CHAPTER 3

OBSERVATIONS ON U.S. CORPORATE TAX POLICY AND THE 1992 U.S. TREASURY REPORT ON INTEGRATION*

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1. INTRODUCTION

From afar, U.S. federal business tax policy is probably quite difficult to understand or to predict, even though its reform is routinely publicly debated and studied. A number of Presidents have ordered major studies of the federal tax system as evidenced by well-known U.S. Department of the Treasury monographs. For example, over the last 20 years, there have been three major Treasury studies of alternatives to the current U.S. income tax system:

- U.S. Department of the Treasury (1977), *Blueprints for Basic Tax Reform* (Treasury I);[1]
- U.S. Department of the Treasury (1984), *Tax Reform for Fairness, Simplicity, and Economic Growth (3 volumes)*. (Treasury II); and
- U.S. Treasury Department (1992), *Report of the Department of the Treasury on Integration of The Individual and Corporate Tax Systems: Taxing Business Income Once* (Treasury III).

While each has generated interest among tax professionals, academics, and even business taxpayers, the immediate relation of these studies to actual major federal tax legislation remains somewhat tenuous. For example, one would be hard pressed to find much in the 1977 Treasury study, *Blueprints for Basic Tax Reform*, that was reflected in the Tax Reform Act of 1978, or in the Economic Recovery Tax Act of 1981 (ERTA). However, much of the base broadening, elimination of individual and corporate tax preferences, and tax rate lowering suggested by *Blueprints* was accomplished in the Tax Reform Act of 1986.

* The authors benefited from discussions with US Tax Court Judge Herbert L. Chabot, former Deputy Chief of Staff of the Joint Committee on Taxation, U.S. Congress. The findings and opinions in this chapter are the authors and do not represent Industry Canada, Government of Canada.

1 Further, in 1978, the Carter Treasury published *The President's 1978 Tax Program: Detailed Descriptions and Supporting Analyses of the Proposals*.

As is often the case in fiscal matters, major studies may then wind up 'on the shelf' for use when a President and Treasury secretary (even of a different political party) need to accomplish yet another definition of tax reform.

Given the peculiarities of the U.S. federal corporate income tax, i.e. its unintegrated nature compared to the more favourable treatment of corporate income in other industrialised countries, it is of interest, when examining contemporary issues of business taxation, to look closely at the U.S. Treasury Department's most recent analysis of the relationship between the federal taxation of corporate source income and the federal taxation of corporate source income at the shareholder level. [2] We examine Treasury III, not with an eye to its being implemented as part of, say, the *Contract for America*, but instead as the most recent statement of how the U.S. Treasury views the double-taxation of corporate source income. Of particular interest will be an examination of the Treasury's economic analysis of the benefits of replacing the two-tier income tax with variants of a one-tier system. We hope this review will not only be useful for making sense of the 1992 Treasury Report, but also may help make sense of the recent large swings in U.S. corporate tax policy.

Our goals are thus to:

- provide a background to understand recent U.S. business tax policy debate[s] on corporate tax integration; and
- examine and explain the 1992 Treasury Department Corporate Integration Study.

2. THE U.S. TWO-TIERED 'CLASSICAL INCOME TAX SYSTEM' AND ASSOCIATED PROBLEMS OF RELIEF

It is useful initially to characterise what is usually called the 'classical' two-tiered income tax system. Here, we note briefly what a classical two-tier income tax system is, and then the basic remedies that have been devised to alleviate the double-taxation of corporate source income.

2.1 Classical Two-Tier Tax System

Under the classical two-tier income tax system, corporations capitalise through equity (sale of shares), debt and retained earnings. Interest payments to lenders on borrowed monies are deductible as a cost of doing business, while dividend payments to investors are not. Profits are taxed at the corporate level and then at

2 It should be noted that Treasury III was the Department's response to Section 634 of the Tax Reform Act of 1986 which directed the Secretary of the Treasury to study reforms of corporate income under Subchapter C of the Internal Revenue Code.

the shareholder level when companies pay dividends out of after-tax corporate income. The return of capital to shareholders is usually tax-free, as are divisions of capital through share-splitting.

Proceeds to the shareholder from the sale of corporate shares are usually taxed at more favourable tax rates to the extent that the sales price exceeds the original purchase price, and the period during which the appreciation took place is more than 6 months or a year. These proceeds of sale then become so-called *long-term* capital gains. The favourable tax treatment of such transactions is accomplished either by excluding an arbitrary portion of the appreciation (the capital gains exclusion percentage), or by indexing the appreciation for inflation.

When the corporate tax rate is below the shareholder's top marginal tax rate, a common occurrence in U.S. tax history, shareholders may prefer to 'park' the corporate income at the corporate level; if the corporate tax rate is higher than the shareholder's top marginal tax rate, shareholders may well prefer to realise corporate income earlier, or forego the benefits of the corporate form and simply be unincorporated.

2.2 Methods of Alleviating Double-Taxation of Corporate Source Income

There are at least four major ways to go from double-taxation of corporate source income to single-level taxation of corporate source income. They necessarily involve alteration either in what is deductible at the corporate level in capitalising, or what is recognised as income by the shareholder upon receiving corporate source dividends:

1. the exclusion of dividends from personal income at the shareholder level;
2. the attribution of all corporate income (including retained earnings) to the shareholder, and provision of a credit to the shareholder for corporate income taxes paid;
3. deduction at the corporate level of dividends paid; and
4. eliminating the deductibility of both interest and dividends at the corporate level, and excluding interest and dividend payments from personal income.

2.3 Problems in Alleviating the Double-Taxation of Corporate Source Income

Each of the outlined approaches to relieving the double-taxation of corporate source income ultimately must deal with a number of problems which are part of the U.S. economic fabric.

Revenue Losses: Any method of relieving the double-taxation of corporate source income must recognise that such tax relief entails the inherent loss of tax revenues. The extent of the revenue loss depends on how current and future owners

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of corporate equities are treated under the integration scheme, and whether or not tax rates on corporations (for withholding) and individuals will need to be adjusted to offset part of the revenue loss. To the extent that economic efficiency is enhanced by alleviating the economic distortions caused by the current double-taxation of corporate source income, it is conceivable that economic growth can forestall in part the revenue losses resulting from integration.

Domestic Tax-exempt Shareholders: There are several classes of domestic tax-exempt owners of corporate equity in the U.S.: public and private pension funds, individual retirement accounts and so-called Keogh plans of the self-employed, and non-profit institutions (principally charitable and educational institutions). Overall, the tax-exempt sector in 1990 held 37% ($1.239 trillions) of all corporate equity, and 46% ($703 billion) of all corporate debt.[3]

While current employees with an interest in pension trusts currently benefit from tax exemption, the exemption really amounts to long-term deferral since withdrawals and pension benefits are taxable (typically at lower individual rates) upon receipt during retirement. A second class of tax-exempt shareholders are retirees and those of moderate and low incomes who receive corporate dividends. For both groups the issue of shareholder tax credits may not be meaningful unless they are made refundable.

Foreign Tax-exempt Shareholders: Foreign owners of U.S. corporate equity are tax exempt under the U.S. personal income tax. At issue is how foreign shareholders should be treated vis à vis resident shareholders, especially with regard to issues of refundability.

Taxes Paid Out of Tax-exempt Income and Corporate Tax Preferences: Corporations receive tax preferences (e.g. tax-exempt income, accelerated depreciation, tax credits) from which they may pay dividends. A question arises as to whether or not taxes paid at the shareholder level on such dividends should be alleviated. On one hand, it can be argued that if taxes have not been paid at the corporate level on this income, then there is no need to reduce taxes at the shareholder level—double taxation does not occur. On the other hand, it can be argued that if integration is to achieve neutrality between the corporate and the non-corporate sector, then extending tax preferences to shareholders—through further tax relief at the shareholder level—is appropriate.

In relieving the first, corporate tier tax, a related question arises about whether or not one should look at the gross tax, or the tax after various corporate tax preferences are considered. For example, for the period 1962-1986, long-lived equipment investment was eligible for a 10% tax credit. Most recently, the foreign tax credit has reduced the gross federal corporate income tax by about 20%. At

3 See *Report*, Table 6.1, p. 68.

issue is whether the corporate tax to be relieved is before or after such credits and other items of tax preference.

Administrative Issues: Large U.S. corporate tax returns are extremely complex documents which often take many years to settle. Given the strong likelihood of the filing of such amended corporate returns and the fluidity of ownership, practical problems arise in determining in an orderly fashion what the corporate level tax was and the relief available to a shareholder. Part-year ownership and ownership by financial intermediaries create a variety of administrative issues which interact with the untimely nature of the determination of final corporate tax liabilities.

Distributional Consequences: While not often discussed, the provision of tax relief raises distributional questions at the shareholder level. For example, to the extent that share ownership, especially among taxable individuals, is concentrated among upper income brackets, shareholder tax relief will provide upper income taxpayers with larger tax reductions both in absolute and in relative terms. Whether or not such changes are consistent with distributional values can become a prominent political consideration, and must be weighed against likely efficiency gains.

2.4 Issues to be Explored

To make sense of the 1992 Treasury Report, we explore a series of issues as a metaphor for the paper.

- What are the relevant contexts for understanding U.S. federal business tax policy?
- Why hasn't the U.S. integrated its corporate and individual income taxes?
- What are the economic effects of the classical two-tier system?
- What integration schemes did Treasury analyse, and what key assumptions were entertained?
- What are the estimated revenue, efficiency and equity effects of corporate integration in the U.S.?
- What are the prospects for the U.S. to integrate its income taxes?

3. THE INSTITUTIONAL AND HISTORICAL SETTING OF U.S. CORPORATE TAX POLICY

3.1 Taxes and the U.S. Legislative Process

U.S. tax policy results from the interplay between the executive and legislative branches of government; 'the President proposes, and the Congress disposes' probably summarises far better than anything else how things get done. By artfully delaying tax bills until just before an election, Congress has generally been able to get a recalcitrant President to accept its definition of reform rather than what got submitted initially for consideration.

Moreover, the U.S. Congress drafts the tax laws with the advice of the U.S. Treasury and Internal Revenue Service, and Congressional revenue and budgetary estimates are binding for national budgetary purposes. This is a quite different tax policy process than in the parliamentary democracies, and has significant implications for tax policy outcomes. It is a rather rough and tumble process; a bicameral legislature ensures that much cannot readily be understood from the outside.

A related aspect of a legislatively dominated tax policy process is that legislative action on taxes can result from the actions of one or two power legislators. They can create entirely new tax policy in-stream to the consternation of Presidents and Treasury Secretaries.[4] Examples of Congressional initiatives abound. The 1976 Gift and Estate Tax Amendment came out of Conference without originating in either body and without Presidential or Treasury support. Earlier, Subchapter S, which provides for partnership treatment to small corporations, arose from a Senate floor amendment to a pending tax bill without originating in the House Ways and Means or Senate Finance Committee.

Another view of the corporate tax policy activities of the U.S. legislative branch of government is that it merely reflects the logrolling effects of regional and industrial interests. A more informed view is that Congressional tax policy is the force of continuity in U.S. democracy, as contrasted with the British traditions of continuity emanating from the executive branch and civil service. Arguably, the chairs of the Ways and Means and Senate Finance Committee are something between chaired professors of public finance and titular kings who must ultimately agree in conference committees on shifts in tax policy.[5] Moreover, as is playing out in the Summer of 1995, the inherent difference in perspective between the U.S. House and Senate, deriving from their different methods of representation, and the political longevity of office, guarantees that original differences in tax policy of the House and Senate must be compromised, often with a recalcitrant and sometimes unwilling tax administrator (the Internal Revenue Service), and a President whose suasion is limited to simply vetoing the resulting legislative compromise.[6]

4 See Blum (1959, chap. 7) for an extensive description of the frustrations President Roosevelt and Treasury Secretary Morgenthau had with a Congress dominated by their own party.

5 That is, both academics and monarchs have difficulty agreeing on matters of (self-) importance.

6 In addition, the U.S. Constitution requires that all legislative tax matters originate in the House. The import of this is to put House tax policy proposals in the position of the first offer, often on behalf of the President, of change, and the Senate in the position of both waiting until the last moment to act (and thus put the House, which is elected every two years, at risk), and countering with extreme proposals, in order to make the conference committee outcome one of significant

3.2 What is the U.S. Corporation?

Another unique feature of U.S. federal business tax policy is that the subject of tax, the corporation, is not defined by the federal government. Rather, the U.S. corporation is a creature of state government with the usual desirable characteristics for shareholders of limited liability and perpetuity as defined under state corporation law.

One economic historian[7] has observed that the U.S. corporate form was created because companies grew weary of dealing with multitudes of local officials in the 18th and early 19th century. The absence of a monarch in the U.S. context meant some sort of democratic political process had legally to grant market access or the privilege to do business. As markets grew in geographic reach, practicality demanded that state rather than local governments provide this right.[8]

The U.S. has no for-profit national corporations whose charters derive from Washington, D.C. In fact, most major U.S. corporations are incorporated in one of the smallest states, Delaware. U.S. corporations spend a great deal of effort managing their state regulatory and tax issues.

Certain, essentially interstate, disputes get resolved through the federal courts, but there is a strong element of interplay between state and federal activities. This is unheard of in other industrialised countries. To be sure, competition among the states makes for some sort of uniformity of the environment, but more often than not it is a consequence of long-term negotiation by states and business organisations, and U.S. Supreme Court decisions. Regulatory and tax forum shopping are inherent parts of U.S. business tax policy planning and negotiating. The 50 states plus the District of Columbia create regulatory and tax opportunities as does the Cayman Islands.

3.3 Why Hasn't the U.S. Integrated its Corporate and Individual Income Taxes?

As Table 1 indicates, the U.S. is among a handful of modern economies which provides neither partial nor full relief for the double-taxation of corporate source income. The question naturally arises as to why this is the case. A review of U.S.

compromise. It is rare that identical tax legislation passes in the House and Senate, needing only a Presidential signature.
Given the commonalty of fiscal provisions of state constitutions to the federal constitution, it is no surprise that the role and political processes surrounding tax matters are typically the same in state capitols.

7 This view is due to Professor Stan Engerman of the University of Rochester.

8 In return for state-wide market access, states imposed various franchise fees and taxes, usually based on capitalisation, for the privilege of doing business in the state.

tax history indicates that the absence of any form of dividend relief is relatively new, and that earlier U.S. income taxes were completely or partially integrated.

Availability of Integration of Corporate and Individual Income Taxes as of 1991, OECD(1991)

No Integration	Partial	Full
Luxembourg	Austria	Australia
Netherlands	Belgium	Finland
Switzerland	Canada	Germany
United States	Denmark	Greece
	France	Italy
	Iceland	New Zealand
	Ireland	Norway
	Japan	Turkey
	Portugal	
	UK	

Some U.S. Constitutional and Tax History

National income taxation became prominent with Congressional enactment of the Civil War income tax. The Civil War income tax was amended 6 times (perhaps to keep the target away from the U.S. Supreme Court), and was a part of U.S. tax law from 1861 to 1872. Remarkably, both corporate and partnership earnings of mercantile and industrial organisations were deemed taxable to the shareholder in the year income accrued, whether earnings were distributed or not. Accrued interest was also deemed received and taxable at the shareholder level. Banks, insurance companies, railroad and canal companies were denied a deduction for interest and dividends, and interest and dividend payments were excluded from shareholder income.[9] Widely unpopular, the personal and business income taxes were finally repealed in 1871.[10]

The Depression of 1893 caused something of a federal receipts crisis, and President Cleveland saw this as an opening to lower tariffs, and use individual and business income taxes instead to finance federal services. The 1894 income tax law was never put in effect because the Supreme Court[11] determined that

9 The reader will find this portion of the Civil War income tax to be completely parallel to the Comprehensive Business Income Tax proposal in the 1992 Treasury study of integration.

10 See Hewitt (1925).

11 See *Pollock v Farmer's Loan and Trust Company* 157 U.S. 429 (1895); on rehearing 158 (1895).

income taxes ran afoul of the apportionment requirements of the Constitution. The Court held income taxes were direct taxes, and, as in the case of political representation, had to be apportioned among the states according to population. Since the enacted federal income taxes were not so apportioned, they were determined by the Court to be impermissible. See Groves (1964, pp. 162-8) for a more complete historical review.

Undeterred, income tax theorists, presumably lawyers, laboured to find a mechanism that would pass this constitutional obstacle. The solution was to create an indirect mechanism for constitutionally taxing income, and the 1909 corporate income tax was the result. The tax was fashioned as a franchise tax for the privilege of doing business, which had been constitutionally permissible at the state level for a considerable period of time.[12] The 'privilege', however, was measured by net income which was then subjected to tax. Since the franchise or privilege theory was not readily applicable to individuals, it is understandable that income tax theorists led with a business income tax. It should be noted that the Supreme Court was looking favourably upon the privilege theory of taxation for various state business capital levies. The matter was (of course) litigated, and the Supreme Court upheld the constitutionality of a franchise tax on the privilege of doing business as measured by business income in a landmark case[13] in 1911.[14]

In March, 1913, the Constitution was amended to provide for income taxation of individuals. The fact that personal income taxation came *after* enactment of business income taxation ensured that there would be tension between taxation at both tiers. Having provided constitutionally for the taxation of individuals, it is difficult to imagine that elected officials would repeal the taxation of business, or upon fiscal exigency (e.g. World War I) be able to maintain an integrated system that did not tax corporate source income twice.

The original 1913 income tax actually excluded dividends received from individual income taxation, and denied a deduction for dividends paid at the corporate level. Interest remained deductible for corporations, and includable as income for individuals.

12 Also, state personal income taxes predated federal individual income taxes, since the states have been enabled under fiscal concurrency to exercise considerable ingenuity in fiscal matters. The Commerce and Equal Protection clauses of the U.S. Constitution are the primary restraints which the states face.

13 *Flint v. Stone Tracy Co.*, 220 U.S. 107 (1911).

14 Of related interest is the application, in 1969, of the same franchise tax theory when the Congress decided to tax private foundations. The foundations much preferred the application of a franchise tax measured by an excise income tax, rather than a direct income tax under the theory that they could better forestall rate increases on an excise tax than on an income tax.

3.4 Twentieth Century U.S. Corporate Tax Integration

It would be inaccurate to conclude that twentieth century U.S. tax policy makers have been unconcerned about the possible harm caused by the U.S. version of the classical two-tier income tax system, and inaccurate to conclude that corporate source income has been without any federal tax relief. Indeed, since the adoption of the individual income tax, there have been a series of provisions in the Internal Revenue Code which have eliminated or softened the impact of the classical double tax on corporate source income.

Front Door Integration 1: 1913-1939

As noted above, the individual income tax of 1913 excluded dividends from the definition of personal income because dividends were not deductible at the corporate rate. Since corporate and individual rates were 1%, one may observe that integration was complete. The Revenue Act of 1916 increased both the corporate and personal rates to 2%; however, in 1917 the corporate rate was raised to 4%, and the dividend exclusion at the individual level was retained.[15]

Beginning in 1917, to finance World War I, personal income tax rates were dramatically increased above their corporate counterparts; personal rates ranged up to 77%, while corporate rates were no more than 13.5% by 1927. Substantial concern arose that individuals were using corporations as a vehicle to avoid taxes.

While President Roosevelt promised in his budget message of January 3, 1936 not to raise taxes, the Supreme Court overturned an agricultural turnover tax three days later with the result that the federal government faced a $500 million revenue shortfall or about 10% of overall federal tax receipts. A variety of experts recommended significant taxes on undistributed profits to forestall using the corporate form as safe haven from individual income taxes, and to finance the revenue shortfall.[16] In 1936, the corporate tax rate was raised to 15%, and a graduated surtax applied with a top rate of 27%. Importantly, credits were allowed for taxable dividends paid to individuals, and for amounts subject to contracts restricting dividends. The excess profits tax and dividend credit remained through 1939.[17]

15 In effect, the exclusion provided a 50% surtax for individuals in the 2% bracket who owned corporate stock in corporations subject to the 4% corporate tax rate.

16 See Blum (1959, chap. 7).

17 It is interesting to note that in 1937 Treasury discussed internally the complete elimination of the 85% dividend-received deduction as well as the disallowance of the statutory deduction for interest paid, and the inclusion of tax-exempt interest received. See U.S. Treasury (1937). The excess profits tax was extremely unpopular in the business community.

Backdoor Integration: General Utilities Doctrine of 1935-1986

Between 1935 and 1986, as a result of a U.S. Supreme Court decision[18] and subsequent ratification by the Congress in Sections 311, 336 and 337 of the Internal Revenue Code, the impact of the above two-tiered structure of the corporate and individual income tax was substantially mitigated in certain important circumstances. Under the *General Utilities* rule, the distribution by a corporation of certain appreciated property to shareholders, upon the liquidation of the appreciated property, would result in non-recognition of the gain at the corporate level, and only taxed at capital gain rates at the shareholder level.

Since these techniques are not well known to the economics community, their development is chronicled below. In 1927, General Utilities purchased 50% of the shares of Island Edison Company for $2,000. In 1928, a prospective buyer offered to buy all of General Utilities holdings in Island Edison which apparently had a fair market value of more than a million dollars. If General Utilities had sold the shares directly, it would have been forced to pay significant corporate tax on the difference between $1 million dollars and $2,000. Instead, General Utilities offered to distribute the Island Edison stock to its shareholders with the understanding that the shareholders would in turn sell their stock to the prospective buyer. However, the shareholders were under no obligation to sell the shares under the terms of the distribution.

General Utilities declared a dividend in an amount equal to the value of the Island Edison stock and which was payable in shares of that stock. General Utilities distributed the Island Edison shares, and four days later the shareholders sold the Island Edison shares to the buyer on the terms previously negotiated by General Utilities' officers. The IRS held that the distribution of the Island Edison shares in the amount of $1 million was a taxable transaction to General Utilities. The Supreme Court held that the distribution was not taxable income to the corporation.

Thus, the shareholders in the General Utilities case simply paid long-term capital gains taxes on the difference between the $2,000 purchase price which the corporation paid on their behalf, and the $1 million which the shareholders realised upon sale of their shares.[19]

In a number of subsequent, related cases, the Court generally upheld its original decision with the general effect that from 1935-1986, gains at the corporate level were generally not realised (and thus no tax was paid) on corporate distributions of appreciated property to shareholders.

18 *General Utilities & Operating Co. v. Helvering*, 296 U.S. 200 (1935).

19 Thus, when the shareholders sold the stock for $1 million to the prospective buyer, the transaction was regarded as a wash transaction at the corporate level.

Certainly, Congressional sensitivity to other tax incentives for mergers led to repeated tightening of the relevant sections of the Internal Revenue Code, and culminated in 1986 with the elimination of the *General Utilities* Doctrine. Since repeal of the *General Utilities* Doctrine, there has been a veritable explosion in new business organisational forms, especially the Limited Liability Corporation, which have the essential features of a Subchapter S corporation, i.e. complete flow-through of income without any corporate level tax, and without the gross income or maximum number of shareholders limitations. However, this was also motivated by the inversion post-1986 of the maximum corporate tax rate so that, until 1994, the top corporate tax rate was above the top individual income tax rate.[21]

While interest in the extent of integration provided by the *General Utilities* Doctrine has been extremely limited in the economics research community (both government and academic),[22] it is my impression that it was extremely important for agile corporations, and its aggressive use has drawn upon the best legal tax talent in the U.S.[23]

Front Door Integration 2: Subchapter R and S

The Internal Revenue Code of 1954 integrated unincorporated business income taxes through Subchapter R. Subchapter R provided that income from partnerships, upon election by the partners, could be recognised entirely at the partnership level; however, the Treasury Department disliked the provision, and never promulgated regulations to clarify when and how a partnership could make such an election. In 1966, the Treasury Department pointed to the lack of use of the Subchapter R election, and Congress repealed it. In 1958, Subchapter S was enacted as a floor amendment to a technical corrections bill by Senator Robert Kerr of Oklahoma. The explanation of the amendment was entered into the record in lieu of a committee report. Subchapter S provided for parallel treatment of corporations with fewer than 10 shareholders and gross income under $5 million. In 1969, a proposal to increase the number of shareholders to 30 failed; it was expanded to 35 as part of the Subchapter S Revision Act of 1982.

Front Door Integration 3: Shareholder Dividend Exclusion and Credit

Since the Internal Revenue Code of 1954, individual income taxpayers have had access to a limited dividend-received exclusion of $50 in the case of single

21 See Plesko (1994) for an analysis of the effects of these changes.

22 See, however, Sunley (1988) who predicted that corporate integration would become topical as a consequence of repeal of *General Utilities*.

23 Periodically inquiring of corporate tax managers about the importance of *General Utilities* convinced me that their '... don't ask, don't say attitude' attested to its importance in corporate tax planning decisions.

Figure 2: U.S. Federal Corporate Income Taxes as % of Federal Budget, 1934–92

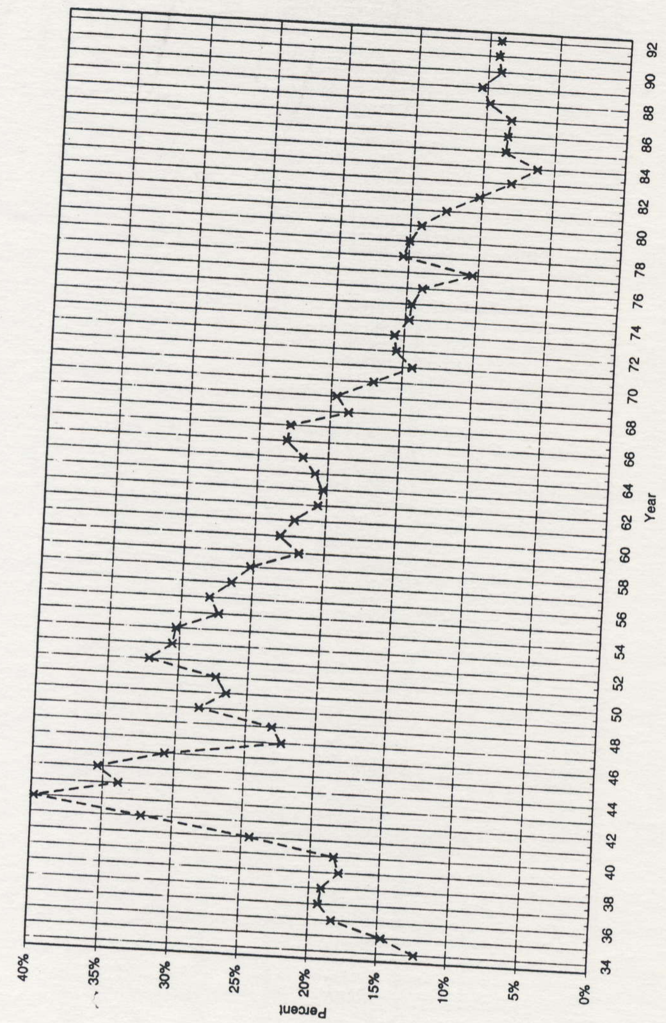
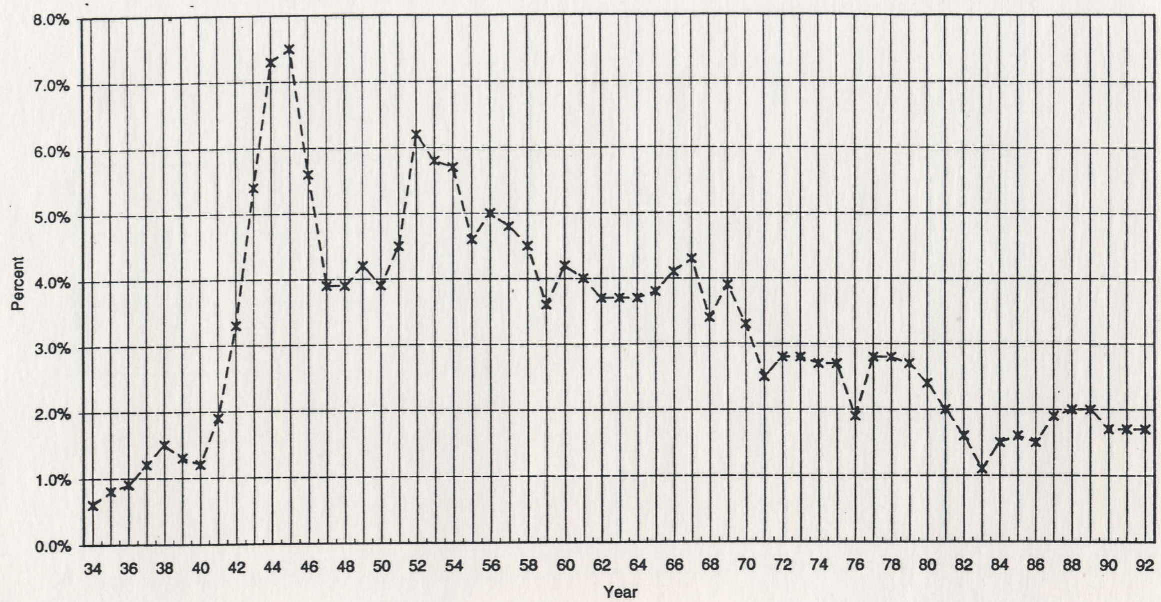


Figure 1: U.S. Federal Corporate Income Taxes as % of GDP, 1934–92



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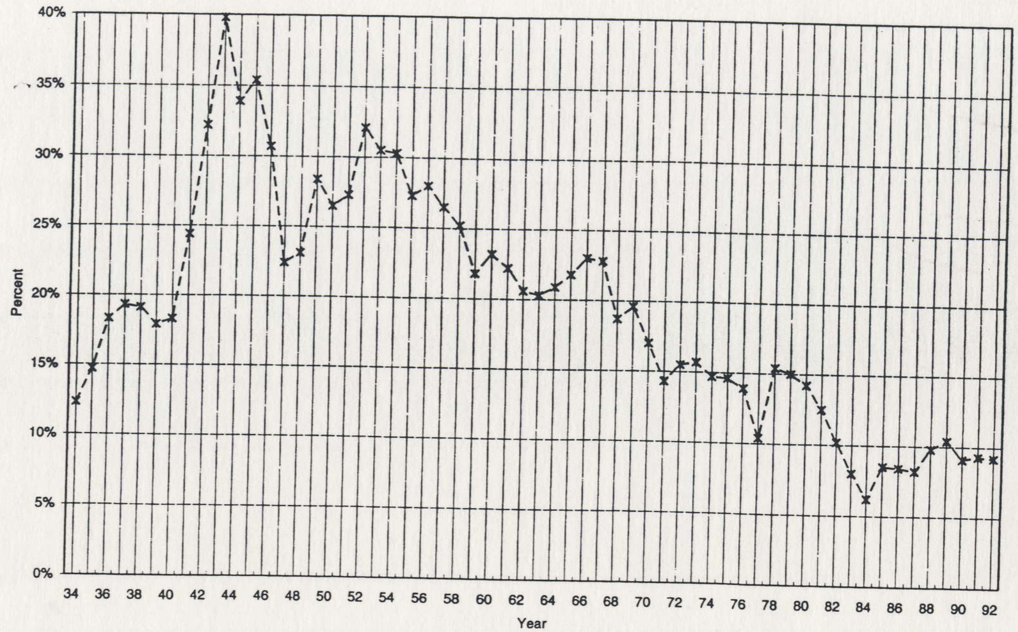

their unfavourable tax treatment: shareholders may value dividends as a signal of the firm's future prospects,[25] as a method of monitoring managers[26] and as a hedge against an uncertain future income stream.[27] Under this view, dividend taxation influences the firm's financing and investment behaviour. Thus, under this view, the double taxation of corporate income introduces a bias against incorporation, reduces the dividend payout rate, increases the cost of equity, the debt-equity ratio and the cost of financial capital, and decreases real investment.

Another view of dividend taxation, the so-called 'new view', assumes that corporate profits can be distributed to shareholders only in the form of dividends, and that established firms never need to issue new shares (real investment is always financed through debt or retained earnings).[28] Therefore, while dividend taxes are capitalised in the price of shares (and thus reduce the value of the firm), they do not affect the firm's financing and investment behaviour since new shares are never issued. Dividends are determined as a residual after the firm undertakes all profitable investments. Hence, although the double taxation of corporate income still introduces a bias against incorporation under this view, it does not affect the dividend payout rate, the debt-equity ratio and the level of aggregate real investment.

The magnitude of the effects of the classical two-tier tax system on economic welfare depends therefore on which view of dividend taxation better describes reality. There is no consensus in the theoretical literature on which view is more reasonable.[29] On the other hand, empirical evidence on the relationship between dividend taxation and dividend payout seems to favour the traditional view.[30]

Analyses of the effects of the classical system on welfare have generally assumed the traditional view; this is the point of view entertained in the 1992 Treasury Report.

4.2 U.S. Corporate Taxes and Corporate Finance

Gross U.S. corporate tax receipts amounted to $130.7 billion in 1992; this was composed of $125.2 billion of regular tax, $4.8 billion of alternative minimum tax, and about $0.5 billion of environmental taxes. Offsetting these taxes were $21.3 billion of foreign tax credits, $3.8 billion of U.S. possessions tax credits,

25 See Kose and Williams (1985).

26 See Jensen and Meckling (1976) and Easterbrook (1984).

27 See Shefrin and Statman (1984).

28 The new view is developed in King (1977), Auerbach (1979) and Bradford (1981).

29 In fact, it can even be argued that each view of dividend taxation characterises different firms at the same point in time, or the same firm at different stages in its life cycle (see Sinn, 1990).

30 See, for example, Poterba and Summers (1985), Poterba (1987), Nadeau (1988), and Nadeau and Strauss (1993).

taxpayers, and $100 in the case of married taxpayers filing jointly. Between 1954 and 1963, taxpayers also received a 4% credit. The credit was eliminated in 1963, and replaced, between 1964 and 1987, with a $100 dividend exclusion for single taxpayers, and $200 exclusion for married taxpayers filing jointly. Thus, our most recent tax history has been one of greater risk of double taxation of corporate source income.

4. ECONOMIC EFFECTS OF THE CLASSICAL TWO-TIER SYSTEM

4.1 Economic Effects

The classical two-tier tax system outlined above is usually criticised by economists for a number of adverse effects on corporate and individual decision making. These tax-induced alterations in choices are described as efficiency losses, because the presence of two-tiered taxation creates resource flows that are different from those which would occur were there no taxation, or single-tiered taxation of corporate source income. Their elimination would result in more production, e.g. higher Gross Domestic Product (GDP), with the same resources being utilised. Because greater GDP implies higher consumption as well, the economic analysis of the elimination of the double taxation of corporate source income suggests that economic welfare, subject to the usual caveats about distributional considerations not being taken into account, will be higher after integration.

Several subtle but important issues arise when determining the size of such efficiency losses. First, what level of government tax revenues would be raised under a single-tier regime? If the total tax revenue is the same as under the two-tier tax regime, it follows that some taxes must be raised to offset the revenue loss from moving from a two-tier to a single-tier tax system. These 'offsetting taxes' will cause their own additional distortions in resource use, so the efficiency gain from integration could turn out to be quite small. In fact, it could even be negative if the offsetting taxes cause more economic distortion than the double taxation of corporate income. A head tax, as an offsetting tax, would unambiguously yield an efficiency gain, but it is impractical and probably unconstitutional.

The economic effects of the double taxation of corporate income under the classical two-tier system depend critically on the effects of dividend taxation on financing and investment behaviour. The traditional view or 'old view' of dividend taxation[24] assumes that dividends have some intrinsic value that compensates for

24 For an elaborate discussion on the different views of dividend taxation, see Zodrow (1991). The impact of tax integration according to the different views of dividend taxation is also discussed in the 1992 Treasury Integration Report.

their unfavourable tax treatment: shareholders may value dividends as a signal of the firm's future prospects,[25] as a method of monitoring managers[26] and as a hedge against an uncertain future income stream.[27] Under this view, dividend taxation influences the firm's financing and investment behaviour. Thus, under this view, the double taxation of corporate income introduces a bias against incorporation, reduces the dividend payout rate, increases the cost of equity, the debt-equity ratio and the cost of financial capital, and decreases real investment.

Another view of dividend taxation, the so-called 'new view', assumes that corporate profits can be distributed to shareholders only in the form of dividends, and that established firms never need to issue new shares (real investment is always financed through debt or retained earnings).[28] Therefore, while dividend taxes are capitalised in the price of shares (and thus reduce the value of the firm), they do not affect the firm's financing and investment behaviour since new shares are never issued. Dividends are determined as a residual after the firm undertakes all profitable investments. Hence, although the double taxation of corporate income still introduces a bias against incorporation under this view, it does not affect the dividend payout rate, the debt-equity ratio and the level of aggregate real investment.

The magnitude of the effects of the classical two-tier tax system on economic welfare depends therefore on which view of dividend taxation better describes reality. There is no consensus in the theoretical literature on which view is more reasonable.[29] On the other hand, empirical evidence on the relationship between dividend taxation and dividend payout seems to favour the traditional view.[30]

Analyses of the effects of the classical system on welfare have generally assumed the traditional view; this is the point of view entertained in the 1992 Treasury Report.

4.2 U.S. Corporate Taxes and Corporate Finance

Gross U.S. corporate tax receipts amounted to \$130.7 billion in 1992; this was composed of \$125.2 billion of regular tax, \$4.8 billion of alternative minimum tax, and about \$0.5 billion of environmental taxes. Offsetting these taxes were \$21.3 billion of foreign tax credits, \$3.8 billion of U.S. possessions tax credits,

25 See Kose and Williams (1985).

26 See Jensen and Meckling (1976) and Easterbrook (1984).

27 See Shefrin and Statman (1984).

28 The new view is developed in King (1977), Auerbach (1979) and Bradford (1981).

29 In fact, it can even be argued that each view of dividend taxation characterises different firms at the same point in time, or the same firm at different stages in its life cycle (see Sinn, 1990).

30 See, for example, Poterba and Summers (1985), Poterba (1987), Nadeau (1988), and Nadeau and Strauss (1993).

$1.9 billion of general business tax credits, and $2.3 billion of prior year minimum tax credits.[31] These net taxes of $101.4 billion compare to total federal tax receipts, including $490.7 billion for Social Security, of $1,183 billion or 8.6% of total federal taxes.

Over the past several years, federal corporate taxes were a little less than 2% of GDP and, until the Tax Reform Act of 1986, a declining percentage of the federal budget; however, their importance in the economy has varied considerably since the 1930s. (See Figure 1 and Figure 2.)

Since WWII, the composition of U.S. non-financial corporate finance has moved increasingly to rely on debt. In 1946, retained earnings provided 54% of capital, and by 1990 it had grown to 94.1% of capital. New debt issues have varied from a low of 7.9% of internal funds in 1949 to a high of 44.7% in 1986. Since 1984, share repurchases have actually exceeded new issues by the nonfinancial corporate sector; these repurchases have been accomplished by greater reliance on debt.

5. MAJOR FEATURES AND FINDINGS OF TREASURY III

The 1992 Treasury Integration Report responded to a Congressional mandate in the Tax Reform Act of 1986. It is quite extensive: it numbers some 268 pages, with 12 figures, and 22 tables. It is divided into five parts, 13 chapters, and also contains three very useful appendices which describe: 1) the U.S. corporate income tax, 2) integration systems in six countries,[32] and 3) the equivalence of distribution-related integration systems. The *Report* acknowledges the assistance of 36 professional staff of the Office of Tax Analysis, U.S. Treasury; 19 professional staff of Tax Legislative Counsel (attorneys), U.S. Treasury; 6 professional staff of the International Tax Counsel, U.S. Treasury; 5 professional staff of the Benefits Tax Counsel, U.S. Treasury; and one professional staff from the Congressional Research Service.

5.1 The *Report's* Goals and Initial Constraints

The principal stated goal of the *Report* is to examine ways to make the U.S. corporate income tax neutral with regard to resource allocation. The *Report* does not endorse or recommend that corporate source income be taxed at only the shareholders' marginal tax rates, rather it recommends that *corporate source*

31 See SOI Bulletin (1994), Table 13, p. 181.

32 Australia, Canada, France, Germany, New Zealand, and the UK.

ommend that corporate source income be taxed at only the shareholders' marginal tax rates, rather it recommends that *corporate source income be taxed only once*. Neutrality is enhanced by achieving four goals in tax system design:[33]

1. Integration should make more uniform the taxation of investment across sectors of the economy;
2. Integration should make more uniform the taxation of returns earned on alternative financial instruments, particularly debt and equity;
3. Integration should distort as little as possible the choice between retaining and distributing earnings;
4. Integration should create a system that taxes capital income once.

The *Report* goes on to analyse in detail three forms or schemes of integration, all of which are designed with the following, (revenue-loss driven) constraints:[34]

Constraint 1: The benefit of corporate-level tax preferences should not be extended to shareholders;

Constraint 2: Integration should not reduce the total tax collected on corporate income allocable to tax-exempt investors;

Constraint 3: Integration should be extended to foreign shareholders only through treaty negotiations, not by statute; and

Constraint 4: Foreign taxes paid by U.S. corporations should be treated, by statute, identically to taxes paid to the U.S. Government.

Constraint 2 means that Treasury does not support refundable integration schemes for tax-exempt pension funds or non-taxable individuals, and *Constraint 4* means that for the purpose of relieving double-taxation of corporate source income, the taxes to be relieved are after application of the foreign tax credit, and are thus lower by about $20 billion/year.

5.2 Contours of Treasury's Alternative Integration Schemes

The *Report* examines rather completely[35] three integration schemes: a dividend-received exclusion, a shareholder allocation scheme, and a comprehensive business income tax (CBIT). It also examines two others which it views unfavourably: an imputation credit scheme and a deduction-for-dividends-paid scheme.

33 See *Report* (1992), p. 13.

34 *Ibid.*, pp. 15-16.

35 In working through the details of each scheme, it is evident that Treasury was concerned about implementation issues. Anti-abuse considerations, as well as revenue considerations, are quite prevalent throughout the *Report*; this differs from the treatment of integration in *Treasury I* and *II*.

(Acceptable) Integration Scheme 1: Dividend Exclusion

Under the dividend exclusion scheme, corporations would pay tax at 34%, and maintain a set of accounts in which they would record the amount of corporate taxes paid out of taxable corporate income. Per-share amounts in the Excludable Distributions Account (EDA) would be reported to each shareholder along with their dividends received, and shareholders would include in their taxable income only those cash dividends in excess of the reported EDA amount[s]. Tax-exempt shareholders would not have access to the EDA; this is equivalent to denying refundability under a shareholder credit or imputation scheme.

It should be noted that this approach only relieves double-taxation upon distribution.

(Questionable) Integration Scheme 2: Shareholder Allocation

Under the shareholder-allocation integration scheme, tax relief is provided both for distributed and undistributed earnings, and is analogous to what is usually called complete or full integration. A corporation would report or allocate to each shareholder its taxable income and corporate taxes paid. Shareholders would include in their taxable income the allocated amount, and use the reported corporate taxes paid as a tax credit against their calculated personal taxes. If the reported credit exceeded the tax on allocated income, it could be used to offset other taxes (on wage and salary and interest income); however, the reported credit would not be refundable in whole or in part. Cash dividends actually received would be excludable from personal income because the allocated amounts already reflect dividends paid to the extent of the taxpayer's basis in the corporate stock.

The basis in their shares would be increased by the amount of the allocated corporate income minus the credit for taxes paid. While the *Report* does not endorse this type of integration, it works through its administrative details.

The *Report* suggests that such a pass-through integration scheme not pass through losses to shareholders, makes the corporate tax a form of withholding tax, requires only aggregate reporting, and, importantly, would deny domestic and foreign tax-exempt shareholders integration tax relief. However, it would require corporations to close its books on a quarterly basis in order to allocate income to shareholders of record, and would result in what the Treasury believes would be a series of excessive administrative complexities.

(Long-term) Integration Scheme 3: Comprehensive Business Income Tax (CBIT)

The CBIT would treat debt and equity at the corporate level the same by denying deductions at the corporate level for interest and dividend payments. Further, it would exclude interest received and dividends received from taxable income (at the corporate and shareholder levels). CBIT would apply both to corporate and non-corporate businesses. Under the CBIT, a single rate of tax, the top corporate rate, would apply to corporate source income, and the receipt of the returns to the sources of capital, individual, tax-exempt taxpayer, etc. would not be taxed at all.

Losses would not be passed through to shareholders, and the *Report* works through various ways to handle preference income transmitted to shareholders. Under the CBIT, the *Report* recommends that U.S. government debt and home mortgage debt be excluded from CBIT debt. Interest from these instruments would thus be taxable, and mortgage interest payments would also be deductible. Since interest payments on corporate debt would be tax-free to recipients, it would make them compete directly with state and local debt which would continue to be tax-free.[36]

Pension funds represent a special problem, and the *Report* suggests a number of ways that the current-law tax-free accumulation of income and capital gains could be continued. At issue is the fact that pension investments in CBIT debt and equity instruments would receive after-tax rates of return, whereas now, in the case of corporate debt, pension funds are conjectured by the *Report* to receive a pre-tax rate of return since corporate interest payments on debt are deductible at the corporate level.

(Unacceptable) Integration Scheme 1: Shareholder Imputation and Credit

The *Report* finds the shareholder gross-up and credit approach, often called the imputation approach, to corporate integration to be unworkable despite its general use in other industrialised countries. Under the imputation method which the *Report* prefers, a corporation would pay tax at a 34% rate, and shareholders would include in their taxable income the sum of cash dividends and the corporate tax credit associated with the dividend, and offset personal tax liability with the reported corporate tax credit. The credit would not be refundable, but could be used to offset individual tax liabilities for other taxes. The *Report* favours providing only a 31% credit rather than 34% credit, reflecting, as elsewhere, its preference to eliminate one level of tax, but in a least-revenue-cost manner.

Corporations would maintain a shareholder credit account (SCA) for corporate taxes paid, and attach a credit from this account to dividends paid, so-called 'franking the dividend'. Corporate tax refunds and 'franking of dividends' reduce the SCA account, while increased corporate tax payments and the inter-corporate dividends with their own associated credits would increase the SCA account.

36 See *Report*, p. 54.

(Unacceptable) Integration Scheme 2: Dividend Deduction

Despite the fact that the Treasury recommended some form of dividend deduction scheme to the Congress in 1984 and 1985, the *Report* found any dividend deduction scheme unacceptable because it would provide completely tax-free corporate source income to tax-exempt entities and foreign shareholders.[37] The *Report* is clear that first-round revenue losses under a dividend deduction proposal are far larger than in the other flat-rate proposals considered, and that this had considerable impact on their evaluation.

5.3 Revenue and Economic Modelling Strategies

Perhaps the most significant aspect of the *Report* to the economic research community is its exhaustive analysis of the economic effects of the various integration schemes considered. Auten and Silverstein (1993) explain Treasury's five-level economic modelling strategy that it pursued in analysing integration tax policy schemes:

1. *Static-Level Revenue Analysis:* with random, stratified samples of recent corporate and individual income tax returns, one can change accounting rules and recalculate taxes due. For example, the exclusion of dividends received would change the level of individual income, and the level of individual tax liabilities.
2. *Secondary Static-Level Revenue Analysis:* higher current depreciation deductions could, depending on the policy in question, mean higher future depreciation deductions. To the extent that unused tax credits and operating losses are carried on the observed, current corporate tax return, they may get used up when next-year accounting tax calculations are performed. This would be an example of a secondary static revenue calculation.
3. *Partial Equilibrium or Direct, Taxpayer-Level Dynamic Effects:* with numerical estimates of the responsiveness of taxpayer decision variables, reactions can be simulated to hypothetical changes in tax laws. For example, integration may be thought to encourage greater investment, so the observed investment on current corporate tax returns can be increased by the behaviourally-induced amount.
4. *General Equilibrium, Economy-Wide Resource Allocation Effects:* large scale tax reform, such as the various integration schemes outlined, will change corporate debt-issuance and equity-issuance behaviour, affect real investment

37 We find it somewhat remarkable that the *Report* did not try to work through the mechanics of applying a shareholder-level tax on dividends received in the same manner, for example, that non-business income of non-profits is taxed under current law. Similarly, it is unclear why bilateral tax treaty negotiations could not deal with such taxation issues, and consideration be given to the continuation of dividend withholding for certain classes of dividend recipients.

decisions, and dividend pay-out behaviour. Further, resources might be expected to flow to the corporate sector from the non-corporate sector. To analyse this, one needs an economic model (a computable general equilibrium (CGE) model) with industrial detail for the corporate and non-corporate, household, and tax-exempt sectors, and a financial sector with enough detail to account for different capitalisation instruments. Such models should contain equations describing use of capital, labour, and intermediate goods, and the effects of tax policies on factor choices as well as product prices. Similarly, the household sector's income will be affected by payments to it, and its consumption and investment decisions affected by how tax policy impacts on portfolio choices through changing after-tax rates of return to different assets. The *Report* relied on four different CGE models[38] to identify the economic efficiency gains of the various integration proposals.

5. *Macro-Economic Feedback Effects:* finally, business cycle effects may be expected when there is a major change in federal budgetary policy such as integration.

Treasury first used the CGE models to get the major effects of the various integration schemes, and then ran the changes in income etc. through the corporate and individual tax calculators to obtain estimates of the revenue effects of each proposal.

5.4 Estimated Revenue Effects

Given the above-noted strong constraints placed on the design of the various implementation schemes,[39] it is perhaps no surprise that the first-round estimated revenue losses from three of the four integration schemes were extremely modest, viz. between $36.8 billion and $13.1 billion in reduced revenues (see Table 2). To put these initial revenue losses in perspective, total net corporate tax collections were $107 billion in 1992, and total net individual income tax collections were $448.4 billion, or a total of $555.4 billion. Thus, estimated revenue losses, before compensating tax increases, were as little as 2.4% or as much as 6.6% of actual collections.

Note that the CBIT proposal actually raises revenues; this is because interest payments, previously deductible at the corporate level and taxable at various individual marginal tax rates, are now entirely taxed at the top corporate rate of 31%. Dividends, previously taxable at various corporate rates and various individual rates, are now also taxed at the top corporate rate of 31%.

38 Auten and Silverstein (1993, pp. 8-10).

39 Recall that tax-exempt entities were not, as a matter of policy, allowed to benefit from any of the integration schemes, nor were shareholders permitted to benefit from corporate-level preferences.

TABLE 2
Estimated Net Revenue Effects of Integration Schemes
($ billions at 1991 GDP Levels)

Dividend Exclusion Scheme	–$36.8
Shareholder Allocation Scheme	–$13.1
CBIT Scheme	$3.2
Imputation Credit Scheme	–$14.6

5.5 Estimated Efficiency Effects: *Report* and *Ballard et al.*

Table 3 displays the estimated efficiency gains of the four integration schemes for two of the four CGE models used in the *Report*. Recall that in the CGE modelling of efficiency effects, taxes are either increased by a lump sum amount (a perfectly non-distortionary head tax), or, more realistically, taxes on capital income are proportionately (or multiplicatively) scaled up to maintain total, pre-integration taxes. Column 2 of Table 3 shows the efficiency gains as a consequence of using a lump sum tax to make up the revenue losses in Table 2 above, while Column 3 of Table 3 displays the efficiency gains resulting from scaling up existing capital income tax rates. The entries for each column are, respectively, the percentage change in 1991 total consumption, and the dollar value at 1991 levels of this economic efficiency gain. The first panel of Table 3 shows the estimated efficiency gains found by Ballard, Fullerton, Shoven, and Whalley (1985) which is probably the most comprehensive study of the economic welfare impact of corporate integration. The second and third panels show the two estimated efficiency effects based on two CGE models used in the *Report*.

Several points are evident from a review of these efficiency estimates. First, they are sensitive to the replacement tax that is used to make up the revenue loss. Generally the efficiency gains are greater when a lump sum tax is used in conjunction with any integration scheme, as compared to the efficiency gains obtained by a proportional increase in capital taxes. This should come as no surprise, since lump sum scaling is less stationary than multiplicative scaling. However, since head taxes are not a viable option in the U.S. context, we must focus our attention on Column [3], rather than [2].

Second, the shareholder allocation and CBIT integration schemes generate the larger efficiency gains. The range of gains is between 0.1% and 0.7% of 1991 consumption across the three models. Third, the efficiency gains from dividend gross-up or imputation credits is relatively modest: estimates range from 0.1% to 0.3% of 1991 consumption levels. These estimates are consistent with, but at the lower end of others in the academic literature.[40]

40 See, for example, Gravelle (1989).

The small magnitude of the estimated efficiency impact of integration can be explained by the fact that there are basically several factors dampening the impact of two-tier dividend taxation on economic output:

- the role played by corporate financial policy in cushioning the impact of dividend taxation on the corporate financial cost of capital;
- the responsiveness of aggregate real investment to changes in the corporate financial cost of capital; and
- the responsiveness of economic output to changes in aggregate real investment.

TABLE 3
Economic Efficiency Effects of Corporate Integration:
Percent Change in 1991 Consumption and $ Efficiency Gain

Plan	Lump Sum Scaling [2]	Multiplicative Scaling [3]
Ballard, Fullerton, Shoven and Whalley (1986)		
Shareholder Allocation	1.0% ($39.7)	0.5% ($21.4)
Dividend Deduction from Personal Income	0.4% ($18.1)	0.0% ($0.3)
Dividend Deduction from Corporate Income	0.5% ($20.6)	0.4% ($14.5)
Dividend Gross-Up	0.4% ($17.4)	0.3% ($12.4)
Treasury Report(1992) Augmented Harberger Model		
Shareholder Allocation	0.4% ($14.3)	0.1% ($5.3)
Imputation Credit	0.3% ($13.1)	0.1% ($4.5)
Dividend Exclusion from Personal Income	0.3% ($11.9)	0.1% ($4.5)
CBIT	0.3% ($11.9)	0.4% ($16.4)
Treasury Report(1992) Mutual Production Model		
Shareholder Allocation	0.7% ($29.5)	0.4% ($16.4)
Imputation Credit	0.7% ($26.6)	0.2% ($6.6)
Dividend Exclusion from Personal Income	0.5% ($21.7)	0.2% ($7.8)
CBIT	0.7% ($30.3)	0.7% ($29.9)

Financial Policy as a Cushion

Dividend taxes affect the financial cost of capital through the cost of equity. There are two ways that corporations may use financial policy to cushion the impact of dividend taxation on the financial cost of capital: the first way is by adjusting dividend payout and the second way is by substituting the use of debt for equity. Under the traditional view of dividend taxation, adjusting dividend payout reduces the impact of dividend taxation on the cost of equity component of the financial cost of capital. Substituting the use of debt for equity just further reduces the overall impact of dividend taxes on the financial cost of capital.

Thus, corporations may use financial policy to partially avoid dividend taxes. The implication of this is that the reduction in the double taxation of dividends resulting from integration might not significantly reduce the financial cost of capital.

Corporate Financial Cost of Capital and Aggregate Real Investment

Another important issue in assessing the impact of integration on welfare is the responsiveness of aggregate real investment (and, by extension, the level of capital stock and the aggregate supply curve) to changes in the corporate financial cost of capital. Although integration might reduce the corporate financial cost of capital, and therefore result in a significant re-allocation of investment between the corporate and non-corporate sectors, several factors may dampen its impact on aggregate real investment:

- the extent to which labour and capital are substitutable in production—to the extent that firms can substitute labour for capital, the demand for capital will be more responsive to a reduction in its cost and integration will result in more investment;
- corporate investment is only a fraction of aggregate investment (approximately one-third)—in other words, the overall impact of integration on aggregate investment is likely to be much smaller than on corporate investment; and
- the extent to which saving is responsive to changes in the rate of return—although integration might increase the demand for capital, integration might not increase the supply of saving and, as a result, might not significantly increase capital stock.

One must keep in mind, however, that even if integration would not increase real investment (supposing, for example, that the total supply of saving is fixed), it would still increase welfare because of the increased efficiency with which the existing capital is used.

Responsiveness of Economic Output to Changes in the Level of Capital Stock

Another factor that may dampen the impact of integration on aggregate economic welfare is whether or not the economy is operating at full employment at the time of integration. The increase in welfare due to the movement along the aggregate supply curve is smaller if one assumes, as is generally done in general equilibrium analyses of integration, that the economy is operating at full employment at the time of integration.

5.6 Distributional Effects

Analysing the distributional effects among individual taxpayers of alternative integration schemes is complicated by an absence of baseline data on the type of equity holdings across income classes. Further, the portfolio behavioural responses of individual shareholders, while actively conjectured in the theoretical finance literature, remains empirically unstudied due to an absence of micro data.

To gain some insights on the distributional effects of alternative integration schemes, the *Report* makes two alternative long-run incidence assumptions: (1) that capital and labour share equally in the incidence of the current corporate income tax, and (2) that capital uniformly bears the incidence of current corporate income tax. Since actual individual income tax returns report dividend and other capital (rental and royalty) income as well as wages (labour income), the current corporate income tax and the alternative integration schemes can be attributed to individual households or family units, and effective tax rates tabulated by income strata.[41]

Overall, current 1991 law at 1991 income levels indicates that the effective tax rate of the corporate income tax on individuals' capital income was 20.9%, and displayed significant progression across the eight income groups tabulated. Effective tax rates vary from a 10-11% range for the lowest income grouping ($0-$10,000 of Family Economic Income), to effective tax rates in the 21-24% range for those with Family Economic Income in the $100,000-$200,000 range. That is, both current law and the various proposals display a fair bit of progressivity.

While progressivity is evident under current law and the alternatives, there is very little difference in the distributional effects of the various integration schemes, and, as a consequence, one cannot identify, on distributional grounds, which of the integration schemes might be more attractive.

6. PROSPECTS FOR U.S. CORPORATE INTEGRATION

We have sought in this paper to provide a context within which to view the 1992 Treasury Report on Corporate Tax Integration. Historically, U.S. federal tax policy has been characterised by periods of complete integration—through the taxation of dividends and interest payments at the corporate level, and exclusion of interest and dividends at the individual level (the Civil War Income Tax) to periods when the classical two-tier tax has been present. However, until the Tax Reform Act of 1986, there have been significant avenues for the agile to mitigate the full force of classical double taxation of corporate source income. Since the Tax Reform Act of 1986, U.S. corporate tax policy has been closest, perhaps ever, to a true classical system, and the Treasury Report is thus quite timely.

41 It is unclear from the *Report*, however, whether total net corporate tax receipts are attributed to individuals, or only that portion of net corporate receipts attributable to non-tax-exempt recipients, are allocated among individual households. Since the tax-exempt sector held 37% of all corporate equity this is a matter of some consequence.

The *Report* systematically reviews and then estimates the efficiency, revenue, and distributional consequences of all of the major contenders for full and partial corporate tax integration. Sensitive to forestalling very large revenue losses by providing tax relief to various exempt groups of individuals and organisations, the *Report* carefully balances its economic goal of furthering economic neutrality with political and revenue realities.

The *Report* is the most thorough Treasury review of integration alternatives, and their administrative implications. Further, it contains a wealth of comparative information about the details of integration schemes in other industrialised countries.

Many associated with the Treasury effort have characterised the estimated efficiency gains of several of the integration schemes as 'large'; however, at least to these authors, a complete reshuffling of the rules governing the taxation of dividend and interest income to gain at most 0.7% of 1991 consumption, or $29.9 billion, seems to be an extremely difficult project to sell to the Congress. With the current annual federal deficit on the order of $250 billion, and a Medicare trust fund now projected into bankruptcy in the next several years, efficiency gains on this order seem to be very difficult to put high up on the Nation's fiscal agenda.

While the direct prospects for integration of U.S. corporate and individual income taxes do not look promising in the near term, there is considerable pressure, as evidenced by the explosion of limited liability corporate laws in the states and continued growth in federal Subchapter-S entities, for relieving the double taxation of corporate source income. On the other hand, the growing Congressional interest in various forms of federal consumption taxation may portend an indirect solution to the double-taxation issue.[42] For example, the CBIT approach, which Treasury favours in its *Report*, in conjunction with a possible flat individual income tax may provide a vehicle for eliminating the multiple taxation of corporate source income.

42 See Head (1993) for a discussion of this approach in the Australian context.

References

Auerbach, Alan J. (1979), 'Wealth Maximization and the Cost of Capital', *Quarterly Journal of Economics*, 93, 433-446.

Auten, Gerald and Gerald Silverstein (1993), 'Microsimulation Modeling of Major Tax Reforms: Integration of Corporate and Individual Income Taxes', Office of Tax Analysis, U.S. Treasury Department, January.

Ballard, Charles L., Don Fullerton, John B. Shoven, and John Whalley (1985). *A General Equilibrium Model for Tax Policy Evaluation*. Chicago, Illinois: University of Chicago Press.

Bittker, Boris I. and James S. Eustice (1994), *Federal Income Taxation of Corporations and Shareholders,* Student Edition. Boston: Warren-Gorham-Lamont.

Blum, John Morton (1959). *From The Morgenthau Diaries. Years of Crisis, 1928-1938.* Boston: Houghton Mifflin Company.

Bradford, David F.(1981), 'The Incidence and Allocation Effects of a Tax on Corporate Distributions', *Journal of Public Economics*, 15, 1-22.

Bradford, David (1986), *Untangling the Income Tax*. Cambridge, Mass.: Harvard University Press.

Easterbrook, Frank H. (1984), 'Two Agency-Cost Explanations of Dividends', *American Economic Review*, 74, 650-659.

Gravelle, Jane G. (1989), 'Differential Taxation of Capital Income: Another Look at the 1986 Tax Reform Act', *National Tax Journal*, 42, 441-463.

Groves, Harold M. (1964). *Financing Government,* 6th. New York: Holt-Rinehard-Winston.

Haskins, Matthew, P. (1995), 'The Theory and Politics of Tax Integration', *Tax Notes*, 67, 3, 401-423.

Head, John G. (1993), 'Imputation in the Context of Taxation Reform', in Bureau of Industry Economics, *Dividend Imputation Policy Forum September 1993*, Occasional Paper 17. Canberra: AGPS.

Hewitt, W.W. (1925), 'The Concept of Income in Federal Taxation', *Journal of Political Economy*, 33.

Hubbard, R. Glenn (1993), 'Corporate Tax Integration: A View from the Treasury Department', *Journal of Economic Perspectives*, 7,1, 115-132.

Internal Revenue Service (1994), *Statistics of Income Bulletin*, (Fall, 1994) Washington, D.C.

Jensen, Michael C. and William H. Meckling (1977), 'Theory of the Firm: Managerial Behavior, Agency Costs, and Capital Structure', *Journal of Financial Economics*, 6, 305-360.

Joint Committee on Taxation, U.S. Congress (1927), *Report of the Joint Committee on Internal Revenue Taxation, Vol 1 and 2.*

Joint Committee on Taxation, U.S. Congress (1975). *Capital Formation.*

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

Kose, John and Joseph Williams (1985), 'Dividends, Dilution, and Taxes: A Signaling Equilibrium', *Journal of Finance*, 40, 1053-1070.

Lent, George (1948), *The Impact of the Undistributed Profits Tax: 1936-37*. New York: Columbia University Press.

Nadeau, Serge (1986), *A Theoretical and Empirical Model of the Real and Financial Decisions of the Firm: Effects of Tax Integration and Other Tax Policies*, unpublished dissertation, School of Urban and Public Affairs, Carnegie-Mellon University, August, 1986.

Nadeau, Serge (1988). 'A Model to Measure the Effects of Taxes on the Real and Financial Decisions of the Firm', *National Tax Journal*, 41, 4, 467-81.

Nadeau, Serge J. and Robert P. Strauss (1991), 'Tax Policies and the Real and Financial Decisions of the Firm: The Effects of the Tax Reform Act of 1986', *Public Finance Quarterly*, 19, 3, 251-292.

Nadeau, Serge J. and Robert P. Strauss (1993), 'Taxation, Equity and Growth: Exploring the Trade-off Between Shareholder Dividend Tax Relief and Higher Corporate Income Taxes', *National Tax Journal*, 46, 2, 161-75.

OECD (1991). *Taxing Profits in a Global Economy*. Paris: OECD.

Plesko, George (1994), 'Corporate Taxation and the Financial Characteristics of Firms', *Public Finance Quarterly*, 22, 311-334.

Poterba, James M. (1987) 'Tax Policy and Corporate Saving', *Brookings Papers on Economic Activity*, 2, 455-503.

Poterba, James M. and Lawrence R. Summers (1985), 'The Economic Effects of Dividend Taxation', in E.I. Altman and M.G. Subramanyan, eds, *Recent Advances in Corporate Finance*. Homewood, Illinois: Richard D. Irwin.

Pechman, Joseph A. (1987). *Federal Tax Policy*, Fifth Edition. Washington, D.C.: Brookings.

Shefrin, Hersh M. and Meir Statman (1984), 'Explaining Investor Preference for Cash Dividends', *Journal of Financial Economics*, 13, 253-282.

Sinn, Hans-Werner (1990), 'Taxation and the Cost of Capital: The "Old" view, the "New" view, and Another View', NBER Working Paper No. 3501.

Sunley, Emil (1988), 'The Tax Challenge for the 1990s', *Tax Notes*, 40, 621-26.

U.S. Department of the Treasury (1937), *Tax Revision Studies, 1937. General Statement, Revenue Estimates, Summaries and Recommendations.*

U.S. Department of the Treasury (1977), *Blueprints for Basic Tax Reform* (Treasury I).

U.S. Treasury (1978), *The President's 1978 Tax Program: Detailed Descriptions and Supporting Analyses of the Proposals.*

U.S. Department of the Treasury (1984), *Tax Reform for Fairness, Simplicity, and Economic Growth (3 volumes)* (Treasury II).

U.S. Treasury Department (1992), *Report of the Department of the Treasury on Integration of The Individual and Corporate Tax Systems: Taxing Business Income Once* (Treasury III).

Zodrow, George (1991), 'On the "Traditional" and "New" Views of Dividend Taxation', *National Tax Journal* 44, 497-510.