Multinational Corporations and Technology Transfer: Some Problems and Suggestions*

We are here concerned with one aspect only of the foreign company – its role as an exporter of technology, not with an assessment of its total impact. The foreign company exports technology to other countries, including developing countries, either in embodied or disembodied (separate) form. Embodied export of technology is involved if the foreign company sets up a subsidiary (wholly or jointly owned) or supplies materials, equipment, etc., embodying its own technology. In this case, the embodied transfer of technology consists both in the standard of management and production technique employed by the foreign company in production, and the spread effects by training and force of example. Disembodied forms include licensing, transfer of patented or non-patented knowledge, and management contracts, consultants’ services, etc. The embodied technology of the foreign company includes, also importantly, techniques of marketing and marketing channels. Embodied and disembodied forms of transfer of technology can be, and often are, combined. Transfer of embodied technology is certainly more

* Paper presented to OECD Conference on 'The Transfer of Technology', Istanbul, 5–9 Oct 1970. In preparing this paper, I have drawn upon the presentation by Mr E. P. Hawthorne in his paper on 'The Transfer of Technology' as well as on research by Mr Javed Ansari, graduate student at the University of Sussex. I have also benefited from discussions on private overseas investment at a recent conference in Cambridge on employment generation in developing countries, organized by the Cambridge Overseas Studies Committee.

H. W. Singer, The Strategy of International Development
© H. W. Singer 1975
important in the overall activities of the foreign company, but because this part is invisible, it is often underrated.

As an investor or supplier of equipment etc., the multinational corporation shares in the general problems of the foreign investor or seller of technology, but with some additional problems special to it. In practice, it is often difficult and not particularly useful to draw too fine a distinction between these two types of agents of technological transfer. In view of its importance much of what follows has been written with the multinational company specially in mind; this has the advantage of giving some concreteness to the present discussion. The activities and motivations of banks, oil companies, plantations, mining companies, the foreign company going into tariff-protected manufacturing and assembly producing, or farming out parts for production in developing countries etc., are all different, and generalizations can be misleading.

In the most general terms, the foreign company like other investors or traders, will be attracted by the prospects either of additional profits, or of additional growth in terms of strengthening the position of the foreign company against actual or potential rivals, or of safeguarding its present profits against threatened encroachment. In more specific terms, and with more specific reference to the type of technology transferred to developing countries, the foreign company will wish to spread the high overhead burden of its own past and present R & D expenditures over a larger volume of production (or secure additional returns on its R & D expenditures in the form of royalties), secure outlets for the products which are the results of its own technology (equipment, materials, end products, know-how), and thus secure funds for additional investment in new technology, enabling the foreign company to maintain its technological leadership. This whole process would then be leading to a new chain of further investments or other ways of securing a pay-off or renewed technological leadership, creating a continuing ongoing process. The host country may be more concerned with local reinvestment of profits, although the resulting market domination may also be unpopular.

It appears that the foreign company will not normally expect from its involvement in developing countries any major direct