THE SRAFFIAN SUPERMULTIPLIER

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THE SUPERMULTIPLIER MODEL

See Serrano (1995), Freitas and Serrano (2015). But also a NK version (Allain, 2015; Lavoie, 2016; Hein, 2016 etc.)

The SM fulfils some requisites proper of a satisfactory demand-led growth model:

- The extension to the long run of the Keynesian Hypothesis
- An accelerator-based investment function that do not engender Harrodian instability
- The absence of any necessary relation between g^Y and normal distribution
- $u = u_n$ (but no assumption of a productive capacity continuously utilized at its normal level)

THE SRAFFIAN SUPERMULTIPLIER

$Y_t = C_t + I_t + Z_t - M_t$ (1)

$C_t = c(1-\tau)Y_t$ & $M_t = mY_t$ (2)

$I_t = h_t Y_t$ (3)

$Z = G + C^a + X$ (4)

$Y_t = \frac{Z_t}{s - h_t}$ (5)

$\dot{h} = h_t \gamma (u_t - 1)$ (6) $\dot{u} = u(g - g^K)$ (7)

$g_t = g^Z{}_t + \frac{\dot{h}}{s - h_t}$ (8)

$g^K{}_t = h_t u_t / v - \delta$ (9)

THE EQUILIBRIUM RESULTS

$g_t = g^K_t = g^Z_t$

$u_t = 1 \; (= u_n)$ (10)

$h^* = v(g^Z + \delta)$

If a given rate of growth of autonomous demand is sufficiently persistent, output and productive capacity of the economy tend to the position represented by the so-called "fully adjusted" Supermultiplier

$$Y_n = \frac{Z}{s - v(\delta + g^Z)} \quad (11)$$

HARROD RELOADED

From the Harrod's lesson:

- from $I = S$, it follows that we can always express the rate of accumulation g^K as g^K = average prop. to save*u/v

$[I/K = S/K = (S/Y)(Y/Y_n)(Y_n/K)]$

- g^W = average propensity to save/v (= g^Z in the SM)

BUT: what happens if g^Z increases?

- $S/Y = s - Z/Y$

A NEO-KALECKIAN SUPERMULTIPLIER

$g^K = I/K = \gamma + \gamma_u(u-u_n)$ (12)

$g^S = S/K = s_p\Pi u/v - Z/K$ (13)

$$u^* = \frac{(\gamma - \gamma_u u_n + Z/K)v}{s_p \Pi - v\gamma_u}$$ (14)

$\dot{\gamma} = \theta(u^* - u_n)$ (15)

$(\dot{Z/K}) = Z/K[g^Z - \gamma - \gamma_u(u^*-u_n)]$ (16)