Migrant Intake into Australia Public Inquiry Submission
Eric Claus

Australians have long been told we need high immigration because "It's good for the economy." (SMH, 2013) Increased population with more workers means that the Gross Domestic Product (GDP) increases. The lie that we have been sold by both major parties is that a higher GDP benefits everyone.

It doesn't.

This story of deception has continued despite strong evidence that the average Aussie is worse off with high immigration.

1. Productivity Commission Report says "resident workers" are worse off
2. GDP and Corporate Profits go up, but wages don't
3. Labor and Liberal parties ignore polls showing Aussies don't want high immigration
4. After the majority of Australians ask not to have high immigration, Government says "Now pay the extra cost of high immigration"
5. All over the world, population growth means slower economic growth
6. High population on a finite planet (increasing demand with finite supply) means higher prices for commodities and housing
7. High population puts pressure on the natural environment, causing a lower standard of living
8. If our goal is to have a better world we are going about it the wrong way
9. The Free Market does not find solutions to problems that don't make profits.

Australia's and the world's best long term policy is net zero immigration.

1. Productivity Commission Report – Resident Workers incomes grow more slowly with high immigration

In 2005, Federal Treasurer Peter Costello commissioned a study on immigration by the Productivity Commission. The study, *Economic Impacts of Migration and Population Growth,* released in April 2006 concluded that:

- Economic gains are mostly accrued to the skilled migrants and capital owners. The incomes of the existing resident workers grow more slowly than would otherwise be the case. (page 151)

The Productivity Commission report also said that similar results had been obtained in earlier research in Australia and overseas, so there is nothing ground-breaking about the conclusion that resident workers are disadvantaged by high immigration. Resident workers are further disadvantaged by the environmental impacts of increased population growth, but the Productivity Commission concluded that "information necessary to quantify the impact of environmental limitations on productivity and economic growth," was not available. They added "This does not imply that the impact is small or does not exist," (page 122) and they were only referring to the productivity and economic impacts. Environmental impacts like increased pollution and loss of natural habitat are certainly increased with high immigration, but those are impacts that the average Australian is told to live with, so that the capital owners can get richer.

2. Even if GDP goes up, the average Aussie's wages don't go up

History supports the Productivity Commission's and other researcher's conclusion that high immigration disadvantages the average resident worker. **Table 1** and **Figure 1** show that although the GDP has increased by 3.1% per year employee wages have only increased by 1.5% per year. **Table 1** and **Figure 1** also show that company profits have increased by 10.1% per year indicating that the capital owners are keeping the profits during these times of high immigration and benefitting just as the Productivity Commission described.

Table 1 – Comparison of Weekly Earnings with GDP/capita and Business Profits in **Australia**			
	2001	2012	Increase/year
All employees total weekly earnings, ABS 6302.0 (A$)	889	1051	1.5%
GDP ABS 5206.0, Quarters GDP (millions A$)	251843	374213	3.1%
Company Profits, ABS 5676.0 Table 9 (millions A$)	15973	50714	10.1%
Business Profits, ABS 5676.0 Table 15 (millions A$)	43263	74817	5.1%

All values adjusted for inflation.

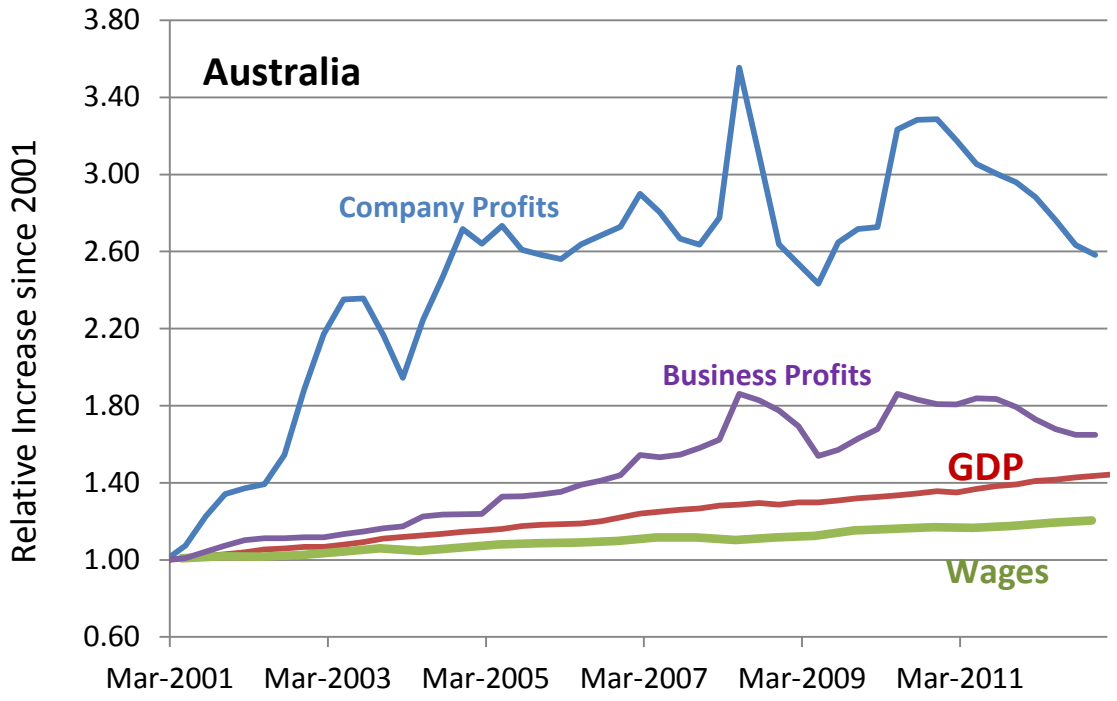

Figure 1 – Graph of the relative increase of Company Profits (ABS 5676.0 Table 9), GDP (ABS 5206.0), Wages (ABS 6302.0) and Business Profits (ABS 5675.0 Table 15) in Australia from 2001 to 2012. All values adjusted for inflation. The raw data is in the Appendices.
Business Profits equals company profits plus unincorporated profits.

Even with a booming economy wages haven't increased much. What about a stalled economy? Australia has been in the lucky position to be able to provide coal, iron ore and other commodities to China at huge profits. Countries like the United States have not been so lucky and their economies have not grown as quickly as Australia's. **Table 2** and **Figure 2** show that just like Australia, corporate profits in the US have been high but wages have been low. In fact, Median Household Income in the US has dropped since 2001. It's not inconceivable that if Australia's economy slows, wages will drop just as they have in America, even though corporate profits are high.

Table 2 – Comparison of Household Income with GDP/capita and Business Profits in the **USA**			
	2001	**2011***	Increase/year
Median Household Income, US Census Bureau	54155	49842	-0.8%
	2001	**2012**	
GDP, US Dept of Commerce, Bureau of Econ. Analysis	12,646	15,583	1.9%
Corporate Profits, Federal Reserve St. Louis	282.9	761.0	9.4%
Corporate profits with inventory valuation and capital consumption adjustments, US Dept of Commerce	425.0	873.5	6.8%

*Median Household Income Data not available for 2012 from US Census Bureau

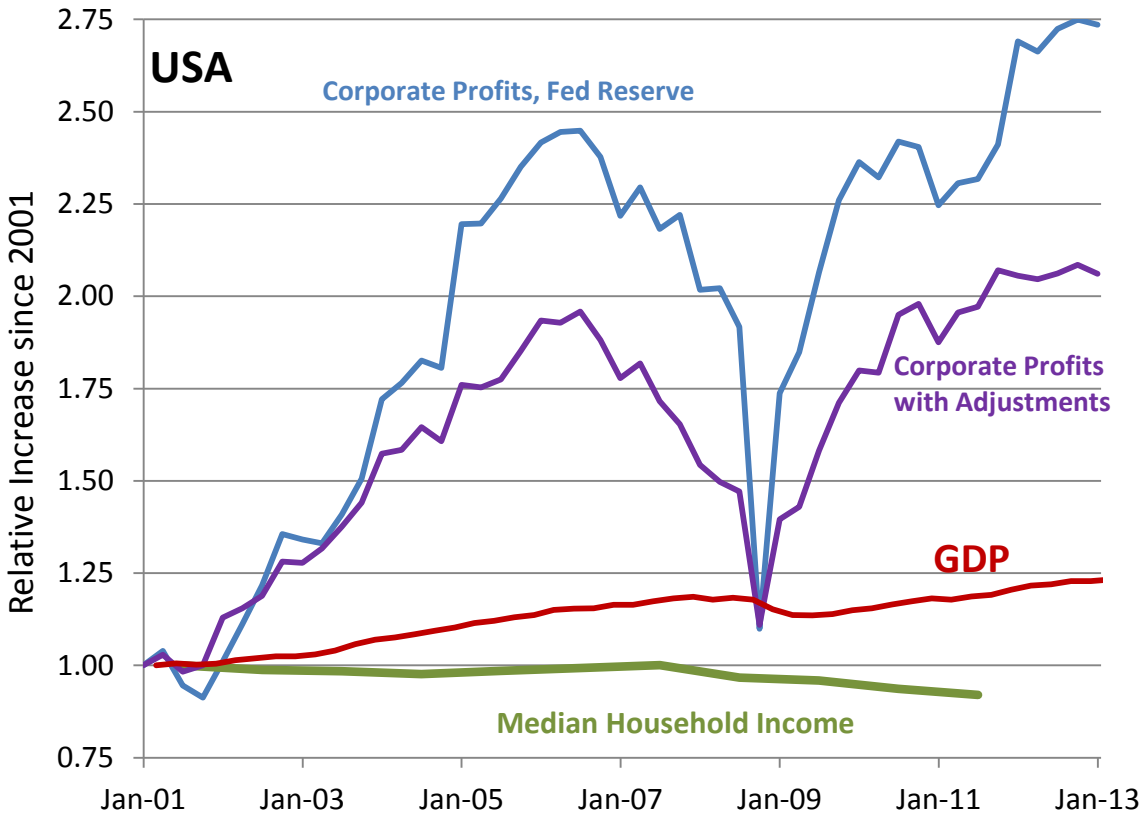

Figure 2 - Graph of the relative increase of Corporate Profits (Federal Reserve, St Louis), Corporate Profits with inventory valuation and capital consumption adjustments, (US Dept of Commerce, Bureau of Economic Analysis), GDP (US Dept of Commerce, Bureau of Economic Analysis), and Median Household Income (US Census Bureau) from 2001 to 2012 (to 2011 for Median Household Income). All values adjusted for inflation. The raw data is in the Appendices.

3. Major Parties ignore the wishes of the Electorate

Even following the clear message of the Productivity Commission report and the slow growth of wages for the majority of Australians, both major political parties continue to enthusiastically embrace immigration policies that make the majority of Australians worse off. The reason that the political parties often use is that high immigration is "good for the Economy." What they are really saying is that high immigration is "good for the economy of the wealthy capital owners" as the Productivity Commission concluded.

Compounding the political parties disrespect for what is best for their constituents are the regular polls that show that the majority of Australians don't want high immigration. **Table 3** summarises two sets of polls (14 polls in total), each showing similar results. The Monash University Inventory of Surveys included 8 polls that asked if immigration was too high, about right or too low. About 5 times as many people believed that immigration was too high, as thought immigration was too low. The Goot and Watson (2011) paper for the Parliamentary Library showed, 6 polls taken between 2001 and 2010 that asked the question "Does Australia need more people?" On average, about twice as many respondents answered no, Australia does NOT need more people, than answered yes.

Table 3 – Summary of polls asking if Immigration is too high and if Australia needs more people

	Is Immigration too high, about right or too low?			
	Too High	About Right	Too Low	Don't Know
Summary of Monash University Inventory of Surveys (2013) – 8 Polls	47%	41%	9%	8%
	Does Australia need more people?			
	Yes	No	Don't Know	
Summary of Goot and Watson (2011), Parliamentary Library - 6 Polls	31%	59%	10%	

The individual results of each poll are referenced in the Appendices.

The Goot and Watson (2010) study was written specifically for members of Parliament and many of the polls in the Monash University Inventory of Surveys have been reported in the media, so the data is certainly not unknown to our politicians. They have just chosen to pursue an immigration policy that is different from the wishes of the majority of their constituents.

4. Ignoring us isn't the worst insult – "Now you must pay for high immigration"

Although the major parties' ignoring the wishes of the majority of their constituencies is insulting to the average Australian, it is not the worst insult. More insulting is the government putting the burden of managing and paying for the infrastructure and environmental impacts of the increased population back on average Australians that have already been disadvantaged by high immigration.

The cost per person of infrastructure is difficult to estimate and varies widely in the literature. A study by Curtin University (Trubka, Newman and Bilsborough, 2009) estimated that the infrastructure cost was $136,000 per dwelling, but didn't include airports, railroads, waste management facilities, Highways, Dams, public transport or municipal services like libraries, day care centres and public parks. Rubenstein (2009) studied infrastructure in the USA and found some figures that can fill in the gaps that the Curtin University study left out. Assuming the extras add up to about $24,000 (so the total is about $160,000) and 2.6 people live in each dwelling, the infrastructure cost for each additional person is about $60,000. If 200,000 new migrants come to Australia next year, the additional cost for infrastructure will be about $12 billion. That would mean an average of about $1200 per year for each of Australia's 9.7 million income taxpayers. Those costs are spread to all income taxpayers, not just the capital owners who get the benefits of high immigration.

Sydney, Melbourne, Adelaide and Perth have all built expensive desalinisation plants in the past ten years to ensure the water supply for their growing populations. These desalinisation plants are only required because of high immigration. The wealthy capital owners who benefitted the most from the increase in population were not asked to pay for the new desalinisation plants. The average water user has been told to pay. The charges for water have increased significantly over the past 10 years and at the same time water restrictions have been imposed. Water suppliers, like Sydney Water, lecture users on saving water. The average Aussie homeowner is asked to allow his lawn to go brown, keep his car dirty and take 4 minute showers, so that property developers like Harry Triguboff can build more blocks of flats and increase their fortunes by a few more million.

From 2008 to 2012 the cost of electricity for households has increased by around 70% nationally (Dept of Resources, Energy and Tourism, 2013). A big part of the increase is due to the requirements to expand the network due to the increase in population. All of us need to foot this bill, not just the capital owners who get the most benefit out of population growth.

The past 20 years have seen a substantial increase in Toll Roads in Australia due to the increase in traffic in Sydney, Melbourne and Brisbane, which naturally follows the increase in population. More toll roads are planned. We all have to pay for these tolls, not just the capital owners who get the benefits of population growth. Due to the increase in population our roads have become more congested. **Figure 3** shows that despite the increased number of toll roads and extra costs that the average Aussie has to pay to drive in the major cities the average driving speed has decreased. This is a strong indication that road infrastructure has not kept up with population growth. The graph does not include the fact that the cities have also become more spread out so that travel times are increased by even more than the reduction in speed indicates.

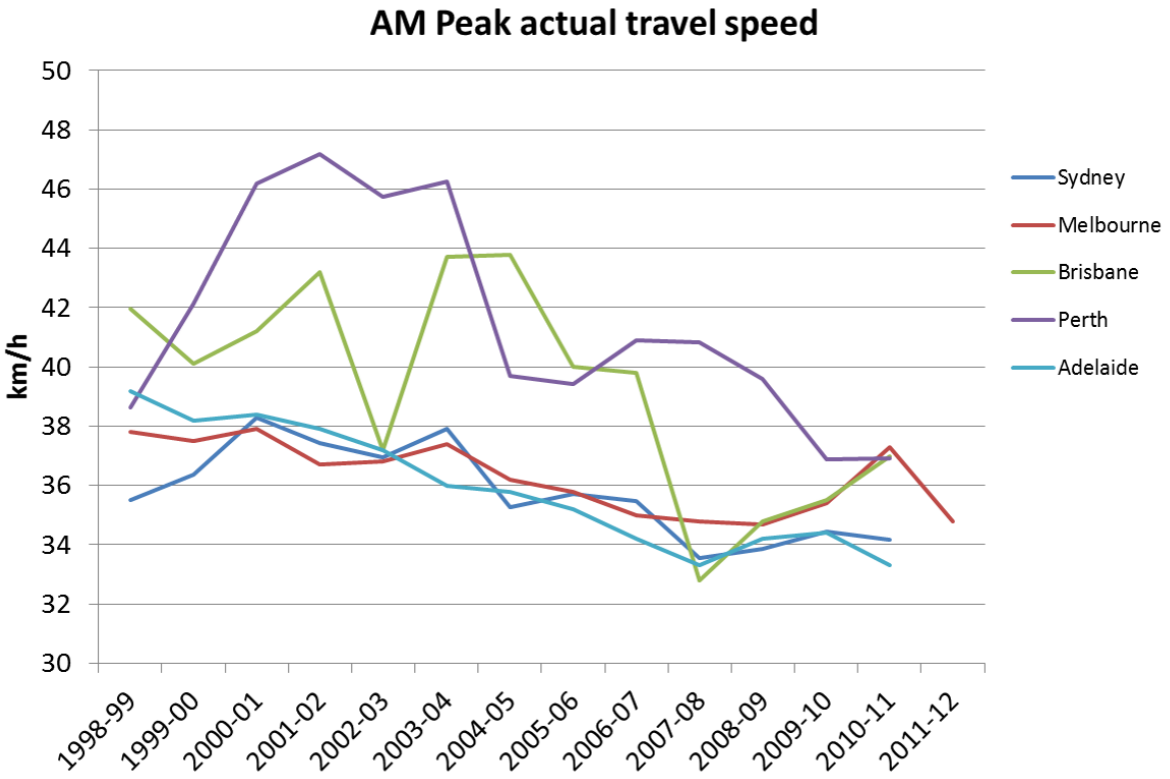

Figure 3 - Graph of the average morning travel speed in Australia's five biggest cities. http://chartingtransport.com/2010/10/31/trends-in-melbourne-traffic/

Also over the past 20 years, as rapidly increasing population has made planning and zoning for new developments more problematic, the State governments have tried to impose changes to residential zoning against the wishes of the local communities and the local councils. Government action to rezone suburbs so that single family homes can be knocked down and replaced with blocks of flats has spawned groups like Save Our Suburbs. Save Our Suburbs "supports residents in their struggle to save our city from overcrowding, traffic congestion, pollution and loss of bushland and heritage resulting from ill-considered planning impositions." (SOS 2013)

Ladd (1992) studied 247 large counties in the USA which made up 59% of the population and found that population growth does not pay for itself. Ladd finds that "...the major stress on local public spending associated with a surge in population occurs in the capital, not the current account budget (p. 288)" (Conklin, 2004).

Ladd (1992) also notes:

> ". . . . . except in sparsely populated areas, higher density typically increases public sector spending. In addition, the results suggest that rapid population growth imposes fiscal burdens on established residents in the form of lower service levels."

Ladd (1992) writes what many Sydneysiders have been saying for years. When population growth is too high, the local residents are not only forced to pay more for services, they sometimes are not able to get those services upgraded and are forced to wait for infrastructure and services to catch up.

5. Economic Growth doesn't follow population growth

Promoting the fiction that high immigration is good for the average Australian, usually means implying that high immigration is needed to stimulate the economy and similarly that if population doesn't grow, the economy will stagnate. The ANU 2010 Poll and the survey reported by Betts (2010) found that the minority support for population increase was based mainly on arguments associated with economic growth.

Even forgetting that when the economy does grow from increases in population, the wealthy are the primary beneficiaries, the data shows that growth in population doesn't provide significant increases to the GDP per capita. An assessment of the 100 most populous countries in the world (representing over 96% of the world's population in 2010) shows that when they are ranked according to GDP per capita, the richest countries have the lowest population growth rates and the poorest countries have the highest population growth rates. This is the opposite of what the advocates of high immigration are telling us.

Table 4 – Comparison of GDP/capita with % population growth rate in the 100 most populous countries in the world in 2010. Full list of countries and data in Appendix A.

	Group Average GDP/capita	Group Average % Pop. Growth rate	Group Total Population	% of World Total Pop.
Richest 25 countries	37,900	0.66%	1,061,000,000	15.3%
2nd richest 25 countries	7,800	0.71%	2,452,000,000	35.4%
3rd Richest 25 countries	2,100	1.42%	2,452,000,000	35.5%
Poorest 25 countries	600	**2.18%**	701,000,000	10.1%
World Average	10,100	1.19%	6,916,000,000	100%
Australia	62,000	1.52%	22,404,000	0.3%

GDP/capita in US$

The criticism of this analysis is that as a country gets wealthier, the birth rate drops, so countries can get rich first and then drop their birth rates. The fact is though that countries don't get rich first and then drop their birth rates. This was clearly shown by Jane O'Sullivan (2013) in a paper comparing drops in birth rates between comparable countries and the increase in GDP/capita. The data showed that a drop in birth rates precedes an increase in GDP/capita. The most well-known example is in China, but it was also shown in comparisons of Thailand and the Philippines, Tunisia and Syria, Costa Rica and Guatemala and Chile and Peru (**Appendix B**). This factor is relatively unimportant in Australia with low birth rates, but are still trying to increase their populations through immigration. **Table 4** provides a very clear indication that we can be rich and have a low population growth rate.

The average Australian, both for and against high immigration, knows that high immigration brings congestion, a reduction in government services and more pollution, but the propaganda campaign sells the fiction that he is getting richer with high immigration. The minority that supports high immigration probably believes that the trade-off for higher wages is worth the congestion, poorer services and pollution.

It is doubtful that the minority for high immigration would be happy to find out they were getting congestion, poorer services, pollution and low wages.

6. Higher prices as increased demand meets a finite planet

Advocates of population stabilisation have long said that population increase would cause scarcity and an increase in prices. Advocates of population increase have said that price increases are always temporary adjustments. Entrepreneurs and inventors respond to high prices by substituting new products and thinking of new ways to fill those scarcities. As soon as these new products and methods become widely used, the prices will drop again. As Economist and pro-growth advocate Julian Simon (1994) said:

> "More people, and increased income, cause resources to become more scarce in the short run. Heightened scarcity causes prices to rise. The higher prices present opportunity, and prompt inventors and entrepreneurs to search for solutions. Many fail in the search, at cost to themselves. But in a free society, solutions are eventually found. And in the long run the new developments leave us better off than if the problems had not arisen. That is, prices eventually become lower than before the increased scarcity occurred."

In 1980 Julian Simon made a bet with Biologist and Population stabilisation advocate Paul Ehrlich in which Ehrlich selected 5 metals and, on paper, purchased $200 of each metal. Simon bet that the prices would go down over ten years and Ehrlich bet that the prices would go up. Simon won the bet and Ehrlich sent him a cheque for $576 in 1990. For many pro-growth advocates this ended the discussion about whether increased population would cause prices to increase.

History has shown that if Ehrlich had made the bet to cover the past 10 or 20 or 30 years he would have won the bet. Julian Simon passed away in 1998.

In the past years from 2001 to 2013 of important commodities have substantially increased making Paul Ehrlich look like a genius compared to Julian Simon.

Table 5 – Price Increases of Agricultural Commodities from 2001 to 2013

	Jan-Jun01 Average	Dec12-May13 Average	%growth/yr	Source
Rice	98.2	243.4	7.9%	World Bank
Wheat	73.9	139.6	5.5%	World Bank
Soybeans	94.4	229.7	7.7%	World Bank
Maize	50.4	129.5	8.2%	CBOT - CME Group
Beef	51.2	82.6	4.1%	World Bank
Pigmeat	35.4	35.0	-0.1%	CME - CME Group
Chicken	35.3	43.5	1.8%	IMF
Coffee	17.3	46.3	8.6%	World Bank
Sugar	5.1	7.9	3.7%	World Bank
Cotton	31.0	38.7	1.9%	Cotlook Limited, via the IMF
Food Index	45.6	78.0	4.6%	IMF

The data is from the IndexMundi website, which identifies where the data was sourced.
Commodity Food Price Index, 2005 = 100, includes Cereal, Vegetable Oils, Meat, Seafood, Sugar, Bananas, and Oranges Price Indices. Sourced from the International Monetary Fund.

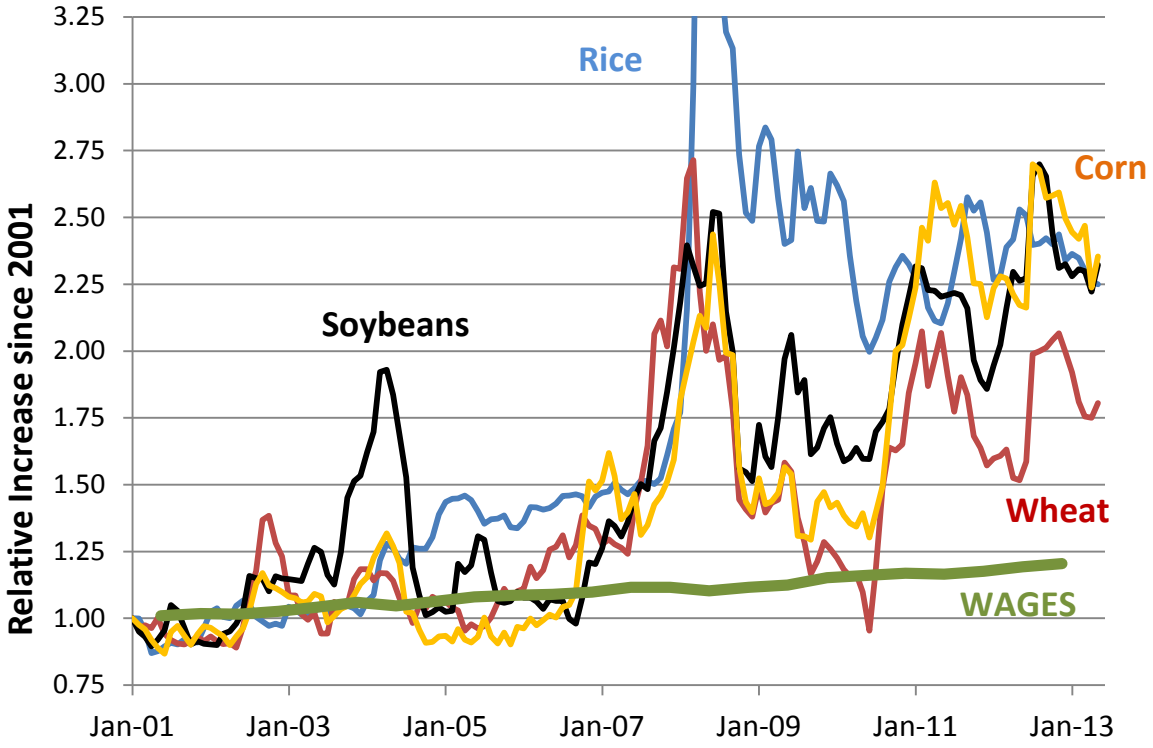

Figure 4 – Relative price increases for Rice, Wheat, Soybean and Corn from 2001 to 2013 with a comparison to Australian average wages.

Table 6 – Increase in Minerals and Energy Prices from 2001 to 2013				
Minerals and Energy	Jan to Jun 01 Average	Jan to Jun 13 Average	%growth/yr	Source
Gold	150.4	655.6	13.1%	World Bank
Aluminium	873.2	825.8	-0.5%	World Bank
Copper	968.1	3245.3	10.6%	World Bank
Iron Ore	7.4	58.9	18.9%	The Steel Index (TSI) via the IMF
Metals Index	33.9	82.8	7.7%	IMF
Crude Oil	28.0	82.9	9.5%	IMF
Australian Thermal Coal	18.7	41.3	6.8%	World Bank
Natural Gas	108.9	51.2	-6.3%	NYMEX - CME Group
Energy Index	29.6	82.1	8.9%	IMF

Graph of Gold, Aluminium, Copper and Iron Ore in Appendices.

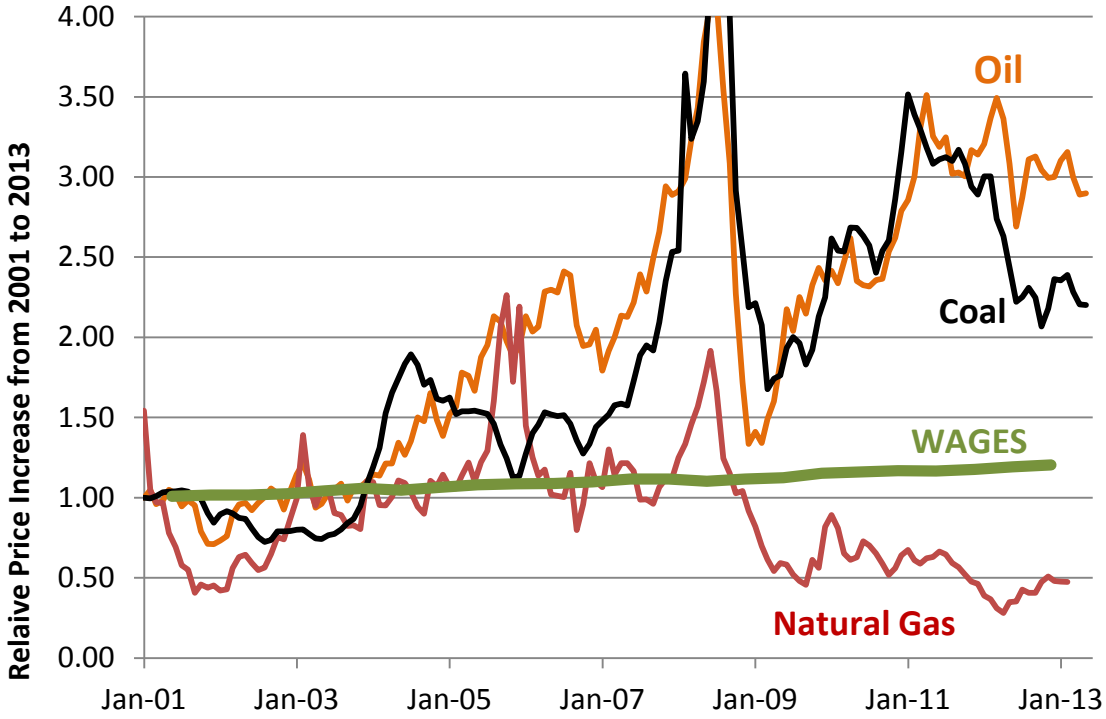

Figure 5 – Relative price increases for Oil, Natural Gas and Coal from 2001 to 2013 with a comparison to Australian average wages.

Some population stabilisation advocates call population stabilisation "the everything issue." (SPP 2013) One reason for this is illustrated in the increase in prices for these key commodities. **Figures 4** and **5** show that prices are highly volatile and they don't all move at the same rate at the same time. When Julian Simon and other pro-population growth advocates say: "In a free society, solutions are eventually found. And in the long run the new developments leave us better off than if the problems had not arisen," they are asking entrepreneurs and inventors to solve all the problems for all the price increases for rice, wheat, soybeans, copper, oil, coal and all the other commodities that have had steep price increases. Advocates of a stable population say that a stable population reduces the demand for every commodity so the pressure on prices is not as high and prices stay lower. This also gives more time for entrepreneurs and inventors to come up with solutions without the impacts to the economy being so severe.

The added bonus to stable population is that demand is reduced for non-commodity costs such as housing and problems such as pollution and congestion are reduced.

Julian Simon hinted at this when he said: "This is my long-run forecast in brief: The material conditions of life will continue to get better for most people, in most countries, most of the time, indefinitely." (Simon, 1996) Simon is only claiming that the "material conditions of life" will get better. He is not making any claims about pollution, or congestion, or species extinctions or any other issues that are not material. In other words if you have to drive to work for two hours in smoggy air but you have an expensive car to drive in, you are materially better off. You may not be happy, but you are materially better off. The market does not look for solutions to problems that don't make the suppliers profits, so even if Julian Simon were right, he is only claiming to be right about the material conditions of life. He makes no promises about non material issues like pollution, congestion and the natural environment.

The wages data and commodity price data from recent history indicate that the average Australian won't even be materially better off. A Lose-Lose for the average Aussie.

Another difficulty with the market economy solution to increased prices is that when there are no profits to be made through the solution of scarcity issues, there is no motivation for entrepreneurs and inventors to solve those problems. For example, real estate developers, who are firmly capitalist, don't necessarily want lower housing prices. They have no desire to find solutions that lower the price of housing, so they not only do nothing to lower housing prices they advocate government policies that increase housing prices such as high immigration and the first home buyers scheme.

Birrell and Healy (2003) showed that high immigration was significantly impacting housing affordability in Sydney. **Figure 6** shows that housing costs have continued to increase after 2003, far exceeding wages growth in four of the five largest cities in Australia.

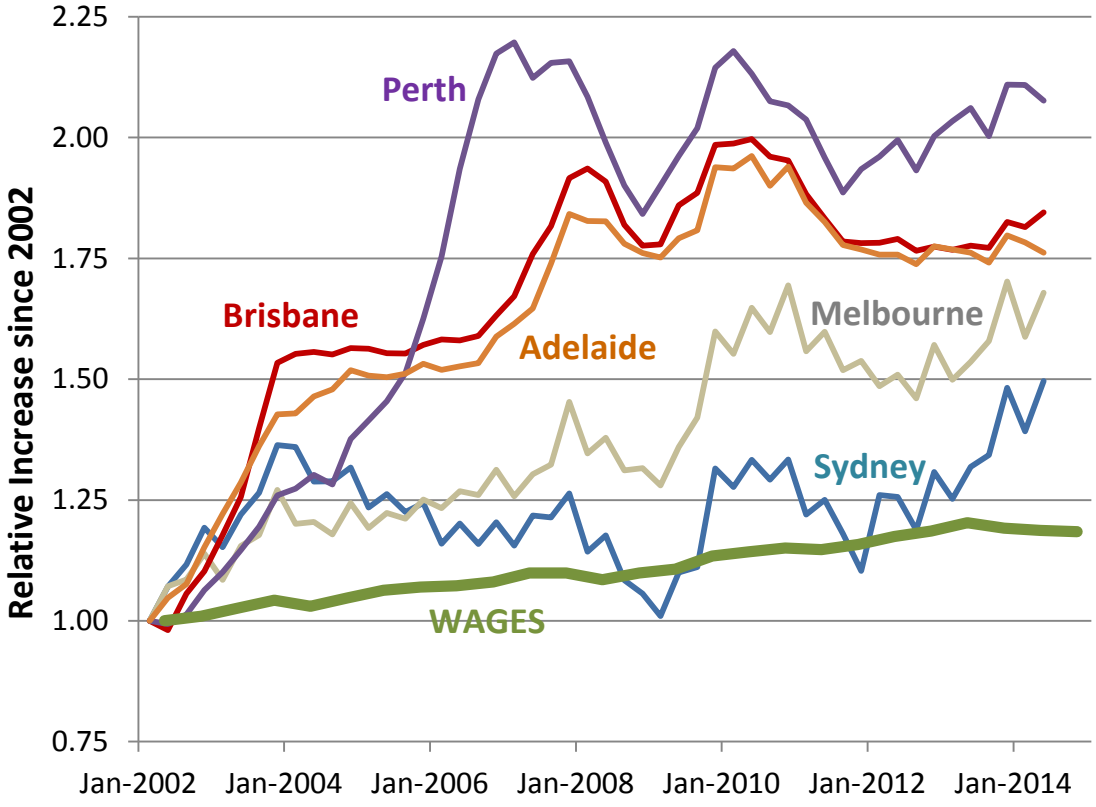

Figure 6 – Relative increase in median house prices for Australia's five largest cities compared to Wages Growth. House prices from ABS 6416.0, where the start of available data is Jan 2002. Relative house prices and Wages adjusted for inflation.

It can also be argued that free market capitalists running private schools and private hospitals will favour high immigration. If the public education and public health care systems can't keep up with a fast growing population, there will be a thriving market for private schools and hospitals. The more demand there is, the higher prices that the private schools and private hospitals can charge. There is no motivation for them to improve public education or health care. There is strong economic incentive to destabilise public education and public health, by encouraging high immigration.

7. Environmental impacts of high population

As the world's population has increased, pressure on the natural environment has increased. Some of the critical issues are listed in **Table 8**. Some of the issues have improved in the past 20 years, others have had improvements and then declines. None of them individually are catastrophic for humanity in the short term, but taken together over a long period, they show a trend of slow deterioration of the natural environment. In addition, there are currently very few incentives to fix any of these problems. Any efforts to repair any of these problems will be made more difficult with a larger population impacting the earth's ecosystems.

Table 7 – Brief Summary of World Environmental Problems	
Land Degradation ISRIC (2008)	1991 15% of productive land degraded, 2008 24% degrading. Many areas are so degraded that they have stable levels of low productivity
Loss of Forests FAO (2010)	1990 to 2000 16Mha/year, 0.43% of total; 2000 to 2010 13Mha/year, 0.35%, next 40 years with assumed decrease, 10% of total
Loss of Wilderness Smith, et al (2012)	Estimate of loss of wilderness 17.6Mha/year 0.28% of total, next 38 years 10% of the total
Loss of Fisheries FAO (2012)	30% of fisheries over exploited, 57% fully exploited, 13% not fully exploited, Global marine catch declining
Loss of Groundwater Wada, et al (2010)	Increase from 126 km^3/ year in 1960 to 283 km^3/year in 2000, 2% of recharge and 39% of the total irrigation water used.
Loss of Surface Water Ref. each Lake	Freshwater withdrawals doubled 1960-2005. Aral Sea lost 70% volume, from 1960-98. Lake Chad lost 95% of surface area from 1963-2001.
Loss of Biodiversity MA (2005)	Extinctions 100 to 1000 as frequent as shown in the fossil record, 15 of 24 Ecosystem services being degraded or used unsustainably
Air Pollution WHO (2011)	Outdoor Air Pollution 1.3 million premature deaths per year, Indoor air Pollution 2.0 million premature deaths per year, half of deaths kids under 5
Water Pollution WHO (2013)	2 million deaths per year from unsafe water, More than 80% of sewage in developing countries is discharged untreated
Increase in GHG IEA (2012)	1990 23 Billion tonnes CO2/year. 2010 32 billion tonnes CO2/year, 39% increase, 1.7% per year
Wetlands OECD (1996)	Half of the world's wetlands have been lost since 1900, most before 1950 but there have been continuing losses.

Australia is one of the most picturesque countries in the world, with a reputation for a beautiful, clean environment and lots of wide open spaces. It might surprise many Australians that we also have many significant environmental problems. **Table 9** gives a brief summary.

Table 8 – Brief Summary of Australia's Environmental Problems	
Great Barrier Reef GBRMP (2011)	2011 Marine Park Report Card: Seagrass Very Poor, Coral Poor, Water Quality Poor
Murray Darling Basin MDBA (2013)	Strong and consistent increase in Blue Green Algae over time across all sites. 17 Salt interception schemes required to control high salinity
Murray Darling Basin MDBC CSIRO (2006)	The river system is effectively a delivery channel rather than a natural system, this has caused impacts on flows, water quality and river health.
Salinity CSIRO (2008)	Salinity in soil, groundwater and river systems is now a serious problem in many parts of Australia, and the problem is increasing
Land Clearing DSEWPC (2006)	40 to 80 million birds, reptiles and mammals killed per year due to land clearing from 1990 to 2008
Extinctions Campbell Bio (2011)	Australia leads the world in mammal extinctions
GHG Emissions ABS 2010, ABS 2012	GHG emissions increased 29% from 1991 to 2010. 1.4% per year
Invasive Species ABS (2010)	Invasive species are a threat to the environment, and also have an impact on the agriculture industry. Cane Toads continue to spread across Australia

Environmental issues are rarely a top concern for governments around the world. Elections in democratic countries usually focus on short term issues that the candidates can either take credit for, or assign blame for. Many long term environmental issues have been impacted by policies started many years and many governments previous to the existing government, and won't be resolved until many years after the current candidates have retired. This means that the politicians trying to get elected, often concentrate on short term issues. In more totalitarian regimes security issues and standard of living issues are usually far more important than the environment.

In Australia and other democracies it is then incumbent on the voting public to let politicians know that more long term issues are important to them. Understandably this rarely happens with environmental issues. There is no money to be made by individuals who want to see the environment protected. There are often huge profits to be made by individuals who want to develop land or increase their market share or lower their labour costs by encouraging policies such as high immigration. Since there are profits to be made by pro-growth advocates, they can afford to hire consultants and public relations companies to get their message out about how important high immigration and other pro-growth policies are. Since these consultants and public relations companies are good at their jobs and there is little competition from advocates for the environment, the pro-growth message is the message that the politicians and the public, most commonly hear.

Although they are a very small minority of the general population, many professionals that have studied the environment have made it very clear that increased population is having damaging effects on the natural environment. **Table 10** gives a brief summary.

Table 9 – Abbreviated comments regarding the damaging impact of high population on the Environment and Living Standards		
Year	Reference	Abbreviated Comment (full comment in Appendices)
1987	Our Common Future, UN Bruntland Commission	Present rates of population growth cannot continue. They already compromise many governments' abilities to provide education, health care, and food security for people, much less their abilities to raise living standards.
2012	UNEP Global Environmental Outlook	The report also calls for a greater focus on policies that target the drivers of environmental change – such as population growth
2013	Aust Dept of SEWP&C Sustainable Aust. Report	Population, economic growth and climate change will see increasing pressures on the natural environment
2012	NSW State of the Environment Report	Environmental impacts can result from increasing population and economic growth
2012	FAO, State of World Fisheries	The global community must reconcile meeting the pressing food and nutrition needs of a growing population with finite natural resources
2013	CSIRO	CSIRO Land and Water scientists are working on the impacts of global human population growth on water supply, food production, resource security and environmental quality
1966	Martin Luther King Jr.	The modern plague of overpopulation is soluble by means we have discovered and with resources we possess. What is lacking is not sufficient knowledge of the solution, but universal consciousness of the gravity of the problem and the education of billions of people who are its victims
2013	Mikhail Gorbachev	Population pressure, coupled with a crumbling world economy and unchecked exploitation of natural resources, will only foment human suffering, spread poverty, and further degrade the environment.
2013	David Attenborough	It's coming home to roost over the next 50 years or so. Either we limit our population growth or the natural world will do it for us, and the natural world is doing it for us right now.
2013	World Water Council	This population growth - coupled with industrialization and urbanization - will result in an increasing demand for water and will have serious consequences on the environment.
2013	Public Health Association of Australia	There is strong evidence that if we let our population keep growing as fast as it is doing now (about 2% a year) our quality of life in Australia is likely to decline.
2011	Campbell Biology Textbook	Human Activities threaten Earths Biodiversity, Earth is changing rapidly as a result of human actions

8. What kind of World do we want to live in?

If the answer is a world where everybody has a good chance to permanently live with a reasonable standard of health care, education, clean water, sanitation and legal rights, then we need to think about whether we are on the right path to provide these basic human needs for 9 or 10 billion people.

It is regrettably true that the subject of the kind of world that we want to build for ourselves is not a hot topic among politicians, business people or the general population. Even if nobody is thinking directly about the kind of world we want to live in, over the long term, at election time or when corporate decisions are made, it does provide a reference point to many of the decisions that we make, regarding public policy.

Table 11 shows that the freest countries are also the wealthiest and have the lowest population growth rates. **Table 12** shows that the freest and wealthiest countries also have the best health conditions with the lowest child mortality and the highest percentage of improved sanitation, child immunisation and the highest Life Expectancy. Unsurprisingly then, **Table 13** shows that the freest and wealthiest countries are also the countries with the best education results including the best literacy and the highest percentage of students of the appropriate age in Secondary School.

Table 10 – One hundred most populous countries Grouped by Indices of Freedom, with those groups average GDP per capita and population growth rate

Groups of Countries	Fraser Index of Freedom	Combined Index of Freedoms	World Bank GDP/capita (US$)	Population growth rate (%)
Least Free 25	3.6	1.8	3188	1.92
3rd freest 25	5.5	5.3	3838	2.03
2nd freest 25	6.8	7.2	6552	1.70
Freest 25 countries	8.0	13.2	32980	0.61

GDP/capita and Population Growth Rate from World Bank (www.data.worldbank.org), Fraser Index of Freedom from www.freetheworld.com, Index of Freedoms is the combination of four indices (1) Freedom of the World by Freedom House, (2) Index of Economic Freedom by the Heritage Foundation and the Wall Street Journal, (3) Press Freedom Index by Reporters Without Borders, (4) Democracy Index by the Economist Intelligence Unit of the Economist Group from the UK

Table 11 – One hundred most populous countries Grouped by Indices of Freedom, with those groups average Child Mortality, % Improved Sanitation, % Child Immunisation and Life Expectancy

Groups of Countries	Fraser Index of Freedom	Child Mortality (per 1000)	Improved Sanitation (%)	Child Immunisation (%)	Life expectancy (years)
Least Free 25	3.6	65.6	61.8	83.3	64.7
3rd freest 25	5.5	67.7	51.1	82.6	63.5
2nd freest 25	6.8	42.2	62.1	86.0	67.4
Freest 25 countries	8.0	7.1	96.5	95.5	79.4

Child Mortality, Improved Sanitation, Child Immunisation and Life Expectancy from World Bank (www.data.worldbank.org)

Table 12 – One hundred most populous countries Grouped by Indices of Freedom, with those groups average % Adult Literacy and Net % in Secondary School				
Groups of Countries	Fraser Index of Freedom	Adult Literacy (%)	Secondary School (%)	Population growth rate (%)
Least Free 25	3.6	74.0	52.8	1.92
3rd freest 25	5.5	70.0	46.7	2.03
2nd freest 25	6.8	82.5	58.9	1.70
Freest 25 countries	8.0	97.6	87.4	0.61

Adult Literacy and Net Secondary School Enrolment rate Primarily from World Bank (www.data.worldbank.org). Some countries not included in World Bank list were from the CIA World Factbook and UNICEF Childinfo website (www.childinfo.org/education_secondary.php)

If it is our goal to encourage the entire world to have legal rights, freedoms, and high quality health and education it would be best to encourage low population growth for two reasons.

First, much of the high quality education and health depends on the freedom and security to plan and build schools and hospitals and the infrastructure such as water, sewer, electricity networks and roads. Planning and providing infrastructure is much easier when the population growth rate is low. A higher standard of living is also required to encourage trained professionals like doctors, nurses, lawyers and teachers to stay in those developing countries.

Second, in order to provide that infrastructure and higher standard of living, a much greater quantity of resources is required than is currently being used. For example, if the entire world used the same amount of oil per capita as Australia, oil would run out before 2031. It is impossible to believe that the world could get to a developed world standard of legal rights, health and education in only 16 years and even more impossible to believe that it could be done without the benefit of oil, the most efficient energy source in history. Similarly, if the entire world used as much coal per capita as Australia, we would run out in 2042 but that doesn't account for the energy needed to make up for oil running out in 2031.

Clearly pushing high population growth will hamper the world's progress toward developed world freedoms, health and education. That puts the Australian government in the difficult position of either:

- encouraging a slow down in population growth, or
- hoping that most of the world stays poor.

Currently both major parties have made the clear choice to hope that most of the world stays poor and doesn't get the freedoms, health and education that we are so lucky to have.

The two major political parties in Australia make some comments about improving the world in their election statements, but both push high immigration which sends the wrong signals to the rest of the world.

The Australian Labor Party says "Labor is for being a good global citizen. Labor has a proud tradition of standing up for the freedom and rights of others in the world." (ALP website 2013)

The Liberal Party says "We will enhance Australia's role and engagement in the world developing greater international cooperation." (Liberal Party website 2013)

Currently the major parties are sending one of two messages to the rest of the world. The first message is that high population growth is a great idea and all nations should be doing it just like we are. This is a disastrous message for the environment and for the effort to encourage the rest of the world to get to developed world standards of legal rights, health and education.

The second message recognises that high population growth worldwide is problematic but that high population growth for Australia is a good idea. The message is essentially "The world needs more Australians and less of you Africans, Asians, Latin Americans and other foreigners." It is hard to see how this kind of message meets the stated goals of "being a good global citizen" and "developing greater international cooperation."

A final consideration regarding the kind of world we want to live in, is whether there are really good reasons to want to cram as many people onto the planet and into Australia as we can. We are certainly not taking advantage of all the world's people at the moment, considering that 800 million adults are illiterate and the majority of the world's population does not have sufficient freedoms and standard of living to take advantage of their maximum potential. If the real reason we are trying to cram more and more people into Australia is to benefit the wealthy "capital owners," then we are being poorly represented by our elected leaders.

9. Can we depend on the Free Market alone, to find solutions?

The cornerstone of the pro-growth advocate's philosophy is that human creativity is the greatest resource and the system that promotes this utilisation of human creativity best is the free market system. As Adam Smith (1776) wrote in "The Wealth of Nations:"

> "It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own self-interest. We address ourselves not to their humanity but to their self-love, and never talk to them of our own necessities, but of their advantages."
>
> "Every individual is continually exerting himself to find out the most advantageous employment for whatever capital he can command. It is his own advantage, indeed, and not that of the society which he has in view. But the study of his own advantage naturally, or rather necessarily, leads him to prefer that employment which is most advantageous to society... He intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was not part of his intention"

But Adam Smith (1776) also wrote in the Wealth of Nations:

> "People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices."
>
> "Our merchants and master-manufacturers complain much of the bad effects of high wages in raising the price and lessening the sale of goods. They say nothing concerning the bad effects of high profits. They are silent with regard to the pernicious effects of their own gains. They complain only of those of other people."

The basic tenets of Adam Smith's concept of human nature are true, but there are aspects that need to be added when discussing the overall benefits to humanity:

1. Capitalists don't solve problems that don't make them a profit. The implication that all of humanities problems will be solved through human creativity and the free market system is false. Poverty, environmental protection, curing diseases that primarily impact the poor and protecting biodiversity are problems that capitalism has no incentive to solve even though it would be greatly beneficial for all of humanity for them to be solved. If we want those problems to be solved, we have to do it outside the free market.

2. Capitalists look at every opportunity to solve a problem that will help them make money, not just the ones that take advantage of human creativity and new inventions. If capitalists can get together and influence governments to give them special considerations outside the competitive market, capitalists will take those advantages.

   When business people are offered the choice between training Australian workers and convincing the government to increase the intake of "skilled" migrants, they choose the option that is more likely to make them more profit, the skilled migrant option. If business groups, like the Business Council of Australia (BCA 2013), can convince governments that a larger population is a good policy, they will use their resources and creativity pressuring the government rather than solving business problems, because that is the "most advantageous employment for their capital." If an industry group is faced with higher costs for pollution

control they will compare the costs of lobbying government with the costs of better pollution control equipment. If the costs of lobbying are cheaper than the cost of pollution control equipment, the business people will choose lobbying.

3. There is no profit, and therefore no incentive, in the free market system, in saving resources for future generations. The price mechanism only works for buyers who are bidding today. Future generations don't get to bid. Classical economic theory says that replacements for anything that is scarce will always found. As Julian Simon (1994) says "in a free society, solutions are eventually found." Recent history shows that prices have gone up and inexpensive replacements are not being found. If this trend continues, and it is our goal to leave the world a better place for our children than it was when we started to look after it, we will have to look outside the free market system to find solutions. A useful first step would be to recognise that population pressure makes the solution to many environmental and sustainability problems, harder to solve. Our elected representatives are currently acting as if they believe that high population growth will have a positive impact on our children's future.

This does not mean we should run away from capitalism, just that we can't depend on capitalism alone. As Ross Gittins (2010), the Economics Editor of the Sydney Morning Herald, says:

> "Don't fall for either criticism or praise of The Free Market. Free markets don't exist - never have, never will. In all real world economies freedom is constrained by government intervention to a greater or lesser extent. That's really the point: the choice we face is not between markets that are totally unregulated or markets that are so tightly regulated they cease to be markets. The answer to our problems will never be found at one extreme or the other; it will always be found somewhere in the middle. Finding the optimal degree of regulation isn't easy, particularly because regulating markets is much harder than it looks. It's terribly easy to get reactions you weren't expecting. So there's plenty of scope for debate about where the line should be drawn."

One easy line to be drawn is a reduction in immigration.

10. Conclusions – An uncomfortable precedent for our democracy

The government commissioned a report on immigration which concluded that “resident workers” would be worse off economically with high immigration, but that “capital owners” would be better off.

Corporate profits set records but the average wage goes up slowly. More slowly than commodity prices or home prices.

Repeated surveys and polls have shown that a clear majority of those polled would prefer lower immigration and slower population growth.

Government departments responsible for the environment, report that population pressure further damages the environment.

Both major parties and the Greens know all these facts and yet choose a policy that benefits a few wealthy “capital owners” over the far greater majority of “resident workers” and their families.

This is an uncomfortable precedent for our representative democracy.

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Section 9 - Can we depend on the Free Market alone to find solutions?

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Appendix A1 – GDP/capita data and population growth data for the poorest 25 countries of the 100 most populated countries						
	GDP/Capita			Population		
Country Name	2001	2011	Growth/yr (%)	**2000**	**2010**	Growth/yr %
Congo, Dem. Rep.	97	245	9.7%	46 949	62 191	2.83%
Burundi	128	247	6.8%	6 674	9 233	3.28%
Ethiopia	120	355	11.4%	66 024	87 095	2.78%
Malawi	148	364	9.4%	11 321	15 014	2.82%
Niger	171	364	7.9%	10 990	15 894	3.70%
Guinea	319	457	3.7%	8 746	10 876	2.18%
Madagascar	279	457	5.1%	15 745	21 080	2.92%
Uganda	233	479	7.5%	24 276	33 987	3.34%
Mozambique	217	511	9.0%	18 276	23 967	2.71%
Tanzania	306	530	5.6%	34 021	44 973	2.76%
Rwanda	191	570	11.5%	8 396	10 837	2.54%
Somalia	300	600	7.2%	7 385	9 636	2.64%
Afghanistan	115	620	18.3%	20 595	28 398	3.27%
Burkina Faso	235	650	10.7%	11 608	15 540	2.95%
Nepal	254	699	10.7%	23 184	26 846	1.45%
Zimbabwe	538	723	3.0%	12 504	13 077	0.44%
Bangladesh	349	732	7.7%	132 383	151 125	1.33%
Haiti	402	732	6.2%	8 578	9 896	1.42%
Mali	249	739	11.5%	10 261	13 986	3.10%
Benin	348	746	7.9%	6 949	9 510	3.18%
Kenya	404	800	7.1%	31 285	40 909	2.68%
Tajikistan	172	835	17.1%	6 186	7 627	2.07%
Chad	198	876	16.0%	8 301	11 721	3.49%
Cambodia	319	878	10.7%	12 223	14 365	1.62%
Senegal	482	1084	8.4%	9 862	12 951	2.71%
Average Poorest 25		**612**	**9.2%**	**552722**	**700734**	**2.57%**
% World Total					**10.1%**	
Growth Rates-Log Calc			**0.80%**			**2.18%**

Appendix A2 – GDP/capita data and population growth data for the 3rd richest 25 countries of the 100 most populated countries						
	GDP/Capita			Population		
Country Name	2001	2011	Growth/yr (%)	**2000**	**2010**	Growth/yr %
Pakistan	492	1196	9.3%	143 832	173 149	1.84%
Cameroon	589	1197	7.3%	15 928	20 624	2.61%
Cote d'Ivoire	642	1242	6.8%	16 131	18 977	1.63%
Yemen, Rep.	547	1361	9.6%	17 523	22 763	2.58%
Vietnam	416	1408	13.0%	80 888	89 047	0.94%
Zambia	353	1409	14.9%	10 101	13 217	2.65%
Myanmar	453	1410	12.0%	48 453	51 931	0.68%
Nigeria	381	1486	14.6%	122 877	159 708	2.61%
India	465	1534	12.7%	1 042 262	1 205 625	1.45%
Sudan	373	1539	15.2%	27 730	35 652	2.49%
Uzbekistan	457	1545	13.0%	24 829	27 769	1.10%
Ghana	275	1578	19.1%	18 825	24 263	2.55%
Korea, Dem. Rep. -North	1200	1800	4.1%	22 840	24 501	0.70%
South Sudan	1000	1847	6.3%	6 653	9 941	4.01%
Honduras	1189	2241	6.5%	6 236	7 621	2.01%
Bolivia	939	2320	9.5%	8 495	10 157	1.80%
Philippines	962	2365	9.4%	77 652	93 444	1.84%
Sri Lanka	838	2836	13.0%	18 846	20 759	0.95%
Egypt, Arab Rep.	1453	2973	7.4%	66 137	78 076	1.66%
Syrian Arab Republic	1263	3018	9.1%	16 371	21 533	2.72%
Morocco	1285	3044	9.0%	28 710	31 642	0.96%
Guatemala	1629	3194	7.0%	11 204	14 342	2.47%
Indonesia	757	3471	16.5%	208 939	240 676	1.41%
Ukraine	781	3576	16.4%	49 057	46 050	-0.62%
Tunisia	2281	4350	6.7%	9 553	10 632	1.05%
Average3rd Richest 25		**2158**	**10.7%**	**2100070**	**2452099**	**1.76%**
% World Total					**35.5%**	
Growth Rates-Log Calc			**0.93%**			**1.42%**

Appendix A3 – GDP/capita data and population growth data for the 2nd Richest 25 countries of the 100 most populated countries						
	GDP/Capita			Population		
Country Name	2001	2011	Growth/yr (%)	**2000**	**2010**	Growth/yr %
Ecuador	1914	5096	10.3%	12 533	15 001	1.80%
Angola	621	5159	23.6%	13 925	19 549	3.45%
Thailand	1832	5192	11.0%	62 343	66 402	0.62%
Algeria	1716	5258	11.8%	31 719	37 063	1.57%
China	1042	5447	18.0%	1 280 429	1 359 821	0.60%
Dominican Republic	2829	5486	6.8%	8 663	10 017	1.45%
Cuba	2835	5500	6.9%	11 138	11 282	0.13%
Iraq	772	5687	22.1%	23 801	30 962	2.63%
Serbia	1518	5964	14.7%	10 272	9 647	-0.61%
Peru	2045	5974	11.3%	26 000	29 263	1.17%
Belarus	1244	6785	18.5%	9 981	9 491	-0.50%
Iran, Islamic Rep.	1727	6816	14.7%	65 911	74 462	1.21%
Azerbaijan	704	6912	25.7%	8 118	9 095	1.14%
Colombia	2421	7144	11.4%	39 898	46 445	1.52%
Bulgaria	1729	7287	15.5%	8 001	7 389	-0.79%
South Africa	2638	7943	11.7%	44 846	51 452	1.36%
Romania	1816	8874	17.2%	22 388	21 861	-0.23%
Mexico	5906	9703	5.1%	103 874	117 886	1.25%
Malaysia	3878	10012	10.0%	23 421	28 276	1.87%
Turkey	3058	10605	13.2%	63 174	72 138	1.30%
Venezuela, RB	4942	10728	8.1%	24 408	29 043	1.71%
Argentina	7209	10952	4.3%	36 903	40 374	0.90%
Kazakhstan	1491	11357	22.5%	14 576	15 921	0.88%
Brazil	3128	12576	14.9%	174 505	195 210	1.12%
Russian Federation	2101	13284	20.3%	146 763	143 618	-0.21%
Average 2nd Richest 25		**7830**	**14.0%**		**2451670**	**1.01%**
% World Total					**35.4%**	
Growth Rates-Log Calc			**1.20%**			**0.71%**

Appendix A4 – GDP/capita data and population growth data for the Richest 25 countries of the 100 most populated countries						
	GDP/Capita			Population		
Country Name	2001	2011	Growth/yr (%)	**2000**	**2010**	Growth/yr %
Poland	4979	13382	10.4%	38 351	38 199	-0.04%
Hungary	5175	13909	10.4%	10 224	10 015	-0.20%
Chile	4625	14513	12.1%	15 454	17 151	1.04%
Czech Republic	6289	20580	12.6%	10 250	10 554	0.29%
Saudi Arabia	8760	20778	9.0%	20 145	27 258	3.01%
Korea, Rep. - South	10655	22388	7.7%	45 977	48 454	0.52%
Portugal	11691	22504	6.8%	10 306	10 590	0.27%
Greece	11858	25631	8.0%	10 987	11 110	0.11%
Israel	19093	31281	5.1%	6 014	7 420	2.10%
Spain	14952	31985	7.9%	40 283	46 182	1.35%
Hong Kong SAR, China	25230	35173	3.4%	6 835	7 050	0.31%
Italy	19722	36104	6.2%	56 986	60 509	0.59%
United Kingdom	24836	38961	4.6%	58 951	62 066	0.50%
United Arab Emirates	32985	40363	2.0%	3 026	8 442	10.53%
France	21812	42522	6.9%	59 213	63 231	0.65%
Germany	22840	44021	6.8%	83 512	83 017	-0.06%
Japan	32716	46135	3.5%	125 715	127 353	0.13%
Belgium	22601	46513	7.5%	10 268	10 941	0.64%
United States	35912	48113	3.0%	284 594	312 247	0.91%
Austria	23834	49581	7.6%	8 020	8 402	0.47%
Netherlands	24969	50085	7.2%	15 860	16 615	0.46%
Canada	23017	51554	8.4%	30 697	34 126	1.06%
Sweden	25558	57071	8.4%	8 872	9 382	0.55%
Australia	19541	62003	12.2%	19 259	22 404	1.52%
Switzerland	36328	83326	8.7%	7 166	7 831	0.87%
Average Richest 25		**37939**	**7.5%**		**1060549**	**1.10%**
% World Total					**15.3%**	
Growth Rate-Log Calc			**0.66%**			**0.66%**
World	5203	10102	6.9%	6127 700	6916 183	1.13%
Growth Rate-Log Calc			0.61%			1.13%

Appendix B – Figure 2 from Jane O'Sullivan (2013) – Fertility and Wealth Time Courses

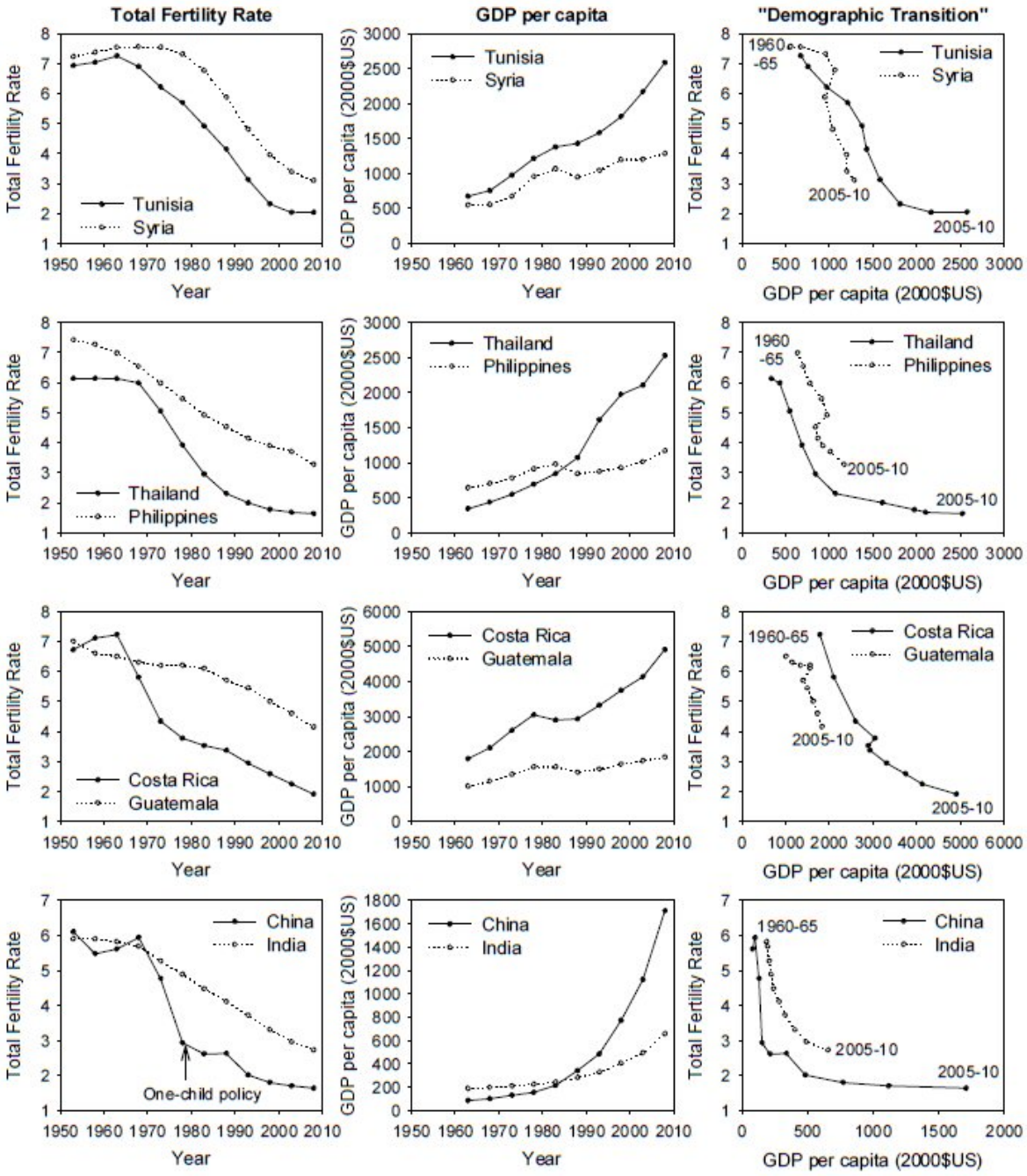

Figure 2. Fertility and wealth time courses for four nations which adopted family planning (solid lines) in contrast with comparable countries in the same region (dotted lines) which were weak or non-adopters of family planning. Left: the change in Total Fertility Rate (TFR, the average number of children born to each woman over her lifetime) over the period 1950 to 2008 (UN Population Estimates, 2010 Revision), middle: the average GDP per capita over 5-year intervals from 1960 to 2008 (adjusted to constant year 2000 US$, ppp (purchase price parity), from World Bank World Development Indicators), and right: the relationship between TFR and GDP per capita.

Appendix C1 - Company Profits data from ABS 5676.0 Table 9 for Figure 1

Quarter	Company Profits ABS 5676.0 Table 9	Inflation Factor	Inflation Adjusted Company Profits	Quarter over March 01
Mar-2001	11804	73.9	15973	1.00
Jun-2001	12790	74.5	17168	1.07
Sep-2001	14626	74.7	19580	1.23
Dec-2001	16160	75.4	21432	1.34
Mar-2002	16671	76.1	21907	1.37
Jun-2002	17036	76.6	22240	1.39
Sep-2002	19021	77.1	24671	1.54
Dec-2002	23358	77.6	30101	1.88
Mar-2003	27267	78.6	34691	2.17
Jun-2003	29521	78.6	37559	2.35
Sep-2003	29773	79.1	37640	2.36
Dec-2003	27514	79.5	34609	2.17
Mar-2004	24909	80.2	31059	1.94
Jun-2004	28896	80.6	35851	2.24
Sep-2004	31913	80.9	39447	2.47
Dec-2004	35368	81.5	43396	2.72
Mar-2005	34633	82.1	42184	2.64
Jun-2005	36058	82.6	43654	2.73
Sep-2005	34749	83.4	41665	2.61
Dec-2005	34558	83.8	41239	2.58
Mar-2006	34573	84.5	40915	2.56
Jun-2006	36187	85.9	42127	2.64
Sep-2006	37169	86.7	42871	2.68
Dec-2006	37733	86.6	43572	2.73
Mar-2007	40119	86.6	46327	2.90
Jun-2007	39276	87.7	44784	2.80
Sep-2007	37606	88.3	42589	2.67
Dec-2007	37508	89.1	42097	2.64
Mar-2008	40020	90.3	44319	2.77
Jun-2008	52008	91.6	56777	3.55
Sep-2008	45911	92.7	49526	3.10
Dec-2008	38926	92.4	42128	2.64
Mar-2009	37456	92.5	40493	2.54
Jun-2009	36103	92.9	38862	2.43
Sep-2009	39661	93.8	42283	2.65
Dec-2009	40912	94.3	43385	2.72
Mar-2010	41461	95.2	43551	2.73
Jun-2010	49481	95.8	51650	3.23
Sep-2010	50601	96.5	52436	3.28
Dec-2010	50880	96.9	52508	3.29
Mar-2011	49852	98.3	50714	3.18
Jun-2011	48403	99.2	48793	3.05
Sep-2011	47881	99.8	47977	3.00
Dec-2011	47185	99.8	47280	2.96
Mar-2012	45970	99.9	46016	2.88
Jun-2012	44329	100.4	44152	2.76
Sep-2012	42827	101.8	42070	2.63
Dec-2012	42078	102	41253	2.58

Appendix C2 - Business Profits data from ABS 5676.0 Table 15 for Figure 1

Quarter	Business Profits ABS 5676.0 Table 15	Inflation Factor	Inflation Adjusted Business Profits	Quarter over March 01
Mar-2001	31971	73.9	43263	1.00
Jun-2001	32525	74.5	43658	1.01
Sep-2001	33672	74.7	45076	1.04
Dec-2001	35059	75.4	46497	1.07
Mar-2002	36312	76.1	47716	1.10
Jun-2002	36872	76.6	48136	1.11
Sep-2002	37123	77.1	48149	1.11
Dec-2002	37513	77.6	48341	1.12
Mar-2003	38013	78.6	48363	1.12
Jun-2003	38563	78.6	49062	1.13
Sep-2003	39255	79.1	49627	1.15
Dec-2003	40015	79.5	50333	1.16
Mar-2004	40718	80.2	50771	1.17
Jun-2004	42733	80.6	53019	1.23
Sep-2004	43236	80.9	53444	1.24
Dec-2004	43613	81.5	53513	1.24
Mar-2005	43985	82.1	53575	1.24
Jun-2005	47465	82.6	57464	1.33
Sep-2005	47961	83.4	57507	1.33
Dec-2005	48588	83.8	57981	1.34
Mar-2006	49486	84.5	58563	1.35
Jun-2006	51628	85.9	60102	1.39
Sep-2006	52920	86.7	61038	1.41
Dec-2006	53941	86.6	62288	1.44
Mar-2007	57877	86.6	66833	1.54
Jun-2007	58128	87.7	66281	1.53
Sep-2007	59028	88.3	66849	1.55
Dec-2007	60953	89.1	68410	1.58
Mar-2008	63437	90.3	70251	1.62
Jun-2008	73751	91.6	80514	1.86
Sep-2008	73314	92.7	79087	1.83
Dec-2008	70927	92.4	76761	1.77
Mar-2009	67748	92.5	73241	1.69
Jun-2009	61836	92.9	66562	1.54
Sep-2009	63729	93.8	67941	1.57
Dec-2009	66450	94.3	70467	1.63
Mar-2010	69110	95.2	72595	1.68
Jun-2010	77118	95.8	80499	1.86
Sep-2010	76473	96.5	79247	1.83
Dec-2010	75781	96.9	78205	1.81
Mar-2011	76799	98.3	78127	1.81
Jun-2011	78855	99.2	79491	1.84
Sep-2011	79213	99.8	79372	1.83
Dec-2011	77394	99.8	77549	1.79
Mar-2012	74742	99.9	74817	1.73
Jun-2012	72912	100.4	72622	1.68
Sep-2012	72652	101.8	71367	1.65
Dec-2012	72731	102	71305	1.65

Appendix C3 – GDP/capita from World Bank data for Figure 1

Year	GDP/capita from World Bank	inflation	GDP/capita adjusted for inflation	Year over 2001
Jul-01	19541	74.6	26195	1.00
Jul-02	20101	76.9	26139	1.00
Jul-03	23446	79	29679	1.13
Jul-04	30381	80.8	37600	1.44
Jul-05	33948	83	40901	1.56
Jul-06	35992	85.9	41900	1.60
Jul-07	40470	87.9	46041	1.76
Jul-08	49207	91.8	53602	2.05
Jul-09	42404	93.4	45400	1.73
Jul-10	51586	96.1	53680	2.05
Jul-11	62003	99.3	62440	2.38
Jul-12	67036	101	66372	2.53

Appendix C4 – Weekly Total Earnings from ABS 6302.0 data for Figure 1

Half Year	Weekly Total Earnings all Persons from ABS 6302.0	Inflation	Inflation adjusted weekly Earnings all persons	Half Year over May 01
May-2001	660.30	74.3	889	1.01
Nov-2001	673.60	75.2	896	1.02
May-2002	683.80	76.4	895	1.02
Nov-2002	699.40	77.4	903	1.03
May-2003	721.40	78.6	918	1.04
Nov-2003	740.30	79.4	933	1.06
May-2004	741.40	80.5	921	1.05
Nov-2004	761.70	81.3	937	1.06
May-2005	784.20	82.4	951	1.08
Nov-2005	800.60	83.7	957	1.09
May-2006	819.70	85.4	959	1.09
Nov-2006	837.40	86.6	967	1.10
May-2007	858.50	87.3	983	1.12
Nov-2007	873.20	88.8	983	1.12
May-2008	885.00	91.2	971	1.10
Nov-2008	909.50	92.5	983	1.12
May-2009	918.60	92.8	990	1.12
Nov-2009	955.00	94.1	1015	1.15
May-2010	977.10	95.6	1022	1.16
Nov-2010	996.10	96.8	1029	1.17
May-2011	1015.20	98.9	1026	1.17
Nov-2011	1033.70	99.8	1036	1.18
May-2012	1053.20	100.2	1051	1.19
Nov-2012	1081.30	101.9	1061	1.20

Appendix D1 – Corporate Profits data from the Federal Reserve Bank, St Louis for Figure 2

Quarter	Corporate Profits from Fed Reserve, St Louis	Inflation Factor 1984=100	Inflation Adjusted Corporate Profits	Quarter over Jan 01
Jan-01	494.9	175.0	282.9	1.00
Apr-01	520.2	176.9	294.0	1.04
Jul-01	475.3	177.7	267.5	0.95
Oct-01	458.9	177.8	258.1	0.91
Jan-02	506.8	177.2	286.0	1.01
Apr-02	564.1	179.5	314.3	1.11
Jul-02	620.4	180.2	344.2	1.22
Oct-02	695.1	181.2	383.6	1.36
Jan-03	689.9	181.9	379.3	1.34
Apr-03	692	183.8	376.4	1.33
Jul-03	733.4	184.1	398.4	1.41
Oct-03	787.4	184.9	425.9	1.51
Jan-04	901.9	185.2	486.9	1.72
Apr-04	939.7	188.2	499.4	1.77
Jul-04	978.8	189.5	516.4	1.83
Oct-04	973.7	190.6	510.9	1.81
Jan-05	1185.8	190.9	621.1	2.20
Apr-05	1206.2	194.1	621.4	2.20
Jul-05	1251.7	195.4	640.5	2.26
Oct-05	1320	198.5	664.9	2.35
Jan-06	1352.9	197.9	683.5	2.42
Apr-06	1391.7	201.3	691.5	2.44
Jul-06	1409	203.4	692.6	2.45
Oct-06	1358.7	202.1	672.4	2.38
Jan-07	1270.8	202.6	627.3	2.22
Apr-07	1341.7	206.7	649.2	2.30
Jul-07	1285.3	208.2	617.3	2.18
Oct-07	1313.7	209.2	628.0	2.22
Jan-08	1203.5	210.9	570.6	2.02
Apr-08	1229.6	215.0	572.0	2.02
Jul-08	1188.8	219.3	542.1	1.92
Oct-08	671.4	215.9	310.9	1.10
Jan-09	1038	211.2	491.5	1.74
Apr-09	1115.1	213.3	522.9	1.85
Jul-09	1259.6	215.6	584.2	2.07
Oct-09	1382.2	216.2	639.4	2.26
Jan-10	1446.9	216.5	668.4	2.36
Apr-10	1431.2	217.9	656.7	2.32
Jul-10	1492.1	218.1	684.1	2.42
Oct-10	1486.9	218.7	680.0	2.40
Jan-11	1399.2	220.2	635.3	2.25
Apr-11	1466.1	224.8	652.2	2.31
Jul-11	1482.1	226.1	655.6	2.32
Oct-11	1545.1	226.5	682.1	2.41
Jan-12	1724.9	226.7	761.0	2.69
Apr-12	1730.3	229.8	753.1	2.66
Jul-12	1769.4	229.7	770.5	2.72
Oct-12	1796.4	231.0	777.7	2.75
Jan-13	1784.8	230.7	773.7	2.74

Appendix D2 – Corporate Profits data Corporate profits with inventory valuation and capital consumption adjustments from Dept of Commerce, BEA for Figure 2

Quarter	Corporate Profits with IV and CC adjustments	Inflation Factor 1984=100	Inflation Adjusted Corporate Profits	Quarter over Jan 01
Jan-01	744	175.0	425.0	1.00
Apr-01	774	176.9	437.5	1.03
Jul-01	742	177.7	417.8	0.98
Oct-01	756	177.8	425.3	1.00
Jan-02	851	177.2	480.1	1.13
Apr-02	881	179.5	490.9	1.16
Jul-02	910	180.2	505.0	1.19
Oct-02	987	181.2	544.6	1.28
Jan-03	988	181.9	543.3	1.28
Apr-03	1029	183.8	559.7	1.32
Jul-03	1076	184.1	584.8	1.38
Oct-03	1,132	184.9	612.3	1.44
Jan-04	1,239	185.2	668.7	1.57
Apr-04	1,267	188.2	673.2	1.58
Jul-04	1,326	189.5	699.5	1.65
Oct-04	1,302	190.6	683.2	1.61
Jan-05	1,428	190.9	747.8	1.76
Apr-05	1,446	194.1	745.0	1.75
Jul-05	1,474	195.4	754.4	1.78
Oct-05	1,563	198.5	787.2	1.85
Jan-06	1,627	197.9	822.2	1.93
Apr-06	1,649	201.3	819.4	1.93
Jul-06	1,694	203.4	832.5	1.96
Oct-06	1,616	202.1	799.7	1.88
Jan-07	1,531	202.6	755.8	1.78
Apr-07	1,597	206.7	772.7	1.82
Jul-07	1,518	208.2	729.2	1.72
Oct-07	1,470	209.2	702.7	1.65
Jan-08	1,383	210.9	655.8	1.54
Apr-08	1,368	215.0	636.2	1.50
Jul-08	1,371	219.3	625.4	1.47
Oct-08	1,018	215.9	471.4	1.11
Jan-09	1,253	211.2	593.2	1.40
Apr-09	1,296	213.3	607.5	1.43
Jul-09	1,450	215.6	672.3	1.58
Oct-09	1,573	216.2	727.5	1.71
Jan-10	1,655	216.5	764.7	1.80
Apr-10	1,661	217.9	762.0	1.79
Jul-10	1,807	218.1	828.5	1.95
Oct-10	1,839	218.7	841.2	1.98
Jan-11	1,755	220.2	796.9	1.88
Apr-11	1,869	224.8	831.3	1.96
Jul-11	1,894	226.1	837.7	1.97
Oct-11	1,993	226.5	880.0	2.07
Jan-12	1,980	226.7	873.5	2.06
Apr-12	1,998	229.8	869.8	2.05
Jul-12	2,012	229.7	876.2	2.06
Oct-12	2,047	231.0	886.3	2.09
Jan-13	2,021	230.7	875.9	2.06

Appendix D3 – GDP/capita from the World Bank for Figure 2

Quarter	GDP/capita from World Bank	Inflation Factor 1984=100	Inflation Adjusted GDP/capita	Quarter over Jan 01
Jul-01	35912	177.1	20278	1.00
Jul-02	36819	179.9	20467	1.01
Jul-03	38225	184	20774	1.02
Jul-04	40292	188.9	21330	1.05
Jul-05	42516	195.3	21770	1.07
Jul-06	44623	201.6	22134	1.09
Jul-07	46349	207.3	22358	1.10
Jul-08	46760	215.3	21718	1.07
Jul-09	45305	214.5	21118	1.04
Jul-10	46616	218.1	21378	1.05
Jul-11	48113	224.9	21389	1.05
Jul-12	49965	229.6	21762	1.07

Appendix D4 – Median Household Income from the US Census Bureau for Figure 2

Year	Median Household Income adjusted for Inflation from US Census Bureau	Year over 2001 Median
Jul-01	54,155	1.00
Jul-02	53,511	0.99
Jul-03	53,303	0.98
Jul-04	52,880	0.98
Jul-05	53,342	0.98
Jul-06	53,793	0.99
Jul-07	54,202	1.00
Jul-08	52,367	0.97
Jul-09	51,940	0.96
Jul-10	50,718	0.94
Jul-11	49,842	0.92

Appendix D – Other Graphs for Relative Price Increases of Commodities

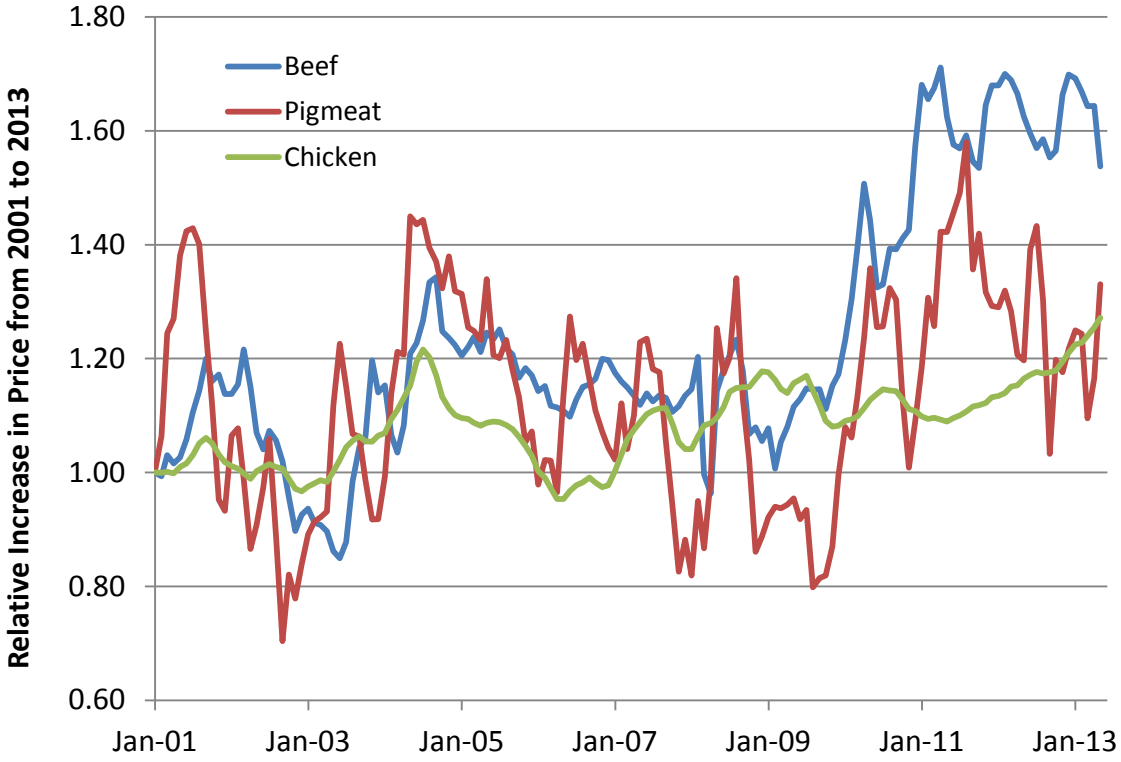

Figure D1 – Relative price increases for Beef, Pigmeat and Chicken from 2001 to 2013

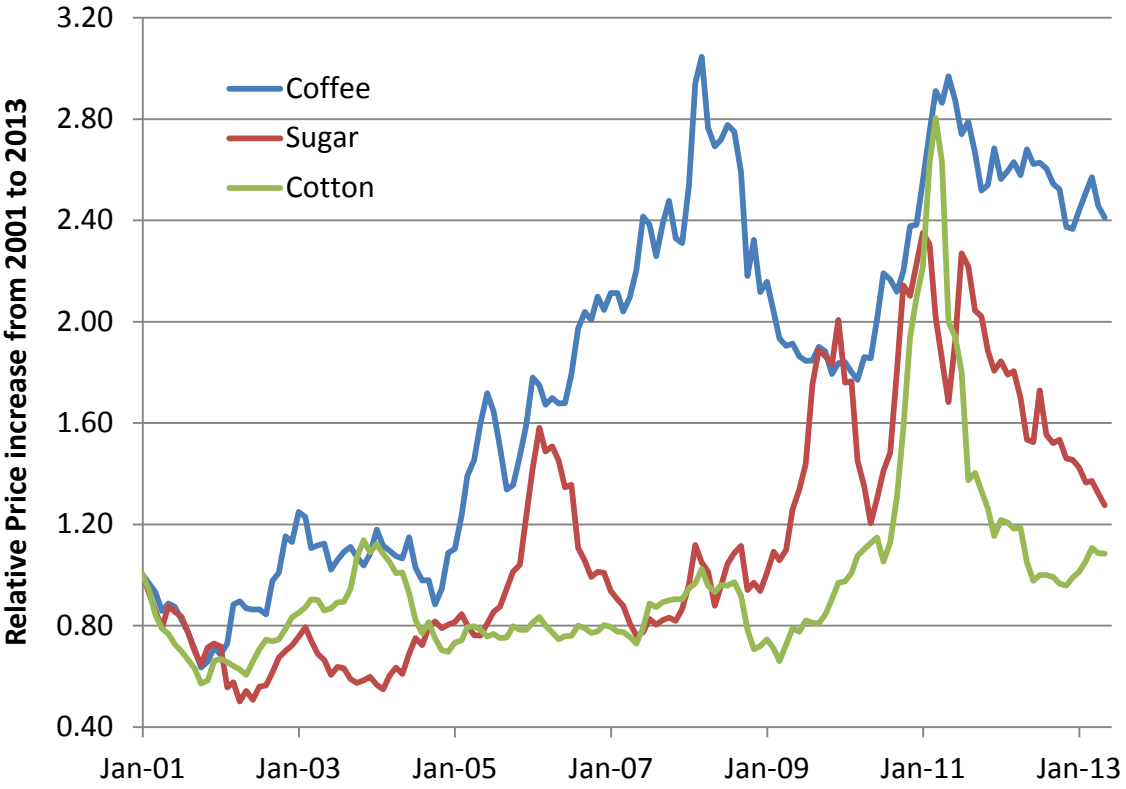

Figure D2 – Relative price increases for Coffee, Sugar and Cotton from 2001 to 2013

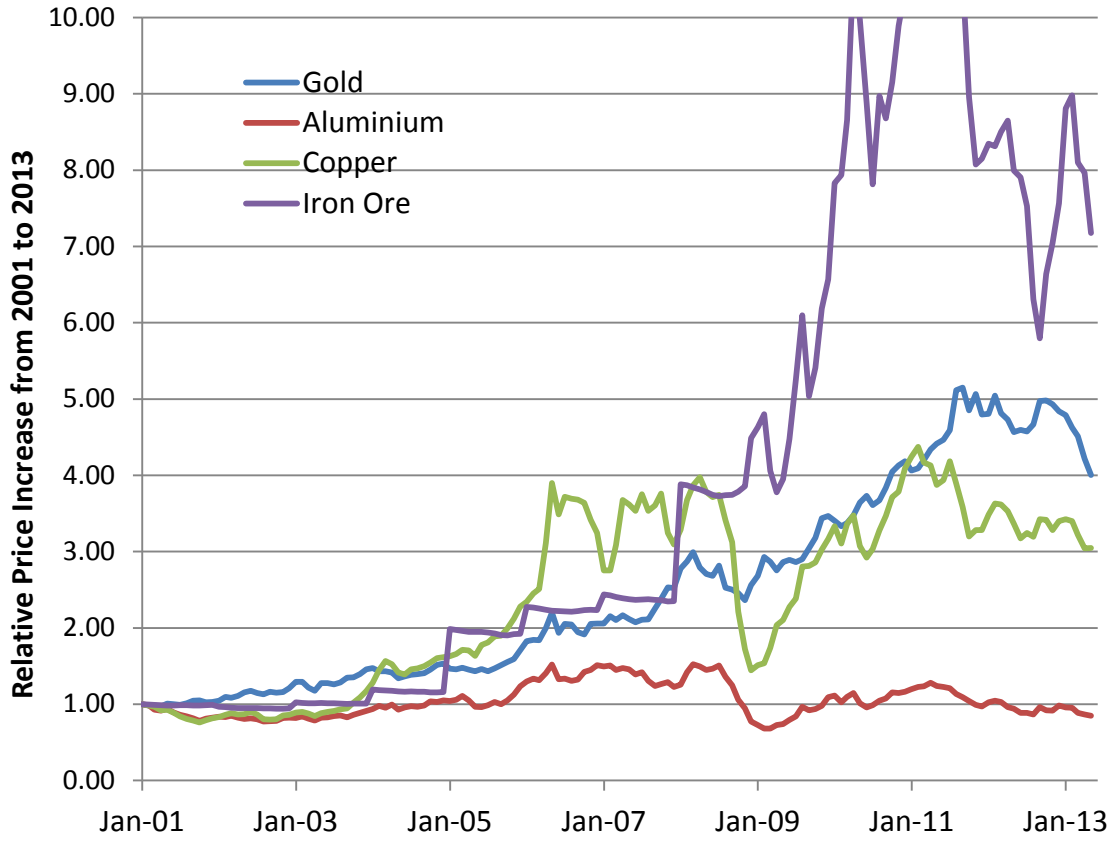

Figure D3 – Relative price increases for Coffee, Sugar and Cotton from 2001 to 2013

Appendix E – Melbourne Median House Price vs Average Wage 1965 to 2012 with comments on Affordability

Year	Ratio	Median	Wage
1960	2.8	$ 8,300	$ 2,923
1961	2.9	$ 8,700	$ 2,998
1962	2.8	$ 8,500	$ 2,992
1963	2.7	$ 8,100	$ 3,003
1964	2.9	$ 8,800	$ 3,079
1965	2.9	$ 9,400	$ 3,193
1966	2.9	$ 9,700	$ 3,370
1967	2.6	$ 9,400	$ 3,598
1968	2.8	$ 10,500	$ 3,812
1969	2.7	$ 11,400	$ 4,160
1970	3.0	$ 12,800	$ 4,200
1971	3.0	$ 13,400	$ 4,482
1972	3.2	$ 15,000	$ 4,623
1973	3.2	$ 19,800	$ 6,136
1974	3.3	$ 25,500	$ 7,686
1975	3.2	$ 28,700	$ 8,866
1976	3.3	$ 32,900	$ 9,937
1977	3.4	$ 37,000	$ 10,884
1978	3.2	$ 37,600	$ 11,783
1979	3.1	$ 38,000	$ 12,241
1980	2.9	$ 39,500	$ 13,458
1981	2.6	$ 44,000	$ 16,786
1982	2.4	$ 46,750	$ 19,256
1983	2.6	$ 52,500	$ 20,493
1984	3.1	$ 68,600	$ 22,220
1985	3.3	$ 78,300	$ 23,587
1986	3.3	$ 84,800	$ 25,407
1987	3.3	$ 89,400	$ 26,910
1988	3.9	$ 113,000	$ 29,063
1989	4.4	$ 135,100	$ 30,987
1990	4.5	$ 141,500	$ 31,200
1991	4.1	$ 138,000	$ 34,018
1992	4.0	$ 137,800	$ 34,575
1993	4.0	$ 142,300	$ 35,360
1994	3.7	$ 146,100	$ 39,260
1995	3.7	$ 144,500	$ 39,562
1996	3.7	$ 152,800	$ 40,794
1997	4.1	$ 175,500	$ 42,385
1998	4.4	$ 195,000	$ 43,971
1999	5.1	$ 227,900	$ 44,964
2000	5.7	$ 249,800	$ 43,727
2001	6.9	$ 316,000	$ 45,994
2002	6.7	$ 322,800	$ 48,277
2003	7.0	$ 361,300	$ 51,298
2004	7.0	$ 370,000	$ 53,139
2005	6.9	$ 370,000	$ 53,534
2006	6.9	$ 395,000	$ 57,496
2007	7.8	$ 472,000	$ 60,434
2008	6.7	$ 425,000	$ 63,154
2009	8.2	$ 540,000	$ 66,040
2010	8.8	$ 600,000	$ 68,224
2011	7.5	$ 540,000	$ 71,552
2012	7.2	$ 530,000	$ 73,580