COMMENTS OF T.N. SRINIVASAN ON

“GRADUATING TO GLOBALISTION: A STUDY of SOUTHERN MULTINATIONMALS”
The Model

Producer  \( Q = AL\alpha \quad 0 < \alpha < 1 \) \hspace{1cm} \text{(1)}

\[
C(Q/w,A) = F + wL = F + w\left(\frac{Q}{A}\right)^{\frac{1}{a}} \hspace{1cm} \text{(2)}
\]

\[
\frac{\delta C}{\delta Q} > 0 \quad \frac{\delta C}{\delta w} > 0 \quad \frac{\delta C}{\delta A} < 0 \hspace{1cm} \text{(3)}
\]

\[
MC \equiv \frac{\delta C}{\delta A} = \frac{1}{A} \left(\frac{w}{\alpha}\right) \left(\frac{Q}{A}\right)^{\frac{1}{a} - 1}
\equiv \left(\frac{w}{\alpha}\right) \frac{Q^{\frac{1}{a} - 1}}{A^{\frac{1}{a}}} \hspace{1cm} \text{(4)}
\]

\[
\frac{\delta MC}{\delta Q} > 0, \quad \frac{\delta MC}{\delta w} > 0, \quad \frac{\delta MC}{\delta A} < 0 \hspace{1cm} \text{(5)}
\]
CONSUMER

\[
\text{MAX } U = \left[ \frac{1}{N} \sum_{1}^{N} Q_i^{\sigma-1} \right]^{\frac{\sigma}{\sigma-1}} \sigma \geq 0 \quad \text{--------(6)}
\]

\[
\text{BUDGET } = \sum_{1}^{N} p_i Q_i = Y \quad \text{--------(7)}
\]

\[
\text{DEMAND } = Q_i^d = \frac{Y}{p_i} \left( \frac{p}{p_i} \right)^{-\sigma} \quad \text{--------(8)}
\]

\[
P \equiv \left( \sum p_i^{-\sigma} \right)^{\frac{1}{\sigma}} \quad \text{--------(9)}
\]

PRODUCER PROFIT MAXIMISATION:

\[
\text{MAX} \pi = p_i Q_i^d - C(Q_i^d) \quad \text{--------(10)}
\]

\[
\text{FOC } \frac{\delta C}{\delta Q_i} \equiv \frac{\delta C}{\delta Q_i} \left[ 1 - \frac{1}{\sigma + 1} \right] \quad \text{--------(11)}
\]

\[
\pi(w, A) = p_i^* Q_i^d \left( p_i^* \right) - C(Q_i^d (p_i^*)) \quad \text{--------(12)}
\]
If $\pi < 0$ firms cannot meet fixed costs $F$

There exists a threshold $A^d$ such that

\[
\begin{align*}
\pi < 0 & \quad \text{for } A < A^d \\
> 0 & \quad \text{for } A > A^d
\end{align*}
\]

if we interpret $F$ as a fixed $F^d$ cost of entry into domestic market, then (13) characterizes the productivity distribution of firms in the domestic market.

For firms already in the domestic market (i.e $A \geq A^d$), whether or not to export market will depend on $F^e$, the entry cost of the export market. This would mean another threshold determined by total profits $\pi^d + \pi^e$ firm domestic and export sales. Thus there exists another threshold $A^e > A^d$ determined by $\pi^e$.

Thus for $A < A^d$ firms do not enter either market

$A^d < A < A^e$ firm sells only in the domestic market

$A^e \leq A$ firm sells in domestic and foreign markets

The decision whether to set up foreign production through FDI is based on consideration.
Whether it is worthwhile paying foreign wages or whether it would be profitable for the firm with its productivity abroad. I interpret (I am not sure) the authors as implicitly assuming, that the firms’ productivity parameters at home and abroad are the same. There is no reason to assume this is to be the case.

Once one describes how productivity of a firm is determined (Melitz assumes that by paying a fixed cost all firms can get to draw its productivity parameters from the exogenous distribution and this cost is sunk in the sense that it cannot be recovered if the drawn value is too low for the firm to be profitable.

I will not go into the assumption needed to close the model etc. this theory is about a differentiated product model but the empirical analysis is not.