Economics 614, Macroeconomic Theory II
Introduction

Two subjects in macro   Growth and development   Business cycles

Growth and Development

Why does Y/L grow across decades (or not)?
Why is Y/L bigger in U.S. than China?

Interaction between saving and aggregate production function (e.g. Solow model)
Saving: preferences across consumption in different periods (OLG, Ramsey-Cass-Koopmans)

Math tricks: dynamic control, programming (Hamiltonians, Bellman equations)

Ignore mechanics of trading: money $wages $prices

Implicit assumptions:
- Perfect information and rationality
- Perfectly competitive markets
- Prices, wages, interest rates adjust to clear markets

Business cycles

Decrease (not just slow growth) in aggregate output, employment, consumption, investment
Rapid (one month to the next)
NBER peaks and troughs
Explanation?
Are they a bad thing? If bad, can we avoid them?

Real business cycle theory *developed 1980s-1990s*

Same structure as growth models: perfect markets, dynamic optimization etc.

Hypothesized cause of business cycles: temporary exogenous "technological regress"
- Sometimes, production functions give less output for same input
- At these times, people rationally choose to work, consume, invest less

Not a bad thing: optimal response to unfortunate, unavoidable events

Dead end: in reality, no such thing as technological regress

Old Keynesian theory *developed 1930s-1960s*

About money $wages $prices

Phillips curve: wages, prices do not immediately adjust to clear markets

Result: involuntary unemployment, people can't get hired
even though they are willing to work at want to work
at same or lower wages than identical people are earning

It's *not* about labor market surplus, excess supply

It's about interest rates

Original IS/LM model
- depicts fundamental idea assuming "sticky" wages and prices
- static (no dynamic optimization)

Hypothesized cause of business cycles:
flawed monetary policy, declines in government spending, other

Business cycles are bad, can be stopped or mitigated

New Keynesian theory *developed 1980s-2008*

Explains why wages and prices don't adjust in terms of utility maximization etc.
Adds dynamics

"New Keynesian Phillips curve"
"New Keynesian IS/LM"

Mostly ignore financial markets, financial intermediaries (e.g. banks), financial crises
though some "Keynesians" (e.g. Bernanke) model these too

Rational expectations (mostly)

Since 2008

Integrate models of financial markets etc. into New Keynesian IS/LM

Non-rational expectations