Comprehensive Analysis on Australian Dollar

Summary on AUD: Bearish

This report is an analysis on the AUD/USD currency pair. Australia's currency is called a commodity currency as its economy depends on the export of raw materials or commodities. The prices of these resources can affect the economy heavily thus causing a change in its currency strength.

From our research, we have observed two factors that have a significant relationship with the AUD/USD pair. They are (1) China's economy; (2) Commodity prices. With China being the top trading partner of Australia, it would be self-evident that a change in China's economy would affect the Australian economy. With China's shrinking economy, we are convinced that their demand for iron ore from Australia would drop drastically, thus decreasing Australia's commodities export revenue which would result in a lower GDP.

For commodity prices, we would focus on iron ore and gold as they share a correlation with the AUD/USD. With the current price depreciation of commodities across the board, we would expect the mining industry to contract and Australia would have to transit into an economy that is less reliant on commodity exports in order to maintain its economic growth.

However, based on a phenomenon called the Dutch Disease, we observed that a boom in commodity prices would result in a booming mining sector at the expense of other tradable sectors growth and exports such as manufacturing and agriculture. As the commodity boom is ending, it would be difficult for Australia to transit to a non-resource dependent economy as the booming mining industry has left a gap in the economy which the other lagging tradable sectors would not be able to fill so quickly.

Therefore, we would expect the Australia economy to continue contracting and we would be looking to open short positions in the AUD/USD pair in the long term. This outlook is dependent on the assumption that the US economy continues to be resilient and no other major shocks happen in the future.

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Technical Analysis

Weekly

Figure 1.1> A long period of consolidation could be observed between July 2012 to April 2013, price then broke out of the range towards the downside, indicated a downtrend. Price subsequently formed a weekly double bottom around March 2014 but failed to rally. After which, a consolidation within a range could be observed, in-between 0.9210 to 0.9463, as depicted by the two horizontal blue lines. Next, a breakout of the range towards the downside, could be observed at the start of September 2014. Employing a moving average crossover strategy, it could be observed that the weekly 50 period EMA crossed below the weekly 200 period EMA (bearish moving average crossover) on the 3rd of November 2013. This is coupled with the observation where both EMAs were downward curving, with increasing steeper gradient. These signals from our technical strategy indicated a strong bearish trend occurrence. In summary; the combination of all the signals mentioned above, strongly indicates a very strong bearish outlook for AUD/USD currently.

Current price could be observed to be forming an ascending triangle pattern which would mean a possible uptrend, as price breaks above. We expects the bullish trend to be short-term, as supported by our fundamental outlook.

Figure 2.1> Looking at the weekly gold chart, a bearish channel coupled with the bearish moving average crossover, confirms that the AUD/USD pair is in a downtrend as gold and the AUD/USD pair are correlated.

Daily

Figure 1.1 overlay> In the AUD/USD daily chart, price has broken the daily downtrend line and is observed to be forming an ascending triangle pattern (mentioned in weekly analysis). Using the Bollinger Bandwidth indicator (BWI), the curve in the BWI is near the value of 2.2938. This indicates that the bandwidth is contracting and the Bollinger Bands are narrowing, thus confirming that price is consolidating and signalling that price is getting ready for a breakout. If price failed to breakout to the upside as mentioned in the weekly analysis, possible shorting opportunities would be at the resistance turned support level of 0.7030.

Figure 2.2> Looking at the daily gold chart, price has formed a bearish flag and is observed to be forming a double bottom indicating that there is a higher possibility for price to rally. With both the AUD/USD chart and the gold chart showing a possible rally in price, it is recommended to not enter any short positions until price shows a continuation of the downtrend.

Recommendation of trade actions

Scenario 1- If price breaks out of the ascending triangle to the upside, we would wait for a reversal in price action in the resistance zone of 0.7600 (1st resistance level) to 0.7800 (support level turned 2nd resistance level). A short entry would be executed after a confirmation of a price reversal towards the downside.

Scenario 2- If price breaks out of the ascending triangle to the downside, a short entry would be executed after a single long bear candle close below 0.7030 support level, with the targeted profit price level at 0.6300.

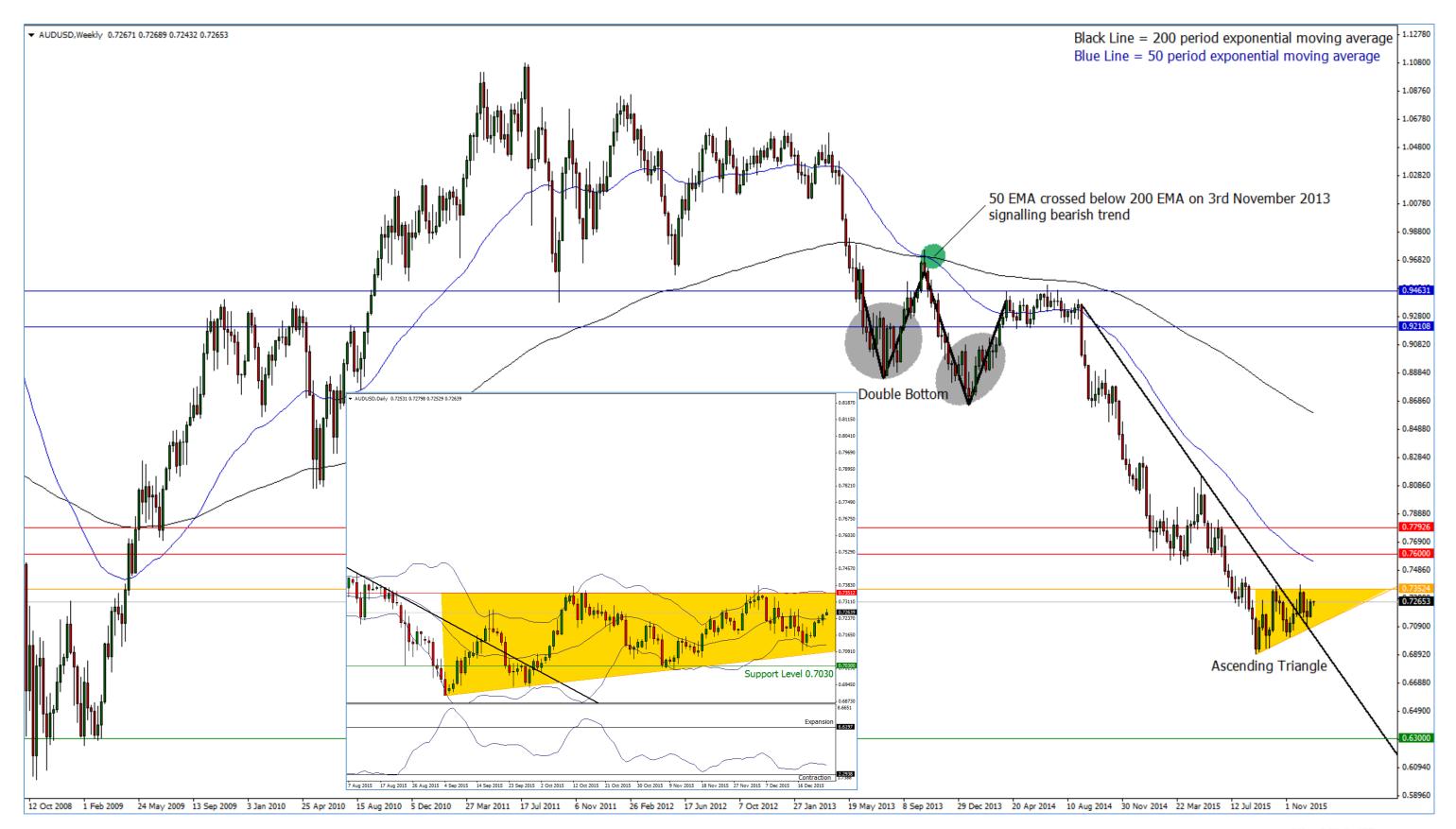


Fig 1.1: AUD/USD Weekly Chart w AUD/USD Daily Chart overlay

Chart Data By:





Fig 2.1: XAU/USD (Gold) Weekly Chart

Chart Data By:





Fig 2.2: XAU/USD (Gold) Daily Chart

Chart Data By:



The Dutch Disease Phenomenon

The Dutch Disease is the name given to a phenomenon that occurs when there is a boom in the natural resources sector through either a supply shock or a large increase in demand for natural resources. When there is a boom in the natural resources sector, an increase in exports will cause an appreciation of the country's exchange rate thus reducing the price competitiveness of other tradable sectors such as manufacturing as both sectors' prices are determined globally. Therefore, the adverse effects of a booming natural resources sector would be the contraction of another tradable sector.

Case Study (Netherlands)

In the 1950s, a large supply of natural gas was discovered in the Netherlands. The country started the exploitation of the natural gas and increased their revenue greatly. However, the country's manufacturing sector was adversely affected by the supply shock in natural gas and started to decline in output and employment. This phenomenon was coined the Dutch Disease and a three sector model explaining the phenomenon was developed by W. Max Corden and J. Peter Neary in 1982.

The three sector model can be grouped as such:

- 1. Tradable Sector (where prices are determined by the global market)
 - (i). Booming Sector (natural resources)
 - (ii). Lagging Sector (manufacturing or agriculture)
- **2. Non-tradable Sector** (where prices are determined by the domestic market)
 - (iii). Goods & services produced only for the domestic market

There are two main mechanisms that explains the Dutch Disease: (1) the spending effect; (2) the resource-movement effect.

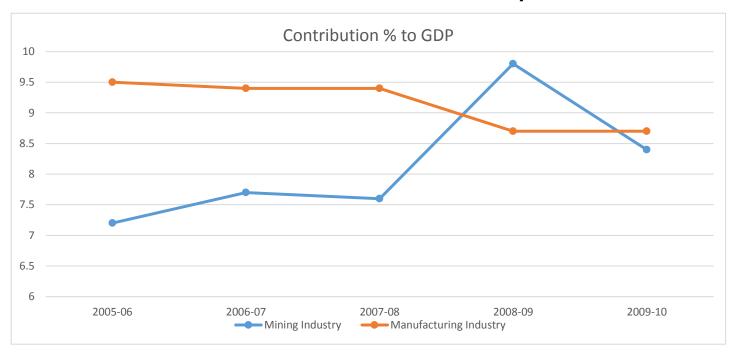
1. The Spending Effect

A boom in the natural resources sector causes revenue to increase, thus causing domestic income to increase. An increase in domestic income causes higher expenditures on both tradable and non-tradable goods which causes an increase in demand for goods in both of these sectors. Prices of tradable goods are determined by the global market hence they are not affected by the increase in demand. However, prices in the non-tradable sector are determined by the domestic market hence they would rise with the increase in demand. An increase in prices in the economy will cause real wage to decrease, resulting in workers demanding higher wages. As a result, profits from the lagging sector would decrease due to higher wages thus causing the lagging sector to contract.

2. The Resource-movement Effect

A rapid growth in the natural resources sector would cause resources such as labour and capital to flow from the lower growth sectors in the economy; transfer of resources from the lagging sector to the booming sector. As a result, production in the lagging sector would slow down; the decreasing output would further contract the lagging sector.

Association to the Australia's Economy



The chart above shows that mining has boomed thus contributing more to the economy while manufacturing has stagnated and even declined in its contribution to GDP. Furthermore, the overall percent change from 2005 to 2010 in the mining industry has increased by a huge 20.6% while the manufacturing industry has only increased by 1.1%. These data shows that the booming natural resources could be causing a slowdown in the manufacturing sector.

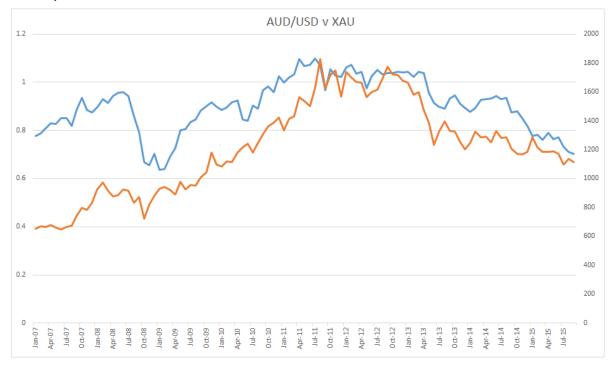
Various effects; decreasing China demand in iron ore is causing a decline in iron ore prices which resulted in the fading of a commodity boom, and coupled with the Australian government effort to transition their economy away from a resource dependent economy. This results in a wide gap left behind by the declining mining industry. We expect the other non-mining industries would not be able to fill the gap in the short term, due to the structural imbalance in production output left by the mining industry.

CAPEX *(Capital Expenditure)* data from the Australian Bureau of Statistics further supports this view. The monitoring of the level of CAPEX spending in Australia will indicate the phase of Australia's transition away from the resource dependent economy. In the 3rd quarter of 2015, Australia's CAPEX declined by 9.2%. This suggests that Australia is having trouble in its transitioning phase.

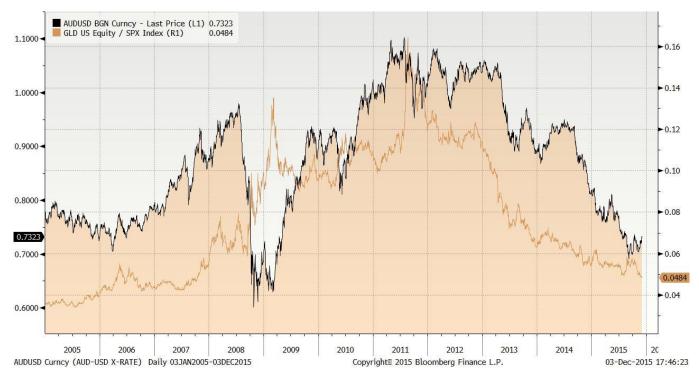
With an observed Dutch Disease phenomenon and a rough transitioning phase, we believe that the Australian Dollar will depreciate further as investors' demand for Australian Dollar will decrease.

Gold & AUD Relationship

Another commodity that has traditionally been associated with the AUD is gold. The relationship of gold and the Australian Dollar stems from production. It all started with the Gold Rush in 1851 in the state of Victoria, subsequently, discoveries were also made in the colonies of Queensland, Western Australia and Tasmania. As the graph below shows, gold (XAU/USD) and the nominal exchange rate (AUD/USD) has a positive correlation of 83.53%.



Looking into the investment demand for gold, it is not like any other commodity and has a special place in the world of commodities. Apart from being a precious metal, it is regarded as an alternative currency. During the 2008 Global Financial Crisis (GFC), the risk-on Australian dollar lost as much as 37% against the US Dollar. During that same period, gold relative to the S&P 500 spiked. This shows that money leaving stocks went into gold – a safe haven asset.



In the chart on the bottom left, gold is represented by the gold ETF, GLD. The line in blue is the relative strength of GLD to the S&P 500 Index as represented by the SPX ETF. Gold gained much more during the GFC relative to the S&P 500.

When the Australian dollar lost 37% against the US Dollar, traders unwound their carry positions and dumped the risk-on Australian dollar.

Security	End of 2008	Peak of 2011 (Aug 22)	% Change
GLD	86.52	184.59	113%
AUD/USD	0.7027	1.0409	48%

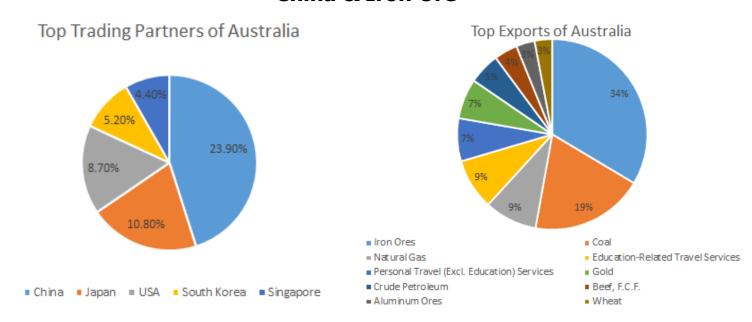
As the table above shows, during the period of fear from 2008 to 2012 which consisted of the Great Recession and Eurozone Sovereign Debt Crisis, gold gained 113% while the risk-on Australian dollar gained only 48%, which shows that gold was highly favoured in times of heightened uncertainty. Hence, it is probable that the Australian dollar gained largely due to its correlation with gold and not necessarily due to increased risk-on sentiment.



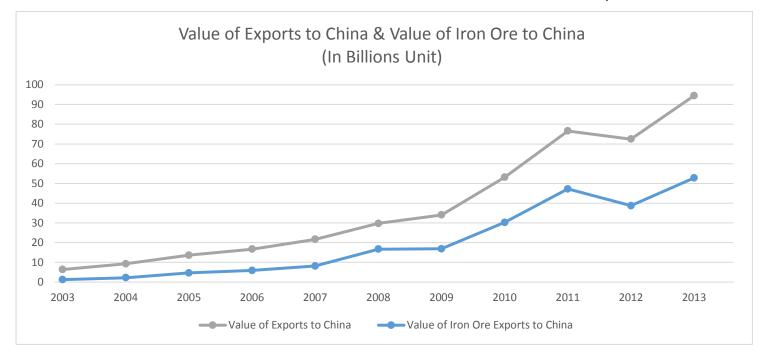
The chart above shows both gold (yellow) and the AUD/USD pair (white) both largely moving in tandem. The line in red represents the AUD/USD pair relative to GLD. It is clear that gold performed much better than the AUD/USD pair.

In conclusion, in times of increased uncertainty, gold can be a good trade along with the AUD/USD pair. However, it is not expected of the AUD/USD pair trade to gain as much as gold. It could also be observed that current price trend is to the downside, which indicates that market uncertainty is declining. This further supports our bearish outlook to Australian Dollar.

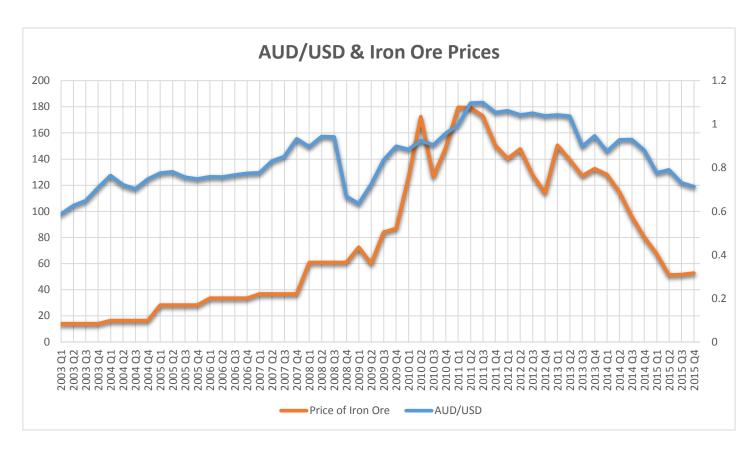
China & Iron Ore



From the pie chart above, it is observed that China is the top trading partner of Australia. Furthermore, China is the largest importer of iron ore which constitute the largest export of Australia. Therefore, it is self-evident that China's demand for iron ore would affect the Australian economy.



From the line chart above, the export revenue of Australia earned by exporting iron ore to China has been increasing from 1.22B in 2003 to 52.8B in 2013. This takes up 56% of Australia's exports to China in 2013. Thus, we can conclude that iron ore exports to China contributes to a large percentage of total export revenue earned from China.



From the chart above, it is observed that the prices of iron ore and AUD/USD share a positive correlation of 83.40%. Thus we would be able to use iron ore price movements to gauge the price movements of the AUD/USD.

With China's slowing economic growth, the demand for iron ore will shrink, thus pushing the price of iron ore down as steel mills in China continue to slow their production. Furthermore, Australia's largest mining companies such as Fortescue and BHP Billiton, are oversupplying the market of iron ore. This is keeping prices low so as to maintain their price competitiveness. As a result, further pressure is put on iron ore prices which we believe will extend the depreciation of the Australian dollar.



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