

**Formula Sheet: Exam #3**  
**Econ 4673**  
**Dr. Keen**

Total reserves = nonborrowed reserves + borrowed reserves

$$M^B = CU + TR$$

$$TR = rr \times ChD$$

$$M^S = m \times M^B$$

$$M^S = CU + ChD$$

$$CU = c \times ChD$$

$$M^S = [(1 + c)/(c + rr)] \times M^B$$

$$R = r + \pi + 0.5 \times (\pi - \pi^*) + 0.5 \times [(Y - Y^*)/Y^*]$$

$$M^S \times V = P \times Y$$

$$\% \Delta M^S + \% \Delta \bar{V} = \% \Delta P + \% \Delta Y$$

$$BD = G - T$$

$$BD = \Delta B + \Delta MB$$

$$M^D/P = L(Y, R)$$

$$Y = C + I + G + NX$$

$$Y^D = Y - T$$

$$C = \bar{C} + MPC \times (Y - T)$$

$$I = \bar{I} - d \times (r + \bar{f})$$

$$G = \bar{G}$$

$$T = \bar{T}$$

$$NX = \bar{NX} - x \times r$$

$$R = r + \pi^e$$

$$R = \bar{r} + \pi + \theta \times (\pi - \pi^*)$$

$$\pi = \pi^e + \gamma \times (Y - Y^P)/Y^P + \rho$$