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THE IMPACT OF THE MULTINATIONAL FIRM

I

Perhaps the most important aspect of direct foreign investment is that it is an instrument of international business integration. It is a means by which a firm can own manufacturing facilities and distribution outlets in foreign countries and exercise direct control over their decisions on production and sales. Direct investment permits an enlargement across international borders of the span of activities covered in the decision-making center of a single firm, and its expansion in recent years can be taken as a measure of the extent of vertical and horizontal international integration and the increased importance of multinational firms. What is the impact of these multinational firms on international trade and factor movements? Large in size, broad in scope, they frequently occupy a major, if not dominant, position in their industry on a world-wide basis. To what extent do they increase trade, cause technology to grow and spread rapidly, and help capital to move freely? To what extent do they inhibit inefficient exchange? Would other forms of international industrial organization lead to better or worse performance?[1]

On the positive side, it is argued that multinational firms, because of their access to capital, technology, and markets in many countries, can take advantage of discrepancies in world prices, and in so doing, help correct them and bring about better integration of the world economy. The multinational firm manufactures where costs are low and sells where the price is high. It raises capital where it is cheapest

and invests it where it is most productive. It spreads the superior technology of one country to other countries in which it operates. It is able to do this to the extent that the internal bureaucracy of the firm transmits information more rapidly than international markets, and overcomes barriers to trade more easily and efficiently. The firm in these cases substitutes for imperfect markets in allocating goods and factors.

Against this must be set the problems created by the large size and dominant position of some of the important multinational firms. Direct investment would not be the matter of great concern that it is if it consisted of many small firms scattered throughout the economy, each occupying a minor part of the industry and behaving in a competitively determined fashion. Instead, much of it is associated with a small number of large firms in oligopolistic industries. Insofar as there is a major problem associated with multinational firms, much of it lies in the fact that, in these cases, competition is weak and the firm has market power. If market forces compel behavior, there is little point in investigating, as is often done, whether foreign firms export more, treat labor better, reinvest more, etc. Performance would depend on supply and demand, and it would be better to focus attention on these forces than on the firm itself. But it is an entirely different matter in industries where a firm, by reason of its dominant position, has scope for choice. Here it certainly makes sense to examine performance, not only from the economic point of view, but from the political side as well. Large concentrations of power in private

corporations can have serious political consequences which are considerably aggravated when the firm is not only large, but foreign, and American at that.

If not pressed too far, there is much to be learned by comparing the problems currently created by the multinational firms with developments in the United States at the end of the nineteenth century. The emergence of national firms which accompanied the development of a national market at that time helped, as Kindleberger points out, to equalize wages, interests, and rents within the United States.[2] But it also led to widespread fears and the antitrust laws. There was great suspicion, sometimes justified, sometimes not, of the power of these new industrial giants to create serious economic problems through the suppression of competition and serious political problems through the concentration of power. Concern about "the fate of small producers driven out of business or deprived of the opportunity to enter it by 'all-powerful aggregates of capital'" and about "the power of monopolists to hurt the public by raising price, deteriorating products, and restricting production" was a principle motive behind the Sherman Act.[3] On the political side, "concentration of resources in the hands of a few was viewed as a social and political catastrophe," a belief, as Kaysen and Turner point out, which "can be rationalized in terms of Jeffersonian symbols of wide political appeal and great persistence in American life: business units are politically irresponsible and therefore large business units are dangerous."[4]

The similarity between the American fears of the large corporation and the ones now voiced in Europe towards the multinational corporation

suggests a closer look at the American antitrust laws designed to deal with this problem. These are far from perfect, and serve more as a model to be studied than one to be copied, but they do provide a large body of experience on the process of examining, evaluating, and attempted remedying of problems of industrial organization. For example, it has at times been found necessary in the United States to bring about a dissolution of giant firms (e.g., Standard Oil and American Tobacco in 1911), to subsidize new competitors (e.g., in the aluminum industry), to prevent mergers, and to curtail the firm's choice of sales methods (e.g., United Shoe Machinery, International Business Machines), to name a few cases. While one cannot judge whether similar action is needed in the international context without much more information than we now have available, the United States antitrust experience seems a useful avenue to explore in looking for precedents for collective action on foreign investment.

The most important lesson perhaps is the difficulty of applying antitrust laws, partly due to the weakness of our tools of economic analysis and partly due to an inherently ambiguous attitude. Fortas points out that there has always been in the United States an ambivalent attitude towards big business, a "romantic view of the achievements and efficiency of large industrial organizations" coupled with a "suspicious view of their power."[5] This is paralleled in the economic literature by disagreement on whether large size inhibits performance because of the lack of competition or improves it because of economies of scale. Similarly, on the international scene most countries find themselves in a dilemma when formulating policy on foreign investment; on the one

hand, they feel they need the contribution that foreign capital and technology can make, and on the other, they fear the large corporation.

The difficulties of separating out the advantages and dangers of large firms should not be minimized, but neither should they deter us from a serious consideration of the great changes in industrial structure now occurring. The United States laws probably worked more to prevent overt collusion than to prevent high concentration. The increase in concentration came about before 1900 and little was done to reverse it, though the antitrust laws may have prevented it from increasing. "The struggle against size was largely lost in the merger movement of 1897-1901," writes E. S. Mason,[6] and the lesson of this for the international economy is perhaps that now is a propitious time to act, while things are still in a state of flux. There is a danger that the present policy, more concerned with collusive agreements than market shares, and with nationality rather than market power, will permit large increase in concentration in international markets which will later become difficult if not impossible to reverse. The reversal of policy towards cartels may prevent overt collusion but encourage merger, while the attempt to countervail American firms may lead to amalgamations that reduce concentration, (e.g., present developments in the automobile industry). The result may be new restrictions on trade by firms, to offset the gains from removing the old restrictions by government.

The historical record on direct investment strengthens the sense of urgency, for it suggests that patterns once set tend to prevail for long periods of time. The basic pattern of direct investment arose early in this century and changed little in the normal course of events. Most

of the firms now dominant began their operations before 1914 and some even before that.[7] There was little tendency for their position to be eroded through time. Their branch plants and subsidiaries, instead of withering away, expanded more or less at the same rate as their industry, and on the average, maintained their market share.[8] If this past is any criteria, we may hazard the guess that a new pattern will emerge out of the great changes now occurring, and that it too will remain stable for a long period. Now would seem a good time to decide which new pattern is most desirable.[9]

II

We might start with a brief indication (drawn mainly from American experience) of the evidence on the size and market position of the important multinational firms. As the data are very incomplete, only tentative conclusions can be drawn from them, but a few consistent characteristics seem to emerge.

The American firms that account for the bulk of direct investment are few in number and large in size. According to the 1957 Census (the latest available), the 50 largest investors account for 60 per cent of the total United States direct investment, while the 100 largest account for over 70 per cent, and the 300 largest for over 90 per cent.[10] From annual reports, it was possible to identify 90 of the largest of these and obtain an estimate of their present size. Their distribution in terms of their total assets in 1964 was as follows:[11]

Asset size (dollars)	Number of firms in each class	Cumulative number of firms
over 10 billion	2	2
2 1/2 to 10 billion	8	10
1 to 2 1/2 billion	20	30
500 million to 1 billion	20	50
200 to 500 million	30	80
100 to 200 million	10	90

These leading direct investors seem often to be in industries where there are only a few firms, each with a large share of the market. A rough comparison of the major United States investors with the American economy at large, for example, shows them to be in relatively concentrated industries. Approximately 40 per cent of these firms are in in-

dustries where the concentration ratio is greater than 75 per cent. For the United States as a whole, the corresponding figure is much lower; only 8 per cent of the total value of shipments occurs in industries where the concentration ratio is higher than 75 per cent.[12] Dunning's detailed study for the United Kingdom showed in striking fashion that nearly every American branch plant was in an industry where it was the dominant producer or one of a small number of producers. As Dunning summarized, "three quarters of the employment in the United States affiliated firms is concentrated in industries where the five largest competitors supply 80 percent or more of the total output."[13] Other studies in Canada,[14] Europe,[15] and Australia,[16] though less detailed and less conclusive, point in the same direction.

It could be argued that the association of high concentration and direct investment is not accidental, but is inherent in the very nature of the subject. This provides added support for looking at direct investment in terms of oligopoly, though the primary justification is to be found in the facts on market structure themselves rather than this tentative hypothesis on their cause. Owning an enterpries in a foreign country can be exceedingly costly due to the exchange risks involved, the difficulty of obtaining information and coordinating over long distances, the disadvantages of being foreign, etc. Some special features are needed to offset these disadvantages, and these are not likely to be found in competitive industries where entry is easy. Where there are no large economies of scale or large differences in cost curves or product differentiation, national firms will have the advantage and will predominate. But where entry is difficult, an incentive to foreign

investment arises. For example, if a firm has an advantage - a patent, a differentiated product, a superior technical knowledge, a better access to capital - it can offset the disadvantage of being foreign. The stronger the advantage, the greater the ability to overcome the disadvantage, and almost by definition, the higher the degree of concentration. Moreover, the decision on whether the advantage can be sold and the bother of direct ownership of a foreign subsidiary avoided is critically affected by the presence or absence of other barriers to entry. If the advantage is to be licensed, rented, or otherwise sold to a large number of buyers who act as price takers, it may be easy to maximize quasi rents by setting the monopoly price and selling to all takers. But if, due to economies of scale or other factors, there are only a few firms in the industry, the firm selling the advantage finds itself in a bilateral oligopoly situation and may need direct investment to obtain the maximum return. For this reason we sometimes even find oligopolistic firms from different countries establishing subsidiaries in each others' countries, in order to utilize their advantage rather than selling it to their competitors.

Even in the absence of differences in technology or product differentiation, barriers to entry arising from economies of scale can lead to direct investment, if it results in highly imperfect international markets. Direct investment may then be needed as a bargaining strategem. A firm in one country may, through direct investment, merge with its competitor or establish a foreign subsidiary in order to gain a strategic advantage; a buyer of a raw material may use direct investment to circumvent an imperfect market and obtain its raw material more cheaply.

Whenever competition in international markets is imperfect, there will be mutual interdependence of enterprise in different countries and international integration as a means of taking advantage of that interdependence.

How are we to evaluate the impact of direct investment? Suppose an industry consists of a few large American firms prevented by anti-trust laws from overt collusion and a larger number of European firms perhaps cooperating in a cartel arrangement. A change in international economic conditions leads to the invasion of the European market by American firms. The American firms may have a decisive advantage, in which case they acquire a large share of the European market; or the European firms may be able to counter American entry by merging into large firms, i.e., become multinational themselves. In either case, the result is a few giant firms, American and European, which dominate the industry and eventually settle into some oligopolistic collusion, tacit or overt. Will performance in this industry be better than it was after this radical change in industrial organization? Will it be as good as it could be? Which countries benefit? Which are hurt? The problem is so difficult that one hardly knows where to begin. Much has changed in the industry; there was not a golden age of efficiency at the beginning, nor at the end. I propose in this paper to break the problem and deal with one or two aspects that isolate major issues. It seems useful for these purposes to treat separately the problems of commodity flows, technology, and capital, and to discuss the positive and negative forces at work in each case. This does not permit over-all conclusions, but it does help make a start.

Direct investment can change both the location of production and the competitive structure of the industry. To illustrate the effects on the flow of goods, consider an industry where economies of scale provide an important barrier to entry. The industry may nonetheless be compet-

itive if transport costs are low and widespread consumption provides an international market large enough to support many firms. In this competitive case, production will be concentrated to take fullest advantage of economies of scale; each firm will operate at a point where costs are rising, price will be equal to marginal costs, and only normal profits will be earned.

Suppose instead that the total world market is small, relative to the optimum size plant, and there is room for only a few producers. These oligopolists, recognizing the mutual interdependence of their actions, will not compete to the point of driving price to marginal costs, but will most likely cooperate to restrain competition and to enhance profits. Two types of inefficiency are likely to prevail in this international oligopoly. First, there will be a monopoly distortion measured by the excess of price over marginal costs. In order to maintain abnormal profits, the firms will jointly restrain output and raise price, and under the usual assumptions, this leads to a misallocation of resources. Second, there will most likely be also an international trade distortion because production will not be concentrated to obtain maximum advantage of economies of scale. Cartel agreements and especially informal collusions are seldom strong enough to cut out production by inefficient firms; instead they often act as an umbrella to protect a certain number of high cost producers. Costs are therefore likely to be higher than under perfect competition because of inefficient allocation.

What will happen in the extreme case that the independent firms merge through direct investment into one international parent firm

owning and controlling all production and maximizing global profits? The previous cartel, hampered by antitrust laws and the inherent difficulty of securing complete agreement, was unable to achieve maximum joint profit. Direct investment will remove some of these obstacles, and more perfect coordination will be possible, as the multinational firm will be free to maximize profits fully. The improved coordination will increase one of the distortions noted above and decrease the other. First, the integrated firm, by raising price to the point of maximum profits, will increase dortortion due to monopoly power. Second, in an opposite direction, the firm will be free to allocate production in the most effective manner. It will be able to close down inefficient producers and concentrate production to minimize costs. The cost curve of the industry will be lowered, perhaps even to the extent of leading to a fall in prices to the consumer.[17]

International integration of business through direct investment usually stops short of being complete; instead of one dominant firm, there are several with branch plants and subsidiaries in various countries, neither colluding completely or competing completely. Industries such as this are often cyclical, and have periods of intense competition followed by relative quiet. At a time such as the present when new markets are opened up and new trade patterns created, competition is likely to intensify as firms establish strategic positions. When the new changes are absorbed, the industry may then settle into a period of stability of market shares and collusion on prices. The effect of any specific act of direct investment is thus ambiguous: it may be positive or negative depending upon whether it increases compe-

tition or decreases it, whether it improves the firm's ability to produce efficiently or lessens it. Our judgement of the present flow of direct investment depends very much on our horizon. In most cases, the entry of United States firms into Europe has positive effects in stimulating competition and improving resource allocation, often to the disquiet of existing firms. But if the current increase in competition is bought at the expense of increased market power in the long run due to a reduction of the number of firms, the short-run gains may be more than offset by long-run losses.

In most cases of direct investment, the key element is the transfer of technology and entrepreneurship. Firms are very unequal in their ability to operate in industry: they vary in skill, efficiency, resources, etc., and direct investment is a way in which a firm with some advantage can put it to use in a foreign country. The American firm that establishes or expands a subsidiary in Europe is usually using some kind of superiority it has over at least some of its European rivals - more experience in techniques of mass production, more experience with certain consumer goods more widely used in the United States, better access to technology developed through the war effort, cheap capital from their own largest resources or from special contact with the New York capital market, a favored position in hiring skilled American personnel, or a low cost source of raw material through their direct investments in underdeveloped countries.

Similarly, the European and Canadian firms which engage in direct investment usually have some advantage enabling them to overcome the difficulty of operating abroad and to meet local competition. Interestingly enough, these firms tend to be in the same industries as the American multinational firms, showing that technology, entrepreneurship, and product differentiation are not one-way streets. The petroleum, soft drinks, paper, soap, farm machinery, business machines, tires and tubes, sewing machines, concentrated milk products, and biscuit industries all provide examples in recent years where American firms have large foreign investments and one of the firms operating in the United States is a branch plant of a foreign firm.

The subsidiary of a multinational firm can therefore usually

supply consumer goods or producer goods at lower cost than at least some national firms; the direct investment thus improves economic performance by making capital and technology from one country available to another. This aspect is often stressed in the trade literature as the most important function of direct investment: the multinational firm, by applying the most advanced technical and managerial skills to its operations throughout the world, facilitates the flow of technology and entrepreneurial ability between countries, and helps bring about international cost equalization.

A somewhat different point of view can be found in some of the antitrust literature, about the best way to promote technology and entrepreneurial efficiency. There, it is stressed that the advantage a firm possesses is a barrier to entry of other firms. The greater the advantage, the greater the barrier to entry, and the less the degree of competition. Attention is thus focused on ways to lower these barriers and increase competition. In some cases, it is suggested that in order to promote competition, firms be prevented from using fully their advantages and forced instead to make them available to their competitors on an equal basis. This always has two sides. Restrictions on the use of an advantage may prevent its fullest use and inhibit the discovery of new ones. On the other hand, if there are no restrictions and the firm obtains a monopoly position, the price paid for the advantage may be too high, and future innovation inhibited because of the lack of competition.

The antitrust tradition leans towards competition rather than size to obtain efficiency and growth. Kaysen and Turner, in their

somewhat radical (from the point of view of existing practice) approach, suggest that the burden of proof be on the firms to justify their size and that doubts should be resolved "in favor of reducing market power rather than maintaining it." An important ground for their belief is an assumption that advantages are perhaps transitory and that rather than allowing them to lead to increases in concentration, it is better to protect long-run efficiency by maintaining numbers. "Large permanent differences in economic efficiency among firms" they feel, are "either non-existent or rare" and "where a particular firm does have an advantage in men and methods, rivals can and will copy the methods and hire away the men."[18]

The antitrust approach can be applied to the international economy as well. The beneficial side of direct investment is that it allows firms freedom to apply their advantages throughout the world. Whether this form is always the cheapest way to spread existing technology and the surest way to promote new ones is another matter. If the firms were restricted somewhat in their choice, better results might be obtained. In other words, some advantages possessed by firms from one country may be viewed as barriers to entry and ways sought to break them down rather than maintain them.

Would it be possible in some cases to obtain the advantage through licensing, or at a lower cost? Surprisingly little attention has been paid to this problem. The argument that international firms are needed to transfer technology rapidly implies that no other alternative is available. Why is it not possible to have international markets for technology instead of relying on the bureaucracy of firms? This sub-

ject is too complicated to go into in detail here, but it is important to note that there need not be a harmony of interest between the firm's choice of the best way to transfer its advantage - i.e., the way which maximizes its profits - and the best choice for the country - i.e., the one which allows it to obtain the advantage at lower cost. In some cases, the firm chooses direct investment with its attendent difficulties because it improves efficiency and removes uncertainty, but in other cases the motive is to protect its position from other firms, to escape regulation, or to obtain maximum quasi rents. It is interesting to note that Japan, which has followed a very strict policy on direct investment, seems to have had considerable success in obtaining, through licensing agreements, some of the advantages other countries obtain through direct investment.

Another question is whether direct investment is the best way to promote dynamic technological change. Suppose an American firm, by dint of its superior technology or access to capital, is able to take over a significant share of a foreign industry previously consisting of a number of small firms. On the one hand, there are the benefits flowing from the greater efficiency of the American firm; against this must be set the worsening of the competitive structure. Is the resulting highly concentrated industry the best structure to promote innovation? Might it not be desirable to promote competition in this industry even at the risk of short-term inefficiency? Suppose, for example, that restrictions were placed on the American firm's market share and it was not allowed to grow to the extent made possible by its advantage. There would then be a gap between American technology and European tech-

nology which might very well grow through time. As the gap increased, the cost of this restrictive policy would grow larger, but so would the incentive to breach the gap. European firms, after a while, might devote expanded effort to correcting their deficiencies and in the process perhaps even discover new ways superior to those of the American firm. To paraphrase Kaysen and Turner, can we assume that large permanent differences between nations are unlikely and that even though firms from a particular country have an advantage at one point in time, other can learn to do just as well. In other words, it might pay to protect some inefficient firms in order to encourage competition in research and development. If overdone, this policy could lead to great waste and inefficiency, but if handled judiciously and accompanied by other measures to improve the communication of technology, it might be sensible in some instances.

There is therefore some sense to interfering with direct investment on the grounds of the infant firm argument for protection. Indeed, the case appears stronger than for the infant industry argument, under which, sometimes, a tariff is imposed and foreign firms are allowed or even encouraged to establish branch plants. The country obtains an inefficient industry, while the foreign firm obtains a subsidy plus a large share of whatever learning does occur. This is not to suggest that national firms should be promoted merely on the grounds of nationality; rather that it might pay to protect firms on the grounds of variety. The ideal case would be to have many multinational firms.

V

Direct investment recovered much more rapidly than portfolio investment after the war. As a result, multinational firms have been one of the main instruments for the international transfer of private long-term capital in recent years. We might briefly consider here one or two points on the ability of the multinational firm to substitute for banks and other financial intermediaries in the efficient allocatinn of the world's capital.

To begin, consider the role of multinational firms in a world where international financial institutions are dequate and capital markets are relatively perfect. In that case, direct investment would have little effect on the structure of interest rates or on the international allocation of capital. In this perfect world, a multinational firm's choice between raising funds in New York or Paris will have little effect on the ultimate pattern of capital flow. If it borrowed in New York, it would cause the interest rate there to rise and capital would flow to the United States to replace in part its borrowing. If instead, it borrowed in Paris, it would cause interest rates there to rise and capital would flow to Paris. Though gross flows would differ in the two cases, the final net flow would be similar in proportion as capital markets are perfect, i.e., to the extent that there were no barriers to free movement. The importance of international firms to capital movements therefore depends on the fact that in the real world, capital markets are highly imperfect.

What is the impact of multinational firms in a world where information is poor, where transaction costs between borrower and lender are high, and where exchange risks and other costs of international lending

are important factors? The multinational firms would seem to be ideally placed to circumvent these barriers; they are in contact with capital markets in many countries and are large enough to take advantage of economies of scale in borrowing. By borrowing in those countries where capital is plentiful and lending where it is scarce, the international firm both maximizes its own profits and allocates capital between countries more effectively. One might expect that not only would they use "their international connection so as to draw their capital from the cheapest market in each particular instance,"[19] but they might even step out of their primary role of manufacturing, mining, or trading, and, acting as international financial intermediaries, lend to other firms less advantageously placed.

Their behavior so far does not seem to bear out this conjecture. Instead, they appear to behave as if constrained to a somewhat inflexible pattern of finance which does not allow them to vary greatly in adjusting to local capital conditions. The pattern that emerges seems somewhat as follows: the American parent firm provides the equity finance for its subsidiary and borrows much of the non-equity securities locally.

Statistically, the over-all pattern of United States direct investment is as follows. (The data are for 1957, the date of the last census, but the figures on flow of funds suggest that the pattern has been maintained.) In that year, the total assets of American subsidiaries abroad was about forty billion dollars, 60% of which was financed from American sources and 40% from local sources. The local participation was confined largely to non-equity securities; equity securities sold to local investors accounted for only 8% of total assets, while non-equity accounted for 32%.

To put this another way, the American firm allowed local investors to hold 75% of non-equity securities and only 15% of equity securities.

This pattern varies somewhat from country to country, but not greatly. In Europe, for example, the American subsidiaries and branch plants borrow 54% locally, of which 46% is non-equity and 89% equity securities. Europeans owned 90% of the non-equity securities outstanding and only 15% of the equity securities. There are probably two reasons why local borrowing in Europe is greater than average; the superior capital markets in Europe and the greater proportion of investment in manufacturing, where short-term liabilities play a more important role.

One constraint which accounts in part for this behavior is risk aversion - a problem which arises because the firm is not truly international, but is in fact national. Each firm is incorporated in one particular country and must pay its dividends in a particular currency; whenever it has an uncovered asset in a foreign country, it incurs an exchange risk, and its policy will be to minimize this risk subject of course to cost conditions. An American firm with assets in a subsidiary in France worth two million dollars can reduce its exchange risk to the extent that it covers its investment through borrowing in France. It will tend therefore to borrow as much as possible, or more accurately, to the point where the increase in costs is greater than the increase in risk. By the same reasoning, a European firm with a subsidiary in the United States will borrow in America to cover its investment there. This is confirmed in fact; foreign companies investing in the United States follow the same over-all pattern described

above for American investments. They borrow 50% of their subsidiaries' needs locally (i.e., in the United States), again largely in the form of non-equity securities.[20]

The second major constraint on the international firm's freedom to borrow where capital is cheapest is the desire to maintain complete control of its subsidiary. Because American and other multinational firms, in the past at least, have been very reluctant to sell equity securities in their subsidiaries, the amount they can borrow in a country is limited by the availability of non-equity sources of finance. The reason for refusing to sell equity securities is in part the desire to maintain control of the subsidiary, but this is not the complete explanation, since in practice, the parent firm holds well above the 50% ownership necessary for effective control; as noted above, it is over 80%. Their desire to capture all the monopoly profits and quasi-rents associated with their subsidiary explains this to some extent.

The multinational firm is a means for centralizing decision making. Its goal of harmonizing policies in different countries in order to maximize world-wide profit may be difficult to accomplish if the firm is encumbered by the problems of local interest. To allow local participation re-introduces some of the very forces that direct investment is designed to avoid. Local shareholders, interested only in the profits of their particular subsidiary, would not take into consideration the repercussions of their policies on branch plants in other countries. Yet if these important repercussions are ignored, global profits will fall short of the maximum. The firm therefore

attempts to capture all profits in order to maximize them fully.[21]

Legal restrictions, improved capital markets, and a divorce of equity and control may lead to increased local sale of equity securities. This would probably reduce further the flow of capital associated with international business integration, since the equity securities account for the major flow at present. The role of multinational firms as a substitute for international financial intermediaries would be reduced.

We may note finally the possibility of a curious relationship between direct investment and the interest rate, which follows from the fact that firms tend to borrow 40 or 50% of the financial needs of their subsidiary locally in the country of operation. The more expensive is capital in a country, the higher the cost on this borrowing, and this provides an incentive to borrow a smaller proportion locally in the country that has the highest interest rates. To this extend the flow of direct investment will be increased. But there is an effect in the opposite direction as well. The high interest rates reduce profits and discourage investment; in other words, it can reduce the in-flow of direct investment because it reduces leverage on that investment.

Direct investment involves a package of management skills, technical knowledge, and capital, and it should bring a triplet of benefits; the lending country should gain becuase its managers, technicians, and capital receive a higher rate of return abroad than they could at home, and the recipient country gains because it receives these factors of production at a lower cost than it could provide them itself, if indeed it could provide them at all.

There is also another side. The presence of multinational firms affects the degree of competition in an industry, and as a result, its price and output. When these are taken into consideration, no simple statements of universal benefit are possible. The effects differ for the firm, for each of the countries, and for the world. While the firm may be presumed to benefit, or to think it benefits, as otherwise it would not undertake the investment, world income may rise or fall, depending on whether competition and efficiency is increased or decreased; and either or both of the receiving and lending countries may gain or lose, depending on where the benefits and burdens fall.

The most troublesome aspect of public policy on direct investment is that, to be adequate, it must be international in scope. The effect is widespread, and all countries must cooperate is policy is to remove rather than aggravate the problem. Since countries differ so greatly in their views and interests, it is difficult to see how cooperation to mitigate the bad effects of direct investment and to distribute the benefits equitably could be obtained. Different attitudes towards competition and planning would have to be reconciled,

as well as different interests in the way the gains from direct investment are shared. Yet however difficult, cooperation on a global basis is essential; independent action by one country or one group of countries would conflict with the interest of others and would probably result in retaliation. Already, signs of mutually antagonistic rather than mutually beneficial policies can be observed.

Broadly speaking, if cooperation could be achieved, one can envisage three types of remedies to the problems created by the international firm.

The first alternative is to do nothing. The complexity of the problem provides a strong argument for this approach. Every case of international business integration has its positive and negative aspects, and it is difficult to tell whether it reduces costs or merely increases profits without enhancing the general welfare. There is reason to question whether governments in these circumstances would be able to evaluate correctly and recommend appropriately. Government errors in correcting the problem might turn out to be worse than the problem itself. The substantial benefits of foreign investment may be lost in the attempt to remove deficiencies. Under this view, the best thing would be to rely on competition, imperfect as it is, to rectify the problem, and to hope that the problem is transitory, that oligopoly positions will erode through time, and that benefits will outweigh costs.

A second line of attack is control and regulation of multinational firms. Even at best, competition is not necessarily an adequate regulation, and when it is imperfect, the argument for planning is strength-

ened. Under this view, constituted authorities, jointly or independently, would prescribe good behavior for international companies, and regulate their policies on investment, employment, purchase, and sales. Guidelines and laws of this nature are already in force in nearly every country, and they seem likely to grow.

A third approach would be to attempt to remove, or at least lessen, barriers to entry and to increase competition. Even where competition is not regarded as a goal, this would be of help, since by reducing the power of international firms, government control would be made easier. It might be useful to state briefly a number of policies which might be considered.

1. Since an important advantage of large firms is their superior access to capital, steps could be taken to improve the capital market. By making capital more readily available in countries where it is not, the advantage of foreign firms might be reduced. The direct costs of subsidizing a good capital market might be far less than the hidden cost of conglomerate enterprise and high concentration.

2. In addition, it may be possible to restrain somewhat the way in which firms use their advantage. For example, tactics designed to exclude new competition could be restricted, and entry encouraged. To this end, there is need for an investigation of exclusive dealing arrangements, tied sales, full line forcing, administration of patent rights, etc.

3. According to Bain,[22] the most important barrier to entry, discovered by detailed study, was product differentiation. If this prevails in the international economy as well, it suggests the advantages

of consumer education and protection. It might therefore be advisable to limit sales promotional activities and provide information services to counter its effects.

4. There could also be an attack on the problem of resource monopolization. The advantage of multinational firms sometimes lies in control of a strategic new material. Steps might be taken to make this raw material available to all on an equal basis. (At the same time, the country where the raw material is located, often an underdeveloped country, might be able to get a better share than it does when dealing with large oligopolistic firms.)

5. Competition could also be increased by removing those tariff and other barriers which protect monopolies. This would make it easier for a small firm to enter markets without establishing production facilities in a foreign country.

6. In certain cases, it might be desirable to prevent expansion of certain firms or even to force a dissolution. This is an extreme solution, but it has been used in certain cases in the United States, and may also be advantageous in an international context.

We might end on the following note: discussions of international business often contain a large element of nationalism; countries feel that what is good for their business firms is good for the country, and try to promote their interests. America supports American firms because they are American, while foreign countries object to them for the same reason. We suggest that the problem should be viewed from a more global point of view, and some of it re-cast in terms of economic power. Many of the most important problems are associated with size and market power,

rather than with nationality, and more attention should be focused on these aspects.

NOTES

[1]One of the first articles to analyze the special behavior of these large international firms is M. Bye's "Self-Financed Multiterritorial Units and their Time Horizon." (International Economic Papers, No. 8, New York: The Macmillan Co., 1958) The other pioneer in this area is E. T. Penrose. ("Foreign Investment and the Growth of the Firm," Economic Journal, LXVI, June 1956; "Profit Sharing between Producing Companies and Oil Countries in the Middle East," Economic Journal, LXIX, June 1959; and "Vertical Integration with Joint Control of Raw Material Production," The Journal of Development Studies, Vol. I, No. 3, April 1965) Professor C. P. Kindleberger has also stressed the importance of the internationalization of the firm to international resource allocation efficiency and the analogy to the emergence of the national firm in the United States at the turn of the century. (International Economics, Third Edition, Homewood, Illinois: Richard D. Irwin & Co., 1963, pp. 404-422; and "European Integration and the International Corporation," Columbia Journal of World Business, Vol. I, No. 1, Winter 1966, p. 65) See also J. Houssiaux, "La grande entreprise plurinationale" and G. Steiner, "La planification des grandes entreprises multinationale." (Economie Appliquee, XVII, April-September 1964)

[2]C. P. Kindleberger, International Economics, op. cit., p. 419.

[3]Carl Kaysen and Donald F. Turner, Antitrust Policy, Cambridge: Harvard University Press, 1959, p. 19.

[4]Ibid., p. 17.

[5]A. Fortas, Foreword to A. D. Neale, The Antitrust Laws of the U. S. A., Cambridge: Cambridge University Press, 1962, p. vi.

[6]E. S. Mason, Preface to Kaysen and Turner, op. cit., p. xii.

[7]In the United Kingdom, for example, where the best historical information is available, fully one half of the employment in United States controlled enterprises is in firms established before 1914. (J. H. Dunning, American Investments in British Manufacturing Industry, London: George Allen and Unwin, 1958, p. 95) Moreover, these statistics refer to the date on which the branch plant began operating. The relevant concept is the date the parent firm first went abroad. If data were available on this basis, it would indicate a much smaller per cent of investment being accounted for by new entrants.

Estimates for American investment in other countries are not as detailed, but date the beginnings of direct investment to at least before 1930. The 1957 Census (United States Department of Commerce, U. S. Business Investments in Foreign Countries, Census of 1957, Washington: Government Printing Office, 1960, p. 50) showed that 65 per cent of total

investment (at that time) was concentrated in plants which were established before 1946. Since few plants were established either during the depression or the war, most of these plants must have started before 1930. This is confirmed in the 1950 Census (United States Department of Commerce, Direct Private Foreign Investments of the United States: Census of 1950, Washington: Government Printing Office, 1953), which found that almost 60 per cent of the investments at that time were in plants established before 1930.

Other evidence on the venerability of most foreign investors can be found in the case histories report in C. Lewis, America's Stake in International Investments (Washington, D. C.: The Brookings Institution, 1938); R. Marshall, F. A. Southard, and K. Taylor, Canadian-American Industry (New Haven: Yale University Press, 1936); D. M. Phelps, Migration of Industry to South America (New York: McGraw-Hill Book Co., 1936); and F. A. Southard, American Industry in Europe (Boston: Houghton Mifflin Co., 1931). In this last work, Southard was able to trace the origins of many firms back to the late 19th century.

Direct investment by foreigners in the United States appears also to be in old, well-established subsidiaries. Of the 6 billion dollars of direct investment in the United States, almost 80 per cent were established before 1941. (U. S. Department of Commerce, Foreign Business Investment in the United States, Washington: Government Printing Office, 1961, p. 40)

[8] In Canada, for example, the share of foreign firms has shown no tendency to fall and is increasing. (Government of Canada, Dominion Bureau of Statistics, Canada's International Investment Position, 1926-1954, Ottawa: Queen's Printer, 1958) In England Dunning found only a very slight decline, helped by the war, in the American share of British industry. (Dunning, op. cit., p. 184. Of the 115 firms questioned, only 15 claimed that their share decreased; 63 firms reported an increase, and 37, no change.) In the United States, in some industries, firms formerly owned by foreigners have given way to local firms; but these were special cases resulting from the war, when German subsidiaries were seized and some British firms sold to meet exchange requirements of the United Kingdom. Some of the British firms have since bought back their interests. (See Department of Commerce, Foreign Business Investments in the United States, op. cit., p. 3, for a description of past investments in the United States and the reasons for the disappearance of some of them.)

[9] Up till now, some of the most important acts of government policy towards direct investment have been connected to balance of payments problems. Direct investment has been treated as another form of capital and the flow of funds associated with it sometimes permitted, sometimes not, according to balance of payments criteria. This involves an attempt to manipulate a long-term factor for short-term purposes, and has many undesirable consequences. Firms, on the other hand, according to a study by the National Industrial Conference Board, have taken a decidedly different view. They are not as much concerned with short-

profit rates in making investment decisions as with the "protection of competitive position in a market." The discussion of this paper suggests that an important guide for public policy be protection of competitive performance. (Judd Polk, Irene W. Meister, Lawrence A. Veit, U. S. Production Abroad and the Balance of Payments, New York: National Industrial Conference Board, 1966)

[10]United States Department of Commerce, United States Business Investment in Foreign Countries, Washington: Government Printer, 1957, p. 144.

[11]The list of firms was obtained from an investigation of financial reports. Asset size was obtained from the 1964 Fortune Directory.

[12]The list of firms is roughly the same as the one used above. Concentration ratios were taken from the U. S. Senate, Concentration in American Industry, Report of the Subcommittee on Antitrust and Monopoly pursuant to S. Res. 57 (85th Congress), Table 17, p. 23. The firms were classified according to their major product, but their direct investments are often restricted to one or two specialties in which the firm has particular advantages. Concentration ratios in these specialties are much higher a better industry definition would therefore show an even stronger association between investment and high concentration.

Moreover, many firms were in industries where product differentiation was important and where the concentration ratio is a poor index of market position because of the difficulty of defining an industry. The industries of high concentration (32 firms) were:

75-100% Concentration	
Cereal, Breakfast Foods	2
Chewing Gum	2
Flavoring for Soft Drinks	3
Hard Surface Floor Coverings	1
Tires & Inner Tubes	5
Flat Glass	1
Tobacco	1
Aluminum	1
Tin Cans & Other Tinware	2
Razors & Razor Blades	1
Computing Machines & Typewriters	4
Sewing Machines	1
Shoe Machinery	1
Motor Vehicles	6
Locomotives & Parts	1
	32

The following industries were in the 50-74% ratio bracket (11 firms):

50-74% Concentration	
Biscuits & Crackers	1
Corn Wet Milling	1
Abrasives	1
Asbestos	1
Photographic Equipment	1
Cleaning & Polishing Soaps & Glycerine	2
Plumbing Fixtures	2
Elevators & Escalators	1
Vacuum Cleaners	1
	11

In the 25-49% concentration ratio bracket (28 firms) were:

25-49% Concentration	
Meat Products	4
Dairy Products	2
Canned Fruits & Vegs.	3
Flour & Meal	1
Cement	1
Refractories	1
Surgical Appliances	1
Mattresses & Bed Springs	1
Medicinal, Chemical, & Pharmaceutical Preparations	6
Paints & Varnishes	1
Tractors & Farm Machinery	5
Oil Field Machinery & Tools	1
Printing Trade Equipment & Machinery	1
	28

One firm, Construction & Mining Machinery, was in industry with less than 25% concentration, and for twenty-six others, it was not possible to assign concentration ratios due to the diversified nature of the firms.

[13] Dunning, op. cit., p. 115. Moreover, this is probably an underestimate, since differentiated products play an importnat role in some of the unconcentrated industries, e.g., foundation garments, proprietary medicines, beauty and toilet preparations.

[14] I. Brecher and S. S. Reisman, Canada-United States Economic Relations, Ottawa: Royal Commission on Canada's Economic Prospects, 1957. Also, Dominion Bureau of Statistics, op. cit.

[15]F. A. Southard, American Industry in Europe, Boston: Houghton Mifflin Co., 1931. See especially his comments on the electrical equipment industry, p. 36; telephone and telegraphic equipment, p. 55; petroleum, p. 60, 68-69; motor vehicles, p. 29; mines and metals, p. 93; phonographs, p. 108; and locks and keys, p. 108. Also see G. Y. Bertin, L'investissement des firmes etrangeres en France, P. U. F., 1963.

[16]D. T. Brash, United States Investment in Australian Manufacturing Industry, Doctoral Dissertation, Australian National University, August 1965.

[17]In the case of vertical integration, an improvement in coordination would tend to improve efficiency of allocation on both counts. Suppose we have a monopolist, A, selling to another firm, B, which is in turn a monopolist in another market. A double distortion is involved in this case of sequential monopoly; if A and B integrate or collude perfectly to maximize joint profits, they will remove one of the distortions and in so doing, increase output and lower price.

[18]Kaysen and Turner, op. cit., p. 9.

[19]C. Iverson, International Capital Movements, London: Oxford University Press, 1935, p. 146. Ohlin makes the same point and is quoted by Iverson. See B. Ohlin, Interregional and International Trade, Cambridge: Harvard University Press, 1935, p. 334.

[20]U. S. Department of Commerce, Foreign Business Investment in the United States, op. cit.

[21]We may state the argument more precisely as follows: direct investment occurs because the profits of an enterprise in one country, π_1, is dependent on the profits of an enterprise in another country, π_2, i.e.,

$$(1) \qquad \pi_1 = F(\pi_2)$$

To maximize global profits $(\pi_1 + \pi_2)$ the following must hold:

$$(2) \qquad \frac{d\pi_1}{d\pi_2} = -1$$

Suppose, however, that the parent firm owns the enterprise in country 1 fully, but only λ per cent of the enterprise in country 2. Then it will

maximize $(\pi_1 + \lambda\pi_2)$ which occurs when

$$\frac{\alpha\pi_1}{\alpha\pi_2} = -\lambda \tag{3}$$

which only fully exploits global interdependence if λ equals 1. The analysis assumes that firms try to maximize total profits legally belonging to shareholders of the parent firm. An alternative assumption is that firms view all dividends, including those paid to shareholders in the home country, as a cost, and attempt to maximize retained earnings. Letting d_1 and d_2 be dividends paid in country 1 and country 2 respectively, the firm maximizes $(\pi_1 + \pi_2 - d_1, -d_2)$ instead of $(\pi_1 - \lambda\pi_2)$ as above. Provided dividends in each country do not depend on profits earned in that country, i.e., they depend only on total profits and the conditions prevailing in the capital market in each country, equity securities introduce no distortion in the production decision of the type described above result. I am grateful to Mrs. E. Penrose for this point.

[22] J. S. Bain, Barriers to New Competition, Cambridge: Harvard University Press, 1956.