisory body on microeconomic policy and regulation and is charged with inquiries and research affecting (among other things) the welfare of Australians. Comments on the draft report can be lodged with the Commission before February 24, 2006.

The principal difficulty for an organisation like SPA in addressing this draft report is that both the terms of reference and the Commission's response are embedded in the prevailing economic growth paradigm. SPA rejects many of the assumptions which are unquestioned within the growth paradigm and therefore finds some of the conclusions unsubstantiated. A significant part of SPA's criticism rests on showing that many of these assumptions are not only inherently wrong but they have led the Commission to draw wrong conclusions.

The Commission takes increases in per capita GDP or GNP as the main measure of productivity. It pays lip service to the claim that there are flaws in GDP and GNP but fails to identify any specific flaws even though some have direct and significant effects on the matter being investigated. The reference to Barro at this point is to a dyed-in-the-wool economist who seems never to have questioned the unalloyed benefits of infinite economic growth. The Commission would have been better informed by reading Professor Herman Daly [1&2] who clearly sets out these flaws.

Both GDP and GNP are measured in constant dollars and are measures of flow through an economy. The Commission finds that increasing Australia's exports of agricultural products and minerals may lead to a decline in the unit price and thus a decline in 'productivity'. In short, producing more results in a decline in

‘productivity’ because the latter is not measured in physical units but in dollars. Surely this is intuitively a bizarre conclusion. Further to this point, the Commission recognises that increasing ‘productivity’ may lead to a decline in availability of non-renewable resources but elsewhere fails to recognise that it has identified a situation in which declining ‘productivity’ can also be associated with decline in the stock of non-renewable resources. The reason for this failure, this apparently anomalous situation, is that it is not relating to the real physical world but to the abstract and artificial world of the economist.

Because GNP and GDP are flow measures they take little account of stocks. When forests are cut or minerals are dug from the ground they enter these flow measures as if by the wave of a fairy’s wand. Until these resources are value added a proper accounting would show them as a loss from the capital or stock account and an equal gain to GDP and GNP, in short, a neutral transaction. The Commission has recognised that economic growth will have negative impacts on the stock of resources, but having no way to measure these losses then proceeds to ignore them. It has no way of measuring them because there is no national capital or stock account and the measures that the Commission has chosen to use cannot capture the value of these assets.

An equally important defect in the indexes chosen by the Commission is that they count many real costs as additions to GDP and GNP. The Commission identifies congestion and pollution as two of the ‘costs’ which may be exacerbated by larger populations but fails to recall (one hopes that its staff once knew) that when dollars are spent to ameliorate the effects of these imposts, those dollars are added to, not subtracted from GDP and GNP. The Commission has no way of measuring these ‘costs’ but in identifying ameliorating strategies it should have recognised that the cost of these show in their accounts as positive additions to productivity. Thus it has committed the cardinal accounting sin of counting the same thing twice.

A reference from the Bureau of Transport Economics, quoted by the Commission, places a cost on congestion of $30 billion by 2015 or $2159 per person. If no rectifying strategies are instigated many of these costs will add to GNP and GDP: increased costs of fuel, of car repair etc. If rectifying strategies are implemented then these costs also add to GDP and GNP. But another question and, in the context of the Commission’s brief, more relevant question, remains unaddressed. Will an increase in population make an attack on these environmental problems easier or harder. The Commission finds an analysis of these interwoven matters too hard to unravel so it ignores them in its final assessment. SPA asserts that these are real costs and that increasing population will exacerbate them and make solutions harder to find and more expensive.

The model used to tease out its conclusions compares two situations in the year 2024-5: one in which migration continues at the present rate and one in which the skill component of immigration is doubled. This model is rather blunt for addressing the broader issue of population growth as it ignores both natural increase and the underlying existing high immigration rate (in comparison with most other industrialised countries). Moreover, it takes a catalytic approach breaking the large question down into small segments and then attempting to reassemble the pieces to make an overall assessment. When the test and reference populations are both growing but at only slightly different rates, dividing the problem into even smaller

segments, the differences within each small segment of the analysis often seem to come down to qualitative judgement rather than quantitative certainty. Categorisation can also have a significant effect on these small differences. For example, while first generation skill migrants are categorised as migrants their children, if born in Australia, are regarded as Australians and the 'drag' on productivity of these 0-15 year olds is attributed to Australians and not to migrants. The Commission has also used multivariate analysis to try and tease out some of the confounding factors. This is a parametric statistical tool that is unreliable as the data used becomes less normally distributed. One of the factors being analysed is the age of skilled migrants which the Commission's graphs clearly show is not normally distributed. Given the very small differences exposed it is doubtful whether this analytical tool is appropriate and the conclusions therefore sufficiently robust.

Nonetheless, the Commission comes to the conclusion that the effect of the increased skill migration is 'benign'. In keeping with statistical rectitude it should have used the word 'insignificant' or 'neutral'. A thesaurus gives the first seven synonyms for 'benign' as: *good, benevolent, compassionate, auspicious, favourable, gracious* and *kind*. Benign is not a word to summarise an economic analysis of population growth and productivity unless the Commission is seeking to please rather than be dispassionate.

An alternative approach which is rather more robust and could at least be used in parallel with the present study is to analyse OECD countries or Australian states and territories with respect to population size, population growth rate and growth of per capita GDP and/or GNP. While this does not overcome any of the above defects in the two economic indexes it comes closer to answering the Treasurer's underlying question, *'What is the effect of population growth on productivity?'* (defined by the Commission as increase in per capita GNP). When this is done using a non-parametric Spearman's Rank Correlation it can be shown that there is no statistically significant correlation between population size or population growth rate on the one hand and growth of per capita GDP on the other. And this is true whether one compares OECD countries or Australian States and Territories. This analysis can be provided to the Commission if it wishes but it is not a difficult analysis for the Commission to repeat for itself.

Taken together with the Commission's own finding in the present study these results suggest that a more sound conclusion for the Commission to draw is that:

a) there is no statistically significant correlation between population growth and growth of per capita GDP (productivity).
b) there are real costs associated with population increase and related to environmental impact which the Commission has not evaluated.

The implicit assumption of growth oriented economists is that standard of living equates with material consumption (throughput of goods and services) and this relates to human welfare and quality of life. A second assumption and this is made reasonably explicit in the Commission's draft report is that no limits to growth are foreseen, resource substitution and technical innovation being able to overcome any resource constraints. SPA rejects both assumptions. In the early stages of industrial

development material consumption probably did parallel human welfare but it does not follow that this is still true in a society with the present very high level of consumption. SPA sees imminent and great difficulties facing Australian society in the form of climate change and oil depletion. In this context we believe it is unwise to seek yet further growth in either direct or indirect (exports) per capita consumption. Moreover there is evidence (C. Hamilton) that increasing immigration increases Australia's greenhouse gas emissions including the emissions of the immigrants themselves. While this does not bear directly on the Treasurer's terms of reference it does relate to the more general task of the Commission which is stated to be:

> *The Commission's independence is underpinned by an Act of Parliament. Its processes and outputs are open to public scrutiny and* ***are driven by consideration for the wellbeing of the community as a whole****. (emphasis added)*

More comprehensive indexes of human welfare have been developed and some of these have been shown to diverge markedly from per capita GDP for a number of industrialised countries including Australia. In fulfilment of its broader responsibility (above) it would be more useful for the Commission to examine the question of the relationship between these indexes of human welfare and population increase.

It is the view of Sustainable Population Australia that such an exercise would reinforce the alternative suggested conclusion to the Commission's report, namely:

a) there is no statistically significant correlation between population growth and growth of per capita GDP (productivity).
b) there are real costs associated with population increase and related to environmental impact which the Commission has not evaluated.

References.

1. Herman E. Daly. *The Steady State Economy: Toward a political Economy of Biophysical Equilibrium and Moral Growth.* In *Toward a Steady State Economy*, pp 149-174, W. H. Freeman and Company 1973.
2. Herman E. Daly & John R. Cobb. *For the Common Good: Redirecting the Economy Toward Community, the Environment and a Sustainable Future*. Beacon Press 1989.