# **STATEMENT 2: ECONOMIC OUTLOOK**

This statement presents the economic forecasts that underlie the Budget estimates.

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## STATEMENT 2: ECONOMIC OUTLOOK

Australia's economic fundamentals are strong and the outlook remains favourable, with the Australian economy expected to continue outperforming most of the developed world.

Global financial market sentiment has improved noticeably since late 2012, although global economic conditions remain challenging, particularly in the major advanced economies. The global economy is also undergoing enormous structural change, as the weight of global economic activity increasingly shifts towards Asia.

Against the backdrop of a fragile global recovery, the Australian economy is expected to undergo two large and important transitions over the forecast period. Following the largest investment boom in Australia's history, the resources boom will transition away from the investment phase towards exceptional growth in production and exports. More broadly, the Australian economy will transition to non-resources drivers of growth.

Australia starts this transition from a position of impressive resilience, with some of the strongest economic fundamentals in the world. Economic growth is solid, the unemployment rate is low, inflation is well contained, and public finances are strong. However, the unusual combination of a persistently high Australian dollar and lower terms of trade is having an acute and enduring effect on profits and prices growth across the economy, and this has weighed heavily on nominal GDP growth and government revenue.

## **OVERVIEW**

The outlook for the Australian economy is favourable, with solid growth, low unemployment and well-contained inflation. GDP growth is forecast to be close to trend at  $2\frac{3}{4}$  per cent in 2013-14 and 3 per cent in 2014-15, and the economy is expected to continue to outperform most other advanced economies over the forecast period. However, nominal GDP growth is expected to remain subdued, reflecting the falling terms of trade and the enduring effect of the persistently high Australian dollar on profits and prices in many sectors of the economy, particularly those that are trade-exposed.

Global financial market conditions have improved noticeably since late 2012 and while global growth remains subdued, it is expected to strengthen over the forecast period. There are signs that economic conditions have stabilised in China and strengthened moderately in the United States and Japan, though this is partly offset by the deepening recession in the euro area.

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The Australian economy is expected to continue to outperform most other advanced economies over the forecast period (Chart 1). While other countries have struggled to overcome weak growth and high unemployment, Australia's growth has remained around trend and the unemployment rate has stayed low, with the Australian economy now more than 13 per cent larger than in late 2007. By the end of the forecast period, the Australian economy is expected to be around 22 per cent larger than in late 2007. This growth is well above that expected in the United States, Japan and the euro area (Box 1).

Per cent Per cent 25 25 Dec atr 2007 - Dec atr 2012 Dec atr 2007 - Jun atr 2015 (incl. forecasts) 20 20 15 15 10 10 5 5 0 0 Australia United Australia United Japan euro States States Japan euro -5 area

**Chart 1: Real GDP Growth** 

Source: ABS cat. no. 5206.0, national statistical agencies, Thomson Reuters and Treasury.

Around half of all advanced economies are yet to return to pre-crisis output levels, and a number have returned to recession. The sluggish recovery underway in most advanced economies has also reinforced the profound structural changes in the global economy. As the centre of global economic activity shifts towards Asia, emerging market economies are expected to account for around three-quarters of global growth over the forecast period, with emerging Asian economies, particularly China and India, driving the bulk of this growth.

Continued strong growth in our region will provide a solid foundation for opportunity and economic growth in Australia. External demand from Asia, particularly for resources like iron ore, coal and liquefied natural gas (LNG), is expected to remain strong. Strong growth in emerging Asia will also open up new export opportunities outside the resources sector, as a growing Asian middle class increasingly demands a diverse range of higher quality goods and services.

The resources sector has responded to the unprecedented growth in demand for resources from Asia with the largest investment boom in Australian history. Total resources investment surged to over \$100 billion in 2011-12, more than 600 per cent

higher than it was a decade ago. LNG projects are increasingly dominating the pipeline of investment, driven by the demand for energy in Asia, but large-scale investment in iron ore and coal extraction and transportation is also contributing to a lift in export capacity.

Resources investment is expected to peak in 2013-14 at record highs, and then remain elevated through to at least the middle of the decade. The pipeline of resources investment remains substantial, with over \$260 billion of investment either committed to or under construction. While resources investment will begin to detract from growth after it passes its peak, the resources sector will continue to make an important contribution to growth as the record level of investment fuels exceptional growth in resources production and exports. Non-rural commodity export volumes are expected to grow by more than 30 per cent from 2011-12 to 2014-15.

Just as the resources boom will transition from its investment phase to the production phase over the next two years, the broader Australian economy is also expected to begin its transition to non-resources drivers of growth. Growth in the non-resources parts of the economy is expected to be underpinned by solid growth in household consumption, a recovery in the housing sector and a modest recovery in business investment outside the resources sector. While this transition may not be seamless, Australia starts from a position of strength and resilience.

Household consumption is expected to grow solidly over the forecast period, and provide a platform for recovery in some non-resources parts of the economy. Recent interest rate cuts have supported a tentative rebound in consumer confidence, and improved global financial market sentiment alongside recent growth in equities markets and house prices are supporting growth in household wealth. Recent strength in retail trade is also indicative of the recovery underway in household consumption, with positive implications for the retail sector and other related sectors, such as wholesale trade and road transport. Nonetheless, a return to the strong but unsustainable pre-crisis growth rates of household consumption is not expected.

There are also early signs of a recovery in the housing sector. In the December quarter National Accounts, dwelling investment recorded its second consecutive quarter of positive growth, growing at its strongest quarterly rate in over two years. After a decade of lacklustre growth in housing construction, conditions are favourable for a sustained recovery. Low interest rates, favourable demographics, low vacancy rates, rising house prices and high rental yields are all expected to support demand in the housing construction sector over the forecast period.

Growth in business investment outside the resources sector has been subdued since the global financial crisis, with many firms reluctant to invest during a period of global uncertainty. However, non-resources investment is expected to pick up modestly over the forecast period as firms build capital stocks to respond to strong external demand from Asia and improving conditions in the non-resources sectors at home. While credit conditions tightened substantially during the global financial crisis, these pressures

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have since eased, and are not expected to constrain business investment over the forecast period. Investment will also be supported by low interest rates and the low cost of imported capital goods.

However, in the near term, economic growth outside the resources sector will continue to face some headwinds, and conditions are expected to remain uneven across the economy. This partly reflects the magnitude of the transition underway, but also structural challenges — such as the persistently high Australian dollar — which are weighing heavily on a number of sectors.

Despite the lower terms of trade and declining prices for Australia's key commodity exports, the Australian dollar remains around parity with the US dollar (Chart 2), and has appreciated by around 20 per cent against the Japanese yen over the past six months. The trade weighted index of the Australian dollar also remains near 30-year highs. While the strength of the Australian dollar reflects the fundamental strength of the Australian economy, the persistently high dollar is producing especially challenging conditions in labour intensive and trade-exposed sectors such as manufacturing and tourism. In the retail and wholesale trade sectors, consumer caution and changing spending patterns have added to the competitive pressure to pass on lower import prices, which has squeezed profit margins.

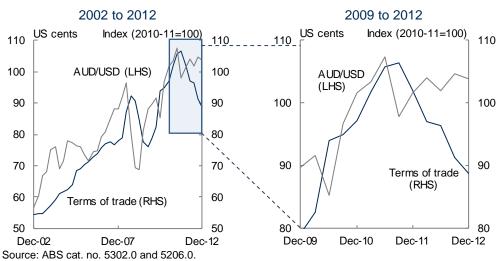


Chart 2: Terms of Trade and the Australian dollar

Employment growth has been modest over the past 12 months, reflecting the uneven conditions across the economy and the dampening effect of the persistently high Australian dollar on trade-exposed sectors. Still, the unemployment rate has remained low and risen only slightly to its current level of 5.5 per cent. This stands in stark contrast to most other developed economies. The average unemployment rate across the OECD has remained stubbornly high at around 8 per cent. In the euro area, the unemployment rate has continued to climb over the past year and now stands at

euro-era highs of around 12 per cent. In the United States, the unemployment rate has also remained high and is currently around  $7\frac{1}{2}$  per cent.

Employment growth is expected to strengthen as growth picks up in some non-resources sectors of the economy and the level of employment remains high in the resources sector. Employment in Australia is expected to grow by  $1\frac{1}{4}$  per cent to the June quarter 2014 and  $1\frac{1}{2}$  per cent to the June quarter 2015, and over 350,000 jobs are expected to be created over the forecast period. However, with the resources sector transitioning to the less labour intensive production phase, and the high Australian dollar still weighing on many sectors of the economy, the unemployment rate is expected to rise by  $\frac{1}{4}$  of a percentage point to  $5\frac{3}{4}$  per cent in 2013-14, but then stabilise at that level over the remainder of the forecast period and remain amongst the lowest in the developed world. In line with the slight rise in the unemployment rate, wage growth is expected to be slightly below trend, and inflation is forecast to be well contained in the bottom half of the Reserve Bank's target band.

The outlook for solid economic growth is consistent with the fiscal consolidation underway at all levels of government. Consolidation at the federal level has been targeted to limit any adverse impact on economic growth and employment, and the expected overall effect of policy decisions in 2012-13 and 2013-14 is largely unchanged since MYEFO. Fiscal consolidation has provided scope for an easing in monetary policy, with the Reserve Bank reducing the cash rate by 200 basis points since November 2011. With wage growth and inflation remaining contained, ongoing fiscal consolidation will continue to provide scope for monetary policy to respond to conditions as appropriate. As is standard practice, the forecasts assume policy interest rates move broadly in line with market expectations at the time that the forecasts are finalised, with the market expectation at that time being that policy interest rates would be slightly lower over the coming year.

Australia's current low unemployment rate and solid real GDP growth are a testament to the resilience of Australia's real economy over the past five years. However, Australia's nominal economy has been less immune to global conditions over this period, with prices absorbing much of the effect of a weaker global economy, declining terms of trade, and high Australian dollar. Although iron ore prices have recovered from their lows of late 2012, the unusual combination of a persistently high dollar and lower terms of trade has put acute competitive pressure on resources and non-resources sectors, resulting in weaker profitability, subdued price growth, and unusually low nominal GDP growth.

Nominal GDP growth has historically exceeded real GDP growth by around 2½ percentage points, but this relationship has reversed recently (Chart 3). Nominal GDP grew by only 2.0 per cent through the year to the December quarter 2012, well below the rate of real GDP growth of 3.1 per cent. This was the third consecutive quarter where nominal GDP growth was outpaced by real GDP growth, the first time this has happened in at least the past half-century.

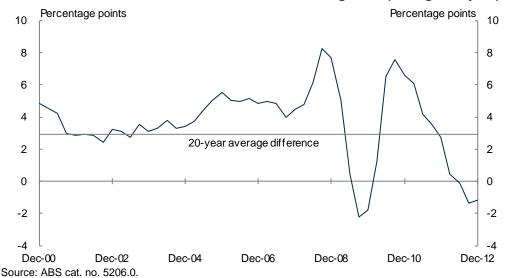


Chart 3: Difference between nominal and real GDP growth (through the year)

Notwithstanding some volatility in iron ore prices toward the end of 2012, non-rural bulk commodity prices have fallen over the past twelve months. Iron ore spot prices in early May 2013 are around 30 per cent lower than their peak in 2010-11, while thermal and metallurgical coal prices have fallen from peaks in 2008-09 and 2010-11 respectively. With overall export prices expected to continue to weaken over the forecast period, the terms of trade are expected to decline by 14 per cent from their peak in late 2011 to 2014-15, placing continued downward pressure on nominal GDP growth.

Domestic price pressures are also expected to remain subdued over the forecast period. Despite business investment reaching record highs as a share of GDP, growth in investment and producer prices has remained contained. Outside the resources sector, measures of capacity utilisation have been subdued since the global financial crisis, while the Australian dollar has remained elevated, making conditions unusually challenging for firms operating in the trade-exposed sectors of the economy. In response to these pressures, firms have been absorbing costs rather than passing on higher prices, which has weighed on profitability. However, many firms are also adapting to these pressures by improving productivity and adjusting business models. These acute competitive pressures are expected to persist over the forecast period, and will continue to place downward pressure on prices and nominal GDP growth.

Despite increased pressures from the economic transition and the high Australian dollar, Australia's economic fundamentals are expected to remain strong over the forecast period. Real GDP growth is forecast to remain close to trend at around 2¾ per cent in 2013-14 before rising to 3 per cent in 2014-15. The unemployment rate is expected to remain low and inflation is forecast to remain well contained.

The key international risk is the potential for a re-escalation of the euro area crisis, as highlighted by recent developments in Italy and Cyprus. Many developed economies are still struggling to achieve sustainable growth and reduce high rates of unemployment. In the euro area, more growth-oriented fiscal policies are warranted in those countries that have the capacity to implement them. More progress also needs to be made towards a banking and fiscal union, and to implement deep reforms to product and labour markets that would boost growth.

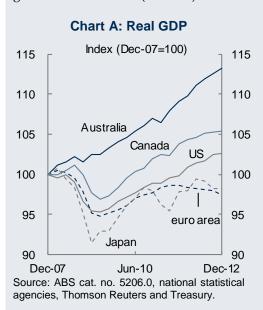
In the United States, the already fragile recovery is at risk if policymakers fail to raise the debt ceiling in a timely manner. There is also a need to develop a better pathway for fiscal policy, with more supportive short-term settings combined with the need for a credible and substantial medium-term fiscal consolidation plan. However, recent policy actions in the United States and Europe have meant that some of the worst crisis risks have abated since the end of 2012, and global conditions are expected to gradually improve.

Domestically, the transmission of volatility abroad to commodity prices presents a considerable risk to the forecast for nominal GDP growth. Australia's own economic transition presents both upside and downside risks to the domestic outlook, but a key risk is that the transition to new drivers of growth will be less than seamless, with the persistently high Australian dollar weighing heavily on firms in the trade-exposed sectors of the economy. Still, with a low unemployment rate, well-contained inflation, and low public debt, Australia embarks on this transition with some of the strongest economic fundamentals in the developed world.

#### **Box 1: International comparisons**

Australia's economy continues to outperform most other advanced economies in terms of economic growth and employment.

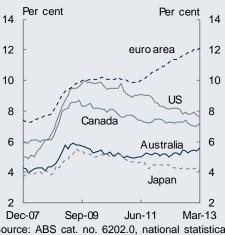
The Australian economy has grown by over 13 per cent since the end of 2007. By contrast, the United States economy has grown by around 31/4 per cent, and both the euro area and Japan are yet to make up lost ground following the global financial crisis (Chart A).



Australia's outperformance is expected to continue. By the end of the forecast period, the Australian economy is expected to be around 22 per cent larger than in late 2007. This growth is well above that expected from the United States (around 9 per cent), Japan (around 2 per cent) and the euro area (which is not expected to return to late-2007 levels by mid-2015).

The Australian labour market also continues to outperform that of many other advanced economies. While advanced economies many experienced significant rises in their unemployment rates during the crisis, the unemployment rate rose less than 2 percentage points in Australia before easing back to around 51/4 per cent through 2011 and 2012 (Chart B).

## **Chart B: Unemployment rates**



Source: ABS cat. no. 6202.0, national statistical agencies, Thomson Reuters and Treasury.

Australia's strong labour market performance over the past five years reflects the economy's resilience in the face of adverse global economic sound conditions, macroeconomic policy, and flexible working arrangements that have enabled the labour market to adjust through lower wage growth and a reduction in average hours worked rather than through job losses. The combination of these factors has resulted in Australia experiencing the significant economic and social costs seen in many other advanced economies.

## **Box 1: International comparisons (continued)**

In contrast, the level of employment in the United States and euro area has fallen significantly and is yet to return to pre-crisis levels (Chart C). While Australia has added around 950,000 jobs since the end of 2007, millions of jobs have been lost in other advanced economies, including more than 4 million in the euro area and around 2½ million in the United States. There are now around 200 million unemployed people worldwide, an increase of 28 million since 2007.

Despite a range of pressures from the weak global environment and high level of the dollar, the Australian unemployment rate has remained low, and at 5.5 per cent is lower than in every major advanced economy except Japan.



## **Summary of forecasts**

**World GDP growth** is expected to pick up gradually over the forecast period from its current subdued rate, as growth in emerging market economies picks up a little, the recovery in the United States continues to gradually gather momentum, and the euro area eventually recovers from recession. The world economy is forecast to grow by  $3\frac{1}{4}$  per cent in 2013, and by 4 per cent in both 2014 and 2015.

**Australia's major trading partners** (export weighted) are expected to grow at a robust rate over the forecast period, reflecting the ongoing rapid growth of emerging Asia. Major trading partner growth is forecast to be  $4\frac{1}{2}$  per cent in 2013 and  $4\frac{3}{4}$  per cent in both 2014 and 2015.

**Australia's real GDP** is forecast to grow by 2¾ per cent in 2013-14 and by 3 per cent in 2014-15. The main drivers of economic growth are expected to be non-rural commodity exports and household consumption.

**Household consumption** is expected to grow solidly at 3 per cent in both 2013-14 and 2014-15. This outlook is consistent with moderate growth in employment and wages, and improving, but subdued, growth in household wealth. The household saving ratio is expected to ease but remain elevated over the forecast period.

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**Dwelling investment** growth is expected to be above-trend over the forecast period, with low interest rates, rising dwelling prices, favourable demographics and tight rental market conditions supporting a pick-up in homebuyer demand. Dwelling investment is forecast to grow by 5 per cent in 2013-14 and 5½ per cent in 2014-15.

New business investment is expected to grow solidly in 2013-14, growing by  $4\frac{1}{2}$  per cent and reaching a record high share of GDP. Growth is expected to moderate in 2014-15 as resources-related investment detracts from growth, but this should be partly offset by recovering investment outside the resources sector. New business investment is expected to grow by 1 per cent in 2014-15.

**Public final demand** is expected to remain flat in 2013-14, before growing by ½ of a per cent in 2014-15, consistent with the fiscal consolidation underway across all levels of government.

**Exports** are expected to grow by 6½ per cent in 2013-14 and 7 per cent in 2014-15, driven by exceptional growth in non-rural commodity exports, as a number of large resources projects progressively enter the export phase. Non-commodity goods exports and services exports are expected to grow modestly, in line with the expected pick-up in demand for higher quality goods and services from emerging market economies.

**Imports** are expected to grow by 6 per cent in 2013-14 and by 3 per cent in 2014-15. Capital goods imports associated with the expansion of the LNG sector are expected to be a significant driver of the increase in 2013-14, though imports growth will slow as investment in the resources sector passes its peak.

The **terms of trade** are expected to decline by ¾ of a per cent in 2013-14 and 1¾ per cent in 2014-15, as increases in global supply, led by Australia, place downward pressure on some key non-rural commodity prices. The decline in the terms of trade reflects the ongoing transition underway in the resources sector, from a phase of high prices driving a rapid expansion in supply, to one of strong growth in export volumes.

The **current account deficit** is expected to widen slightly to 3¾ per cent of GDP in 2013-14 before narrowing to 3¼ per cent of GDP in 2014-15. The widening of the deficit in 2013-14 reflects continued strong growth in resources investment-related imports coupled with the expected decline in the terms of trade. The subsequent narrowing in 2014-15 reflects an improvement in the trade balance owing to strong growth in non-rural bulk commodity exports.

**Employment** growth is expected to be 1½ per cent through the year to the June quarter 2014 and 1½ per cent through the year to the June quarter 2015, as investment and growth pick up in the non-resources sectors of the economy. The **unemployment rate** is expected to drift up slightly to 5¾ per cent by the June quarter 2014 and stabilise around this rate through to the June quarter 2015. The **participation rate** is forecast to remain close to historical highs at around 65 per cent.

**Wage** growth is expected to remain subdued over the forecast period, consistent with the outlook for moderate employment growth. The **Wage Price Index** is forecast to grow 3½ per cent through the year to the June quarters of 2014 and 2015.

**Inflation** is expected to remain well contained, consistent with ongoing competitive pressures from the sustained high dollar and the moderate outlook for wages and employment. Both **Headline and underlying inflation** are forecast to be  $2\frac{1}{4}$  per cent through the year to the June quarters of 2014 and 2015.

**Nominal GDP** is expected to grow by 5 per cent in both 2013-14 and 2014-15, well below the 20-year average of 6½ per cent. This largely reflects the expected decline in the terms of trade and slightly below-trend growth in domestic prices.

Table 1: Domestic economy forecasts<sup>(a)</sup>

	Outcomes(b)		Forecasts	
	2011-12	2012-13	2013-14	2014-15
Panel A - Demand and output(c)				
Household consumption	3.2	2 1/2	3	3
Private investment				
Dwellings	-3.6	1/2	5	5 1/2
Total business investment(d)	20.8	10 1/2	4 1/2	1
Non-dwelling construction(d)	37.6	18 1/2	5	-2 1/2
Machinery and equipment(d)	10.1	1 1/2	2 1/2	5
Private final demand(d)	6.2	4	3 1/2	2 3/4
Public final demand(d)	2.3	- 1/2	0	1/2
Total final demand	5.3	3	2 3/4	2 1/4
Change in inventories(e)	-0.1	0	0	0
Gross national expenditure	5.2	3	2 3/4	2 1/4
Exports of goods and services	4.7	7	6 1/2	7
Imports of goods and services	11.8	5	6	3
Net exports(e)	-1.3	1/2	0	1
Real gross domestic product	3.4	3	2 3/4	3
Non-farm product	3.3	3	2 3/4	3 1/4
Farm product	9.0	-8	4	0
Nominal gross domestic product	5.0	3 1/4	5	5
Panel B - Other selected economic measures				
External accounts				
Terms of trade	0.4	-7 1/2	- 3/4	-1 3/4
Current account balance (per cent of GDP)	-2.7	-3 1/2	-3 3/4	-3 1/4
Labour market				
Employment(f)	1.2	1 1/4	1 1/4	1 1/2
Unemployment rate (per cent)(g)	5.1	5 1/2	5 3/4	5 3/4
Participation rate (per cent)(g)	65.3	65	65	65
Prices and wages				
Consumer price index(h)	1.2	2 1/2	2 1/4	2 1/4
Gross non-farm product deflator	1.7	0	2	1 3/4
Wage price index(f)	3.7	3 1/2	3 1/2	3 1/2

- (a) Percentage change on preceding year unless otherwise indicated.
- (b) Calculated using original data unless otherwise indicated.
- (c) Chain volume measures except for nominal gross domestic product which is in current prices.
- (d) Excluding second-hand asset sales between the public sector and the private sector.
- (e) Percentage point contribution to growth in GDP.
- (f) Seasonally adjusted, through-the-year growth rate to the June quarter.
- (g) Seasonally adjusted rate for the June quarter.
- (h) Through-the-year growth rate to the June quarter.

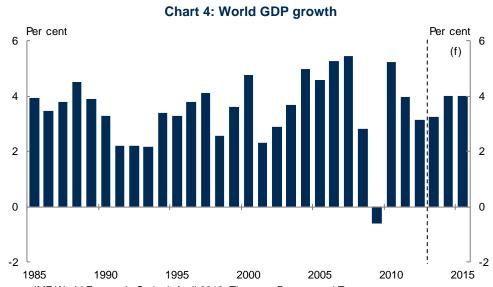
Note: The forecasts are based on several technical assumptions. The exchange rate is assumed to remain around its recent average level — a trade-weighted index of around 78 and a United States dollar exchange rate of around 103 US cents. Interest rates are assumed to move broadly in line with market expectations. World oil prices (Malaysian Tapis) are assumed to remain around US\$106 per barrel. The farm sector forecasts are based on an assumption of average seasonal conditions.

Source: ABS cat. no. 5206.0, 5302.0, 6202.0, 6345.0, 6401.0, unpublished ABS data and Treasury.

### THE OUTLOOK FOR THE INTERNATIONAL ECONOMY

Global financial market conditions have improved noticeably since late 2012 and global economic activity is expected to gradually strengthen over the forecast period. While acute crisis risks have abated due to policy actions in the United States and Europe, the recovery is fragile and downside risks remain. Many advanced economies face deep-seated challenges with weak growth, high unemployment and unsustainable public finances. It is likely that the uncertainty surrounding the prospects for a lasting resolution to the euro area's crisis, and the potential for renewed volatility in financial markets, will continue for some time. Growth in a number of advanced economies is also being constrained by their fiscal austerity measures. As such, global growth remains subdued, with the recovery only expected to strengthen noticeably from 2014 onwards.

Global economic growth is expected to gradually improve over the forecast period, as major economies experience a gradual pick-up in their growth rates. World GDP growth is forecast to be  $3\frac{1}{4}$  per cent in 2013, and 4 per cent in both 2014 and 2015 (Chart 4).



Source: IMF World Economic Outlook April 2013, Thomson Reuters and Treasury.

China's growth outlook remains positive, economic conditions in the United States are looking more encouraging, and the proactive policy stance Japan has taken since late 2012 will help support its growth, especially in the short term. However, the euro area recession has deepened and events in Italy and Cyprus have served as a reminder that the sovereign debt crisis is far from resolved. Unemployment in many advanced economies remains high and a number of these economies (including the United States and Japan) face the challenge of undertaking significant medium-term fiscal consolidation without undermining their recoveries. In the case of Japan, ensuring a

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sustainable return to growth will also require an extensive program of structural reform.

The growth of emerging market economies in 2012 was noticeably affected by the knock-on effects of recessions in Europe and Japan and slow growth in the United States. This was exacerbated by a slowing in domestic demand in some of the emerging market economies, particularly India. Despite the slowdown, growth in emerging Asia has remained relatively robust. The stabilisation in China's growth since mid-2012 is expected to have continuing spillover benefits to the rest of Asia, as will the improved outlook for the United States.

The economies of Australia's major trading partners are expected to grow at a robust rate over the forecast period, largely reflecting ongoing strong growth in emerging Asian economies. GDP growth in Australia's major trading partners (export weighted) is forecast to be  $4\frac{1}{2}$  per cent in 2013 and  $4\frac{3}{4}$  per cent in both 2014 and 2015 (Table 2).

Table 2: International GDP growth forecasts<sup>(a)</sup>

	Actuals	Forecasts		
	2012	2013	2014	2015
China	7.8	8	7 3/4	7 3/4
India(b)	4.0	5 3/4	6 1/2	6 1/2
Japan	2.0	1 1/4	1	1
United States	2.2	2	2 1/2	2 1/2
Euro area	-0.6	- 1/2	1	1 1/2
Other East Asia(c)	3.8	4 1/2	4 3/4	5
Major trading partners	4.1	4 1/2	4 3/4	4 3/4
World	3.2	3 1/4	4	4

<sup>(</sup>a) World, euro area, and other East Asia growth rates are calculated using GDP weights based on purchasing power parity (PPP), while growth rates for major trading partners are calculated using export weights.

Source: National statistical publications, IMF, Thomson Reuters and Treasury.

Economic conditions in China strengthened in the second half of 2012 after the Chinese authorities adopted more accommodative policy settings particularly in relation to credit. Total social financing — a broad measure of new finance activity — surged in the second half of 2012 and has remained strong in 2013. While real activity for the March quarter was weaker than expected given these favourable credit conditions, strong credit growth should provide an increasing impetus to economic activity over the remainder of the year. While this is expected to underpin economic growth of 8 per cent in 2013, a continued muted response in the real economy to the expansive credit conditions would present some downside risk to this forecast.

China's economic growth is expected to ease marginally to 7¾ per cent in both 2014 and 2015, in line with China's evolving medium-term growth potential. This

<sup>(</sup>b) Production-based measure of GDP.

<sup>(</sup>c) Other East Asia comprises the Newly Industrialised Economies of Hong Kong, South Korea, Singapore and Taiwan and the Association of Southeast Asian Nations group of five (ASEAN-5), which comprises Indonesia, Malaysia, the Philippines, Thailand and Vietnam.

lower, though still robust rate of growth reflects a view that the Chinese authorities will promote a pattern of economic growth that moves away from the very high rates of investment seen in the past. The prospects for more moderate growth also reflect the fading benefits of past reform and opening-up policies, and the projected easing in the growth of China's urban labour supply. Despite the expected moderation in Chinese growth, China's economy has grown by more than 40 per cent since 2008, and so China will continue making a very substantial contribution to global growth.

The risks to the outlook beyond the near term centre on the Chinese Government's ability to manage the difficult transition to a more sustainable pattern of growth. This includes addressing the growing pressures from the rapid growth in investment, which has been increasingly tilted towards investment projects with low rates of return. These pressures have seen growing indebtedness among local governments and signs of capital misallocation. Added to these internal risks for China are continued downside risks from the ongoing uncertainty among advanced economies. Nevertheless, the Chinese Government still has sufficient policy space to shelter the economy from any short-term adverse impacts.

Economic conditions in the euro area have deteriorated further. Forward-looking indicators for the core economies of Germany and France imply that activity remains weak at best, and the euro area periphery remains in deep recession. Economic sentiment and credit growth remain weak, unemployment continues to reach new euro-era highs, and ongoing fiscal austerity and private sector deleveraging will continue to drag on growth.

In contrast to the recessionary conditions in the euro area's real economy, the region's financial markets have calmed somewhat in recent months. Nevertheless, recent developments in Cyprus and Italy serve as a clear reminder that risks remain and that the crisis in the euro area is far from resolved. The widespread public reaction in many euro area countries to prolonged fiscal austerity and structural change highlights the large implementation risks the euro area faces to put in place the reforms needed to produce a lasting resolution to the crisis. The initial proposal for the official assistance program for Cyprus contained a levy on all depositors in Cypriot banks, including deposits insured under European law. While the levy on insured depositors was subsequently withdrawn, it still may have undermined confidence across the euro area, and created uncertainty about whether bank depositors in other troubled euro area economies could face similar measures. The eventual bail-in of uninsured bank depositors in Cyprus, and conflicting views over the design of a banking union, further point to the difficulty of coordinated euro area decision making in implementing the reforms necessary to resolve the crisis.

Given the ongoing deterioration in economic activity, and the range of policy challenges in restoring economic growth, recovery in the euro area is expected to be delayed and weaker than previously anticipated. Euro area GDP is forecast to record its third calendar year of negative growth since the onset of the global financial crisis

#### Statement 2: Economic Outlook

five years ago, with a contraction of  $\frac{1}{2}$  of a percentage point in 2013, before returning to modest growth in 2014 and 2015.

Fiscal issues continue to dominate the outlook in the United States. Congress came to an agreement on 1 January to avoid the majority of the 'fiscal cliff', averting a sharp fiscal tightening that would likely have pushed the economy back into recession. However, automatic expenditure reductions, which were initially delayed to 1 March, were subsequently allowed to be implemented in their entirety and will drag on already subdued growth. The independent non-partisan Congressional Budget Office estimates that GDP growth in 2013 would be roughly 1½ percentage points faster if not for the fiscal tightening currently being enacted. Accordingly, the United States economy is forecast to grow at 2 per cent in 2013, before picking up to  $2\frac{1}{2}$  per cent in both 2014 and 2015.

Abstracting from fiscal policy developments, the United States economy has held up reasonably well, with clear signs of underlying strength in the private sector economy. Private consumption and business investment — which have traditionally been key drivers of growth — have been solid over much of the past year. The housing sector continues to gather momentum with house prices consistently rising over the past year, and construction activity picking up strongly in late 2012. The housing sector could thus provide a welcome upside to growth prospects. A further positive sign is the improvement in the labour market, with employment growth over the past several months being relatively strong.

While the United States is expected to continue its gradual recovery, it faces a key near-term risk from the need to raise the federal government's legislated debt ceiling. If the debt ceiling is not raised in a timely manner this may trigger a re-emergence of financial market turbulence and may damage growth prospects for the United States and the global economy. While there have been positive developments in the labour market, unemployment levels are still elevated, and the long-term unemployed still account for around 40 per cent of total unemployment.

The near-term outlook for Japan has also become more positive in recent months. The new Japanese Government has brought with it a more flexible approach to fiscal policy. Monetary policy has also become much more stimulatory. The Bank of Japan has announced an aggressive unconventional monetary policy response, with the intention of using asset purchases to double the size of its balance sheet and achieve a new inflation target of 2 per cent within two years. The Bank of Japan's measures aim to put an end to 20 years of deflation and help spur an economic recovery. It will need to be complemented by much-needed and broad-ranging structural reforms, with further reforms due to be announced by the Japanese Government mid-year. The substantial depreciation of the yen over the past several months, while a source of contention, will also support Japan's growth.

India's economy experienced a marked slowdown over the course of 2011 and 2012, reflecting a variety of domestic structural constraints, such as persistently high

inflation, and widening fiscal and current account deficits, as well as weaker global growth. While growth in the Indian economy is expected to recover noticeably over the next two years, the extent of the recovery is likely to be impeded somewhat by various supply-side constraints, which may deter a stronger upswing in investment. A key downside risk to the outlook for India is the country's current account deficit, which could become unsustainable if capital flows reverse under unfavourable global or domestic circumstances.

While a number of Asian economies experienced a slowdown in 2012 due to weaker external conditions, the ASEAN-5 economies, particularly Indonesia, have continued to record strong growth driven by domestic demand. The highly trade-exposed Newly Industrialised Economies (NIEs) such as Korea and Taiwan were significantly affected by the subdued global environment in 2012. Looking ahead, the expected pick-up in global economic activity should see growth in the NIEs rebound over the forecast period.

Overall, forecasts are for a continuation of below-trend global growth this year before improving to around trend rates in 2014. Risks to the outlook, while more balanced than in 2012, are still tilted to the downside, with the euro area sovereign debt crisis the key risk to the global recovery.

The actions of the European Central Bank (ECB) continue to ease financial pressures in troubled euro area economies. However, on its own the ECB's actions cannot improve the region's medium to long-term growth prospects. With the euro area's recession deepening, the European populace is increasingly weary of enforced austerity, economic stagnation, very high unemployment and deep structural reforms. The prospects for European governments implementing the measures necessary to resolve the crisis and restore growth remain highly uncertain. While clearly a challenge, further progress will need to be made on achieving a fiscal and banking union and on structural reforms if the euro area is to return to growth. Given ongoing uncertainty about the prospects for such reform, the threat of contagion from the euro area sovereign debt crisis is likely to persist.

With Europe's sovereign debt crisis and the debt ceiling debate in the United States both far from resolved, the current state of relative calm in global financial markets could easily be disrupted. The periodic bouts of financial market volatility since the global financial crisis (Chart 5) are a reminder that confidence remains fragile with significant downside risks to the global economic outlook. With many advanced economies under significant fiscal constraints, and policy actions by major advanced economy central banks already very accommodative and unconventional, there is very limited space to respond to any further negative shocks to the global economy.

Chicago Board Options Exchange Market Volatility Index (VIX) Index Index 90 90 60 60 30 30 n n May-05 May-07 May-09 May-11 May-13

Chart 5: Financial market volatility expectations

Note: The VIX shows the market's expectations of volatility in the S&P 500 index over the next 30 days. Source: Bloomberg.

Indeed, the unconventional monetary policy actions being undertaken may themselves carry risks. The size of the stimulus being implemented by the Bank of Japan, while warranted by circumstances, necessarily involves risks including to financial stability and capital flows. The Bank of Japan is also undertaking this stimulus in an environment of unprecedented levels of Japanese public debt, with the IMF projecting Japan's net public debt to exceed 150 per cent of GDP towards the end of the decade. The Japanese Government needs to put in place an integrated growth package to ensure monetary and fiscal stimulus feeds into sustained improvement in the real economy.

In China, there are risks around how the authorities manage the difficult transition to a new growth model, which will require a formidable set of reforms including to China's financial system and, more broadly, the way in which capital is allocated across the economy. However, so far China has managed the transition reasonably well, and China has a proven capacity to support growth in the event of a more substantial slowdown.

The relative stability of global oil prices since the start of 2013 is consistent with a global outlook that remains relatively subdued in the short term, and with oil supply in both Organisation of Petroleum Exporting Countries (OPEC) and non-OPEC countries being maintained. However, if political tensions in the Middle East escalate, a sharp rise in oil prices could occur. A significant and sustained oil price shock would pose an additional risk to an already uncertain global economic outlook.

### THE OUTLOOK FOR THE DOMESTIC ECONOMY

## **Demand and output**

The Australian economy is expected to grow solidly over the next two years with real GDP growth forecast to be close to trend at 2¾ per cent in 2013-14, before increasing to 3 per cent in 2014-15 (Chart 6).

The economy will undergo a substantial transition over the forecast period. A record surge in resources investment is nearing its peak and growth will increasingly be supported by rising export volumes and a pick-up in investment outside the resources sector. The level of economic activity is also expected to be supported by continued strong investment in the resources sector and solid growth in household consumption.

Conditions are expected to remain uneven across the economy, with the transition underway occurring alongside ongoing pressure from the sustained high Australian dollar and continued household caution around debt accumulation. The sustained strength of the Australian dollar continues to weigh heavily on a number of sectors, particularly those that are trade-exposed, and has forced many firms to explore new markets and business practices to meet this competitive pressure. Firms have also responded by focussing on productivity and containing costs, and many have accepted substantially tighter profit margins.

While conditions will remain uneven, economic growth outside the resources sector is expected to pick up over the forecast period, supported by low interest rates and emerging opportunities presented by the shift in global growth towards Asia.

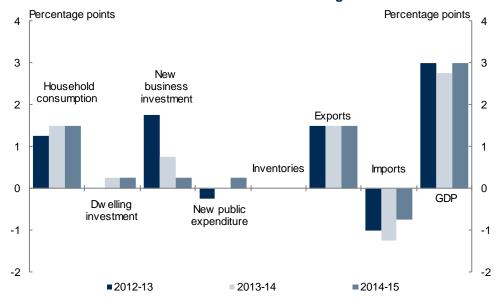


Chart 6: Contributions to real GDP growth

Note: Business investment and public expenditure are adjusted for second-hand asset sales between the public sector and the private sector.

Source: ABS cat. no. 5206.0 and Treasury.

## **Household consumption**

Household consumption is expected to grow solidly over the forecast period and provide a platform for recovery in some non-resources parts of the economy. Consumption growth is forecast to rise to 3 per cent in both 2013-14 and 2014-15.

Consumer confidence has improved, household incomes are growing moderately, and household net worth has grown. Interest rate cuts over the past 18 months have supported the recent improvement in consumer confidence, and improved global financial market sentiment along with recent growth in equities markets and house prices are supporting growth in household wealth. Recent strong growth in retail trade is also indicative of the recovery underway in household consumption.

Still, while growth in retail trade volumes has been strong, weak growth in retail prices reflects the competitive challenges faced by retailers from lower import prices and changing consumer behaviour (Chart 7). Household spending patterns have shifted, with the continued fall in the discretionary share of household expenditure adding to the challenging conditions faced by retailers over recent years. Households have also reduced their appetite for debt and increased their level of saving since the crisis, even as economic conditions have improved (Box 2). Consequently, while the growth in consumption is forecast to be solid, it is not expected to be as strong as that seen prior to the global financial crisis. The household saving rate is forecast to remain close to current levels, though ease a little as global conditions improve and confidence picks up.



## **Dwelling investment**

Dwelling investment is forecast to grow by 5 per cent in 2013-14 and  $5\frac{1}{2}$  per cent in 2014-15, supporting construction and related activity in the non-resources sectors of the economy. The recovery in dwelling investment is expected to be supported by continued low interest rates and other favourable market fundamentals, such as rising dwelling prices, high rental yields and low vacancy rates.

Favourable demographics are also expected to drive a pick-up in homebuyer demand. Over the past decade, Australia's population growth has often outpaced the growth in the stock of dwellings. Still, this demand is expected to be tempered by continued household caution towards debt accumulation, as well as ongoing supply constraints associated with the high cost of development, land release restrictions, and complex planning and approval processes (Box 2).

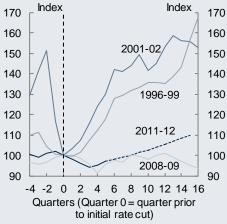
Growth is expected to pick up in both the medium-to-high density sector and the detached housing sector over the forecast period. The medium-to-high density sector has been the key source of growth in dwelling investment over the past year, as homebuyers increasingly look to make more economical use of land. There are also encouraging signs that growth in the detached housing sector is beginning to recover. Detached housing investment recorded its second consecutive quarter of positive growth in the December quarter 2012, supporting the strongest quarterly rate of growth in dwelling investment in over two years.

#### Box 2: Dwelling investment response to interest rate cuts

The Reserve Bank of Australia's (RBA) official interest rate cuts since late 2011 have seen the average standard variable mortgage rate drop to around 6.2 per cent. This is a decrease of around 240 basis points since November 2007, saving a household with a \$300,000 mortgage more than \$5,500 a year.

After four quarters of contraction, there are signs that the dwellings sector has begun to respond to the reduction in interest rates, with positive growth recorded in the first half of 2012-13. Consistent with near-term forward indicators and strong economic fundamentals (including favourable demographics, low vacancy rates and high rental yields), the recovery is expected to gain momentum over the next two years. However, growth is not expected to be as strong as that seen during previous interest rate easing cycles (Chart A).

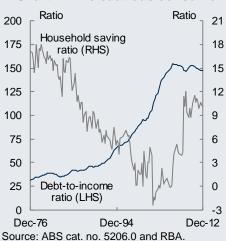
Chart A: Dwelling investment response to easing cycles



Source: ABS cat. no. 5206.0, RBA and Treasury.

The sector's relatively subdued response to the current cycle reflects a number of factors. First, households have taken a more cautious approach to saving and borrowing since the crisis, even as economic conditions have recovered. During this period consumption growth has moderated, while at the same time disposable income has grown solidly. This has seen the household saving ratio rise sharply and remain elevated relative to recent rates of saving, which included a brief period of dissaving in the early 2000s (Chart B).

Chart B: The cautious consumer



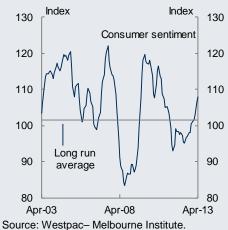
However, when the recent increase in the saving rate is compared to a longer time period, the current level of saving appears consistent with more normal household behaviour. The sustained period of decline which began in the 1980s reflected the trend towards the incorporation of businesses and exceptionally strong household credit growth, which was in part driven by financial deregulation and the economy's transition to a low inflation

## Box 2: Dwelling investment response to interest rate cuts (continued)

environment. Reflecting a marked reduction in credit growth from the double-digit rates experienced in the 1990s and early 2000s, the level of household debt as a share disposable income has stabilised. Households are responding to the reduction in interest rates increasing their principal mortgage payments and paying down existing debt, and have become less inclined to take out new housing loans. While the lower interest rates are expected to encourage credit growth, it is unlikely to return to the rates seen prior to the crisis.

The change in household behaviour since the crisis has been largely driven by heightened global uncertainty, which has continued to weigh on households' concerns about their ability to service debt. However, consistent with the nascent recovery in dwelling investment, there have been improvements in household confidence, with a turnaround in consumer sentiment at the start of the year (Chart C).

Chart C: Consumer sentiment (three month moving average)



A second factor contributing to the subdued dwellings recovery is the moderation in dwelling prices over the past two years. Following average annual growth of almost 10 per cent in the 2000s, which coincided exceptionally strong growth household credit, dwelling prices fell by an annual average of 2.1 per cent in 2011 and 2012. Slower growth in dwelling prices drove expectations for capital gains, dampening both owner-occupier and investor demand.

Supply constraints (particularly land supply restrictions) have also weighed on the dwellings recovery. The trend towards higher density living partly reflects this constraint, as homebuyers increasingly make more economical use of land. Nevertheless, with a number of state government proposals to boost housing supply recently announced, supply constraints could ease over the forecast period.

Dwelling prices have begun to increase and a number of survey measures point to the expectation of further recovery over the next two years. Coupled with an expectation of continued low interest rates and state government efforts to target supply constraints, the improving outlook is likely to encourage further investment over the forecast period.

#### **Business investment**

Over recent years, new business investment has been underpinned by record volumes of investment in the resources sector. Total resources investment surged to over \$100 billion in 2011-12, more than 600 per cent higher than it was a decade ago. Elsewhere in the economy, investment has been modest with an uncertain global outlook, the high Australian dollar and domestic competitive pressures all weighing on activity.

Still, the outlook for business investment remains solid, with new business investment forecast to grow by  $4\frac{1}{2}$  per cent in 2013-14 and 1 per cent in 2014-15, and peak at a record 19 per cent of GDP in 2013-14 (Chart 8).

The pipeline of resources investment is substantial with over \$260 billion of investment either committed to or under construction, underpinned by strong ongoing demand for Australia's resources from emerging market economies in Asia. Total resources investment, including exploration and development, is expected to peak at a record 8 per cent of GDP in 2013-14, before easing over the rest of the forecast period. Historically high levels of resources investment are expected through to at least the middle of the decade.

Non-resources related investment is expected to strengthen over the forecast period, stimulated by low interest rates and a broadening of economic growth. Consistent with this, business credit growth should pick up from current below-average rates. In recent years, business credit has failed to keep pace with resources dominated investment growth as resource companies have relied primarily on internal funding to support their investment.

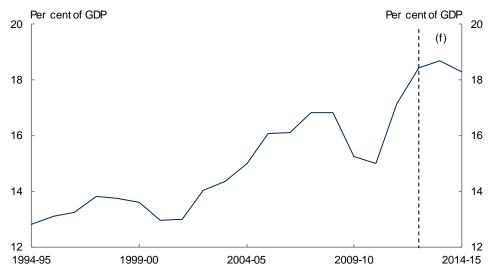


Chart 8: New business investment as a share of GDP

Note: Adjusted for second-hand asset sales between the public sector and the private sector. Source: ABS cat. no. 5206.0 and Treasury.

New engineering construction is expected to remain robust in the near term. After surging by 51 per cent in 2011-12, new engineering construction is forecast to grow by 24 per cent in 2012-13 and 6 per cent in 2013-14. As spending on a number of major projects passes its peak, new engineering construction is expected to ease, falling by  $4\frac{1}{2}$  per cent in 2014-15, but remaining near historical highs (Box 3).

Investment in new machinery and equipment is expected to grow modestly in 2013-14 before strengthening in 2014-15, reflecting the subdued but strengthening outlook for the non-resources sector. Business confidence and conditions continue to be affected by global uncertainty, with survey measures indicating some weakness in capital expenditure intentions for the non-resources sector in the near term. However, low interest rates and improving conditions in the non-resources sectors are expected to support a modest rebuilding of capital stocks. New machinery and equipment is forecast to grow by  $2\frac{1}{2}$  per cent in 2013-14 and 5 per cent in 2014-15.

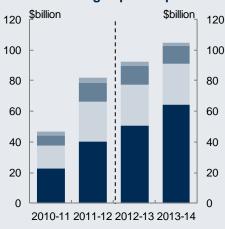
Continued uneven conditions in the non-resources-related sectors of the economy are expected to weigh upon investment in the commercial property sector over the next two years, with underlying demand in the sector likely to remain subdued. Investment in new non-residential buildings is expected to grow by  $1\frac{1}{2}$  per cent in 2013-14 and  $3\frac{1}{2}$  per cent in 2014-15.

#### **Box 3: Resources investment and exports**

Over the past decade, the rapid development of economies in the Asian region has had a transformative impact on the Australian economy, driving the largest resources boom in Australia's history. Strong demand for resources propelled commodity prices to record levels, supporting rapid expansion of global energy and minerals supply. While this investment phase is nearing its peak, the record expansion of production and exports will continue to support growth well into the decade.

The initial surge in resources investment was driven by coal and iron ore projects, largely to meet demand for steel in China. In recent times, the majority of resources investment has been in LNG projects to support rising global demand for energy (Chart A).

**Chart A: Mining capital expenditure** 



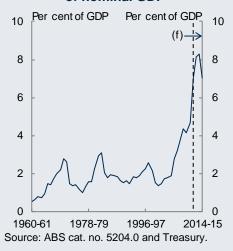
- Other mining and services
- Coal Mining
- Metal Ore Mining
- Oil and Gas Extraction

Note: Estimates adjusted using five year average realisation ratios for the mining sector. Source: ABS cat. no. 5625.0 and Treasury.

The ramp-up in mining capital expenditure is driving investment in the resources sector towards new highs. In 2012, resources companies invested over \$100 billion on buildings and structures, equipment and exploration.

As these facilities move towards their production phase, the rate of construction will slow significantly. Resources investment is expected to peak sometime in 2013-14, at an all-time high of 8 per cent of GDP, up from only 2 per cent of GDP a decade before (Chart B).

Chart B: Mining investment, share of nominal GDP

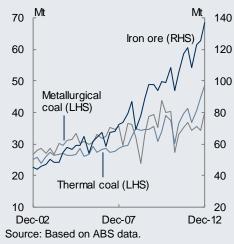


The exact timing of the peak in investment is uncertain, owing to a combination of factors including the rate of progress on existing projects, the extent and nature of any cost overruns and the outcome of final investment decisions on projects under consideration.

## Box 3: Resources investment and exports (continued)

The export phase of the boom has been underway since the late 2000s. Coal and iron ore exports started to pick up considerably in late 2009, driving growth in non-rural commodity exports of 9 per cent in 2009-10. Although strong export growth was interrupted by the severe flooding in 2010-11, non-rural commodity export volumes have since recovered. In 2011-12, iron ore exports 16 per cent while coal exports rose 4 per cent (Chart C).

Chart C: Iron ore and coal volumes (orig.)



Iron ore exports are forecast to increase by more than 40 per cent over the next three years, with total volumes reaching double their 2008-09 level in 2014-15. Coal export volumes are also expected to increase significantly, growing by almost 35 per cent over the same period to reach volumes around 60 per cent higher than in 2008-09.

While new LNG facilities will start to enter into production from around

2014-15, the majority of the increase in LNG export capacity falls outside of the forecast period. The Bureau of Resources and Energy Economics (BREE) is forecasting LNG exports to grow by 117 per cent between 2014-15 and 2016-17 (Chart D) with Australia expected to become the world's largest LNG exporter by the end of the decade.

**Chart D: LNG exports** 



As the peak of the investment phase passes, the resources sector will transition towards a record expansion in production and exports. Other resource rich countries have also seen a response to strong demand commodities in their resources sectors. Together with increased export capacity from Australia, these increases in global supply are expected to result in a gradual overall decline in commodity prices over medium-term. However, the impact of lower export prices on Australia's trade be offset by balance will combination of higher export volumes and less demand for imported capital to build resources projects.

#### Public final demand

Public final demand is expected to remain flat in 2013-14, before growing by a subdued  $\frac{1}{2}$  of a per cent in 2014-15, consistent with continuing fiscal consolidation across all levels of government.

## **Exports and imports**

Over the next two years, record levels of resources investment will generate considerable new production and export capacity in the resources sector. As this capacity comes on line, non-rural commodity exports are forecast to increase strongly. Between 2011-12 and 2014-15, non-rural commodity exports are expected to grow by over 30 per cent. This will underpin strong growth in total exports, which are forecast to increase by  $6\frac{1}{2}$  per cent in 2013-14 and 7 per cent in 2014-15.

Iron ore export volumes are expected to grow strongly, with iron ore mining projects in the Pilbara region increasingly adding to production as expansions come online. Iron ore exports are expected to grow by 13 per cent in 2013-14 and 12 per cent in 2014-15. Coal exports are also expected to grow strongly, by 12 per cent in 2013-14 and 10 per cent in 2014-15. Towards the end of the forecast period, LNG exports are forecast to start growing rapidly as the first of the large export projects in Queensland and Western Australia enter production. Exports of LNG are forecast to grow by 31 per cent in 2014-15. Overall, non-rural commodity exports are forecast to grow by 9 per cent in 2013-14 and 9½ per cent in 2014-15.

Rural exports are forecast to be little changed in 2012-13. Drawdowns on inventories accumulated in 2011-12 are expected to support rural export volumes despite slightly weaker production owing to less favourable conditions for the recent winter crop. Exports are expected to remain around their 2012-13 levels in the following two years, with a return to average seasonal conditions in 2013-14 allowing stronger production volumes but reducing stock drawdowns.

Notwithstanding the high Australian dollar, non-commodity goods exports are expected to grow modestly over the next two years, reflecting robust economic growth in Australia's major trading partners. Non-commodity goods exports are expected to grow by  $4\frac{1}{2}$  per cent in 2013-14 and 4 per cent in 2014-15.

Services exports are expected to return to growth this year after an extended period of weakness following the global financial crisis. Recent strength in overseas arrivals suggests a more positive outlook for inbound tourism. Short-term visitor arrivals returned to growth in 2012 and are now at record levels, with over six million visitors entering Australia over the past year. The international student sector has also shown signs of a recovery following a significant contraction over the past three years. Services exports are forecast to grow by 1½ per cent in 2013-14 and 2½ per cent in 2014-15.

Imports are forecast to remain at elevated levels over the next two years, consistent with the expected continued strength in import-intensive investment in the resources sector. The resources investment boom is expected to continue driving significant demand for imports in 2013-14, particularly around LNG construction. Away from the resources sector, imports of consumption goods are expected to grow solidly, as higher consumer confidence takes hold and the high Australian dollar continues to hold down the price of imported goods. Total import volumes are forecast to grow by 6 per cent in 2013-14 and 3 per cent in 2014-15.

#### Terms of trade

The terms of trade have fallen 17 per cent from their peak in September 2011. While the continued expansion in global supply is expected to lead to further falls in iron ore prices, these are expected to be more gradual than previously anticipated, with the average grade of iron ore exported from Australia declining less rapidly than previously forecast. Treasury forecasts of the prices of key commodity exports are outlined in Box 4. The terms of trade are expected to decline 3/4 of a per cent in 2013-14 and 1¾ per cent in 2014-15 (Chart 9).



**Chart 9: Terms of trade** 

Source: ABS cat. no. 5206.0 and Treasury.

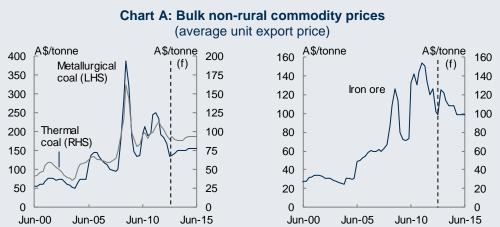
## **Box 4: Bulk commodity prices**

Treasury forecasts commodity prices by drawing on consensus forecasts, BREE forecasts, commodity price futures, Treasury liaison and analysis. Treasury's forecasts of iron ore, metallurgical coal and thermal coal export prices are consistent with private sector forecasts (Chart A).<sup>1</sup>

Prices for Australia's key non-rural commodity exports continue to be highly volatile, with falls in 2012 weighing heavily on the terms of trade, nominal GDP and tax receipts. The volatility has continued into 2013 with recent declines in the price of some commodities, including gold and copper. If these falls are sustained, they will place further downward pressure on the terms of trade.

Iron ore is a key input to steel production and its price reflects global demand for steel. Seasonally high Chinese steel demand and ore stocking by Chinese steel mills are expected to continue to support iron ore prices during the first half of 2013. Nevertheless, the substantial increase in iron ore supply (particularly from Australia) and high global steel inventories are expected to lead to a decline in prices in the second half of 2013. Further increases in supply are expected to place downward pressure on prices over the forecast period.

The price of metallurgical coal has diverged from the iron ore price in recent quarters, despite it also being a key input to steel production. Prices of both metallurgical coal and thermal coal (which is used in electricity generation) appear to more widely reflect marginal producer costs, and are expected to remain around their current levels. with increasing production costs expected to lead to only a modest increase in prices over the forecast period.

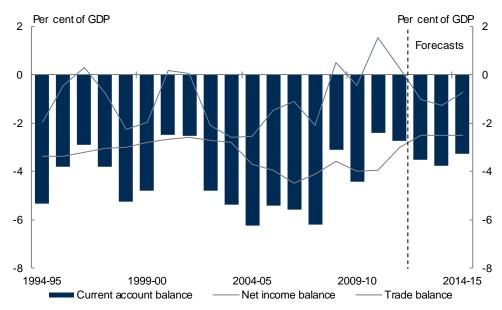


Source: Based on ABS data and Treasury. Export prices differ from the more-widely quoted spot prices. Export prices reflect the actual price foreigners pay for our exports and reflect the quality of the resource being provided (such as the iron ore content), long-term contracts, and exchange rate movements.

<sup>1</sup> Previously, Treasury could not publish forecasts which relied more directly on information provided by individual firms on an in-confidence basis.

## **Current account balance**

The current account deficit is expected to widen slightly from  $3\frac{1}{2}$  per cent of GDP in 2012-13 to  $3\frac{3}{4}$  per cent of GDP in 2013-14, before narrowing to  $3\frac{1}{4}$  per cent of GDP in 2014-15 (Chart 10)(Box 5). This profile mirrors the trade deficit, which is expected to widen from 1 per cent of GDP in 2012-13 to  $1\frac{1}{4}$  per cent of GDP in 2013-14, before narrowing to  $3\frac{1}{4}$  of a per cent of GDP in 2014-15. The narrower trade deficit reflects the outlook for sustained strong export growth and weaker import growth. The net income deficit is forecast to remain at  $2\frac{1}{2}$  per cent of GDP over the forecast period. Data for the past year suggest that the net income deficit has been widening more slowly than had been expected, and this has been reflected in an adjustment to the forecast.



**Chart 10: Current account balance** 

Source: ABS cat. no. 5302.0 and Treasury.

## Box 5: Australia's increasingly robust external funding position

Australia has been a net importer of foreign capital for more than 200 years. Foreign capital has financed expansions in the productive base of the economy that have enabled us to sustain higher rates of economic growth and faster improvements in living standards. That Australia has been able to sustain this gradual accumulation of net foreign liabilities reflects both our attractiveness as an investment destination and confidence foreign investors place in our ability to meet our external obligations.

Nevertheless, dependence on foreign sources of capital does entail some risk. The global financial crisis has shown that severe dislocations in external funding markets can, even if only for a short period, impede the ability of even the most creditworthy of borrowers to obtain funding. This box surveys the drivers of recent and likely future developments in our current account, and the robustness of our external funding position. The conclusion is that, as the private sector's call on international funding has fallen, so too has the risk profile of our foreign liabilities.

The current account balance (CAB) is typically expressed as the sum of the balance on our trade in goods and services (the trade balance) and the net income balance, which is the net flow of payments (primarily interest and profits) on our stock of net foreign liabilities. Australia has historically run a deficit on both the trade and net income balance, although there have

been periods when the trade balance has been positive.

The current account deficit (CAD) also represents the extent to which Australia draws on foreign saving to portion of national that investment that is not funded by domestic national saving. important to recognise that our CAD is not a reflection of low national saving. Indeed, Australia's national saving rate has risen steadily since the early 2000s and is high relative to the major advanced economies (Chart A). Rather, it reflects even higher levels of investment which have been directed at expanding the economy's productive capacity, most recently in the resources sector.

# Chart A: Gross saving and investment



The payoff from recent investments in the resources sector has underpinned a substantial improvement in the trade balance over recent years. This improvement in the trade balance

## Box 5: Australia's increasingly robust external funding position (continued)

has seen the CAD narrow to around 3 per cent of GDP, after averaging around 6 per cent of GDP in the years leading up to the global financial crisis. This improvement is expected to be sustained over the forecast period.

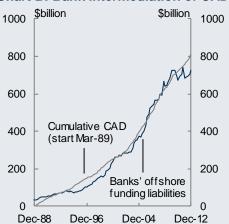
As our demand for foreign capital has fallen, there has also been a material shift in both the form and sectoral composition of those capital inflows. Prior to the global financial crisis, the dominant form of net capital inflow was portfolio debt — mostly debt accumulated by the household and non-financial corporate sectors, intermediated via the banking system.

However, an extended period of balance sheet consolidation has seen the household sector go from being a significant net borrower in the years before the crisis to a significant net lender. While still a net borrower in aggregate, the non-financial corporate sector has also increased its use of internally-generated funding (retained earnings), particularly in the resources sector. Since a large proportion of the resources sector is foreign owned, much of this internally-generated funding enters as an inflow on the financial account of the balance of payments. This form of financing, and direct equity investment generally, is typically regarded as a more stable funding source than portfolio investment.

As a consequence of this reduced demand for intermediated finance, our banks have generally been net *repayers* of their total offshore liabilities since mid-2010. Indeed, whereas the evolution of our accumulated CADs

has historically mirrored that of banks' offshore liabilities, recent years have seen a marked divergence (Chart B).

Chart B: Bank intermediation of CAD



Note: Offshore funding liabilities are total offshore liabilities less offshore derivatives liabilities. Source: ABS cat. no. 5232.0 and 5302.0.

Since the crisis, Australian banks have also reduced their exposure to roll-over risk by lengthening the average term of their wholesale debt liabilities, which has seen a substantial lengthening in the maturity profile of our overall foreign debt (Chart C).

Chart C: Foreign debt liabilities

Residual maturity basis \$billion \$billion 1000 1000 800 800 600 600 Greater than 1 y 400 400 Up to 1 yr 200 200 n Dec-96 Dec-12 Dec-04 Source: ABS cat. no. 5302.0.

## Labour market

Total employment has grown by around 165,000 people over the past year, and around 950,000 people since the end of 2007. As a result of this strong jobs creation, Australia's unemployment rate of 5.5 per cent is significantly below that of the United States and less than half that of the euro area, and remains one of the lowest in the developed world.

Australia's strong employment growth over the past five years has been supported by the resources-related sectors and some services sectors such as health care and education (Chart 11), although demand for labour in the mining sector has eased from its 2012 peak. In contrast, subdued global conditions, the sustained high Australian dollar and cautious behaviour by consumers have weighed on hiring decisions in other parts of the economy such as manufacturing and retail trade. Firms have also reacted to uneven economic conditions by reducing the average number of hours employees work each week, which has helped alleviate the impact of uneven demand on employment.

-2.0 -1.5 -1.0 -0.5 0.0 0.5 1.0 2.0 Percentage points Health Care and Social Assistance Professional, Scientific and Technical Services Education and Training Agriculture, Forestry and Fishing Other Services Retail Trade Manufacturing Percentage points 0.0 -2.0 -1.5 -1.0 -0.5 0.5 1.0 1.5

Chart 11: Change in employment share — November 2007 to February 2013

Note: This chart shows the four industry categories with the largest increase in employment share since November 2007, and the four categories with the largest decrease over the same period. Source: ABS cat. no. 6291.0.55.003 and Treasury.

Employment growth is expected to remain moderate, at  $1\frac{1}{4}$  per cent through the year to the June quarter 2014, with the persistently high dollar producing challenging conditions in some labour intensive sectors of the economy, such as manufacturing and tourism. Employment growth is then expected to strengthen to  $1\frac{1}{2}$  per cent through the year to the June quarter 2015 as investment and growth pick up in the non-resources sectors of the economy. Over 350,000 jobs are expected to be created over the forecast period.

The participation rate has declined since November 2010, falling around ¾ of a percentage point. This is a reversal of the upward trend seen over much of the 2000s (Box 6), and largely reflects demographic drag as a greater number of baby boomers reach retirement. Despite these falls, the aggregate participation rate continues to be high in historical terms, and is expected to remain at around 65 per cent over the next two years.

With the resources sector transitioning to the less labour intensive production phase and the high dollar still weighing on many sectors, the unemployment rate is expected to drift up slightly to 5¾ per cent by the June quarter 2014, and stabilise there through 2014-15. Despite this slight increase, Australia's unemployment rate is expected to remain one of the lowest in the developed world.

#### Box 6: The participation rate

The participation rate (or proportion of people aged 15 years and over who are either working or willing and available to work) rose over much of the 2000s. However, since its peak of 65.9 per cent in late 2010, it has gradually declined (Chart A), reflecting a range of demographic factors, social trends and the impact of the economic cycle.

**Chart A: The participation rate** 



The most significant factor weighing on participation is Australia's ageing population, resulting in fewer potential workers as a share of the total population. The 2010 Intergenerational Report projects that the participation rate will fall from its current level of around 65 per cent to less than 61 per cent by 2049-50. This is the equivalent of around 900,000 people leaving the labour force.

This demographic change is already having an effect, with the changing age distribution accounting for around 80 per cent of the decline in the participation rate since 2010.

In particular, the increase in those aged 65 and over as a share of the working-age population (aged 15 and over) has accelerated in recent years (Chart B), resulting in a higher proportion of workers reaching retirement age.

Chart B: 65+ share of population aged 15 or over



However, a range of longer-term factors have helped boost participation, offsetting the impact of the ageing population for much of the 2000s.

Factors such as improved health outcomes and a shift away from jobs involving manual labour have allowed people to delay retirement and prolong their working lives. As a result, the participation rate for those aged 55 and over has trended upwards. However, as participation among older people remains well below that of other cohorts, this has only partially offset the impact of population ageing.

Increased education and changing social attitudes have resulted in people

# Box 6: The participation rate (continued)

having greater opportunities and attachment to the labour market. This continued to boost participation during the 2000s, particularly among women (Chart C).

This longer-term shift has been facilitated by the increased availability of flexible working arrangements and access to childcare, allowing females with young children to work part time when in previous decades they may not have participated in the workforce.

Chart C: Participation rate — females aged 25-54



The terms of trade boom and strong performance of the Australian economy also attracted potential workers into the labour market over much of the 2000s, with participation rates in the resources states of Western Australia and Queensland increasing significantly.

However, employment growth has been uneven since the global financial crisis as a result of weak global conditions, the sustained high Australian dollar and cautious consumer behaviour.

It is likely that potential workers in industries have become discouraged and left the labour force, contributing to the decline in the participation rate since 2010. This may have affected younger people, who typically have less attachment to the labour market, are more likely to be engaged in study, and gravitate towards those sectors that have been disproportionately affected by the crisis and weak global conditions. Many young people have likely also advantage of increased opportunities to pursue tertiary study.

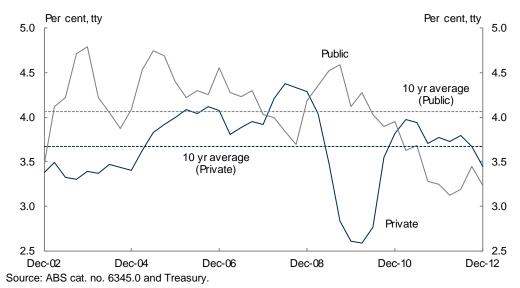
On the other hand, the crisis may have boosted participation by older workers, as they delayed retirement in order to rebuild wealth and maintain a desired standard of living. This effect could be waning as asset and financial markets improve, with the participation rate of older workers being broadly flat over the past year.

Over the forecast period, there may be some upward pressure on participation as the non-resources sectors take over as the engine of economic growth and employment, encouraging potential jobseekers to look for work and helping offset downward pressure from demographic change. In the longer-term, the participation rate will continue to be driven lower by the ageing of the population. However, Government policies in areas such as education, incentives to work, and childcare affordability will support participation in the workforce.

# **Wages**

Wage growth moderated during 2012. Growth in private sector wages was slightly below its 10-year average during the second half of the year, and public sector wage growth remained weak, consistent with fiscal consolidation at all levels of government (Chart 12). Wage growth is expected to remain contained over the next two years in line with the outlook for moderate employment growth and inflation within the lower half of the Reserve Bank's target band.

The Wage Price Index is forecast to grow 3½ per cent through the year to the June quarters of 2014 and 2015.



**Chart 12: Growth in Wage Price Index** 

# **Consumer prices**

Consumer price inflation was subdued in 2012, as the high level of the exchange rate held down prices of imported goods and, together with uneven domestic demand, increased competitive pressures on firms across the economy to pass on low prices. Prices for tradable goods and services have been especially weak, falling by 0.2 per cent over the past year, while prices of non-tradables grew by 4.2 per cent. The weakness in tradables inflation highlights the significant effect the persistently high Australian dollar is having on prices in the most competitive parts of the economy.

The pressures from the high Australian dollar are expected to continue over the forecast period, with subdued wage growth and continuing productivity growth also expected to contain inflation. Headline and underlying inflation are expected to ease to  $2\frac{1}{4}$  per cent through the year to the June quarters of 2014 and 2015 (Chart 13).

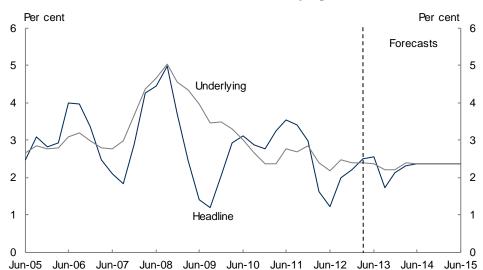


Chart 13: Headline and underlying inflation

Note: The underlying inflation measure is the average of the quarterly growth rates of the trimmed mean and weighted median.

Source: ABS cat. no. 6401.0 and Treasury.

#### **Incomes**

The outlook for nominal GDP growth remains subdued following unusual weakness in 2012-13. Nominal GDP is forecast to grow by 5 per cent in both 2013-14 and 2014-15, below its 20-year average of  $6\frac{1}{2}$  per cent. The outlook reflects the expected decline in the terms of trade and subdued domestic price growth over the forecast period (Chart 14). Nominal GDP is distributed throughout the economy mainly as compensation of employees, gross operating surplus and gross mixed income.

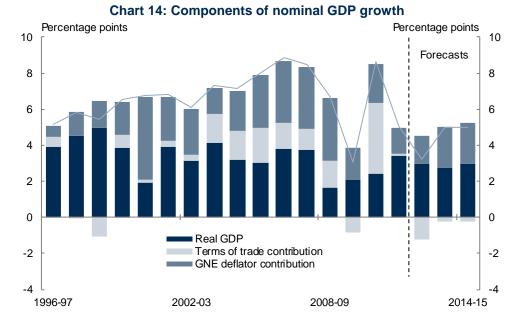
Gross operating surplus (the National Accounts measure of profit) is forecast to decline by ¾ of a per cent in 2012-13 before recovering to grow by 4¾ per cent in 2013-14 and 5½ per cent in 2014-15, remaining below its 20-year average growth rate of around 7 per cent. The recent weakness in profit growth is indicative of the widespread and significant effect of the high Australian dollar (Box 7). The unusual combination of a high Australian dollar and falling commodity prices has led to sharp declines in resources profits. At the same time, the persistently high Australian dollar is having an acute and enduring effect on profits in the non-resources parts of the economy as firms squeeze margins to remain competitive both in export markets and domestically.

Compensation of employees (primarily wages) is forecast to grow by 5¾ per cent in 2013-14 and 5 per cent in 2014-15, reflecting the slightly below-trend outlook for wage and employment growth over the period.

#### Statement 2: Economic Outlook

The forecast decline in commodity prices and competitive pressures from the sustained high dollar are expected to result in a decline in the profit share (and a corresponding rise in the wage share) of income over the forecast period.

Gross mixed income, which includes the wages and profits of farms and other unincorporated enterprises, is forecast to grow by  $3\frac{1}{4}$  per cent in 2013-14 and  $2\frac{3}{4}$  per cent in 2014-15.



Note: The small discrepancy between nominal GDP and the sum of its components is due to interactions which cannot be attributed to individual components. Totals may not add due to rounding. Source: ABS cat. no. 5206.0 and Treasury.

#### Box 7: The impact of the persistently high Australian dollar

Movements in Australia's exchange rate and terms of trade are typically closely related and it is unusual for the Australian dollar to remain broadly unchanged while the terms of trade fall. However, while the terms of trade have fallen sharply since their peak in late 2011, the Australian dollar has remained high. The persistently high dollar is creating acute and enduring challenges in many sectors and is weighing heavily on profitability and prices across the economy.

The floating Australian dollar promotes macroeconomic stability by encouraging the reallocation of labour and capital to parts of the economy that provide the best return. This has occurred most recently by reducing returns in non-resources sectors of the economy to meet the record demands in the resources sector. While this has presented challenges for some sectors, without a floating exchange rate, this adjustment would have occurred through higher domestic inflation.

The Australian dollar appreciated strongly in response to the terms of trade boom, rising from less than US\$0.50 in 2001 to a peak of over US\$1.10 in the middle of 2011, and appreciating around 50 per cent in the past four years alone. Yet, while the terms of trade have fallen sharply in the past two years, with non-rural bulk commodity prices now around 35 per cent below their peak, the dollar Australian has remained relatively stable and high (Chart A).

More recently, the trade weighted index of the Australian dollar has risen to around 30-year highs, driven by a 20 per cent appreciation against the Japanese yen over the past six months.

The strength of the Australian dollar reflects the fundamental strength of the Australian economy. With unemployment, contained inflation and low levels of public debt, Australia is one of only eight countries with a AAA credit rating with a stable outlook from all three ratings agencies. These strong fundamentals and the relative attractiveness of yields on offer have increased the demand for Australian dollar denominated assets.

# **Chart A: Terms of trade and AUD**



While the high Australian dollar reflects our strong fundamentals, it has also contributed to uneven conditions domestically and weighed heavily on company profits across the economy. Total gross operating surplus has fallen for five consecutive quarters (Chart B) — the first time this has occurred in the history of the quarterly National Accounts.

Box 7: The impact of the persistently high Australian dollar (continued)

Chart B: Gross operating surplus (growth)

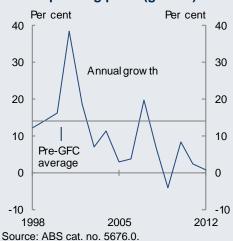


Source: ABS cat. no. 5206.0.

The record decline in profits partly reflects the decline in commodity prices, with mining sector profit falling 20 per cent in 2012. However, away from the mining sector, profit growth has also been very weak as firms continue to adjust to the high Australian dollar. Non-mining profit rose 0.9 per cent in 2012, well below the annual average increase of 14.1 per cent in the ten years prior to the global financial crisis (Chart C).

Treasury's business liaison program suggests that subdued profits in the reflects non-resources sectors competitive pressures from sustained high Australian dollar, with firms absorbing costs by squeezing profit margins at the same time as they pass on lower import prices to consumers. Business survey data support the information from liaison, with margins particularly weak in manufacturing, wholesale, retail and construction.

Chart C: Non-mining gross operating profit (growth)



With profit representing around 40 per cent of nominal GDP, the weakness in profit growth has led to an period of unprecedented relative weakness in nominal GDP. Through-the-year nominal **GDP** growth was below real GDP growth for the third consecutive quarter in

December - its longest period of

relative weakness on record.

While the dollar remains high, it will continue to place downward pressure on profits. Firms are innovating and adapting to manage this pressure, but the persistent strength in the Australian dollar is making the economic transition to non-resources drivers of growth more challenging, particularly in the trade-exposed sectors.

# **Medium-term projections**

The fiscal aggregates in the Budget are underpinned by a set of forward estimates consisting of short-term economic forecasts and projections based on medium-term assumptions (Box 8).

Real GDP is projected to grow at its trend rate of around 3 per cent over the two projection years of the medium term based on analysis of underlying trends in employment and productivity (Chart 15). Trend growth in real GDP is projected to slow early next decade as the participation rate declines in line with Australia's ageing population profile.

The unemployment rate is projected to be 5 per cent over the medium term, consistent with Treasury's estimate of the non-accelerating inflation rate of unemployment. Inflation is projected to be around  $2\frac{1}{2}$  per cent, consistent with the Reserve Bank's medium-term target band.

After 2014-15, the terms of trade are projected to decline by a total of 20 per cent over a 15-year period, settling around their 2005-06 level.

The exchange rate is assumed to remain around its recent average level during the forecast period. Over the projection period, the exchange rate is assumed to move in line with the long-term historical relationship between the terms of trade and the real effective exchange rate. The terms of trade projections imply a fall in the real exchange rate of 0.9 per cent per annum over the projection period.

The carbon price parameters underpinning the Government's Clean Energy Future Plan have been revised in the 2013-14 Budget. The revised methodology ensures that the carbon price parameters reflect both short-term market dynamics and longer-term fundamentals. Further detail on the methodology used to estimate the carbon price is outlined in Box 9.

## Statement 2: Economic Outlook

Per cent Per cent 6 6 Forward estimates 5 5 30-year average 4 4 3 2 1991-92 2016-17 1986-87 1996-97 2001-02 2006-07 2011-12 Source: ABS cat. no. 5206.0 and Treasury.

Chart 15: Real GDP growth over the forward estimates period

# Box 8: The transition in the resources sector and the projection methodology

Treasury prepares detailed forecasts of the economy for the budget year and the subsequent year. Beyond this, there is less information on which to prepare detailed forecasts, so Treasury prepares projections of high level economic aggregates to underpin budget estimates of receipts and payments. The projection methodology is based medium-term assumptions of growth consistent with historical experience or longer-term factors, such demographic change.

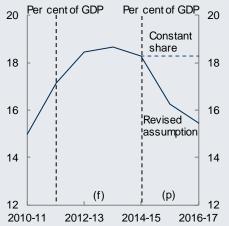
As a result of the current investment boom in the resources sector, private business investment has increased from its historical average share of around 14-15 per cent of GDP, and is expected to peak at around 19 per cent of GDP in 2013-14 (Chart A). Normally, the approach for projecting business investment in the projection years would be to assume that this high investment share of GDP is maintained in 2015-16 and 2016-17. There is usually little information on the likely path of business investment beyond the forecast period and this assumption would normally provide a plausible path.

However, at present, the scale of investment in resources projects and the lengthy timeframes for their construction mean that some information on business investment and exports beyond the forecast period is available. Based on company reports, analysis of the resources pipeline, investment Treasury's business liaison historical and investment to capital stock ratios, resources investment is expected to fall significantly as a share of GDP in 2015-16 and 2016-17.

To account for this expected decline, new business investment is projected to fall to around its historical share of GDP by 2016-17. Associated imports growth is projected to decline at the same rate as resources investment. Non-rural commodity exports are projected to grow at a rate sufficient to maintain the standard projection assumption of 3 per cent growth in real GDP. This is consistent with the continuation of the production phase of the resources boom and is comparable to forecasts produced by BREE.

The revised projection methodology has been introduced in this Budget for a similar reason to the step-down assumption for terms of trade projections, first introduced in the 2005-06 Budget.

Chart A: New business investment as a share of nominal GDP



Note: Adjusted for second-hand asset sales between the public sector and the private sector. Source: ABS cat. no. 5206.0 and Treasury.

#### Box 9: Updated carbon price estimates

The Carbon Pricing Mechanism commenced operation on 1 July 2012, with a fixed price period of three years. The fixed price arrangements for emissions liabilities remain unchanged, with the price set at \$23.00 in 2012-13, \$24.15 in 2013-14 and \$25.40 in 2014-15.

The 2013-14 Budget estimates incorporate a revised carbon price methodology for when the price links to the European Union Emissions Trading Scheme (EU-ETS) in 2015-16, and for the advance auction of permits related to the floating price period. The methodology incorporates market information for the advance auctions of permits in 2013-14 and 2014-15.

These advance auctions in the Budget forecast years are based upon average EU-ETS market futures prices for 2013-14 and 2014-15. However, carbon prices in the Budget projection years are not forecasts of carbon prices. As outlined in the 2012-13 Budget, projection year parameters generally rely on longer-term factors.

Projections for carbon prices for emissions liabilities for 2015-16 and 2016-17 incorporate the straightforward approach of a linear transition from market prices in 2014-15 to the modelled price of \$38 in 2019-20 from the Strong growth, low pollution (SGLP) modelling report. The price is now projected to be \$12.10 in 2015-16 and \$18.60 in 2016-17.

The longer-term modelled carbon prices from SGLP reflect the price levels required to meet long-term global environmental goals as well as the international commitment pledges for 2020, and these have not changed.

The near-term outlook for prices in the EU-ETS remains unclear given the profound economic weakness in Europe and uncertainty in relation to the timing of any regulatory changes that may be agreed with respect to the scheme.

The revised methodology ensures that the carbon price parameters incorporated in the 2013-14 Budget reflect both short-term market dynamics and longer-term fundamentals.

# APPENDIX A: MACROECONOMIC FORECASTING PERFORMANCE

The Government's macroeconomic forecasts are prepared using a range of modelling techniques, including structural macroeconometric models and equations, spreadsheet analyses and accounting frameworks. These are supplemented by survey data, business liaison, expert opinion and judgement.

In 2012, the Secretary to the Treasury commissioned an independently-overseen Review of Treasury Macroeconomic and Revenue Forecasting performance.<sup>2</sup>

The Review concluded that the forecasts draw upon 'the full range of information and modelling techniques used by comparable agencies overseas', and place broadly appropriate weight on the various tools available to forecasters. The Review made 11 recommendations on how to improve forecasting performance, all of which are currently being implemented. This appendix responds to Recommendation 5:

Treasury should include in the Budget papers a high level review of the economic forecast errors (nominal and real GDP) for the previous financial year, as a complement to the existing discussion of revenue forecasting errors.

Macroeconomic forecasts are always subject to a margin of error. Charts 16 and 17 show the magnitude of the Budget year forecast error for real and nominal GDP growth over the past 20 years. The independent review concluded that, over this period, Treasury's forecasts of real GDP growth have exhibited little evidence of bias, with accuracy generally remaining within a range of ½ to 1 percentage point. However, in recent years, forecasts of real GDP growth have been less accurate, reflecting greater uncertainty about the path of real GDP during and after the global financial crisis. Treasury's experience has been broadly consistent with that of foreign counterparts and other Australian forecasters.

# 2011-12 Real and nominal GDP growth forecasts

Economic forecasts for 2011-12 were first published in the 2010-11 Budget. Subsequent forecasts were published in the 2010-11 MYEFO, 2011-12 Budget, 2011-12 MYEFO and 2012-13 Budget.

<sup>2</sup> http://www.treasury.gov.au/~/media/Treasury/Publications%20and%20Media/Publications/2013/forecasting\_review/downloads/PDF/forecasting-review.ashx.

Per cent Per cent 6 6 5 5 4 3 2 2 1 0 1993-94 2005-06 2008-09 2011-12 1990-91 1996-97 1999-00 2002-03 ■ Outcome Budget

Chart 16: Budget forecast of real GDP growth

Note: Outcome is as published in the December quarter 2012 National Accounts. Forecast is that published in the Budget for that year.

Source: ABS cat. no. 5206.0 and Treasury.

Per cent Per cent 11 11 10 10 9 9 8 8 7 7 6 6 5 5 4 4 3 3 2 2 1 1 0 0 -1 -1 -2 -2 1999-00 2011-12 1990-91 2002-03 2005-06 2008-09 1993-94 1996-97 ■ Outcome Budget

Chart 17: Budget forecast of nominal GDP growth

Note: Outcome is as published in the December quarter 2012 National Accounts. Forecast is that published in the Budget for that year. Source: ABS cat. no. 5206.0 and Treasury.

In 2011-12, Australia recorded above-trend economic growth driven by surging resources sector investment and robust growth in household consumption. However, conditions in some parts of the economy were challenging, reflecting soft global conditions, the high dollar and shifting patterns of household demand. Above-trend real GDP growth in 2011-12 supported rising employment and a low unemployment rate, while underlying inflation remained contained.

Chart 18 presents the evolution of Treasury's forecasts for 2011-12 real GDP growth. The absolute percentage errors<sup>3</sup> for 2011-12 forecasts of real GDP growth were largest in the 2010-11 Budget (at 0.7 percentage points) and smallest in the 2010-11 MYEFO (at 0.1 percentage points). Over the past 20 years, Treasury's mean absolute percentage error for forecasts of real GDP growth in the budget year has been 0.9 percentage points at both Budget and MYEFO.

The largest absolute forecast errors occurred in forecasts of business and dwelling investment. Business investment in 2011-12 was consistently underestimated as the upswing in resources investment gathered pace, while dwelling investment in 2011-12 was consistently overestimated as supply constraints and changes to households' willingness to accumulate more debt unfolded.

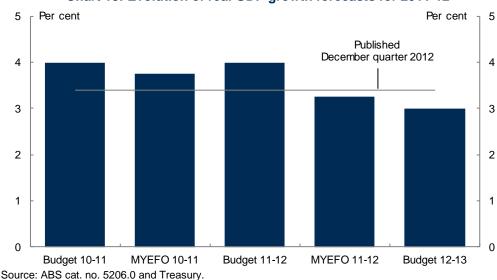


Chart 18: Evolution of real GDP growth forecasts for 2011-12

In 2011-12, nominal GDP grew by 5.0 per cent as below-trend growth in domestic prices and broadly flat terms of trade weighed on growth. Weakness in domestic prices was evident in both investment and consumption deflators. Chart 19 presents the evolution of Treasury's forecasts for 2011-12 nominal GDP growth.

The absolute percentage errors in the forecasts of nominal GDP growth were largest in the 2011-12 MYEFO (at 1.3 percentage points) and smallest in the 2010-11 MYEFO (at 0.0 percentage points). Over the past 20 years, Treasury's mean absolute percentage error for forecasts of nominal GDP growth in the budget year has been 1.6 percentage points at Budget and 1.3 percentage points at MYEFO.

<sup>3</sup> The absolute percentage error is an indicator of the accuracy of the forecasts, as it measures the distance between the forecast percentage growth rate and the outcome. All other things equal, a smaller number indicates a better forecasting performance.

#### Statement 2: Economic Outlook

The largest absolute forecast errors in the components of nominal GDP growth were in forecasts of the terms of trade. Smaller forecast errors were recorded in forecasts of domestic prices and real GDP growth. Forecast errors for the terms of trade were largest for export prices, reflecting the difficulty of forecasting commodity prices during periods of substantial price volatility. Domestic price growth in 2011-12 was consistently overestimated as the surge in resources investment was expected to put upward pressure on prices of investment goods, consistent with the experience prior to the global financial crisis. However, investment prices remained subdued in 2011-12, partly owing to the sustained high level of the Australian dollar.

7 Per cent Per cent 7 Published 6 December quarter 2012 6 5 5 4 4 3 3 2 2 1 1 0 0 Budget 10-11 MYEFO 10-11 Budget 11-12 MYEFO 11-12 **Budget 12-13** Source: ABS cat. no. 5206.0 and Treasury.

Chart 19: Evolution of nominal GDP growth forecasts for 2011-12