SUBMISSION ON PRODUCTIVITY COMMISSION POSITION PAPER ON MIGRATION AND POPULATION GROWTH

Glenn Withers, Australian National University

The Position Paper is, as ever, a very good piece of professional analysis by the Productivity Commission. However there is a worry arising from the focus on, and attention given to, the (Monash) modelling used prominently in the Paper. It is the argument of this submission that this attention to Monash CGE modeling downplays (and sometimes incorrectly dismisses or ignores) the insights from alternative research methods and, as a result, the PC research has lead to under-estimation of the contribution of immigration to economic welfare. The problems with the CGE work presented in the Position Paper are*:

1. The simulation is of a single shift in the level of skilled migration. This produces focus on the value of the specific single shift scenario and away from total migration program benefits, away from temporary entry benefits and away from sensitivity of results to alternative scenario specifications eg a rising level of skilled entry or a fixed rate of entry implying an ongoing rise over time but leading to a much larger increase in migration level at end-period than envisaged in the Position Paper.

2. The Monash model has well specified allocation (interindustry) characteristics but less well developed macro adjustment characteristics. The Monash model is essentially a complex CGE model with a more modest macro model add-on. Yet for this exercise it is the macro adjustment that has received attention. By contrast the Econtech model has better macro labour adjustment and capital adjustment mechanisms (it is a macro model with a more modest CGE add-on) and , in this instance, mechanisms which come closer to replicating direct time series estimation work on these adjustment processes for immigration for Australia eg Baker (1988) and Pope and Withers (1993)

3. All CGE models have trouble reflecting some key characteristics that are germane to the dynamic growth issues at the core of the relationship between immigration and growth viz. scale economies, differential labour behaviour, enhanced capital quality and enhanced innovation.

    - On scale see the work of Antweiler and Trefler (2002) referring to traded good economies and add Corden's observations on infrastructure and public goods and a large share of the economy may be characterized as increasing returns-not constant or decreasing returns. CGE modeling can try to reflect these scale economies in various unsatisfactory ad hoc ways, but the available scale estimates themselves that match the parameterization requirements of CGE work come from a flawed and

narrow methodology based on data- poor production and cost function estimates for manufacturing only

- On labour behavior recognize that the motivation for many migrants, the knowledge transfer they bring (they are unkindly called “knowledge mules” in the business literature) and the international linkages and networks they possess for opening up trade access (see Access Economics 1998) may be crucial in overcoming overcome Australia’s disadvantages of distance (for which also see Keller 2002 and estimates that we face a tariff equivalent of 8-15% through our location). Also see some nice recent work by Leahy and Neary on migrants as knowledge transfer.
- On capital quality, recognize how vintage capital is lacking from the CGE models, yet new capital embodies latest technology and immigration and increases the share of the capital stock embodying such new knowledge, just as countries under reconstruction and/or enjoying “catch-up’ growth can enjoy such benefits. Migration permits this peacefully for societies otherwise facing slow down due to below replacement fertility and demographic ageing
- On innovation see Nevile (1991) on the role of induced or endogenous innovation that can be produced by immigration-derived population expansion eg by Nevile’s estimate current migration scale alone adds about 0.3% per annum to the rate of technological change-a very significant component of TFP , and more if knowledge transfer is added (see above)

4. Should the question be asked how these effects can possibly be added up without CGE modeling, one answer would be to do some serious growth accounting of the components. But growth accounting itself suffers from the assumption of independence of the identified drivers, when these are really interdependent.

5. Hence a better if more conservative answer is Granger causality and/or reduced form or structural regression estimation on historical data, for which see again Nevile (1991), plus Withers (1988) and Pope and Withers (1995). Such studies allow for all mechanisms through which immigration influences per capita income (including congestion costs, infrastructure provision etc) though they still do not account for technological externalities such as greenhouse, salinity etc where these have not been incorporated in a government or private decision that does not affect per capita income. Within these studies note that
    - Nevile looks closely at non-linear estimation and determines an optimal population growth rate, from which can be imputed an optimal migration path (given natural increase) which is growing gradually from present levels to higher levels over time.
    - Withers includes granger causality s analysis which does not depend on the correctness of the theory of how migration has its effects, but instead simply affirms the direction , magnitude and significance of the effect of interest

- Pope and Withers place immigration against other drivers of growth and allow its relative magnitude of impact to be gauged (which gets away from the diversion of how a 39000 increase is only "small" since it looks at over-all migration relative to other forms of capital accumulation)
- Also the recent work by Parasnis et al (2005), using Borjas estimation methods, indicates that (unlike some US results) there is overwhelming wage benefit to local workers across much of the work-force from immigration, so decomposing some of the economy-wide effects which dominate the other estimation studies cited into evidence on natives and immigrants.

Given deadlines facing the PC it may be difficult to undertake new methodologically appropriate "triangulation" studies by which the results of alternative research approaches are compared and their degree of consistency adduced or their strengths and weaknesses assessed where they are divergent or not available. If this could be done it would appropriately reduce reliance upon any one inevitably flawed "single king hit" approach.

But in the time available to it, and given the typical "path dependence" of PC Reports, the Commission could at least move to the following:

- also incorporate the alternative Macro-Industry modeling work provided by Econtech-DIMIA alongside the Monash work, to show model sensitivity
- use some new scenarios in revising the Monash work eg fixed rate of migration, to show scenario sensitivity
- and report alternative extant regression findings more centrally and thoroughly

All of which, this Submission believes, would add up to a "bottom line" interpretation of stronger economic benefit from immigration than is conveyed in the Position Paper. Even improved CGE work should be more correctly characterized as lower bound or conservative, rather than convey the present impression of a "best estimate".

A final policy point may be made. The PC could draw attention to key complementary policies that need to be better advanced or, if that judgement is too radical, which can be said to need to be at optimal level if the benefits of immigration are to be maximized. These include professional regulation standards as well as recognition processes, child care and early childhood support policies, and infrastructure provision and environmental management policies. Each of these is particularly pertinent to the impact of immigration and its distinctive nature and characteristics.

GLENN WITHERS
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- Most references cited are in Glenn Withers "Immigration" in Cambridge Handbook of the Social Sciences in Australia, CUP, 2003 or already cited in the Position Paper. A copy of the 2003 paper was provided to

Productivity Commission in 2005, but not cited in Draft Report, so it can be resent if required.

- An additional reference not so cited is D.Leahy and P. Neary “Absorptive Capacity, R&D Spillovers and Public Policy” University College Dublin, 2003 (mimeo)