

Handout 1: The Employment Motive for Monetary Expansion under Perfect Information

2.2 The Inflationary Bias of Monetary Policy – A Basic Model:

$$-\left[\frac{A}{2}(N^* - N)^2 + \frac{\pi^2}{2}\right], \quad N^* - N \geq 0 \quad (2.1)$$

$$N - N_n = \alpha(\pi - \pi^e), \quad \alpha > 0 \quad (2.2a)$$

$$\text{Max}_{\pi} - \left\{ \frac{A}{2} [N^* - N_n - \alpha(\pi - \pi^e)]^2 + \frac{\pi^2}{2} \right\} \quad (2.3)$$

$$\pi = \frac{\alpha A}{1 + \alpha^2 A} (N^* - N_n) + \frac{\alpha^2 A}{1 + \alpha^2 A} \pi^e = \phi(\pi^e) \quad (2.4)$$

$$\pi^e = \pi \quad (2.5)$$

Combining (2.5) and (2.4), the equilibrium rate of monetary expansion is

$$\pi = \alpha A (N^* - N_n) . \quad (2.6)$$