Errata to: Why the Concept of Hicks, Harrod, Solow Neutral and even Non-Neutral Augmented Technical Progress is flawed in Principle in any Economic Model, May19 2018

Replace the next part (page 9-10)

We choose $c = c_1 y$ and linearize around k_{c_1}, using Taylor expansion at c_1 gives

$$\dot{k} = \frac{(1-c_1)}{\left(\frac{k}{y}\right)_{c_1}} \frac{\alpha\left(a_K k_{c_1}\right)^{\gamma}}{\alpha\left(a_K k_{c_1}\right)^{\gamma}+(1-\alpha)} k - \delta k = \left(\frac{\alpha\left(a_K k_{c_1}\right)^{\gamma}}{\alpha\left(a_K k_{c_1}\right)^{\gamma}+(1-\alpha)} - 1\right)\delta k = (1-ks)\delta k \quad (31)$$

The eigen value of this equation is λ

$$\lambda = (1-ks)\delta < 0 \quad (32)$$

which holds for $\forall\ c_1 \epsilon (0,1)$

This means that this system is stable and will converge towards the equilibrium at c_1, starting from arbitrary initial condition $k_0 > 0$. The time constant τ is

$$\tau = \left|\frac{1}{\lambda}\right| \quad (33)$$

> Lemma: If consumer's behavior is $c = c_1 y$ under maximizing profit with wages fixed or under maximum profit conditions, then all choices c_1 will result in a unique and stable equilibrium.

by

We choose $c = c_1 y$ and linearize around k_{c_1}, using Taylor expansion at c_1 gives

$$\dot{k} = \frac{(1-c_1)}{\left(\frac{k}{y}\right)_{c_1}} \frac{\alpha\left(a_K k_{c_1}\right)^{\gamma}}{\alpha\left(a_K k_{c_1}\right)^{\gamma}+(1-\alpha)} k - \delta k = \left(\frac{\alpha\left(a_K k_{c_1}\right)^{\gamma}}{\alpha\left(a_K k_{c_1}\right)^{\gamma}+(1-\alpha)} - 1\right)\delta k = (ks-1)\delta k \quad (31)$$

The eigen value of this equation is λ

$$\lambda = (ks-1)\delta < 0 \quad (32)$$

which holds for $\forall\ c_1 \epsilon (0,1)$

This means that this system is stable and will converge towards the equilibrium at c_1, starting from arbitrary initial condition $k_0 > 0$. However, not all combinations of c_1 and σ will result in an equilibrium. The time constant τ is

$$\tau = \left|\frac{1}{\lambda}\right| \quad (33)$$

> Lemma: If consumer's behavior is $c = c_1 y$ under maximizing profit conditions, then all choices c_1 will result in a unique and stable equilibrium, if an equilibrium exists.