**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.

1. **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.

1. **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.

1. **Ignoring us isn’t the worst insult – “Now you must pay for high immigration”**

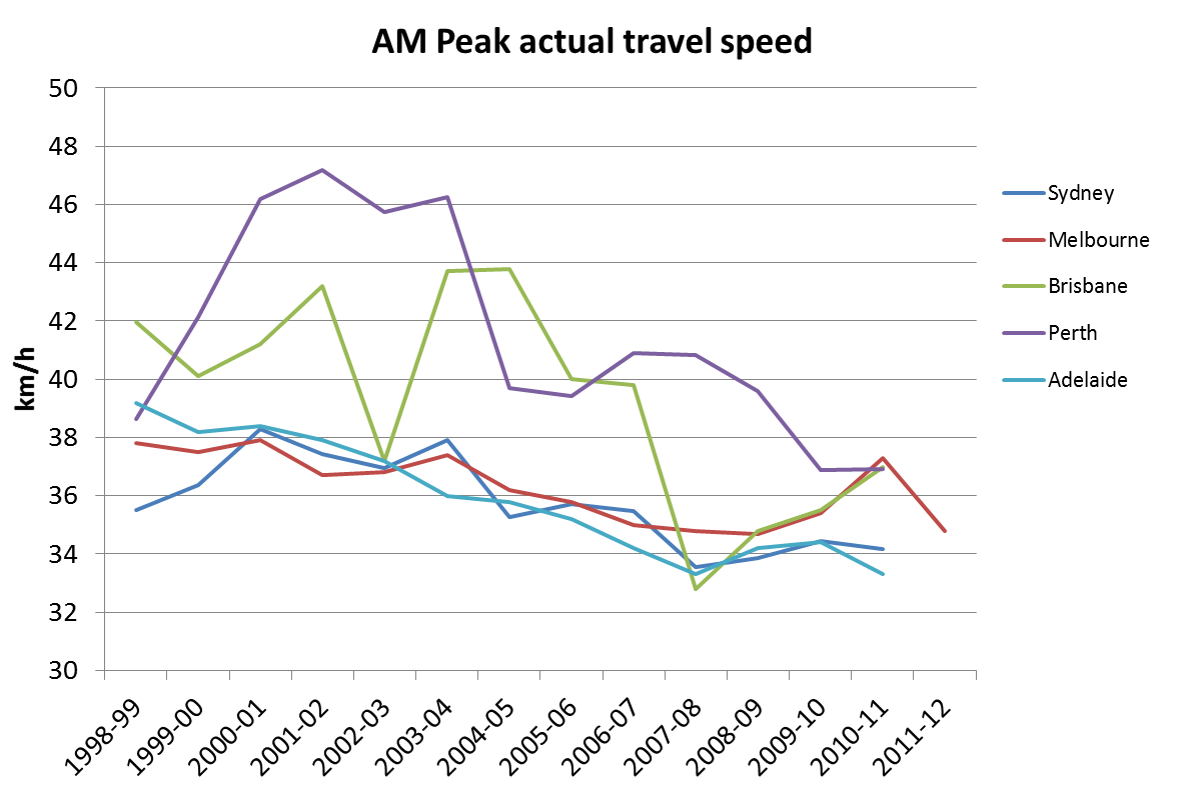
Although the major parties’ ignoring the wishes of the majority of their constituencies is insulting to the average Australian, it is not the worst insult. More insulting is the government putting the burden of managing and paying for the infrastructure and environmental impacts of the increased population 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.

1. **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.

1. **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](http://www.cmegroup.com/trading/agricultural/grain-and-oilseed/corn_quotes_settlements_futures.html) - [CME Group](http://www.cmegroup.com/) |
| Beef | 51.2 | 82.6 | 4.1% | World Bank |
| Pigmeat | 35.4 | 35.0 | -0.1% | [CME](http://www.cmegroup.com/trading/agricultural/livestock/lean-hogs_quotes_settlements_futures.html) - [CME Group](http://www.cmegroup.com/) |
| 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](http://www.cotlook.com/) |
|  |  |  |  |  |
| 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](http://www.thesteelindex.com/) |
| 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](http://www.cmegroup.com/trading/energy/natural-gas/natural-gas_quotes_settlements_futures.html) - [CME Group](http://www.cmegroup.com/) |
| 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.

1. **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** | 1991 15% of productive land degraded, 2008 24% degrading. Many areas are so degraded that they have stable levels of low productivity |
| ISRIC (2008) |
| **Loss of Forests** | 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 |
| FAO (2010) |
| **Loss of Wilderness** | Estimate of loss of wilderness 17.6Mha/year 0.28% of total, next 38 years 10% of the total |
| Smith, et al (2012) |
| **Loss of Fisheries** | 30% of fisheries over exploited, 57% fully exploited, 13% not fully exploited, Global marine catch declining |
| FAO (2012) |
| **Loss of Groundwater** | Increase from 126 km3/ year in 1960 to 283 km3/year in 2000, 2% of recharge and 39% of the total irrigation water used. |
| Wada, et al (2010) |
| **Loss of Surface Water** | Freshwater withdrawals doubled 1960-2005. Aral Sea lost 70% volume, from 1960-98. Lake Chad lost 95% of surface area from 1963-2001. |
| Ref. each Lake |
| **Loss of Biodiversity** | Extinctions 100 to 1000 as frequent as shown in the fossil record, 15 of 24 Ecosystem services being degraded or used unsustainably |
| MA (2005) |
| **Air Pollution** | 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 |
| WHO (2011) |
| **Water Pollution** | 2 million deaths per year from unsafe water, More than 80% of sewage in developing countries is discharged untreated |
| WHO (2013) |
| **Increase in GHG** | 1990 23 Billion tonnes CO2/year. 2010 32 billion tonnes CO2/year, 39% increase, 1.7% per year |
| IEA (2012) |
| **Wetlands** | Half of the world's wetlands have been lost since 1900, most before 1950 but there have been continuing losses. |
| OECD (1996) |

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

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 |

1. **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.

1. **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.

1. 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.

1. **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.

**References**

**Section 1- Productivity Commission Report – Resident Workers incomes grow more slowly with high immigration**

Productivity Commission, (2006) *Economic Impacts of Migration and Population Growth,* Final Report, Productivity Commission Research Report, 24 April 2006

Sydney Morning Herald, April 27, 2013, Bigger Population should not be bogeyman

<http://www.smh.com.au/federal-politics/editorial/bigger-population-should-not-be-bogeyman-20130426-2ijy9.html>

**Section 2 – Even if GDP goes up, the average Aussie’s wages don’t go up**

ABS 5676.0 - Business Indicators, Australia, Mar 2013

<http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/5676.0Mar%202013?OpenDocument>

ABS Corporate Profits, Profit before Income Tax ; Total (State) ; Total (Industry) ; Current Price ; CORP ; Series ID A3531612T

ABS 6302.0, Average Weekly earnings, Australia, November 2001, page 4/36

<http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/2D620E006E172CF7CA256B66007FA01A/$File/63020_nov%202001.pdf>

ABS 6302.0, Average Weekly earnings, Australia, February 2012, page 4/36

<http://www.ausstats.abs.gov.au/ausstats/meisubs.nsf/0/E3A0AFB49762714ECA257A0000121465/$File/63020_feb%202012.pdf>

ABS 5206.0 Australian National Accounts: National Income, Expenditure and Product, Mar 2013

<http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/5206.0Mar%202013?OpenDocument>

US Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product

<http://www.bea.gov/national/>

World Bank Databank, GDP/capita

<http://data.worldbank.org/indicator/NY.GDP.PCAP.CD>

World Bank general indicators such as GDP, GDP/capita, Secondary education enrolment, Life Expectancy, Literacy, child immunisations, etc

<http://data.worldbank.org/indicator/all>

Rate of Inflation website

<http://www.rateinflation.com/consumer-price-index/australia-historical-cpi?start-year=1990&end-year=2013>

Reserve Bank of Australia, Inflation Calculator

<http://www.rba.gov.au/calculator/annualDecimal.html>

Population Source: United Nations, Department of Economic and Social Affairs, Population Division (2013). World Population Prospects: The 2012 Revision, CD-ROM Edition. 2010: Estimates 1950-2010, Future population estimates in Medium Fertility 2010-2100

CIA World Factbook, Somalia,

<https://www.cia.gov/library/publications/the-world-factbook/geos/so.html>

CIA World Factbook, North Korea

<https://www.cia.gov/library/publications/the-world-factbook/geos/kn.html>

**Section 3 - Labor and Liberal parties ignore polls showing Aussies don’t want high immigration**

Goot and Watson (2011) Population, immigration and asylum seekers: patterns in Australian public opinion, Parliamentary Library, Parliament of Australia, Department of Parliamentary Services

<http://www.ianwatson.com.au/pubs/parliamentary_library_population.pdf>

Monash University Arts Faculty (2013) Immigration, An Inventory of Australian Public Opinion Surveys

<http://arts.monash.edu.au/mapping-population/inventory-of-surveys-immigration.php>

Betts, Katharine (2010), Population Growth: What do Australian Voters Want? People and Place, vol. 18, no. 1, 2010, page 49-64

<http://www.swinburne.edu.au/chancellery/mediacentre/publications/Betts%5BFinal%5D.pdf>

McAllister, Ian, Aaron Martin, Juliet Pietsch (2010) Public Opinion towards population growth in Australia, ANU Poll, The Australian National University, ANU College of Arts and Social Sciences, October 2010 <http://socpol.anu.edu.au/sites/default/files/2010-10-26_ANUpoll_population.pdf>.

Sydney Morning Herald, 11 October 2006, <http://www.smh.com.au/news/national/triguboff-lets-trade-trees-for-homes/2006/10/10/1160246131958.html>

**Section 4 - After we ask not to have high immigration, Government says “Now pay the extra cost of high immigration”**

Conklin, George H. (2004) Article Review: Population Growth, Density and the Costs of Providing Public Services, Sociation Today, Volume 2, Number 1, Spring 2004

<http://www.ncsociology.org/sociationtoday/v21/review2.htm>

Electricity Price Factsheet – Australian Government Department of Resources, Energy and Tourism

<http://www.ret.gov.au/Department/Documents/clean-energy-future/ELECTRICITY-PRICES-FACTSHEET.pdf>

Ladd, Helen F. (1992) Population Growth, Density and the Costs of Providing Public Services, Urban Studies, April 1992 vol. 29 no. 2, 273-295

<http://usj.sagepub.com/content/29/2/273.abstract>

Rubenstein, Edwin S. (2009) The Twin Crises – Immigration and Infrastructure, The Social contract, [www.thesocialcontract.com](http://www.thesocialcontract.com), 445 East Mitchell Street, Petoskey, MI 49770, USA

Save our Suburbs website

<http://www.sos.org.au/>

Trubka, Roman, Peter Newman and Darren Bilsborough (2009), Curtin University of Technology, Assessing the Costs of Alternative Development Paths in Australian Cities, Report commissioned by Parsons Brinckerhoff Australia

<http://www.earthsharing.org.au/wp-content/uploads/Curtin_Sustainability_Paper_0209.pdf>

**Section 5 - All over the world, population growth means slower economic growth**

Betts, Katharine (2010), Population Growth: What do Australian Voters Want? People and Place, vol. 18, no. 1, 2010, page 49-64

<http://www.swinburne.edu.au/chancellery/mediacentre/publications/Betts%5BFinal%5D.pdf>

CIA World Factbook, Somalia Some data filled in with the CIA Factbook. Not all referenced here but they can be found starting from Somalia or North Korea

<https://www.cia.gov/library/publications/the-world-factbook/geos/so.html>

CIA World Factbook, North Korea

<https://www.cia.gov/library/publications/the-world-factbook/geos/kn.html>

Population Source: United Nations, Department of Economic and Social Affairs, Population Division (2013). World Population Prospects: The 2012 Revision, CD-ROM Edition. 2010: Estimates 1950-2010, Future population estimates in Medium Fertility 2010-2100

McAllister, Ian, Aaron Martin, Juliet Pietsch (2010) Public Opinion towards population growth in Australia, ANU Poll, The Australian National University, ANU College of Arts and Social Sciences, October 2010 <http://socpol.anu.edu.au/sites/default/files/2010-10-26_ANUpoll_population.pdf>.

World Bank general indicators such as GDP, GDP/capita, Secondary education enrolment, Life Expectancy, Literacy, child immunisations, etc

<http://data.worldbank.org/indicator/all>

O’Sullivan, Jane (2013) Revisiting demographic transition: correlation and causation in the rate of development and fertility decline. Paper presented at the 27th IUSSP International Population Conference, 26-31 August 2013, Busan, Korea

**Section 6 – High population on a finite planet (increasing demand finite supply) means higher prices for commodities and housing that we have to pay with lower wages**

Birrell, Bob and Healy, Ernest (2003) Migration and the Housing Affordability Crisis, People and Place, vol. 11 no. 3 2003, page 43-56

Index Mundi Reference for Commodity prices – This link specifically for Rice but all commodities can be referenced from this page

<http://www.indexmundi.com/commodities/?commodity=rice&months=180>

Index Mundi Reference for commodity prices – This one is specifically for copper but all commodities including theEnergy Index, Metals Index etc can be referenced from this page

<http://www.indexmundi.com/commodities/?commodity=copper&months=180>

Simon, Julian (1996). *The State of Humanity*. Wiley–Blackwell. p. 24. [ISBN](http://en.wikipedia.org/wiki/International_Standard_Book_Number) [978-1-55786-585-4](http://en.wikipedia.org/wiki/Special:BookSources/978-1-55786-585-4).

Quotes on internet

<http://www.goodreads.com/author/quotes/246139.Julian_Simon>

<http://en.wikiquote.org/wiki/Talk:Julian_Simon>

Simon, Julian (1994)

<http://www.juliansimon.com/writings/Ultimate_Resource/TCHAR28.txt>

Simon – Ehrlich Wager Reports

<http://perc.org/articles/betting-wealth-nature>

<http://www.webcitation.org/5Xu64dbNz>

<http://en.wikipedia.org/wiki/Simon%E2%80%93Ehrlich_wager>

Wall Street Journal Review of “The Bet” by Paul Sabin

<http://online.wsj.com/article/SB10001424127887324165204579026631593290784.html>

Source for Index Mundi Iron Ore prices

<https://www.thesteelindex.com/>

Source for IndexMundi Grain prices

<http://www.cmegroup.com/>

Stable Population Party Website, Population is the Everything Issue

http://www.populationparty.org.au/

**Section 7 – Environmental impacts of high population**

Alexandratos, Nikos and Jelle Bruinsma, (2012) World Agriculture Towards 2030/2050 2012 Revision

ESA Working Paper No. 12-03, Agricultural Development Economics Division, Food and Agriculture Organization of the United Nations

Aral Sea References

Reeuters Article: FACTBOX-Key facts about the disappearing Aral Sea

<http://www.reuters.com/article/2008/06/24/idUSL23248577>, accessed 30 Aug 2013

Glantz, Michael H. (1999). [*Creeping Environmental Problems and Sustainable Development in the Aral Sea...*](http://books.google.com/?id=2YXnBxZg7c4C). Cambridge, New York: Cambridge University Press. [ISBN](http://en.wikipedia.org/wiki/International_Standard_Book_Number) [0-521-62086-4](http://en.wikipedia.org/wiki/Special:BookSources/0-521-62086-4).

Attenborough, David (2013), The Telegraph, 22 January 2013

<http://www.telegraph.co.uk/earth/earthnews/9815862/Humans-are-plague-on-Earth-Attenborough.html>

Australian Bureau of Statistics (2010) ABS 1370.0 – Measures of Australia’s Progress - Environment

<http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/1370.0~2010~Chapter~Environment%20(6)>

Australian Bureau of Statistics (2010) ABS 1370.0 – Measures of Australia’s Progress, 2010 – Land, Invasive Species

<http://www.environment.gov.au/soe/2006/publications/drs/indicator/13/index.html>

Australian Bureau of Statistics (2010) ABS 1370.0 – Measures of Australia’s Progress, 2010 – Land, Land Clearing

<http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/1370.0~2010~Chapter~Land%20clearing%20(6.2.2)>

Australian Bureau of Statistics (2012) ABS 1370.0 – Measures of Australia’s Progress – Summary Indicators 2012 - Atmosphere

<http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/1370.0.55.001~2012~Main%20Features~Atmosphere~25>

Australian Government Department of Sustainability, Environment, Water, Population and Communities, State of the Environment Report 2006 - Index

<http://www.environment.gov.au/soe/2006/index.html>

Australian Government Department of Sustainability, Environment, Water, Population and Communities, Sustainable Australia Report 2013, National Sustainability council

<http://www.environment.gov.au/sustainability/measuring/publications/sustainable-australia-report-2013.html>

Campbell Biology, Ninth Edition, Australian Version, (2011) Jane Reece, Berkeley, California

Lisa A. Urry, Mills College, Oakland, CA, Noel Meyers, University of the Sunshine Coast

Michael L. Cain, Bowdoin College, Brunswick, Maine, Steven A. Wasserman, University of California, San Diego, Peter V. Minorsky, Mercy College, Dobbs Ferry, New York, Robert B. Jackson, Duke University, Durham, North Carolina, Bernard N. Cooke, University of the Sunshine Coast

ISBN 9781442531765, ISBN 10 1442531762, Published by Pearson Australia

Used at University of Technology, Sydney, Sydney University, University of New South Wales, Australian National University, Newcastle University, Adelaide University and others.

CSIRO Land and Water website 2013

<http://www.clw.csiro.au/>

CSIRO Land and Water October 2008 – Salinity Factsheet

<http://www.csiro.au/files/files/pmyj.pdf>

CSIRO Salinity webpage

<http://www.csiro.au/resources/Salinity-Factsheet>

DSEWPC (2006) Australian Government Department of Sustainability, Environment, Water, Population and Communities, State of the Environment Report 2006 – Indicator BD-08 - Estimated loss of Biodiversity resulting from Land Clearing

<http://www.environment.gov.au/soe/2006/publications/drs/indicator/13/index.html>

Source: Cogger, H, Ford, H, Johnson, C, Holman, J and Butler, D 2003, Impacts of Land Clearing on Australian Wildlife in Queensland, World Wildlife Foundation Australia, Sydney

EPA Victoria – Australian Greenhouse Calculator – Research Centre

<http://www.epa.vic.gov.au/agc/r_cc_causes.html#page-10/>!

FAO (2010) Global Forest Resources Assessment - Key Findings

<http://foris.fao.org/static/data/fra2010/KeyFindings-en.pdf>

FAO (2012) The State of World Fisheries and Aquaculture 2012, FAO Fisheries and Aquaculture Department, Food and Agriculture Organisation of the United Nations, Rome 2012, page 30/230

<http://www.fao.org/docrep/016/i2727e/i2727e.pdf>

Global Greenhouse Gas estimates

IEA (2012) International Energy Agency World Energy Outlook

<http://www.worldenergyoutlook.org/>

US Environmental Protection Authority quoting IPCC

<http://www.epa.gov/climatechange/ghgemissions/global.html>

Great Barrier Reef Marine Park Authority – Report Card 2011

<http://www.reefplan.qld.gov.au/measuring-success/report-cards/report-card-2011.aspx>

ISRIC (2008) Global Assessment of Land Degradation and Improvement (GLADA). ISRIC Report 2008/01. Wageningen, The Netherlands: International Soil Reference and Information Centre.

<http://www.fao.org/geonetwork/srv/en/resources.get?id=37053&fname=GLADA%20%20Report%205.pdf&access=private>

NSW State of the Environment Report 2012

<http://www.environment.nsw.gov.au/soe/soe2012/chapter1/chp_1.7.htm#1.7.82>

Queensland Government – Department of Natural Resources and Mines – Land Degradation page

<http://www.nrm.qld.gov.au/land/management/land_degradation.html>

Martin Luther King, Jr. reference (1966)

Martin Luther King, Jr.acceptance speech, Margaret Sanger award in human rights 1966; Lamont Hempil *Sustainable communities*

<http://www.plannedparenthood.org/about-us/who-we-are/reverend-martin-luther-king-jr-4728.htm>

MA (2005) Millennium Ecosystem Assessment, United Nations Environment Programme

<http://www.unep.org/maweb/documents/document.356.aspx.pdf>

Ecosystems 60% degraded 15/155, Extinctions 19/155, Freshwater withdrawals 16/155

MDBC-CSIRO (2006) The Shared Water Resources of the Murray-Darling Basin- Part I in a two part series on the shared water resources of the Murray-Darling Basin prepared for the Murray-Darling Basin Commission, MDBC Publication 21/06 February 2006

Mac Kirby, Ray Evans, Glen Walker, Richard Cresswell, Jane Coram, Shahbaz Khan, Zahra Paydar, Mohammed Mainuddin, Neil McKenzie and Sarah Ryan (CSIRO)

<http://www.csiro.au/files/files/p7g9.pdf>

Murray Darling Basin Authority (2013) Salinity Webpage, Australian Government

<http://www.mdba.gov.au/river-data/water-quality/salinity>

Murray Darling Basin Authority (2013) Blue-green Algae Webpage, Australian Government

<http://www.mdba.gov.au/river-data/water-quality/bga>

Mikhail Gorbachev Reference (2013)

Green Cross International Website

<http://www.gcint.org/news/mikhail-gorbachev-leaders-failing-face-risks-confronting-humanity>

OECD – FAO Agricultural Outlook 2013-2022 - highlights

<http://www.oecd.org/site/oecd-faoagriculturaloutlook/highlights-2013-EN.pdf>

Our Common Future (1987) Bruntland Report for the United Nations - Report of the World Commission on Environment and Development: Our Common Future, Transmitted to the General Assembly as an Annex to [document A/42/427](http://www.un-documents.net/a42-427.htm) - Development and International Co-operation: Environment

<http://www.un-documents.net/ocf-04.htm>

UK Environment Agency (2013)

<http://www.environment-agency.gov.uk/research/library/publications/34083.aspx>

UNEP (2012) Press Release for the 2012 Global Environmental Outlook from the United Nations Environment Programme. <http://www.unep.org/geo/pdfs/geo5/GEO5-Global_PR_EN.pdf>

UN (2012) Lake Chad reference

<http://www.un.org/africarenewal/magazine/april-2012/africa%E2%80%99s-vanishing-lake-chad>

Wada, Y., L. P. H. van Beek, C. M. van Kempen, J. W. T. M. Reckman, S. Vasak, and M. F. P. Bierkens (2010), Global depletion of groundwater resources, Geophys. Res. Lett., 37, L20402, doi:10.1029/2010GL044571.

<http://igitur-archive.library.uu.nl/fysgeo/2011-0831-200526/2010GL044571.pdf>

World Water Council website

<http://www.worldwatercouncil.org/library/archives/water-crisis/>

World Health Organisation (2011) – Air Pollution Factsheet

<http://www.who.int/mediacentre/factsheets/fs313/en/index.html>

World Health Organisation (2013) *Progress on sanitation and drinking-water*

<http://www.who.int/water_sanitation_health/facts_figures/en/>

<http://www.who.int/water_sanitation_health/en/>

UNESCO Factsheet – 80% sewage in developing countries discharged untreated

<http://www.unesco.org/new/en/natural-sciences/environment/water/wwap/facts-and-figures/all-facts-wwdr3/fact-15-water-pollution/>

**Section 8 - What kind of World do we want to live in?**

Fraser Institute, Economic Freedom Network website and Human Freedom webpage

<http://www.freetheworld.com/>

<http://www.freetheworld.com/humanFreedom.php>

Freedom in the World by Freedom House

<http://www.freedomhouse.org/>

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

Index of Economic Freedom created by The Heritage Foundation and the Wall Street Journal

<http://www.heritage.org/index/>

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

Press Freedom Index published by Reporters without Borders

<http://en.rsf.org/press-freedom-index-2013,1054.html>

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

Democracy Index by the Economic Intelligence Unit of the Economist Group

<http://www.economist.com/topics/economist-intelligence-unit>

<http://www.economist.com/node/8908438>

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

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

ABS 1301.0 – Article Humanitarian Arrivals Asylum Seeker numbers from 2009-2010, published April 2012

<http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/1301.0Main+Features592012>

Combined group of Freedom Indices

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

Simon, Julian (1996). *The State of Humanity*. Wiley–Blackwell. p. 24. [ISBN](http://en.wikipedia.org/wiki/International_Standard_Book_Number) [978-1-55786-585-4](http://en.wikipedia.org/wiki/Special:BookSources/978-1-55786-585-4).

World Bank general indicators such as GDP, GDP/capita, Secondary education enrolment, Life Expectancy, Literacy, child immunisations, etc

<http://data.worldbank.org/indicator/all>

CIA World Factbook, Somalia Some data filled in with the CIA Factbook. Not all referenced here but they can be found starting from Somalia or North Korea

<https://www.cia.gov/library/publications/the-world-factbook/geos/so.html>

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

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

Adam Smith quotes

<http://www.adamsmith.org/quotes>

<http://www.goodreads.com/work/quotes/1373762-an-inquiry-into-the-nature-and-causes-of-the-wealth-of-nations>

Business Council of Australia (2013) Action Plan for Enduring Prosperity – Summary, page 6/76, item 2, page 28/76, <http://www.bca.com.au/Content/102223.aspx>

### Gittins, Ross (2010) [ONLY CAPITALISM CAN SAVE THE PLANET](http://www.rossgittins.com/2011/09/only-capitalism-can-save-planet.html) , IQ2 Debate, Sydney City Recital Hall, August 10, 2010

<http://www.rossgittins.com/2011/09/only-capitalism-can-save-planet.html>

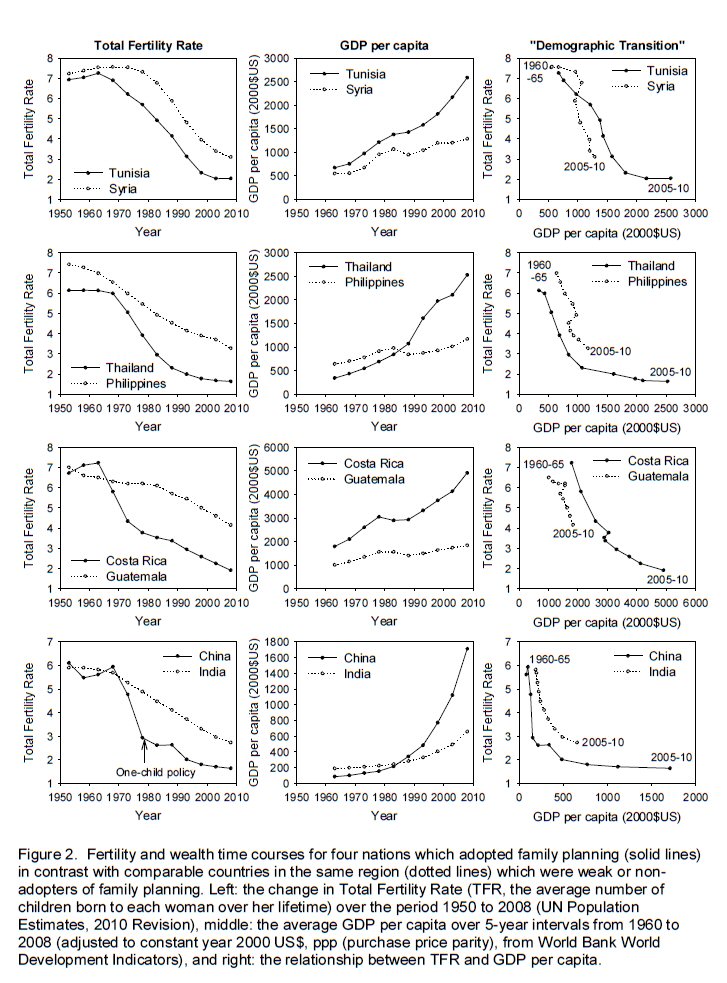
|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Appendix A1** – GDP/capita data and population growth data for the poorest 25 countries of the 100 most populated countries | | | | | | |
|  | GDP/Capita | | | Population | | |
| Country Name | 2001 | 2011 | Growth/yr (%) | **2000** | **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**



**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**

