Analysing Government Economic Policy Using IS and LM curves:

An increase in Government spending shifts the IS curve outwards. There are several possibilities. In Figure 1a we get a substantial increase in Y (GDP) and a small increase in R. What has happened? The increase in G increases Y, this will cause consumers to spend more money increasing C causing Y to increase still further (the multiplier). This increase in Y results in an increase in the transactions demand for money and with a fixed money supply this will leave less for speculative purposes, driving up the rate of interest. (This views the rate of interest as the ‘price of money’ if the demand increases with fixed supply, the price (interest rates) rise. This increase in R will have a negative effect on 1, investment will actual fall thus reducing Y slightly from the boost the increase in G and C had given it. We say that some 1 has been ‘crowded out’ by the increase in G. In Figure 1b, the increase in Y is much smaller and that in R much bigger than hitherto. What has happened? We are further up the LM curve. To get money for transactions purposes with a fixed money supply we need to shift money away from speculative purposes. Yet on this almost vertical section of the LM curve speculative demand is close to its minimum below which it will not fall. To get even a small amount switched out of speculative demand results in a large increase in interest rates. But this causes a reduction in I almost equal to the increase in G. Crowding out is almost 100%.

In Figure 2 a reduction in tax rates also ‘swivels’ the IS curve outwards. In Figure 2a there is a substantial increase in Y and a small increase in R. What has happened? The reduction in the direct tax rates increases disposable income, this increases consumer expenditure increasing Y. Once more the multiplier works to expand this initial increase in Y. This increase in Y results in an increase in the transactions demand for money and with a fixed money supply this will leave less for speculative purposes, driving up the rate of interest. The analysis from here on in is the same as with the increase in G.

In Figure 3a, we have an increase in the money supply shifting the LM curve outwards. There is once more a substantial increase in Y and a reduction in R. What has happened? The increase in the supply of money has reduced the rate of interest which has boosted investment. This has increased Y and consumers have therefore increased their expenditure (the multiplier) thus increasing Y still further. In Figure 3b, the increase in the money supply has had no impact on either interest rates nor Y. Why? Interest rates are already at their floor they cannot fall any lower (the floor is probably about 1%-2% in practice). This is called the ‘liquidity trap’. It is possible that this is one of the problems facing Japan at this moment. (They have been stuck in recession throughout the 1990s). As always further details on all of this can be found in Lipsey and Chrystal.