

can be done more effectively.

Assume there is a large number of multi-national firms, with a presence in all countries. Given the large number of multi-national firms, all markets are competitive and the profit of each multi-national firm is zero. There is no restriction on free trade and labor can move freely across countries.

Assume that there are \bar{n} stages to the production chain and \bar{n} countries. Each country has an absolute advantage in precisely one stage of the production process. The absolute advantage derives from the location, not the worker, so that if any worker moves to the country with absolute advantage in a particular task, the new worker is able to produce at the higher productivity for that task. There is a constant $b > 0$ such that the country with the absolute advantage in production stage i has an effective labor input of $1 + b$ compared to the effective labor input of 1 in any other country for that task.

The output of a production chain depends on the amount of offshoring done to utilize the most effective inputs. Specifically, the output of a production chain is given by

$$\left(\sum_{i=1}^{\bar{n}} x_i \right)^\alpha \quad (0 < \alpha < 1) \quad (22)$$

where $x_i = 1 + b$ if the production of the i th stage takes place in the country with the absolute advantage in stage i while $x_i = 1$ if the production takes place anywhere else. Thus, if a firm offshores s stages of the production chain to the country with the absolute advantage in that process, output is given by

$$y(s) = (\bar{n} + bs)^\alpha \quad (23)$$

The firm's decision is to choose s , the extent of offshoring.

Offshoring entails two costs - the cost of transport and the financing cost due to the lengthening of the production chain. We assume that transport requires labor services just as for production. Offshoring also incurs financing