Neo-Kaleckian questions to the new neo-Goodwinian framework

Marc Lavoie

Université d'Ottawa | University of Ottawa

Introduction I

- At the beginning, there was Goodwin's cycle (1967). It was fully based on a supply-side approach, relying on Say's law. Its steady-state equivalent was the classical approach, based on a reversal of the Cambridge equation, where $g = \frac{s_c m u_n}{v}$
- Then came a Kaleckian version of it, a neo-Goodwinian model by Barbosa-Filho and Taylor (2006), with a demand-led model.
- The New neo-Goodwinian model, is both demand-led and supply-led; it has been developed by various authors, notably Rada, Kiefer, von Arnim, Petach, Tavani.
- The latest papers have, among other things, attempted to respond to previous neo-Kaleckian critiques of the Goodwin mechanism, which is the subject of the present presentation.

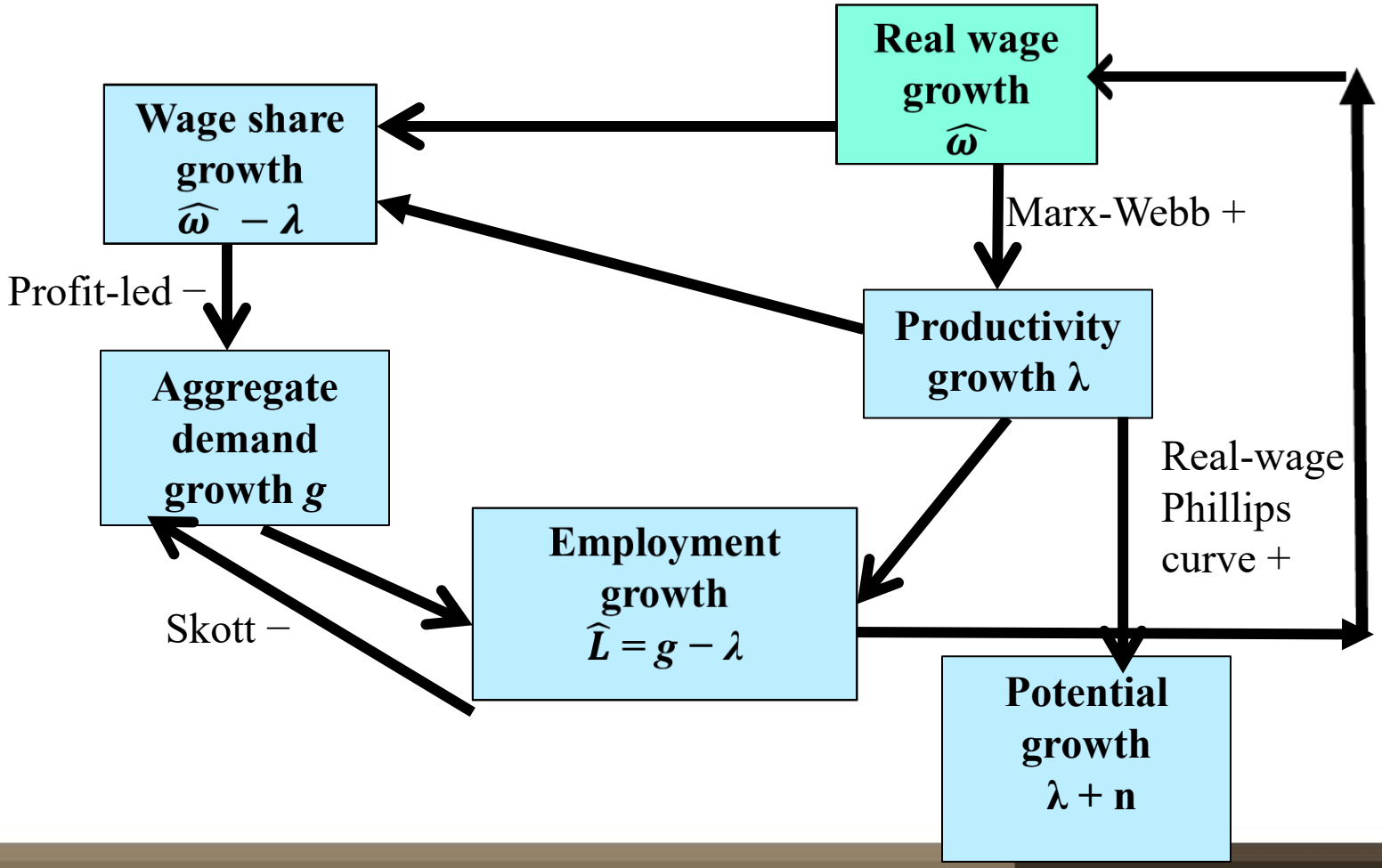
Introduction II

- There are a number of fancy econometric studies that seem to justify, at least for the US, the existence of a Goodwin cyclical **pattern**.
- The Goodwin **pattern** is a counter-clockwise cycle linking the wage share with economic activity, however defined, or alternatively a clockwise cycle linking the profit share with economic activity.
- Neo-Goodwinians attribute this pattern to the presence of a **Goodwin mechanism**, that is, the combination of a **short-run profit-led demand** and a short-run **profit squeeze** mechanism.
- The new neo-Goodwinian model (NNG) adds to this the claim that **growth is wage-led in the long run, due to the supply-side positive effect of the wage share on productivity growth.**
- **They now say: pro-labour policies are beneficial in the long run.**

The New neo-Goodwinian model

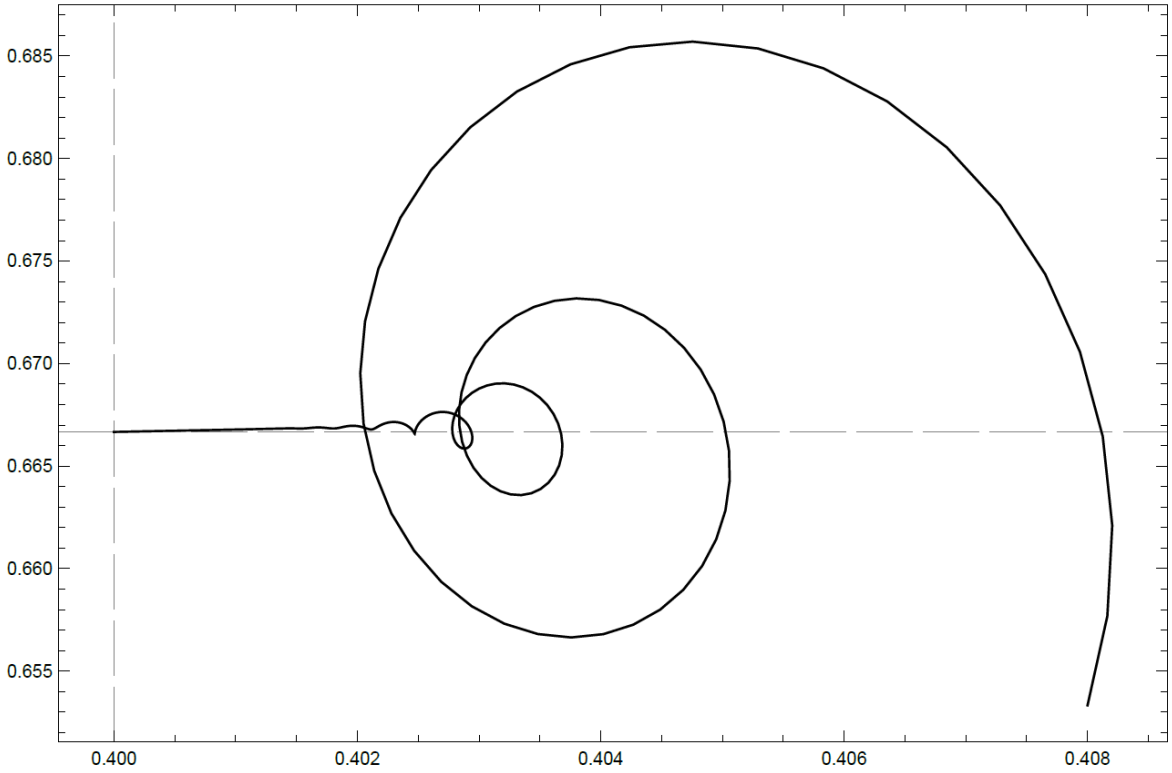
- Growth rate of capital depends
  - Positively on the rate of utilization and the profit share
- Growth rate of output depends
  - Positively on the rate of utilization
  - Negatively on the rate of employment
  - Negatively on the wage share (profit-led demand)
- The real wage depends
  - Positively on the rate of employment
- The growth rate of labour productivity depends
  - Positively on the wage share
    - Due to induced technical change (Webb-Marx effect)
    - Attributed to non-capacity enhancing investment in technical progress (Weisskopf, Bowles, Gordon 1985)

New neo-Goodwinian relations (partial)



Rada, Schiavone and von Arnim 2025
Counter-clock wage share-utilization

Labour share



(b) u, ψ

Rate of utilization

Three explanations of the Goodwin pattern

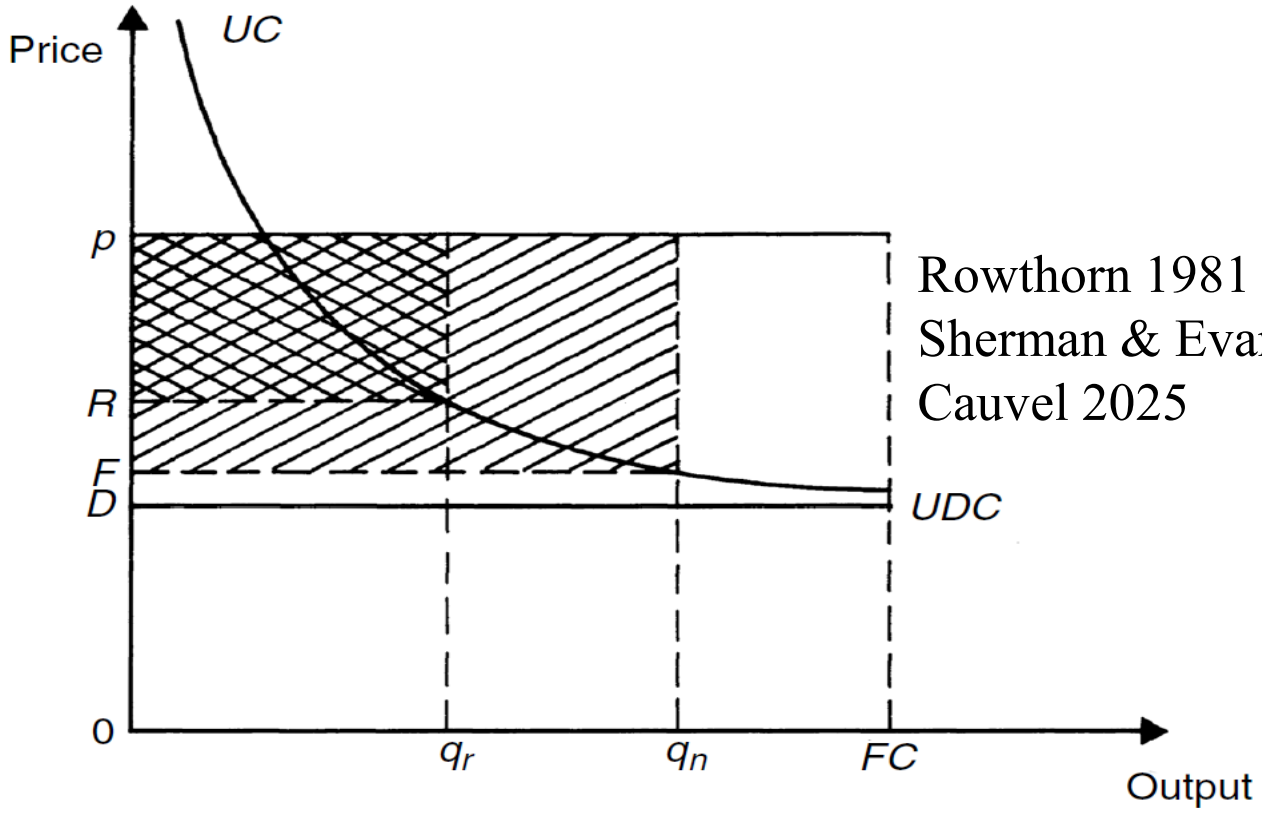
- 1) The Goodwin mechanism, profit-led demand with profit squeeze
- 2) The financial pseudo-Goodwin cycle, based on Minskyan real-financial cycle, driven by the debt ratio, where the economy is weakly wage-led (Stockhammer and Michell 2017)
  - Initially dismissed by Goodwinians, now recognized as a valid possibility, along with a model based on Tobin's q.
- 3) The overhead labour hypothesis (Sherman 1979, Lavoie 2017), tied to pro-cyclical productivity, combined with non-capacity creating autonomous expenditures, in particular residential investment (Fiebiger 2018)

The overhead labour hypothesis

- The profit-led demand regime may be an *artefact* of reversed causation, a spurious relation.
- This critique stems from the fact that most models overlook the presence of overhead labour, which is at least partially fixed in the short run – a case of labour hoarding.
- This implies that an increase in economic activity automatically results in a concomitant increase in labour productivity, a decrease in unit cost, and hence an increase in the profit share, even though markups or profit margins are constant.

Profit-led demand: an artefact

of reversed causality: the profit share rises with higher output, at a constant markup



Rowthorn 1981
Sherman & Evans 1984
Cauvel 2025

Notes: OD = normal direct unit costs ($NUDC$); DF = normal overhead unit costs; OF = normal unit costs (NUC); Fp = net costing margin ($\Theta.NUC$); Fp/OF = percentage net costing margin (Θ); Dp = gross costing margin ($\theta.NUDC$); Dp/OD = percentage gross costing margin (θ); Rp = realized net profit margin; Rp/OR = realized percentage net profit margin; Rp/Op = realized net profit share in sales.

Contemporaneous effect of demand on labour productivity

- Recall that the wage share is the ratio of the real wage to labour productivity
- Usual empirical aggregative literature assumes that demand only has lagged effects on the wage share and labour productivity
- Under these assumptions, Cauvel (2025, EJEEP) finds profit-led demand and profit squeeze, with counter-cyclical productivity
- But with an alternative ordering, where demand can have a contemporaneous effect on productivity, he finds:
  - pro-cyclical productivity;
  - delayed profit squeeze;
  - wage-led demand

Another explanation of possible spurious results

- Lilian Rolim (2019, IRAE) with the standard aggregative approach, also gets the usual Goodwinian results.
- But splitting the wage share into the income shares of non-supervisory and supervisory workers, she finds that a positive shock to the workers' share leads to an increase in capacity utilization, while the same shock to the supervisors' share leads to a decrease in capacity utilization.
- There does exist a profit-squeeze mechanism, but the squeeze is through the increase in the wage share of managers when the economy is doing well (salary boosts, bonuses), which leads to an eventual fall in economic activity.

The NNG response to the overhead labour hypothesis

- Labour productivity was procyclical only during the Golden age.
- Labour productivity is largely acyclical during the neo-liberal period.
- Therefore the overhead labour critique falls apart on empirical grounds.
- Moreover, pro-cyclical productivity is not necessarily contradictory with the Goodwin mechanism. Ceteris paribus, an increase in productivity implies a fall in the labour share and hence faster economic activity in a profit-led demand economy.

Output (dash), productivity (solid) Rada et al. 2025

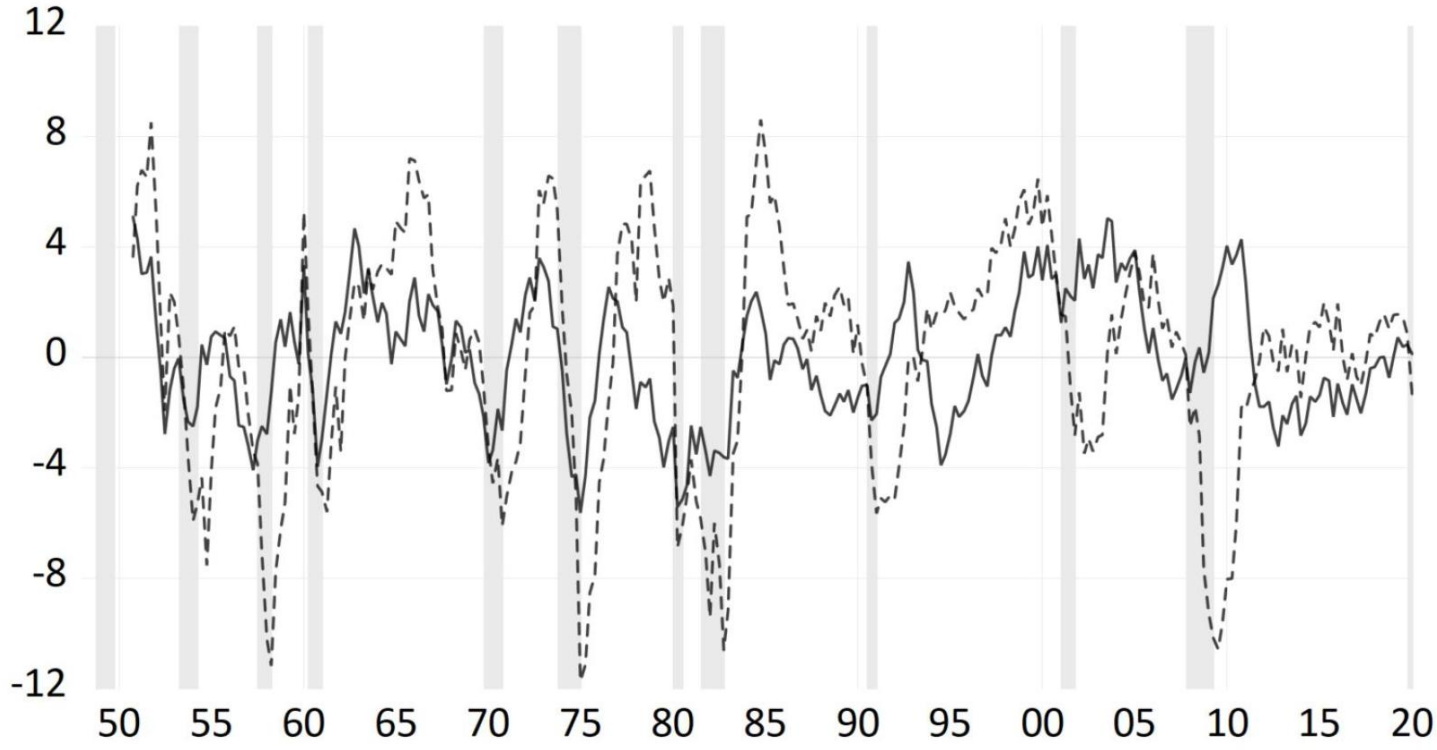


Figure 2: Output & productivity. The figure shows Hamilton-filtered series of real value

A rejoinder to the NNG reply

- The acyclical labour productivity is based on HP filters.
- HP filters have been severely critiqued by James Hamilton.
- According to Robert Blecker, HP filters seem to show that the 2008-2009 Great Recession ‘was just a small downturn, while Hamilton shows it (correctly) to be a severe recession’.
- So the acyclical behaviour of labour productivity is still an open question.

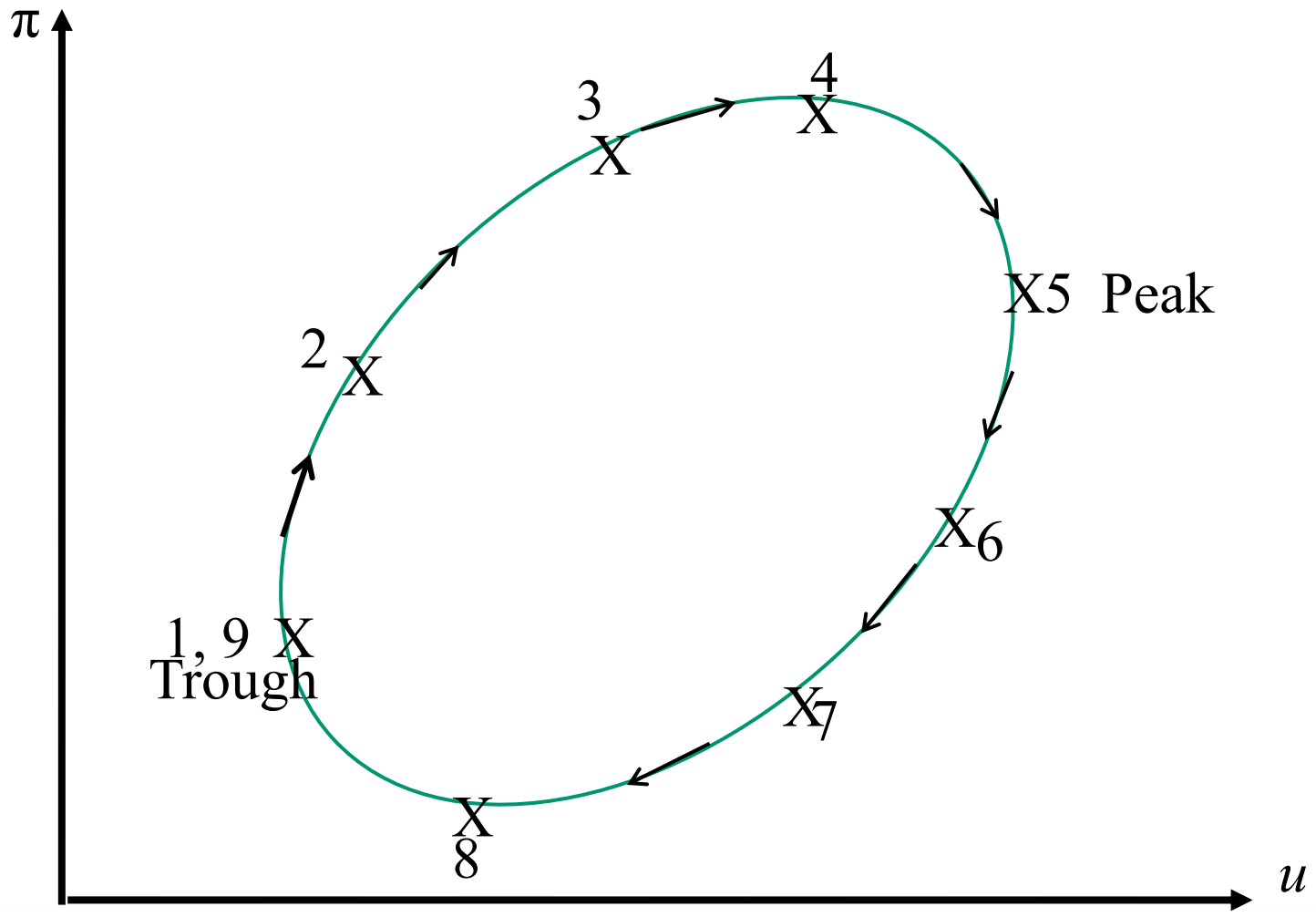
Corporate investment or residential investment as the main driver?

- Brett Fiebiger (2018, CJE) shows there exist systematic clockwise cycles between the corporate profit share and the output shares of household fixed investment and semi-autonomous expenditures with respect to the rate of employment and the rate of utilization.
- The profit share does not closely follow the output share of corporate fixed investment.
- The growth rates of economic activity and corporate profits are themselves most strongly correlated with contemporaneous household fixed investment expenditures and household semi-autonomous expenditures.

Household investment as the driver

- Fiebiger argues that the business cycle is driven by the fluctuations in the fixed investment of households and their debt-financed consumption, with the cyclical evolution of the profit share being essentially explained by the existence of overhead labour costs.
- The investment of the corporate sector is reacting to the evolution of its sales.
- The new neo-Goodwinians concede that business capacity investment lags the cycle.
- But they argue that real-estate investment is largely undertaken by corporations, subject to the same profitability constraints faced by corporations in non-residential industries.

Utilization rate-profit share cycle



What or who is the driver of recovery?

- The neo-Goodwinian story is difficult to swallow.
- First, why would firms expand productive capacity at the bottom of the cycle (point 9)
  - when the rate of utilization of capacity is at its lowest?
  - when profitability is lower by 35% (cf .Weisskopf 1979 CJE) than when presumably the profits squeeze discouraged corporate investment during the second phase of expansion (from 4 to 5)?

How ultimately can the economy move from point 8 to point 9 and above?

- The neo-Kaleckian and the Sraffian answers (Fiebiger 2008) are that non-capacity creating (semi-) autonomous expenditures get the economy out of the trough (possibly with the help of low interest rates, government deficits)
- The new neo-Goodwinian answer is that corporate investment depends on expected profitability, and that the recession-induced wage squeeze ‘signals the impeding recovery in realized rates of utilization and profit’ (Rada, Schiavone and von Arnim 2025).

The long run: Omission of the Kaldor-Verdoorn effect (Setterfield 2022, EJEEP)

- « Technical change through the Verdoorn channel would mean that …a fall in the actual rate of growth induced by a rise in [the real wage] would retard productivity growth and so reduce the natural rate of growth…..
- The steady-state equilibrium growth rate will now be profit-led…. In sum, the controversy in PK macrodynamics concerning wage- versus profit-led growth will reappear in a model of this type that is augmented by the Verdoorn law, with the supply-side now established as the battleground between competing views. »

Profit-led in SR now can imply profit-led in the LR