Notes re: Ch. 3 and Ch. 5

Ch. 3

- An equilibrium condition for keeping income and output in equilibrium, i.e. these not increasing or decreasing is that

$$(I - S) + (G - T) + (X - M) = 0 \qquad \text{(Equation 1)}$$

- In a closed economy $X - M = 0$. This analysis uses S for private savings while the text uses S for total public plus private savings $= S + (T - G)$. Thus, I'll denote private savings as S_P and S_N for national savings, i.e. total public plus private. In this context M stands for imports – not money supply.

- The classical model in Ch. 3 – 5 assumes the economy is always at full employment so Y is always constant. Thus any change in one of the variables must be offset by an equal change of opposite signs by one or more of the other variables.

- There are several economic mechanisms through which such changes can occur. Sp is disposable income $(Y - T)$ that isn't spent. Thus holding Y and T constant, a change in C causes a change in Sp of equal size and opposite sign. Thus changes in T will affect C and Sp through the consumption function $C = f(Y - T)$.

- Changes in the variables can also bring about adjustments through their effects on interest rates (r) and the exchange rate (e).

- For the interest rate channel think of the D and S for loanable funds. In a closed economy $G > T$ (a budget deficit) creates a D_{Lf} i.e. the government needs to borrow to finance the deficit while $G < T$ creates a net S_{Lf}.

- Changes in the variables in equation 1 can create an excess D_{Lf} which would raise r and crowd out some other form(s)of spending or an excess S_{Lf} which would lower r and stimulate other types of spending.

- I will be a negative function of r.

- C will be a negative function of r and S a positive function, but these effects are generally less than those on I.

Ch. 5

- When we move to an open economy $X - M$ may also be affected. In these models net international capital flows K determines $X - M$ through the balance of payments equation: $BP = K + X - M$ (Equation 2)

- Since the longer run models assume equilibrium, $BP = 0$ so $K = - (X - M)$ i.e. a net capital outflow (a negative item in the BP which creates a supply of the home currency in the foreign exchange market) generates an equal sized trade surplus, while net capital inflows create a trade deficit.

- The model assumes perfect capital mobility, i.e. the home country is a price taker on the world market. Capital flows will be determined by what the domestic r would have been in a closed economy compared with the world interest rate r^w. In equilibrium the two interest rates will be equal. Thus when considering an exogenous change in one of the variables in equation1, analyze whether it would cause the domestic r to rise or fall in a closed economy. If it would rise there will be a capital inflow and the trade balance will turn negative. If the domestic r would fall then there'll be a K outflow and a trade surplus.

- The mechanism through which the ΔK causes $\Delta (X - M)$ is most easily seen with a floating exchange rate. A capital outflow creates an excess supply of the home currency on the foreign exchange market. This causes the currency to depreciate, making X more competitive and imports more expensive so a trade surplus is generated.

- With a capital inflow there's an excess demand for the domestic currency. It appreciates, causing exports to be less competitive and imports to be less expensive so a trade deficit is generated.

- We can analyze foreign shocks in the same way. First see whether they would raise or lower the world interest rate. If it rises, the home country will have capital outflows and an increase in the domestic interest rate. If the world rate falls, there will be capital inflows and a fall in the domestic interest rate.