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The Effect on U.S. Foreign Direct Investment of the Integration of the Corporate and Personal Income Taxes

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I. INTRODUCTION

Two major proposals for reform of the U.S. corporate income tax are the integration of the corporate and personal income tax and the elimination of the credit for foreign taxes paid on U.S. corporate income. While the cases for and against each of these proposals are well known to those concerned with tax policy, there is no evidence of any analysis having been made of the interconnection between the two proposals.

Integration of the U.S. corporate and personal income tax could, under certain formulations, have a significant effect on the incentives of U.S. corporations to invest abroad. A decline in U.S. foreign direct investment could result in substantial gains to national income and tax revenue, offsetting in part the revenue losses which are generally anticipated from integration.

This is not to say that integration should be undertaken because of international considerations or that its effect on U.S. foreign investment would be preferable to that from the elimination of the foreign tax credit. The thesis of this paper is that the case for integration (whatever it may be) is substantially strengthened when the effects on foreign investment are taken into account.

II. THE CURRENT SYSTEM

The basic criticism of U.S. tax law on foreign source income is that it stimulates corporations to make investments abroad which would earn a higher social rate of return if invested domestically. This arises because firms are allowed to take a credit against U.S. tax liability for foreign income taxes paid. Thus, the private firm is indifferent as to whether it pays taxes to a foreign country or to the U.S. From the national interest standpoint, however, taxes paid to foreign treasuries by U.S. corporations represent a loss to national income, while taxes paid to the U.S. Treasury have no effect on national income. Where the foreign tax rate is less than the U.S. tax rate, the firm has a positive incentive to invest abroad because it can defer the higher U.S. taxes indefinitely by reinvesting abroad the earnings of foreign subsidiaries.

In assessing U.S. foreign investment from the standpoint of the national interest, the appropriate comparison is between the domestic rate of return before taxes and the foreign rate of return after foreign taxes. The difference between these two rates is referred to as the "net social rate of return".

Studies done on the net social rate of return on U.S. foreign direct investment indicate that it is on the whole negative.[1/] While it is a moot question whether foreign investment is a substitute for or a supplement to domestic investment, the current tax treatment of foreign source income undoubtedly works in the direction of stimulating the export of capital which could earn a higher net social return if invested in the U.S.

In order to eliminate this conflict between private interests and the national interest it has frequently been proposed that the foreign tax credit should be eliminated, along with tax deferral, and that foreign taxes should be taken as a deduction and foreign source income taxed on a current basis, that is, as earned by the foreign affliate whether or not it is repatriated to the U.S. parent. The

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1/ United States Taxation of Foreign Investment Income, Peggy B. Musgrave, the Law School of Harvard University, Cambridge, 1969, pp. 27-30. "The Private and Social Rate of Return from U.S. Asset Holdings Abroad", Herbert G. Grubel, unpublished study done for Treasury Department, December, 1971.

objections to these proposals cover the lot of economic, political, and national security considerations and the debate usually bogs down in the question of whether U.S. foreign investment is or is not advantageous on the whole to U.S. national interests.

In any event, as a practical political matter it is doubtful that the foreign tax credit and tax deferral will be eliminated or curtailed to the extent necessary to have a significant effect on the social return of foreign investment. The foreign tax credit and tax deferral are the established practice of all major countries and their elimination by the U.S. would be in the face of the strongest resistance and protest by other countries. It would necessitate the termination of all U.S. international tax treaties. Internally, opponents would claim that the change would impose a discriminatory penalty on multinational corporations, with the direst of consequences for the competitive position of the U.S. in world trade.

III. AN INTEGRATED SYSTEM

The integration of the U.S. corporate and personal income taxes, in addition to its benefits in general to equity and economic efficiency, could serve the same purpose as the elimination of the foreign tax credit and tax deferral, although with less force. Most of the other industrial countries now have some form of integrated system, the most recent country to move in this direction being the United Kingdom in 1973. An integrated system for the U.S. has been frequently discussed, both within and without the Treasury, but the international implications of such a system have received virtually no attention.

Integration in its purest form eliminates the corporate income tax altogether and taxes the earnings of the corporation directly to stockholders at their personal rates of tax whether or not the earnings are distributed. This approach, called the partnership method, presents certain practical difficulties, however, and there are serious doubts about its administrative feasibility. No major country has integrated its tax system to this extent and it is probably not a realistic possibility for the U.S. in the foreseeable future.

The integration methods now in use by other major countries all involve some variation of the credit method.[2/] This method taxes undistributed profits at a flat rate, as under the present U.S. system, but eliminates (or reduces) the double taxation of distributed profits by allowing a tax credit equivalent to some portion of distributed profits. Under the dividends-paid-credit system (DPC) the tax credit is taken at the corporate level and applied against the corporation's tax liability, while under the dividends-received-credit system (DRC) the credit is taken at the shareholder level and applied against personal income tax liability.

The DPC and DRC systems can both be structured to give the same result in eliminating or reducing the double taxation of distributed profits. From the international standpoint, however, an important difference is that when the tax relief is given at the corporate level, corporate profits flowing to nonresident shareholders escape taxation by the host country altogether (except for withholding taxes), whereas under the DRC system such income would continue to be taxed by the U.S. at the full corporate

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2/ See Company Tax Systems in OECD Member Countries, OECD, Paris, 1973, for descriptions of various systems in effect.

rate. While both systems would have the same effect on U.S. foreign investment, the advantage of the DRC system regarding foreign investment in the U.S. recommends its usage.[3/]

Assume then that a dividends-received-credit system is adopted by the U.S. and that shareholders are allowed a credit for the full amount of corporate tax "deemed paid" on their dividends. In the case of distributed earnings the corporate tax would, in effect, be eliminated, since tax payments by the corporation would be tantamount to withholding at source on dividends. Dividends would be grossed up to reflect the withheld tax, the gross-up being included in the recipient's income and claimed as a credit against his tax liability. Illustration A shows the effect of adopting the DRC system of taxation on two shareholders in different tax brackets, assuming the corporate tax was continued at a rate of 48 percent and refunds were given to individuals whose tax liability fell short of the credit.

3/ This consideration was the primary reason why the Canadian Royal Commission and the U.K. Select Committee recommended against systems which would give relief at the corporate level. Germany, which adopted a split-rate system giving relief at the corporate level, has become increasingly conscious of the "giveaway" to foreigners entailed by this approach.

Illustration A

	Current System		DRC System	
Corporate earnings	100		100	
Corporate tax	48		48	
Dividends paid	52		52	
Taxable income	52		100	
Tax liability	(@30%) 15.6	(@70%) 36.4	(@30%) 30	(@70%) 70
Minus tax credit	-	-	48	48
Tax due or rebate (-)	15.6	36.4	-18	22
Total tax burden	63.6	84.4	30	70

The total tax collected on each stockholder's share of gross corporate profits would be equivalent to his personal tax rate in the case of distributed profits. The switch from the present system would benefit all shareholders and the benefit would be greater the lower the shareholder's personal rate of taxation.

There would be no change from the present system in regard to the total tax collected on undistributed profits, but the incentive which now exists for shareholders to retain earnings rather than pay them out as dividends would be substantially changed. Under the current system, all shareholders (excepting those with no tax liability) gain

a tax advantage from taking the return on their investment in the form of appreciation in share values rather than dividend income. In addition to the more favorable capital gains tax, the deferral of any personal tax liability so long as corporate profits are not distributed is a further advantage. Under the DRC system, only those shareholders whose marginal tax rate was greater than the corporate tax rate would find it advantageous for their share of corporate earnings to be retained by the corporation. Illustration B shows how the incentives toward retained profits would be changed by the DRC system before taking account of the tax on capital gains realized by the sale of shares.

Shareholders whose personal marginal tax rate was exactly equal to the corporate tax rate, 48 percent, would be indifferent between retained and distributed profits if no account is taken of the capital gains tax and no weight is attributed to the liquidity advantage of income in the form of dividends. When these factors are taken into account, the point of indifference would be somewhat greater than a personal tax rate of 48 percent.

Illustration B*

	Current System		DRC System	
Personal tax rate	30%	70%	30%	70%
Net return on $100 of corporate earnings if:				
(a) Profits distributed	36.4	15.6	70.0	30.0
(b) Profits retained	52.0	52.0	52.0	52.0
Incentive or disincentive(-) to distribute	-15.6	-36.4	18.0	-22.0

* Assumes that retained profits are fully reflected in increased market values of shares. To the extent that this is not the case and/or to the extent that shareholders have a preference for realizing their returns in the form of dividends rather than stock appreciation, the incentives (disincentives) to distribute are greater (less). However, these considerations would not affect the comparisons of the two sytems.

The average marginal tax rate applicable to dividend receipts is currently estimated at about 35 percent. Table 1 shows the distribution of dividend receipts in 1971 by Adjusted Gross Income (AGI) class. While these data are not necessarily representative of the distribution of stock ownership, it is apparent that stockholders whose personal tax rate is less than 48 percent constitute a majority.[4/] Although most stockholders in large corporations have little or no

4/ The 48 percent tax bracket starts at a taxable income of $40,000 for married taxpayers and about $30,000 for single taxpayers.

direct influence on dividend policies, their preference for shares with high payout ratios would be reflected in the demand for and price of shares, to which corporate officials, the board of directors, and high tax bracket shareholders could not be indifferent. Thus, the shift in incentives induced by the adoption of the DRC system toward a preference for dividends on the part of the majority of stockholders should lead to a substantial increase in the payout ratios of large corporations.

Table 1

Percentage of Total Dividends Reported to the Internal Revenue Service in 1971 by Adjusted Gross Income (AGI)

Persons reporting an AGI of less than:	Accounted for this proportion of total dividends reported:
$20,000	34%
$25,000	41%
$30,000	47%
$50,000	60%
$100,000	76%
$200,000	87%
$500,000	94%
$1,000,000	97%

Source: Statistics of Income, Individual Income Tax Returns, 1971, I.R.S., Wash., D.C., 1973.

IV. EFFECT ON U.S. FOREIGN DIRECT INVESTMENT

In the case of foreign investment decisions by U.S. corporations, one influencing factor would be the way in which the foreign tax credit was handled. The foreign tax credit as well as tax deferral could be continued. Thus, there would be no change from the present system in regard to foreign earnings retained abroad and remittances from foreign affiliates which were retained by the parent corporation. In the case of foreign source earnings distributed to stockholders, however, stockholders would be allowed to take a credit against their personal tax liability only for U.S. corporate taxes paid. In other words, the foreign tax credit would not pass through to stockholders.[5/]

This would mean that the private incentive for foreign investment from the standpoint of stockholders would be the same as the net social rate of return. Illustration C shows what the comparative incentives would be for two stockholders in different tax brackets in the case of a given amount of investment in three different corporations. For simplicity it is assumed that the earnings of the "Domestic Corporation"

5/ This would be similar to the approach adopted by the British under their newly integrated system which limits the amount of the foreign tax credit which can pass through to stockholders.

Illustration C

Incentive for Investment under the DRC System, Allowing Credit Against Personal Tax Liability Only for U.S. Taxes Paid

	Domestic Corp.	Direct Investment Corp. A	Direct Investment Corp. B
Gross profit	$100	$100	$167
Foreign Tax @40%	-	40	67
Remitted to parent	-	60	100
U.S. corp. tax liab.	48	48	80
Foreign tax credit	-	40	67
U.S. corp. tax paid	48	8	13
Dividend	52	52	87
Stockholders. tax. inc.	100	60	100
Personal tax liab:			
30% taxpayer	30	18	30
70% taxpayer	70	42	70
Credit for U.S. corp. tax deemed paid	48	8	13
Personal tax paid:			
30% taxpayer	-18	10	17
70% taxpayer	22	34	57
Net return:			
30% taxpayer	70	42	70
70% taxpayer	30	18	30

are entirely from U.S. sources and those of the "Direct-investment Corporations" are entirely from foreign sources.

The social return is "Gross profit" in the case of the domestic corporation and "Remitted to Parent" (or available for remission in cases where earnings are reinvested in the foreign affiliate) in the cases of the direct investment corporations. The illustration shows that all stockholders would have a disincentive to invest in Direct-investment Corporation A, where the net social return is negative (by $40) and would be indifferent between Direct-investment Corporation B, where the net social return is zero, and the domestic corporation.

Under the proposed DRC system with credit allowed to the stockholder only for U.S. corporate taxes paid, the private incentive to invest in countries where the corporate tax rate was less than that of the U.S. would not be eliminated but it would be reduced. Leaving aside the liquidity advantage to stockholders from a given net return on their investment in the form of dividends as compared to appreciation in stock values, under the current system of deferral all stockholders have an incentive toward foreign investments wherever the foreign tax rate is less than that of the U.S., other things being equal. Under the integrated system, this

incentive would exist only for those stockholders whose personal tax rate was greater than the foreign corporate tax rate.

For example, in Illustration C, under the current system all stockholders would favor Direct-investment Corporation A over the domestic corporation, even though the former yields a negative net social rate of return, because their net return on reinvested profits would be $60 as compared to $52 for the domestic corporation. Under the integrated system, the 30 percent taxpayer (and all others with personal tax rates less than 40 percent) would favor the domestic corporation over Direct-investment Corporation A since his net return of $70 from the former would exceed the net return of $42 from the latter even where profits are retained abroad and escape the higher U.S. tax rate.

To recapitulate, the proposed integrated system would work in the direction of reducing U.S. foreign direct investment which was socially unprofitable by making alternative investments in the U.S. relatively more profitable to stockholders in U.S. multinational corporations. This effect would be greater the higher the foreign corporate tax rate and the lower the personal tax rate of the stockholder. The sytem would continue the use of the foreign tax credit and tax deferral on unremitted profits.

V. INTERNATIONAL TAX NEUTRALITY

The basic rationale for the foreign tax credit is that it is necessary for the purpose of international tax neutrality (ITN). ITN is defined as a situation in which differences in taxation do not affect taxpayers' choices between investing at home and abroad. While it is recognized that adherence to a policy of ITN by the U.S. may conflict with national efficiency by encouraging foreign investments which yield a negative net social return, it is justified on the grounds of world efficiency in the allocation of resources. That is, by encouraging investments to be made where the economic rate of return is highest, without the encumbrance of the artificial differences created by taxes, world output will be maximized. The foreign tax credit is also justified in terms of avoiding the "double taxation" that would occur if countries did not make allowance for each other's taxes.

The foreign tax credit would not be eliminated under the integration plan hypothesized here, but since domestic investment would afford a tax advantage to stockholders, the plan would constitute a departure from ITN. But the validity of the ITN policy is questionable in any case, on

international as well as domestic grounds, because it takes no account of the distribution of income from international investment.

If the economic rate of return on capital is higher in Country X than in Country Y, world output may be maximized by neutralizing any tax differences and encouraging capital to flow from Y to X; but if the corporate income tax imposed by Country X more than offsets the higher economic rate of return, the national income of Country Y is less than it would be if the investment had been made domestically. There is no presumption that world welfare, which is the ultimate object of increased output, is maximized by a transfer of income from Country Y to Country X. Thus, adherence to the policy of ITN results in arbitrary transfers of income, which will continue to occur so long as there are different tax jurisdictions and differences among countries in their propensities to export and import capital.

A counter argument is that in the long run the income of all countries will be maximized if world output is maximized; hence, the U.S. and other countries should follow an internationalist as opposed to a nationalistic policy in this respect. Apart from the question of how realistic such a position is, it is highly questionable whether a policy of ITN is the best way in the long run of eliminating international tax distortions.

It should not be forgotten that the initial cause of the distortions which foreign tax credits are designed to correct is the corporate income tax itself. If the long run view of the ideal world is taken, it is doubtful that there would be a corporate income tax, in the U.S. or in any other country. The foreign tax credit helps perpetuate the imposition of high corporate taxes by countries which are host to sizable amounts of foreign investment, since any rate up to nearly 50 percent is a matter of indifference to multinational firms.

It might also be argued that since the taxation of income is generally accepted as an equitable way to raise revenue, it is appropriate and necessary for countries to tax the income of foreign owned corporations since such income would otherwise escape taxation by the host country. But this implies that income per se should be taxed, regardless of who earns it--a proposition lacking in rationale. The justification for taxing income is presumably based on the proposition that income is a good measuring rod for determining the amount people should contribute toward government expenditures made on behalf of the community. While the taxation of foreign owned corporations can be justified to the extent that the host government undertakes expenditures which directly benefit such corporations, foreign investors clearly do not have the

same obligation to support the host government budget as residents. Hence, there is no economic rationale for the host country partaking of the fruits of such investment beyond what accrues to the factors of production furnished by its own residents.

The foregoing may appear contradictory to the recommendation made earlier that the U.S. should adopt a DRC system rather than a DPC system in order to continue the taxation of U.S. income flowing to foreign stockholders. But it would be pure folly for the U.S. to voluntarily sacrifice substantial revenue in the hope that its exemplary conduct would move other countries to follow suit. At the same time, the U.S. should be prepared to reduce or eliminate the taxation of foreign owned corporations on a quid pro quo basis with other countries. Thus, the DRC system would give the U.S. bargaining power, which the DPC system would not, to help move the world toward a more sensible and efficient system of taxation.[6/]

6/ The realities of international politics were duly noted by the U.K. Select Committee which, in recommending a DRC type system over a DPC system solely because of the advantage of the former regarding foreign owned corporations, said, "...the double taxation agreement (between the U.S. and the U.K.) might be drawn so as to mitigate this effect but certainly an imputation system strengthens the hand of the U.K. negotiators." Cf. U.K. Select Committee on Corporation Tax, HMSO, 1971, paras. 12-15.

In the international negotiations which ensue with the change by countries to an integrated system of the DRC type, the philosophical question as to how the payment by the corporation to the tax collector is precisely viewed becomes critical, at least in logical terms. If the payment is viewed not as a corporate income tax but as withholding at source of personal income tax due from the dividend recipients, there is no case for "withholding" tax on dividends paid to nonresidents. On the other hand, if it is considered that the payment is a corporate income tax and that the credit allowed to the dividend recipients is given in order to avoid the double taxation of corporate earnings, it can be argued (as the U.S. in fact has done) that it is discriminatory to deny a credit for foreign taxes paid on dividends received by residents from multinational and foreign corporations.

If forced to choose between the two, it would be in the interests of the United States to opt for the first of these two interpretations. U.S. investment abroad is considerably greater than foreign investment in the U.S. The gains to the United States on account of a switch to a DRC system would considerably outweigh the loss of even a complete elimination of corporate tax on foreign owned investment in the U.S. But other countries, for example,

France and the U.K., have initially chosen to have it both ways and the U.S. should be equally pragmatic in this respect. The U.S. should define the tax at the outset as a withholding of personal income tax due to the I.R.S. by residents, and state quite candidly that the withholding of tax on payments to nonresidents must be continued so long as other countries tax the earnings of U.S. corporations.

VI. QUANTITATIVE EFFECTS OF AN INTEGRATED SYSTEM

The hypothesized tax change would have the effect of making the private interest of shareholders in U.S. corporations coincide with the U.S. social interest with regard to the comparative rates of return on foreign and domestic investment. Thus, any actions undertaken by U.S. corporations on account of the tax change would by definition increase the social rate of return on U.S. capital and result in a gain in national income and tax revenue.

In addition to the national income and tax revenue gains, the tax change would create an improvement in the social rate of return on outstanding and future foreign investment. U.S. corporations would have an incentive to resist increases and press for decreases in the rates of foreign taxation and to switch some investments from relatively high to relatively low tax countries.

There is no need to speculate on the extent to which foreign investment is a substitute for or supplement to domestic investment, since the question would answer itself as a result of the tax change. To the extent that it is purely supplemental to domestic investment, no reduction in foreign investment would ensue; to the extent that foreign investment is a substitute for domestic investment, foreign investment would be reduced, resulting in gains in national income and tax revenue. In other words, the social cost of

foreign investment in the absence of a tax change is the amount by which national income would be increased by the tax reform.

Viewed strictly from the international standpoint, therefore, the tax change would be a "no lose" proposition and should be undertaken regardless of how much or how little it might increase national income and tax revenue. But the international aspects are only one of several considerations involved in such a far-reaching reform; if they are to carry any weight, it is necessary to have some indication of the quantitative magnitudes involved.

A. Potential Gains in National Income. The methodology for estimating the benefit from the proposed tax change is to estimate what the social return on foreign investment would be in the absence of the tax change and what it would be after the tax change. The difference between the two is the estimated gain in national income. The social return in any year is simply the net social rate of return multiplied by the amount of U.S. direct investment outstanding at the beginning of the year.

The data used for this analysis relate only to the manufacturing industry because data for other industries

are insufficient to give meaningful results.[7/] The estimates for the manufacturing industry can then be used to project an estimate of the gain on account of all industries.

There are two major questions regarding the measurement of the rate of return on foreign direct investment. The first is whether loans made by the parent firms to their foreign affiliates and interest payments thereon should be treated the same as equity capital and earnings. Since U.S. parent firms have a controlling interest in the great majority of their foreign manufacturing affiliates, the distinction between debt and equity capital is probably not meaningful for the purposes of this discussion.[8/] Therefore, debt and equity capital invested by U.S. parents in their foreign affiliates are assumed to be equivalent for the purpose of assessing rates of return on U.S. foreign direct investment.

The second question is whether royalties and fees paid by foreign affiliates to U.S. parents should be treated as arms-length payments for services received from the parent,

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7/ The data for investment in domestic manufacturing are from the Quarterly Financial Report for Manufacturing Corporations, (various issues) published by the Federal Trade Commission. The data for U.S. foreign direct investment in manufacturing are from the Survey of Current Business (various issues) published by the Department of Commerce and from some unpublished sources obtained from that department.

8/ Grubel, op. cit., takes the opposite position.

or whether they should represent a return on capital invested in foreign affiliates by parent firms (which are merely disguised as something other than dividends for tax or other purposes). The truth probably lies somewhere in between these extremes.

Rates of return are shown both ways in the Appendix, but the average of the two rates was used in the following analysis. Other more technical aspects of compiling the data are shown in the Appendix. The rates of return on U.S. domestic and foreign direct investment in manufacturing for the period 1963-1972 are shown in Table 2.

Taking the averages for the ten-year period, the net return to corporations on foreign direct investment in manufacturing was 1.3 percentage points greater than the net return to corporations on domestic investment. From the standpoint of the national economy, however, foreign investment in manufacturing earned 10.1 percentage points less than domestic investment in manufacturing.

The data in Table 2 along with the most recent figures for direct investment in manufacturing (1972) serve as the starting point for estimating the social return on this investment in the future with and without the hypothesized tax change. It is necessary to project into the future, as the

Table 2

Rates of Return on U.S. Domestic and Foreign Direct Investment in Manufacturing, 1963-1972 (%)

	Domestic Investment (before tax)	Domestic Investment (after tax)	Foreign Direct Investment (after tax)	Net Private Incentive to Invest Abroad 1/	Net Social Rate of Return 2/
1963	21.5	10.5	12.9	2.4	-8.6
1964	23.6	12.1	13.8	1.7	-9.8
1965	26.6	13.9	13.5	-0.4	-13.2
1966	26.7	13.7	12.5	-1.2	-15.2
1967	23.2	12.2	10.9	-1.3	-12.3
1968	25.5	12.8	12.2	-0.6	-13.3
1969	24.9	12.1	14.0	1.9	-10.9
1970	18.4	9.8	13.2	3.4	-5.2
1971	19.6	9.9	13.5	3.6	-6.1
1972	23.1	11.6	15.7	4.1	-7.4
Avg.	23.3	11.9	13.2	1.3	-10.1

1/ The "net private incentive" is derived by subtracting the after tax rate of return on domestic investment from the after tax rate of return on foreign investment.

2/ The "net social rate of return" is derived by subtracting the before tax rate of return on domestic investment from the after tax rate of return on foreign investment.

lead time involved in such a major tax change would be fairly long. For example, starting from mid-1974, the first year in which foreign investment would be affected would probably be 1977 with the gain to national income lagging at least a year behind. The farther one projects into the future, the greater the gain becomes, both in absolute terms and as a proportion of national income.

The concept and methodology of estimating the benefit from the integrated tax change are best seen in graphic form. In Figure 1, which is drawn on a ratio scale in order to depict constant rates of growth by straight lines, the line ABN represents projections of the book value of direct investment in manufacturing in each year between 1972 and 1988 in the absence of a tax change. The projections are based on the assumption that direct investment in manufacturing, which was $39.5 billion at the end of 1972, will increase at an average annual rate of 5 percent in real terms.

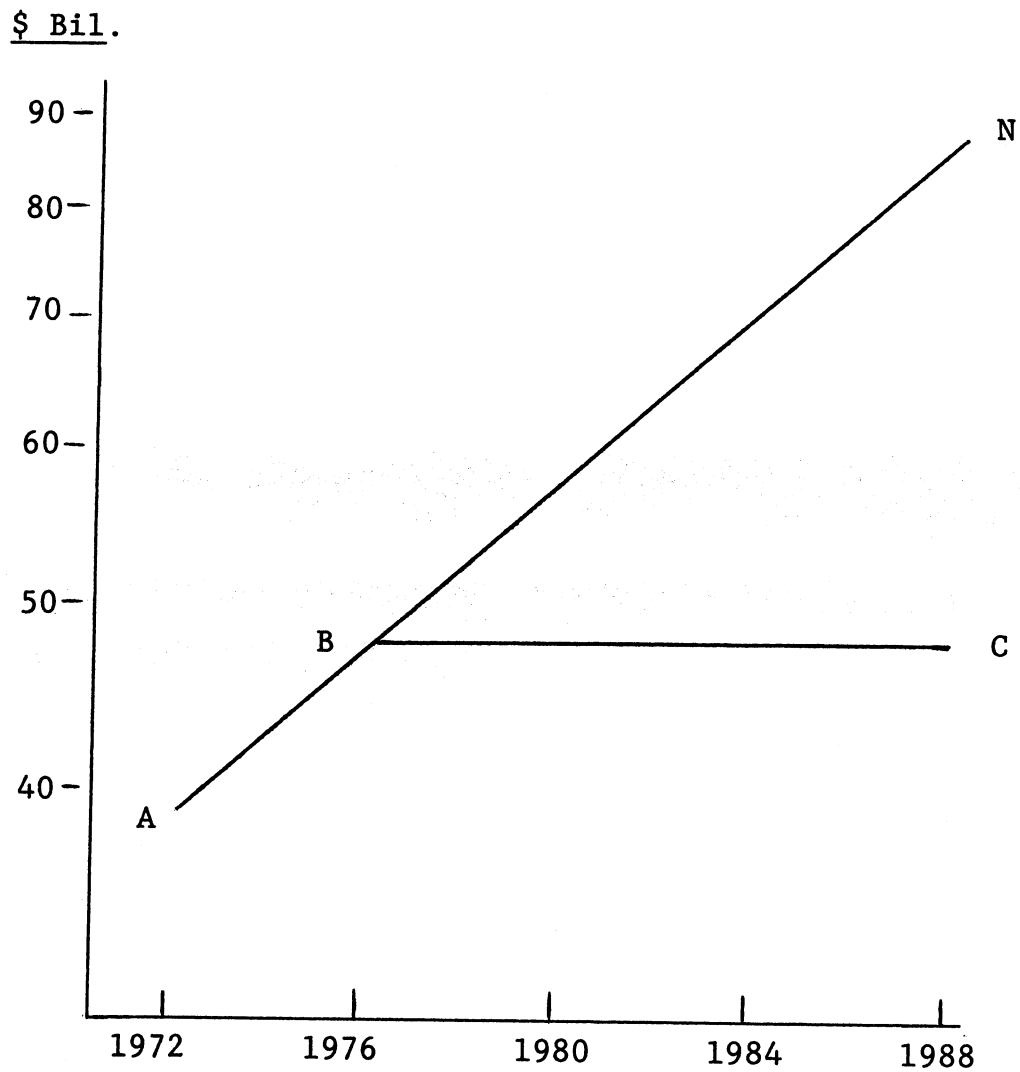
The assumption that a tax change will become effective in 1977 produces one or both of two results: a reduction in the amount of foreign investment (from what it otherwise would have been) and/or an improvement in the net social rate of return (compared to what it otherwise would have been). Either of these results would increase national income, by definition, as noted earlier.

Take the extreme illustration that all future increments to foreign investment are eliminated on account of the tax change, so that the post-1976 amount of foreign investment outstanding levels off to the amount shown by the line BC in Figure 1. The foreign investment (represented by the vertical distance between BN and BC in any given year) could only have been eliminated because this capital would (in the view of the corporations concerned) earn a higher net rate of return (both private and social) in some alternative investment. (The alternative could be a direct investment in the U.S. or a portfolio investment in the U.S. or abroad.) Thus, the gain to national income would be the total amount of foreign investment eliminated, NC, multiplied by what the net social rate of return would have been on this amount in the absence of a tax change.

Now, take the extreme illustration in the other direction, that no foreign investment is eliminated by the tax change. In this case, the gain to national income would be the number of percentage points by which corporations were able to improve the after tax rate of return on foreign investment multiplied by the total amount of foreign investment. (As discussed earlier, corporations could do this by pressing foreign countries for lower tax rates and/or by switching investments from relatively high to relatively low tax rate countries.)

Figure 1

Future Book Value of U.S. Foreign Direct Investment in Manufacturing Projected at 5% Average Annual Rate of Increase



In practice, of course, the gain would lie somewhere between these two extremes--between what the social cost of foreign investment would be in the absence of the tax change and what it would be with the tax change. Estimating the minimum gain is greatly eased if it is assumed that the social return on the amount NC would be no worse than zero on average, if the tax change were enacted. (If the average net social rate of return on NC is zero, then the rate on some of this investment would be positive, allowing other investment to incur a negative net social rate of return.)

This assumption is reasonable, since under the hypothesized tax scheme, any foreign investment which has a lower rate of return after foreign taxes than the rate of return on domestic investment before taxes would be relatively unprofitable to the owners of the capital in question. It should be noted that the relevant comparison is not between the rates of return which multinational corporations can earn at home or abroad but between the rate of return which individual investors can earn on their capital if invested in these corporations relative to what these investors can earn on their capital in any investment in the U.S.

To illustrate this point, assume that multinational Corporation A believes it can earn 15 percent on an increment of capital invested abroad after foreign taxes but it

sees no opportunity for earning this much, even before U.S. taxes, on a comparable investment in the U.S. From the standpoint of the officials of Corporation A, the foreign investment would appear worthwhile; but from the standpoint of its stockholders, the foreign investment would not appear worthwhile if they had the alternative of investing their capital in some domestic investment which would earn more than 15 percent before U.S. corporate taxes.

To recapitulate, the initial assumptions are that the net social rate of return on capital invested abroad after the tax change will be no worse than zero on average and that there will be no change as a result of the tax change in the net social rate of return on capital invested abroad before the tax change. Further, it is postulated that any error in these assumptions would be in the direction of increasing the gain to national income from the tax change. On these assumptions, a minimum estimate of the benefit from the tax change can be obtained by estimating the amount of new foreign investment that will take place in the absence of a tax change and what the net social rate of return would be on this investment.

The margin for error in any estimate of the future rate of growth of foreign investment is quite substantial in absolute terms, particularly where projections are made up to 15 years into the future. Since this analysis is only

concerned with deriving some estimate for the minimum gain from the hypothesized tax change, and since the gain will increase with higher levels of future foreign investment in the absence of a tax change, only an estimate of the minimum growth rate for foreign investment in manufacturing in the absence of a tax change was derived.

Table 3 shows five-year moving averages of the annual rates of growth in domestic and direct investment in manufacturing over the 1962-1972 period. Three observations can be made concerning the ratio of the rates of growth of direct foreign investment to domestic investment (as shown in column (3)). First, this ratio never fell below 2.0 for the period. Second, there was no evidence of a decreasing trend in the ratio. Third, the ratio was generally higher the lower the rate of growth of domestic investment.

This ratio can be used to estimate the minimum rate of growth for direct foreign investment in future years. Thus, if we take as this minimum the lowest rate of growth for direct investment experienced in any five-year period over the past decade, 5.0 percent, the reasonableness of this estimate is substantiated by the fact that it could not be any lower without the average annual rate of increase in domestic investment being at an improbably low level and/or the ratio of direct to domestic investment falling well below any level experienced

Table 3

Five-year Moving Averages of Annual Rates of Growth in Domestic and Direct Foreign Investment in Manufacturing, 1962-1972*

	(1) Domestic Investment (%)	(2) Domestic Foreign Investment (%)	(3) Ratio of Dir. to Dom.
1962-67	4.1	10.8	2.6
1963-68	4.4	9.5	2.2
1964-69	4.3	8.4	2.0
1965-70	3.0	6.0	2.0
1966-71	1.6	5.0	3.1
1967-72	1.9	5.6	2.9
1962-72	3.0	8.2	2.7

*Rates of increase are in real terms (1958 dollars). GNP implicit price deflator for nonresidential investment was applied to data in Appendix Table A for domestic rates of growth and to Commerce Department data for book values for direct investment.

over the past decade. For example, if we took 4.0 percent as the estimate for the minimum rate of growth of direct investment in the post-1972 period, we would be implicitly assuming that the rate of growth of domestic investment would be 2.0 percent at most (4.0 percent divided by 2.0, the lowest ratio applicable to the 1962-1972 period) or that the ratio of direct to domestic investment would fall considerably below the ratio prevailing for the 1962-1972 period.

If it appears reasonable to assume that direct foreign investment in manufacturing will grow at a minimum rate of 5.0 percent in the absence of a tax change, what is the <u>best</u> rate for the net social rate of return that can be anticipated in the absence of a tax change? Table 4 shows five-year moving averages for the rates of return shown in Table 2.

The variations in the net social rate of return over the period were almost entirely attributable to variations in the rate of return on domestic investment, which showed a cyclical decline in the latter part of the decade due to the sharp drop in corporate profits in 1970 and 1971.

It might be thought that the profitability of foreign investment should improve in the post-1972 period as the large amount of direct investment made in the 1960's matures

Table 4

Five-year Moving Averages of Rates of Return on Domestic and Direct Investment in Manufacturing (%)

	Domestic Inv. (before tax)	Direct Inv. (after tax)	Net Social Rate of Return
1963-1967	24.3	12.7	-11.6
1964-1968	25.1	12.6	-12.5
1965-1969	25.4	12.6	-12.8
1966-1970	23.7	12.6	-11.1
1967-1971	22.3	12.8	- 9.5
1968-1972	22.3	13.7	- 8.6

Source: Table 1

and becomes more profitable. But it should be kept in mind that this discussion is concerned only with the profitability of the foreign investment made after 1972 (the amount NC in Figure 1) compared to the potential profitability of the same amount of investment made in the U.S. after 1972, and there is no apparent reason why the former should improve relative to the latter in the future. Since there is also no reason to expect that foreign corporate tax rates will decline, on the whole, from the levels of the 1963-1972 period, it seems reasonable to assume that the net social rate of return on direct investment in manufacturing will not be significantly better than the average for the 1963-1972 period, about -10 percent.

Applying these coefficients to Figure 1, estimates were derived for the minimum gain in national income as shown in Table 5 The estimates should be viewed as a "rock bottom" starting point. There are several reasons why the actual gain would in all probability be greater.

First, the projected growth rate of direct investment in the absence of a tax change was the lowest average rate for any five year period over the past decade. If a growth rate equivalent to the average for the 1962-1972 period (8.2 percent) was projected, the estimated gains in Table 5 would be approximately doubled.

Table 5

Estimated Minimum Increase in National Income Resulting from Tax Change on Account of Direct Investment in Manufacturing, 1980-1988

1973 dollars (billions)

	1976	1980	1984	1988
1. Minimum level of direct inv. in absence of tax change (BN)	48.0	58.4	70.9	86.2
2. Of which:				
a. made prior to 1977 (BC)	48.0	48.0	48.0	48.0
b. made after 1976 (NC)		10.4	22.9	38.2
3. Minimum gain in following year resulting from tax change (10% of line 2.b.)		1.0	2.3	3.8

Assumption: (1) Tax change becoming effective in 1977
(2) In the absence of a tax change direct investment in manufacturing will increase at average annual rate of 5% in real terms.

Note: Letters in parentheses refer to lines in Figure 1.

Second, by applying the average rate of -10 percent (the assumed net social rate of return) to the amount NC, it is implicitly assumed that to the extent that the gain resulted from reduced direct investment, the net social rate of return on this amount would be no worse than the average for all direct investment, the amount BN. In practice, however, it is most probable that investment eliminated on account of the tax change would, on the whole, be less profitable than the average, that is, the worst would be the first to go. 9/

Third, no estimate has been made for the increased profitability of the pre-tax change investment, BC. The potential for additional gain can be seen from the equation:

$$r_s = r_f (1-t) - r_d \qquad (1)$$

where r_s is the net social rate of return, r_f is the before-tax rate of return on foreign investment, t is the foreign tax rate, and r_d is the rate of return on domestic investment before taxes.

9/ Grubel, who made estimates for fourteen individual developed countries, found that the net social rate of return ranged from over 6 percentage points worse than the average in the least profitable country to nearly 11 percentage points better than the average in the most profitable country.

Given the before tax foreign rate of return, r_f, as the foreign tax rate, t, decreases, the social rate of return, r_s, increases. If the estimates for r_s and r_d derived for the 1963-1972 period (shown in Table 1) are substituted into equation (1), and if it is assumed that the before-tax profitability of direct investment in manufacturing is the same as that for domestic investment, 23 percent, a coefficient for t can be derived as follows:

$$-10 = .23(1-t) - .23$$

$$t = .43$$

This estimate for the average rate of foreign taxation on profits of U.S. subsidiaries (which includes withholding taxes) is consistent with the estimates derived by the Internal Revenue Service for the year 1964. 10/ Now assume that multinational corporations are able to reduce t by 5 percentage points by pressing foreign host countries for lower effective tax rates and/or by switching investment from relatively high to relatively low tax rate countries. Then r_s, the net social rate of return, would be improved to -8.7 percent, a

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10/ The I.R.S. estimated that foreign taxes (excluding carry-over) were 49 percent of total taxable (by the U.S.) income from foreign sources. Since this included the relatively high taxes paid on income by the extractive industries, the average rate for the manufacturing industry would be lower. For European affiliates, for example, the average rate was 41 percent. Cf. Foreign Income and Taxes, Corporation Income Tax Returns, Supplemental Statistics of Income, 1964, 1965 and 1966, Internal Revenue Service, p. 11, Table 1A.

gain of 1.3 percentage points to be applied to the amount BC in Figure 1. If an improvement of 10 percentage points were effected in the average tax rate, the gain in the net social rate of return would be 2.4 percentage points.

Finally, the estimates in Table 5 relate only to direct investment in manufacturing and the hypothesized tax change would apply to all direct investment, of which manufacturing accounted for less than half (42 percent) of total book value in 1972. Little statistical information is available on the social return of non-manufacturing direct investment. One expert in this area has noted that "net foreign returns on agriculture, trade and petroleum investments appear to be appreciably larger than gross domestic returns. 11/

Agriculture and trade together account for only about 3 percent of total direct investment. Petroleum, which accounted for 28 percent of total direct investment in 1972, is the big unknown. The sharp increases that have recently occurred in the taxation of petroleum by the oil producing countries have obviously reduced the comparative advantage of direct investment in this industry and it is quite possible that some of this investment now has a negative net social rate of return.

11/ Musgrave, op. cit. p.29.

In sum, it is most probable that the total gain in national income from the tax change would be two or three times greater than the amounts shown in Table 5. Therefore, the following estimates would appear to be reasonable approximations of the magnitudes involved. If the proposed tax change were to become effective in 1977 the gain in national income in 1973 dollars would be about $2 billion by 1981, rising to about $8 billion by 1989 and increasing thereafter at a rate greater than the rate of increase of national income (assuming that national income would increase at an average annual rate of less than 5 percent in real terms).

These estimates denote the social cost of U.S. direct investment, that is, the opportunity cost of a continuance of the present system of taxing foreign source income. 12/ Moreover, the opportunity cost of postponing such a tax change for only a few years would be substantial. Assume, for example, that instead of becoming effective in the earliest practicable year of 1977, the tax change is postponed to 1981. The effect of such a delay is shown by Figure 2, which is identical to Figure 1 except that the lines B'C'

12/ In fact, the opportunity cost of the present system is even greater than this because another alternative, the outright elimination of the foreign tax credit and tax deferral, would be even more effective in improving the net social rate of return on direct investment.

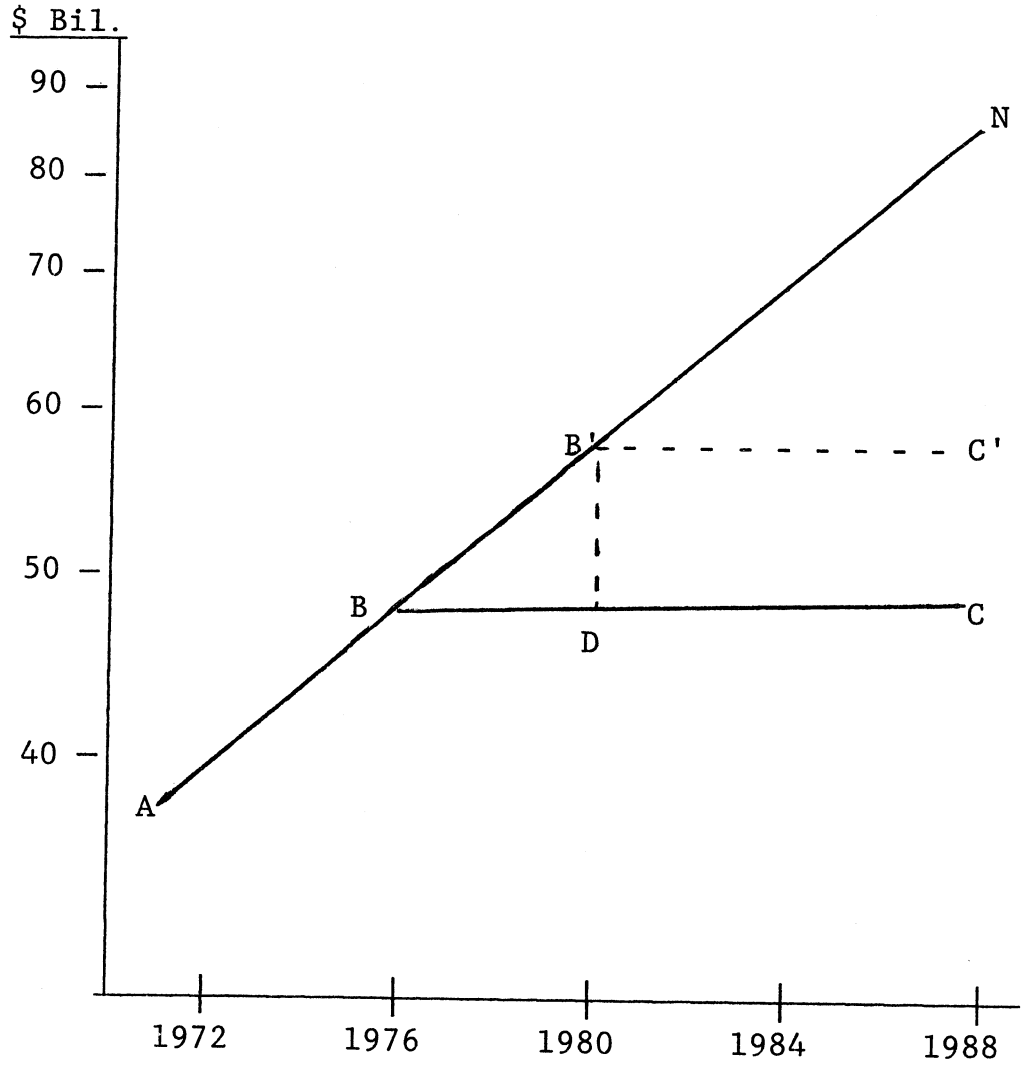
and B'D have been added to denote the additional foreign investment that would be unaffected by the tax change on account of the postponement.

The cost of the delay would be the net social rate of return multiplied by the vertical distance between BB' and BD for the years 1977-1980 plus the net social rate of return multiplied by the amount B'D for each year thereafter. In quantitative terms this would amount to an average annual cost of about $0.6 billion for the years 1977-1980 and about $1.0 billion for each year thereafter. If these figures are doubled per above (to obtain estimates above the "rock bottom" estimates of Figures 1 and 2), the cost of the delay is estimated at over $1 billion for each of the years 1977-1980 and about $2 billion for each year thereafter.

B. Potential Gains in Tax Revenue. An approximation of the proportion of the national income gain which would accrue to the tax collector can be derived as follows: Since the national income gain would be in the form of increased corporate profits before tax, the average effective tax rate would depend in the first instance on the extent to which these profits were distributed to stockholders. This distribution ratio could vary between zero, in which

Figure 2

Postponement of the Tax Change
(Figure 1 with addition of B'C' and B'D)



case the effective tax rate would be about 48 percent, 13/ and 100 percent, in which case the effective tax rate would be equivalent to the weighted average of the marginal tax rates of the individual dividend recipients.

On the basis of a study by the Treasury on dividend distributions in 1966 which entered the base for the individual income tax, some 20 to 25 percent of distributions would escape the individual income tax. The average effective individual income tax rate on dividend receipts reported to the Internal Revenue Service is about 35 percent. These ratios would give an effective tax rate on dividends distributed of 26 to 28 percent (75 to 80% of 35%). In the absence of a reduction in the schedule of individual tax rates, however, the 35 percent average tax rate will increase in the future as money incomes rise. It is also questionable whether individuals and institutions who are exempt from the income tax would be allowed a full credit and tax rebate for corporate taxes under an integrated system. Continuing efforts to broaden the individual income tax base should reduce the proportion of dividends that escape taxation. On the basis of these trends and prospects, it would seem reasonable to assume that the tax revenue from the increments of dividends distributed in the future as a result of the integrated tax change would be

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13/ Because the first $25,000 of corporate earnings is taxed at 22 percent the effective corporate tax rate never quite reaches 48 percent.

at least 30 percent of these distributions.

The efficacy of the proposed integrated system is predicated on the assumption that it would cause a high proportion of corporate earnings to be distributed, and therefore, taxed at the individual level. Nevertheless, some of the incremental corporate income would undoubtedly be retained by corporations and bear the 48 percent tax. On a weighted average basis, then, the effective rate would be somewhat above 30 percent. A reasonable approximation would be that tax revenue gains would be about one-third of the national income gain.

APPENDIX

Sources and Methodology for Computing Rates of Return on Domestic and Direct Investment in Manufacturing

The source for U.S. domestic manufacturing investment is Quarterly Financial Report for Manufacturing Corporations, Federal Trade Commission, Washington, D.C., issues for various quarters from 1962 through 1971. Data for stockholders' equity are as of the beginning of each year.

The source for foreign direct investment is the Survey of Current Business, Commerce Department, Washington, D.C., issues for November 1972 and September 1973 and unpublished data from the Commerce Department for the years 1963-1968. Data on book values are as of the beginning of each year.

Rates of return for foreign direct investment are earnings for each year as a percentage of book value as of the beginning of the year.

Petroleum refining was subtracted from the totals for U.S. investment in order that the data for domestic manufacturing would be on the same basis as the data for manufacturing by foreign direct investment affiliates, which did not include petroleum refining.

The FTC data for the book value of and earnings from foreign direct investment in manufacturing was adjusted on the assumption

that corporations reporting to the FTC on the whole would include the assets and earnings of their foreign affiliates. Although the reporting instructions called for reporting only assets and earnings derived from investments in the U.S., the FTC believed that in recent years corporations had on the whole been reporting world-wide operations on a consolidated basis. To the extent that assets and earnings of foreign affiliates were not in fact included in the FTC data, the subtraction resulted in a slight overestimate of the rates of return on domestic investment in manufacturing.

"Adjusted earnings" includes branch earnings, dividends paid to U.S. parent firms (net of foreign withholding taxes) reinvested earnings by foreign subsidiaries and interest payments to U.S. parent firms. "Broad earnings" includes these same categories plus royalties and fees paid to the U.S. parent firms.

"Net private incentive" is the after tax rate of return on foreign direct investment minus the after tax rate of return on domestic investment.

"Net social rate of return" is the rate of return on foreign direct investment minus the rate of return on domestic investment before tax.

No adjustment was made for U.S. taxes paid on account of income from foreign affiliates; thus, after tax rates of return on domestic investment were somewhat underestimated. It was possible to make crude estimates for these amounts for some years, but the error involved in ignoring this consideration was believed to be small. For example, a crude estimate indicated that only about 2 percent of total U.S. taxes paid by U.S. manufacturing corporations was on account of foreign source income.

Adjustments for exchange rate changes over the period were not considered worthwhile because the error was believed to be insignificant. The possible error could be derived from the fact that book values of foreign direct investment, as compiled by the Commerce Department, would not reflect changes in the value of the dollar relative to other foreign currencies, while earnings which had been converted from foreign currencies into dollars would reflect such changes. The extent to which U.S. foreign affiliates kept books in dollars, in which case there would be no error, was not known. Also, of the countries where U.S. investment in manufacturing would be significant, appreciations of the dollar over the period would approximately offset depreciations of the dollar.

Table A

Computation of Rate of Return on U.S. Investment in Manufacturing in U.S. (Before Tax)

(Money amounts in billions of dollars)

	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
1. Total stockholders' equity, "All manufacturing corporations" 1/	184.3	192.4	203.6	218.1	236.8	254.3	273.2	297.1	310.9	327.1
2. Minus: equity in petroleum refining	32.6	34.6	36.5	38.9	41.7	45.1	48.1	51.4	54.7	57.7
3. Equals: stockholders' equity in manufacturing excluding petroleum refining	151.7	157.8	167.1	179.2	195.1	209.2	225.1	245.7	256.2	269.4
4. Minus: book value of U.S. foreign direct investment in manufacturing	13.3	14.9	16.9	19.3	22.1	24.2	26.4	29.5	32.3	35.6
5. Equals: stockholders' equity in manufacturing corporations attributable to assets in U.S.	138.4	142.9	150.2	159.9	173.0	185.0	198.7	216.2	223.9	233.8
6. Net profit before Federal income tax, "All manufacturing corporations"	34.9	39.6	46.5	51.8	47.8	55.4	58.1	48.1	53.2	63.2
7. Minus: profit from petroleum refining	4.3	4.7	5.2	6.0	6.3	6.6	6.9	5.8	6.7	6.4
8. Equals: net profit before income tax of manufacturing corporations excluding petroleum refining	30.6	34.9	41.3	45.8	41.5	48.8	51.2	42.3	46.5	56.8
9. Minus: earnings of foreign affiliates										
(a) adjusted basis	0.7	0.9	1.1	1.1	1.2	1.3	1.3	1.9	2.0	2.1
(b) broad basis	1.1	1.4	1.7	1.8	1.9	2.1	2.2	2.9	3.1	3.4
10. Equals: earnings before tax of U.S. manufacturing corporations attributable to assets in U.S.										
(a) adjusted basis	29.9	34.0	40.2	44.7	40.3	47.5	49.9	40.4	44.5	54.7
(b) broad basis	29.5	33.5	39.6	44.0	39.6	46.7	49.0	39.4	43.4	53.4
11. Rate of return (line 10 line 5)										
(a) adjusted basis (%)	21.6	23.8	26.8	28.0	23.3	25.7	25.1	18.7	19.9	23.4
(b) broad basis (%)	21.3	23.4	26.4	27.5	22.9	25.2	24.7	18.2	19.4	22.8

1/ All data on stockholders' equity and book values are of the beginning of the year.