

The IS-LM-PC Model

Recall from chapters 6 and 8:

$$Y = C(Y - T) + I(Y, r + x) + G.$$

$$\pi - \pi^e = -\alpha(u - u_n).$$

Now

$$u \equiv \frac{U}{L} = \frac{(L - N)}{L} = 1 - \frac{N}{L}.$$

Therefore: $N = L(1 - u)$. Now, based on the simple production function, $Y = N$, we can write,

$$Y = L(1 - u), \text{ and } Y_n = L(1 - u_n).$$

It then follows that:

$$Y - Y_n = L((1 - u) - (1 - u_n)) = -L(u - u_n).$$

$Y - Y_n$ is called the **output gap**. Substituting from the above into the Phillips curve, we get:

$$\pi - \pi^e = (\alpha / L)(Y - Y_n).$$

