$$\eta^{\frac{\eta\beta}{\sigma(1-\eta)}}\left(\frac{2\pi}{m}\right)^{\frac{\beta}{1-\eta}}\cdot\sum_{g}\tau_{i,g}^{\frac{\eta\beta}{\sigma(1-\eta)}}\int g\,h_{TS}^{\gamma-1}$$

$$U_T=(1-s_T)\left(w_T\tau_T-e_T\right)^{\mu}\left(1+\tau^{e}_{T}\right)^{\mu}$$

$$U_T>U_i$$

$$(1-s_T)^{1/\mu}(w_T\tau_T-e_T)\cdot(1+\tau^{e}_{T})>(1-s_i)^{1/\mu}(w_i\tau_i-e_i)(1+\tau^{e}_{i})$$

$$w_T\tau_T-e_T>(w_i\tau_i-e_i)\cdot\left(\frac{1-s_i}{1-s_T}\right)^{1/\mu}\cdot\frac{1+\tau^{e}_{i}}{1+\tau^{e}_{T}}$$

Let $w_T=h_T^{\gamma}$

$$w_T\tau_T-\eta g\tau_T w_T \qquad w_i\tau_i-e_i=A_i\tau_i h_i-\eta\tau_i A_i h_i=(1-\eta)\tau_i w_i$$

$$\tau_T w_T(1-\eta g)>\tau_i w_i(1-\eta)\cdot\left(\frac{1-s_i}{1-s_T}\right)^{1/\mu}\cdot\frac{1+\tau^{e}_{i}}{1+\tau^{e}_{T}}$$

$$h_T^{\gamma}>A_i h_i\cdot\frac{1-\eta}{1-\eta g}\cdot\frac{\tau_i}{\tau_T}\cdot\left(\frac{1-s_i}{1-s_T}\right)^{1/\mu}\cdot\frac{1+\tau^{e}_{i}}{1+\tau^{e}_{T}}$$

$$k_T\cdot a_T^{\frac{\alpha\gamma}{1-\eta g}}>k_i\cdot a_i^{\frac{\alpha}{1-\eta}}\cdot z$$

$$k_T\cdot a^{\frac{\alpha}{\gamma}-\eta}>k_i\cdot a_i^{\frac{\alpha}{1-\eta}}\cdot z$$

$$k_T^{\frac{1}{\alpha}}\cdot a_T^{\frac{1}{\gamma}-\eta}>k_i^{\frac{1}{\alpha}}\cdot a_i^{\frac{1}{1-\eta}}\cdot z^{\frac{1}{\alpha}}$$

$$a_T>\left(\frac{k_i}{k_T}\right)^{\frac{1}{\alpha}\cdot\left(\frac{1}{\gamma}-\eta\right)}\cdot z^{\frac{1}{\alpha}\left(\frac{1}{\gamma}-\eta\right)}\cdot a_i^{\frac{\frac{1}{\gamma}-\eta}{1-\eta}}$$

$$a_i<\left(\frac{k_T}{k_i}\right)^{\frac{1}{\alpha}(1-\eta)}\cdot\left(\frac{1}{z}\right)^{\frac{1}{\alpha}(1-\eta)}\cdot a_T^{\frac{1-\eta}{\frac{1}{\gamma}-\eta}}$$

$$a_i<\underline{\qquad\qquad}\cdot a_T^{\frac{\gamma(1-\eta)}{1-\eta\gamma}}$$

$$\int F_1\left(a,\xi_1\cdot a^{\frac{\gamma(1-\eta)}{1-\eta\gamma}},\xi_2\cdot a^{\frac{\gamma(1-\eta)}{1-\eta\gamma}},\dots,\xi_M\cdot a^{\frac{\gamma(1-\eta)}{1-\eta\gamma}}\right)da$$