Hochschule für
Wirtschaft und Recht Berlin
Berlin School of Economics and Law

Eckhard Hein

DISTRIBUTION AND GROWTH AFTER KEYNES

A Post-Keynesian Guide

(Edward Elgar 2014)

CHAPTER 11

'THE KALECKIAN MODELS AND CLASSICAL, MARXIAN AND HARRODIAN CRITIQUE'

Content

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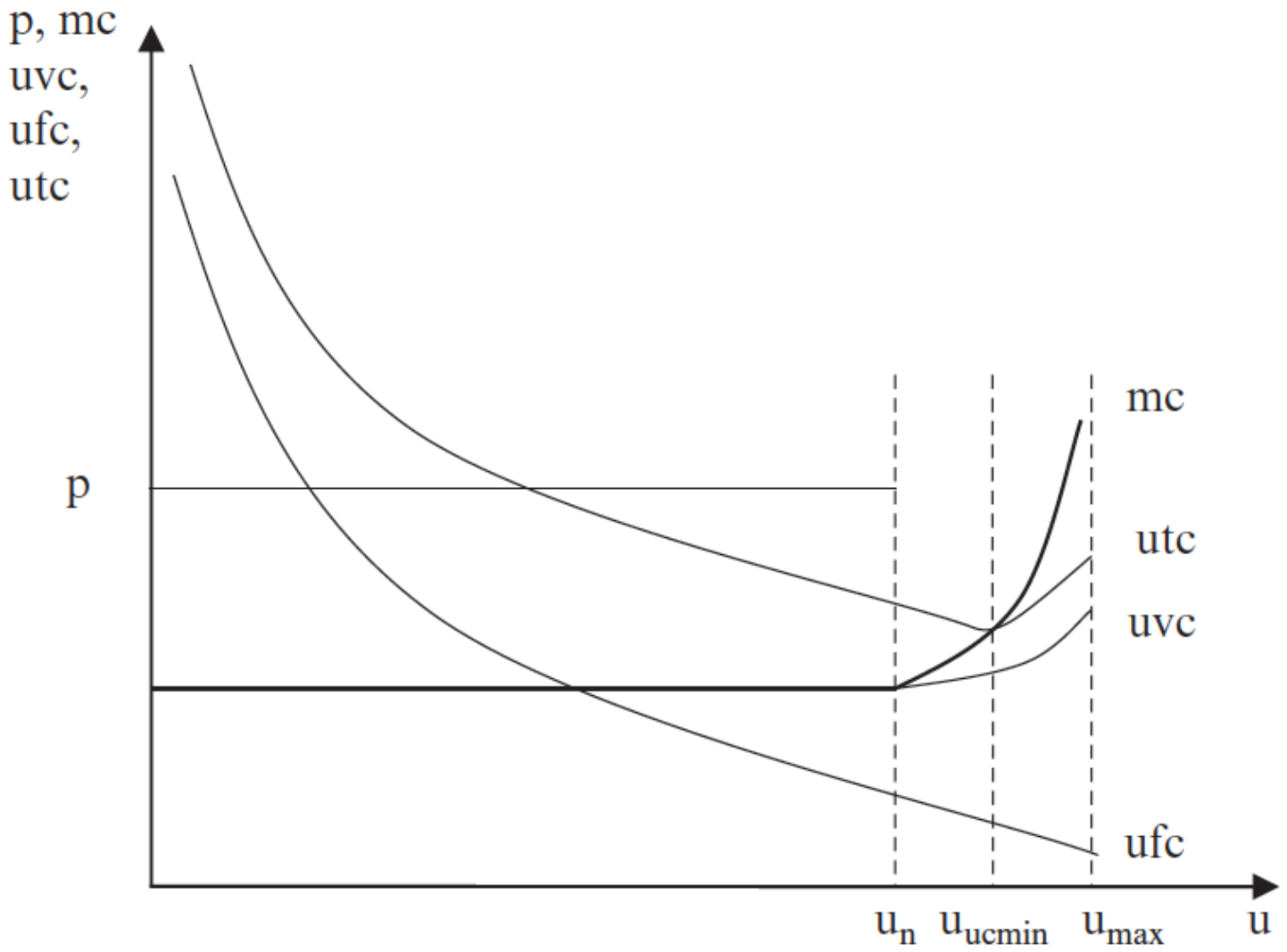
11.1 INTRODUCTION

- Equilibrium rate of utilization may deviate from 'normal' or target rate of firms – without any adjustments in the long run?
- Committeri (1986), Auerbach/Skott (1988), Dumenil/Levy (1995/1999), Shaikh (2009), Skott (2010, 2012):
  - Kaleckian model is prone to Harrodian instability in the long run.
  - Harrodian instability has to be tamed by other mechanisms in the long run: rising (falling) average propensity to save, falling (rising) incentives to invest, monetary policy, ..
- Kaleckian critique of the critics and defences: overview by Hein/Lavoie/van Treeck (2011, 2012):
  - normal or target rate of utilization may be a range
  - firms have achieve multiple, mutually exclusive targets
  - assessment of normal rate of utilization is endogenous
  - monetary policy also affects normal rate of utilization

11.2 THE BASIC MODEL WITH A NORMAL RATE OF CAPACITY UTILIZATION AND HARRODIAN INSTABILITY

- One good closed economy
- No technical progress
- No depreciation of the capital stock
- No overhead labour
- But normal or taget rate of utilization

Figure 11.1 Maximum, unit total costs and normal/target rate of capacity utilization



(11.1) $$r = h\frac{u}{v} = r_n\frac{u}{u_n}$$

r: realized profit rate, u_n: normal or target rate of capacity utilization, u: realized rate of capacity utilization, h: profit share, v: capital-potential output ratio, r_n: normal profit rate, u_n: normal rate of capacity utilization

(11.2) $$\sigma = s_\Pi r = s_\Pi h\frac{u}{v}, \qquad 0 < s_\Pi \leq 1$$

σ: saving rate, s_Π: propensity to save out of profits

(11.3) $$g = \alpha + \beta(u - u_n), \qquad \alpha, \beta > 0$$

g: rate of capital accumulation, α: assessed trend growth rate of sales and output

(11.4) $$g = \sigma$$

(11.5) $$\frac{\partial \sigma}{\partial u} > \frac{\partial g}{\partial u} \qquad \Rightarrow \qquad s_{\Pi} \frac{h}{v} > \beta$$

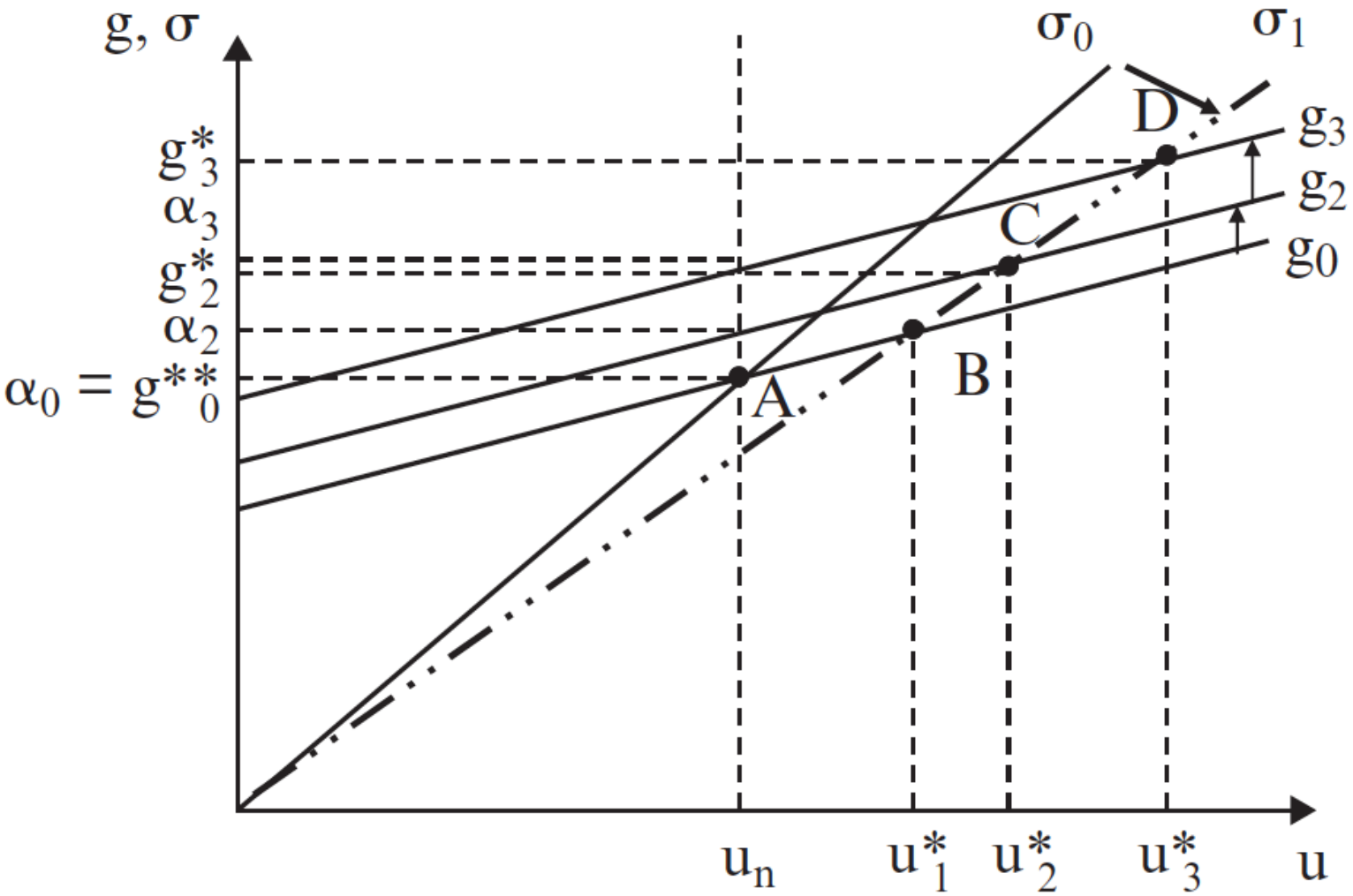
(11.6) $$u^{*} = \frac{\alpha - \beta u_{n}}{s_{\Pi} \frac{h}{v} - \beta}$$

(11.7) $$d\alpha = \upsilon\left(u^{*} - u_{n}\right), \qquad \upsilon > 0$$

- firms‘ assessment of the trend rate of growth responds to deviation of actual from normal rate of utilization

➢ Harrodian instability

Figure 11.2 Harrodian instability



11.3 TAMING HARRODIAN INSTABILITY WITH AN EXOGENOUS NORMAL RATE OF CAPACITY UTILIZATION

Figure 11.3 Taming Harrodian instability I – rotation of the saving rate function

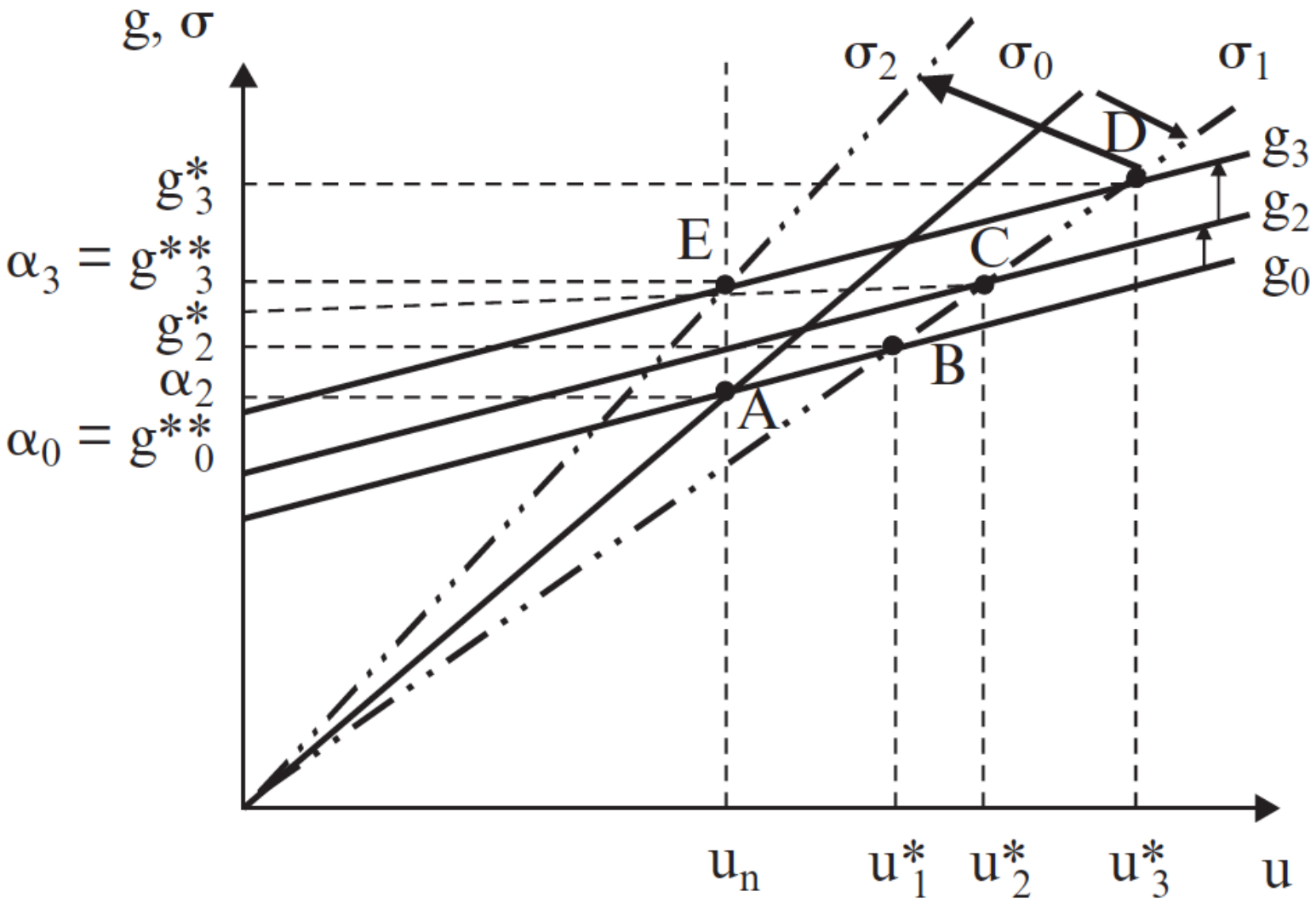
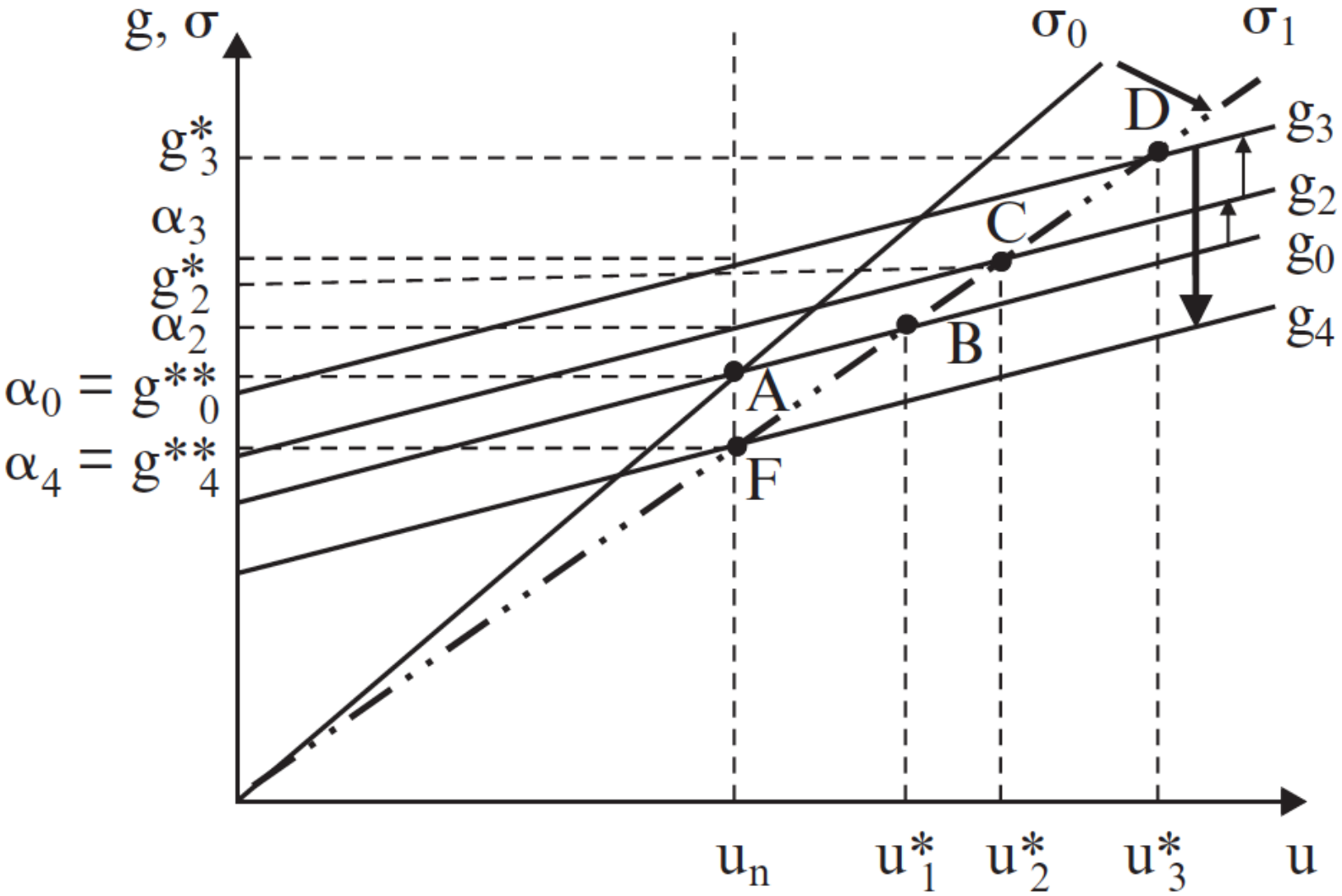


Figure 11.4 Taming Harrodian instability II – shift of the accumulation rate function



Taming Harrodian instability by either a rise (fall) in the propensity to save or a fall (rise) in the incentive to invest means:

- Paradox of thrift disappears in the long run
- Paradox of costs disappears in the long run

➢ Keynesian in the short term but classical in the long term (Dumenil/Levy 1999)

- Rise in propensity to save: Kaldor (1955/56, 1957), Robinson (1956, 1962),
- Rise (fall) in firms' retention ratio: Shaikh (2009)
- Firms' investment responds to rising (falling employment): Skott (2010, 2012)
- Economic policy responses: Dumenil/Levy (1999)

11.4 QUESTIONING THE UNIQUENESS OF THE NORMAL RATE OF UTILIZATION AND THUS THE NECESSITY FOR ANY ADJUSTMENT

- Chick/Caserta (1997): expectations and behavioural parameters, as well as norms, are changing so frequently that long-run analysis, defined as fully-adjusted positions at normal rates of capacity utilization, is not a very relevant activity.

- Palumbo/Trezzini (2003, p. 128): 'the notion of "normal" or "desired" utilization should be defined more flexibly as a range of degrees rather than as a single value'.

➢ Dutt (1990a, pp. 58-60) and Lavoie (1992, pp. 327-332, pp. 417-422): firms may be quite content to run their production capacity at rates of utilization that are within an acceptable range for the normal rate of utilization.

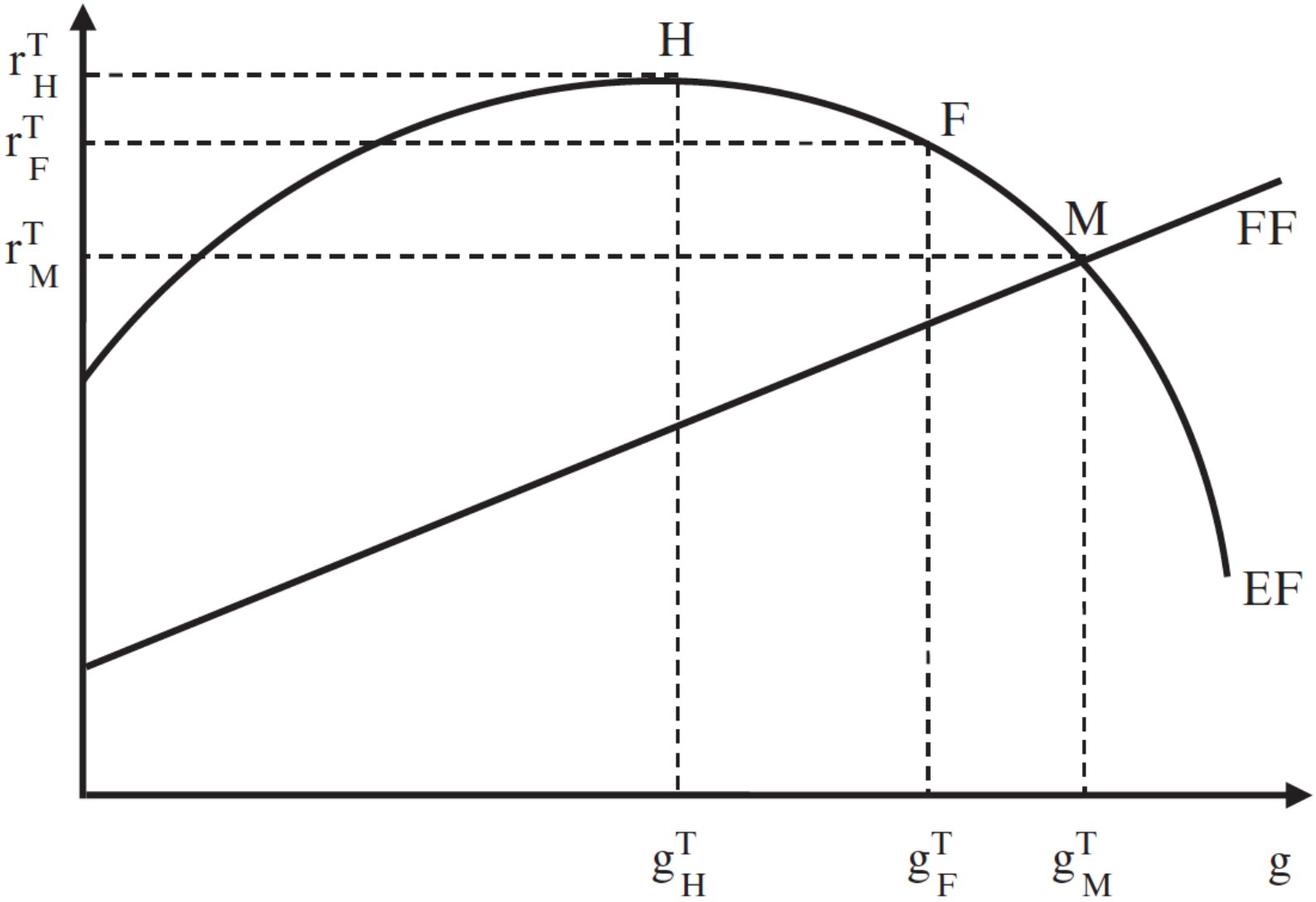
11.5 FIRMS HAVE MULTIPLE TARGETS, THE REALIZATION OF WHICH MAY BE MUTUALLY EXCLUSIVE

Lavoie (1992, pp. 417-421; 2002; 2003), Dallery/van Treeck (2011):

- Firms may have a definite target rate of utilization, hence a definite normal rate, but that they have other targets as well, which may prevent them from achieving each of their targets even in the long run
- The first conflict about the target rate of profit involves shareholders and managers, who oppose each other in the determination of the accumulation policies of firms: growth vs. profits
- The second conflict around the target rate of profit involves firms (shareholders and managers) on the one hand, and workers on the other. It concerns the distribution of income between gross profits, including retained profits and distributed profits (dividends, interest), and wages.
- The normal rate of profit (r_n) from firms – workers conflict is thus not necessarily equal to the target rate of return of firms determined by the relative powers of management and shareholders (r^T_F).

➢ Adjustment through variation in capacity utilization.

Figure 11.5 Target rates of profit and growth of managers and shareholders



(11.8) $$r_F^T = \delta_1 r_H^T + (1-\delta_1) r_M^T, \qquad 0 \leq \delta_1 \leq 1$$

r_F^T: target rate of profit of firm, δ_1: the power of shareholders vis-à-vis managers, r_H^T: target rate of profit of shareholders, r_M^T: target rate of profit of managers

(11.9) $$r_n = \delta_2 r_F^T + (1-\delta_2) r_W^T, \qquad 0 \leq \delta_2 \leq 1$$

r_n: normal rate of profit, δ_2: power of firm vis-à-vis workers, r_W^T: target rate of profit of workers

(11.10) $$\hat{p} = \Psi_1\left(r_F^T - r_n\right) + \Psi_2 \hat{w}_{-1}$$

$\hat{p}$: price inflation, ψ: bargaining power of firms

(11.11) $$\hat{w} = \Phi_1\left(r_n - r_W^T\right) + \Phi_2 \hat{p}_{-1}$$

$\hat{w}$: wage inflation, ϕ: bargaining power of workers

(11.12) $$\delta_2 = \frac{\left(1-\Phi_2\right)\Psi_1}{\left[\left(1-\Phi_2\right)\Psi_1 + \left(1-\Psi_2\right)\Phi_1\right]}$$

11.6 ENTREPRENEURS ADJUST THEIR ASSESSMENT OF THE NORMAL RATE OF CAPACITY UTILIZATION

Park (1997, p. 96): ‘the degree of utilisation that the entrepreneurs concerned conceive as ‘normal’ is affected by the average degree of utilisation they experienced in the past’.

Lavoie (1995b, pp. 807-808; 1996b):

- expected trend growth rate is influenced by past values of the actual growth rate
- normal rates of capacity utilization also being influenced by past actual rates

(11.13) $$du_n = \varsigma(u^* - u_n), \varsigma > 0$$

(11.14) $$d\alpha = \xi(g^* - \alpha), \quad \xi > 0$$

Using equations (11.3) and (11.6)

(11.13a) $$du_n = \frac{\varsigma\left(\alpha - s_\Pi \frac{h}{v} u_n\right)}{s_\Pi \frac{h}{v} - \beta}$$

(11.14a) $$d\alpha = \frac{\xi\beta\left(\alpha - s_\Pi \frac{h}{v} u_n\right)}{s_\Pi \frac{h}{v} - \beta}$$

From equations (13a) and (14a):

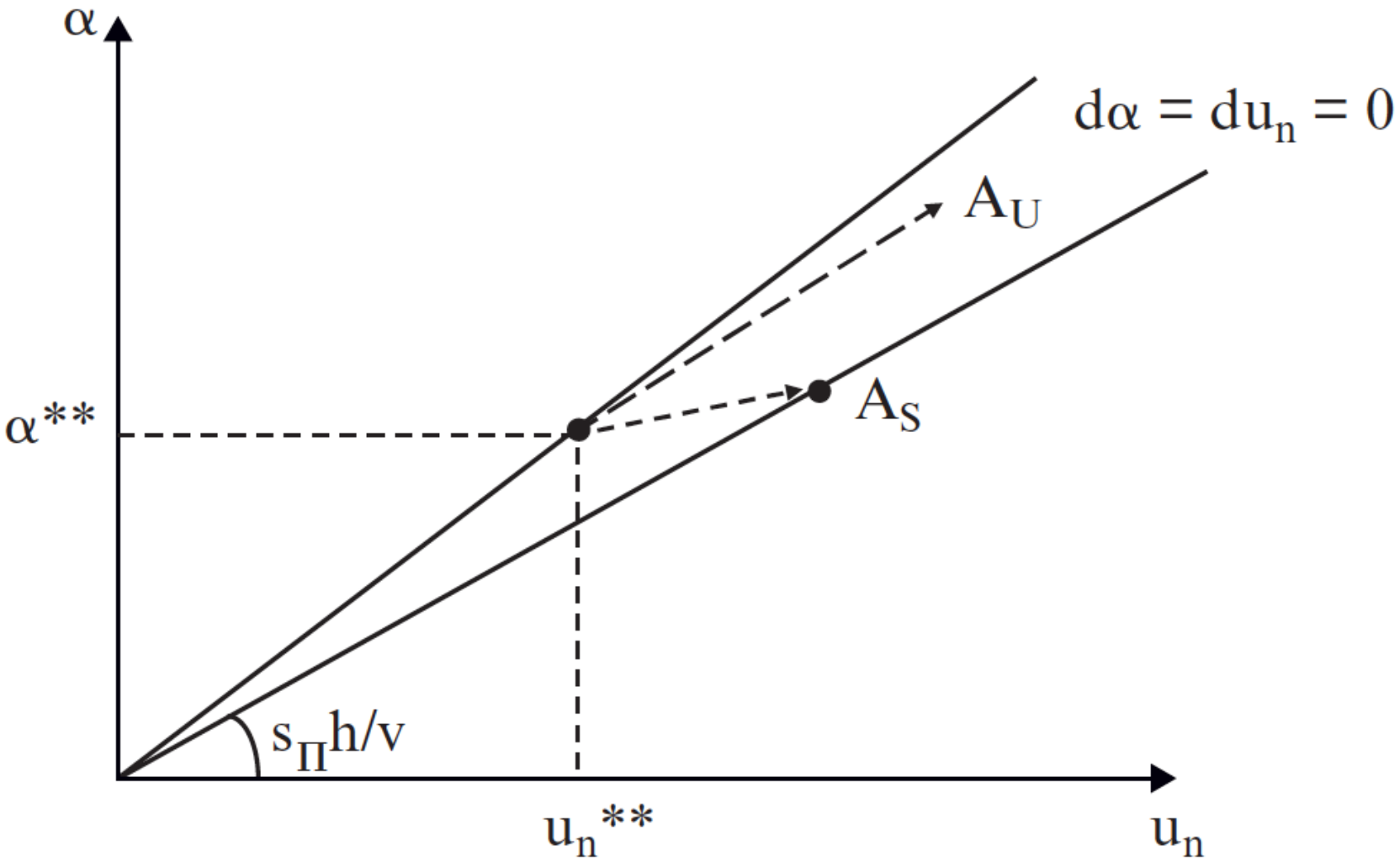
(11.15) $$d\alpha = \frac{\xi\beta}{\varsigma} du_n$$

- Continuum of long-run equilibria, which satisfy the condition that:

$$d\alpha = du_n = 0$$

(11.16) $$g^{**} = \alpha^{**} = s_\Pi \frac{h}{v} u_n^{**}$$

Figure 11.6 Long-run equilibrium rates of growth and capacity utilization



11.7 MONETARY POLICIES MAY STABILIZE THE SYSTEM – BUT WILL FEED BACK ON THE NORMAL RATE OF UTILIZATION

Dumenil/Levy (1999): Normal rate of utilization is associated with price/inflation stability, deviations trigger central bank reactions (close to New Consensus Macroeconomics)

Several presuppositions:

- Phillips curve is continuously upwards sloping (no horizontal parts)
- Central banks can affect relevant interest rate
- Interest rate changes have unique effects on aggregate demand
- Interest rate changes have no feedback effects on distribution conflict generating inflation

Here:

- Interest rate effects on aggregate demand: unique?
- Interest rates, cost channel, distribution conflict and inflation

(11.17) $$r = \frac{h}{v} u = r_n \frac{u}{u_n}, \qquad \frac{\partial h}{\partial i\lambda} \geq 0, \; \frac{\partial r_n}{\partial i\lambda} \geq 0$$

i: real interest rate, λ: debt-to-capital ratio

(11.18) $$\sigma = (r - i\lambda) + s_R i\lambda = h\frac{u}{v} - i\lambda(1 - s_R), \qquad 0 \leq s_R \leq 1$$

s_R: propensity to save out of rentiers' income

(11.19) $$g = \alpha + \beta(u - u_n) - \theta i\lambda, \alpha, \beta, \theta > 0$$

(11.20) $$u^* = \frac{\alpha - \beta u_n + i\lambda\left(1 - s_R - \theta\right)}{\frac{h}{v} - \beta}$$

(11.21) $$\frac{\partial \sigma}{\partial u} > \frac{\partial g}{\partial u} \quad \Rightarrow \quad \frac{h}{v} > \beta$$

(11.22) $$h_F^T = h_0 + h_1 i\lambda,\ h_0 > 0,\ h_1 \geq 0$$

h_F^T: target profit share of firms

(11.23) $$(1-h)_W^T = \omega_0 + \omega_1 u, \qquad \omega_0 > 0,\ \omega_1 \geq 0$$

$(1-h)_W^T$: target wage share of workers

(11.24) $$u_n = \frac{1 - \omega_0 - h_0 - h_1 i\lambda}{\omega_1}$$

Deviations of u* from u_n trigger changes in the inflation rate, central bank reactions and thus changes in the interest payments-capital ratio, which then feedback on u* and u_n :

(11.20a) $$\frac{\partial u^*}{\partial i\lambda} = \frac{1 - s_R - \theta}{\frac{h}{v} - \beta}$$

(11.24a) $$\frac{\partial u_n}{\partial i\lambda} = -\frac{h_1}{\omega_1} < 0$$

(11.20b) $$\frac{\partial u^*}{\partial i\lambda} = \frac{(1 - s_R - \theta) + h_1\left(\frac{\beta}{\omega_1} - \frac{u}{v}\right)}{\frac{h_0 + h_1 i\lambda}{v} - \beta}$$

Figure 11.7 Goods market equilibrium, distribution claims and unexpected inflation

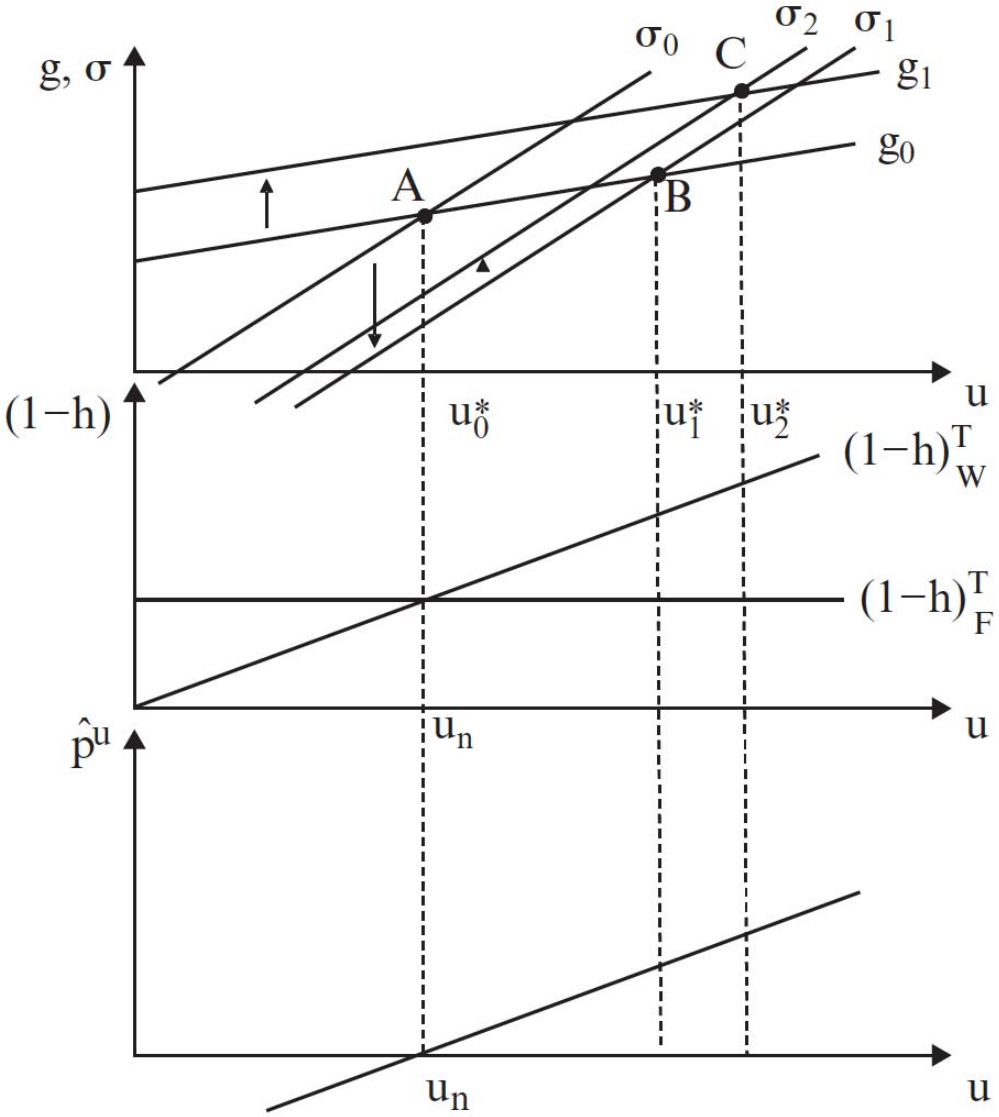
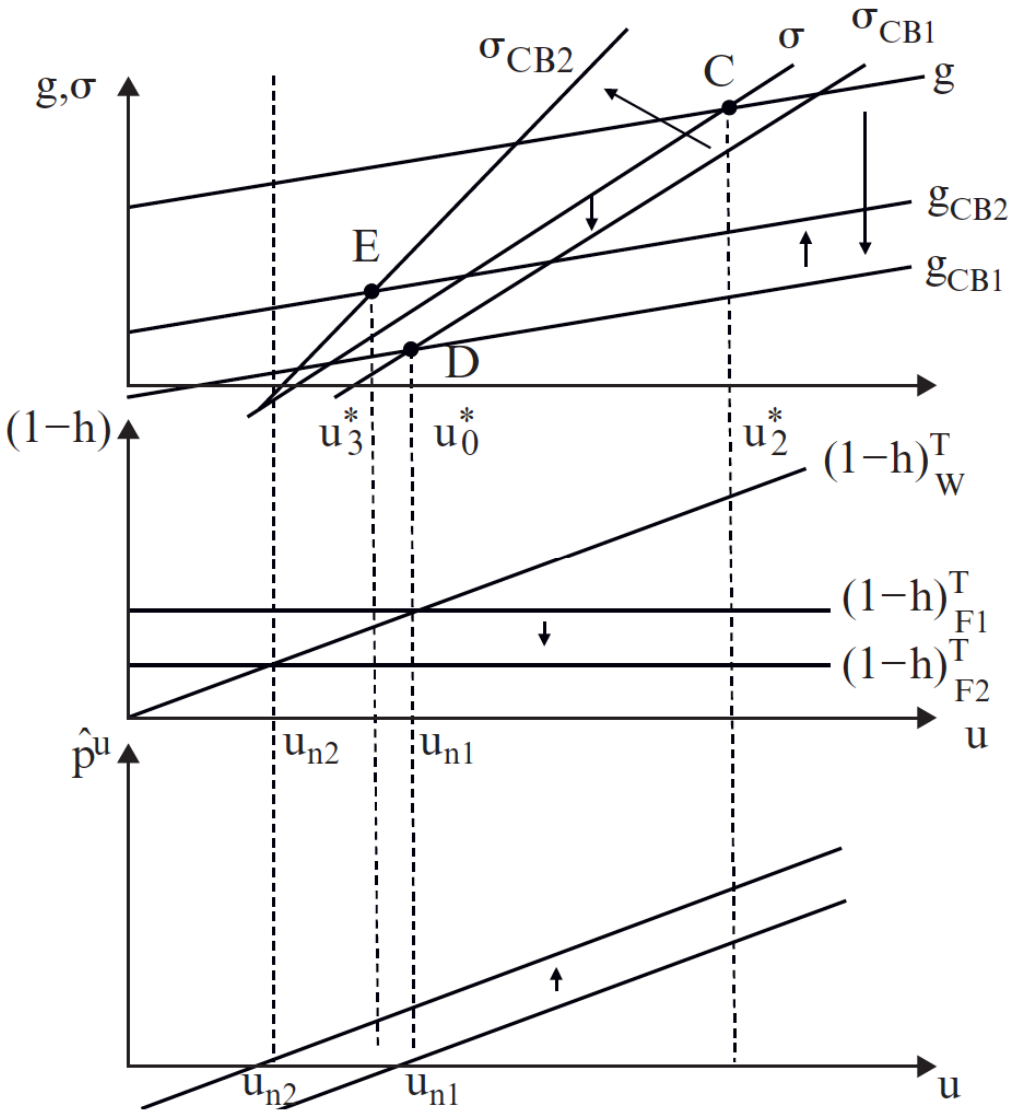


Figure 11.8 Short- and long-run effects of inflation targeting monetary policies



11.8 CONCLUSIONS

- The neo-Kaleckian model is capable of maintaining the paradox of thrift and the paradox of costs in the long run, even if the problem of Harrodian instability is included.
- For the post-Kaleckian model we would have to argue that it is capable of maintaining the paradox of thrift and at least the potential for the paradox of costs in the long run.
- Further stabilising mechanism: Capital-potential output ratio as endogenous variable (capital scrapping): Steindl (1979), Cassetti (2006), Allain/Canry (2008), Schoder (2014)
- Further stabilising mechanism: Exogenous growth of non-capacity creating demand component: Steindl (1985), Sawyer (2012), Allain (2015), Lavoie (2014, 2016)