NBER WORKING PAPER SERIES

# A STATUS REPORT ON TAX INTEGRATION IN THE UNITED STATES

Charles E. McLure, Jr.

Working Paper No. 298

NATIONAL BUREAU OF ECONOMIC RESEARCH
1050 Massachusetts Avenue
Cambridge MA 02138

November 1978

This paper is part of the National Bureau's Special Research Project on Capital Formation and is related to the NBER's Program in Business Taxation and Finance. Any opinions expressed are those of the author and not those of the National Bureau of Economic Research.

NBER Working Paper No. 298

# A STATUS REPORT ON TAX INTEGRATION IN THE UNITED STATES

Charles E. McLure, Jr.

Summary

Recent years have seen considerable interest in the integration of the corporate and personal income taxes. Full integration, under which corporate-source income would be taxed only to shareholders, has significant economic advantages, but it suffers from severe practical difficulties. Some but not all of its advantages could be realized through dividend relief. Alternative means of providing dividend relief include a deduction for dividends paid, application of a lower corporate rate to distributed income than to retained earnings, and allowing shareholders a dividend-received credit for corporate taxes imputed to have been paid on their behalf. The proper treatment of tax preferences and international flows of corporate-source income raise important issues of tax administration and public policy. It is necessary, for example, to decide whether tax preferences are to be passed through to shareholders or nullified when preference income is distributed. Beyond that, "stacking rules" are required for the presumptive allocation of dividends between preference and taxable income. Further research on both economic effects and administrative feasibility is necessary for an adequate appraisal of integration.

Charles E. McLure, Jr.
National Bureau of Economic Research
1050 Massachusetts Avenue
Cambridge, Massachusetts 02138

(617) 868-3906

A STATUS REPORT ON TAX INTEGRATION IN THE UNITED STATES

Charles E. McLure, Jr.*

National Bureau of Economic Research
and Rice University

## I. Introduction

The past several years have seen a remarkable amount of interest in the United States in what can generally be described as the integration of the corporate and personal income taxes. This interest, seemingly rooted in recent concern that the present tax system retards capital formation and economic growth, has strong theoretical foundations in the academic arguments that an unintegrated or separate corporation income tax reduces both the equity of the tax system and the efficiency of allocation of the nation's resources.

While the Ford Administration was sufficiently convinced of the case for integration to propose dividend relief to the Congress in July 1975, the largely Democratic Congress was unconvinced and the proposal was generally ignored.[1] On the other hand, the proposal for complete integration contained in Blueprints for Basic Tax Reform, a white paper issued by the U.S. Treasury Department (1976) during the waning days of the Ford Administration, received considerable attention. But it seems to have done so more because it was part of a comprehensive scheme for revamping the U.S. tax system than because anyone really believed integration to be politically viable. Over the next two years, however, there developed a substantial interest in integration--so much so that President Carter's failure to include dividend relief in the tax reform package presented to the Congress in late 1977 surprised some, and in early 1978 Chairman Al Ullman (1978) of the House Ways and Means Committee proposed a scheme for partial dividend relief patterned closely after that reported to have been suggested to the Carter White House by the Treasury Department. Since then interest in integration or dividend relief seems to have diminished somewhat as attention has turned increasingly to rate cuts and reduction of taxes on long-term capital gains as means of stimulating capital formation.

This paper reviews the advantages of integration, describes some of the significant practical problems of achieving full integration, discusses alternative approaches to dividend relief and the possibility of achieving most of the objectives of full integration by merely providing dividend relief, and emphasizes especially the administrative problems and issues raised by tax preferences and international ownership of capital.[2] It will be seen that the prognosis for full integration is not good and that even dividend relief poses significant problems.

## II. The Case for Integration[3]

Though much has been made in recent public discussions of the presumed effects integration or dividend relief would have in stimulating capital formation, the fundamental economic arguments for integration are in terms of equity and economic neutrality of taxation. Under a separate unintegrated or "classical" system of taxation, corporate-source income which is paid out as dividends is taxed more heavily than income retained by the corporation and more heavily than other capital income which is fully taxed to the taxpayer as ordinary income. This creates an incentive for firms to finance expansion through the retention of earnings or the issuance of corporate debt rather than through the sale of new equity issues (including reinvestment of dividends by shareholders). That is, it is commonly argued that both dividend payout rates and debt-equity ratios are distorted by the separate corporation income tax.[4] Moreover, since corporate-source equity income is generally thought to be taxed more heavily, on average, than capital income earned in the noncorporate sector, it is usually presumed that the separate corporation income tax results in the misallocation of capital from the corporate to the noncorporate sector. This misallocation has been estimated to result in a loss of welfare of perhaps one-half of one percent of GNP per year.[5]

The equity effects of integration and dividend relief can be appraised from at least two perspectives. On the one hand, it is easily shown that the overtaxation of corporate-source income resulting from the failure to integrate the income taxes or provide relief from double taxation of dividends is greater at the bottom of the income scale than at the top.[6] With a 46 percent corporate rate and marginal personal rates ranging from zero to 70 percent, for example, the overtaxation of distributed corporate-source income, relative to the taxation that would be incurred if only the individual income tax were applied to such income, would be 46 percentage points for the person in the zero marginal rate bracket, but only 13.8 percentage points at the top of the rate structure. Similarly, for retained corporate-source income which subsequently results in preferentially taxed long-term capital gains the results would range from overtaxation of 46 percentage points at the bottom of the marginal rate scale to undertaxation of from 8.9 to as much as 24 percentage points at the top.[7]

The argument just presented does, however, give a somewhat misleading impression of the distributional effects of integration and dividend relief. Because the ownership of corporate shares is highly concentrated in upper-income classes, relief from double taxation of dividends is of greatest benefit at the top of the income scale and providing dividend relief would greatly reduce the progressivity of the income tax. On the other hand, because the extension of integration to retained corporate-source income is tantamount to taxing long-term capital gains as they accrue at the rates applied to ordinary income, integration would actually increase the progressivity of the tax system.[8]

There can be little doubt that by themselves integration, and especially dividend relief, would spur capital formation. After all, they would represent tax reduction of some \$15 to \$30 billion in taxes currently collected on the return to investment in corporate equity securities.[9] But the story is incomplete if it stops there. To be meaningful, analysis of the effects on capital formation should compare effects under dividend relief or integration with those under equally costly alternative ways of reducing taxes. Dividend relief, for example, can be expected to stimulate capital formation somewhat more than an equally expensive across-the-board reduction in personal income taxes, both because the tax cut it involves is concentrated on capital income and because the particular type of capital income on which taxes would be cut is concentrated in the hands of the wealthy. But the stimulus would be substantially less than is indicated by analysis of a plan which would simply provide dividend relief. Moreover, it appears that either integration or dividend relief would have a greater positive impact on capital formation the more unequal it left the distribution of after-tax income. Or, stated differently, if the revenue loss involved in integration or dividend relief were made up through an income tax increase which left the distribution of tax burdens across income classes basically unchanged, it is unlikely that there would be much effect on the rate of capital formation in the United States.[10]

The solution which academic economists propose for the ills of an unintegrated income tax described above is, of course, to integrate the income taxes. In a nutshell, this means that the entire current income of a corporation would be attributed to its shareholders for tax purposes. If the corporation income tax continued to exist it would be only as a withholding device. If integration were deemed to be infeasible, dividend relief might be a reasonable second-best solution. Under it the corporation income tax would continue to be a final tax so far as retained corporate-source income is concerned, but it would, at most, be only a withholding tax to the extent that income is distributed.[11] That is, the income taxes would be "integrated" to the extent that income is distributed, but not to the extent that it is retained.

## III. The Feasibility of Full Integration[12]

Interpreted literally, full integration would involve taxation of the equity income of corporations in the same way that the income of partnerships is taxed. A number of difficulties in implementing such an approach have been identified. First, an enormous amount of data would need to be transmitted to shareholders and utilized by them. Many large corporations are not even able to calculate their taxable income until well after the end of their fiscal year. It would therefore be difficult for them to communicate to shareholders the information that the latter would require in order to file their own tax returns on a timely basis. This problem, like several others to be described below, is even worse if there are chains of intercorporate ownership. For example, firm A could not inform its shareholders of their proportionate parts of its taxable income until it had been told by firm B, whose shares it owns, what the latter's income was.

Moreover, it would be necessary for shareholders to make adjustments to the basis used in calculating capital gains on shares any time corporate-source income attributed to them and taxed as part of their personal income was retained by the firm. Otherwise such income would be taxed twice, once when retained and again when it resulted in capital gains. (See also footnote 15 below.) American experience with record-keeping by owners of shares in mutual funds does not induce optimism that the necessary adjustments would be made accurately by individual shareholders. Intra-year transactions in stock and the existence of stock held for shareholders by mutual funds or in the name of brokers would aggravate this problem.

Second, strictly speaking, alterations in corporate taxable income resulting from amended returns and audit adjustments would involve reopening the tax returns for all shareholders who held stock in the corporation in question during the year for which income was changed. Since final determination of corporate taxable income is often not made until years after the fiscal year in question such an approach is patently unworkable. A compromise in which results of audit adjustments and amended returns would be reflected in the taxable income for the year in which the adjustments were made seems to be the only feasible alternative. But such an approach, besides violating the basic spirit of integration, would not be without difficulties, for it could lead to manipulation and abuse through intentional miscalculations of taxable income and subsequent adjustments.

Third, in the case of intra-year sales of corporate shares, income and losses of the corporation would be allocated to shareholders on a day-by-day basis under a strict interpretation of the partnership approach. Such an approach would clearly be infeasible, and it would be necessary as a compromise solution to allocate income and losses to shareholders of record on a given date. Using the last day of the corporation's fiscal year as the date of record would be unsatisfactory since it could result in abuses through "trafficking" in losses. That is, high income individuals could be expected to purchase shares in firms with known losses from low income shareholders near the end of the year in order to benefit from the deduction for the corporate losses that would be passed through to shareholders of record. But the first day of the year is also an unsatisfactory day of record, because the seller's tax credit would depend on the performance of the firm after the sale of the stock.

Fourth, the existence of multiple classes of stock and near-stock would add further to the difficulties of implementing integration. In particular, "...profits retained in one year in excess of accumulated claims of preferred shareholders would presumably be allocated to holders of common stock. Yet in a later year these funds might be used to pay dividends on preferred stock."[13] Problems of this type could be avoided if integration were allowed only for firms with simple capital structures, as is currently the case under Subchapter S of the U.S. Tax Code. But integration restricted in this way would probably not be worth the trouble. Though the problem posed by multiple classes of stock has been recognized for at least thirty years, no one has as yet devised a satisfactory solution to it.

Fifth, a purist interpretation of the partnership approach to integration would require that the various components of corporate income which are treated differently at the individual level be segregated and reported separately to individual shareholders. Not only would each type of income be accorded the treatment in the hands of the shareholder that it would receive if realized through a proprietorship or true partnership; under such an ideal approach tax preferences would also flow through to shareholders. Such an approach, besides creating a substantial compliance and administration burden, could result in abuses similar to those that have recently been under attack in the partnership field.[14]

Finally, a literal interpretation of full integration would require that the foreign tax credit be available to individual shareholders, rather than merely to corporations. The thought that all shareholders in firms paying foreign taxes would claim the foreign tax credit staggers the imagination. But that is only the beginning of the problem; unless present law were changed substantially those shareholders would be concerned with the intricacies of the limitation on the foreign tax credit, carrybacks, and carry-forwards.

In short, it is unlikely that total integration could be implemented in its pure form. At most an approach such as those recommended by the Canadian Royal Commission on Tax Reform (1966) and the authors of Blueprints for Basic Tax Reform (U.S. Department of Treasury, 1976) is feasible. Under it no attempt would be made to differentiate between types of income, changes in taxable income resulting from audit adjustments and amended returns would be attributed to those owning shares in the year of the change, the first day of the year would be the day of record, and the foreign tax credit would be applied at the corporate level. Under the Blueprints approach shareholders would be taxed on the entire income of the corporation in the year in which it is earned. Basis would be adjusted for income taxed in this way, and dividends would be treated as a tax-free return of capital, rather than as a taxable event.[15] Tax would continue to be collected at the corporate level, but it would be only a withholding device, the tax being creditable by the individual against his liability for personal income tax.

Though some of these solutions seem satisfactory, the proper treatment of losses remains troublesome, and no satisfactory solution has been found for the problems posed by multiple classes of stock. Moreover, even this less ambitious scheme for integrating the income taxes would create substantial demands for data processing and record keeping which might not be met on a timely basis. Though full integration should not be dismissed without further study, it is clearly something into which no country can afford to rush.[16]

## IV. Techniques Of Dividend Relief

Given the difficulties of full integration described above, there is a natural tendency for its advocates to retreat to dividend relief. Limiting relief to the double taxation of dividends would avoid the most troublesome problems of full integration, which result primarily from the attempt to include retained corporate-source income in the personal taxable income of shareholders. Since dividend relief is currently being provided under the tax laws of a number of countries, there is little question that it is administratively feasible.[17] Moreover, under certain circumstances most of the advantages of full integration would be achieved if relief were offered only for double taxation of dividends; this is explained further in Section VI.

Basically two methods of providing dividend relief have been proposed and implemented. The most commonly used method goes under such names as the withholding method, the imputation approach, and the gross-up and credit.[18] Under it the shareholder does not merely include cash dividends in his personal income for tax purposes, as under a classical income tax. Rather, he "grosses-up" such dividends by the amount of corporate tax which would have been paid on the gross income from which the dividends are paid. (For example, if the corporation income tax rate is 46 percent, as in the United States, a shareholder receiving a dividend of \$54 would know that \$100 had to be earned by the corporation in order for it to be able to pay the \$54 dividend after paying the 46 percent tax.) After including grossed-up dividends in his taxable income the shareholder is allowed to take a credit against personal tax liability for the amount by which cash dividends have been grossed-up -- (\$46 in the above example). The net result is that distributed corporate-source income is taxed at exactly the marginal tax rate of the individual shareholder. In that sense, the corporate and personal income taxes are "integrated," but only for the distributed portion of corporate-source income.

The alternative approach to providing dividend relief is even easier to understand than is the imputation method. Under it the corporation would be allowed a deduction for dividends paid or, alternatively, a zero tax rate would be applied to that portion of corporate-source income which is distributed. In either event the corporation tax would be a final tax so far as corporate income is retained, but there is no corporate tax on distributed earnings. Because dividends are included in the personal taxable income of shareholders they are taxed at the shareholder's marginal personal rate and dividend relief is exactly achieved.

The description to this point pertains only to total relief from double taxation of dividends. Under either approach relief could be provided for only some portion of the double taxation. In order to simplify exposition, suppose that the corporate income tax rate is 50 percent. Complete dividend relief would require either a) a gross-up and credit equal to the amount of net cash dividends received (50 percent of gross dividends), b) complete deduction of dividends paid, or c) a zero tax rate applied to distributed corporate income. Half the double taxation of dividends could be avoided through either a) gross-up and credit equal to only half of net cash dividends received (one third of gross dividends), b) deduction for only half of dividends paid, or c) application of a rate of 25 percent to corporate-source income resulting in dividends.

It is readily seen from the above description that the various alternative approaches to dividend relief would be equivalent if all shareholders were resident individuals and no stockholders held shares in foreign firms. If tax-exempt organizations or foreigners owned shares in domestic firms the two basic approaches need not be equivalent.[19] Whereas all shareholders would benefit equally from dividend relief provided through a dividend-paid deduction or a split-rate system, the benefits of the imputation credit could be denied either tax-exempt organizations or foreign shareholders under the withholding approach.

The effect of denying the shareholder credit under the imputation approach could be replicated by levying a special tax on distributions to tax-exempt organizations or to foreigners (or to both). Such a special tax might be controversial if levied on tax-exempt organizations, but in reality it would be little different from denying such organizations the benefit of the imputation credit. It seems, however, that using a separate tax to replicate denial of benefit to foreigners would be more difficult. This is true because such a separate tax could be interpreted as a withholding tax (in the sense that the term is used in international tax conventions dealing with the taxation of dividends). Such taxes are generally constrained by reciprocity provisions of double tax treaties to be "mirror images." That is, most treaty countries mutually agree that they will levy the same rate of withholding tax on dividends paid by domestic firms to shareholders resident in the other country. Since the United States objected to Germany's imposition of nonreciprocal withholding taxes as an accompaniment of its split-rate system, and threatened to do so if the United Kingdom adopted a split rate, but seems not to have objected to the denial of relief to American shareholders under the imputation system, both Germany and the U.K. have opted for imputation systems. Thus it appears that this largely cosmetic difference in alternative approaches to dividend relief may have real consequence in the international sphere. We return to this issue in section VII.

## V. The Role Of Tax Preferences[20]

Most elementary expositions of the case for integration and the techniques of integration and dividend relief assume, if only implicitly, that the marginal tax rate commonly applied to corporate-source equity income is the statutory rate, 48 percent in the United States until recently. Some authors have noted that because of tax preferences effective rates have tended to average closer to 36-38 percent than to 48 percent, but rarely have the implications of tax preferences been discussed thoroughly. Indeed, it seems that only recently has it been realized that the treatment of tax preferences is a crucial component of any scheme for integration or dividend relief. This section is an attempt to indicate the nature of the problem, its importance, and its likely practical solution.

Generally speaking, tax preferences can be defined as any provision which reduces the effective rate of tax applied to economic income to below what it would be if the normal statutory rate were applied to economic income. In a classical system these can be roughly divided into three categories: <u>deductible preferences</u>, which reduce taxable income to less than economic income, <u>preferential rates</u>, and <u>creditable preferences</u>, which further reduce the effective rate of tax once tax liability has been calculated using taxable income and tax rates as reduced by special provisions. Generally speaking the first and third of these can be defined in an analogous way in an integrated system. That is, deductible preferences, rather than being allowed at the corporate level, could be passed through to shareholders. Similarly, tax credits could be used to reduce the tax liability of the shareholder, rather than that of the corporation. Preferential rates at the corporate level really have no place in an integrated system, since the corporate tax, if it continued to exist, would be only a withholding device. Any preferential rates would need to be allowed at the individual level, rather than the corporate level.

The logic of full integration would seem to demand that corporate shareholders receive the same benefit from tax preferences that they could realize on the same income realized through a proprietorship or a partnership;[21] that is, in the terminology to be employed below, "pass-through" seems to be inherent in the conceptual case for full integration.[22] Thus specially taxed items should be reported separately to the shareholder so that he can benefit from the special tax treatment. Even so, some might argue that certain tax preferences should not be passed through or that they should be passed through only if corporate-source income is not distributed.[23] This line of reasoning is not pursued further here for several reasons. First, it is not persuasive. Second, full integration appears to be so unlikely for the foreseeable future that it seems preferable to concentrate on the analogous problems under dividend relief. Third, the issues under full integration and dividend relief are sufficiently similar that substantial progress can be made by focusing on the latter.

Dividend relief is, in a sense, a hybrid solution to the problems posed by a separate and unintegrated corporate income tax on the one hand and those of full integration on the other. Relief is provided for double taxation of dividends, but no effort is made to integrate the corporate and personal taxes so far as the retained portion of corporate-source income is concerned. For this reason the definition of tax preferences is somewhat more complicated than under either a classical or an integrated system and one must face squarely several issues which are less obvious if full integration is at stake.

We noted above that even though pass-through of preferences seems to be inherent in the case for full integration, some might argue that the benefits of tax preferences should be available only to the extent that income is not distributed. A similar policy decision must be faced under dividend relief: should tax preferences be passed through on distributed corporate-source income or should they be available only to the extent that earnings are retained? While a strong case can be made that preferences should be passed through on distributions, the countries that currently provide dividend relief generally do not follow this path; rather, the benefits of tax preferences are nullified when preference income is deemed to be distributed.[24]

But note the use of the word "deemed" in the last sentence of the previous paragraph. When dividends are paid they do not automatically carry tags saying whether they are paid out of preference income or fully taxed income. Thus it is necessary to have arbitrary rules for the determination of the split of a given amount of dividends between tax-preferred and fully taxed income. Three such rules suggest themselves. Under the first it would be assumed that dividends are paid first from fully taxable income; such a rule we will define to involve "stacking preferences last." By analogy, if preferences are "stacked first," it would be assumed that the first dollar of dividends is paid from preference income. A more natural presumption might be that dividends are paid in proportionate amounts from fully taxed and preference income.[25] Combining these alternative stacking rules with the alternative treatments of distributed preference income described above (pass-through and wash-out), we have the six cases of potential interest indicated in Table 1. (Ignore for now the "variable credit" and "fixed credit" subdivisions of the "washout" column.) Thus in case 2a preferences are prorated between dividends and retentions and are passed

Table 1

Alternative Approaches to the Treatment of Tax Preferences

| Treatment of Distributed Preference Income: | Passed Through | Washed Out | |
|---|---|---|---|
| Gross-up and Credit: | Variable | Variable | Fixed |
| 1. Preferences Stacked First (against dividends): | 1a | 1bV | 1bF |
| 2. Preferences Prorated: | 2a | 2bV | 2bF |
| 3. Preferences Stacked Last (against retentions) | 3a | 3bV | 3bF |

through on distributions. On the other hand, in case 3b preferences are stacked last, but are washed out to the extent that they are distributed. This last treatment is characteristic of European tax systems.

Given the pervasive importance of the treatment of tax preferences, it may be worthwhile to describe briefly how preferences are commonly washed out upon distribution. Though the mechanics of the three systems differ somewhat, the British, French, and German systems employ advance or supplementary corporate taxes to prevent the pass-through of tax preferences. That is, suppose that a German firm with 100 of tax-exempt income and 100 of taxable income wishes to make a complete distribution of both the exempt and taxed earnings. Though it would initially pay corporate tax at a rate of 36 percent on only the 100 of taxable income, it can distribute only 128 because a supplementary tax (called a précompte in the French and German systems) equal to the 36 percent tax on taxable income must be paid on the 100 of exempt income when it is distributed.[26] The shareholder then includes the 200 (cash dividend of 128 plus shareholder credit of 72) in his income for tax purposes and takes the imputation credit of 72. The ultimate result is that the income which would have been exempt if retained is taxed at the shareholder's marginal tax rate when distributed; that is, the preference is nullified if the preference income is distributed.

Under the approach just described the shareholder completing his tax return would be unconcerned with whether or not he is receiving taxable or preference income; in either event he uses a fixed fraction (36/64 = 9/16 in this case) to gross-up his cash dividends.[27] Under an alternative approach a gross-up rate based on the corporation's effective tax rate could be used instead of a précompte to achieve wash-out of distributed preferences. In the example of the previous paragraph, in the absence of the précompte the firm would pay only the tax of 36 on its taxable income and distribute the rest. Shareholders would then gross up net dividends (164) by only 36 and take a credit for 36 of tax. While the ultimate results would be identical, the gross-up rate would be 36/164 = 9/41, instead of the standard 9/16 in the system employing a precompte. Because the gross-up rate depends on the effective tax rate it would vary across firms and from year to year. The relevance of this point is discussed further below.

Among the most complicated provisions of U.S. tax law are those governing the calculation of "earnings and profits." Earnings and profits, commonly referred to as " E and P," is utilized in determining whether or not a given distribution is taxed to shareholders as a dividend (ordinary income) or as a tax-free return of capital. Distributions are treated as dividends and fully taxed to shareholders, up to the full amount of E and P. Additional distributions are treated as return of capital and reduce basis for calculating capital gains (but not to less than zero). Since earnings and profits include many items which could properly be characterized as tax preferences, once a firm goes beyond distributing fully taxed income the shareholder must include the corporate preference income in his ordinary income for tax purposes. This implies that the preferences are valuable to the extent they are retained, are washed out to the extent they are distributed, but are "stacked last."

The complicated calculation of earnings and profits is, as a practical matter, largely unnecessary for the bulk of American corporations. Because of the "stack last" provision, only firms which distribute amounts in excess of both current and accumulated earnings and profits need to inform shareholders that they have done so and for most firms the "cushion" of accumulated E and P is sufficiently large that the calculation need not even be made. A similar comment might be made about the arrangements in Table 1 above which involve stacking preferences last. For most firms it would not be necessary to calculate economic income or preference income, and under certain proposals for the treatment of tax preferences under dividend relief it would not even be necessary to have a concept analogous to earnings and profits.[28]

By comparison, if preferences were prorated between dividends and retentions it would be necessary for every firm with preference income to calculate preference income in order to make the arbitrary allocation. But recall that preferences were defined relative to taxation of economic income. The existence of relatively clear-cut cases such as tax-exempt municipal bonds creates a false impression of simplicity. It is easy to construct examples in which it would be virtually impossible to implement the critical definition of preference income. Similar problems would arise if preferences were stacked first (against dividends.) Any rule which involves stacking preferences first or prorating preferences has gener-ally been agreed to be administratively infeasible.[29]

Although integration and dividend relief are fairly complicated, it should generally be possible to isolate the compliance burdens at the corporate level, so that the individual shareholder would be little affected by the fact that dividend relief is being provided. Under a dividend-paid deduction or split-rate system (application of different corporate rates to retained and distributed earnings) the personal return need be hardly any more complicated than under a classical system; the shareholder would simply include cash dividends in income for tax purposes. Under the imputation approach to dividend relief the tax return need be only marginally more complicated than under a classical system. Ideally the shareholder would be provided three pieces of information: his net dividends, his gross taxable dividends, and the shareholder credit. Under some of the alternative approaches to the treatment of tax preferences complications could not, however, be isolated at the corporate level.

Suppose, for example, that it were desired to nullify preferences on dividends. Suppose in addition that a corporation with a fiscal year ending in November made a distribution of dividends in December of 1978. A calendar year shareholder would include such dividends in his 1978 income tax return. Moreover, this dividend should be recorded on a grossed-up basis. But this is generally impossible under a system which utilizes a variable-rate gross-up and credit, because if it has any tax preferences a corporation cannot calculate its effective tax rate and the appropriate gross-up and credit until after the end of its fiscal year. Based on current experience it would not be unreasonable to believe that corporate income and its division between taxable and preference income would be known only 9 or 10 months after the close of the corporate fiscal year, or as much as 6 months after the individual shareholder had filed his return for the year following that in which the dividend was originally paid.[30]

The situation is quite different if a précompte were employed to nullify preferences and a fixed gross-up and credit could be allowed at the shareholder level. Under this approach, typified by the German approach described above, the corporation would simply report to the shareholder dividends grossed-up using the statutory rate. To the extent that tax had not in fact been paid on income deemed to be distributed, the firm would pay the supplementary tax. Any problems resulting from delay in calculating corporate income, audit ajustments, and amended returns would be isolated at the corporate level. It is thus clear that a fixed gross-up and credit would be vastly preferable to using a variable gross-up and credit to achieve the same result.

The discussion above suggests that viable options in the treatment of tax preferences under dividend relief are restricted to cases 3a and 3bF in Table 1. Attempting to pass preferences through to the extent distributed (case 3a) would also be doomed if it required the use of a variable gross-up and credit.[31] But it has been argued that the firm could report taxable income and preference income to the shareholder separately and a fixed gross-up and credit could be applied to the taxable income. Dividends paid from preference income would simply be exempt, and therefore not grossed-up at all.[32] It appears, however, that this approach, while ingenious, would not overcome the problems created when the corporation does not know until after the shareholder has filed his return whether its claim for a given preference will be allowed. Moreover, it would open the entire Pandora's box of calculating preference income.

In summary then, the form of integration most likely to be adopted is dividend relief which stacks preferences last and washes them out on distributions. This approach, which is followed in Europe, is not the most attractive from a policy point of view. As argued above, it would seem more reasonable to allocate preferences between dividends and retained earnings on a prorata basis and pass them through on dividends. But this choice is likely to be made on grounds of administrative feasibility, rather than on the basis of policy objectives.

That this is true is indicated by the way tax preferences would be treated under the scheme for dividend relief proposed by Chairman Al Ullman of the House Ways and Means Committee (1978). A shareholder credit account (SCA) would be established at the corporate level in order to limit the amount of credit allowed shareholders to a fraction of the taxes actually paid by the corporation. The firm's SCA would be increased by a given percentage of net corporate tax liability and reduced by the amount of any credits allowed shareholders; once the firm's SCA was exhausted no further credits could be taken. When fully implemented, the Ullman plan would allow a shareholder credit equal to 20 percent of net dividends (thereby eliminating 21.67 percent of the corporate tax at the then-current rate of 48 percent.)[33] In order to produce increases in the SCA which would exactly offset the credits taken by the shareholders it would be necessary to allow corporations to add 21.67 percent of corporate tax liability to the SCA.[34]

An assumption that dividends are paid first from taxable income is implicit in the mechanics of this proposal. But it would not be necessary to calculate preference income under the Ullman proposal. Additional tax would automatically be collected any time tax-preferred income was distributed, without it being necessary to define tax preferences explicitly. As noted above, this would facilitate administration considerably.

## VI. Equivalence of Integration and Dividend Relief

If all corporate-source income were distributed and tax preferences were treated identically under the two systems, integration and dividend relief would be identical. This is of considerable interest, because under at least one possible tax reform package that includes complete dividend relief, it could be expected that virtually all corporate income would, indeed, be distributed. To see this, ignore for the moment the existence of tax preferences and suppose that dividend relief were accompanied by the reduction of the top personal income tax rate to the level of the corporate rate.[35] In such a case individual shareholders in the top marginal rate bracket would have no tax incentive to prefer retained earnings to dividends, and anyone in lower brackets would have a positive tax incentive to prefer dividends.[36]

With these strong fiscal pressures for distribution it can be assumed that a substantial proportion of income would be distributed. To the extent that income was distributed, shareholders would be taxed on corporate-source income at the rate applicable to ordinary income.[37] Since this is the objective and result under full integration it would appear that even if integration is technically infeasible, it could, in effect, be achieved "by the back door" by simply allowing dividend relief.

While there is much truth in this argument, it suffers from several flaws. First, one hallmark of integration is its total neutrality, toward corporate financial policy as well as toward resource allocation. But the results of dividend relief resemble those for full integration under the assumptions stated above precisely because dividend relief would distort dividend payout policy.

Second, and perhaps more important, if preferences were to exist and be stacked last and nullified, it is quite unlikely that dividend payout rates would increase to the extent just posited. This is true because this treatment of tax preferences would imply that taxpayers in marginal rate brackets substantially below the corporate rate would find that aggregate (corporate and personal) taxation would be minimized by the retention of an amount equal to preference income. Even for taxpayers in higher marginal rate brackets it would become very expensive to pay dividends, in terms of forgone retained earnings, once all taxable income has been paid out.[38] This is shown in Table 2. This being the case,

Table 2

Aggregate Corporate and Personal Tax
on $100 of Corporate-source Income,
for Alternative Marginal Personal Tax Rates
and Dividend-payout Rates*

(Based on Deductible Preferences of $20)

| Marginal Personal Tax Rate | 100 Percent Retention (a) | Retentions Equal 20 (b) | 100 Percent Distribution (c) | Tax Cost of Distributing Preference Income (d) |
|---|---|---|---|---|
| 0 | 40 | 0 | 0 | 0 |
| 20 | 40 | 16 | 20 | 4 |
| 40 | 40 | 32 | 40 | 8 |
| 60 | 40 | 48 | 60 | 12 |

*Based on corporate income tax of 50 percent.
Ignores capital gains tax on gains resulting from corporate retentions.

we could expect less than complete distribution of corporate income even if dividend relief were complete. If only partial relief were allowed, then there would be even less reason to expect a shift to nearly complete dividend payout.

## VII. International Aspects of Dividend Relief

That dividends are sometimes paid by U. S. corporations to shareholders resident in foreign countries or by foreign firms to U. S. residents considerably complicates dividend relief. An exhaustive discussion of these complications would go well beyond the scope of this paper.[39]

Yet it seems worthwhile to discuss several aspects of this problem.

First, it seems only reasonable that dividend relief should be based on the rate of tax in the country of residence of the corporation which is paying dividends across national borders. (If it is not, relief would be given for taxes not paid or be less than taxes paid.) This result would occur naturally if the dividend-paid deduction were employed by the country of source of dividends; if the imputation method were used, the gross-up and credit must be based on the source country's tax rate. Because it would be very difficult for the country of residence of shareholders to provide imputation credits using taxes paid in the source country, it seems almost inevitable that dividend relief should be provided in the first instance by the source country. It might, however, be that arrangements for the sharing of the overall fiscal costs of dividend relief would be necessary if international dividend flows were sufficiently out of balance that the sharing of costs in the absence of such arrangements would be deemed unsatisfactory.

While the above conclusions seem reasonable enough in the case of individual shareholders and corporate portfolio investors, it seems likely that alternative rules might be necessary where dividends paid to parent corporations by foreign subsidiaries are concerned. For one thing, there would be substantial opportunity for abuse if relief was provided by source countries, for firms incorporated in tax-haven countries could be employed to escape all tax liability on income earned through foreign subsidiaries. It would therefore appear proper that in the case of dividends paid to parent firms by subsidiary corporations relief should be provided by source countries only on the basis of tax treaties; otherwise relief should be provided by the country of residence of the parent firm.

It appears that in large part the practices outlined in the previous two paragraphs are becoming standard. That is, both France and the United Kingdom extend the benefits of dividend relief to foreign individuals and corporate portfolio investors but do not grant it to resident shareholders on dividends received from abroad. Germany does not currently provide relief to foreign shareholders, but seems likely to do so and already withholds dividend relief from domestic owners of shares in foreign corporations. Thus far source countries have shown little inclination to provide relief from double taxation of dividends where subsidiary-parent relations are involved. But the United Kingdom has agreed in its treaty negotiations with the United States and the Netherlands to provide dividend relief on direct investment at half the rate available to foreign portfolio investors. Finally, where dividends received from foreign subsidiaries but retained by parent corporations are concerned, relief from double taxation is generally provided by the resident country of the parent, through either a foreign tax credit or exemption. But where foreign-source income is distributed by the parent, taxes paid abroad are not recognized for purpose of application of the imputation approach. Rather, such income is treated like preference income and subjected to précompte.

It is useful to appraise this developing practice in the light of commonly accepted normative goals in the international tax sphere. Perhaps the overriding objective of foreign tax treaties, in the eyes of economists, should be capital export neutrality. This form of neutrality has the advantage that if it is achieved investors' decisions on where to invest are not distorted by tax considerations and under certain circumstances world-wide efficiency is realized. If précompte were not applied to distributed foreign-source income which has benefited from exemption or foreign tax credit, the practices outlined above would be consistent with capital export neutrality, so far as distributed corporate-source income is concerned.[40]

A somewhat different basis has been used for judging the propriety of withholding taxes collected on dividends paid to foreign shareholders by domestic firms. Reciprocity of withholding rates has tended to govern provisions of double taxation treaties dealing with dividends; it has generally been agreed that the taxes levied on dividends by two countries should be "mirror images" if they are to be reciprocal. Strong adherence to this principle has caused the United States to object to Germany's use of withholding rates in excess of those charged by the United States on dividends paid to German shareholders by American firms. Being unable to convince the United States that higher withholding rates than would be allowed by a strict interpretation of reciprocity are justifiable, given its use of a split-rate system, Germany has changed to a hybrid system incorporating an imputation credit as well as a preferential rate for distributed earnings. Similarly, the United Kingdom, learning from the German experience, chose to adopt an imputation approach despite a preference for a split-rate system.[41] Having thus forced its treaty partners into systems of dividend relief which they judged to be inferior when appraised on the basis of domestic considerations, the United States may have a difficult time choosing any form of dividend relief other than the imputation approach.

Whether denial of benefits of dividend relief to foreign shareholders will eventually be deemed to be equivalent to levying a special withholding tax on dividends paid to foreign shareholders under a split-rate system, and therefore subject to the rules of reciprocity, remains to be seen. But it should be noted that it has been argued that strict adherence to the principle of reciprocity, while appropriate in a world of classical tax systems, is not proper when various countries have differing degrees of dividend relief.[42] According to this view "effective reciprocity" would require considering the entire (corporate and withholding) tax burden on dividend income attributed to foreigners in the negotiation of double tax conventions.

## VIII. Summary and Conclusions

Integration and dividend relief are not novel topics in the United States. Provisions for integration and dividend relief, having been incorporated in the income taxes used to finance the Civil War, predate the existing corporate and personal income taxes. Moreover, the tax on undistributed profits levied during the late 1930's was economically equivalent to a deduction for dividends paid.

Of course, the provisions of the tax law need bear no close relationship to our understanding of their effects. But integration and dividend relief were studied thoroughly in the first half of the twentieth century. From 1950 to 1975 there was relatively little public interest in integration and dividend relief, and hardly greater academic interest. Even so, the analysis of the 1940's had been thorough and our understanding of the case for integration and the administrative difficulties of integration and dividend relief would have probably been judged in 1975 to have been substantial. What is therefore amazing is how little we really did know about several vital aspects of integration. In 1975 so little was known about the problems posed by tax preferences that the Secretary of the Treasury could propose to the Congress that the statutory rate be employed in the calculating gross-up and credit under the imputation approach.[43] Similarly, except for a few experts hardly anyone knew very much about how dividend relief fit into international fiscal relations.[44] It would appear that similar statements could be made about the state of knowledge in European countries.

The considerable attention integration and dividend relief have received in the past 5 years has substantially increased our understanding of this type of tax reform. Especially important are our increased appreciation of the role played by tax preferences and our understanding of the international aspects of integration and dividend relief. The U. S. Treasury Department has contributed significantly to the understanding of integration and dividend relief. But because President Carter chose to exclude dividend relief from the tax reform package he proposed in late 1977, the knowledge generated at the Treasury Department has, unfortunately, been given all too little circulation. One can only hope that dividend relief will be subjected to more wide-spread analysis and that the Treasury studies of integration and dividend relief will be extended and made public. Only then will we really be able to appraise integration and dividend relief adequately. Integration is clearly a good idea, if it is feasible, and dividend relief is probably a good idea. But, whether either is "good enough" depends in part on whether or not they can be effectively administered in a way that makes good public policy.

Finally, it should be noted that this paper has focused very largely on theoretical and conceptual discussions of integration and dividend relief and their difficulties. It contains no hard evidence about the effects of integration or dividend relief on such things as the rate of capital accumulation and economic growth, the allocation of resources between the corporate and non-corporate sectors, corporate financial policy, including debt-equity ratios and dividend payout policies, the distribution of income, tax exempt organizations, international capital flows, etc. In appraising the case for integration and dividend relief it is essential to know not only whether such a policy is administratively feasible but more about its economic effects.

Footnotes

*This paper is part of the National Bureau's Special Research Project on Capital Formation and is related to the N. B. E. R.'s Program in Business Taxation and Finance. Is has not, however, undergone review by the National Bureau's Board of Directors. It was delivered at a conference on Taxation and Firm Behavior held at the Industrial Institute for Economic and Social Research in Stockholm on August 28 - 29, 1978.

[1]Throughout this paper, except where context makes meaning clear, "integration" is reserved for approaches to the taxation of corporate - source equity income which involve the taxation of all such income to shareholders at the relevant marginal tax rate of the shareholder, without regard to whether the income is distributed or retained by the corporation. "Dividend relief," on the other hand, is used to refer to approaches which apply only to distributed corporate-source income, that is, to systems which relieve the double taxation of dividends but retain the corporate income tax as a final tax to the extent that income is retained by the corporation.

[2]The discussion in this paper draws heavily on McLure (1979).

[3]The case for integration and the counter-arguments against it are described in substantially greater detail in McLure (1979) chapter 2. For a more detailed presentation of the case for integration, see McLure (1975).

[4]This argument has been expressed, for example, by Tambini (1969) and Scott (1976). It has, however, recently been questioned by Stiglitz (1973) and Bradford (1977). The relevance of these counter-arguments is still being hotly debated.

[5]The standard reference for this argument is Harberger (1962). Important subsequent work on this issue has been done by Rosenberg (1969) and Shoven (1977). But see Stiglitz (1973), Bradford (1977), and King (1977).

[6]Inherent in the statements which follow is an implicit assumption that the corporate tax cannot be shifted. As Harberger (1962) has argued, the tax is, in fact, quite likely to be borne more or less equally by all owners of capital, rather than merely falling on owners of corporate shares. For arguments that the case for integration is little affected by shifting, see Mieszkowski (1972) and McLure (1975). Moreover, the effects of tax preferences in reducing effective corporate tax rates are ignored at this point.

[7]In calculating the maximum undertaxation of retained corporate-source income resulting in long-term capital gains, it is assumed that realization and taxation of such gains occurs after basis has been stepped up at death. Short-term capital gains are treated like dividends for tax purposes and therefore are not discussed separately here.

[8]Among the efforts to determine the distributional consequences of integration and dividend relief are Break and Pechman (1975), Feldstein and Frisch (1977a and 1977b), and U.S. Treasury Department (1976). All these studies reach qualitatively similar results. The exact distributional effects of integration or dividend relief would, however, depend crucially on (a) how tax preferences are treated and (b) tax-induced changes in dividend policy. This has been recognized and incorporated all too seldom in estimates of the distributional effects of this type of tax reform.

[9]For evidence that saving is substantially more responsive to the rate of return than commonly thought, see Boskin (1978).

[10]For more complete statements of this position see Feldstein (1975) and McLure (1976). Effects on capital formation would also depend crucially on the treatment of such tax preferences as the investment tax credit and accelerated depreciation.

[11]Part of the corporate tax would be a withholding tax under one method of dividend relief, that which commonly goes under such names as the withholding method, the imputation method, or the gross-up and credit. Alternative approaches to be described more fully below utilize a deduction for dividends paid or the application of a lower rate to corporate-source income which is distributed than to that which is retained. See also Section IV.

[12]For further elaboration of the points made in this section, see McLure (1979, chapter 5). No effort is made to assess the political forces for and against integration. But see McLure and Surrey (1977).

[13]This quotation is from Goode (1946, pp. 20-21). This remains one of the best analyses of the problems of integration. For more recent discussions, see Royal Commission on Taxation (1966) and U.S. Department of the Treasury (1976).

[14]Under U.S. law no deduction can be taken for interest paid to finance holding securities of state and local governments, which pay tax-exempt interest. Whereas this prohibition currently impinges upon some high income taxpayers, any shareholder in a firm holding these securities could, strictly speaking, be affected under integration. Similar comments could be made about other tax-sheltered activities.

For more on the possibility that corporations might come to be used for tax shelter purposes, much as partnerships have, see Warren (1978 p. 353). The argument in the text could, however, be turned around to say that the reason we have so much trouble with integration is that we have departed so far from a Haig-Simons definition of income. With more accurate measurement of economic income integration would be easier.

[15]The recommendations of the Royal Commission on Taxation and those in Blueprints for Basic Tax Reform differ in that the former would separately tax dividends (on a grossed-up basis, to be defined below) and (at the option of the corporation) allocated retained earnings (again on a grossed-up basis), making basis adjustments only in the latter case. While the two are algebraically equivalent, the Blueprints scheme outlined in the text seems administratively preferable. For further discussion of this point, see McLure (1979, chapter 5). In addition, retention of the corporate income tax as a withholding device was inherent in the proposals of the Royal Commission on Taxation, whereas in Blueprints it was not seen to be necessary.

[16]This was the decision reached in Germany. For a description of European deliberations on integration and dividend relief, see Gourevitch (1977).

[17]For descriptions of the systems of dividend relief found in various developed countries, see Ault (1976 and 1977), Hammer (1975), OECD (1973), Sato and Bird (1975), and Snoy (1975). Skeptics may, however, argue that full integration is no less feasible than is dividend relief if one is willing to make the pragmatic sacrifices to administrative feasibility that other countries have made in implementing dividend relief. See also Section V.

[18]For further descriptions of these approaches see McLure (1975). There are, of course, other ways to relieve the "double taxation of dividends." For example, the corporation income tax could be abolished, dividends could be excluded from personal income, a credit could be given on personal tax returns for some portion of dividends received, without the dividends being grossed-up, or corporations could be given a deduction equal to some percentage of its capital. Because these schemes have such adverse allocational and distributional effects, they are not considered further. For a description of their defects, see McLure (1975).

[19]If, in addition, domestic shareholders owned shares in foreign firms they could be treated differently under the two approaches. That is, if relief from double taxation of dividends paid by domestic firms were provided through the dividend-paid deduction or split rate, its benefits would not extend to domestic shareholders in foreign firms. If,

however, gross-up and credit were allowed on all dividends, including those from foreign sources, domestic shareholders in foreign firms would benefit from dividend relief. In no country is the latter practice followed; nor is it likely to be. It is therefore ignored in the remainder of this section.

[20]For a more detailed discussion of the issues covered in this section, see McLure (1979, chapter 4) and Warren (1978).

[21]This is not to say that all existing tax preferences make sense and should be continued. Indeed, many do not. (It has been argued that many preferences exist only as an offset to the overtaxation that captial invested in the corporate sector would otherwise experience.) But equity and neutrality seem to demand that whatever preferences are available in the noncorporate sector should also be available in the corporate sector if integration or dividend relief is provided.

[22]It may help to clarify this term if we note that a deduction of 10 is worthless to a taxpayer in the zero marginal tax bracket but is worth 7 to one in the 70 percent marginal rate bracket. By comparison, a credit of 5 is worth that amount to all taxpayers, regardless of their marginal tax bracket. If corporate preferences were passed through to individual shareholders they would be worth the amounts just indicated to shareholders in the various marginal tax brackets. If, on the other hand, preferences were "washed-out," they would be worth nothing to all shareholders.

[23]Contention that a given tax preference should not be passed through seems generally to reflect a belief that the preference should not exist in the first place. The view that preferences should be available only if corporate-source income is not distributed appears to be relevant primarily for such preferences as the investment tax credit and accelerated depreciation, both of which can be argued to be intended to increase saving and investment.

[24]In fact, tax preferences are not fully nullified on income that is distributed, except in Germany, where dividend relief is complete. In countries such as France and the United Kingdom the précompte or advance corporation tax (to be explained further immediately below) equals only the rate at which the shareholder's gross-up and credit is calculated, rather than the higher corporate income tax. Thus, distributed corporate-source preference income is taxed at exactly the marginal tax rate applicable to ordinary income of the shareholder, whereas the availability of only partial dividend relief implies that distributed income which is fully taxable is taxed at aggregate (corporate and personal) rates which exceed the shareholder's marginal tax rate. Thus in one sense the preference is nullified; in another it is not. For more on this point see McLure (1979, chapter 4). For a more detailed description of the treatment of tax preferences in the British, French, and German systems, see McLure (1979, chapter 3).

[25]Among the many additional complications which will not be considered further here is the need to decide, for example, whether dividends are assumed to come in proportionate amounts from taxed and preference income of the current year or from accumulated taxed and preference income.

[26]Germany actually employs a hybrid system which involves both a split rate (56 percent on retained income and 36 percent on distributed earnings) and an imputation approach. The shareholder is allowed a gross-up and credit based on the 36 percent corporate tax levied on distributed earnings. The British advance corporation tax serves much the same purpose as the précompte.

[27]The shareholder would, of course, generally care about whether or not the firm distributed preference income. The point here is that in completing his tax return the shareholder would treat a given amount of dividends indentically, regardless of whether it was paid from taxed or preference income.

[28]This would be true, for example, under the scheme proposed by Ullman (1978) outlined below.

[29]For futher arguments along these lines, see McLure (1979, chapter 7) and Warren (1978).

[30]This discussion is based upon McLure (1979, chapter 4). Note that a literal interpretation of the variable gross-up and credit approach would require reopening tax returns of individual shareholders any time an amended return or audit ajustment altered the firm's preference income for an earlier year.

[31]This argument is presented, for example, in McLure (1979, chapter 4).

[32]This argument has been stated eloquently in Hickman (1978). It is summarized in somewhat greater detail than here in McLure (1979, chapter 7).

[33]Assuming a 48 percent corporate tax, 100 of corporate-source income could result in 52 of dividends. Twenty percent of 52 is 10.4 or 21.67 percent of the corporate tax of 48. In its use of the shareholder credit account, this proposal, which is said to resemble closely that proposed to the White House by the Treasury Department, is more like the British system with its advance corporation tax than the French or German systems.

[34]Though additions to the SCA of only 21.67 percent of tax liability would prevent shareholders from taking credit for taxes not paid, the Ullman proposal would allow contributions to the SCA equal to 30 percent of tax liability. It would therefore be substantially more liberal than exact washout of preferences under even the more generous definition of washout given in footnote 24.

[35]The tax reform package allegedly recommended to President Carter by the Treasury Department in September 1977 reportedly included such a proposal. Taxation of long-term captial gains as ordinary income, also included in that tax reform package, would strengthen the argument made in the text, but is not necessary for it.

[36]This argument would be stronger if tax-exempt organizations were to benefit from dividend relief. If they did not, these organizations would be indifferent between receipt of dividends and accumulation of retained earnings, so far as tax considerations are concerned.

[37]Any increase in dividend payout ratios induced by dividend relief would, of course, be constrained by provisions of corporate indebtedness.

[38]This argument is substantially stronger if the top personal rate is not reduced to the level of the corporate rate. If, for example, the top marginal rate is 70 percent and the corporate rate is 50 percent, it becomes extremely expensive to pay dividends out of preference income to taxpayers subject to the top personal rate. For a further discussion on this issue, see McLure (1979, chapter 4).

[39]See, however, Ault (1977), Sato and Bird (1975), and McLure (1979, chapter 6). In what follows we ignore for the most part the extreme complications which result from the interaction of tax preferences and international streams of dividends. Moreover, we limit the discussion to international aspects of dividend relief, though allowance for full integration in this context does not considerably complicate matters.

[40]For a further elaboration of this and other concepts of neutrality, see Musgrave (1969, chapter 7). Most other commonly discussed criteria of neutrality are generally agreed by economists not to be relevant for policy in this area. So long as corporate parents are not taxed on the retained earnings of their subsidiaries on an accrual basis, capital export neutrality will not be fully realized. This important qualification is not considered further in this paper.

[41]For more on this see Ault (1977), Gourevitch (1977), McLure (1979, chapter 6), and Sato and Bird (1975).

[42]See Sato and Bird (1975).

[43]See Simon (1975). For the defects of employing the statutory rate to calculate the imputation credit, see McLure (1976 and 1979, chapter 4).

[44]For an excellent exposition of this subject, see Sato and Bird (1975).

## References


Ault, Hugh J., "Germany: The New Corporation Tax System," Intertax, 1976/8, pp. 262-75.

Ault, Hugh J., "International Issues in Corporate Tax Integration," Law and Policy in International Business, vol. 10, no. 10, 1977.

Boskin, Michael J., "Taxation, Saving and the Rate of Interest," Journal of Political Economy, vol. 86 (April 1978), pp. S3-S27.

Bradford, David F., "The Incidence and Allocation Effects of a Tax on Corporate Distributions," Center for Operations Research and Econometrics, Louvain, 1977.

Break, George F. and Pechman, Joseph A., Federal Tax Reform: The Impossible Dream? (Washington: Brookings Institution, 1975).

Feldstein, Martin, "Corporate Tax Integration and Capital Accumulation," Discussion Paper No. 437 of the Harvard Institute of Economic Research, 1975.

Feldstein, Martin and Frisch, Daniel, "Corporate Tax Integration: The Estimated Effects on Capital Accumulation and Tax Distribution of Two Integration Proposals," National Tax Journal, vol. 30 (March 1977), pp. 37-52.

Feldstein, Martin and Frisch, Daniel, Corporate Tax Integration: A Quantitative Comparison of Alternatives (New York: Tax Foundation, Inc., 1977).

Goode, Richard, The Postwar Corporation Tax Structure (Washington: U.S. Government Printing Office, 1946).

Gourevitch, Harry G., Integration of Corporate and Shareholder Taxes on Income: The European Experience (Washington: U.S. Government Printing Office, 1977).

Hammer, Richard M., "The Taxation of Income from Corporate Shareholders: Review of Present Systems in Canada, France, Germany, Japan, and the U.K.," National Tax Journal, vol. 28 (September 1975), pp. 315-34.

Harberger, Arnold C., "The Incidence of the Corporation Income Tax," Journal of Political Economy, vol. 70 (June 1962), pp. 215-40.

Hickman, Frederick W., "Statement on the President's 1978 Tax Reduction and Tax Reform Proposals," Hearings of the House Committee on Ways and Means, March 14, 1978.

King, Mervyn A., Public Policy and the Corporation (London: Chapman and Hall, 1977).

McLure, Charles E., Jr., "Integration of the Personal and Corporate Income Taxes: The Missing Element in Recent Tax Reform Proposals," Harvard Law Review, vol. 88 (January 1975), pp. 532-82.

McLure, Charles E., Jr., "Integration of the Income Taxes: Why and How," Journal of Corporate Taxation, vol. 2 (Winter 1976), pp. 429-64.

McLure, Charles E., Jr. Must Corporate Income be Taxed Twice? (Washington: The Brooking Institution, 1979).

McLure, Charles E., Jr. and Surrey, Stanley S., "Integration of Corporation and Individual Income Taxes: Issues for Debate," Harvard Business Review, vol. 55 (September-October 1977), pp. 169-81.

Mieszkowski, Peter, "Integration of the Corporate and Personal Income Taxes: The Bogus Issue of Shifting," Finanzarchiv, vol. 31 (1972), pp. 256-97.

Musgrave, Peggy B., United States Taxation of Foreign Investment Income (Cambridge, Mass.: Harvard Law School International Tax Program, 1969).

Organisation for Economic Co-operation and Development (OECD), Company Tax Systems in OECD Member Countries (Paris: OECD, 1973).

Rosenberg, Leonard Gerson, "Taxation of Income from Capital, by Industry Group," in Arnold C. Harberger and Martin J. Bailey (eds.), The Taxation of Income from Capital (Washington: The Brookings Institution, 1969), pp. 123-84.

Royal Commission on Taxation, Report (Ottawa: Queen's Printer, 1966).

Sato, Mitsuo and Bird, Richard M., "International Aspects of the Taxation of Corporations and Shareholders," International Monetary Fund Staff Papers, vol. 22 (July 1975), pp. 384-455.

Scott, James H., Jr. "The Optimal Capital Structure," Bell Journal of Economics, vol. 7 (spring 1976), pp. 33-54.

Shoven, John B., "The Incidence and Efficiency Effects of Taxes on Income from Capital," Journal of Political Economy, vol. 84 (December 1976), pp. 1261-83.

Simon, William E., Testimony Before the House Ways and Means Committee, July 31, 1975.

Snoy, Bernard, Taxes on Direct Investment Income in the EEC: A Legal and Economic Analysis (New York: Praeger, 1975).

Stiglitz, Joseph E., "Taxation, Corporate Financial Policy, and the Cost of Capital," Journal of Public Economics, vol. 2 (February 1973), pp. 1-34.

Tambini, Luigi, "Financial Policy and the Corporation Income Tax," in Arnold C. Harberger and Martin J. Bailey (eds.), The Taxation of Income from Capital (Washington: The Brookings Institution, 1969), pp. 185-222.

Ullman, Al, Congressional Record, House, 95th Congress, Second Session, February 2, 1978, pp. H640-42 and March 22, 1978, pp. H2337-38.

U.S. Department of the Treasury, Blueprints for Basic Tax Reform (Washington: U.S. Government Printing Office, 1976).

Warren, Alvin C., Jr., "Integration of the Individual and Corporate Income Taxes," a paper presented to an ALI-ABA conference on federal tax simplification, Warrenton, Virginia, January 1978.