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# Interpreting Economic Data

## An Assessment of the Health of Australia's Economy



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## 1. Executive Summary

Australia has experienced unprecedented growth in Gross Domestic Product (GDP) since December 1991 and avoided recessions in both the Asian financial crisis in 1998 and the global financial crisis (GFC) in 2008. In the wake of the GFC and subsequent flattening of the growth of leading countries, Australia has focussed primarily on the stability of its economic health.

This report provides a general analysis of the current “health of the Australian economy”. It reviews data for the period 2008 to 2015, sourced widely from leading authorities i.e. the Reserve Bank of Australia (RBA), Australian Bureau of Statistics (ABS), International Monetary Fund (IMF), Department of Foreign Affairs and Trade (DFAT) and the World Data Bank. The report considers the impact of key macroeconomic indicators i.e. real GDP, inflation and interest rates, current account balance, debt and unemployment and highlights economic coincidental, leading and lagging indicators, as well as providing a relative comparison with other nations.

It discusses the concern that Australia’s growth is below the benchmark of 2-3% in the economic cycle; it highlights the impact of this period of ‘slow growth’ on prosperity and comments on predictions to recover pace. Finally, it is expected that the analysis provides a rich economic picture of the health of Australia’s economy and on the balance and flexibility required to manage a ‘slow growth’ economy into the future.

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## 2. Introduction

The current Australian economy is weak. The Australian Bureau of Statistics (ABS) recently released real GDP figures for the December 2014 quarter showing only a .5% growth seasonally adjusted (ABS, 2015) and averaged only .5% or less over six of the past ten quarters, falling far short of the 3.1% required. If weak growth continues, a revenue shortfall in the May budget may be likely, prompting a further rate cut by the RBA.

The current economic picture is complex and fraught with economists' and media predictions of a gloomy economic future. Whilst some forecasts are espousing a visit from the horseman of the apocalypse, new economic data from the RBA and ABS is indicating that the economy is responding marginally to macro-economic policy infrastructure and stimulus.

A true picture of the health of the economy requires closer investigation of Australia's accounts. This report aims to provide an explanation and analysis of current macroeconomic data and an interpretation of the economic status of expansion or contraction. It is also concerned with future growth and Australia's interest on debt, as if growth in this account surpasses the GDP growth rate, the economy is may enter recession.

## 3. Gross Domestic Product (GDP)

### 3.1 GDP Concept

The gross domestic product (Nominal GDP) is defined as the market monetary value of all finished goods and services produced within a nation's geographic border regularly on quarterly or annually basis. The concept of GDP discounts all the goods manufactured by the nation's business outside of the nation's border and does not count second hand and non-productive transactions (Layton et al, 2012).

The money GDP (Nominal GDP) grows over time as a result of growth in output and general price rises, however to mirror only the changes in output, it is essential to adjust the nominal

GDP, and hence the real GDP would be required which is the value of all final goods and services produced during a given period of time based on the prices existing in a selected base year. The real GDP provides important contrasts of combined economic activities over a period of time while prices are changing.

### 3.1 Measuring GDP

Governments compute GDP using various methods including the expenditure approach which is the more widely used method and measures by summing up all the four major components of expenses for final products during a period of time. The other method is using the income approach which measures GDP by adding all incomes of all factors of production, including wages, rents, interests and profits, which include all forms of income created in the production process. Both methods provide similar results with some minor variances between the two estimates for GDP (Layton et al, 2012). It employs the household consumption expenditure (C), gross private domestic investment, government consumption and gross public investment expenditures (G) and net export. It is stated mathematically as:  $GDP = C + I + G + (X - M)$

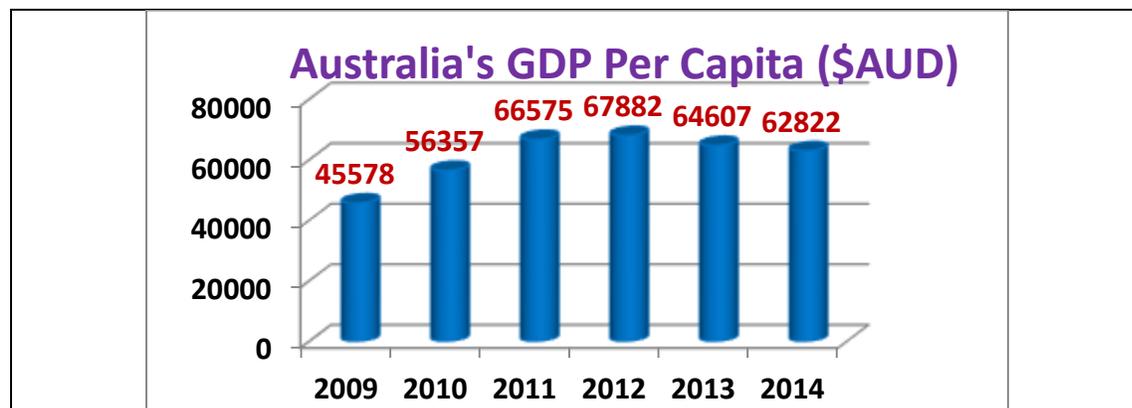


Figure 1 Shows the trend of Australia's GDP per Capita (in \$AUD) during 2009-2014. Adapted and modified from (DFAT, 2014)

### 3.2 Real GDP as economic indicator

Because the real GDP is an inflation-adjusted concept, it shows the changes in national outputs excluding the fluctuations in price during a period of time. The international standards for computing real GDP now endorses rebasing the price indexes of goods annually and relating the

subsequent indexes to form yearly reweighted chain volume measures, the real GDP serves as the main economic indicator revealing the general Nation's economic growth (ABS,2015 ).

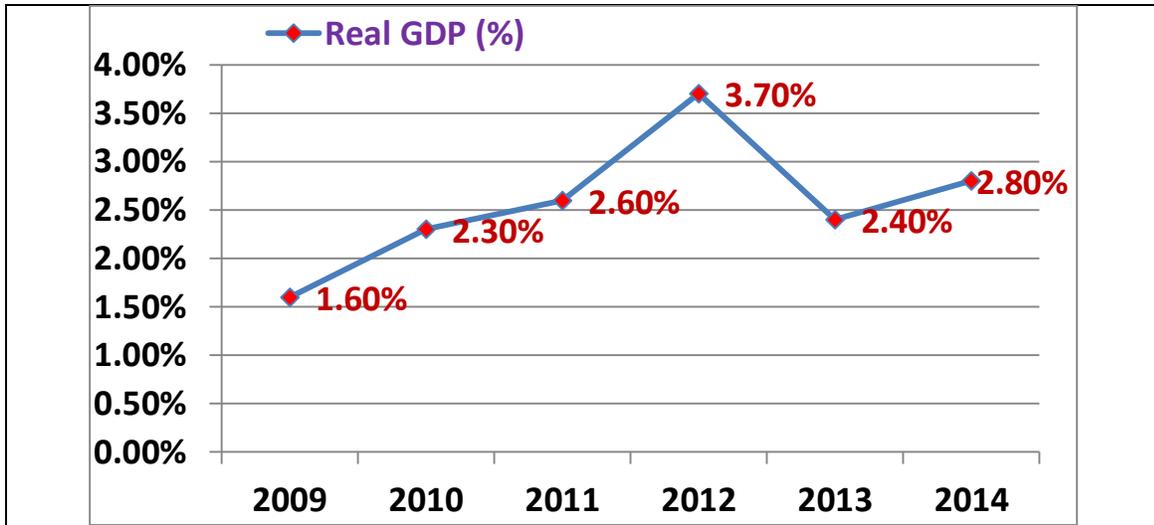


Figure 2 Depicts the percent changes in Australian Real GDP during 2009-2014 period  
Adapted and modified from (DFAT,2014)

During the past 23 years, Australia's economy has attained a real GDP normal growth rate of 3.3 per cent per year. Its predicted economic growth rate between 2015 and 2019 is the highest among leading developed countries. During the period 2009 to 2012, real GDP fluctuations have shown an upward increasing trend, followed by a decline between 2012 and 2013 and rise of .2% during 2014 (Figure 2) as per IMF's projections published in October 2014 Reference.

Australia has benefited by its close proximity to the thriving Asia-Pacific region and its reputation for the superior quality of their goods and services (IMF, 2014).

Mining continues to be the key contributor to Australia's worldwide trade profile; nevertheless it is the country's services sector that created more than 80 per cent of its economic yield. The sector is developing quicker than other industry, indicating the existing insightful professional expertise present in Australia (IMF, 2014).

Australia's nominal GDP is projected at US\$1.5 trillion and comprises 2% of the international economy. Compared with the past ten years, Australia has more than doubled the value its

total output. Australia's current and forecast economic development reveals its distinctive place within, and progressively resilient ties to the fast rising Asian region.



Figure 3 Indicates Australia's export of goods and services as a percent of GDP and the changes in real GDP (in %) during 2009-2014 periods. Adapted and modified from (DFAT,2014)

Figure 4 indicates Australia's progressive performance in the export and import of goods and services in 2019. The regional economy is predicted to represent 42 % of global output, twofold the ratio in 1980. In comparison, the collective economies of China and India will only represent one quarter of the world's GDP, which has increased only 5% from outputs in 1980 (IMF, 2014).

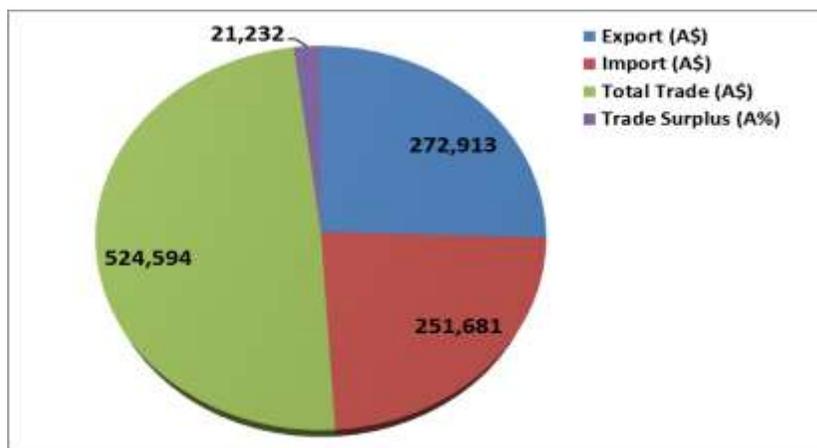


Figure 4 shows Australia's export and import trade balances during 2013-2014 period. Adapted and modified from (DFAT, 2014)

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### 3.3 Limitations of GDP

Although the GDP serves as main economic indicator for a nation's economic performance and plays a very critical role in influencing economic and social policies, it has a number of key drawbacks, the GDP:

- Only counts market transactions excluding certain unpaid activities i.e. house hold production and child-rearing;
- Does not provide complete information regarding the population division of consumption of the GDP.
- Neglects leisure time and can understate a nation's wellbeing as no allowance is made for people reducing hours worked.
- Does not take into account goods and services that do not meet all the requirements for GDP i.e. illegal gambling, loan-sharking, illegal drugs.
- Does not take into account the environmental costs and benefits resulted during production processes (Layton, et al, 2012).

## 4. Monetary Policy

### 4.1 Interest rates

The Reserve Bank Act 1959 sets the formal objectives for monetary policy in Australia. The three key objectives are stability of Australia's currency, maintenance of full employment and economic prosperity and welfare.

To achieve price stability in terms of goods and services purchasing power, the RBA sets the target cash rate to influence the market interest rate on overnight funds. The interest rate adjusted by the RBA from 1990 until 2015 in Australia averaged 5.13%, reaching a high of 17.5% in 1990 and a low of 2.25% in February 2015 (Figure 5).

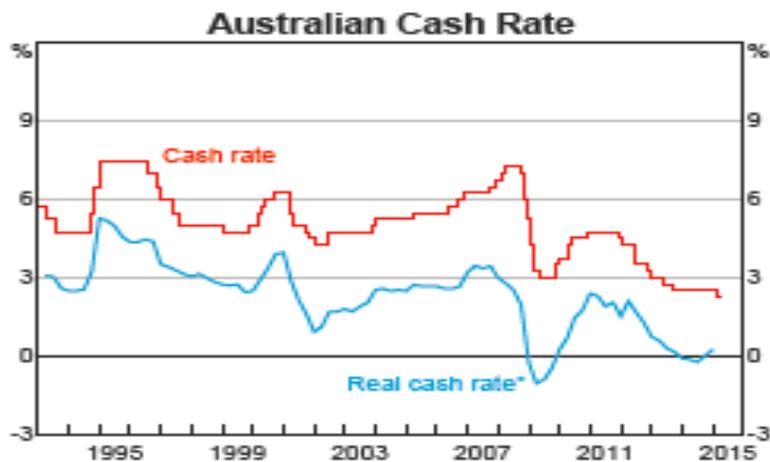


Figure 5 - Trends Australia's cash rate and real cash rates for 1995-2015 period. Calculated using average of weighted median and trimmed mean inflation. Source ABS: RBA 2015.

The RBA and government have set an objective of consumer price inflation (CPI) of between 2 to 3% on average over the business cycle allowing for natural variations in inflation. The RBA in line with monetary policy has responded to predictions that economic growth for 2015 would be 1.75% - 2.25% and adjusted the cash rate by lowering interest rates to 2.25%. This is between the benchmark level, however it has not had the positive effect in real GDP growth expected through stimulating consumer confidence and business investment.

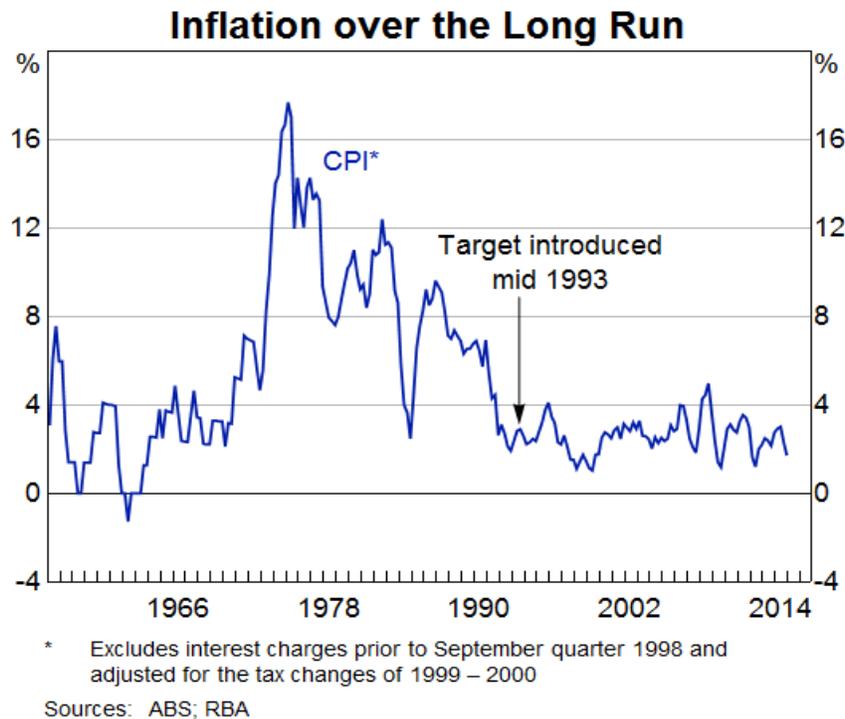
## 5. Inflation

Inflation is an increase in the general (average) price level of goods and services in the economy and not an increase in the price of any specific product (Layton, et al.2012).It is measured as an annual percentage increase and as the general cost of living

### 5.1 Measuring Inflation

The ABS prepares the consumer price index (CPI ) quarterly and is widely reported as a measure of inflation, (also known as price-level index).CPI determines how rising prices affect the income of consumers, purchasing a weighted market basket of goods and services, but does not cover exports, purchases by businesses and government. The inflation rate is calculated as a percentage change and compared to the price increase to the base period The ABS has switched to the 16th Series and the weighting base period will now be June 2011.

## 5.2 Inflation history and current position



**Figure 6 Australian Inflation Rate for the period 1955- 2014**

Figure 6 above depicts how quickly prices changed since 1955 as calculated in quarterly ‘annual percentage changes’ in CPI (computed as the change in the CPI value in a quarter of one year from the value of the CPI in the same quarter of the previous year). In the 70s inflation climbed to 17% and some of the negative implications that affected the economy during the 70s and 80s were:

- Oil price shock of the 70s, increased both prices and unemployment;
- Destabilization of business decision making as empirical evidence (70s-80s) supported Milton Friedman that there may exist an inverse relationship between inflation and unemployment (Layton et al 2012);
- Confidence in savings was dampened as inflation was higher than the rate of return ;
- A greater disparity in the redistribution of the wealth, and unemployment increased.

Since 1993, the RBA has implemented a target for inflation of between 2-3% over the quarterly business cycles. Throughout the GFEC period of 2008-9, RBA managed to control inflation but as from 2009-10 unemployment increased to the levels of 2006-7.

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On 1 April 2015 RBA published an inflation rate of 1.7%, which is below its target and a further reduction of interest rates is a possibility to revive the economy as the resource mining pricing declines rapidly.

## **6. Implications to the Health of Australia's economy**

Australia achieved a real GDP growth rate of 3.3 per cent per year over 23 years to 2012 and was one of the few countries where interest rates increased after 2009. In the wake of the mining boom however, Australia experienced a sub-trend growth of 2.5% in 2012-2013 (Appendix 1) creating gloomy forecasts for a slowed economy.

Interest rates have been lowered by the RBA to a record low 2.25% in a push to stimulate growth through increasing consumer confidence and business investment. Headline inflation has declined to 1.7 % over the past year well below the RBA set target of 2-3% over the quarterly business cycles, reflecting the repeal of the carbon price which lowered utility and fuel prices. It is expected to remain below the 2 - 3% target reflecting the fall in oil prices and the slightly weaker outlook for product and labour markets (ABS, 2015).

The Australian dollar has depreciated almost 20% (trade-weighted basis) since its peak in mid-2013 to its current level (TWI at 64 and A\$ at US\$0.78). This has created wide ranging economic issues including competitive pressures following high exchange rates, weak growth of non-mining activity and strong wage growth. The lower than expected exchange rate and increased domestic inflationary pressures has led to increases in import prices and is forecasted to add .5% to underlying inflation (Kent, C. 2015).

Retail sales have increased but retail spending has fallen since 2011. Unemployment rose to 6.4% in the first quarter of 2015 (Appendix 2). This is the highest rate since 2002 and although this has fallen to 6.1 in the second quarter, 3% sustained growth is required to stabilize the employment sector.

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Dwelling investment has strengthened in comparison to 2013, supported by low interest rates and rising housing prices, however, there has been a gradual decline in the household saving ratio (RBA, 2015). Although consumption growth has increased marginally from its lows in 2013, it remains below average and there is significant uncertainty regarding the future effect large changes in commodity prices, particularly oil, will have on household saving and consumption behaviour. Further cuts in the cash rate pose a significant risk of accelerating a sharp rise in property prices and a further decline in the savings ratio.

The growth of Australia's major trading partners (MTPs) has increased marginally since 2011 and is expected to be unchanged in 2015 and 2016 (Appendix 3). Falling commodity prices particularly for oil largely reflect supply-side factors and weaker-than-expected growth of global demand. Australia's GDP position (2.5%) is reflective of a relatively flat global economy, particularly when performance is compared to China's slowing economy and GDP of 7%, USA (3%), Europe (1%) and Japan (0%).

## **7. Conclusion**

As long as Australia's interest on debt does not grow faster than its GDP growth rate, the economy is expected to avoid a recession. Overall, consumption is growing at a below-average pace and non-mining investment is subdued. Exports will continue to increase less rapidly in the near term. There is some stimulus relief expected provided by the net positive effect on growth of lower commodity prices, the depreciation of the exchange rate and low interest rates. The future health of the economy will balance on the flexibility and effectiveness of Australia's monetary policy in dealing with a slow growth economy.

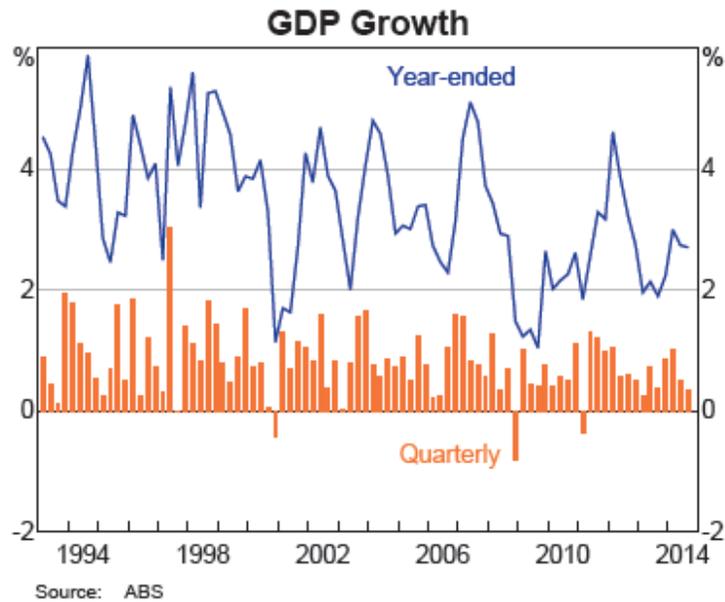
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## 9. Appendices

### Appendix 1: Australia GDP Growth and Inflation



### Appendix 2: Australia - Unemployment Rate



### Appendix 3: Australia's Trading Partner Growth

