1. Discuss

2. - Since $e_0 < e_{90}$, the Swiss franc is at premium.

$$ p = \frac{e_{90}}{e_0} - 1 = \frac{.6747}{.6693} - 1 = .0081 $$

- Since $p$ is positive, $(i_{us} - i_s)$ should be positive or $i_{us} > i_s$

- In equilibrium, $\frac{i_{us} - i_s}{4} \approx p_{90} \pm \text{transaction costs}$

- If we assume Transaction costs are .00024 throughout, we can calculate the limits within which equilibrium should fall by adding and subtracting .0024 to the equilibrium condition. This can then be applied to the interest rates in the two countries.

$$ e.q. \quad \frac{i_{us} - i_s}{4} = p \pm \text{transaction costs} $$

or/ $$ i_{us} - i_s = 4p \pm \text{transaction costs}, \text{assuming transaction costs do not vary with the transaction period length.} $$

$$ i_{us} - i_s = 4(.0081) \pm .0024 = .0324 \pm .0024 $$

$$ \therefore .03 \leq (i_{us} - i_s) \leq .0348 \Rightarrow \text{if } i_{us} \text{ is more than .0348 larger than } i_{us}, \text{funds should flow into the U.S. If } i_{us} \text{ is less than .03 larger than } i_s, \text{funds will move to Switzerland.} $$
Funds will continue to move from Switzerland to the US until \[ \frac{\bar{i}_{US} - \bar{i}_S}{4} \approx \frac{e_{fwp} - e_0}{e_0} - 1. \]

3. Multipliers

Simple multiplier \[ \frac{1}{1 - mpc} = \frac{1}{1 - .75} = 4. \]

For trade multiplier \[ \frac{1}{1 - mpc + mpm} = \frac{1}{1 - .75 + .15} = 2.5 \]

F.T. Multiplier with repercussions - A \[ \frac{1 + (.1/.4)}{.25 + .15 + .1 \left( \frac{.25}{.4} \right)} = 2.702 \]

F.T. Multiplier with repercussions - B \[ \frac{1 + (.15/.25)}{.4 + .1 + .15 \left( \frac{.4}{.25} \right)} = 2.162 \]
\[ \xi_{M/Y} - A = \frac{\Delta M/M}{\Delta Y/Y} = \frac{\Delta M}{\Delta Y} / M/Y \]

\[ = .15/.15 = 1.0 \]

\[ \xi_{M/Y} - B = (mpm/apm)_B = .1/.15 = .666 \]

4. Discuss

5. a. Using the Monetary Approach, 
\[ \hat{e}_{$/yen} \equiv \hat{P}_{us} - \hat{P}_{Jap} \]
\[ = .06 - .05 = .01 \]

i.e. you would expect the $ to depreciate by 1% over the year and 
\[ E (e_{$/y}) = (\$ .005838) (1.01) = \$ .005896 \]

b. \[ \hat{e} = (\hat{M}_S^{US} - \hat{M}_D^{US}) - (\hat{M}_S^{UK} - \hat{M}_D^{UK}) \]
\[ = (.05 - .04) - (.06 - .04) \]
\[ = -.01 \]

The US dollar is expected to appreciate by 1% against the UK £.

6. Discuss, using the international financial equilibrium condition;

\[ (i_{domestic} - i_{foreign}) = [E (e) - e_{spot}] / e_{spot} \]