NZ@A Intended for teacher use only

Student processed and presented the statistical data, and explained the trends and relationships in the inflation and unemployment data in detail in the analysis.

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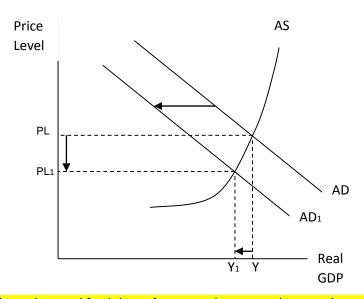
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Inter-relationships

Interpret the trends and explain the inter-relationships between the inflation data (graphs 1 and 2) and the unemployment data (graphs 3 and 4).

The inflation rate (*graphs 1 and 2*) trends downwards from 0.9% in Dec 2010 to 1.0% in Dec 2011. Then decreases down to 0.4% in Mar 2013. The percentage change in the money supply (*graph 1*) trends downwards from 3.0% in Dec 2010 to 1.2% in Mar 2012, and decreasing to 0.6% in Dec 2013. The quantity theory of money which uses the Equation of Exchange (MV=PQ) can help explain the relationship, because the decrease in the money supply (M) has a direct effect on the rate at which the level of prices (P) change. When the rate of change in M decreases, the rate of change in P (i.e. inflation rate) also decreases assuming no change in V and Q.

The decreasing inflation rate and the increase in the exchange rate will cause an increase in demand for \$NZ because foreign investors see \$NZ providing an attractive return, and supply of \$NZ decreases as existing holders do not want to exchange it for \$US because holding it is more profitable. The exchange rate (*graph 2*) trends upwards from 0.75 (\$NZ/\$US) on Dec 2010 and reaches 0.80 (\$NZ/\$US) in Dec 2011, increasing to 0.84 (\$NZ/\$US) in Mar 2013. As the exchanges rate increases, the inflation rate decreases because when the \$NZ is strong this decreases (X-M) because what foreign currency exporters earn now converts to less \$NZ, and it is a component of AD, this causes a shift of the AD curve inwards to AD1, causing less demand-pull inflation (PL to PL1). Additionally, exporting firms will therefore demand less workers and so this also affects the participation rate in the labour market and the number of workers employed will decrease and we will see more involuntary unemployment.



The unemployment rate (*graphs 3 and 4*) trends upwards from 5.2 % in Dec 2010 to 6.2% in Mar 2012, increasing to 7.8% in Mar 2013. As the unemployment rate increases this decreases the inflation rate. When unemployment is increasing this means disposable income decreases causing (C) consumption spending to decrease, and decreasing AD because (C) is a component of AD = C+I+G+(X-M).

A decrease in AD will cause a decrease in price level (i.e. rate of inflation). This can be illustrated by the AD/AS model. AD moves inwards to AD1 and this causes a decrease in PL to PL1 causing less demand-pull inflation, and real GDP decreases, meaning there are less goods and services being produced. Therefore, there will be

less demand for labour from employers and unemployment will increase, because demand for labour is derived from demand for final goods and services (Y to Y1, a decrease in real output).