

The outlook for inflation

Economic research note

June 2011

- For both the Australian economy and the global economy the outlook for inflation is one of the most important factors for financial markets, currencies and economic growth over the coming years. Concerns are rising that inflation pressures, especially within the Asian region, are not being dealt with quickly enough.
- If these inflation pressures are allowed to continue, rising inflation could eventually threaten the medium-term growth potential of the global economy as it continues to recover from the financial crisis and erode purchasing power and the value of investments.
- This paper will look at recent inflation trends here in Australia and globally, what the outlook is like and what policy-makers can do to ensure price stability over the medium-term and, therefore, a more robust and sustainable global economy.

Recent history

A global trend for inflation occurred through much of the first decade of the 2000s, where inflation in the major developed nations was relatively low and stable. The table below shows the average inflation rate amongst major developed economies since both 1993 and 2000.

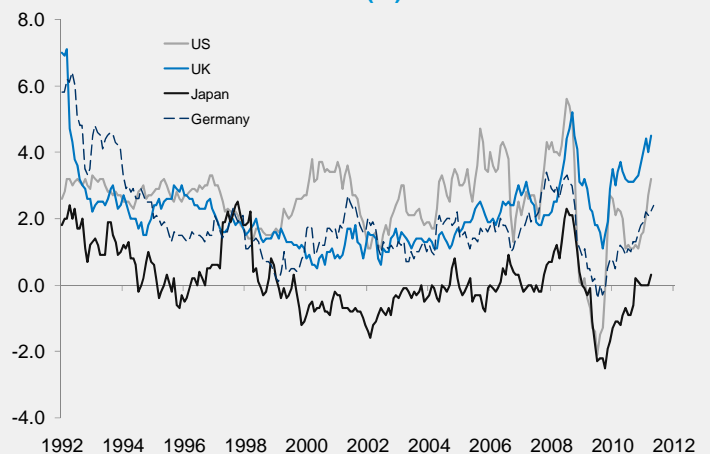
Average inflation rates and current inflation rate

	Since 1993	Since 2000	As at 31/03/2011
Australia	2.5%	2.9%	3.3%
US	2.5%	2.5%	2.7%
UK	2.0%	2.0%	4.0%
Germany	1.7%	1.6%	2.1%
Canada	1.8%	2.1%	3.3%
NZ	2.2%	2.6%	4.5%

Source: Bloomberg and CFSGAM

The chart below shows rolling annual CPI inflation in the four major Western economies over the past 20 years.

Annual inflation – headline (%)



Source: Bloomberg



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However, after a long period of declining inflation rates, consumer prices had begun to rise from around 2004 at annual rates approaching or exceeding those that were being posted in the early 1990s. The GFC interrupted this trend, with a fall in prices during 2009 triggering deflationary concerns, especially in the US. However, with the worst of the macroeconomic consequences of the GFC seeming to have passed, inflation rates have risen once more to levels which, in the US and Germany, are comparable to 2008 and in the UK are above those that were recorded pre-GFC.

Asian economies experienced a similar pattern of inflation through this period. For instance in China, in early 2008 inflation had risen to 8.7%, then fell to -2.1% for the year to June 2009, but has accelerated once more to above 5%. The following table provides some comparisons within the emerging markets of average inflation since 2000 and the latest annual rate of inflation, indicating how widespread the recent increase in inflation has been:

What can also be seen from the table is that inflation in some countries such as the UK and New Zealand exceeded 4% in March 2011. Rising food and energy prices have impacted inflation globally, but in some countries increases in consumption taxes (such as the UK and NZ) have skewed the figures to the upside. The chart below shows the recent increase in inflation in the developed world, although as this article goes on to discuss, much of this increase in inflation will be largely temporary and that large output gaps should see inflation fall over the medium term in most developed economies.

Average Inflation rates and current inflation rate

	Since 2000	As at 31 March 2011
China	2.1%	5.4%
India	6.2%	9.0%
Indonesia	8.2%	6.7%
Korea	3.1%	4.7%
Brazil	6.7%	6.3%
Russia	13.3%	9.5%

Source: Bloomberg and CFS GAM

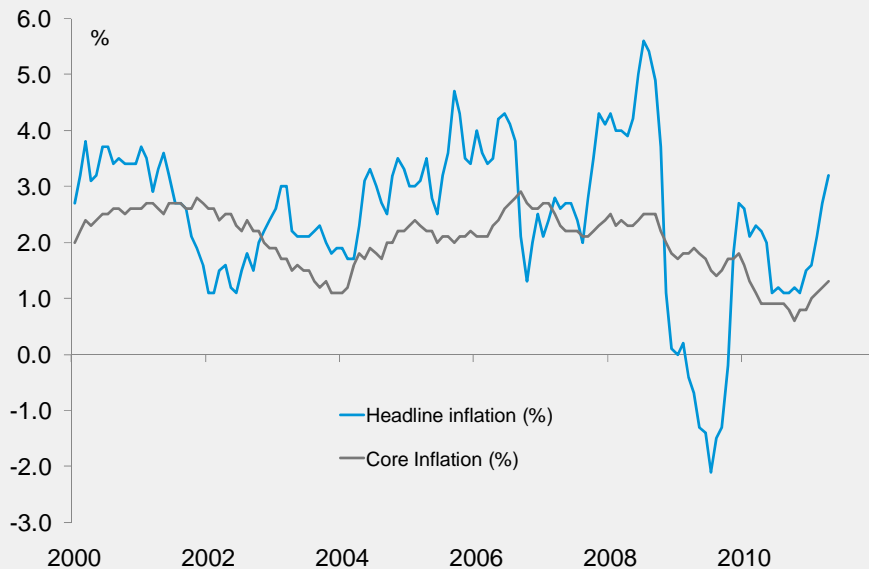
How to approach the inflation outlook

How concerned should investors be about the renewed trend to higher inflation in the global economy? The following considerations seem to be most important and help determine our outlook for inflation in Australia, Asia and the US.

1. *Headline or Core?*

The recent rise in inflation globally largely reflects the influence of stronger commodity prices, which tend to exhibit significant short term volatility. This is most evident when looking at US inflation and the difference between the headline inflation rate compared with the core rate (ie. ex food and energy), as in the following chart. Core inflation has risen a little from just below 1% to just above it and if one's focus were to be only on that measure, there would be little reason for concern as core inflation still has a long way to go to reach pre-GFC levels.

US annual inflation – headline vs core



Source: Bloomberg. Data to 30 April 2011

Further, as research by the Federal Reserve Bank of Atlanta shows,¹ the core inflation rate is a better predictor of CPI inflation over the next three years than is the headline inflation rate. If that relationship holds, then the outlook is more benign than the current trend in the headline CPI would indicate.

It is important to understand that each central bank does focus on a different measure of inflation. For example in the US, the focus is on core inflation by the Federal Reserve ('the Fed'), whereas in Europe, the European Central Bank ('ECB') focuses on headline inflation. The Reserve Bank of Australia (RBA) targets headline inflation over the medium term, but monitors underlying inflation as the more appropriate measure of short term inflation trends.

2. Measures of spare capacity

There is still a significant amount of spare capacity in the US and most other Western economies:

- Industrial capacity utilisation in the US is currently reported at 76.9%, which is still somewhat below the long run average of 80%. Capacity use usually needs to be above that 80% level for price pressures to emerge in the economy. One risk to this is that given the low levels of capital investment pre and post GFC, some of this capacity is likely to be of poor quality and price pressures could come through at a lower capacity use point.
- Labour market capacity utilisation is very low – this is the flip side of the fact that unemployment remains at an elevated level.

Research undertaken by the RBA² shows that one of the best indicators of the inflation outlook is the strength, or otherwise, of the labour market. In the research paper the RBA states that "we still find that the unemployment rate or growth in marginal costs (unit labour costs and import prices) provides a better fit than either the output gap or level of real marginal costs."

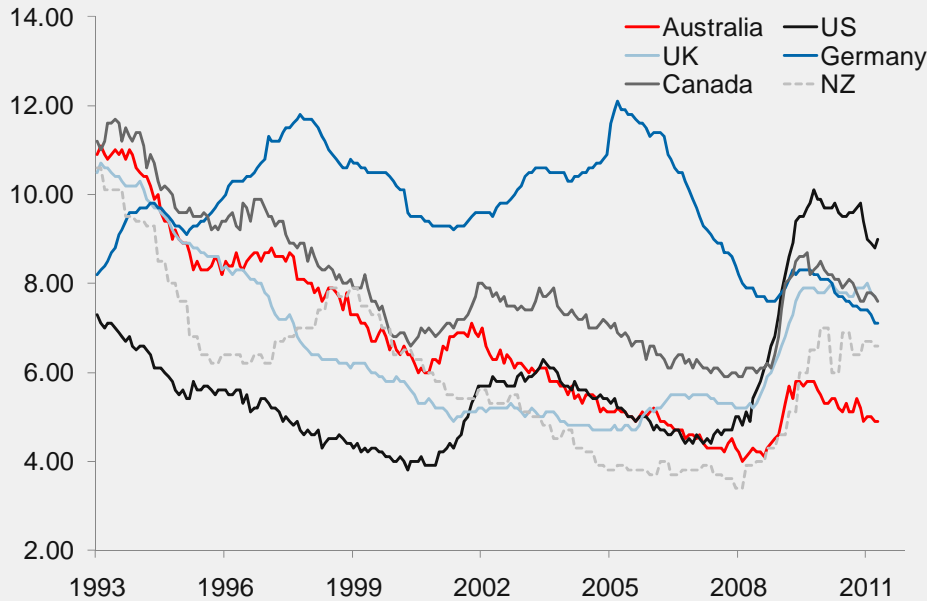
In this regard it is very informative to look at the unemployment rates in selected developed economies and the implications of this for the inflation outlook.

At 9.1% the US unemployment rate is the highest, followed by 7.7% for the UK, 7.4% for Canada, 7.0% for Germany and 6.6% in New Zealand. These unemployment rates would also indicate a very different inflation outlook in Australia relative to other developed nations, with the Australian unemployment rate at 4.9%.

¹ Found at the Federal Reserve Bank of Atlanta website: <http://macroblog.typepad.com/>

² "Modelling inflation in Australia" David Norman and Anthony Richards, RDP 2010-03

Comparative unemployment rates (%)



Source: Bloomberg

Wage pressure, of course, is one well regarded way to produce inflation pressure in the economy. Historically as much as 70% of inflation is driven by wages pressure. The US Federal Reserve Chairman, Ben Bernanke, has admitted it could take as long as 5 years for the labour market in the US to return to normal, or to an unemployment rate considered to be at an acceptable level. If so, then sustained inflation pressure is not expected to emerge for some time yet in the US. This should also limit inflation pressures in other developed economies where unemployment rates remain at elevated levels.

3. Food and energy prices

To date, most of the inflation in emerging economies has been due to rising food and energy prices. The United Nations Food and Agriculture World Food Price Index has risen 38% from end June 2010 to end May 2011 and the oil price is up 36% over the same time period.

These goods make up a higher proportion of consumer spending in emerging markets. In the Middle East and economies like India, 45% of income is spent on food; in China it is 30%; while in developed economies it is closer to 15%. As a result, the pass through of food and energy prices into inflation has been significantly higher in the emerging world than the developed world.

The rise in food and energy prices is a structural story, driven by strong growth from emerging economies, particularly rising income and consumption levels. Strong gains in demand for food and energy have not been met with the same increase in the level of supply. For example, Federal Reserve Chairman, Ben Bernanke in a recent speech³ stated "world oil consumption rose by 14% from 2000 to 2010; underlying this overall trend, however, was a 40% increase in oil use in emerging market economies and an outright decline of 4.5% in the advanced economies". At the same time, world oil production increased less than 1% per year since 2004.

The dynamics in terms of the supply and demand for food is even more out of balance. According to the United Nations⁴ the amount of land cultivated globally has increased by just 13% since 1961, while the global population has grown from 3 billion to 6.5 billion over the same period, an increase of 115%⁵. This equates to a fall in arable land per person. The impact of higher food and energy prices on inflation is expected to continue until there is a meaningful supply response. Over time persistent higher prices should encourage a supply response.

³ "The U.S. Economic Outlook", Ben Bernanke, June 7, 2011

⁴ FAOSTAT: Agricultural statistics, world arable land and permanent crops 1961-2006 www.fao.org

⁵ United Nations World Population Prospects: 2008 Revision Population Database, <http://esa.un.org/unpp>

Regional / country inflation outlook

1. Australia

The recent consumer price index (CPI) data for Q1 2011 showed the annual headline inflation rate in Australia rising to 3.3%, from 2.7% at the end of 2010. Much of this increase was due to temporary effects (largely on food prices) from the devastating floods and cyclone at the start of the year. Away from some of the more extreme price movements, the underlying inflation rose to just 2.25%. The Reserve Bank of Australia (RBA) has had a mandate to target inflation between 2%-3% 'average over the cycle' since 1993, with this mandate most recently re-confirmed in September 2010 (ie. after the Federal election).

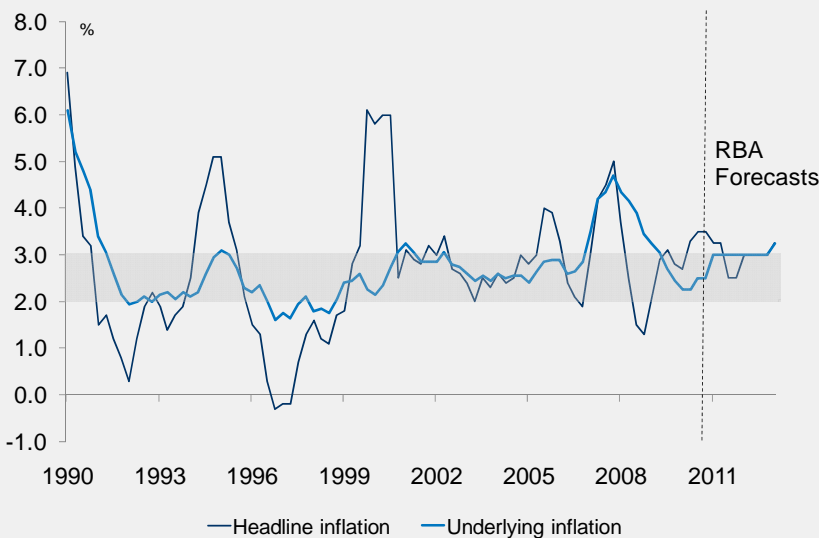
If the impact on prices of the introduction of the 10% GST on 1 July 2000 is excluded, the average inflation rate since the start of the RBA's mandate has been just over 2.5%. Given this excellent outcome, and the outcomes for GDP growth over that period, it is a widely held view that the RBA is one of, if not the most, successful inflation-targeting central banks in the global economy.

The RBA's inflation forecasts (see chart below) are for a gradual increase back to just above the top of the 2%-3% target range. Much of this increase is expected from utility prices due to underinvestment in the sector over the past decade and expected above trend economic growth with the RBA expecting growth at the end of 2011 of 4.25% and 3.75% for end 2012 and end 2013. Given Australia already has very low spare capacity, above trend economic growth will continue to lead to inflationary pressures in the Australian economy.

There are other factors impacting on inflation in Australia, and the risks to the inflation outlook that these imply seem to be very different for Australia than most developed economies.

This is clearly represented by the fact that the RBA has been on a monetary policy tightening trend since late 2009, while monetary policy in most developed economies remains extremely accommodative.

Australian inflation



Source: ABS and RBA

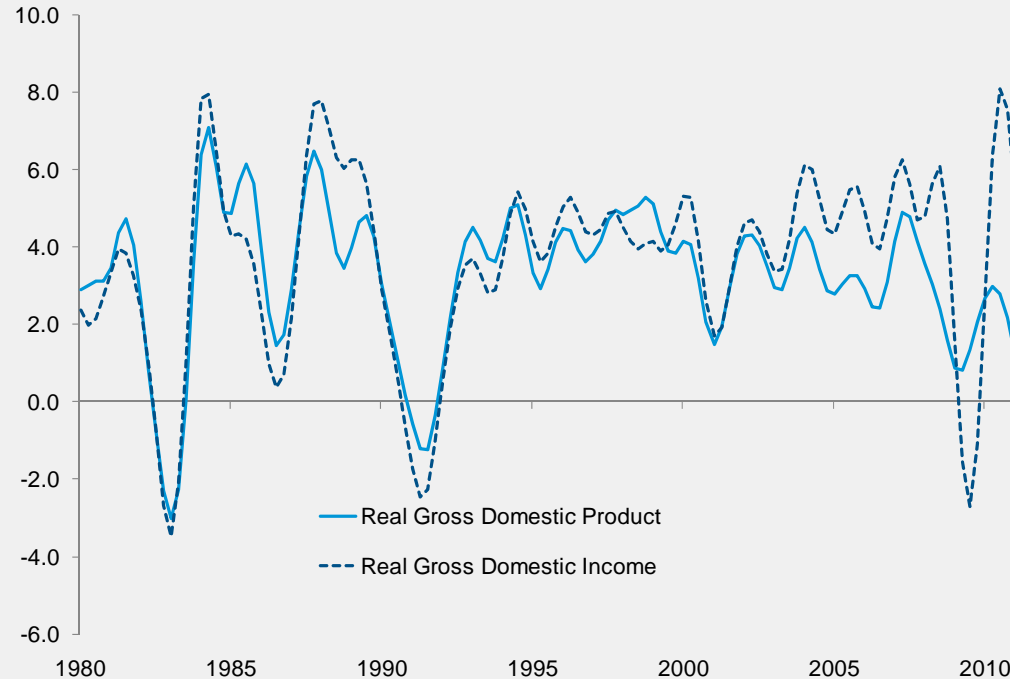
The key difference for the Australian economy compared to other developed economies, particularly the US, UK, Europe and Japan is likely to be the income effects of Australia's surging terms of trade and how this income flows through the economy.

As is well known, Australia's terms of trade (export prices relative to import prices) is projected to be at its highest level on record in 2011 (ie. data dates back to 1870). This is being driven largely by Australia's exposure to emerging economies, particularly China. China is Australia's number one trading partner, with the export share now at 21% at the

end of March 2011. This compares to the likes of the US at 8%, Germany at 5% and Canada at 3% who have a relatively low export relationship with China.

This surge in the terms of trade is translating into an increase in the rate of growth of national income. Indeed, as shown in the chart below, income growth is now running significantly ahead of production growth in Australia.

Australian GDP and income growth



Source: ABS

In their tightening of monetary policy over 2009-2011 the RBA has been focused on the threats to the inflation outlook from this increase in national income. However, the surprise over 2010 was the rapid increase in the household savings rate, rather than a big increase in consumer spending. In essence, the inflation impact of the terms of trade boom was dampened by the decision to increase savings, rather than spending.

In addition, the inflation environment was helped by the ongoing rally in the Australian dollar (AUD), which has acted to reduce import price pressures.

This is a combination of inflationary fundamentals that is not being experienced by other developed economies. In most other developed economies the terms of trade have not been rising and their currencies have been depreciating, a good example is the UK. Income growth in these economies has also been limited given their poor trade, banking and debt fundamentals and weakness in the labour market (and consequently, wages).

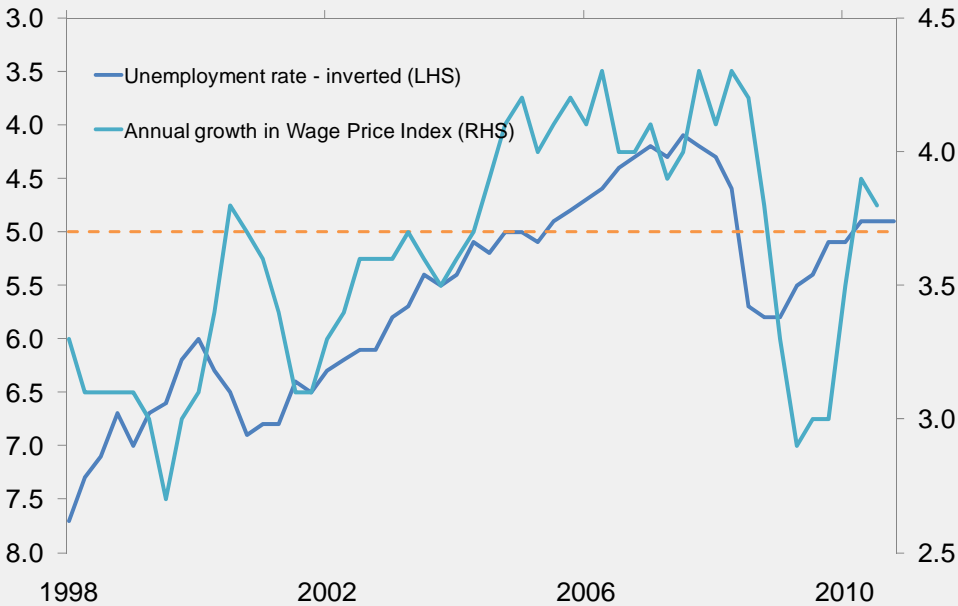
As a result, for 2011 and the years ahead the inflation outlook in Australia is likely to be very different to other developed economies. While Australia's relatively high inflationary pressures are likely to be offset by tighter policy from the RBA and ongoing strength in the AUD, the strength of income growth in Australia likely poses an increased inflation risk relative to other developed economies, especially if Australia's savings rate started to trend lower again.

While it is a good challenge to have (in a world of slow growth and too much government debt), the challenge for the Australian authorities will be to ensure that the positive demand effects of the rising terms of trade and income flow do not translate into elevated inflation, that especially begins to translate into higher wages and higher inflation expectations.

While the RBA is expected to be up to the challenge, supply-side challenges to the Australian economy remain, especially given the combination of a record mining and gas investment boom at the same time as supply constraints are elevated by recent weather related events. As a result, it seems clear that Australia faces more upside risks to its inflation outlook than does many of our developed economy peers.

At below 5% it is worth noting that Australian's unemployment rate has returned relatively quickly to the estimated natural rate of unemployment (NAIRU) where the RBA believes wages growth begins to accelerate and becomes a greater challenge for inflation. The chart below shows the relationship between unemployment and wages. It is for this reason that the RBA remains vigilant against inflation. There is also growing industrial relations action in Australia that can threaten wages pressure and inflation expectations.

Wage growth vs unemployment rates (%)



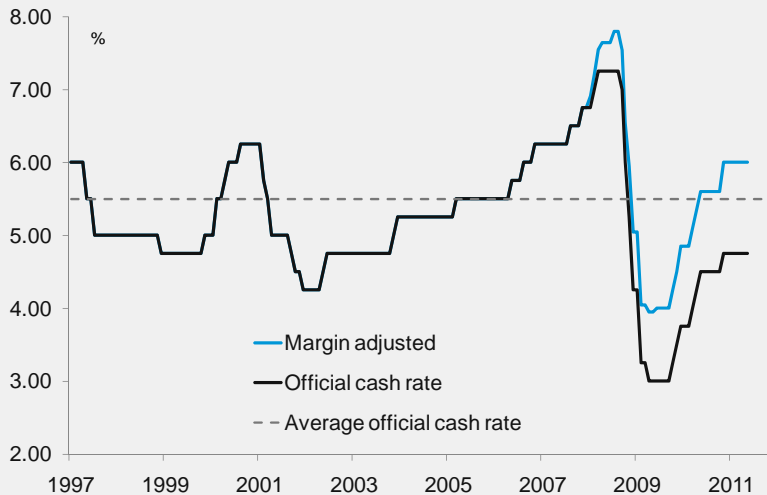
Source: ABS, CFS GAM.

Implications for interest rates in Australia

The RBA has signalled that it expects the official cash rate will have to be tightened further from its current stance of 4.75%. This was confirmed in the May 2011 “Statement on Monetary Policy”, with the RBA stating “further policy tightening is likely to be required at some point to restrain inflation” and again was reiterated in a June speech by Governor Glenn Stevens. This is likely to be almost the direct result of RBA expectations for inflation above 3% at the end of its forecast horizon in December 2013.

The more important question is how many more interest rate rises are possible. Looking at the below chart, we can see the stance of monetary policy in Australia is already mildly restrictive. Mortgage rates have risen more than the official cash rate and the RBA has said it does decide monetary policy decisions on the lending rate in the economy. As the chart below shows, if we add on this extra margin banks have charged, the official cash rate is equivalent to 6%, which is arguably a relatively restrictive setting of interest rates.

Official cash rate and margin adjusted official cash rate (%)



Source: RBA, CFS GAM

This could limit the number of further interest rate rises required by the RBA to control inflation. This paper suggests the outlook for inflation in Australia will depend on the labour market, particularly wages growth and how quickly wages pressure moves from the resources sector to the rest of the economy, as well as the supply constraints the Australian economy is burdened with given the mining and gas boom underway. There seems little doubt, therefore, that further interest rate rises will be needed to push against the resulting inflation pressures.

However, the outlook for elevated inflation and the resources boom must be balanced against the performance of the rest of the Australian economy. The consumer remains on hiatus, the strong Australian dollar is hurting traditional sectors of the economy including tourism, manufacturing (those who compete against cheap imports) and non-resource exporters. While further interest rate rises are expected, it is unlikely that the RBA will have to go as high as the previous terminal cash rate of 7.25% in March 2008 for the same impact on the Australian economy.

2. Inflation in the emerging world

Inflation in Asia and the emerging world is a very different story than the developed world. While low interest rates in most developed economies has been appropriate due to large output gaps (such as high unemployment and low capacity utilisation), minimal inflation, a recovering banking sector and fiscal austerity measures, the same policy measures are not appropriate in most emerging economies.

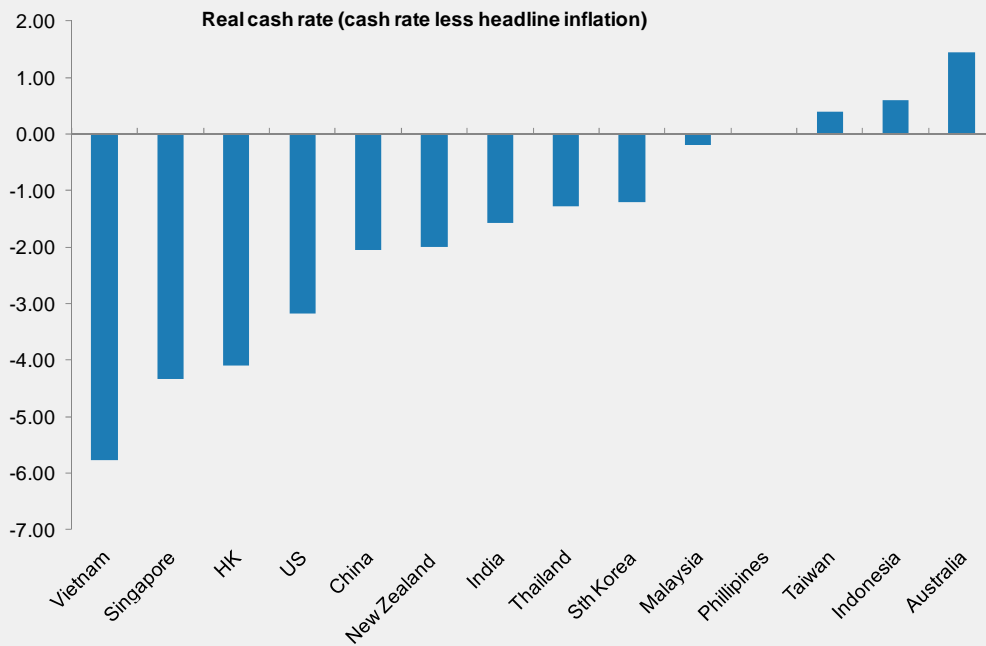
To date, most of the inflation in emerging economies has been due to rising food and energy prices with these goods making up a higher proportion of spend from income as detailed in an earlier section. Inflation has also been higher given relatively higher economic growth rates and lower output gaps due to inadequate infrastructure and falling unemployment rates. The expected growth in emerging economies in 2011 by the International Monetary Fund (IMF) is 6.5% compared to developed world growth of 2.4% and an inflation differential of 6.9% versus 2.2%.

Wages are rising and are expected to continue to rise in economies like China where the focus is on lifting living standards and disposable income. Skill levels are also rising and with this come rising wages, although these are not always accompanied by productivity gains. For example in the next five year plan in China, there is a commitment to lift the minimum wage by 13% per year, this is after wages gains of 20% over the past year. While inflation has been elevated due to food and energy costs, inflation pressures are broadening out beyond this, indicating inflation pressures are more than likely to persist for a longer period of time.

Apart from greater exposure to rising food and energy prices, one key reason for higher inflation in emerging economies is due to ineffective or inappropriate monetary policy. One way we can assess the appropriateness of monetary policy is to examine the real interest rate. Simply this is the nominal cash rate less inflation. A negative real interest rate implies money is cheap and there is minimal incentive to reduce borrowing and spending decisions.

Some emerging economies have held interest rates artificially low to reduce the incentive for volatile and sometimes unproductive capital inflows searching for a high yield. With some Asian countries not having flexible exchange rates, mass capital inflows can be extremely destabilising, as evidenced by the Asian crisis in 1997 / 1998. Some currencies in the Asian region have also been held artificially low to boost exports (one common example that is used is China), however a low currency also leads to import price inflation and is another key factor boosting inflation in the region.

The chart below shows current real interest rates in the Asian region and indicates that for many countries, real interest rates are negative and given the economic growth outlook of countries like Vietnam, India and South Korea, interest rates are too low and inadequate for controlling inflation in the region.



Source: Bloomberg

Until there are changes to interest rate and foreign exchange policy in Asia, inflation will continue to be an issue in the region and there is a growing risk that this inflation problem could be exported globally. There is beginning to be some recognition of the need for higher interest rates in Asia, countries including China, India, Korea, Thailand, Indonesia, Malaysia, Philippines and Vietnam having tightened monetary policy. But given real interest rates are low and often negative, more tightening is needed. There is also recognition that currencies will need to be appreciated but this will be a long, drawn out process to reform monetary policy and foreign exchange policy in these economies.

3. The US

One key question is the outlook for inflation in the US economy over the short term and medium term. US inflation is currently 3.6%, largely driven by rising food and energy prices, and also exacerbated by a weak US dollar. However, core inflation is, to date, is relatively well contained, at 1.5%.

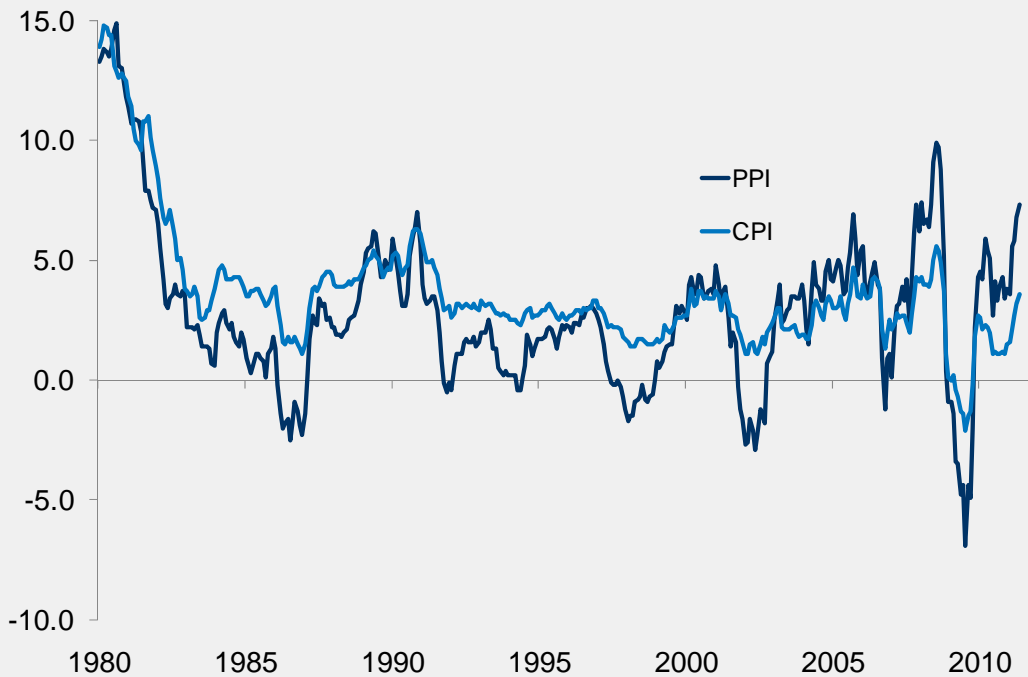
In the short term, elevated food and energy prices and an ongoing weak US dollar could see headline inflation uncomfortably high. Import prices have risen 12.5% over the 12 months to May 2011, excluding petrol, import prices have risen 4.5%. However, given the weakness in consumer spending, the ability of firms to pass through higher costs have to date been restricted. Higher food and energy prices are perceived to be more likely to reduce consumption in other parts of the economy, rather than contributing to overall inflationary conditions. In the medium term a weaker US dollar is expected to further erode consumer purchasing power and could see consumer spending and prices at lower levels than the average rate of the past decade, especially when combined with the benign outlook for wages.

One key risk to this is higher short term inflation becoming sticky and influencing long term inflation expectations. To date, one measure of inflation expectations, the University of Michigan inflation expectation survey over 5 -10 years is 2.9%, which is the same as the average level since 2000. If inflation expectations remain anchored, a build up of inflation pressures is difficult to achieve.

Over the medium term the risk of a serious increase in inflation remains low. There is some merit to the debate that spill-over of inflation pressures from the emerging markets world to the US – driven by food and energy could be a possibility. The worry is a build-up of the spread between Producer Price Inflation ('PPI') and Consumer Price Inflation ('CPI') – where producer (or input) prices were rising but consumer prices could not keep pace (ie the consumer was still too weak to pay the higher prices). See chart below. However with profit margins in the US the highest in 18 years, it does appear that companies could wear some margin contraction before price pass through is attempted aggressively.

However given the large amount of spare capacity evident in the labour market, with unemployment above 9% and the average duration of unemployment now almost 40 weeks and the highest since records began in 1948, it is hard to envision wages pressures to materialise on a widespread scale.

US annual inflation – PPI (%) and CPI (%)



Source: Bloomberg. Data to 31 May 2011

The risks to move from a low inflation environment to a higher inflation environment include; unemployment is more structural than cyclical, leading to some wages pressure emerging sooner than expected; consumers unleash savings and companies are able to pass on higher input costs; the weak US dollar continues to lead to further rises in import prices which see inflation expectations set higher and impact on the general level of prices through widespread wage renegotiations.

While these factors are possible, the more likely scenario for US inflation is for a lower average rate of inflation over the next decade compared to the previous decade. Much of this is due to the soft outlook for the labour market.

Impact on interest rates

Currently the Federal Reserve appears willing to accept slightly higher inflation in the short term to ensure a sustainable economic expansion and gains in employment, than react to the recent increase in headline inflation. There appears to be a general appreciation that the recent rise in energy and food prices (and commodities more generally) was more of a short term event and would have no more than a transitory impact on prices. While further information is needed to appreciate if this was a permanent impact on the general level of inflation. The main point to consider would be if higher commodity prices would feed into higher inflation expectations, as this would be more of a concern than a short-term spike in headline inflation.

Given this uncertain medium term outlook and the current soft patch in the US economy, combined with the large output gap in the labour market, it could be said that the Federal Reserve is neither achieving its inflation objective nor its employment objective (ie inflation is too low and the unemployment rate is too high). As a result, monetary policy is likely to remain at its very easy setting for a considerable time with any tightening likely a mid 2012 story.

Conclusion

The greater risks of higher inflation seem, therefore, to be in the emerging economies and in Australia, albeit for different reasons. In Asia, structural changes and policy settings will lead to a higher inflation period. In Australia a combination of proximity to Asia, the terms of trade boom and capacity constraints could see a higher level of inflation in the next decade compared to the previous decade, despite having an inflation fighting central bank.

This sets a certain amount of policy challenges in both Australia and Asia, as well as challenges for investors who will now have to consider inflation and the impact of investments with increased care.

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