REVIEW: KEYNESIAN MACRO, LATE 1980s

Old-Keynesian IS/LM with expectations-augmented Phillips curve

IS (spending) equation: $y_t = \alpha - \beta r_t + \varepsilon_{IS,t}$

Money demand: $(m-p)_t^D = \gamma y_t - \lambda i_t + \varepsilon_{LM,t}$

Exp. aug. P.C.: $\pi_t = {}_{t-1}\pi_t^e + \eta y_t$

& something about monetary policy

Why are prices "sticky"?

Non competitive markets to make it less costly if you fail to adjust p_i to profit-maximizing value p_i^*

Real rigidity so that p_i^* doesn't fall too much when $y \downarrow$

Models

"Time-dependent" price adjustment (e.g. Taylor)

Menu costs ("state-dependent")

Then come RBC models using dynamic optimization

DYNAMIC NEW KEYNESIAN MODELS: INTRO

Like RBC:

representative agent, expected utility,
infinite life
production function
rational expectations

Unlike RBC:

product market not perfectly competitive
(usually Dixit–Stiglitz)
(labor market sometimes p.c., sometimes not)
if you want money demand, put (M/P) in
utility function (e.g. (6.2))
but often ignore money demand (e.g. (7.1))
because "monetary policy" will determine
r directly.
price stickiness
usually from time-dependent, sometimes
from menu cost

Just For simplicity

$Y = L$ or $Y = \bar{K}^{\alpha} L^{1-\alpha}$ — fixed, no saving

hence $Y_t = C_t$

DYNAMIC ... (cont.)

"NK IS/LM" or "three-equation model"

NK IS $y_t = {}_t y^e_{t+1} - \beta r_t + \varepsilon^{IS}_t$ (one equation)

easy to get from Euler equation

Something about monetary policy (second equation)

— interest rate rule e.g. $r(\overset{+}{\pi}, \overset{+}{Y})$

— minimization of $L = E\left[(y-y^*)^2 + \theta(\pi-\pi^*)^2\right]$

— something about M^S & $(M/P)^D$

NK Phillips curve $\pi_t = {}_t \pi^e_{t+1} + \eta Y_t$ (third equation)

How do you get NKPC?