

JOINT ECONOMIC FORECASTING GROUP REPORT

ECONOMIC OUTLOOK FOR 2013-14 AND 2014-15 SEPTEMBER 2013

This report incorporates domestic and international data released up to 9 October 2013.

EXECUTIVE SUMMARY

The Australian economy is forecast to grow steadily, albeit at a rate a little below trend, as the economy transitions away from resources investment towards stronger resource exports and broader-based growth.

Resources investment is expected to fall more sharply than expected at PEFO, but the transition towards stronger resources exports remains firmly underway.

In contrast, the transition to broader-based growth has been slower than expected, with the positive signs mostly limited to the established housing market and surveys of consumer and business sentiment.

As a consequence, real GDP is expected to grow at a below-trend pace for longer than forecast at PEFO, with forecast growth in 2014-15 revised down by $\frac{1}{4}$ of a percentage point to $2\frac{3}{4}$ per cent.

Despite a lower participation rate, the unemployment rate is expected to rise gradually to 6¼ per cent by mid-2014 before stabilising at this level, with lower forecast wage growth helping to limit the impact on employment from softer real GDP growth.

Nominal GDP growth has been revised lower in both 2013-14 and 2014-15. Lower wage growth will limit growth in domestic prices, and the recent strength in some commodity prices is expected to be only temporary.

There are significant risks to the outlook including the possibility that the transition to broader-based growth will continue to disappoint. Further falls in the exchange rate would assist with the transition.

There is also a related risk that sustained weakness in national income growth owing to the falling terms of trade will weigh more heavily on domestic demand than currently expected.

The external environment continues to pose risks. The October government shutdown and debt ceiling impasse have only been temporarily resolved and therefore US fiscal policy is expected to re-emerge as a risk in early 2014. The eventual 'tapering' of asset purchases by the US Federal Reserve is also creating uncertainty.

Still, the outlook remains positive. Global growth is forecast to strengthen and sustained low interest rates, particularly if combined with further falls in the exchange rate, should support solid rates of domestic growth.

Table 1: Key domestic and international forecasts (a)

	2012-13	2013-14		2014-15	
	Outcome	PEFO	Sept JEFG	PEFO	Sept JEFG
Real GDP	2.8	2 1/2	2 1/2	3	2 3/4
Nominal GDP	2.5	3 3/4	3 1/4	4 1/2	3 3/4
Unemployment rate	5.6	6 1/4	6 1/4	6 1/4	6 1/4
Underlying inflation	2.4	2 1/2	2 1/2	2 1/4	2
WPI	2.9	3 1/4	3	3 1/4	3
Terms of trade	-9.7	-5 3/4	-5 1/4	-3 3/4	-4 3/4
World GDP (b)	3.2	3	3	3 3/4	3 3/4
Major trading partners GDP (b)	4.1	4	4	4 1/2	4 1/2
China (b)	7.8	7 1/4	7 1/4	7 1/2	7 1/2
United States (b)	2.8	1 1/2	1 1/2	2 1/2	2 1/2

Note: Text in blue indicates a forecast upgrade, while red text indicates a forecast downgrade. Forecasts for the domestic economy are based on the assumption of a trade weighted index of around 72 and \$US exchange rate of around 94 US cents.

(a) Real GDP, nominal GDP, the terms of trade, world GDP, major trading partner GDP, China and United States are year-average growth. Underlying inflation and the WPI are through-the-year growth to the June quarter. The unemployment rate is the rate for the June quarter. (b) International GDP figures are calendar year average growth for 2012, 2013 and 2014.

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

Outlook for the International Economy

Table 2: Key international forecasts

	2012	2013		2014		2015	
	Actual	PEFO	Sept JEFG	PEFO	Sept JEFG	PEFO	Sept JEFG
China ^(b)	7.8	7 1/4	7 1/4	7 1/2	7 1/2	7 1/2	7 1/2
India ^(b)	3.8	5	2 3/4	6 1/2	4 3/4	6 1/2	5 3/4
Japan	2.0	1 3/4	2	1	1	1	1
United States	2.8	1 1/2	1 1/2	2 1/2	2 1/2	2 1/2	2 1/2
Euro area	-0.6	- 3/4	- 1/2	3/4	3/4	1 1/4	1 1/4
Other East Asia ^(c)	3.9	3 3/4	3 3/4	4 3/4	4 1/2	5	4 3/4
			_	4 4/2	4.4/2		0.4/2
Major Trading Partners	4.1	4	4	4 1/2	4 1/2	4 3/4	4 1/2
World	3.2	3	3	3 3/4	3 3/4	4	4

Note: Text in blue indicates a forecast upgrade, while red indicates a forecast downgrade.

Global growth remains subdued...

As forecast at PEFO, global growth is expected to remain well below trend in 2013 before picking up gradually in 2014. Australia's major trading partners in aggregate are forecast to grow at around their long-term average. While there have been substantial downgrades to the forecasts for India's growth, the 2013 downgrade is partly offset by slight upgrades to growth in Japan and the euro area. Fiscal policy uncertainty in the US has offset what had been tentative signs of building momentum in the US economy in mid-2013.

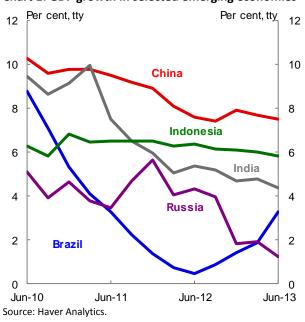
...with growth in emerging economies having moderated...

Subdued global growth has increasingly reflected a moderation in a number of key emerging economies (Chart 1). In China, the large expansion of credit earlier in the year did not provide the anticipated level of support to the real economy, while ongoing softness in advanced economies weighed on Chinese exports.

India's growth has been dampened by structural bottlenecks and an unpredictable policymaking environment which has increasingly deterred much-needed private domestic and foreign investment. With forward-looking indicators implying

continued weakness, growth forecasts for India have been revised down substantially for 2013 and 2014.

Chart 1: GDP growth in selected emerging economies



Since mid-2013, investors have scaled back their emerging market exposures. This has had a profound impact, particularly for those emerging markets running large and persistent current account deficits, and which are therefore reliant on foreign capital. India and Indonesia were particularly hard hit, with

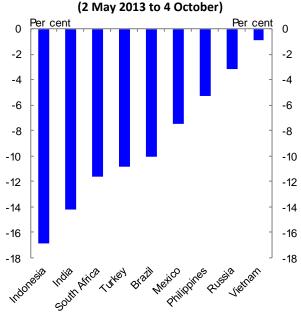
⁽a) Calculations for World, euro area and other East Asia growth rates use GDP weights based on purchasing power parity (PPP). Calculations for Major Trading Partners use export trade weights.

⁽b) Production-based measure of GDP.

⁽c) Other East Asia comprises the newly industrialised economies (NIEs) 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. Source: National statistical publications, IMF, Haver Analytics and Treasury.

their currencies depreciating significantly as investment flows retreated (Chart 2).

Chart 2: Currency depreciation since the start of Fed tapering speculation



Source: Bloomberg.

These investment outflows reflected market concerns over how these economies will fund their current account deficits, as well as a broad reappraisal of relative asset returns for emerging markets. They also reflected market expectations, prior to the recent US government shutdown and debt ceiling impasse, that the US Federal Reserve could soon start 'tapering' its asset purchases under its quantitative easing program, which have raised interest rates and relative asset returns for the US and a number of other countries.

...although the most recent data from China have been better

Since PEFO, improving external demand and policy fine-tuning by the Chinese authorities to support growth saw a rebound in real activity in July and August. This is despite the People's Bank of China (China's central bank) raising inter-bank lending rates since June to curb excessive credit growth in the shadow banking system. The forecasts for China's growth are unchanged, although strong partial data for the September quarter tilt the risks to the 2013 growth outlook to the upside.

The US outlook has become clouded, while the Japanese recovery is building some momentum...

Notwithstanding the recent government shutdown, the United States has continued its steady but modest recovery, underpinned by solid domestic demand set against considerable fiscal drag. GDP growth has picked up since the start of the year, the housing and labour markets have continued to improve. However, while the two-week government shutdown and the debt ceiling impasse have recently been resolved, the shutdown and uncertainty over whether the debt ceiling would be raised in time are expected to slightly reduce previous forecasts for December quarter growth. A previous upward revision to June quarter GDP growth has somewhat offset the subsequent negative impact on the forecast from the government shutdown. The forecast for 2013 thus remains unchanged. The expected impacts of the shutdown and potential for further fiscal policy disruptions early next year continue to cloud the outlook for 2014 but are not presently considered sufficient to justify downgrading the US 2014 forecast.

In contrast, fiscal and monetary stimulus has markedly boosted Japan's short-term growth. There are also tentative signs that deflationary pressures in Japan are easing. The forecast for Japanese growth for 2013 has been revised up a ¼ percentage point reflecting a stronger than expected June quarter outcome. Prime Minister Abe's 1 October announcement that the planned increase in the consumption tax will take place on 1 April 2014, is an important step towards greater fiscal sustainability. Its transitory impact on consumption growth will be offset by additional fiscal stimulus measures.

...but prospects for a euro area recovery remain uncertain

The euro area returned to growth in the June quarter for the first time since September 2011, with the better than expected result (and slight upward revisions to other recent quarters) leading to an upward revision to the forecast for 2013 of a ¼ percentage point to a contraction of ½ a per cent. Nonetheless, the outlook for the region remains weak and fragile. The June quarter result was boosted by some temporary weather-related factors, unemployment remains historically high, and credit conditions are still weak and highly divergent across the euro area. Further, there are persistent risks to the

implementation of the reforms necessary to comprehensively resolve the crisis.

Downside risks remain prevalent

The key risk of a failure to raise the debt ceiling in the US and the threat of a 'technical default' has been averted. While the government shutdown has also ended after two weeks, this will nonetheless impact near-term growth. Further, with the recent agreement to raise the debt ceiling and re-open the government only extending to early 2014, further political battles over fiscal policy issues may re-emerge early next year and continue to cloud near-term prospects.

The recent uncertainty over fiscal policy, the potential for such issues to occur again in early 2014, and the government shutdown delaying the release of key economic data, have led markets to expect a further deferral of the commencement of a 'tapering' of asset purchases by the US Federal Reserve. Despite this, previous expectations have led to a significant increase in market interest rates in the US which could dampen recovery prospects for the housing market.

With the eventual normalisation of US monetary policy likely to take some time to occur, any volatility in emerging markets stemming from this issue, while likely to abate in the near term, could be similarly persistent and could hamper emerging economies' growth prospects over the medium term.

While China's growth outlook remains positive, instability in China's evolving financial system and the Government's ability to manage a smooth transition to a more sustainable pattern of growth remain the key downside risks to the outlook.

Japan's medium-term outlook remains uncertain, due to a lack of detail on much-needed structural reforms, and with fiscal headwinds from medium-term consolidation requirements a potential risk, particularly if the government's growth strategy is unsuccessful.

Despite the euro area's return to growth in the June quarter, the region's crisis lingers. Political impediments to necessary reforms persist, and the euro area's heavily impeded banking sector remains a major vulnerability.

Outlook for the Domestic Economy

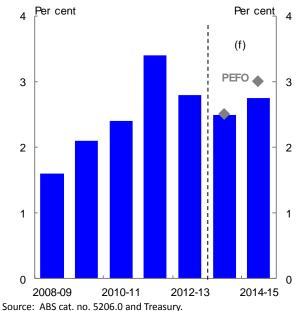
Below trend growth is expected to continue until at least 2014-15

The Australian economy is forecast to grow steadily, albeit at a rate a little below trend, as the economy transitions away from resources investment led growth. Real GDP is expected to increase by 2½ per cent in 2013-14 before picking up to 2¾ per cent in 2014-15 (Chart 3).

Forecast growth in 2014-15 is slightly lower than at PEFO, owing to a sharper forecast fall in resources investment and the transition to broader-based growth progressing more slowly than previously expected. Households continue to exercise caution and investment intentions in the non-resources sectors remain weak.

Nevertheless, there are some tentative signs of rebalancing occurring, including buoyant conditions in the established housing market and improved consumer and business confidence. It will be important for these positive signs to translate into increased spending by households and businesses.

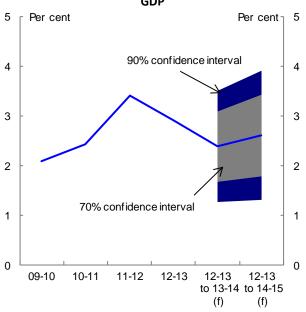
Chart 3: Real GDP forecasts



As always, there is a degree of uncertainty around the forecasts. The degree of uncertainty can be estimated based on past forecast errors and presented using confidence intervals. The average annualised real GDP

growth over the two years 2012-13 to 2014-15 is expected to be 2.6 per cent, with the 70 per cent confidence interval from 1.8 to 3.4 per cent (Chart 4). See Appendix A for an explanation of the confidence interval methodology and its interpretation.

Chart 4: Confidence intervals around forecast real GDP



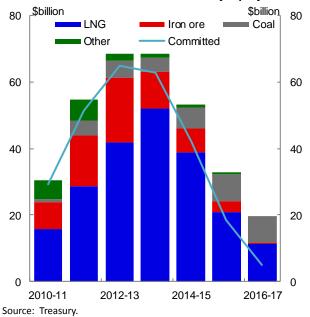
Note: Confidence intervals are based on Budget forecast errors (please see Appendix A for further information).
Source: ABS cat. no. 5206.0, Budget papers and Treasury.

The JEFG forecasts are broadly consistent with Consensus and the International Monetary Fund (see Appendix B). Forecast real GDP growth is broadly in line with the Consensus median forecast, while the forecast unemployment rate and commodity prices are below median expectations.

Resources investment peaks and begins its descent...

LNG projects currently under construction should keep overall investment at elevated levels in 2013-14. However, resources investment is expected to fall significantly as these projects move towards completion around the middle of the decade (Chart 5). The fall could be sharper still if projects under consideration, but not yet committed to, do not proceed.

Chart 5: Resources investment - major projects



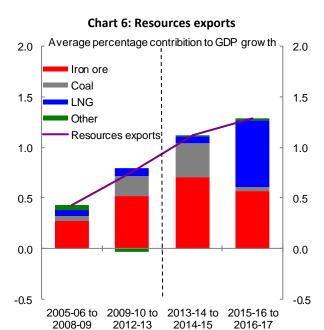
The forecast decline in resources investment is more pronounced than expected at PEFO. Further cost cutting programs within the industry have led to lower forecast growth in machinery and equipment investment. A number of future coal and smaller iron ore projects have also been removed from the list of likely projects following company announcements and Treasury liaison.

...as the transition to stronger resource exports continues...

Resources exports have been making an increasingly strong contribution to real GDP growth as resources projects have progressively moved to their production and export phase (Chart 6). In the near term, export growth will continue to be underpinned by rapidly expanding iron ore exports, with LNG exports making a more significant contribution from around the middle of the decade.

However, resources exports have been revised lower since PEFO with lower production guidance from coal producers and a weaker outlook for non-bulk resources exports more than offsetting higher iron ore volumes. The downgrade to non-bulk resources exports reflects the latest Bureau of Resources and Energy Economics forecasts, which significantly lower expected exports of gold, oil and metal ores in 2013-14. In addition, LNG export volumes have been revised down in 2014-15 reflecting ongoing uncertainty around the pace with which new projects will reach production.

Despite this, total exports will account for over a half of real GDP growth in 2013-14 and 2014-15.



...with lower imports mitigating the impact of falling resources investment...

Source: ABS cat. no. 8731.0 and Treasury.

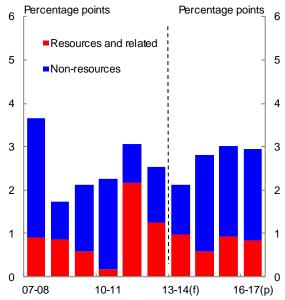
Capital imports are an important input to resources investment, particularly for LNG projects which dominate the investment pipeline. Consistent with this, forecast import growth is quite moderate, and has been downgraded since PEFO in line with lower resources investment, and more modest domestic demand. Imports are expected to grow 3 per cent in 2013-14 and 2 per cent in 2014-15.

...giving rise to a decline in the net contribution from the resources sector.

The rise in exports is expected to only partly fill the gap created by the fall in resources investment net of imports. To estimate the net contribution to growth from the resources sector, it is necessary to take into account resources-related activity, which includes the vast array of services that support the resources industry in both its investment (such as construction services) and export (such as transport) phase.

This analysis indicates that in order to achieve real GDP growth of 2¾ per cent in 2014-15, the non-resources sector will need to grow at its fastest rate since before the global financial crisis (Chart 7). Similarly strong growth will be needed immediately beyond the forecast period to deliver projected real GDP growth of 3 per cent in 2015-16 and 2016-17.

Chart 7: Composition of real GDP growth



Source: ABS cat. no. 5204.0, 5206.0, 5209.0.55.001 and Treasury.

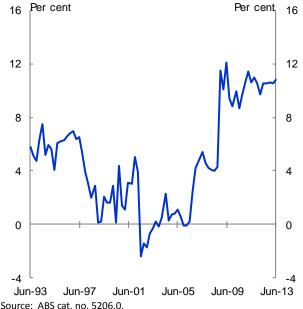
The path of household consumption will be key to how the transition unfolds...

While rising house prices and equity markets have boosted household wealth, slowing wage growth and concerns around rising unemployment are restraining consumer spending. The recent improvement in consumer sentiment is encouraging, although it is not yet clear whether this will translate into higher spending.

Forecast consumption growth in 2013-14 has been revised down since PEFO, reflecting subdued spending in the middle of the year and weaker forecast income growth. The forecast for 2014-15 is unchanged, although should households choose to remain cautious and maintain elevated rates of savings, consumption growth might not pick up as strongly as forecast (Chart 8).

Household consumption is forecast to grow by 2¼ per cent in 2013-14 and 3 per cent in 2014-15.

Chart 8: Household saving rate

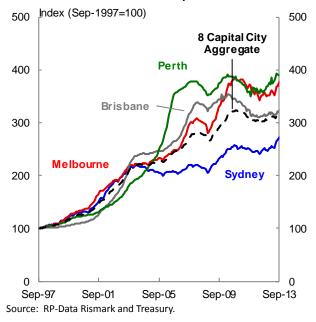


...with the recovery in dwelling investment expected to be modest...

To date, the clearest sign of transition to non-resources based growth drivers has been in the housing market, particularly for established homes. Established house prices, auction clearance rates and housing finance have all grown strongly over recent months. Activity in the new housing construction market has been more moderate but has been trending up and key fundamentals, such as population growth and interest rates, remain supportive.

While some concerns have been raised around the pace of house price increases, at this stage the nationwide movements do not appear out of line with expected responses to sustained low interest rates. House prices are still below their previous peaks in many locations (Chart 9). Similarly, house prices as a ratio of household income or rents are also below previous peaks, and household credit growth remains restrained. For now, risks to the outlook for house prices remain modest, with developments in the housing market being closely monitored.

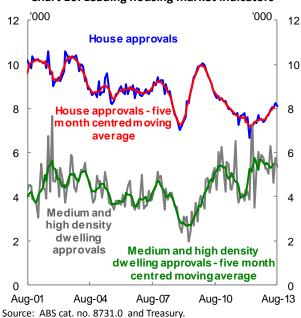
Chart 9: House prices



Despite the strength in the established housing market, caution by developers and owner-builders continues to restrain dwelling investment. Higher house prices could initiate a stronger response in part through encouraging the development of existing land holdings. Building approvals data, while volatile, is trending higher, with private houses growing strongly over recent months (Chart 10).

Dwelling investment is forecast to grow by 4½ per cent in 2013-14 and 6½ per cent in 2014-15.

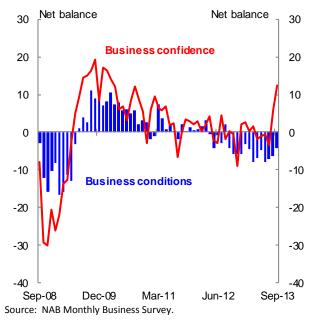
Chart 10: Leading housing market indicators



...and investment in the non-resources sector remaining subdued...

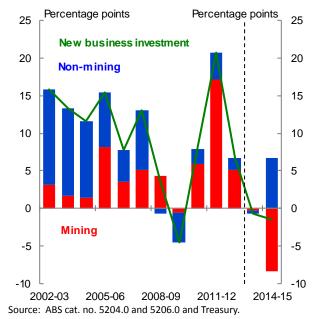
While business confidence has improved recently, investment intentions remain subdued in the non-resources sector (Chart 11). Business conditions remain well below long run averages and the most recent CAPEX survey suggested non-resources investment may fall in 2013-14. With capacity utilisation well below long run averages, clearer signs of improving demand may be needed before businesses significantly increase their level of investment.

Chart 11: Business confidence and conditions



Forecast business investment in the non-resources sector has been downgraded since PEFO. Together with the decline in forecast resources investment, total business investment is now expected to fall by 1 per cent in 2013-14 and 1½ per cent in 2014-15. There is the risk that the decline in 2014-15 could be sharper if the recent improvement in business confidence is not followed by improved conditions in the non-resources sector (Chart 12).

Chart 12: Business investment



...and fiscal consolidation constraining public final demand.

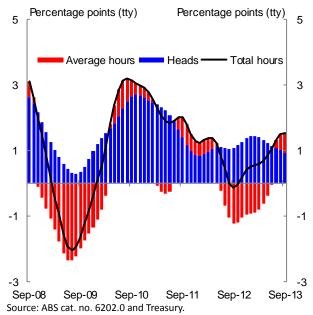
The fiscal consolidation underway at all levels of government continues to constrain public final demand. Since PEFO, forecast public final demand has been revised higher in 2013-14 and lower in 2014-15, in line with updated State budget estimates and the announced policies of the Commonwealth Government.

Public final demand is forecast to grow by $\frac{3}{4}$ per cent in 2013-14 and 2014-15.

The unemployment rate is expected to drift higher...

Employment rose a subdued 0.9 per cent through the year to September. In the quarter itself, employment fell but aggregate hours worked rose, reflecting an increase in average hours worked (Chart 13). There are many possible explanations for the divergence between employment growth and total hours worked, but one possibility would appear to be the effort by firms to constrain costs by reducing 'heads' and increasing average hours worked by remaining employees.

Chart 13: Employment and hours worked



Forecast employment growth has been revised down to ¾ of a per cent through the year to the June quarter 2014, reflecting the recent softness in the number of employed. Employment growth is still expected to pick up to 1½ per cent to the June quarter 2015 as economic growth improves and wage growth remains moderate (see below).

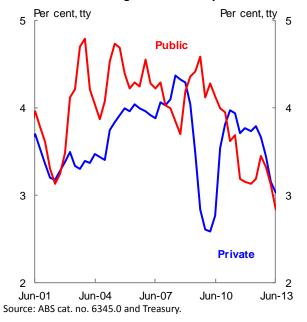
The unemployment rate fell to 5.6 per cent in the month of September, largely reflecting a fall in the participation rate to 64.9 per cent, its lowest level since October 2006. Despite this, the unemployment rate is still expected to gradually rise to 6¼ per cent by mid-2014 before stabilising at this level, although it could peak at a lower rate if the participation rate falls further.

...with lower wage growth supporting the labour market adjustment...

Wage growth has eased and is expected to remain subdued consistent with continuing spare capacity in the labour market, contained inflation, and feedback from business liaison (Chart 14). Forecast wage growth has been revised down to 3 per cent through the year to the June quarters of 2014 and 2015.

While the softer outlook for wage growth will weigh on household income, wage flexibility is an important adjustment mechanism for supporting employment growth as the economy transitions. The current slowing in wage growth is in contrast to the experience in the mid-2000s when wages grew strongly as capacity constraints emerged.

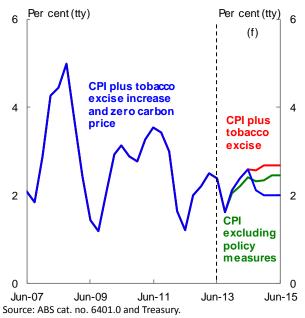
Chart 14: Wage Price Index by sector



...and helping to contain inflationary pressures.

Domestic price pressures remain modest. Headline and underlying inflation are expected to be $2\frac{1}{2}$ per cent through the year to the June quarter of 2014, unchanged since PEFO (Chart 15). The removal of the carbon price in 2014-15 is expected to lower headline and underlying inflation by less than $\frac{1}{4}$ of a percentage point through the year to the June quarter 2015^1 . Headline and underlying inflation are expected to be 2 per cent through the year to the June quarter 2015.

Chart 15: Headline inflation



The terms of trade are still expected to fall...

Near-term forecasts for the terms of trade have been revised up since PEFO, reflecting recent strength in commodity prices. Policy fine-tuning by Chinese authorities to support near-term economic activity have resulted in faster growth in industrial production and infrastructure investment. These resource intensive sectors have supported demand for iron ore and metallurgical coal over recent months.

However, the outlook for China over the next two years remains unchanged since PEFO. As a result, we have not changed our view on the medium term outlook for commodity demand or prices, which remain below consensus forecasts (Appendix B). Strong growth in iron ore supply, particularly from Australia, is expected to weigh on prices over coming years, and increasing global supply of metallurgical and thermal coal should limit their price growth.

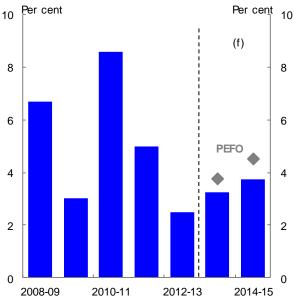
The terms of trade are expected to fall 5½ per cent in 2013-14 and 4¾ per cent in 2014-15, returning to around the same level at the end of the forecast period as expected at PEFO.

This reflects the impact of moving from the assumption of a \$6 per tonne (floating) carbon price (included in PEFO) to a zero price. Moving from the initial carbon tax to zero is estimated to lower headline inflation by around ¾ of a percentage point and underlying inflation by around ¾ of a percentage point through the year to the June quarter 2015.

...and together with slower wage growth is constraining nominal GDP growth

Forecast nominal GDP growth has been revised lower since PEFO, reflecting the weaker outlook for real GDP, wages and domestic prices, partially offset by the higher terms of trade in the near term. Nominal GDP is expected to grow by 3½ per cent in 2013-14 and 3½ per cent in 2014-15, downgrades of ½ of a percentage point in 2013-14 and ¾ of a percentage point in 2014-15 (Chart 16).²

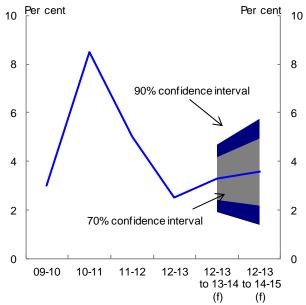
Chart 16: Nominal GDP growth



Source: ABS cat. no. 5206.0 and Treasury.

The uncertainty around nominal GDP growth forecasts is larger than around real GDP growth forecasts, reflecting the compounding nature of two sources of uncertainty: the outlook for real GDP and the outlook for prices or the GDP deflator. The average annualised nominal GDP growth over the two years 2012-13 to 2014-15 is expected to be 3.6 per cent, with the 70 per cent confidence interval over the two years from 2.2 to 5.0 per cent (Chart 17 and Appendix A).

Chart 17: Confidence intervals around forecast nominal GDP



Note: Confidence intervals are based on Budget forecast errors (please see Appendix A for further information).
Source: ABS cat. no. 5206.0, Budget papers and Treasury.

There are significant domestic risks to the outlook...

The forecasts are consistent with a relatively smooth transition to broader based growth drivers over the forecast period. However, should the pace of rebalancing continue to disappoint, the period of below-trend growth could be more pronounced and/or protracted.

In 2014-15, the non-resources sector is forecast to grow at its fastest rate since before the global financial crisis. Should consumers continue to remain cautious and not provide the expected boost to demand needed for businesses to increase investment, growth may not meet forecast rates.

Additionally, the anticipated fall in resources investment could be sharper than currently expected necessitating a greater contribution from the non-resources sector to help bring growth back towards trend.

It is also possible that the forecast weakness in national income growth may weigh more heavily on domestic demand than currently expected. The income shock to the Australian economy from the falling terms of terms is forcing households and businesses to adjust their expenditure decisions. While low interest rates are helping to partially offset this shock, to date, they have not been enough.

Part of the lower nominal GDP growth in 2014-15 reflects the removal of the carbon tax. However, its removal does not affect the taxable revenue base.

The falls in the exchange rate over the past six months will also help the economy adjust to the income shock (Chart 18). However, a lower exchange rate could initially reduce the purchasing power of households where domestic substitutes are not readily available for higher priced imports. Household expenditure available for domestically produced goods may therefore decrease.

Over time households are likely to identify more competitive domestic alternatives, thus boosting their demand and also helping to boost the income of domestic producers. But this may take a number of quarters to play out. Further falls in the exchange rate may be necessary to provide the boost to demand and income which will support a sustained recovery in the non-mining economy.



...as well as international risks

Any misstep in the ongoing fiscal battle in the United States could cause significant disruption in global financial markets. This would be expected to flow through to the Australian economy through financial and confidence channels. Additionally, the crisis in the euro area remains far from resolved.

Recent economic data from China suggests a strengthening in economic activity. This could provide near-term support to Australian commodity prices and exports. However, how the transition currently underway in the Chinese economy towards a more sustainable pattern of growth unfolds will be key for the Australian economy.

Table 3: Domestic economy forecasts (a)

	Outcomes (b)	Forecasts	
	2012-13	2013-14	2014-15
Panel A - Demand and output(c)			
Household consumption	2.4	2 1/4	3
Private investment			
Dwellings	1.1	4 1/2	6 1/2
Total business investment(d)	6.6	-1	-1 1/2
Non-dwelling construction(d)	14.4	-1	-6 1/2
Machinery and equipment(d)	-2.6	-3 1/2	4 1/2
Private final demand(d)	3.3	1 3/4	2 1/4
Public final demand(d)	-0.8	3/4	3/4
Total final demand	2.4	1 1/2	2
Change in inventories(e)	-0.2	0	0
Gross national expenditure	2.2	1 1/2	2
Exports of goods and services	5.6	6	6
Imports of goods and services	-0.1	3	2
Net exports(e)	1.2	3/4	1
Real gross domestic product	2.8	2 1/2	2 3/4
Non-farm product	3.0	2 1/2	2 3/4
Farm product	-5.7	2	2
Nominal gross domestic product	2.5	3 1/4	3 3/4
Panel B - Other selected economic measures			
External accounts			
Terms of trade	-9.7	-5 1/4	-4 3/4
Current account balance			
\$billion	-47.7	-57	-64 1/2
Percentage of GDP	-3.2	-3 3/4	-4
Labour market			
Employment (labour force survey basis)(f)	1.3	3/4	1 1/2
Unemployment rate (per cent)(g)	5.6	6 1/4	6 1/4
Participation rate (per cent)(g)	65.3	65	65
Prices and wages			
Consumer Price Index(h)			
- headline	2.4	2 1/2	2
- underlying	2.4	2 1/2	2
Gross non-farm product deflator	-0.5	3/4	1
Wage Price Index(f)	2.9	3	3

- (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 from the public sector to 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 for the domestic economy are based on several technical assumptions. The exchange rate is assumed to remain around its recent average level — a trade-weighted index of around 72 and a \$US exchange rate of around 94 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\$118 per barrel. The farm sector forecasts for 2014-15 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.

Appendix A – Confidence intervals

At PEFO, confidence intervals around two key economic variables, real and nominal GDP, were introduced to reflect the forecast uncertainty of Treasury's estimates. This was done to help convey to readers a better appreciation of the risks associated with the economic outlook and also improve the credibility and transparency of the forecasting process.

The degree of uncertainty around forecasts can be estimated based on past forecast errors. For GDP forecasts, confidence intervals can be presented around forecasts of annual growth rates or average annualised growth rates. While both measures have merit, providing a reasonable forecast of the level of GDP is important for fiscal variables. The average annualised growth rate is a better summary statistic, as it reflects cumulative growth.

For a hypothetical example, if GDP is forecast to grow by 2 per cent in one year and 5 per cent in the next, the level of GDP will be forecast to be roughly 7 per cent higher after two years. This is more effectively summarised by the 3½ per cent average annualised growth rate over the two years than by the two separate annual growth rates.

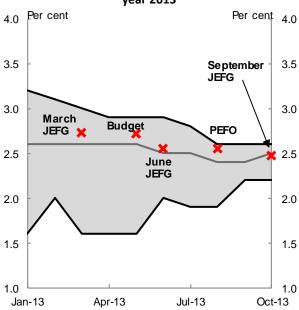
The confidence intervals in the September JEFG are derived from forecast errors based on budget forecasts from the 1998-99 Budget onwards, with outcomes based on the June quarter 2013 National Accounts data. Forecast errors are calculated using the root mean square error of budget percentage growth rate. Separate forecast errors are calculated for budget forecasts of the estimate year and the Budget year.

In the charts, the central line shows the outcomes and September JEFG forecasts with annual growth reported for outcomes and annualised average growth rates from 2012-13 reported from 2013-14 onwards. For 2013-14, estimate year confidence intervals have been used while for 2014-15, Budget year confidence intervals were used. The use of these errors may understate the uncertainty associated with the forecasts, given the timing of Budget and the September JEFG.

Appendix B – Forecast comparison

Real GDP forecasts are broadly in line with consensus...

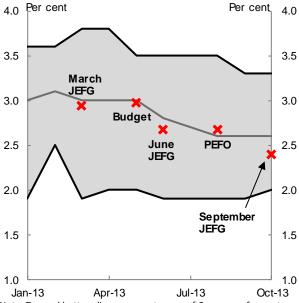
Chart 1: Consensus real GDP forecasts for calendar year 2013



Note: Top and bottom line represent range of Consensus forecasts. Centre line represents Consensus mean forecast.

Source: Consensus Economics³ and Treasury.

Chart 2: Consensus real GDP forecasts for calendar year 2014

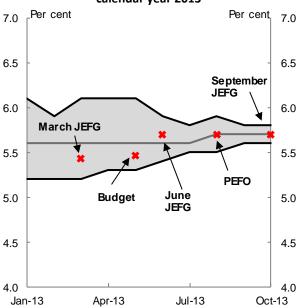


Note: Top and bottom line represent range of Consensus forecasts. Centre line represents Consensus mean forecast.

Source: Consensus Economics and Treasury.

...although the forecast unemployment rate is a little above the median...

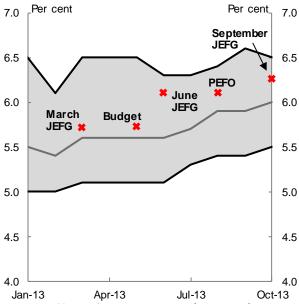
Chart 3: Consensus unemployment rate forecasts for calendar year 2013



Note: Top and bottom line represent range of Consensus forecasts. Centre line represents Consensus mean forecast.

Source: Consensus Economics and Treasury.

Chart 4: Consensus unemployment rate forecasts for calendar year 2014



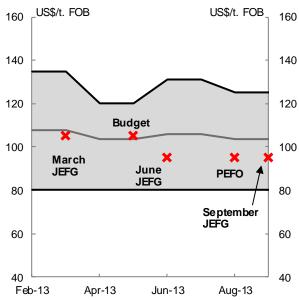
Note: Top and bottom line represent range of Consensus forecasts.

Centre line represents Consensus mean forecast.

Source: Consensus Economics and Treasury.

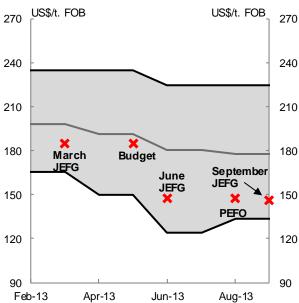
...while bulk commodity price forecasts are at the lower end of consensus.

Chart 5: Iron ore price forecasts for June 2015



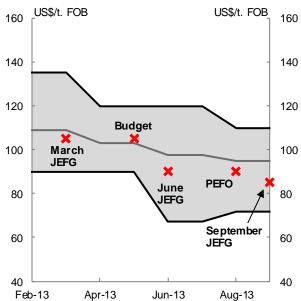
Note: Top and bottom line represent range of consensus forecasts. Centre line represents Consensus median forecast. Source: Consensus Economics⁴ and Treasury.

Chart 6: Metallurgical coal price forecasts for June 2015



Note: Top and bottom line represent range of Consensus forecasts. Centre line represents Consensus median forecast. Source: Consensus Economics and Treasury.

Chart 7: Thermal coal price forecasts for June 2015



Note: Top and bottom line represent range of consensus forecasts. Centre line represents Consensus median forecast.

Source: Consensus Economics and Treasury.

Every month, Consensus Economics surveys a range of prominent Australian financial and economic forecasters (while the range varies from month to month, it is usually around 15-20 forecasters) for their estimates of a range of variables, including future growth, inflation, exchange rates and commodity

prices.

4 Consensus Economics surveys commodity price forecasters every three months.