

FOOTNOTES FOR WHY WE SHOULD SAY NO TO BIG AUSTRALIA BY MARK O'CONNOR

The **numbers** below match the note-numbers in the WHY vs WHY™ book text of Mark O'Connor's main argument:

1. Dr Ken Henry, "The Shape of Things to Come: Long Run Forces Affecting the Australian Economy in Coming Decades", Address to the Queensland University of Technology Business Leaders' Forum, 22 October 2009. http://www.treasury.gov.au/documents/1643/HTML/docshell.asp?URL=QUT_Address.htm
2. Treasury, *Intergenerational Report 2010, Australia to 2050: future challenges*, http://www.treasury.gov.au/igr/igr2010/report/pdf/IGR_2010.pdf
Note that this report was not released to the public till January 2010, and that its population projection for 2050 was 35.9 million. (Media reports often give this either as 35 million or 36 million).
3. Ken Henry, loc. cit.:
 - a. "Fourth set of issues: Are Australia's natural resource endowments, including water, capable of sustaining a population of 35 million? What are the implications for environmental amenity of this sort of population growth? Must it mean an even greater loss of biodiversity – difficult as that might be to imagine, given our history of species extermination?"
 - b. "We don't know the answers to these questions, even though all of us would have opinions. My own opinion on the last of these sets of issues – and I must stress that it is a personal view, not to be taken as a Treasury view – is pessimistic ... permits have been issued to allow the commercial slaughter of 49.6 million kangaroos in the last decade¹ – primarily to give household pets a bit of variety in their diet. That is but one instance of a set of behaviours that suggests that with a population of 22 million people, we haven't managed to find accommodation with our environment. Our record has been poor and in my view we are not well placed to deal effectively with the environmental challenges posed by a population of 35 million."
4. "We need a real debate on how big we want to be", editorial in *The Australian* newspaper, 19 July 2010: at <http://www.theaustralian.com.au/news/opinion/we-need-a-real-debate-on-how-big-we-want-to-be/story-e6frg71x-1225894269892>.
5. See the Newspoll charts at http://www.newspoll.com.au/cgi-bin/polling/display_poll_data.pl
6. See http://www.institutional-economics.com/index.php/section/comments/kevin_rudd_lesson_for_us_politicians
7. Cf. Peter van Onselen, "Rule of reckless vows", *The Weekend Australian* 27–28 December 2008 p. 20. http://www.theaustralian.com.au/news/opinion/rule-of-reckless-vows/story-e6frg6zo-111118413753?from=public_rss
8. Cf. the latest CSIRO modelling. Graham Turner, "Consumption and the Environment: Impacts from a System Perspective". In: Newton, P. (ed.), *Landscapes of Urban Consumption*: CSIRO Publishing, 2011 (in press). "In brief, larger populations are less secure in terms of energy, water and food supply, and contribute substantially more to greenhouse gas (GHG) emissions, than do smaller populations."
9. "Big Australia" dominated debate in the first fortnight of the 2010 federal election campaign. Rudd and some commentators have since sought to present his greenhouse policies as having caused his fall, and as de-linked from population. But see Crispin Hull, "People do not want a big Canberra", *Canberra Times*, 3 July 2010

<http://www.crispinhull.com.au/2010/07/03/people-do-no-want-a-big-canberra/>

10. See comment on this in the *Adelaide Advertiser*, editorial “Concern Grows for our much valued lifestyle”, 28 April 2011 at <http://www.adelaidenow.com.au/news/opinion/editorial-concern-grows-for-our-much-valued-lifestyle/story-e6freabl-1226045861545>
11. Australian House of Representatives Standing Committee for Long-Term Strategies, *Australia's Population 'Carrying Capacity': One Nation – Two Ecologies*, (a.k.a. The Jones Report), Australian Government Printing Service, 1994.
12. Barney Foran and Franz Poldy, (Resource Futures Program, CSIRO Sustainable Ecosystems), *Future Dilemmas: Options to 2050 for Australia's population, technology, resources and environment*, (An online report for CSIRO and DIMIA), 2002. <http://www.cse.csiro.au/research/futuredilemmas/>
Also: Barney Foran and Franz Poldy, *Dilemmas distilled: a summary and guide to the CSIRO technical report*. Report to the Department of Immigration and Multicultural Affairs, CSIRO Sustainable Ecosystems, Canberra, 2002. <http://www.cse.csiro.au/futuredilemmas>
cf. Barney Foran and N. Gurrán, “Population”, in Lindenmayer, D., Dovers, S, Olson, M.H. and Morton, S. (eds), *Ten commitments: reshaping the lucky country's environment*, CSIRO Publishing, 2008, Collingwood.
Barney Foran and Franz Poldy, “Between a rock and a hard place: Australia's population options to 2050 and beyond”, *People and Place*, Melbourne, 2003, vol. 11, no. 1, pp. 1-15.
13. Jonathan Sobels et al., *Research into the Long-Term Physical Implications of Net Overseas Migration*, National Institute of Labour Studies, Flinders University report for the Department of Immigration and Citizenship, January 2011 http://www.immi.gov.au/media/publications/research/_pdf/physical-implications-migration-fullreport.pdf
14. See references to media releases by the Business Council of Australia below, plus from the Urban Task Force see “Know the facts: A big Australia: Strength and vitality” at <http://urbantaskforce.com.au/ABigAustralia.php>. Also “Urban Task Force, “Fact Sheet: A big Australia” <http://urbantaskforce.com.au/attachment.php?id=4033>. A Google search will find scores of media releases and publications advocating rapid population growth, from business or employer groups, including the Housing Industry Association, The Master Builders Association, the Australian Industry Group.
15. On the Replacement Rate Fallacy see Mark O'Connor, <http://www.australianpoet.com/overloading.html#rrf>
Also Mark O'Connor and William Lines, *Overloading Australia: How governments and media dither and deny on population*, (4th ed.), Sydney, Envirobook, 2010, p. 198 (Note 146) and p. 219 (Note 311).
16. See Kelvin Thomson, “There is an alternative to runaway population: Kelvin Thomson's 14-point plan for population reform”, Speech by the Hon. Kelvin Thomson, 11 November 2009. http://www.kelvinthomson.com.au/Editor/assets/speeches_2009/091111_per cent20population per cent20reform per cent20paper per cent20ac.pdf
17. Betts, Katharine, “Population growth: what do Australian voters want?” *People and Place*, Vol. 18, No. 1, 2010, pp. 49-64. Available at: <http://www.swinburne.edu.au/chancellery/mediacentre/publications/Betts per cent5BFinal per cent5D.pdf>
18. Australian Academy of Science 1995, *Population 2040 Australia's choice: proceedings of the Symposium of the 1994 Annual general meeting of the Australian Academy of Science*, Australian Academy of Science, Canberra.

See also <http://www.science.org.au/events/sats/sats1994/Population2040-section8.pdf>.

Note that the 1994 statement was made when greenhouse emissions and peak oil were not such public concerns or well-accepted concepts as today. The academy is currently revisiting the issue, and on 6 May 2011, at the Shine Dome in Canberra, it held a one-day symposium *Australia 2050: Population challenges to sustainability*. Proceedings closed with a show of hands on support for "Big Australia". A solitary hand was raised.

19. Wording of the Stable Population Party of Australia's video *The everything issue*, released 4 May 2011 http://www.youtube.com/watch?v=ki_CfVqqjYc See also <http://www.populationparty.com/>
20. See *Overloading Australia* pp. 8-9
21. See the projection of population growth at 1.6 per cent a year on p. 135 of *Overloading Australia* in the 1st edition 2008. In the 4th edition of 2010 the graph shows 1.8 per cent growth.
22. Statement by Sir David King to a British Parliamentary enquiry, 3 July 2006. <http://populationmatters.org/2007/press/leaders-urged-brave-population-growth/>
23. The ABS website www.abs.gov.au is a valuable resource. Note, though, that its figures may change as further information comes to hand. Growth and fertility rates are published up to a year in arrears, and even then may be subsequently revised.
24. See for instance the Central Intelligence Agency's *The World Fact Book*, <https://www.cia.gov/library/publications/the-world-factbook/fields/2177.html> (Accessed 2 May 2011.)
25. On attempts to reduce Indonesia's fertility rate, see for instance "Indonesia to Cut Population Growth to Below 1 Percent", *Kompas*, 25 January 2011 <http://english.kompas.com/read/2011/01/25/0719093/Indonesia.to.Cut.Population.Growth.to.Below.1.Percent> (Accessed 10 May 2011.)

As of May 2011 the CIA's *World Factbook* gives Indonesia's annual population growth rate as 1.069 per cent, though it adds "(estimated)". <https://www.cia.gov/library/publications/the-world-factbook/geos/id.html> (Accessed 10 May 2011.)

26. But see The Population Reference Bureau's 2010 world data sheet. It gives Australia's immigration rate as 13 per 1000. A few countries are higher: Bahrain 42, Oman 26, Singapore 25, Luxembourg 16; and Guam is 13. However migrants to Gulf States may not be migrants in the sense of having the right to remain when their work-contracts end. Migration to Singapore has not been consistent. The bureau says that the average for the "more developed countries" is 2 per thousand. The sheet can be downloaded from <http://www.prb.org/Publications/Datasheets/2010/2010wpds.aspx>
27. Speech to the Royal Society of Arts and Commerce (UK), 10 March 2011. <http://www.populationmedia.org/2011/04/27/david-attenborough-talk-on-population/>
See also Liz Thomas, "We must halt the explosion in population to offer decent life for all, says Sir David Attenborough", *Daily Mail* 22nd April 2011 <http://www.dailymail.co.uk/news/article-1379376/Population-growth-stop-says-Sir-David-Attenborough.html>
28. "Government not learning from the past," *Sunshine Coast Daily*, 23 March 2011. <http://www.sunshinecoastdaily.com.au/story/2011/03/23/government-not-learning-from-past-excess-and-waste/>

29. See Marian Wilkinson, Environment Editor, "Australia one of worst animal destroyers", *Sydney Morning Herald*, 29 June 2009
<http://www.smh.com.au/environment/conservation/australia-one-of-worst-animal-destroyers-20090728-e068.html>.
 Also: James Woodford, "In a ravaged land, 1600 species at risk", *Sydney Morning Herald*, 23 April 2003, <http://www.smh.com.au/articles/2003/04/22/1050777255475.html>
 e.g. " 'One-third of the world's extinct mammals since 1600AD are Australian,' says the report by the Federal Government's National Land and Water Resources Audit, leaked to the *Herald*. 'Such a record is unparalleled in any other component of Australia's biodiversity, or anywhere else in the world.' In all, 346 vertebrates, eight invertebrates and 1241 plants are listed as threatened. And almost 3000 different types of ecosystem are now considered at risk. Twenty-two Australian mammals are already extinct and a further eight species persist only on islands, says the report, Australian Terrestrial Biodiversity Assessment 2002."
30. Emeritus Professor Harry Recher, *The Plight of Australia's Small Birds*,
<http://www.youtube.com/watch?v=GyUmptgs4sU>
31. See Graham Turner "The double-edged sword of technology", *Issues Journal*, Control Publications. (91), 2010, pp 25-28.
32. See Sheila Newman, "Where's the balance?? Koalas vs Developers in Australia,"
<http://candobetter.net/node/2426> and note links to related pages, e.g.
<http://candobetter.net/SaveTheKangaroo?page=1>.
CanDoBetter is a population activists' site that carries regular news items on the sad ways in which animals perish when their habitat is cleared.
33. 'Why the city we build will never be the city we need', *Dissent* no. 34, Summer 2010-2011, page 26. cf. *Overloading Australia* pp. 96-97
34. See *Long-term physical implications of net overseas migration*, p. 113
<http://www.immi.gov.au/media/publications/research/pdf/physical-implications-migration-fullreport.pdf>
35. See Marian Wilkinson above. Also R. T. Kingsford*, *et al.*, "Major Conservation Policy Issues for Biodiversity in Oceania", *Conservation Biology*, **Volume 23, Issue 4**, August 2009, pp. pages 834-840.
36. There is some confusion in the numbering of these reports. The 1996 report has sometimes been called the *third* State of the Environment report. Professor Ian Lowe has told me, "that is probably technically correct but potentially misleading. There were two very modest internal reports produced by the government, but the 1996 was the first independent report, the first one that was widely available and the first in the series which continued with the 2001 and 2006 reports. The 1996 report is usually referred to as the first independent State of the Environment report."
37. *Australian State of the Environment Advisory Council Report*, 1996, Executive Summary, p. 25. cf. also p. 22 "The greatest pressures on biodiversity come from the demands on natural resources by increasing populations of humans, their affluence and technology." See www.deh.gov.au/soe/index.html
38. Foreword to Kate Crowley and K J Walker, (eds), *Environmental Policy Failure: Australian Stories* (forthcoming) Tilde University Press, Derrimut, Victoria, 2011. "Nearly forty years after the first national environmental legislation, almost all the significant environmental indicators are still in decline. Three independent reports on the state of the environment have documented the loss of biodiversity, the decline of inland rivers, pressures on the coastal zone, degradation of productive land and spiralling greenhouse gas emissions ...

[Yet] all elected governments, commonwealth and state, ALP and Coalition, have as their highest priority economic growth through exploitation of natural resources.”

39. Introduction to Kate Crowley and K J Walker, (eds) , *Environmental Policy Failure: Australian Stories*, (forthcoming),
40. See *Overloading Australia* pp. 8-10 for examples.
41. The point is well made by Dr Chris Watson’s maps. See <http://www.australianpoet.com/boundless.html>
See also *Overloading Australia* pp. 1, 6, 15, 75, 84-88, 97, 210
42. For this argument, see Jane O’Sullivan, “Our relentless war on resilience”, *On Line Opinion*, 2 May 2011, <http://www.onlineopinion.com.au/view.asp?article=11962>. She remarks: “More people must have more housing, more infrastructure for transport, electricity, health, education, law and order, welfare, waste and pollution management, etc.” Also Clive Hamilton, “Population growth and environmental quality: are they compatible?”, *People and Place*, 2002, vol. 10, no. 2, pp. 1-5.
43. See *Overloading Australia* pp. 128-131, 170-171
44. Turner is the group leader of the CSIRO’s Integrated Systems Analysis team which looks at interacting future effects. He worked on both *Future Dilemmas* and *Long-Term Physical Implications*. His work considers different population trajectories based on Australian Bureau of Statistics’ projections, Series A, B, C and D. The low variant, which requires migration to be neutral (zero net migration), leads to 21 million Australians in 2050.
45. This is a well-known paradox. Its basics are well explained in Wikipedia. http://en.wikipedia.org/wiki/Jevons_paradox
See also http://en.wikipedia.org/wiki/Khazzoom-Brookes_postulate
46. See Graham Turner, “The double-edged sword of technology” *Issues journal*, Control Publications, No. 91, pp 25-28, 2010. p. 25 “Unfortunately our reliance on technological fixes is likely to worsen environmental outcomes unless we change our lifestyle in substantial ways. This is the apparent paradox, the double-edged sword of technology.” p. 28 “In combination, a lower population, better work-life balance, lower consumption, and further technological progress offer the best hope. But simply expecting innovation and efficiency to save us is likely to make things worse.”
47. The report *Long-term Physical Implications of Net Overseas Migration* drily notes that “Some studies regard any environmental impact that could be reduced through better management and planning as not caused by population growth.” p. 24 <http://www.immi.gov.au/media/publications/research/pdf/physical-implications-migration-report-1.pdf>
48. It is available on line. http://www.acfonline.org.au/uploads/res/EPBC_nomination_22-3-10.pdf
49. On the ineffectiveness of Australia’s energy-conservation and emissions-reduction policies to date, see Mark Diesendorf, “Lost energy policy opportunities”, in K. Walker and K. Crowley (eds) *Environmental Policy Failure: Learning from Australian Studies*. Tilde University Press, 2010, Ch. 4. (In Press).
For a brief summary of Diesendorf’s reasons and conclusions see Mark Diesendorf, “Population growth negates efforts to halt greenhouse harm”, *The Canberra Times*, 15

April 2009. Online at <http://ffggippsland.blogspot.com/2009/04/population-growth-negates-efforts-to.html>

See also Australian Government, *National Greenhouse Gas Inventory 2008: Accounting for the Kyoto Target*, Department of Climate Change & Energy Efficiency, 2010, pp. 2-3

<http://www.climatechange.gov.au/en/publications/greenhouse-acctg/national-greenhouse-gas-inventory-2008.aspx>.

cf. Australian Government, Department of Climate Change and Energy Efficiency, *Australia's emissions projections 2010*, pp. 1, 8. Note that this is a government policy document whose sometimes optimistic assumptions have not yet been critically examined by scholars such as Birrell and Healey.

50. As stated in its December 2008 White Paper; see http://www.energymatters.com.au/index.php?main_page=news_article&article_id=248
51. Robert Birrell and Ernest Healy, "Labor's greenhouse aspirations", *People and Place*, 2008, vol. 16, no. 2, pp. 1-15.
<http://elecpress.monash.edu.au/pnp/view/abstract/?article=0000010719>
52. See Paul A. Murtaugh and Michael G. Schlax, "Reproduction and the carbon legacies of individuals," *Global Environmental Change* 19 (2009), 14-20. Cf. Kate Galbraith, "Having Children Brings High Carbon Impact," *The New York Times*, August 7, 2009.
53. "Time to Wake Up: Days of Abundant Resources and Falling Prices Are Over Forever", April 2011 GMO Quarterly Letter,
http://xa.yimg.com/kq/groups/20338607/248579386/name/JGLetterALL_1Q12.pdf
54. For the basics of Peak Oil, see http://en.wikipedia.org/wiki/Peak_oil
55. Terry Macalister, Science Editor, "One in five households in fuel poverty as energy prices soar," *The Guardian*, 14 July 2011.
<http://www.guardian.co.uk/money/2011/jul/14/households-fuel-poverty-energy-prices>
56. "Peak Oil: just around the corner". ABC Radio National's *Science Show*, 23 April 2011. See transcript at <http://www.abc.net.au/rn/scienceshow/stories/2011/3198227.htm>. See also ABC TV's Catalyst's Oil Crunch" web page: <http://www.abc.net.au/catalyst/oilcrunch/>. For a basic explanation of Peak Oil, see http://en.wikipedia.org/wiki/Peak_oil
57. Turner, loc. cit., p. 26
58. See "Can oil production curves be modelled by Hubbert-curves"
<http://www.peakoil.org.au/hubbert-curves.htm>. For Hubbert's speech in 1956 <http://www.hubbertpeak.com/hubbert/>. See also the note on "Peak everything" below.
59. For basics and reading list see http://en.wikipedia.org/wiki/Simon_%E2%80%93Ehrlich_wager Simon also claimed, in 1981, that oil supplies were "not meaningfully finite". See *Overloading Australia* pp.150-151.
60. See for instance Frank J. Tipler, "There are no limits to the open society", *Critical Rationalist*, Vol. 3, No. 2 (September 23, 1998). <http://www.tkpw.net/tcr/volume-03/number-02/v03n02.html>
However Wikipedia's article on the Simon-Ehrlich bet remarks: "Jeremy Grantham (GMO Quarterly Letter, July 2011) noted that if the bet were from 1980 to 2011, Ehrlich would have won: "Simon would have lost posthumously, and by a lot! (Even of the original five,

he is only one for five, having won the least significant of the five: tin.) So, please “Cornucopians,” let’s not hear any more of the Ehrlich-Simon bet, which proves, in fact, both that man is mortal and must make short-term bets, and, more importantly, that Ehrlich’s argument was right (so far).”

http://en.wikipedia.org/wiki/Simon%E2%80%93Ehrlich_wager (Accessed 5 September 2011.)

For the broader basics of the cornucopian debate and Julian Simon’s role in it, see

<http://en.wikipedia.org/wiki/Cornucopian>

For an analysis of extreme cornucopian assumptions in a recent Australian Treasury paper see Richard Dennis, “Woolly figures: An analysis of the Treasury’s modelling of emissions from sheep and cattle”, Australia Institute Policy Brief No. 4, October 2009.

https://www.tai.org.au/file.php?file=/media_releases/PB%204%20woolly%20figures%20final.pdf

61. “Time to Wake Up: Days of Abundant Resources and Falling Prices Are Over Forever”, April 2011 GMO Quarterly Letter, http://xa.yimg.com/kq/groups/20338607/248579386/name/IGLetterALL_1Q12.pdf Grantham makes the points that “No compound growth [*he means steady percentage growth, like compound interest*] is sustainable. If we maintain our desperate focus on growth, we will run out of everything and crash. We must substitute qualitative growth for quantitative growth.” This problem is “not easily understood by optimistic, short-term-oriented, and relatively innumerate humans (especially the political variety).” For similar warnings from another investment expert, see Peter Hall, *Lumberjacks in Eden*, London, 2007. http://www.hunterhall.com.au/content/upload/files/Lumberjacks_in_Eden.pdf. cf. *Overloading Australia*, p. 206.
62. See for instance Richard Heinberg, *Peak Everything: Waking Up to the Century of Declines*, Gabriola Island, BC, Canada, New Society Publishers 2007. See also http://en.wikipedia.org/wiki/Peak_minerals. On Hubbert’s calculations and on peak phosphorus, for which, unlike oil, there seems to be no substitute, see Patrick Déry and Bart Anderson, “Peak phosphorus”, *Energy Bulletin*, 13 August 2007. <http://www.energybulletin.net/node/33164>
63. Intergenerational Report 3. *Australia to 2050: future challenges*, January 2010, Chapter 6, p. 91, chart 6.3 “Indicative life of Australia’s non-renewable resource stocks”.
64. On Peak Oil as a threat to Australia see: Dr David Ingles and Dr Richard Dennis, “Running on empty? The peak oil debate”, The Australia Institute, September, 2, 2010, pp. 6-9. <https://www.tai.org.au/index.php?q=node%2F19&pubid=788&act=display>
65. Bill McKibben, “Breaking the Growth Habit”, *Scientific American*, March 2010
66. See:
Suzanne Goldenberg, US environment correspondent, “Thirst for oil poses threat to US national security, says military adviser”, *The Guardian* UK, 28 October 2009. <http://www.guardian.co.uk/environment/2009/oct/28/climate-change-senate-national-security>.
Stefan Schultz, “Peak Oil and the German Government Military Study Warns of a Potentially Drastic Oil Crisis”, *Der Spiegel*, 9 October 2010. <http://www.spiegel.de/international/germany/0,1518,715138,00.html>
Carl Mortished, “Shell chief fears oil shortage in seven years”, *The Times*, 28 January, 2008. <http://business.timesonline.co.uk/tol/business/economics/wef/article3248484.ece>

Terry Macalister, “Lloyds adds its voice to dire ‘peak oil’ warnings”, *The Guardian*, 11 July, 2010. <http://www.guardian.co.uk/business/2010/jul/11/peak-oil-energy-disruption>

See also Climate Change Australia's web page:
http://www.climatechangeaustralia.org/Peak_Oil.html

- 67.** Personal communication. Email of 28 April 2011
- 68.** On the ineffectiveness of Australia's energy-conservation and emissions-reduction policies to date, see Diesendorf, M. "Lost energy policy opportunities", in K. Walker and K. Crowley (eds) *Environmental Policy Failure*.
- 69.** Australian Davos Connection (ADC) Summit, *Sustainable Cities*, Melbourne 30 March 2010, report of the "Strategic City Panel" by its Chair, Admiral Chris Barrie. (Source: my notes, confirmed by Admiral Barrie's email of 6 May 2011). cf. the finalised text of the *ADC Cities Report 2010*, "The Strategic City", p. 86: "The elephant is in the room. The debate on population is well under way ... The jury remains out as to whether we are doing enough to prepare for the next oil shock and its consequences for every facet of Australian life." and p. 87 re perhaps needing "to fix the illiterate economics of relentless growth".
- 70.** Bob Birrell and Ernest Healy, "Melbourne : a parasite city?", *People and Place*, Volume 18, Issue 3, 2010
<http://elecpress.monash.edu.au/pnp/view/abstract/?article=0000011199>. cf Greg Roberts, "Vic badly placed for another fin shock", AAP, 3 May 2011 – despite Melbourne having very rapid population growth.
http://www.tradingroom.com.au/apps/view_breaking_news_article.ac?page=/data/news_research/published/2011/5/123/catf_110503_172600_8065.html
- 71.** To be distinguished from the argument that if we were building a new capital city *now* it should be denser, or that additional suburbs need to be denser. cf. Michael Buxton's remarks at <http://www.theage.com.au/victoria/denser-is-better-say-planners-20110428-1dyvw.html>
However, the energy costs of high-rise living are surprisingly high. Either on their own or when added to the energy costs of re-building existing suburbs piecemeal (with great nuisance to residents), they may outweigh any energy savings on transport. See P. Myers, with Rachel O'Leary and Rob Helstroom, "Multi-Unit Residential Building Energy & Peak Demand Study", *Energy News* (NSW Department of Planning) 2005, vol. 23, no. 4. And Glazebrook, G, Rickwood, P, & Searle, G 2007, "Urban structure and energy—a review", *Urban Policy and Research*, 2007, pp. 1-25.
http://www.fbe.unsw.edu.au/cf/staff/peter.rickwood/files/rgs_upr08_extract.pdf
- 72.** See ABC Radio's AM report of 20 May 2006 "PM calls for Nuclear Debate".
<http://www.abc.net.au/am/content/2006/s1642908.htm>
However Howard soon revealed himself as a strong supporter of nuclear energy. See for instance the Switkowski report *Uranium Mining, Processing and Nuclear Energy – Opportunities for Australia?*, which Howard commissioned 16 days later, appointing as chair a strong supporter of nuclear energy.
http://www.ansto.gov.au/_data/assets/pdf_file/0005/38975/Umpner_report_2006.pdf
This report was sharply criticised by an independent panel of Australian scientists and nuclear experts – see Media Release 24 Nov 2006: *Response to UMPNER draft report*
<http://www.energyscience.org.au/media-releases.html>
- 73.** For business consultant Bernard Salt's argument to this effect, see his "A nuclear future awaits our sprawling 'burbs'", *Herald Sun*, 30 September 2009,
<http://www.heraldsun.com.au/opinion/a-nuclear-future-awaits-our-sprawling-burbs/story-e6frfhqf-1225780949865>.
For Martin Nicholson's argument, based on environment and population, see "Dash for gas in the wrong direction", ABC Environmental (Opinion) at
<http://www.abc.net.au/environment/articles/2010/02/12/2818317.htm>

He says: "First, according to Treasury, our demand for electricity will grow by 7 per cent by 2020 and 38 per cent by 2050. All those extra people will consume more electricity even with substantial improvements in efficiency." Indeed Treasury's assumption that a 60 per cent increase in population will produce only a 38 per cent increase in demand for electricity (despite perhaps moving to electric vehicles because of Peak Oil) seems optimistic.

74. See Amory Lovins, "Learning From Japan's Nuclear Disaster", 18 March 2011, <http://blog.rmi.org/LearningFromJapansNuclearDisaster>. Note also Greg Palast, "Tokyo Electric to Build US Nuclear Plants: The No BS Info on Japan's Disastrous Nuclear Operators", 14 March 2011. <http://www.gregpalast.com/no-bs-info-on-japan-nuclearobama-invites-tokyo-electric-to-build-us-nukes-with-taxpayer-funds/> (Palast is a former government nuclear investigator). Also Stephen Leahy, "The Nuclear Cost Shell Game", *IPS News*, 6 May 2011, e.g. "The nuclear energy industry only exists thanks to what insurance experts call the 'mother of all subsidies'..." On a broader issue, see "Why nuclear power is not a sustainable source of low carbon energy" at <http://www.after-oil.co.uk/nuclear.htm>
75. Pantera Press, 2010. Co-authored with Dr Barry Brook. See <http://www.whyyvswhy.com>
76. Michael Lardelli, "Peak oil and population", Speech on 4 April 2009 at the AGM of Sustainable Population Australia, Slide 35. See also SPA5 Conference Adelaide 2009: Dr. Michael Lardelli at <http://www.youtube.com/watch?v=-XWwr9vQMsY>
77. "Global warming will threaten food security: CSIRO", ABC TV's *Lateline* program, 11 July 2011. <http://www.abc.net.au/lateline/content/2011/s3267079.htm>. See also Jo Chandler, "Australia faces prospect of being unable to feed itself", *The Age*, 14 July 2011. <http://www.theage.com.au/environment/un-climate-conference/australia-faces-prospect-of-being-unable-to-feed-itself-20110713-1hdyn.html#ixzz1S1hsRxuM>
78. See David Pimentel and Marcia H. Pimentel (eds) *Food, Energy and Society* (3rd edition), CRC Press, 2007, Part 5. e.g. p. 153 "When the availability of fossil energy became readily available, especially in developed nations, this supported the 20- to 50-fold increase in the use of fertilisers, pesticides, and irrigation. From 1950 to 1980, US grain production per hectare increased three to four times. For example, where fertiliser use on corn increased from about 5 kg/ha in 1945 to about 150 kg/ha (30 times), corn yields increased by about four times. The rate of yield increases during the 30-year period from 1950 to 1980 was about 3 per cent per year. However, since 1980, US grain crop yield increases declined to only about 1 per cent per year. This is because crops have limits in the amounts of fertilisers and pesticides that they can tolerate and use." See also the detailed analysis of energy use for different crops and regions. e.g. p. 138 "Yearly, the U.S. population consumes about 53 per cent more energy than all the solar energy captured by harvested US crops, forest products, and all other vegetation." With wheat in North Dakota, detailed figures show that close to 70 per cent of the energy input that humans supply to produce the food comes directly or indirectly from petroleum. p. 150 summarises the crops and ratios, and makes it clear that declining availability of fertiliser and higher prices for fossil fuels have grim implications.
79. See Lester R Brown, "Why world food prices may keep climbing," 9 March 2011 www.earth-policy.org/plan_b_updates/2011/update92 "In February, world food prices reached the highest level on record. Soaring food prices are already a source of spreading hunger and political unrest..."
80. Pimentel and Pimentel as above, p. 138. Lester R Brown, as above, "Last year, the world produced 2,180 million tons of grain. It consumed 2,240 million tons, a consumption excess that was made possible by drawing down stocks by 60 million tons. (See data at www.earth-policy.org.) To avoid repeating last year's shortfall and to cover this year's estimated 40-million-ton growth in demand, this year's world grain harvest needs to

increase by at least 100 million tons. Yet that would only maintain the current precarious balance between supply and demand ... In France, Europe's leading wheat producer, yields have been flat for a decade. Wheat yields have also plateaued in Germany and the United Kingdom. In Egypt, Africa's leading wheat producer, wheat yields have been flat for six years.... World Bank data for India indicate that 175 million people are being fed with grain produced by over-pumping [groundwater], which by definition is a short-term phenomenon. The comparable number for China is 130 million people."

81. According to Worldwatch, "Grain Harvest Sets Record, But Supplies Still Tight", 2007. See <http://www.worldwatch.org/node/5539#notes>, citing UN Food and Agriculture Organisation (FAO), *FAOSTAT Statistical Database*, at faostat.fao.org, updated 30 June 2007, and US Bureau of the Census, *International Data Base*, electronic database, Suitland, MD: updated 16 July 2007.
82. Dale Allen Pfeiffer, *Eating Fossil Fuels*, From The Wilderness Publications, 2004, www.copvicia.com See Chapter 2 "Land degradation", and Chapter 6 "The Collapse of Agriculture"
83. "In the past decade the prices of N and P [nitrogen and phosphate] fertilisers have more than trebled, with few if any prospects that this trend can be reversed". Peter Core, CEO of The Australian Centre for International Agricultural Research (ACIAR), in his introduction to *Efficient nutrient use in rice production in Vietnam achieved using inoculant biofertilisers*, ACIAR proceedings, 130, 2008. <http://aciar.gov.au/publication/PR130>
84. cf. Professor Julian Cribb on the ABC's *Landline* program "The Future of Food", 26 June 2011: "There isn't any evidence at the moment that GM [=genetically modified crop varieties] has lifted world food production as such." <http://www.abc.net.au/landline/content/2010/s3253782.htm>
85. Lester R Brown, as above. See also Julian Cribb, *The Coming Famine*, CSIRO Publishing Australia August 2010.
86. *Long-term physical implications of net overseas migration* p.109. www.immi.gov.au/media/publications/research/ For discussion see www.abc.net.au/unleashed/44896.html
87. <http://www.immi.gov.au/media/publications/research/pdf/physical-implications-migration-fullreport.pdf> pp. 111-113. For discussion see www.abc.net.au/unleashed/44896.html cf. Jan C Ting, "Obama's plan to reduce oil imports is doomed by immigration and population growth", *Newsworks*, 9 April 2011. <http://www.newsworks.org/index.php/blogs/brandywine-to-broad/item/16980-obamas-plan-to-reduce-oil-imports-by-a-third-is-doomed-by-immigration-and-population-growth>. e.g. "How can oil imports be reduced in the face of rising demand from an expanding population? ... A 42 per cent population increase [by 2050] means that even if we succeed in increasing domestic oil production, developing alternative fuels, and increasing fuel efficiency, we're still going to have to import more, not less oil."
88. Barney Foran, "Population policy is driven by the Dolly Parton syndrome", *The Punch*, 9 March 2011. <http://www.thepunch.com.au/articles/australias-population-policy-is-like-dolly-parton/>
89. Paul Sheehan, *The Age*, January 31, 2011. <http://www.theage.com.au/opinion/politics/biting-the-boom-that-feeds-us-20110130-1a9i6.html>

90. See Mark O'Connor, "A Short Environmental History of Australia", *The Edinburgh Review*, No. 128, February 2008, pp. 121 ff. re Goyder's Line, Farina, the C19th "boomers", and Griffith Taylor. Online at <http://markoconnor-australianpoet.blogspot.com/2011/03/environmental-history-of-australia.html>. Also *Overloading Australia* pp. 9, 209 (Notes 230, 231). On Australia's agricultural capacity see Dr Chris Watson's maps: <http://www.australianpoet.com/boundless.html>
91. Harriet Alexander, "Looming food crisis showing on our shelves", *The Age*, 3 April 2011, <http://www.theage.com.au/national/looming-food-crisis-showing-on-our-shelves-20110402-1csl3.html>
Also Prof Robin Batterham – Australia should buy farms in Mozambique, <http://candobetter.net/node/2424>
92. "Global warming will threaten food security: CSIRO", ABC TV's *Lateline* program 11 July 2011. <http://www.abc.net.au/lateline/content/2011/s3267079.htm>.
93. Tim Flannery, *The Future Eaters: An Ecological History of the Australasian Lands and People*, Chatswood NSW, Reed Books, Chatswood NSW, 1994, pp. 369, 394, 400-1. See Flannery's discussion of this figure in his 17th Lionel Murphy lecture: "Humanism and the Environment: Addressing Need in a World of Environmental Limits", November 2003. <http://lionelmurphy.anu.edu.au/Flannery%20transcript1.doc> (transcript).
See also Alan Dupont, "Future of food policy must start at home", *Sydney Morning Herald*, 10 January 2011
<http://www.smh.com.au/opinion/society-and-culture/future-of-food-policy-must-start-at-home-20110109-19jrt.html>
94. *Intergenerational Report 2010*, p. 8
95. *Intergenerational Report 2010*, Chapter 6, p. 91, chart 6.3 "Indicative life of Australia's non-renewable resource stocks".
96. The point was well made in a letter to *The Australian* newspaper by former Democrat leader John Coulter on 11 May 2010 about iron ore and black coal (which Treasury imagined would last till 2100):
The resources in question are non-renewable, and are being very rapidly run down, so the companies are keen to make as much money as they can in the very limited time the resources last. Take black coal as an example. According to the Australian Bureau of Agricultural and Resource Economics the reserves of black coal in Australia amount to 39 Gigatonnes (GT) and the rate of exploitation is expanding at 3.2 per cent per year. If continued at this rate the reserves would be totally exhausted by about 2050. But once half the reserves of a non-renewable resource have been extracted it has been shown that the rate of extraction begins to fall. Thus, while the total life of black coal will extend beyond 2050, by about 2038 the rate of extraction will inevitably fall and with it profitability. It can readily be shown that even the discovery of twice as much black coal will not extend the life of this valuable resource beyond about 2065. This also has major implications for carbon sequestration for, even if this technology is shown to work, by the time it could come into widespread use, the resource on which it is based will be running down.
cf. Tadeusz W. Patzek and Gregory D. Croft "A global coal production forecast with multi-Hubbert cycle analysis", *Energy* journal 2010, vol. 35, no8, pp. 3109-3122. They suggest that world coal production may peak in 2011 and begin a permanent decline. See also Note 185 re Bartlett.
97. Jared Diamond, *Collapse: How Societies Choose to Fail or Succeed*, Penguin, 2006. Older, but rich in evidence, is Claire Russell and W. M. S. Russell, *Population Crises and Population Cycles*, Galton Institute, London, 1999. For an online summary see <http://home.vicnet.net.au/~ozideas/poprus.htm>
98. See Steven Scott, "Bigger Australia a must: Immigration", *Australian Financial Review*, 5 January 2011. Also Mark O'Connor "Red faces over the Immigration Department's 'Red

Book", *On Line Opinion e-Journal*, 11 January 2011.
<http://www.onlineopinion.com.au/view.asp?article=11460>.

As noted in the latter, Scott's article reports that the Red Book says no policy change is likely to stop about 90 per cent of migrants settling in major Australian cities.

99. See Jennie Curtin, "Big Australia vision goes down like a lead balloon", *SMH*, 4 August 2010. <http://www.smh.com.au/national/big-australia-vision-goes-down-like-a-lead-balloon-20100803-115g7.html>.
Also Katharine Betts, "A bigger Australia: opinions for and against", *People and Place*, vol. 18, no. 2; and Katharine Betts, "Attitudes to immigration and population growth in Australia 1954 to 2010: an overview", *People and Place*, 18(3), 2010, pp. 32-51.
100. cf. the 1996 *State of the Environment Report's* remark: "The big cities are generally more efficient in their metabolic flows . . . This suggests there is little to be gained environmentally by dispersing urban populations into other areas, especially the non-urban coastal zones, which are growing rapidly." p. 20.
101. Ross Gittins, "Punters well aware of economic case against more immigration", *Sydney Morning Herald*, 24 November 2010. <http://www.rossgittins.com/2010/11/punters-well-aware-of-economic-case.html>
102. For example: "Population growth good for business", *Business Spectator*, CEO Pulse column, 27 April 2010. <http://www.businessspectator.com.au/bs.nsf/Article/CEO-Pulse-pd20100427-4VTBA?OpenDocument> (Accessed 30 April 2010.)
Business Council of Australia (BCA) press release, *Moderate Population Growth the Best Path to Prosperity*, 28 February 2011, <http://www.bca.com.au/Content/101802.aspx>. (Accessed 30 April 2011.)
The Australian, editorial, 28 January 2011: "What they [critics] all ignore is immigrants are part of the solution to our problems. More migrants, especially ones with job-generating skills, expand the economy, helping to pay for improved infrastructure."
Opinion piece by Jennifer Westacott, CEO of BCA, "Essential skills in short supply", *The Australian*, 6 May 2011. <http://www.theaustralian.com.au/national-affairs/commentary/essential-skills-in-short-supply/story-e6frgd0x-1226050758599>.
Sample arguments: "... A long-term commitment to well-managed population growth is right for the times. It will be good for our society and economy, our international influence and our national security.
And with a stronger economy we will be in a better position to make the investments we need to improve social services, urban amenity and better environmental outcomes.
The government's intergenerational report shows how important sustained immigration will be for the long-term stability of the budget with rapidly rising health and services for the aged and pension costs projected to grow to about half of all federal expenditures."
- For counter-argument see Ross Gittins, "Beware gurus selling high immigration", *Sydney Morning Herald*, 20 December 2010. <http://www.rossgittins.com/2010/12/beware-gurus-selling-high-migration.html>
103. See William Bourke, "Population growth is bad for business", *On Line Opinion*, 26 October 2010. <http://www.onlineopinion.com.au/view.asp?article=11141&page=0>
104. Quoted in Peter Meredith "Population: How much is too much?", *Australian Geographic*, 11 January 2011, <http://www.australiangeographic.com.au/journal/population-how-much-is-too-much.htm>
105. "The Origins of the Crisis in Immigration Policy", *Quadrant*, December 2009.

<http://australianconservative.com/2010/09/australias-failed-immigration-and-citizenship-policies/>

- 106.** *This Tired Brown Land*, Mark O'Connor, Duffy and Snellgrove 1998, pp. 138-139.
- 107.** Productivity Commission 2006
"Economic Impacts of Migration and Population Growth Research Report".
<http://www.pc.gov.au/projects/study/migrationandpopulation/docs/finalreport>
- 108.** Jane N. O'Sullivan, "Submission to the Issues Paper on a Sustainable Population Strategy for Australia" available at <http://www.environment.gov.au/sustainability/population/consultation/submissions.html>.
Also Jane O'Sullivan, "The downward spiral of hasty population growth", *On Line Opinion*, 8 March 2010
[Http://www.onlineopinion.com.au/view.asp?article=10137&page=0](http://www.onlineopinion.com.au/view.asp?article=10137&page=0)
She notes in the former that researchers appear to have ignored the infrastructure costs of immigration on the grounds that they were not a cost but an "investment" (i.e. a temporary financial loss that need not be counted as a cost because you believe you will get it back later, with interest). In other words, they had begun by assuming what they had expected to conclude – that immigrants are not a net financial cost to the public purse but a net financial gain – and then had argued in a circle.
- 109.** "Population: It's the infrastructure, stupid. Or is it?" *The Drum*, 11 October 2010.
<http://www.abc.net.au/unleashed/39930.html>
- 110.** This applies in general to natural increase (newborn children) no less than to immigrants, except inasmuch as a baby does not initially demand as much infrastructure as an adult.
- 111.** On occasion, Australia's annualised population growth rate has exceeded 2.0 per cent, for example in September 2009 when it was 2.1 per cent, ABS Australian Demographic Statistics, September 2009, Pub no. 3101.0
<http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/3101.0Main+Features1Sep%202009?OpenDocument> (Accessed 30 April 2011.)
- 112.** For details see <http://www.onlineopinion.com.au/view.asp?article=10137&page=0> ;
<http://www.abc.net.au/unleashed/39930.html>
- 113.** See William Ryerson, *Sixteen Myths About Population*.
<http://www.populationpress.org/essays/essay-myths2.html>
- 114.** See
[http://en.wikipedia.org/wiki/List_of_countries_by_GDP_\(PPP\)_per_capita](http://en.wikipedia.org/wiki/List_of_countries_by_GDP_(PPP)_per_capita)
- 115.** Ebden Fodor, *Relationship between Growth and Prosperity in 100 Largest U.S. Metropolitan Areas*, December 2010, p.1. Available from
http://www.fodorandassociates.com/rpts_and_pubs.htm (Accessed 30 April 2011.)

116. See for instance Clair Weaver and Linda Silmalis, "Our health system basically 'broke'", *Sunday Telegraph*, 1 February 2009. They detail how health budgets in NSW hospitals can't cope. "At Dubbo, running out of basic supplies is an 'everyday' occurrence." Hence outbreaks of "superbugs" are feared.
<http://www.dailytelegraph.com.au/news/sydney-nsw/our-health-system-basically-broke/story-e6freuzi-111118721637>
117. See Patricia Karvelas, "Resource wealth fund backed", *The Australian*, 7 April 2007. Available at <http://www.theaustralian.com.au/national-affairs/resource-wealth-fund-backed/story-fn59niix-1226034947436> (Accessed 30 April 2011.) She quotes Bob Birrell as saying that Australia should stop seeking such high population growth, and invest its resource royalties in such a fund. "This is a far more compelling option than squandering this wealth to provide the infrastructure for a rapidly expanding metropolitan population". Karvelas points out that Norway, a country of four million people, has accumulated a sovereign fund worth \$480 billion after just 16 years of saving. This investment means the country will have a perpetual stream of income to maintain its high standard of living after selling its oil and gas.
118. Betts, Katharine, "Population growth: what do Australian voters want?" *People and Place*, Vol. 18, No. 1, 2010, pp. 49-64. Available at: <http://www.swinburne.edu.au/chancellery/mediacentre/publications/Betts%5BFinal%5D.pdf> (Accessed 30 Apr 11.)
119. *Sustainable Development Panel Report*, Department for Sustainability, Environment, Water, Population and Communities, Canberra, 2010. Available at: www.environment.gov.au/sustainability/population/publications/issues-paper.html
 On ageing, see especially: "Our ageing population is a boon, not a problem..." pp. 24-27; and Attachment C: "Population growth, demographic ageing and projection assumptions" pp. 37-40.
 See also *Overloading Australia*, Chapter 11, "An Ageing Population", and p. 184. On the supposed lack of workers see pages 10, 55, 77, 82-83, 92-93, 112, 218.
120. As Labor's spin doctors recognised during the 2010 Federal election. "Jobs, jobs, jobs" was a catchcry much used by the Labor Prime Minister Julia Gillard as she sought re-election. See for instance Paul Toohey, "How Julia Gillard laboured the point", *The Daily Telegraph*, August 23, 2010.
<http://www.dailytelegraph.com.au/election/how-julia-gillard-laboured-the-point/story-fn5zm695-1225908589066>
121. ABS, *Labour Force Australia, March 2011*, Pub no. 6202.0; and ABS, *Australian Demographic Statistics, June 2010*, Pub no. 3101.0.
122. The Australia Institute, "The Hidden Unemployed", March 2011, <https://www.tai.org.au/?q=node/254> "...while the number of unemployed at the moment is 604,800 people, the ABS survey of people not in the labour force shows that 1,292,400 of them want to work. Overall 1,897,200 do not have a job but want one. Put another way, that means that less than a third of the people who want to work are actually defined as unemployed. If we include all those who want to work then the real unemployment rate should be 14.3 per cent of the workforce not 5 per cent ... There is also a substantial level of underemployment which the ABS defines as people who 'want, and are available for, more hours of work than they currently have'. A total of 833,800 people are underemployed at the moment. Taking account of those people, the real rate of unemployment plus underemployment rises to 20.5 per cent."
 cf. "Just how important is the mining sector to Australia", <https://www.tai.org.au/?q=node/252>

123. Roy Morgan in its August 2011 business statistics newsletter reported its finding that in July 2011:
- a. 14.9 % of the workforce [is] unemployed or working less than an optimal amount. Including what economists call 'discouraged workers' – those who have stopped looking for a job, there is a shocking 18.4 % of the workforce.
- It also reported Henry Thornton's endorsement, and comment that "We have known for some time that the labor market is less buoyant than the official statistics say - undoubtedly due to politicians leaning ever-so-gently on the ABS over the decades."
<http://www.roymorgan.com/news/polls/2011/4692/>
124. ABS Australian Demographic Statistics, June 2010, Pub no. 3101.0. For the last three years the Australian population has grown, on average, by 155,000 people per year due to natural increase alone (births less deaths).
125. See B. Birrell, E. Healy, K. Betts and T. F. Smith, *Immigration and the Resources Boom Mark 2*, Centre for Population and Urban Research (CPUR), Monash University, July 2011, pp. iv, 46. The higher figure assumes that the proportion of the population wanting paid work continues to rise.
<http://arts.monash.edu.au/cpur/publications/documents/immigration-policy-13-july-2011.pdf>
 c.f Australian Bureau of Statistics, *Labour Force, Australia, Mar 2011*, Pub no. 6202.0.
<http://www.abs.gov.au/ausstats/abs@.nsf/mf/6202.0>
126. See *Hansard*, Monday, 19 October 2009, p. 10121. John Sutton was till 2011 National Secretary of the giant Construction, Forestry, Mining and Energy Union. See also Sutton's remarks quoted in Malcolm Knox, "Union takes on Labor over 'cheap' foreign workers", *Sydney Morning Herald*, 12 February 2010.
<http://www.smh.com.au/national/union-takes-on-labor-over-cheap-foreign-workers-20100211-nv7b.html>
127. ¹Department for Sustainability, Environment, Water, Population and Communities, *Sustainable Development Panel Report*, Canberra, 2010. Available at: www.environment.gov.au/sustainability/population/publications/issues-paper.html
128. Submission to Minister Tony Burke's Sustainable Population Enquiry, at <http://www.environment.gov.au/sustainability/population/consultation/submissions.html>:
"While there are some examples of genuine skills shortages in Australia, most claims of supposed skills shortages should be assessed sceptically. In many cases, a "skills shortage" may just be another way of saying employers are unwilling to provide the terms and conditions and training required to meet their [skilled employees'] needs. Australia has no shortage of trained nurses, for instance, but with poor pay and tough working conditions, many skilled nurses leave their profession for better prospects elsewhere".
- On the ideological blinkers of some of those demanding more workers, see *Overloading Australia*, Chapters 14 and 18.
- John Sutton remarks that as yet, "all of the focus is solely on economic considerations – particularly the much talked about (but rarely analysed) skills and labour shortages. The trouble is that we currently have a one-dimensional neo-liberal discussion heavily influenced by economic rationalists and the corporate world ... At the same time, our cities are bursting at the seams. Urban congestion is a large and growing problem. There is a crisis in housing ..." See www.cfmeu.net.au/infopages/2963.html
- For a US view: <http://cis.org/H1bVisaNumbers> and <http://cis.org/node/220>
- For Sutton's comments of 13 December 2010 on the pro-growth demographer/economist Professor Peter McDonald's call for foreign workers, see <http://www.cfmeu.net.au/multiversions/3662/FileName/PREMcDonaldforeignlabour13DEC10.pdf>

For Mark Cromer's moving account of the harm done to ordinary workers in the USA now that employers have won the lobby battle for cheap immigrant labour, see "Hey Buddy, Can You Spare A Job?", January 2011, online at <http://www.progressivesforimmigrationreform.org/wp-content/uploads/2011/01/cromer.pdf>

For other huge gaps in the labour-shortage argument, see Birell et al., *Immigration and the Resources Boom Mark 2*, July 2011 (for publication details see Note 130 above). Also Robert Birrell et al ... "Labor's education and training strategy: building on false assumptions", *People and Place*, 16(1), 2008, and Robert Birrell and Ernest Healy "The Mineral Boom and Immigration Policy: Skills Australia debunks the myths", *People and Place* 18(2), 2010. Also, Sustainable Population Panel Report pp. 22 and following.

- 129.** About half of those issued with 457 visas in recent years have obtained permanent residence visas after a few years temporary residence. See Birrell et al., *Immigration and the Resources Boom Mark 2*, July 2011, pp. vi, 13.
- 130.** Or that the migrant intake will reduce the skills shortage. (cf. the next note but one.) *Overloading Australia* pp. 110-111 describes ways in which the skilled intake is represented as more skilled than it is. For instance advocates may split the intake notionally into skilled immigrants (whose skills are claimed to be higher than the Australian average) and other categories (where skills are not the point). Yet both types may be members of a single family. Note too that the official numbers for skilled migration include the family members accompanying those possessing the skills. Note also that Jane O'Sullivan's point about population growth multiplying our requirements for infrastructure applies also to our requirements for skilled workers. For instance, if skilled professionals work on average for 33 years, then about 3 per cent will retire each year. Hence we need to graduate or import that number of new ones *who will actually work in the profession* every year. However if population is growing by 1.5 per cent a year we will need a further 1.5 per cent a year, making 4.5 per cent – which is 50 per cent more. Hence bringing in more migrants may well increase the shortage of certain skills.
- 131.** See *Overloading Australia* pp. 114 and 207 (Notes 211 and 214).
- 132.** See ACTU, "Temporary Overseas Workers" available at: <http://www.actu.org.au/Issues/TemporaryOverseasWorkers.aspx> [1 May 2011].
- 133.** "Most cases of abuse have tended to involve trades level 457 visa holders with little or no English language skills who often lacked the technical skills they are supposed to have to be eligible for a 457 visa. At the same time, the 457 visa program has undermined the Australian labour market by enabling employers who are unable to attract local labour as a result of offering poor wages and conditions, or who are unwilling to train workers in areas of skills needs, to sponsor workers from overseas."
- Malcolm Knox (Note 131 above) quotes John Sutton: "The minimum salary level in the 457 visa scheme is as low as \$45,000 in jobs where a local worker could expect to earn more like \$100,000".
- 134.** National Resources Sector Task Force, Final Report, *Resourcing the Future*, July 2010, page 33.
- 135.** ABS, *Labour Force, Australia, Detailed, Quarterly*, Feb 2011 Pub no. 6291.0.55.003. Available at: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6291.0.55.003Feb%202011?OpenDocument> (Accessed 1 May 2011.)

136. National Resources Sector Task Force, Final Report, *Resourcing the Future*, July 2010, page 3.
137. Annual net immigration figures from 2006-07 to 2009-10 reported in ABS, *Australian Demographic Statistics June 2010*, Pub no. 3101.0.
138. See Andrew Trounson, Julie Hare, “International student fees keeping universities afloat”, *The Australian*, 1 July 2011. They say that “every domestic undergraduate is effectively subsidised to the tune of \$1200 by international student fees”, based on an analysis of fees by Michael Beaton-Wells for the University of Melbourne. Assuming a 40/60 ratio of overseas to Australian students, this means that each overseas student is providing roughly \$2000 profit to the campus.
139. Department for Sustainability, Environment, Water, Population and Communities, *Sustainable Development Panel Report*, Canberra, 2010. Available at: www.environment.gov.au/sustainability/population/publications/issues-paper.html p. 23: *Relying on immigration for these skills is neither efficient nor ethical. This panel wants to recognise the moral challenge to Australians in recruiting skilled workers from other countries, particularly those with lower living standards. This activity creates perverse inequities for countries that can ill afford the loss of workers. We can train more of the domestic population to meet these requirements, and should not be draining developing countries of their skilled people, trained at their expense.*
140. Department for Sustainability, Environment, Water, Population and Communities, *Sustainable Development Panel Report*, Canberra, 2010, p. 264. Available at: www.environment.gov.au/sustainability/population/publications/issues-paper.html
141. Central Intelligence Agency, “Field Listing: Median Age”, *The World Fact Book*, updated weekly, available at: <https://www.cia.gov/library/publications/the-world-factbook/fields/2177.html> (Accessed 2 May 2011.)
142. As the Jones report noted back in 1994, p. 100, “The myth that immigration is an effective tool for either permanently or in the short term reducing the average age of the population has been punctured by simple demographic analysis. Australia still has a relatively youthful age structure and the population will continue to age slowly for some decades. The Committee, as does the Government, accepts that immigration is an inappropriate tool to counter demographic ageing, if indeed demographic ageing is a problem.” http://www.aph.gov.au/house/committee/reports/1994/1994_PP457.pdf
143. cf. Michael Lardelli (on population pyramids), “Booms in immigration are the problem, not the solution”, *On Line Opinion*, 20 May 2010. <http://www.onlineopinion.com.au/view.asp?article=10448>
144. Michele Raitano, “The Impact of Death-Related Costs on Health-Care Expenditure: A Survey”, *European Network of Economic Policy Research Institutes (ENEPRI) Report No. 17*, February 2006, available at: <http://www.enepri.org/files/Publications/RR17.pdf> (Accessed 2 May 2011.)
145. James Vaupel, “Biodemography of human ageing”, *Nature*, 25 March 2010, Vol. 464, pp. 536-542, available at: <http://www.nature.com/nature/journal/v464/n7288/full/nature08984.html>
146. Judith Healy, “The Benefits of an Ageing Population”, *The Australian Institute, Discussion Paper No. 63*, March 2004, pp. 27-29, available at: http://www.tai.org.au/documents/dp_fulltext/DP63.pdf

- 147.** Australian Institute of Health and Welfare research cited in “Evaluation of the impact of accreditation on the delivery of quality of care and quality of life to residents in Australian Government subsidised residential aged care homes - Final Report”, Department of Health and Ageing, Commonwealth of Australia, 2007, available at: <http://www.health.gov.au/internet/main/publishing.nsf/Content/ageing-iar-final-report.htm~ageing-iar-final-report-3.htm> (Accessed 2 May 2011.)
- 148.** ABS Australian Social Trends June 2010 Pub. No. 4102.0, “Childcare” available at: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Main+Features50Jun+2010>
- 149.** David de Vaus, Matthew Gray and David Stanton, “Measuring the value of unpaid household, caring and voluntary work of older Australians”, Australian Institute of Family Studies, Commonwealth of Australia 2003, p. 4, available at: <http://www.aifs.gov.au/institute/pubs/respaper/RP34.pdf> (Accessed 2 May 2011.) Note also the graph showing the projected need for health care workers in *Long-Term Physical Implications*, p. 97. It disproves the claim that a smaller Australia will have to find a much higher proportion of them.
- 150.** David de Vaus et. al., op. cit., p. viii.
- 151.** Judith Healy, op. cit.
- 152.** Jane N. O’Sullivan, “Submission to the Issues Paper on a Sustainable Population Strategy for Australia”, 2011, pp. 16-17. Also, note that the percentage who will be in their working years also improves when these are defined as the years between 20 and 69. (The traditional notion that a person’s working years are from 15 to 64 is now badly out of date. It leads to a serious under-count of those too young to work, and an over-count of those too old.) See also the *Sustainable Development Panel Report*, op. cit., p. 41
- 153.** Ben Spies Butcher, “The myth of the ageing ‘crisis’”, *The Conversation*, 26 April 2011. <http://theconversation.edu.au/articles/the-myth-of-the-ageing-crisis-1113>. cf. Ben Spies Butcher, “What ageing crisis?”, 31 January 2011. <http://www.abc.net.au/rn/lifematters/stories/2011/3124413.htm>. Similarly, in the UK, the Select Committee on Economic Affairs of the House of Lords concluded that: “Arguments in favour of high immigration to defuse the ‘pensions time bomb’ do not stand up to scrutiny”. <http://www.publications.parliament.uk/pa/ld200203/ldselect/ldeconaf/179/179.pdf> For a list of “myths” the committee rejected, see Sir Andrew Green, “Devastating demolition of the case for mass immigration”, *Daily Mail*, 31 March 2008. <http://www.dailymail.co.uk/news/article-552449/Devastating-demolition-case-mass-immigration.html#ixzz1KV3RDYm> e.g. “The Government’s key claim that immigration increases Britain’s overall gross domestic product (GDP) is dismissed as ‘irrelevant and misleading’ – even though, as the report points out, it is a claim that has been ‘persistently emphasised’.”
- 154.** Jane O’Sullivan, “The downward spiral of hasty population growth”, *On Line Opinion*, 8 March 2010. <http://www.onlineopinion.com.au/view.asp?article=10137&page=0>. Jane N. O’Sullivan, “Submission to the Issues Paper on a Sustainable Population Strategy for Australia”, 2011, pp. 16-19
- 155.** “City life in decline, PM warned”, by Shane Wright, economics editor, *The West Australian*, December 20, 2010. <http://au.news.yahoo.com/thewest/a/-/breaking/8536559/city-life-in-decline/>

156. See Annabel Hepworth, "Infrastructure Australia unveils its project wish list", *The Australian*, 7 June 2010. <http://www.theaustralian.com.au/business/industry-sectors/infrastructure-australia-unveils-its-project-wish-list/story-e6frg97o-1225876193194>
157. On the folly of selling of our oil, gas and minerals at such speed, see Albert Bartlett, "A depletion protocol for non-renewable natural resources: Australia as an example", *Natural Resources Research*, 2006, vol. 15, no. 3, pp. 151-164. Jeremy Grantham, loc. cit., says that Australia's iron ore is bound to appreciate steeply in value. Surely this makes it a folly to sell it off so quickly. On why the Australian government should not have sold off the Gorgon gas field, and how it was manipulated, see *Overloading Australia* p. 175.
158. Speech, April 2003, while director of the Australia Institute. Hamilton has a doctorate in economics. Quoted at <http://www.population.org.au/index.php/resources/population-quotes/147-quotes-on-population-and-other-related-subjects>
159. "City's population explosion", 1 April 2001. <http://theage.domain.com.au/real-estate-news/citys-population-explosion-20110331-1cng1.html>
160. "Gridlock costs Perth business \$1billion", Russell Quinn, Business Reporter, *Perth Now*, November 25, 2010 <http://www.perthnow.com.au/business/gridlock-costs-perth-business-1bn/story-e6frg2s3-1225960871868>
161. According to KPMG business consultant Bernard Salt. KPMG Media Release of 9 December 2009: "Study findings on what Boomers want". He says: "Nearly 70 per cent of the 'Me Generation', as they are now known, plans to stay in the family home in retirement."
162. <http://www.theage.com.au/victoria/fringe-prices-out-of-reach-20110327-1cc1r.html>
163. See e.g. www.dailytelegraph.com.au/news/sydney-will-become-a-slum-report-warns/story-e6freuy9-1226029794992
164. See Mark O'Connor, *This Tired Brown Land*, Duffy and Snellgrove, 1998, pp. 144-145. Also *Overloading Australia*, p. 219, Note 314.
165. <http://www.smh.com.au/business/the-second-last-straw-in-affordable-housing-market-rankings-worldwide-20110123-1a18f.html>
166. Crispin Hull, loc. Cit. (Note ix above).
167. For refutation, see *Overloading Australia*, p. 20, 96
168. Bob Carr in *Sydney Morning Herald*, 19 November 2009
169. *Overloading Australia*, http://www.australianpoet.com/docs/oa_order_form.pdf See pp. 56-58, 96, 141-146, 177-179. As Australia's National Population Council reported in 1991: "Immigration is an inappropriate and ineffective means of reducing overpopulation elsewhere."
170. A point vividly made in Roy Beck's "gumball" video. <http://www.numbersusa.org/#2>. See also Tim Flannery's Lionel Murphy Lecture (Note 97 above).
171. See *Overloading Australia* pp. 194-195

- 172.** See *Overloading Australia*, pp. 72-75
- 173.** See the Australian government's 2010-2011 immigration budget:
http://www.aph.gov.au/budget/2010-11/content/bp2/html/bp2_expense-15.htm
- 174.** Robert Birrell and Ernest Healy, "Labor's greenhouse aspirations", *People and Place*, 2008, vol. 16, no. 2, pp. 1-15.
<http://elecpress.monash.edu.au/pnp/view/abstract/?article=0000010719>.
See also *Overloading Australia* p. 20 and p. 188 (bottom).
- 175.** As David Suzuki has remarked.
<http://www.population.org.au/index.php/resources/population-quotes/147-quotes-on-population-and-other-related-subjects>
- 176.** See Camille Ebdon, "UN 'concerned' by world population growth trends", *BBC News*, 3 February 2011.
<http://www.bbc.co.uk/news/science-environment-12338901>
- 177.** See the statement by the environmental group Sustainable Population Brazil, "US and virtually every American country needs to lower their fertility rate", online article at: <http://populationmatters.org/2011/blog/sustainable-population-brazil/>
<http://populacaosustentavel.wordpress.com>
- 178.** See their submission to the Minister for Population.
<http://www.environment.gov.au/sustainability/population/consultation/submissions/pubs/0304.doc> It recommends a halt to "any policy that provides an incentive specifically and primarily to increase Australia's population, notably the baby bonus". For press coverage see Josh Gordon, "Thou shalt not breed: Anglicans", *The Age*, 9 May 2010.
<http://www.theage.com.au/national/thou-shalt-not-breed-anglicans-20100508-ul2f.html>.
John Masanauskas, "Anglican Church in attack on Australia's birth rate," *Daily Telegraph*, 28 April 2011. <http://www.dailytelegraph.com.au/news/national/anglican-church-in-attack-on-australias-birth-rate/story-e6freuzr-1226045868485#>
- 179.** This is argued at more length in *Overloading Australia*, p. 136-140.
- 180.** *Overloading Australia*, p. 205
- 181.** See the transcript of Bartlett's on-line talk "Arithmetic, Population, and Energy," 2002.
http://www.albartlett.org/presentations/arithmetic_population_energy_transcript_english.html (Accessed 4 September 2011.)
- 182.** Albert A Bartlett, "The New Flat Earth Society", *The Physics Teacher*, September 1996, Vol. 34, No. 6, Pp. 342-343. <http://www.oilcrisis.com/bartlett/flaearth.htm>
For Simon's claim see Julian Simon, "The State of Humanity: Steadily Improving", *Cato Policy Report*, Vol. 17, No. 5, September/October 1995, P. 131, Cato Institute, Washington, D.C
- 183.** As claimed by the Business Council of Australia. See Westacott, "Essential skills in short supply", loc. cit. Also its March 2011 media release "Moderate Population Growth the Best Path to Prosperity" which claims: "*The projected growth in the Intergenerational Report that would see our population increase to around 30 million in 2030 and 36 million in 2050 is a moderate and sensible guide to what is likely to be needed to meet Australia's long-term goals.*" For criticism see Mark O'Connor's blog:
<http://markoconnor-australianpoet.blogspot.com/>
"Business Council tries to spin rampant growth as 'moderate'", entry of 4 March 2011.

184. In a speech "How much is enough, debating, for the Australian National University's Environmental Studies students, in April 2010, against the pro-population-growth demographer and economist Professor Peter McDonald. He also quoted, in the same context, St Augustine's famous prayer "O Lord give me chastity, but not yet."
185. See Jessica Brown and Oliver Marc Hartwich, *Populate and Perish? Modelling Australia's Demographic Future*, Centre for Independent Studies policy monograph, October 2010.
www.cis.org.au/images/stories/policy-monographs/pm-112.pdf.
 See also numerous remarks by Professor Peter McDonald about growth being inevitable, e.g. in his debate with Mark O'Connor on ABC Radio's *The World Today* on 13 May 2011.
<http://www.abc.net.au/worldtoday/content/2011/s3216101.htm>
186. The population-activist website *Can Do Better* (<http://candobetter.net>) is understandably sceptical of a premier who claims we cannot stabilise population "whilst her website advertises constantly for international and interstate migrants".
<http://candobetter.net/node/1691>. cf. <http://candobetter.net/node/2416>
187. *Overloading Australia*, pp. 8-13, and chapters 9 ("Australia's population: facts and their misrepresentation") and 14 ("Pyramid selling Australia").
188. "The Growth Lobby and Australia's Immigration Policy", *People and Place*, Vol.14, 2006. See also Sheila Newman's thesis, *The Growth Lobby and its Absence*, at <http://candobetter.net/sheila>
189. See for instance Sheila Newman's criticisms of 23 April 2011 at <http://candobetter.net/node/2442>. "*The Age* is a constant source of propaganda for population growth in Melbourne ... *It* owns a massive international property *dot com* ..."
190. See <http://dicksmithpopulation.com/2010/08/16/extra-5000-prize-for-coverage-of-the-wilberforce-award-in-the-murdoch-press/>
 Also <http://dicksmithpopulation.com/?s=Murdoch>. Rejoinder by Mark O'Connor in the Autumn 2011 edition of *Australian Quarterly Essay* (no. 41) to George Megalogenis's essay, *Trivial Pursuit: Leadership and the end of the reform era* (Quarterly Essay no. 40, December 2010) <http://markoconnor-australianpoet.blogspot.com/2011/03/megalogeniss-growth-propaganda-rebuked.html>, and <http://markoconnor-australianpoet.blogspot.com/2011/03/murdochs-australian-pro-growth.html> (both entries of 10 March 2011)
 See also James Sinnamon, "Murdoch media contradicts itself on immigration".
<http://candobetter.net/node/1074>
191. *Government response to the report by the House of Representatives Standing Committee for Long Term Strategies: Australia's population carrying capacity : one nation - two ecologies*, AGPS, 1999.
192. See Central Intelligence Agency, *The World Fact Book*, updated weekly, available at: <https://www.cia.gov/library/publications/the-world-factbook/fields/2177.html> (Accessed 2 May 2011.)
193. <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3222.02006%20to%202101?OpenDocument>
 The data cubes are toward the bottom. The first one, "Projected population, Australia, 2006-2101", unpacks to yield 24 different sets of projections.
194. www.kelvinthomson.com.au/Editor/assets/speeches_2009/091111%20population%20reform%20paper%20ac.pdf
195. See <http://www.populationparty.com/>

196. www.kelvinthomson.com.au/Editor/assets/speeches_2009/091111&20population%20reform%20paper%20ac.pdf ; <http://www.populationparty.com/>
197. Speech by Kelvin Thomson, Federal Member for Wills, to Sustainable Population Australia (South Australia), 7 March, 2010.
<http://marvellousmelbourne.org/drupal/?q=node/1150>

FOOTNOTES FOR MARK O'CONNOR'S REBUTTAL TO WHY WE SHOULD SAY YES TO BIG AUSTRALIA

The **numbers** below match the note-numbers in the WHY vs WHY™ book text of Mark O'Connor's rebuttal:

1. This projection is in Treasury's 2010 Inter-generational Report, discussed in my main statement. Treasury assumed net annual migration of just 180,000.
2. Transport Energy Futures: long-term oil supply trends and projections, Report to the Australian Federal Government by the Department of Infrastructure, Transport, Regional Development and Local Government (BITRE), 2011, 436 pages, (From the Executive Summary) "The outlook under a base case scenario is for a long decline in [global] oil production to begin in 2017, which will stretch to the end of the century and beyond."
3. See <http://energybulletin.net/stories/2010-10-30/peak-oil-debate-over>
4. For evidence, see Note 43, below. On our business-as-usual pattern of ongoing environmental damage, see for instance the remarks of Victoria's Environmental Sustainability Commissioner Dr Ian McPhail. Reporting that Victoria was getting hotter and drier, was emitting more greenhouse gases, was rapidly losing its native species, and that current action on climate change and sustainability was not enough, he summed up this way: "Business as usual isn't going to work . . . Government, business and the community must accept that natural systems are the basis of our economy and our well being. The future cannot be an extension of the past."

Sarah Wotherspoon, "New report details environmental degradation across Victoria", Herald-Sun, 4 December 2008

<http://www.heraldsun.com.au/news/special-reports/victorias-grim-environment/story-e6frf7ro-1111118220785>

5. See his introduction to A 'Sustainable' Population? - Key Policy Issues, AGP, August 2011, p. 5.
<http://www.pc.gov.au/research/confproc/sustainable-population>

6. See Note 152 in my main statement
7. See for instance Jessica Brown, "Big Australia is coming, like it or not", The Punch, 13 June 2011
<http://www.thepunch.com.au/articles/a-bigger-australia-is-inevitable-but-will-it-be-better/>

8. The Australian Conservation Foundation's population spokesman, Charles Berger, puts this case robustly: "If Norway can prosper with a stable population, why can't Australia?", Online Opinion, 22 February 2010. "The claim of inevitability is disingenuous and easily dismissed. While some degree of growth is inevitable over the next few decades, both the pace of growth and the ultimate trajectory are well within the

government's power to influence. Migration is the largest determinant of long-term population growth for Australia, and different migration levels mean the difference between population stabilisation and ongoing rapid growth."
<http://www.onlineopinion.com.au/view.asp?article=10084>

See also the stinging refutation that Victorian Planning Minister Matthew Guy received in December 2011 when he tried this "inevitability" argument on the community group Planning Backlash:

<http://candobetter.net/node/2696#comment-7815>

9. <http://www.abs.gov.au/ausstats/abs@.nsf/mf/3101.0> Note that figures for the year ended March 2011 were only preliminary at the time of writing (December 2011). ABS does not regard population stats as finalised until they are about 2 years old.

Note, too, it is only 12 years since an official government report claimed we didn't need a population debate because we were heading for just 23.5 million people – not 36 million! – in 2050. (On this, see the fifth section "Debating Population" of my "Boundless Plains to Share?: Australia's missing population policy" in *Environmental Policy Failure: Australian Stories*, edited by Kate Crowley and K J Walker, Tilde University Press, Derrimut, Victoria, 2011. See also the Australian government's 1999 response to the Jones Report, Government response to the report by the House of Representatives Standing Committee for Long Term Strategies: *Australia's population carrying capacity : one nation - two ecologies*, AGPS, 1999.)

10. See Radio National's AM program 20 December 2011, Australian population growth rate slips. Presenter Peter Cave remarked: "The latest figures from the Australian Bureau of Statistics show that Australia's population growth is falling well short of the predictions of a big Australia." Demographer Graeme Hugo commented that, "very significant changes" in government policy were a major cause of this."
<http://www.abc.net.au/am/content/2011/s3394511.htm>

11. For example, they write: "In Japan, Russia and many European countries the debate is all about population ageing and shrinking."

12. According to Graeme Hugo: "... Australia currently has one of the fastest growing populations, not just in high income countries (more than three times faster than the average) but also compared with all other Asia-Pacific countries, growing at almost twice the rate of the world's population as a whole (Hugo, 2010)". See his "Population Distribution, Migration and Climate Change in Australia: An Exploration", discussion paper for ACCARNSI, The Australian Climate Change Adaptation Research Network for Settlements and Infrastructure, December 2011. Hugo is ARC Australian Professorial Fellow, Professor of Geography, and director of the Australian Population and Migration Research Centre at the University of Adelaide.

The CIA's World Factbook 2011 would suggest Hugo's statement is a cautious understatement. (See footnote 24 in my main statement.)

Kelvin Thomson has remarked, "we could cut our migration program to 74,000 net, rather than 174,000, and we'd still be running one of the biggest per capita programs in the world – as big as the UK, Italy and Sweden, and bigger than the US and New Zealand."

<http://candobetter.net/node/2707>

13. See the graphs for annual population growth at 1.6 per cent and 1.8 per cent. on page 135 of the first and fourth editions respectively of *Overloading Australia*, by Mark

O'Connor and William Lines. At a steady 1.8 per cent annual population growth – less than some recent annual figures – we would be well past 100 million by 2100. As of December 2011, the last confirmed ABS figure was 1.7 per cent for the year ended June 2010, giving a recent three-year average of around 1.8 per cent.

14. I cite laptops and the internet as quick shorthand for the past 60 years' remarkable progress in computing. Note that this is not typical of the progress of most technologies. Christopher Evans remarked in *The Mighty Micro* (London, Victor Gollancz, 1979) that if cars had made similar progress, "today you would be able to buy a Rolls Royce for £1.35, it would do three million miles to the gallon, and...you could place half a dozen of them on a pinhead." He wrote this back in 1979! Cited in Richard Dawkins, *Unweaving the Rainbow*, Penguin, London, 1998, p. 288.

15. See the Property Council of Australia's *My City: The People's Verdict*, January 2011.
http://www.propertyoz.com.au/tas/library/110122_Auspoll_My%20City%20The%20Peoples%20Verdict_FINAL.pdf
Also Michael Lardelli, "Cities and their Foodsheds", *Energy Bulletin*
<http://energybulletin.net/stories/20oneone-one0-3one/urban-planning-and-food> and
OnLine Opinion: <http://www.onlineopinion.com.au/view.asp?article=one>
Also Matt Smith, "Happy Hobart's top marks", *The Mercury*, 10 November 2011.
http://www.themercury.com.au/article/2011/11/10/275611_todays-news.html

16. cf. The close of their Section 4, where my opponents optimistically argue that it might be a good thing to let Australia's population increase till the states are even less able to afford the infrastructure bills because their proposed reforms (having the Commonwealth give the states more money) "are long overdue, and a bigger population could well be the catalyst to tackle them." It sounds like they are saying we should let things get worse and hope that this worsening creates a solution.

17. About 70 per cent of Australians think Australia has enough people already. See Betts, Katharine, "Population growth: what do Australian voters want?" *People and Place*, Vol. 18, No. 1, 2010, pp. 49-64.
http://www.swinburne.edu.au/chancellery/mediacentre/publications/Betts_per_cent5BFinal_per_cent5D.pdf

18. See Earth Policy Institute, "Demographics Loom Large in State Failure", 8 November 2011.
www.earth-policy.org/data_highlights/2011/highlights20

19. See my online report, Growth lobby can't get its story together. Urban Task Force versus UDIA
<http://markoconnor-australianpoet.blogspot.com/2011/03/growth-lobby-cant-get-its-story.html>

Cardinal Pell's views are expressed at length in his book *God and Caesar*, and on an ABC TV Stateline program: "There is a crisis in the Western world: no Western country is producing enough babies to keep the population stable. No Western country." See Stateline, "Populate and Perish", 18 July 2008.

<http://www.abc.net.au/stateline/nsw/content/2006/s2308390.htm>

My opponents can't logically argue both inevitable growth and population decline, and seem to have committed themselves to the first proposition. Yet, as mentioned earlier, they spend a surprising amount of time talking about declining populations.

20. See Jackson's paper "Comparing Australia's population growth challenges with New Zealand", at the Informa "Australia's Population 2050" conference in Melbourne in September, 2011. She argues that the ageing of Australia's population will make it very easy to stabilise population – or, if growth is desired, it will require very large immigration.

21. Jessica Brown and Oliver Marc Hartwich, *Populate and Perish? Modelling Australia's Demographic Future*, Centre for Independent Studies policy monograph, October 2010.

22. I pointed out in my main statement that fertility rates (without net migration) can lead to long-term population increase only if the rates climb past two children per woman (and remain consistently there).

23. "It seems likely at present that the Australian TFR will be around 1.9 for the foreseeable future." See Graeme Hugo, loc. cit. (Note 12).

24. See Banks' introduction to *A 'Sustainable' Population? - Key Policy Issues*, AGP, August 2011, p. 4. He remarks: "It is true that Australia has experienced a surge in the birth rate recently (from 1.7 to 1.9 births per woman). But this appears to have been largely attributable to...a previously postponed decision to have children – rather than a permanent increase. (Note that even the recent more elevated rate is still below what would be needed for population replacement.)"

<http://www.pc.gov.au/research/confproc/sustainable-population>

Cf. Note 10 above

25. Page 92 of the report offers vivid graphs showing seven different projections for Australia's population. These all appear to peak in the future, with the lowest two peaking at about 23.6 million and just under 25 million. Collectively they show that the size at which our population peaks is highly sensitive to the government's choice of immigration levels.

<http://www.immi.gov.au/media/publications/research/pdf/physical-implications-migration-fullreport.pdf>

26. Richard Denniss's 2011 Informa conference paper describes such claims as "a meme [an idea that spreads like a virus] that has been pumped out since the 1990s". For one European demographer's refutation of such claims see [Tomáš Sobotka](#), "Europe is not heading for a population collapse", *Guardian*, 5 February 2010

www.guardian.co.uk/commentisfree/2010/feb/05/europe-not-heading-for-population-collapse

27. See Stephen Lunn, "Immigration link to economic growth yet to be proven, says Productivity Commission," *The Australian*, 29 October 2011
<http://www.theaustralian.com.au/national-affairs/immigration/immigration-link-to-economic-growth-yet-to-be-proven-says-productivity-commission/story-fn9hm1gu-1226179973978>
28. cf. Sobotka, loc. cit. "There may be a slow decline in the number of people, but it should be welcomed."
 My opponents mention the fact that some regions in Hartwich's native Germany are trying to increase their population for local economic motives. Yet Germany's overall population is stable or falling – which does not seem to have damaged its very high standard of living. Indeed Colin Teese, former deputy secretary of Australia's Department of Trade, suggests it was precisely the stable populations of Japan and (West) Germany that permitted their long economic success after World War 2. (See my *This Tired Brown Land*, Duffy and Snellgrove, Sydney 1998, p. 145.)
 Contrary to assertions from some journalists, it is not established wisdom that Japan's more recent economic crisis or doldrums (following the collapse of an economic bubble) is due to "stagnant" population. For instance, Wikipedia's article on Japan's economic crisis currently (in October 2011) does not even mention population. Other commentators say that Japan's growth in GDP per capita has been just as rapid as that of other developed countries. It is its overall GDP that hasn't grown much, which is understandable if population growth has slackened. See for example:
<http://www.thoughtofferings.com/2011/04/real-gdp-per-capita-and-myths-about.html>
 On Japan's energy dilemmas, see Professor Tatsuo Hatta, "Powering Japan after Fukushima", *The Conversation*, 20 December 2011.
http://theconversation.edu.au/powering-japan-after-fukushima-4693?utm_medium=email&utm_campaign=Latest+from+The+Conversation+for+December+21+2011&utm_content=Latest+from+The+Conversation+for+December+21+2011+CID_df12160c627237eff92b31a0e432b8cd&utm_source=
29. At the Informa Australia's Population 2050 conference in Melbourne in September 2011, the director of the Australia Institute, Dr Richard Denniss, was scathing about such misreadings of the Inter-generational Report: "The latest Inter-generational Report for Australia says by 2050 we will be so rich that at current tax rates government will be swimming in money....The scare stuff is put in the part called Costs of Ageing. The admission that these costs are in fact small is to be found tucked away in a section rivetingly titled Methodological Issues...So, you've been tricked. There's plenty of money if we just leave tax rates where they are – or even stop lowering them so often." See http://www.treasury.gov.au/igr/igr2010/report/html/12_Appendix_C_Methodology.aspx --especially the Charts C4 and C6. Note the contrast between the relatively small total increase projected in per capita health spending and the enormous cumulative effect of the average annual increases in per capita productivity and wages that Treasury projects to 2050. e.g. Item 1.5 "Productivity" and 1.6 "Growth in real GDP per person" in Chapter 1: Long-term demographic and economic projections
http://www.treasury.gov.au/igr/igr2010/report/html/02_Chapter_1_Economic_and_demographic.asp
 Denniss's remarks are a timely reminder that treasurers are political animals, and often spin the facts to please business communities whose approval they seek.
30. My opponents also contend, "If 'arable' Australia had the population density of France, it could hold 76.9 million people." But their source, the 1994 Jones Report *One Nation: Two Ecologies*, did not recommend such a population level, and for good reason. Much of

France's farmland has rich topsoil and reliable rainfall; most of Australia's does not. For the basics on Australia's variable rainfall and susceptibility to the Southern Oscillation see

http://en.wikipedia.org/wiki/Climate_of_Australia and www.australianpoet.com/boundless.html

31. Discussed in my main statement. e.g. the account of Ebdon Fodor's survey that showed slow-growing US regions and cities are better to live in.
32. On just how small and isolated most villages and even towns in France were until 200 years ago. See Graham Robb, *The Discovery of France: A Historical Geography*, W W Norton, 2007. The great variety of recipes for cheese-making, and the variety of bacteria and fungi "domesticated" was surely a result of such isolation. And the resulting advantages persist. As a cheese-lover, I can vouch that no Australian cheeses compare with the Roquefort range!
33. Conversely my *This Tired Brown Land*, page 183, tells how Australia's small population in the early 1940s proved no obstacle to the development of many and varied small bakeries. Affluence, mass migration, and the modern "foodie" culture all came later.
34. In 2009-10 only 57 per cent of the 107,868 people given permanent visas under the skilled stream were in fact people who would have had the skills named in their visa (aka "primary applicants"). The other 43 per cent were dependents. See DIAC, *Population Flows: Immigration Aspects 2009-2010* edition, Department of Immigration and Citizenship, Canberra, 2011, p. 3.
The numbers given for allegedly skilled people coming in as temporaries on 457 visas also include dependents. DIAC doesn't offer percentages here but you can work them out. In 2009-10 Australia issued 67,980 457 visas, but only 34,790 were to primary applicants. Thus the primaries made up 51.2 per cent of the 457 stream. See *ibid*, p. 51. There are a few other pieces of information, not mentioned in DIAC's *Population Flows* that should probably be factored in. In 2009-10 Australia issued 182,450 permanent visas overall: Family Reunion 60,300; Skill 108,100, Special Eligibility 300, Humanitarian 13,750. If we assume that 57 per cent of all the "skilled" visa holders were primary applicants, that gives 61,617 actual skilled permanent migrants or 33.8 per cent of the total. (Source data from *ibid*. above re general permanent migration scheme and DIAC media releases re humanitarian migrants. These latter data have been published separately since 1993.)

However William Bourke, convenor of the Stable Population Party of Australia, suggests that when one adds other categories like New Zealanders, the proportion of skilled migrants is more like a quarter of the total. See his "More bills than skills from this migration", *The National Times*, 19 July 2011.

<http://www.smh.com.au/opinion/politics/more-bills-than-skills-from-this-migration-20110718-1hlgk.html>

I am indebted to Dr Katharine Betts, private communication, for the statistics in this footnote.

35. See *Australia's Migration Program Exacerbates Skills Shortages* (Media Release from the Stable Population Party, 10 May 2011).
<http://www.populationparty.com/attachments/db/pop/44.pdf>

Also William Bourke, "More bills than skills from this migration", The National Times, 19 July 2011. <http://www.smh.com.au/opinion/politics/more-bills-than-skills-from-this-migration-20110718-1hlgk.html>

Also William Bourke, "Big Australia or stable population?", Dissent, Summer 2011

On the holes in the more general argument that population growth is good for the economy, see Richard Florida (a former proponent of "bigness and diversity"), "The State Story: Growth Without Growth" 4/4/2011

<http://www.theatlantic.com/business/archive/2011/04/the-state-story-growth-without-growth/73367/>

and

<http://www.theatlantic.com/business/archive/2011/04/the-metro-story-growth-without-growth/73368>

36. For a fuller explanation see

[Http://www.onlineopinion.com.au/view.asp?article=10137&page=0](http://www.onlineopinion.com.au/view.asp?article=10137&page=0) . See also the fourth section of my "Boundless Plains to Share?: Australia's missing population policy" in Environmental Policy Failure: Australian Stories, edited by Kate Crowley and K J Walker, Tilde University Press, Derrimut, Victoria, 2011.

37. See for instance Ben Packham, "Housing shortage threatens living standards, economic growth: report", The Australian, 21 December 2011; Stephen Lunn, "Housing shortage blowout to hurt the economy", The Australian, 22 December 2011. (Note the tendency of Murdoch journalists to speak always of a shortage of housing etc rather than of an increase in people needing housing.) Or Richard Denniss, "At home with contradictions", Canberra Times, 24 December 2011.

38. This may seem utopian to most Australians, yet it is another advantage of a matured population with roughly equal numbers in each generation. I experienced such a situation during three years I lived in a part of Tuscany (Siena Province) where the villages had stable populations. Few of the young couples I knew were troubled by mortgages. There was usually a spare house, or floor of an apartment, in one of the couple's families. If not, suitable housing could be fairly cheaply purchased (though there was inflation in the price of those properties suitable for purchase by foreigners as holiday villas). For most couples expenses were limited to renovations. So far from the largish elderly population in nursing homes impoverishing the young, they were providing them with accommodation.

On the vastly greater affordability of housing in France as contrasted with Australia, see Sheila Newman's M.A. Thesis "The growth lobby and its absence", <http://candobetter.net/sheila> The Growth Lobby and its Absence.

Note also Bob Birrell and Ernest Healy, "Migration and the housing affordability crisis", People and Place, vol. 11 no 3. This article documents a related point my opponents were trying to make: that older people live in smaller households, and so occupy proportionately much more housing space (per thousand persons) than recent migrants. However, most older people already occupy the homes in which they plan to age; so it is in fact quite largely recent migration, not "our ageing population", that puts pressure on the housing market. Yet in a Sydney Morning Herald article called, "A few home truths on people and houses" (28 September 2011) my opponents claimed that: "In the long run, it hardly makes a difference for total household numbers whether Australia continues its current migration intake or drastically cuts it."

<http://www.smh.com.au/business/a-few-home-truths-on-people-and-houses-20110927-1kvdv.html#ixzz1ZCThPKce>

Answering my emailed request for a comment on this, Dr Bob Birrell wrote: "The CIS argument that migration makes no difference is hard to fathom. Over the short to medium term, migration is the key factor shaping household numbers."

I too struggle to understand my opponents' argument that Australia must build new housing and infrastructure with or without population growth. The questions, surely, are how much more growth must our cities endure, and how quickly, cf. the remarks of Planning Backlash cited above:

<http://candobetter.net/node/2696#comment-7815>

39. See its chapter 14 "Pyramid-Selling Australia", pages 120-126. Also for instance <http://www.perthnow.com.au/almost-90-per-cent-of-homes-are-out-of-reach-for-perth-workers/story-fn6mh7kp-1226187624021> .
40. See *Overloading Australia* (4th edition) page 175
41. Intergenerational Report 3. *Australia to 2050: future challenges*, January 2010, Chapter 6, p. 91, chart 6.3 "Indicative life of Australia's non-renewable resource stocks".
42. Intergenerational Report 3, p. 91, says our known reserves of natural gas would last 70 years if we continued to use it at 2008 rates. However this would be an unsafe assumption. After Peak Oil, gas may be used at far higher rates, and hence be gone in a fraction of the time. cf. Chris Nelder, "Why energy journalism is so bad?", *Smart Planet*, November 30, 2011: "First, it should be obvious that if you transfer large loads to natural gas, a 100-year supply at current rates is no longer a 100-year supply. It might be a 10- or 20-year supply. . . ."

<http://www.smartplanet.com/search?q=chris+nelder>

Though Australia was originally rich in natural gas, successive governments have allowed gas fields to be sold off almost as soon as found. So one cannot assume that Australia will keep a strategic reserve (as the Whitlam Government's Energy Minister, Rex Connor intended) of its own gas to protect it from the world peak in gas. Some experts predict global gas supplies will peak as early as 2020, e.g. R.W. Bentley (2002). "[Global oil & gas depletion: an overview](http://www.oilcrisis.com/bentley/depletionOverview.pdf)" (PDF). *Energy Policy*. pp. 189-205. <http://www.oilcrisis.com/bentley/depletionOverview.pdf> though others predict no decline before 2030.

Note, too, that there are great problems in using natural gas for many of the uses of oil. On these, see Richard Gilbert and Anthony Perl, "Problems and Opportunities with Natural Gas as a Transportation Fuel", where they say, "despite the hype to the contrary, natural gas should have only a modest role in fuelling future mobility."

<http://www.postcarbon.org/reports/NatGasSupplements.pdf>

Also: "Natural Gas: The Squeeze at the Bottom of the Resource Triangle",

<http://www.theoil drum.com/node/8310>

On the long history of governments and journalists grossly over-estimating energy resources, see Professor Albert Bartlett's online piece *Arithmetic, Population and Energy* – a talk by Al Bartlett, particularly the paragraphs beginning: "At current levels of output and recovery, these American coal reserves can be expected to last more than 500 years."

http://www.albartlett.org/presentations/arithmetic_population_energy_transcript_english.html

Also Bartlett's "A depletion protocol for non-renewable natural resources: Australia as an example", *Natural Resources Research*, 2006, vol. 15, no. 3, pp. 151-164. It seems that

the desire of exploration companies to overstate a find combines with the tendency of journalists, once they have taken on a story about a big find, to exaggerate its implications. Hence we have often been assured we have centuries' worth of a resource when in fact we have only decades. On how this distorts estimates of natural gas reserves, see Richard Heinberg's Foreword to 'Will Natural Gas Fuel America in the 21st Century?'

http://www.theoil Drum.com/node/7912#_edn3

43. See <http://markoconnor-australianpoet.blogspot.com/2011/03/ken-henry-treasury-secretary-says.html> Australia's population at the time was 7 million more, so Henry was saying we were already over-populated, granted the way we behave.

44. I have analysed this argument elsewhere as the "No Necessary connection" argument. See <http://fr.wiserearth.org/article/a40a2fbf88d87747f6c83b54a6bc56bc>

For hard evidence that population growth does damage environments, see Mark O'Connor, "Boundless Plains to Share?: Australia's missing population policy" (sub-section 3: Does population growth damage environments?) in Environmental Policy Failure: Australian Stories, cited above.

45. cf. their Introduction: "To take one example, agricultural technology has increased our food production faster than the population.'

For a counter view, cf. John Michael Greer's remark: "The fantasy that today's industrial societies are destiny's darlings, and therefore exempt from the common fate of civilisations, needs to be set aside." <http://www.energybulletin.net/node/48571> As Greer implies, it is one thing to think that human ingenuity plus cheap and unlimited fossil energy can sustain an ever-increasing population, quite another to think that human ingenuity with limited energy can do so.

46. See <http://www.csiro.au/Organisation-Structure/Flagships/Sustainable-Agriculture-Flagship/Food-for-thought-on-food-security.aspx>

On fallacies in the "Malthus was wrong" argument, see my Online Opinion article "Malthus and the 3-card Trick", 21 November 2011

<http://www.onlineopinion.com.au/view.asp?article=12907>

47. Personal communication, email to me on 19 October 2011. Quoted with Professor Cribb's permission. "Since 2000 food demand has risen faster than production; so the example used is deceptive by its reference to the 1960s rather than present day circumstances." Cribb added, "Furthermore the world has since 2000 experienced peak oil, peak fish and probably peak land (the area of farmland has also declined since 2000)." He also made the point that "Billions of people are now eating richer more energy-intensive diets – it is not a simple equation of food production and human numbers. We need to think about food demand." In other words, as some countries like China begin to feed more of their grain to pigs and cattle so they can eat more meat, world grain production may need to rise even faster than population if grain stocks and food security are not to fall. Of course this does not mean that population is irrelevant.

48. See "Climate change leading to food crunch", AFP, November 17, 2011

<http://news.theage.com.au/breaking-news-world/climate-change-leading-to-food-crunch-20111117-1njls.html>

49. See Paddy Manning, "Global' risks on food security mean us too", The Age, 3 December 2011

<http://www.theage.com.au/business/global-risks-on-food-security-mean-us-too-20111202-1obhh.html#ixzz1fizChzUy>

50. Their 7 titles are:

Because it is happening whether we like it or not

Because it can offset the challenges of an ageing society

Because of its economic benefits

Because we can afford the infrastructure and housing

Because we will have enough food and water

Because we can still protect the environment

Because social cohesion will remain strong

51. See Note 17 above.