

A Theoretical Review of Benefits & Costs of Direct Foreign Investment in a Host Country

Dev Ratna Kansakar*

Introduction

Direct foreign investment by multinational corporations has become an increasing source of concern in the countries where such investment has been significant. The multinational corporations are perceived by policy makers in host countries as both an economic institution which creates benefits for and costs to the local economy and as a quasi—political institution which threatens the power and even the sovereignty of the nation.

Direct foreign investment has multiple effects on the economy of a host country in terms of production, employment, income, prices, exports, imports, the balance of trade, the balance of payments economic growth, and general welfare. Some of these effects confer benefits on the host country; some of them incur costs. Some effects occur almost immediately, and some may take a generation. The fundamental effect of direct foreign investment is its contribution to the national income of the host country over time.

*Mr. Kansakar is currently associated with the Department of Economics, Tribhuvan University, Kirtipur, Kathmandu.

The purpose of this article is, therefore, to review this fundamental effect theoretically. It discusses some of the theories involved in the benefits and cost as well as welfare effects of direct foreign investment in the host country.

Benefits and Costs Analysis

The standard theory of international trade and finance starts off the analysis of multinational corporation with two assumptions :

- (a) It assumes perfect competition in all the markets; and
- (b) It assumes that the multinational corporation is engaged in shifting capital from one country to another.

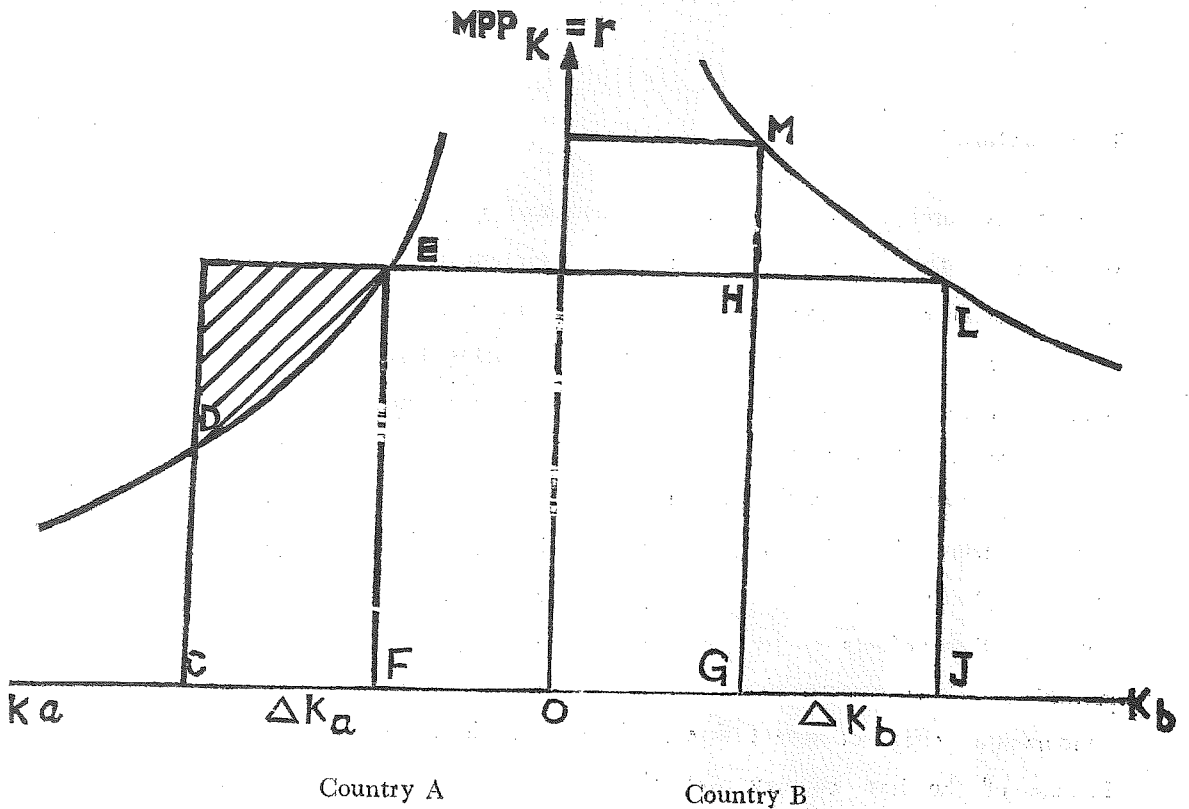


Figure 1. Gains from capital movement between two countries.

Private capital movements were once seen as beneficial for both home and host countries. The analysis was based both on the differential-returns to capital argument and on the Classical assumptions concerning the relocation of capital stock. Capital would supposedly flow from Country A to Country B until returns in the two countries were equated.

In Figure I, the home country A would experience a decline in domestically produced output of trapezoid CDEF, but it would earn returns on foreign investment of rectangle GHIJ. The net gain to the home country A is thus indicated by the shaded triangle lying above its marginal productivity of capital curve. In the host country B, the addition to capital stock would increase output by trapezoid GMIJ, of which only rectangle GHIJ is paid to foreign capitalists. Thus, the triangle HMI remains as incremental income to the host country B.

According to such classical analysis, the international capital movement simultaneously achieves three targets. World income is increased because capital is equally productive in all countries. The home countries are better off because they are earning higher return on their capital abroad than they would have earned had that capital remained at home. The host countries also are better off because higher returns to other factors absorb part of the gain in output resulting from a larger stock of capital.

The above analysis implies that the return per unit of capital in the host country B, as illustrated in Figure I, falls at the benefit of labour and other factors, while the reverse happens in the home country A. But Harry G. Johnson has proved that the technologically more efficient foreign firms can depress the wages of labour instead of depressing the returns to capital in the host country where they invest.

The multinational corporations probably move capital around the globe, but they also move technology simultaneously. They can improve the production isoquants for capital-intensive goods using superior technology. It might lower relative prices of the capital-intensive goods using superior technology, it might lower relative price of the

capital-intensive good. But if the relative prices of goods are fixed by international markets as it might be for a small country with an open economy, the benefits will be passed on entirely in the form of the an altered factors-price ratio. With such inappropriate intensity of factors employed by the foreign firms, the effect of the inflow of foreign capital will be to raise the rate of return on capital and reduce the wages of labour.

The above point is illustrated in figure 2, where XX and YY are the isoquants for the two sectors of the economy as they are before the inflow of foreign investment, and X' X' is the isoquant for the situation after the introduction of the foreign technology. If the multinational corporations absorb the who lebenefit of their superior efficiency in profits on the technology, the factor prices remain unchanged and they

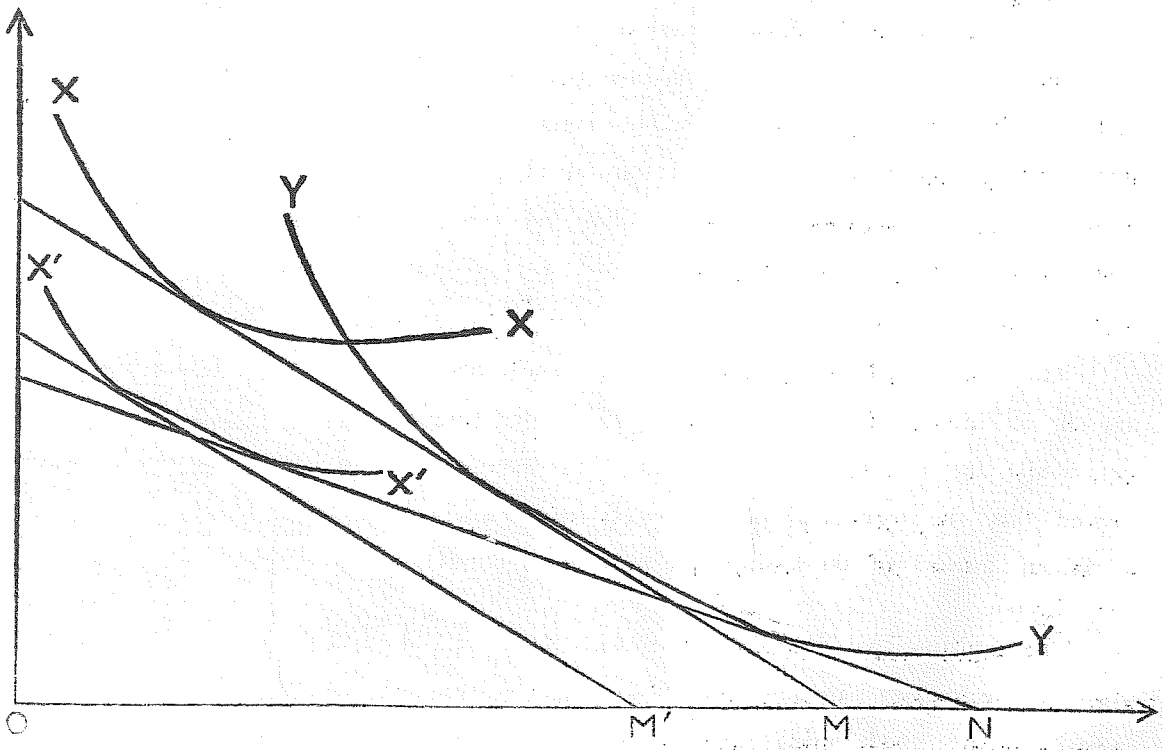


Figure 2. Redistribution of Factor Income from Direct Foreign Investment.

derive a profit on their technological superiority as a proportion of cost at the rate MM'/OM . If they pass it on to the consumers completely in the form of a price reduction proportional to their technical superiority, the price of X falls by MM' in terms of capital and factor prices are unchanged; and if they keep commodity prices unchanged and let the benefits be absorbed by the community through altered factor prices, the new factor-price ratio is the slope of NN , which implies a relative and absolute increase in the rate of return to capital and an absolute and relative decline in the wages of labour. Thus, local labour suffers at the same time local inefficient capitalists are being displaced.

B. I. Cohen has analysed Johnson's special case further and concluded that the foreign ownership of capital might be so extensive that the higher profit rate could actually serve to decrease total income accruing to the host country. More important than its effect on overall returns to capital, the multinational profits on the new technology it brings to the host country. If the multinational corporation enjoys a monopoly in its branch of technology, the fruits of improved products and processes can for a long while leave the host country. Only as competition prevails technological gains will be reflected in higher factor prices or lower commodity prices in the host country.

The Classical theory needs further qualification when there are infant entrepreneurs in the host country. It is often claimed that the multinational corporations thwart local entrepreneurial effort. If the infant-entrepreneur argument is valid, a first-best case may exist for restricting inward flow of technology. In addition, the Classical Theory needs modification when there are domestic distortions. If domestic prices do not accurately reflect social costs, the multinational corporations can impose a burden on the economy. The most important distortions are those created by tariff and non-tariff barriers. Multinational Corporations are mostly attracted to protected markets. The result may be small and inefficient plants, or profits could be generously inflated, with multinational corporations sharing in the windfall gains.

Macdougall has analyzed the effects of an increase in the foreign-owned capital stock on the real income of a host country. The line GK in Figure 3 relates the capital stock in the host country to the marginal physical product of capital, given the amount of other factors of production, which are represented by the so-called "labour". Initially, the capital stock is AC, of which AB is owned by the host country and BC by the foreign investors. Since profits per unit of capital equal the marginal product of capital, total profits are FEBA on domestic capital and EDCB on foreign capital. Output is GDCA so that labour gets GDF.

Now suppose a small increase in foreign capital from BC to BL. Foreign profits become IKLB. The new foreign capital earns JKLC and the old foreign capital loses EDJI because the marginal product of capital, and hence the rate of profit, have fallen. Total foreign profits rise on balance if the elasticity of demand for foreign capital exceeds unity.

The capitalists of the host country lose FEIH. Labour gains FDKH. The host country as a whole thus gains EDKI. The host country does not, as one would expect, gain the whole of FDJH, that is, the whole of the increase in real wages resulting from labour's higher marginal productivity, but only a proportion corresponding to the ratio of foreign to total capital; the great bulk of labour's gain is merely a redistribution from the capitalists of the host country.

Welfare Effects of Direct Foreign Investment

Direct foreign investment by the multinational corporations has become an increasing source of concern in countries where such investment has been significant since the Second World War and particularly in the past generation or so; and there has been much discussion, and some restrictions to such investment. Much of the concern about direct foreign investment has merely expressed political or nationalistic sentiments of a type that cannot readily be reasoned with, but there are some possibilities under certain conditions that the effects of such investments may

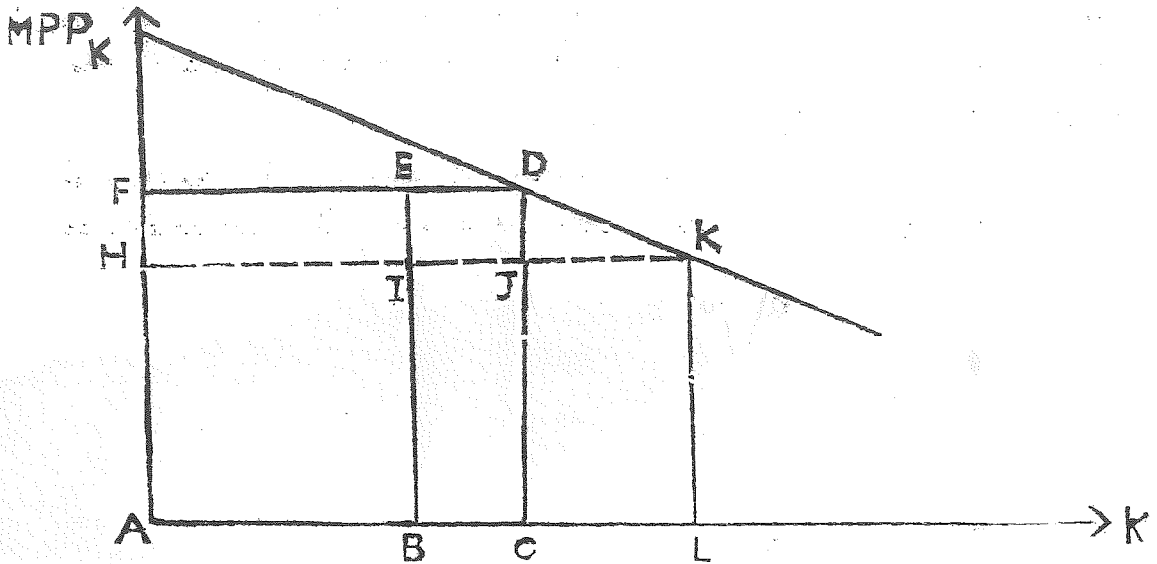


Figure : 3.

be adverse, either by comparison with the situation as it would be in their absence or, less stringently and more plausibly by comparison with alternative methods of handling their welfare implications.

To deal with the question of the welfare effects of direct foreign investment and whether restriction of inward investment might under certain conditions desirable it is convenient to idealize such investment as involving an increase in the host country's capital stock and an improvement in its technology. The adoption of more efficient technology and the accumulation of capital are generally considered to increase the real income of a country. But when a country is following a protectionist policy, the improved efficiency in the protected industry or the accumulation of capital used intensively in that industry will actually reduce the country's real income. The possibility of income reducing growth is relevant to the fact that the countries trying to industrialize by means of protectionist and import-substitution policies are frequently dissatisfied with the poor results.

In the framework of a two-commodity, two-factor model of international trade, Jagdish N. Bhagwati has demonstrated the possibility of "immiserizing growth"

caused by a tariff-induced inflow of capital from abroad, assuming that the host country is small and continues to import the capital-intensive good while remaining incompletely specialized.

Brecher and Alejnadro have further analyzed this immiserization problem and demonstrated that the capital inflow must reduce the welfare of the host country under

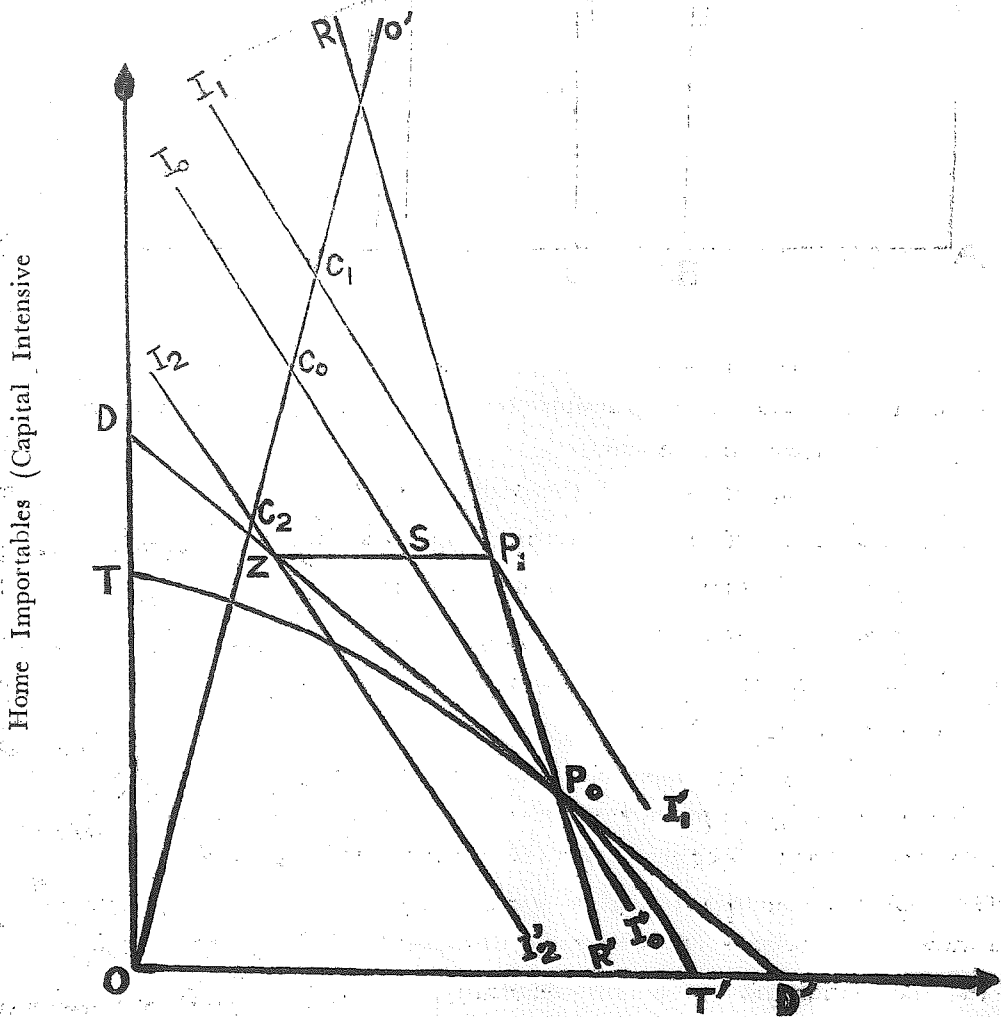


Figure 4. Home Exportable (labour-intensive)

the condition that the foreign capital receives the full (tax-free) value of its marginal product.

There are four welfare elements in the transition from an initial free trade situation to the tariff and capital inflow inclusive situation;

- (1) The tariff imposes a consumption cost by distorting the price faced by consumers;
- (2) The tariff imposes a production cost by distorting the prices faced by production;
- (3) The capital influx implies "growth", at constant tariff inclusive domestic prices faced by producers, which may imply a welfare gain or a welfare loss; and
- (4) The tariff-induced capital influx from abroad earns a reward which must be reckoned as a cost and hence a welfare loss to the tariff-imposing country.

Since the inclusion of welfare losses (1) and (2) would serve merely to reinforce the following argument, the analysis is restricted only to welfare effects (3) and (4), by starting from the tariff-inclusive but pre-capital inflow situation.

In Figure 4, the small protectionist country produces with constant returns to scale to P_0 , using only the domestic endowments of capital and labour which generate the production possibility curve TT' . The tariff-inclusive domestic price-ratio is given by the slope of the line DD' tangent to TT' at P_0 ; whereas the international price ratio, as fixed by the small country assumption, is given by the slope of the line I_0I_0' . Consumption is at C_0 , where I_0I_0' intersects the line OO' , which is the income-consumption curve corresponding to domestic prices. To avoid cluttering, the figure omits the social indifference curves, one of which passes through C_0 which has a slope equal to that of the line DD' .

Effect (3) is examined at first in isolation. The once-for-all increase in the capital stock shifts out the production-possibility frontier (now shown in its new position) and, at constant prices, production increases from P_0 to Point P_1 lies

northwest of P_0 , according to the Rybczynski Theorem, and both of these points lie on RR' , which is the familiar Rybczynski line corresponding to the fixed ratio of domestic prices. Since RR' is steeper than the international price line in the particular case illustrated, the real value of total output increases at international prices, as the international price line shifts from I_0I_0' to I_1I_1' . Therefore, consumption increases from C_0 to C_1 , and welfare improves. On the contrary, if the international price line had been drawn steeper than RR' , welfare would have decreased by similar reasoning, and the following analysis obviously would go through *a fortiori* because effect (3) would be negative.

Now effect (4) also is incorporated, by subtracting foreign profits to leave only national income. Assuming that the foreign capital receives the full (tax-free) value of its marginal product, foreign profits absorb the entire increase in total output valued at domestic, by reasoning similar to that of Robert A. Mundell.

Expressed in terms of the home exportables, these profits are represented by P_1Z , which is the horizontal distance between point P_1 and land DD' . Thus, the home country is left with commodity bundle Z , which can be exchanged internationally along the international price line I_2I_2' to have consumption at C_2 . Since C_2 must lie south-west of C_0 , the capital inflow from abroad clearly reduces the home country's welfare.

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