Lecture 15: Aggregate Supply-Aggregate Demand

- Current Events
- Aggregate Supply
- Aggregate Demand
The Natural Rate of Unemployment

- “Long Run” \( P = P^e \)
- The wage and price setting relationships:

\[
\frac{W}{P} = F(u,z)
\]

\[
\frac{P}{W} = 1 + \mu
\]

\[
\Rightarrow \quad \text{The natural rate of unemployment}
\]

\[
F(u,z) = \frac{1}{1 + \mu}
\]
From $u_n$ to $Y_n$

\[
\begin{align*}
    u &= \frac{U}{L} = \frac{L - N}{L} = 1 - \frac{N}{L} = 1 - \frac{Y}{L} \\
    F(1 - \frac{Y_n}{L}, z) &= \frac{1}{1 + \mu}
\end{align*}
\]
$\frac{1}{1+\mu}$, markup

[Note: $A=1$ again]
Aggregate Supply

\[ W = \hat{P} F(1-Y/L,z) \]

\[ P = (1 + \mu) W \]

\[ \Rightarrow \]

\[ P = P^e (1 + \mu) F(1-Y/L,z) \]
\[ P = P^e (1 + \mu) F(1-Y/L, z) \]

**AS:**

\[ P(t) = P(t-1) (1 + \mu) F(1-Y(t)/L, z) \]
Aggregate Demand

IS: \[ Y = C(Y-T) + I(Y,I) + G \]

LM: \[ \frac{M}{P} = Y L(i) \]

LM': \[ P' > P \]
AD: \[ Y = Y(M/P, G, T) \]
Aggregate Demand - Aggregate Supply
AD-AS: Canonical Shocks

Monetary expansion; fiscal expansion; oil shock (figs 7-9/7-10/7-11)