

**Formula Sheet: Exam #3**  
**Econ 3133**  
**Dr. Keen**

$$C = MPC_{LR} \times Y^d$$

$$\Delta C = MPC_{SR} \times \Delta Y^d$$

$$A_{+1} = A + R \times A + E - T - C$$

$$Y^d = R \times A + E - T$$

$$S = R \times A + E - T - C$$

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

$$R_K = (R + \delta_K) \times P_K$$

$$R_K = (R + \delta_K) \times P_K - (P_{K(+1)} - P_K)$$

$$I_K = K^* - K^*_{-1} + \delta_K \times K^*_{-1}$$

$$K^* = v \times Y$$

$$I_K = v \times (Y - Y_{-1}) + \delta_K \times v \times Y_{-1}$$

$$I_K = s \times (K^* - K_{-1}) + \delta_K \times K_{-1}$$

$$R_K = [(1 - z) \times (R + \delta_K) \times P_K] / [1 - u]$$

$$R_H = (R + \delta_H) \times P_H$$

$$I_H = H^* - H_{-1} + \delta_H \times H_{-1}$$

$$R_{IN} = R \times P_{IN}$$

$$CU = \text{Paper money} + \text{Coins}$$

$$TR = \text{Bank deposits held at the Fed} + \text{Vault cash}$$

$$M^B = CU + TR$$

$$M_1 = CU + \text{ChD}$$

$$M_2 = M_1 + \text{savings accounts} + \text{small time deposits (CDs)} + \text{money market mutual funds}$$

$$TR = RR + ER$$

$$RR = rr \times \text{ChD}$$

$$ER = e \times \text{ChD}$$

$$CU = c \times \text{ChD}$$

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

Total reserves = Borrowed reserves + Nonborrowed reserves

$$OC_M = R - R_M$$

$$M = Y_M / (2 \times z)$$

$$M = ((k \times Y_M) / (2 \times OC_M))^{1/2}$$

$$R = \pi + \beta_\pi \times (\pi - \pi^*) + \beta_Y \times [(Y - Y^*) / Y^*] + r^{e*}$$