Behavioral and structuralist perspectives on macroeconomics

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Mainstream consensus

- Blanchard
  - Macroeconomics has made “enormous progress” and has reached “substantial convergence”
- Chari and Kehoe
  - “Macroeconomics is now firmly grounded in the principles of economic theory.”
- Woodford
  - Macroeconomic analysis needs “coherent intertemporal general-equilibrium foundations”

What to do?

- Aggregate demand
- Income distribution

- But also
  - Structural constraints
  - Microeconomic behavior
  - Supply side
  - Dynamic interactions across goods, labor and financial markets

Overview

- Three examples
  - Ex 1: Finance
  - Ex 2: Labor
  - Ex 3: Goods
- Conclusion
  - Behavioral and structuralist
  - Dynamic general equilibrium

A CORPORATE ECONOMY

The neo-Pasinetti theorem

- The high saving propensity
  - "attaches to the nature of business income, and not the wealth (or other peculiarities) of the individuals who own property" Kaldor (1966, p. 310)

Household budget constraint

$$pC + v(\Delta N) + \Delta M = W + Div + iM$$

Stock-Flow ratios

$$
\begin{aligned}
(vN)^* &= \alpha(i, r_e, \ldots)pC \\
M^* &= \beta(i, r_e, \ldots)pC
\end{aligned}
$$

Implication

- Consumption depends inversely on retained earnings
- Changes in firms’ financial behavior (‘financialization’) affect macroeconomic outcomes

Intuition

- Can households ‘declare their own dividends’?
- Induced capital gains

- Structuralist: corporate economy
- Behavioral: desired stock-flow ratios

LABOR AND THE SUPPLY SIDE

Dual economies

- Highly elastic supply of labor to the modern/formal/capitalist sector
- Hidden unemployment

- Modern sector not self-contained

- Sectoral interaction can be important
  - Ex: Changes in the product real wage in the modern sector

‘Mature economies’

- Labor constrained long-run growth
- The unemployment rate matters

Observation #1

- Maturity does not imply a Friedmanite ‘natural rate of unemployment’
- Ex: conflict theory of inflation and path dependency of employment
  - Fairness and aspirations

Fair wages and behavioral economics

- “any stable state of affairs tends to become accepted eventually, at least in the sense that alternatives to it no longer readily come to mind.”

Kahneman et al. (1986, p. 730)

Path dependencies

- Own past wage as reference point
  - path dependency in employment
- Other people's incomes as reference points
  - Path dependency in income distribution
  - Autonomous shocks to norms (neoliberalism) affect income inequality

Observation #2

- The 'natural rate of growth' can be endogenous
  - Induced technical change or induced changes in labor supply
  - $n=h(e)$
- Corollary: shocks that affect the levels of unemployment also have growth effects

Observation #3

- Mature economies exhibit feedback effects from the unemployment rate to
  - firms’ investment and output/price decisions
  - wage setting and inflation
  - fiscal and monetary policy

‘the post Keynesian view’

- Focus on goods market
- Aggregate demand as the driver of growth
- No binding supply constraints

- Ex: Dutt 2006
  - *Perfectly elastic* productivity growth
  - If *a*=productivity growth, *e*=employment rate

$$\hat{a} = h(e); \quad h' > 0$$

- Not sufficient that

$$a = h(e); \quad h' > 0$$

Opposite extremes

- Mainstream:
  - AD adjusts to ensure ‘natural rate of unemployment’
  - AD plays no role in long-run analysis
- ‘Post Keynesian’:
  - AS adjusts to ensure a labor supply that matches capital capacity
  - The labor market and AS play no role in long-run analysis

Does is matter?

- Unreasonable assumptions can give misleading conclusions
- Ex: ‘Wage-led growth’
  - The growth effect of changes in the wage share is not independent of the interaction between labor and goods markets
  - Ex: *Profit-led goods market* can produce a *wage-led economy* in a labor constrained economy

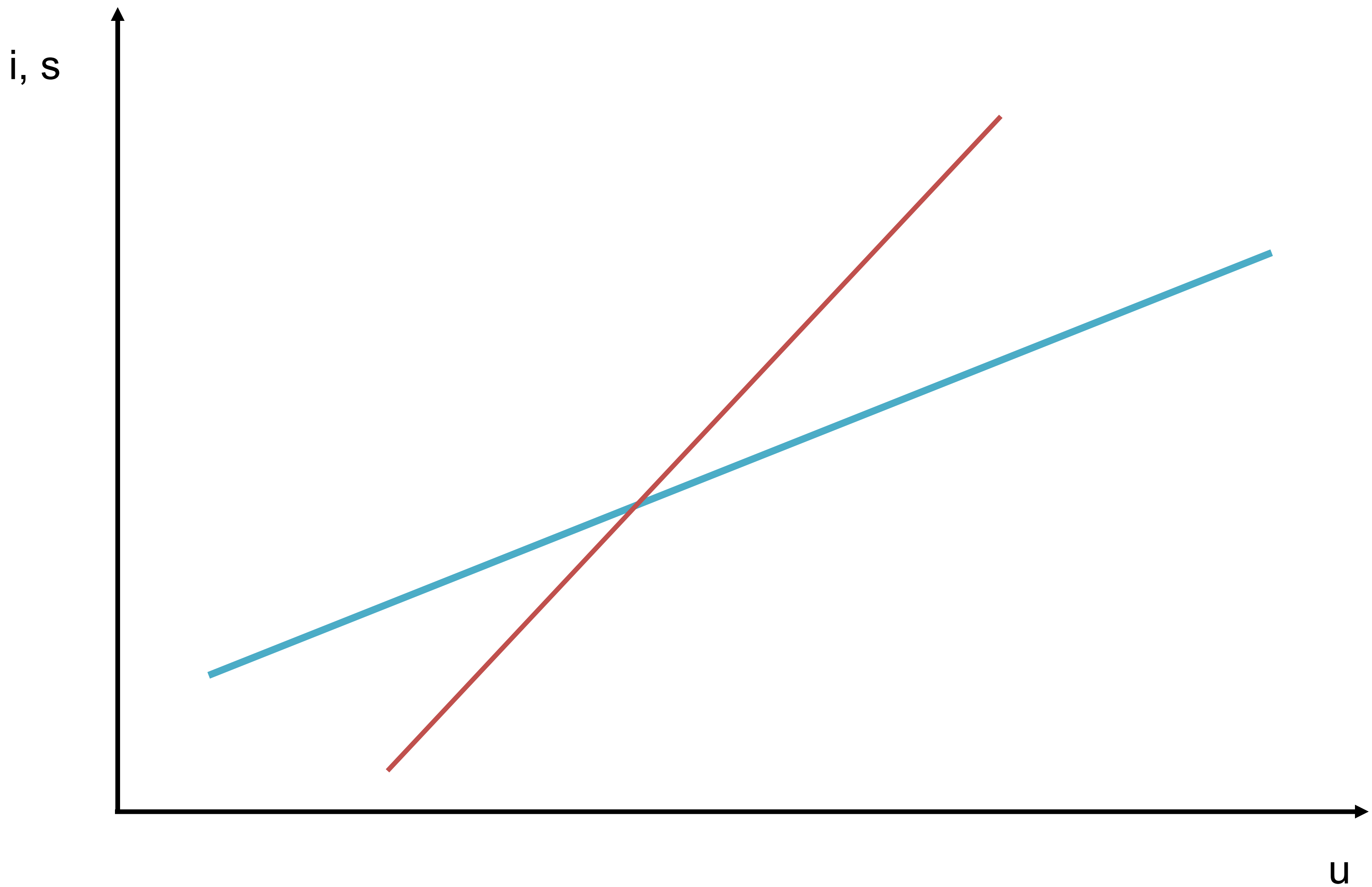
Macroeconomics as ‘general equilibrium’

- “important mistakes have been made through extending to the system as a whole conclusions which have been correctly arrived at in respect of a part of it taken in isolation”
  - – Keynes 1936, p. xxxii, preface to the French edition

PRODUCT MARKETS

Kalecki vs Harrod

- Agreement
  - Keynesian stability in the short run
- Question
  - Does the Keynesian stability condition hold in the long run?
- Critical for
  - Stability
  - Comparative statics



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Which is right?

- Firms will not keep investing if they have large amounts of unwanted excess capital capacity

- Objections:
  - Investment and uncertainty
    - Is the optimal utilization rate well defined?
    - Is it path dependent?
  - What is the range of acceptable utilization rates?

Harrod’s problems

- The growth rate gradually influences the ‘state of the labor market’
- Stabilizing feedback effects:
  - Firms’ investment and output/pricing decisions (hence distribution)
  - Nominal wage demands ,worker ‘militancy’, and inflation
  - Economic policy

- Implications
  - Equalization of natural and (average) actual growth rates
  - Asymptotic stability or local instability with bounded fluctuations
  - Average employment rate takes reasonable value

An alternative: autonomous demand

- Potential Harrodian instability recognized
- Stabilization via autonomous demand
  - Consumption by capitalists
  - Residential investment
  - Government spending
  - Exports
- Advantages
  - Uniquely Keynesian: growth is demand driven
  - Preserves Keynesian properties like ‘paradox of thrift’

Questions

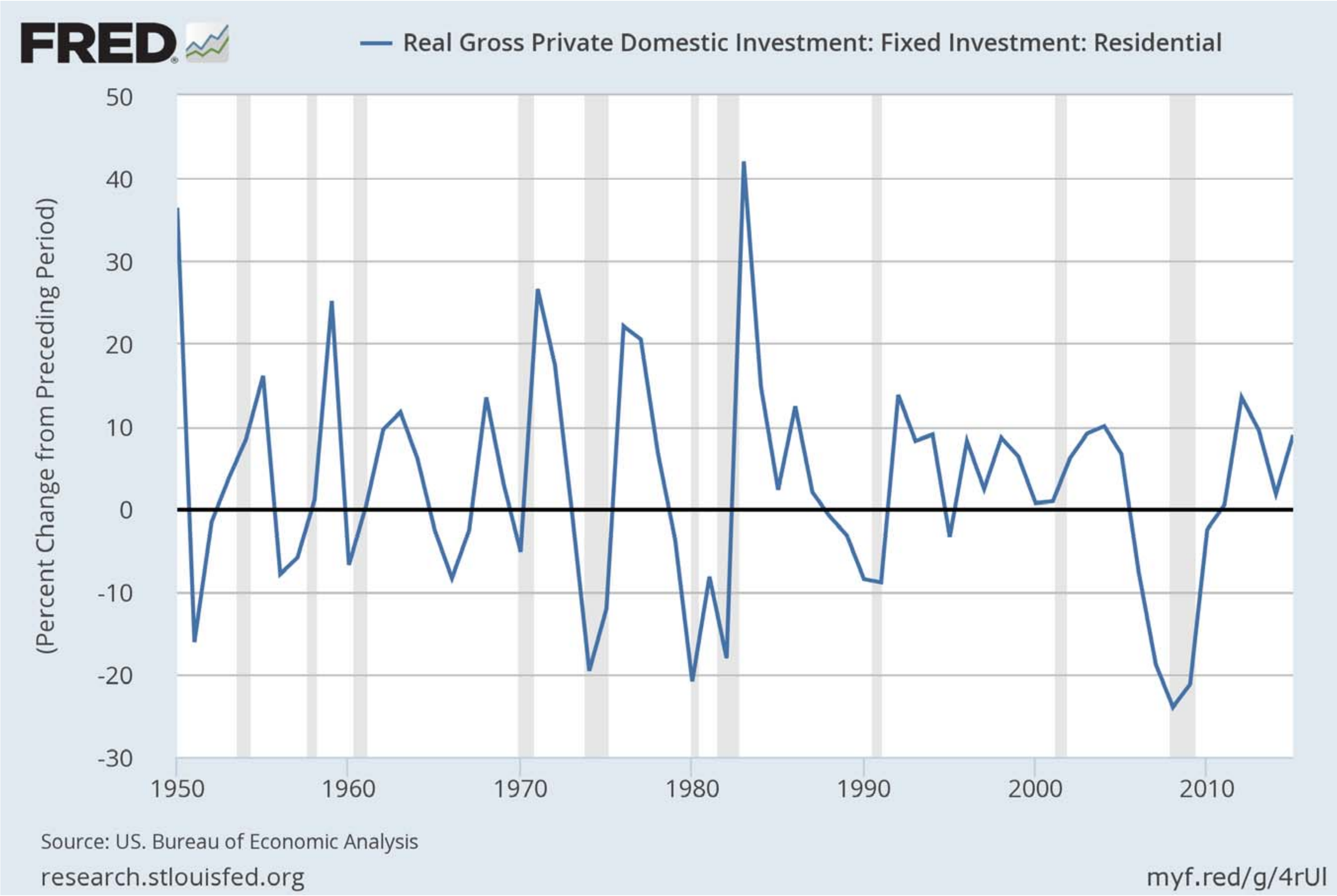
- Can autonomous demand tame Harrodian instability?
  - Magnitudes matter

- Are the suggested components of demand
  - autonomous?
  - stable?

Luxury goods in the recession

"Spending Pulse, which estimates retail spending, **says luxury goods were the worst hit retail category in the last two months of 2008**. Sales fell more than **34 per cent** between November 1 and December 24, compared to the same period in 2007."

- Financial times, Feb, 2, 2009 ('Luxury goods succumb to the cycle' by Scheherazade Daneshkhu and Haig Simonian)


FRED
Real Gross Private Domestic Investment: Fixed Investment: Residential
(Percent Change from Preceding Period)
50
40
30
20
10
0
-10
-20
-30
1950
1960
1970
1980
1990
2000
2010
Source: US. Bureau of Economic Analysis
research.stlouisfed.org
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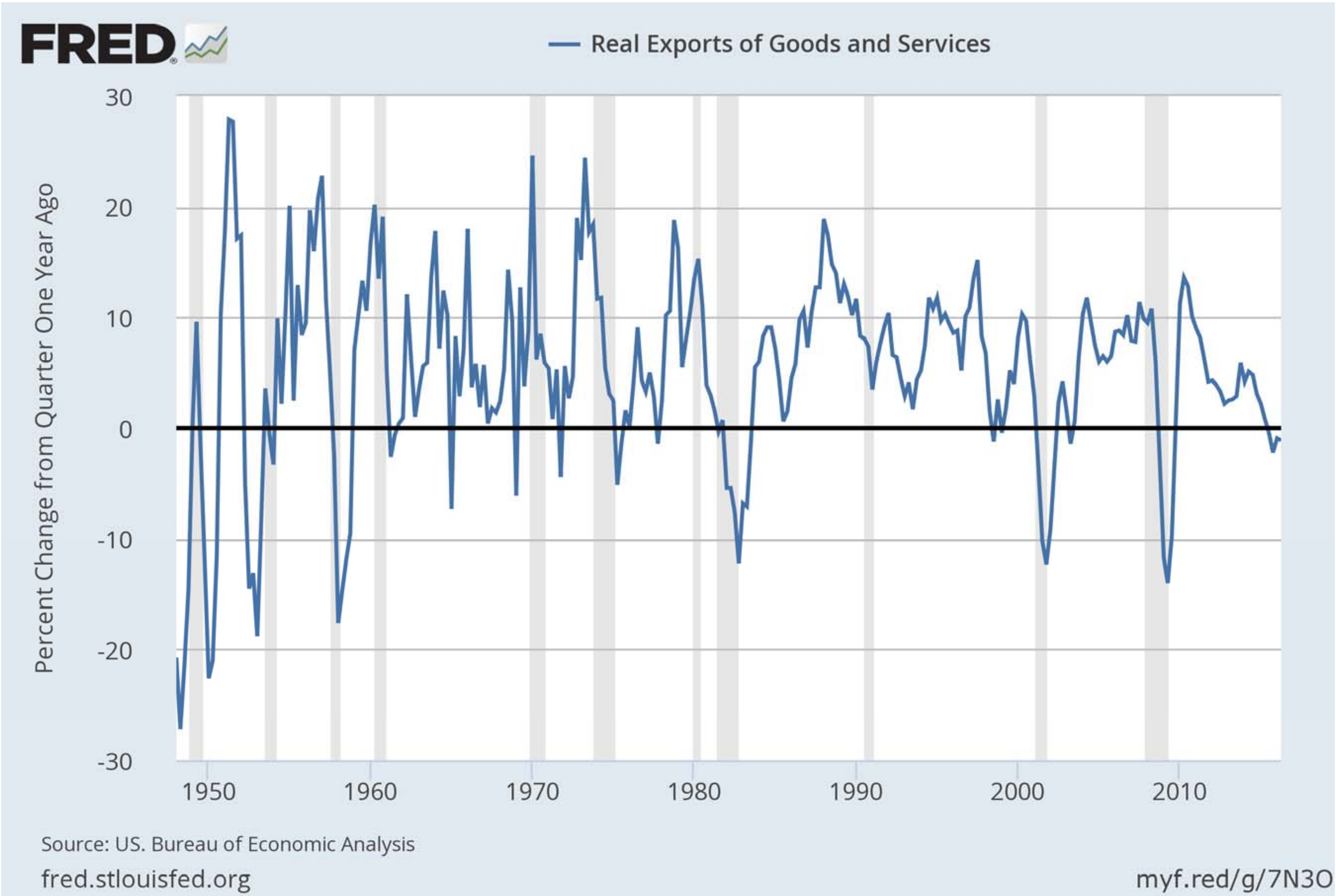
FRED
Real Exports of Goods and Services
Percent Change from Quarter One Year Ago
30
20
10
0
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-20
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1950
1960
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Source: US. Bureau of Economic Analysis
fred.stlouisfed.org
myf.red/g/7N3O

More questions

- Why insist on non-capacity creating demand as the driver of economic growth?
- Is the mechanism particularly Keynesian?
  - Keynes did not ignore the supply side
  - Labor market feedback implies that Keynesian properties hold!
    - Paradox of thrift
    - Paradox of cost is ill-defined if income distribution is endogenous

BEHAVIORAL AND STRUCTURALIST MACROECONOMICS

Valid Lucas *critique*

- Economic behavior is goal oriented, and influenced by expectations
- Shifts in expectations will affect reduced-form equations that link current decisions to observable variables

Silly Lucas *solution*

- Blanchard (2016)
  - Current DSGE descriptions of aggregate demand and price adjustment are “badly flawed descriptions of reality”
  - But “starting from explicit microfoundations is clearly essential”

‘Narrow post-Keynesian’ alternatives

- Focus on goods market and AD
- Play down microeconomic analysis and goal oriented behavior
  - Heterodox contributions “do not invoke the optimizing agent (even in the sense of bounded rationality)” (Dutt 2003, p. 54)

A broader perspective

- Dynamic general equilibrium
- Structural contingency
- Behavioral analysis

Dynamic general equilibrium

- General
  - Interactions across goods, labor and financial markets
    - Ex: Keynes chapter 19
    - Ex: Profit-led goods market but wage-led economy
- Dynamic:
  - Long run as sequence of short runs but with lagged effects
    - Ex: Harrod instability and endogenous cycles
    - Ex: Stock-flow dynamics

Structural constraints

- Importance of institutional setting
  - Ex: Neo-Pasinetti theorem
  - Ex: Dual vs mature economies

Behavioral analysis

- Goal orientation
  - Firms: Profit maximization
- Deviations from ‘homo economicus’
  - Households and workers: habits, social norms, fairness …
- Goal oriention can have bite, even if full optimization is impossible
  - Example: investment
- Goal orientation does not exclude path dependency
  - Example: employment and income distribution

Thanks!

References

- Skott 1981, Kyklos
- Skott 1989, CUP
- Skott 2005, JEBO
- Skott 2012, Metroeconomica
- Skott 2017a, Metroeconomica
- Skott 2017b, ROKE

- Blanchard 2008 NBER
- Blanchard 2016 Peterson Inst Policy Brief 16-11
- Chaari and Kehoe 2006 JEP
- Davis 2013 Umass WP
- Davis, De Souza and Hernandez 2017 Umass WP
- Dutt 2003 IntJofPE
- Dutt 2006 IRAE
- Kahneman, Knetsch, Thaler 1986 AER
- Kaldor 1966 REStuds
- Pasinetti 1962 REStuds
- Woodford 2009 AEJ Macro