# Money Supply Model for Econ 302 - Prof. Abrams

**Variables determining the money supplies, M1 and M2**

**M1 ≡ C + D (currency outside banks + checkable deposits)**

**M2 ≡ C + D + T + MMF (add time deposits and money market deposits and funds to M1)**

**MB ≡ the monetary base (also commonly called "high-powered money" and variable B)- controlled by the Fed**

**[C/D] ≡ currency ratio (set by the non-bank public)**

**[ER/D] ≡ excess reserves ratio (set by the banks)**

**$r_D$ ≡ required reserve ratio (set by Fed)**

**[MMF/D] ≡ money market account ratio (set by the non-bank public)**

[T/D] ≡ time deposit ratio (set by the non-bank public)

$$M1 = \left( \frac{1 + [C/D]}{r_D + [ER/D] + [C/D]} \right) \times MB$$

$$M2 = \left( \frac{1 + [C/D] + [T/D] + [MMF/D]}{r_D + [ER/D] + [C/D]} \right) \times MB$$