

New Equity Integration

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Abstract

This paper considers the economic effects of the double-level corporate tax, examining different methods of reducing or eliminating the distortions. The core conclusion is that both standard models of the effects of the double-level tax, the traditional view and the new view, support integration methods that reduce the double tax only for new equity. The paper then examines methods of limiting integration to new equity, and avoiding churning transactions. The paper concludes that there are a number of methods of limiting the benefits of integration to new equity. While these methods are not without complexities and avoidance potential, they also avoid large windfall gains to holders of existing equity and, therefore, may be substantially less expensive.

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The tax system imposes taxes twice on corporate earnings, once at the corporate level and again when earnings are distributed by the corporation to its shareholders. This double-level tax is thought to discourage the use of the corporate form, to encourage corporations to retain earnings rather than distribute them, and to encourage the use of debt financing in place of equity. Eliminating or reducing these economic distortions by eliminating one of the two levels of taxes, a policy known as integration, is one of the central components of tax reform.

Because of its importance, there have been a large number of studies of corporate integration, including examinations of different methods of integration, and of the likely efficiency gains relative to the costs.¹ Among the most important studies and proposals, the Treasury in 1984 proposed a partial deduction for dividends.² In 1992, the Treasury Department proposed three different methods of

¹ For academic studies of these issues, see George F. Break, *Integrating Corporate and Personal Income Taxes: The Carter Commission Proposals*, 34 L. CONTEMP. PROBL. 726 (1969); Charles E. McLure, Jr., *Integration of the Personal and Corporate Income Taxes: The Missing Element in Recent Tax Reform Proposals*, 88 HARV. L. REV. 532 (1974); Martin Feldstein & Daniel Frisch, *Corporate Tax Integration: The Estimated Effects on Capital Accumulation and Tax Distribution of Two Integration Proposals*, 30 NAT'L TAX J. 37 (1977); Alvin Warren, *The Relation and Integration of Individual and Corporate Income Taxes*, 94 HARV. L. REV. 717 (1981); Alan J. Auerbach, *Tax Integration and the New View of the Corporate Tax: A 1980 Perspective*, 74 NAT'L TAX ASSOC. 21 (1981); Don Fullerton, A. Thomas King, John B. Shoven, & John Whalley, *Integration of the Corporate and Personal Income Taxes*, in A GENERAL EQUILIBRIUM MODEL FOR TAX POLICY EVALUATION 153 (Charles Ballard et al. eds., 1985); Emil M. Sunley, *Corporate Integration: An Economic Perspective*, 47 TAX L. REV. 621, 624 (1992); Michael L. Schler, *Taxing Corporate Income Once (or Hopefully Not at All): A Practitioner's Comparison of the Treasury and ALI Integration Models Colloquium on Corporate Integration*, 47 TAX L. REV. 509 (1992); George K. Yin, *Corporate Tax Integration and the Search for the Pragmatic Ideal*, 47 TAX L. REV. 431 (1992); R. Glenn Hubbard, *Corporate Tax Integration: A View From the Treasury Department*, 7 J. ECON. PERSPECT. 115 (1993); ; Michael P. Devereux & Harold Freeman, *The Impact of Tax on Foreign Direct Investment: Empirical Evidence and the Implications for Tax Integration Schemes*, 2 INT'L TAX PUB. FIN. 85 (1995); Michael J. Graetz & Alvin C. Warren, Jr., *Integration of Corporate and Shareholder Taxes*, NAT'L TAX J. ___ (Forthcoming 2016).

² DEP'T OF THE TREASURY, TAX REFORM FOR FAIRNESS, SIMPLICITY, AND ECONOMIC GROWTH: THE TREASURY DEPARTMENT REPORT TO THE PRESIDENT 118–119 (1984).

corporate integration and later in 1992 proposed to eliminate the tax on dividend income.³ The American Law Institute (“ALI”), in 1982 and again in 1989 proposed a deduction for dividends paid on newly contributed capital.⁴ In 1993, the ALI proposed yet a different method of integrating the corporate and individual income tax through a method known as the imputation credit system.⁵ This method was commonly used at the time in Europe, and is still in use in a number of countries. President Bush, in 2003, proposed a system similar to the Treasury 1992 proposal and Congress amended the dividend tax rules to move partially in that direction. This year, 2016, the Chairman of the Senate Committee on Finance is expected to propose a dividend deduction method of integration as a central component of corporate tax reform.⁶

Examinations of corporate integration tend to take a dichotomous view of integration: they take the view that we should either have what I will call full integration or none. In particular, with the exception of the ALI 1982 and 1989 studies, a feature common to integration proposals is that they apply to dividends paid on all equity (“full integration”),⁷ including equity existing at the time of

³ DEP’T OF THE TREASURY, REPORT OF THE DEPARTMENT OF THE TREASURY ON INTEGRATION OF THE INDIVIDUAL AND CORPORATE TAX SYSTEMS: TAXING BUSINESS INCOME ONCE 15–58 (Jan. 1992) [TREASURY INTEGRATION REPORT]; DEP’T OF THE TREASURY, A RECOMMENDATION FOR INTEGRATION OF THE INDIVIDUAL AND CORPORATE TAX SYSTEMS (Dec. 1992) [TREASURY INTEGRATION RECOMMENDATION].

⁴ AMERICAN LAW INSTITUTE, FEDERAL INCOME TAX PROJECT SUBCHAPTER C: PROPOSALS ON CORPORATE ACQUISITIONS AND DISTRIBUTIONS AND REPORTER’S STUDY ON CORPORATION DISTRIBUTIONS 328 (1982) [hereinafter ALI 1982 PROPOSAL]; AMERICAN LAW INSTITUTE, FEDERAL INCOME TAX PROJECT: REPORTER’S STUDY DRAFT 3 (1989) [ALI 1989 PROPOSAL].

⁵ ALVIN C. WARREN, JR., AMERICAN LAW INSTITUTE, FEDERAL INCOME TAX PROJECT: INTEGRATION OF THE INDIVIDUAL AND CORPORATE INCOME TAXES 50–52 (1993) [WARREN ALI INTEGRATION STUDY].

⁶ Kaustuv Basu & Dylan F. Moroses, *Hatch Corporate Integration Draft Could Be Ready in a Few Months*, TAX ANALYSTS (Jan. 29, 2016).

⁷ Note that the term “full integration” is sometimes used to refer to an integration method that treats corporations similar to the way partnerships are treated under current law. *See, e.g.*,

enactment (“existing equity” or “old equity”) and equity issued after the time of enactment (“new equity”). As will be explained below, full integration is thought to be premised on empirical support for a model of the effects of the corporate tax, known as the Traditional View of the corporate tax instead of an alternative model, known as the New View.⁸ If the Traditional View holds, the efficiency gains from full integration are thought to be substantial, while if the New View holds, they are modest. Because of the revenue costs, full integration is only desirable with the substantial efficiency gains that come with the Traditional View. If instead, the New View holds, integration is not desirable because the costs of eliminating the double-level tax would exceed the efficiency gains.

My goal here is to examine the arguments behind the Traditional and New Views and the implications for corporate integration. I draw four conclusions. First, the dichotomy between full integration and no integration is not a correct reading of the implications of the two models. In fact both views support as a first best a third option, integration applied only to new equity (“new equity integration”), such as the integration system proposed by the ALI in 1982 and again in 1989.⁹

Although it seems to have been lost in the fog of time, the argument for full integration rather than new equity integration seems to have been that, while in theory it is more efficient, new equity integration is not administratively feasible. Therefore, the realistic options are full integration or none. My second conclusion is that this is not the case, and that relatively simple systems based on the well-

TREASURY INTEGRATION REPORT *supra* note 3, at 27. I use the term to refer to integration applied to all equity.

⁸ See *infra* note 23 and accompanying text.

⁹ While the point can be found in prior literature, it is widely ignored. For example, Alan Auerbach noted this in 2002. See Alan J. Auerbach, *Taxation and Corporate Financial Policy*, in 3 HANDBOOK PUB. ECON. 1251, 1262 (Alan J. Auerbach & Martin Feldstein eds., 2002). Similarly, the ALI in 1993 hinted at this. See WARREN ALI INTEGRATION STUDY, *supra* note 5, at 48.

known economics of the transition to a consumption tax can be used to apply integration only to new equity.

The central problem with systems that attempt to distinguish new from old equity is churning, transactions that are structured to cause old equity to get the benefits given to new equity. The systems I consider will, to varying degrees, be subject to churning. There will be transactions that get around the distinctions between new and old equity, some of which are relatively easy to anticipate and, probably, others that we cannot foresee as motivated taxpayers and clever lawyers seek holes in the system.

My third conclusion is that the possibility of churning should not cause us to abandon new equity integration. Churning should be analyzed and treated like other tax avoidance problems. Our general approach to tax avoidance is to try to limit it. Only rarely do we say that a particular tax avoidance problem is so severe that it is better to just allow it rather than incur the costs of trying to prevent it.¹⁰ Yet full integration does exactly that. It automatically grants the benefits of churning to old equity. It can be thought of as new equity integration with free churning. While this might be the most desirable approach, it probably is not, and, at a minimum, we need to at least analyze the costs of churning and anti-churning rules before deciding.

I make the first three arguments under a set of restrictive assumptions designed to highlight the central analytic issues presented by the New and Traditional views. The most important assumption I make is that shareholders are all taxed at the same rate. In fact, while many shareholders are taxable at roughly the highest individual tax rate, many are tax-exempt (e.g., pension funds) and many are foreigners, subject to at best only a modest withholding tax. In the final part of the paper I relax the assumption that shareholders are all taxed.

My fourth conclusion is that in this more robust setting, the case for full integration becomes stronger but this is not because of either the Traditional View

¹⁰ See David A. Weisbach, *An Economic Analysis of Anti-Tax-Avoidance Doctrines*, 4 AM. L. ECON. REV. 88, 103–104 (2002).

is more likely to hold in this setting. Instead, when shareholders are heterogeneous, there are distortions from the corporate tax that are common under both views. In particular, the incentive to invest in a corporation (and correspondingly, the incentives for corporations to distribute or retain earnings) are optimal only if the tax rate on corporate income is the same as each investor's tax rate on other investments. When investors have widely varying tax rates, however, the tax on corporate income (i.e., the corporate-level tax, not the dividend tax) cannot be equal to, or even roughly the same as, all the various investor rates. Full integration systems may do a better job of matching corporate rates to investor rates than new equity integration. I will show, however, that there are integration systems that can reduce or eliminate the distortions from differential shareholder and corporate rates while also applying only to new equity. These systems are likely the most desirable systems.

Finally, I briefly consider the problem of foreign income of U.S. corporations arising from outbound investments. The taxation of outbound investments is, as I write, the central topic of corporate tax reform. It holds a central place because the current system seems to be leading to substantial economic distortions in the location of investments and in corporate financing decisions. I will argue that most of the considerations regarding outbound investment are not centrally connected to the choice of integration systems. Most integration systems are compatible with most choices regarding the taxation of outbound investments.

Part 1 provides background on current law, its economic effects, and on commonly proposed methods of integration. Part 2 considers the case where all shareholders are taxed at the same rate and that all corporate income is taxed. Part 3 relaxes these assumptions and considers tax-exempt and foreign shareholders as well as foreign income of U.S. corporations. Part 4 concludes.

1. Background

A. Problems with current law

1. Basic description of current law.

Under current law, corporations pay tax on their earnings.¹¹ The corporate income tax is computed in the same basic way the individual income tax is computed: corporations pay a tax on their realized gains and income less deductions for costs.¹²

When corporate earnings are distributed, shareholders are taxed as well, creating a second level of tax on the same economic income.¹³ Historically, dividend distributions were taxed as ordinary income. In 2003, as part of a move to reduce the distortions from the double-level tax, Congress reduced the tax rate on dividends to the capital gains rate, where it remains today.¹⁴

There are number of technical rules which will occasionally come into play in the analysis below. First, corporate distributions are taxed as dividends only to the extent of corporate earnings.¹⁵ Corporations keep a special account, known as their earnings and profits account, abbreviated as e&p, which tracks their dividend paying capacity.¹⁶ The e&p account starts with a measure of taxable earnings and then adjusts this measure to better reflect dividend paying capacity.

¹¹ I.R.C. § 11(a).

¹² I.R.C. § 63(a).

¹³ I.R.C. § 301(c); *see also* I.R.C. § 302.

¹⁴ I.R.C. § 1(h); *see also* Raj Chetty & Emmanuel Saez, *Dividend Taxes and Corporate Behavior: Evidence from the 2003 Dividend Tax Cut*, 120 Q. J. ECON. 791, 792–793 (2005).

¹⁵ I.R.C. § 316(a).

¹⁶ *See* I.R.C. § 312.

For example, because taxes paid by the corporation are not available to be distributed as dividends, the earnings and profits account is reduced by taxes. Tax-exempt income is added because it reflects dividend paying capacity. And so forth.

Second, while distributions labeled as distributions are generally taxed as dividends, distributions in the form of stock repurchases can sometimes be treated by shareholders as sales.¹⁷ There are a host of complex rules that attempt to distinguish share repurchases from dividends. These rules were particularly important when dividends were taxed as ordinary income while repurchases were taxed a sale or exchange, usually generating capital gains and losses. Now that dividends are taxed as capital gains, the only difference between a dividend and a sale is that shareholders can use the basis in their stock against their amount realized for repurchases but not for dividends. If a distribution is treated as a dividend, the unused basis is preserved to be used when the stock is eventually sold. For the most part below, I will focus on dividends.

Third, shareholders are taxed when they sell their stock to other shareholders.¹⁸ The gain or loss is, for most shareholders, treated as capital gain or loss. Stock sales generate a number of complex problems which, for the most part, are beyond the scope of this analysis.

2. Economic effects.

The double-level tax can influence investment decisions and the capital structure used to finance investments. To understand these effects, it is helpful to make some simplifying assumptions designed to isolate key effects. Therefore, except where otherwise noted, assume that (i) the shareholders of U.S. corporations are fully taxable at a single tax rate, (ii) all the income of U.S. corporations is taxed (in the United States), (iii) the corporate and shareholder rates are the same (which, as will be shown, is optimal under the assumption that

¹⁷ I.R.C. § 302.

¹⁸ I.R.C. § 1001.

all shareholders are taxed at a single rate) and (iv) shareholders do not sell their shares to one another. I will relax these assumptions in Part 3: there I will allow shareholders to be taxable, tax-exempt, or foreign, allow the corporate tax rate to be set independently from the shareholder rate, and allow the corporation to have foreign income which is not taxed in the US until repatriated (and then subject only to a residual US tax).

With these assumptions, consider a hypothetical investment, such as the purchase of an asset or some other type of opportunity, which costs \$100 and has a 10% pre-tax rate of return. There are three ways for a corporation to finance the investment: retained earnings, borrowing, and issuing new stock. We want to examine how taxes affect the decision to engage in the investment for each financing alternatives, comparing these cases to non-corporate investment.

Non-corporate investment.

Suppose that an individual makes the investment directly (or through a non-corporate entity such as a partnership). The individual earns a pre-tax return of \$10 in one year. If the tax rate is 40%, the individual pays a \$4 tax, leaving him with \$6 of gain and \$106 in his pocket. The 40% tax rate reduces the pre-tax return from 10% to 6%.

In the general case, with an arbitrary rate of return r , a personal tax rate of p , and an investment that lasts for n periods, the rate of return is:

Non-corporate investment: $(1 + r(1 - p))^n$.

New Equity.

Suppose that instead of investing directly, the individual invests the \$100 by contributing \$100 to a corporation in exchange for new stock and the corporation makes the investment in the asset. If the corporate tax rate is also 40%, after one year, the corporation, having earned \$10, would owe \$4 of tax, leaving it with a return of \$6 and \$106 of cash. The corporation has an after-tax return of 6%. If the corporation distributes the \$106 to the shareholder, the shareholder is taxed on the \$6 of dividend income (the return of the original \$100 investment is not

taxed). If dividends are taxed as ordinary income, the individual would pay a 40% tax on the \$6 or \$2.40. He would be left with \$3.60 in after-tax earnings, giving him a 3.6% rate of return.

The combination of the corporate and individual taxes reduces the 10% pre-tax return to 3.6%, creating an effective tax rate of 64%. In notation, the return has gone from r to $r(1-d)(1-c)$ where c is the corporate tax rate and d is the dividend tax rate. The effective tax rate is $[1 - (1-d)(1-c)]$ or 64%. The individual is better off making the investment outside of the corporate sector where the tax rate is 40%. The double-level corporate tax discourages new investments in corporate equity.

Another way to understand this effect is to note that the required rate of return on corporate investment has to be higher than otherwise to offset the additional tax cost of investing through a corporation. Using the numbers above, the corporation would need to get a return of 16.67% if the individual is to receive the same after-tax return from investing in the corporation as he can get elsewhere. If the corporation earned a 16.67% return, it would earn \$16.67 on its \$100 investment. After corporate taxes, the corporation would have \$10 that it could distribute. The shareholder would have a \$10 dividend, pay a 40% tax on it, and be left with a \$6 return on the \$100 investment, the same as the return on a 10% investment outside the corporate sector.¹⁹

¹⁹ While the conclusion that new investments in the corporate sector are discouraged is, to a great extent, general, there are several important caveats. First, the conclusion is sensitive to the tax rates on individual investments, corporations, and dividends. In particular, if the tax rate on investments outside the corporate sector were sufficiently high, and the corporate tax rate and dividend tax rate low, the incentive to avoid the corporate sector would be much smaller, and with some combinations of rates, even reversed. For example, the current corporate tax rate is 35% and the tax rate on dividends is 20%, creating a combined rate on new corporate investments of 48%. If the tax rate on individual investments is higher than that, which it has been at various points in history, there would be a preference for investing in corporate equity rather than a penalty.

Second, the example ignores capital gains taxes on stock. Capital gains taxes on stock raise a number of complex issues. Capital gains taxes on stock may increase the required rate of return for corporate investments, thereby further discouraging corporate investment. *See, e.g.*, TREASURY INTEGRATION REPORT, *supra* note 3, at 81 (“The Treatment of Capital Gains in an Integrated Tax

Note that if the investment is for more than one year, the effect of the dividend tax may depend on the pattern of dividend payments. In its analysis for its 1993 integration study, the ALI assumes for new equity that returns in each period are distributed and reinvested.²⁰ Then, the after-tax return is the same as for the one-year case because in each period the return faces both a corporate and individual tax. Algebraically, the return is:

$$\text{New equity: } (1 + r(1 - c)(1 - d))^n.$$

Debt. Investments in corporations can also be made by lending money to the corporation. Suppose that the individual lends \$100 to the corporation, and the corporation invests the money at a 10% rate of return. The corporation will once again earn \$110 and have \$10 of income. If the interest rate on the debt is 10%, the corporation will owe the individual \$10 of interest and be able to deduct that payment. As a result, the corporation will have no net income and pay no taxes. The individual will have \$10 of interest income, and owe \$4 of taxes, leaving him with a \$6 or 6% after tax return. Using the tax rates we have been assuming, the tax rate on debt investments is 40% or p .

Retained earnings. Suppose that the corporation has \$100 of retained earnings that it can choose to invest at a 10% pre-tax return or distribute to its shareholders, who can also invest it at a 10% return. If the corporation invests the \$100, in one year, it will have \$110 before taxes and \$106 after paying taxes on its \$10 of gain.

Let us suppose that after one year, the corporation distributes the \$106 to its shareholders. Because this is a distribution of \$106 of retained earnings, the shareholders will be taxed on the entire amount.²¹ They will have \$106 of

System”); WARREN ALI INTEGRATION STUDY, *supra* note 5, at 117 (“Capital Gains on Sales of Stock”); Alan J. Auerbach, *supra* note 9, at 1258.

²⁰ Warren ALI Integration Study, *supra* note 1, at 33.

²¹ In the new equity case, the shareholders will have contributed after-tax dollars to the corporation, get a basis in his stock of \$100, and, therefore not be taxed on \$100 of the \$106

dividend income. After paying a 40% tax on the dividend, they are left with \$63.60.

Compare that to an immediate distribution of the \$100 of retained earnings. The shareholders will have an immediate \$100 dividend and will be left with \$60 after paying the dividend tax. If they invest it at a 10% pre-tax return, they are left with \$66 in one year. They have to pay a tax \$2.40 on the \$6 of earnings, leaving them with \$63.60 in after-tax returns.

The shareholders are left with the same amount regardless of whether the corporation invests the money and distributes the after-tax returns in the future or whether the corporation distributes the money and lets the shareholders invest it. The reason the amounts are the same is that the amount of the distribution, and therefore, the size of the tax on the distribution, grows over time at the after-tax rate of return. The shareholders are indifferent to paying a tax on a \$100 dividend today or on \$106 next year because \$106 is the future value of \$100 at the 6% after-tax rate of return.

We can express this relationship algebraically. Suppose that the corporation has \$1 of after-tax cash that it can invest at a pre-tax rate of return of r . If it invests it for n periods, it will have $\$1(1+r(1-c))^n$. When it distributes this amount to the shareholder, the shareholder will pay a dividend tax at rate d , leaving him with $\$1(1-d)(1+r(1-c))^n$. If instead the corporation distributes \$1 immediately, the investor can invest $\$1(1-d)$. After n periods, he has $\$1(1-d)(1+r(1-p))^n$. That is:

Retained Earnings:

$$\text{Immediate distribution: } (1-d)(1+r(1-p))^n$$

$$\text{Future distribution: } (1+r(1-c))^n(1-d)$$

Summary. We can summarize these results with the following table.

distribution. In the retained earnings case, whatever the shareholder's original contribution, there will be a dividend tax on the retained earnings when distributed.

Table 1: Investment returns for taxable investor

Investment choice	After-tax return
Non-corporate	$(1 + r(1 - p))^n$
New equity	$(1 + r(1 - c)(1 - d))^n$
Debt	$(1 + r(1 - p))^n$
Retained earnings, corporate investment	$(1 + r(1 - c))^n(1 - d)$
Retained earnings, immediate distribution	$(1 - d)(1 + r(1 - p))^n$

To understand these results, start with the assumption that the corporate and individual rates are the same, $p = c$. In this case, the two investment choices for retained earnings (the bottom two rows) are equal. Moreover, they are equal for any value of the dividend tax rate d . Therefore, regardless of the dividend rate, there is no tax incentive to distribute or retain earnings.²²

The conclusion that the dividend tax has no effect on the timing of the distribution of retained earnings is known as the New View, after a series of papers in the late 1970's and early 1980's that established the result.²³ It holds as long as the after-tax rate of return on investments is the same for corporations and their shareholders. It also holds for any tax rate on dividends as long as the tax rate does not change. (If the tax rate changed, there would be an incentive to distribute earnings when the rate is low.)

²² If the shareholders sell their stock during the period that earnings are retained, the resulting capital gains tax may mean that the return on retained earnings is lower than on distributed earnings. See DAVID A. WEISBACH, CAPITAL GAINS TAXATION AND CORPORATE INVESTMENT 11–15, <http://papers.ssrn.com/abstract=2721798> [<https://perma.cc/9PTG-P5FF>].

²³ See, e.g., Mervyn A. King, *Taxation and the Cost of Capital*, 41 REV. ECON. STUD. 21 (1974); Alan J. Auerbach, *Wealth Maximization and the Cost of Capital*, 93 Q. J. ECON. 433 (1979); David F. Bradford, *The incidence and allocation effects of a tax on corporate distributions*, 15 J. PUBLIC ECON. 1–22 (1981).

To the extent a corporation can finance projects with retained earnings, there is also no incentive to use debt financing instead. In our example, if the corporation invested the retained earnings, the investor would get \$63.60 in one year.

Suppose instead that the corporation distributed its retained earnings and the shareholder reinvested the proceeds by lending them to the corporation. The shareholder in this case would receive a \$100 distribution, pay a tax of \$40 and be left with \$60 to reinvest by lending it to the corporation.

The corporation invests the \$60 at a 10% return and earns \$6. It would pay the \$6 to the investor as interest income. The corporation would deduct the \$6 of interest, so it would bear no tax but the investor would have \$6 of interest income. After paying \$2.40 of tax, the investor would have \$63.60, which is exactly the same amount the investor would have if the corporation simply invested the retained earnings.

The same analysis holds for non-corporate investments. If the corporation invests its retained earnings, after one year, the shareholder will have \$63.60. If the corporation distributes the earnings and the shareholder invests outside the corporate sector, the shareholder will have \$63.60.

Therefore, to the extent that the New View holds, there is no reason to reduce the dividend tax on retained earnings. In particular, under the New View, if the corporate and individual rates are the same, neither the choice of the corporation to invest or distribute retained earnings nor the choice to finance investments with debt or with retained earnings is distorted.

One implication of the New View is that a change in the dividend tax changes the price of the stock. To see this, consider the price of the stock of our corporation that had \$100 of retained earnings. The corporation's stock would be valued only at \$60 because whenever the retained earnings are distributed, they will bear a tax. The most that a shareholder can get out of the corporation is \$60 or the present value of \$60. The New View, for this reason, is sometimes called the tax capitalization view.

If the tax rate on dividends were reduced to 10%, the value of the stock would go up to \$90 because the shareholder would be able to keep \$90 out of the \$100 distribution. If the distribution were in a future year, the shareholder would be able to keep the future value of \$90. While the stock price would go up, the corporation's decision whether to invest or distribute the retained earnings would not change. Lowering the tax rate on dividends on existing equity, which is what most integration plans would do, results in a windfall gain to shareholders without generating efficiency benefits.²⁴

In contrast to the New View, what is known as the Traditional View argues that the tax on dividends distorts corporate investment because corporations either rely on, or anticipate relying on, new equity.²⁵ Examine the first two lines in Table 1. If we set the corporate and individual rates the same ($c = p$), new equity is disadvantaged relative to outside investments if the dividend tax rate, d , is positive. Corporations using new equity to finance investments need to earn a higher rate of return to offset the additional tax these investments bear, or equivalently, they will forego investments that they would otherwise make if they could use retained earnings or debt.

The Traditional View also emphasizes that the dividend tax may affect the investments made with retained earnings in addition to investments made with new equity. The reason is that corporations might choose not to distribute retained earnings to avoid any potential for having to issue new equity in the future. Therefore, even if current projects are financed out of retained earnings, the double-level tax might distort corporate behavior.

To the extent that the Traditional View holds, integration may lead to substantial efficiency gains. The double-level tax discourages the use of new equity. If new equity is an important source of funds, the double-level tax

²⁴ See WARREN ALI INTEGRATION STUDY, *supra* note 5, at 33–36.

²⁵ See JAMES M. POTERBA & LAWRENCE H. SUMMERS, THE ECONOMIC EFFECTS OF DIVIDEND TAXATION (1984), NBER Working Paper No. 1353 ; George R. Zodrow, *On the "Traditional" and "New" Views of Dividend Taxation*, 44 NAT'L TAX J. 497 (1991).

discourages desirable corporate investments. To avoid this problem, corporations have an incentive to finance projects with debt and to retain earnings which distorts corporate capital structures. We have too much corporate debt and corporations unduly retain earnings. Eliminating the double-level tax reduces or eliminates these distortions.

Focusing on the New Equity line in Table 1, we see the benefits of integration by setting the dividend tax to be zero. If the corporate and personal tax rates are the same, the return to new equity is the same as the return for non-corporate investment, debt, and retained earnings. All of the distortions are eliminated.

We can summarize the implications for corporate tax policy as follows. If the choice is between (1) keeping the double-level tax, or (2) eliminating the double-level tax for all equity, the Traditional View implies that eliminating the double-level tax may be the preferable choice because the distortions from the double tax are high. The New View implies that the distortions are small relative to the cost, so retaining current law may be preferable. This is particularly the case because lowering the dividend tax leads to windfall gains to existing shareholders, gains which reduce tax revenues but have no efficiency benefits. Therefore, the extent to which each view holds is thought to determine the extent to which integration is desirable.

The distinction between these views is the marginal source of funds for corporate investment. The New View emphasizes the case where corporations fund projects from retained earnings while the Traditional View emphasizes the use of new equity. Analysts have tried to distinguish between the new and traditional views by looking at the response of dividend payments to taxation. Under the New View, dividends should not be responsive to permanent changes in the dividend tax rate. Instead, these changes are capitalized into the value of the stock. Under the Traditional View, lowering the dividend tax rate should lead to

an increase in dividends because lowering the rate reduces the distortions from issuing new equity.²⁶

There are been a large number of attempts to examine these effects, many focusing on the 2003 dividend tax cut.²⁷ The evidence so far is ambiguous. Realistically, each view probably describes some portion of firms. For example, new firms will often need equity to get started or to finance growth. Mature firms may have sufficient cash flow to finance new projects out of retained earnings.²⁸

B. *Methods of integration:*

There have been a large number of different proposals for integrating the corporate and individual taxes. Integration methods vary in how they address a number of policy issues raised by reform of the corporate tax (such as the treatment of foreign and tax-exempt shareholders) and in their ease of implementation. Here I describe the basic structure of the most important proposals.

1. *Dividend exclusion.* The simplest method of integration is to eliminate the separate tax on dividend income, a method known as dividend exclusion. The return on equity investments, both old and new, would be subject only to the corporate-level tax and, therefore, taxed only once.

²⁶ See WARREN ALI INTEGRATION STUDY, *supra* note 5, at 37–39.

²⁷ See, e.g., Chetty & Saez, *supra* note 14; Weisbach, *supra* note 22; Zodrow, *supra* note 25; Alan J. Auerbach & Kevin A. Hassett, *The 2003 Dividend Tax Cuts and the Value of the Firm: An Event Study*, in TAXING CORPORATE INCOME IN THE 21ST CENTURY (Alan J. Auerbach, James R. Hines, and Joel B. Slemrod eds., 2007); Steven A. Bank, *Dividends and Tax Policy in the Long Run*, 2007 U. ILL. L. REV. 533 (2007); Zhonglan Dai Edward Maydew, Douglas A. Shackelford & Harold H. Zhang, *Capital Gains Taxes and Asset Prices: Capitalization or Lock-in?*, 63 J. FIN. 709 (2008); Dhammika Dharmapala, *The Impact of Taxes on Dividends and Corporate Financial Policy: Lessons from the 2000s*, in TAX POLICY LESSONS FROM THE 2000S (2009).

²⁸ See WARREN ALI INTEGRATION STUDY, *supra* note 5, at 37.

To illustrate, in our running example, when the individual contributes \$100 to the corporation, he would get a \$100 basis in his stock. The corporation would pay \$4 of tax on the \$10 of earnings, leaving it with \$106 to distribute. The shareholder would receive the \$6 of after-corporate-tax earnings without paying an additional tax on the dividend. He would treat the remaining \$100 as a return of basis. Therefore, the earnings are subject only to the corporate tax. Note that the earnings are subject to the same tax regardless of the tax bracket of the shareholder: the earnings would be subject to the corporate tax even if the shareholder were, say, a tax-exempt pension fund. Whether this is a virtue or a flaw will be discussed in Part 3 below.

Dividend exclusion systems have been proposed a number of times, including most prominently by the Treasury Department in 1992 and by the Bush administration in 2003.²⁹

2. *Dividend deduction.* Instead of excluding dividends at the shareholder level, we can tax dividends to shareholders and allow corporations to deduct the payment of dividends. This shifts the remittance of tax to the shareholders and

²⁹ TREASURY INTEGRATION RECOMMENDATION, *supra* note 3, at 2; Jobs and Growth Tax Relief Reconciliation Act, Pub. L. No. 108-27, §§ 301–303, 117 Stat. 752, 758–766 (2003). These proposals were somewhat more complicated than described in the text. They included three types of distributions: dividends out of income that had been taxed at the corporate level, dividends out of income that was non-taxed at the corporate level (for example, tax-exempt interest) and distributions that are treated as a return of capital. Distinguishing these different types of distributions required maintaining an account known as the Adjusted Taxable Income account which is similar to the e&p account of current law. The main purpose of this account was to impose a tax at the shareholder level for distributions of earnings that had not been taxed at the corporate level.

The Treasury also proposed an extension of the dividend exclusion system called the Comprehensive Business Income Tax or CBIT. Under CBIT, interest on corporate borrowing would not be deductible and would not be taxed to shareholders. Therefore, the treatment of debt and equity would be the same. Under a simple dividend exclusion system, equity investments are taxed at the corporate level but not the investor level while debt investments are taxed at the investor level but not the corporate level. Eliminating the debt/equity distinction might create substantial efficiency gains but would also create a disruptive transition. *See* TREASURY INTEGRATION REPORT, *supra* note 3, at 39–60.

taxes corporate income at the shareholder rate instead of the corporate rate. In effect, stock would be taxed just like debt.

To illustrate using our running example, when the corporation earns \$10, it would owe tax on its \$10 of gain. When it distributes the earnings, however, it gets a \$10 deduction, so the corporation would have no net income and pay no tax. The shareholder, however, has \$10 of dividend income.

If the shareholder is in the same tax bracket as the corporation, the effect is just to shift who remits the tax. The shareholder in our example, would owe \$4 of tax on his \$10 of dividend income, leaving him with \$106.

If the shareholders are taxed at a different rate than corporations, the two systems will not be the same. For example, if the shareholder is tax-exempt, it would owe no tax on the \$10 of dividend income. That is, a dividend deduction system taxes corporate earnings at the shareholder rate while a dividend exclusion system taxes them at the corporate rate.³⁰ This difference can be quite significant in practice because a large number of shareholders are either tax-exempt or foreign.

The Treasury Department proposed a partial dividend deduction system in 1984, with the deduction equal to 50% of dividends.³¹

3. *Dividend deduction with withholding.* With a dividend deduction system, shareholders owe tax on dividends. The problem is that this means that the government has to rely on remittance of tax by a very large number of shareholders instead of by a comparably small number of corporations. The

³⁰ Note that this is true only if earnings are distributed each year. If the corporation retains earnings, the return on those retained earnings is taxed at the corporate rate while if there were an immediate distribution, they would be taxed at the shareholder rate. *See* Appendix 2.

³¹ DEP'T OF THE TREASURY, TAX REFORM FOR FAIRNESS, SIMPLICITY, AND ECONOMIC GROWTH, *supra* note 2, at 136.

administrative and compliance costs are correspondingly higher with a dividend deduction system than with a system that has corporate-level tax remittance.

In a dividend deduction with withholding system partially fixes this problem by requiring corporations to withhold the dividend tax and remit it to the government on the shareholders' behalf. Shareholders would then claim a credit on their returns for taxes paid on their behalf. The concept is similar to employer withholding on wages: employers remit them on behalf of their employees who they claim a credit on their tax return for those taxes.

To illustrate, in our example, the corporation earns \$10 and distributes it, claiming a \$10 deduction, so it owes no corporate tax. Under a dividend deduction plus withholding system, it would be required, however, to withhold taxes on the dividend, so it remits \$4 of taxes on the shareholders' behalf. The shareholder would have \$10 of dividend income. If the shareholder is in the 40% bracket, he would owe \$4 in tax. Just like with wage withholding, he would receive a form telling him that taxes have been withheld and he would show that amount on his return as taxes paid. He would therefore owe no additional taxes.

This system mimics a dividend deduction system with the enforcement advantage of withholding. A possible difference is that the government can adjust the allowable credit for the withheld taxes depending on the type of taxpayer. For example, it could allow, or not, tax-exempt entities and foreigners to claim the credit for the withheld tax. In our example, if a tax-exempt shareholder could not claim credit for the withholding tax, it would effectively be taxed on the \$10 of corporate earnings.

Because of the corporate-level remittance, the system has a level of policy flexibility that is not easy to have with a dividend exclusion or dividend deduction system. A pure dividend deduction system relies on shareholder remittance. If a tax is to be paid on corporate investment by tax-exempt entities or foreigners, the government would have to separately collect that tax, which may be impossible.

A dividend deduction with withholding system is expected to be proposed by the Senate Finance Committee in 2016.³²

4. *Credit imputation.* The dividend deduction plus withholding system is identical in substance, although with different labels, to a system that was once widely used in OECD countries, known as the credit imputation system. In a credit imputation system, the corporation pays tax on its income and cannot (nominally) deduct dividends. The corporate tax, however, is treated as a withholding system and shareholders may claim a credit against their taxes for their share of corporate taxes (the corporate tax is “imputed” to shareholders). Shareholders are taxed on dividends.³³

To illustrate, in our example, the corporation would earn \$10 and pay a tax of \$4. It would have only \$6 to distribute. The shareholder would be treated as receiving a dividend of \$10 and get a credit for the \$4 of taxes paid by the corporation. If the shareholder’s tax rate is 40%, he would owe \$4 of tax on the dividend but because of the credit for the corporate tax, would owe no additional taxes. As with the dividend deduction/withholding system, tax-exempt and foreign shareholders could be allowed, or not allowed, to claim credits for their share of the corporate tax.

The difference between the deduction/withholding system and the imputation credit system is just labelling. In the deduction/withholding system, there are three line entries: the corporate tax, the offsetting deduction, and the withholding. If all are at the same rate, there is a \$4 tax, a \$4 deduction, and \$4 of withholding, netting to a \$4 payment to the government. With the imputation credit system, there is just the \$4 of corporate tax. The shareholder treatment is identical: the

³² Recent committee work has also noted this equivalence between the two integration methods. See REPUBLICAN STAFF COMMITTEE ON FINANCE, COMPREHENSIVE TAX REFORM FOR 2015 AND BEYOND 202 (2014); see also U.S. SENATE COMMITTEE ON FINANCE, THE BUSINESS INCOME TAX BIPARTISAN TAX WORKING GROUP REPORT 34–38 (2015).

³³ See REPUBLICAN STAFF COMMITTEE ON FINANCE, *supra* note 32, at 202.

shareholder in both cases gets \$6 in cash and is treated as receiving a \$10 dividend and having \$4 of tax paid on his behalf.

The ALI proposed a credit imputation system in 1993.³⁴ European countries used them widely until earlier this century.³⁵ They largely repealed these system because of decisions by the European Court of Justice unrelated to the merits.³⁶ Some non-European OECD countries such as Australia still use credit imputation systems.³⁷

As noted, the Senate Finance Committee is expected in the coming months to propose using the deduction/withholding system instead of a credit imputation system. Their theory is that the labels will fool people. Under the deduction/withholding system there is, nominally, no (or far less depending on the size of dividends versus corporate income) corporate tax. The corporate tax of \$4 in our example is reduced by the dividend deduction worth \$4 so the corporation pays no “corporate income tax.” Instead of a corporate income tax, corporations remit a “withholding tax” on their shareholders’ behalf. The Senate Finance Committee believes this matters. Their theory is, apparently, that the accountants will treat the two systems differently and allow corporations to report no, or lower, corporate taxes for accounting purposes under the deduction/withholding system than the credit imputation system. Moreover, they believe that the markets will believe the accountants that the systems are different. They apparently have a poor view of accountants and of markets.

³⁴ WARREN ALI INTEGRATION STUDY, *supra* note 5, at 50–52.

³⁵ Michael J. Graetz & Alvin C. Jr. Warren, *Income Tax Discrimination and the Political and Economic Integration of Europe*, 115 YALE L.J. 1186, 1206–1226 (2006).

³⁶ *Id.*

³⁷ Canada, Chile, Mexico, and New Zealand also use full credit imputation systems, while Korea uses a partial credit imputation system. Kyle Pomerleau, *Eliminating Double Taxation through Corporate Integration*, TAX FOUNDATION, http://taxfoundation.org/article/eliminating-double-taxation-through-corporate-integration#_ftnref12.

5. *Pass-through or shareholder allocation.* Corporations could be taxed under a partnership model. In this system, corporations would allocate their income to their shareholders, who would then be liable for the resulting tax exactly like partners are liable for taxes on partnership income. Shareholder allocation systems are widely viewed as unadministrable in the publicly-held corporation context, and have never been seriously proposed.³⁸

6. *Shareholder mark-to-market.* Rather than taxing corporations and then having a system that governs the interaction of the corporate and shareholder taxes, we can exempt corporations from tax altogether and just tax shareholders. If we were to try this and leave shareholders on a realization basis, the system would create a tax shelter: individuals could invest their retirement savings in a corporation which could accumulate the returns tax-free until they are withdrawn on retirement.

Proposals that attempt to tax shareholders therefore require stock to be marked to market, which means that shareholders are taxed annually on the change in value of their stock. In our example, the shareholder invests \$100 in the corporation which earns \$110 in one year. Under a shareholder mark-to-market system, there is no corporate tax, so the corporation has \$110 in after-tax earnings. The value of the stock would go up to \$110. The shareholder would have \$10 of gain even if the stock is not sold or the \$10 dividend not distributed. The shareholder would owe \$4 of tax, leaving him with a net return of \$106, which is the same as the return available outside of the corporate sector or through corporate debt.

The key issue with a shareholder mark-to-market system is that it is purely a shareholder system. There is no corporate remittance of tax. Collecting tax on millions of corporate shareholders may be much more difficult than collecting tax at the corporate level. Moreover, a shareholder mark-to-market system makes it difficult to adjust the treatment of tax-exempt or foreign shareholders for their investments in U.S. corporations. While we could impose a separate tax on tax-exempt shareholders on the change in the value of their stock holdings, it would

³⁸ See, e.g., TREASURY INTEGRATION REPORT, *supra* note 3, at 27.

be difficult to impose a similar tax on foreigners because there would be no way to enforce the tax.

A number of scholars have proposed shareholder mark-to-market systems.³⁹

7. *New equity dividend deduction.* In 1982 and again in 1989, the ALI proposed a dividend deduction system.⁴⁰ In an attempt to limit the benefits of integration to new equity, the deduction, however, was limited to dividends paid on newly contributed capital.

To determine the portion of dividends attributable to newly contributed capital, corporations were to keep an account of the net new equity issued since enactment (i.e., the value of shares issued less shares redeemed). They would be allowed to deduct dividends up to a specified return on that account. Dividends above the specified return would not be deductible. All dividends would be taxed to shareholders, so the net effect was to create a single-level tax (via a dividend deduction system) for new equity. Note also that the ALI in a related proposal would have shifted the remittance of dividend taxes to the corporate level, so the system would have actually resembled a dividend deduction plus withholding (or imputation credit system) limited to new equity.⁴¹

³⁹ See, e.g., Scott A. Taylor, *Corporate Integration in the Federal Income Tax: Lessons from the Past and a Proposal for the Future*, 10 VA. TAX REV. 237, 298–310 (1990); Joseph M. Dodge, *A Combined Mark-to-Market and Pass-Through Corporate-Shareholder Integration Proposal*, 50 TAX L. REV. 265 (1995); Joseph Bankman, *A Market Value Based Corporate Income Tax*, 68 TAX NOTES 1347 (1995); David A. Weisbach, *A Partial Mark-to-Market Tax System*, 53 TAX L. REV. 95 (1999); ERIC J. TODER & ALAN D. VIARD, MAJOR SURGERY NEEDED: A CALL FOR STRUCTURAL REFORM OF THE U.S. CORPORATE INCOME TAX (2014).

⁴⁰ ALI 1982 PROPOSAL, *supra* note 4, at 330–331; ALI 1989 PROPOSAL, *supra* note 4, at 88–89.

⁴¹ WARREN ALI INTEGRATION STUDY, *supra* note 5, at 92–93.

A system of roughly this sort, known as the Annell System, was used in Sweden (from 1960 to 1993) and Finland (from 1969 to 1988). Subject to some limits, both countries allowed a deduction for dividends paid on new equity.⁴²

2. New Equity Integration

With this background, we can turn to my first three claims.

A. *Integration limited to new equity:*

My first claim is that leaving aside administrative concerns, limiting integration to new equity is better than allowing integration to apply to all equity, regardless of whether the evidence supports the New or the Traditional View. Under either view, to the extent, and only to the extent, a firm issues or anticipates issuing new equity, the double-level tax increases the required marginal rate of return for investment and correspondingly reduces corporate investment. Under either view, *all* of the distortions from the double tax arise because of the taxation of new equity, even if they manifest themselves elsewhere, such as the choice to distribute or retain earnings or to use debt.⁴³

⁴² See Krister Andersson et al., *Corporate Tax Policy in the Nordic Countries*, in TAX POLICY IN THE NORDIC COUNTRIES (Peter Birch Sørensen ed., 1998); Mervyn A. King & Don Fullerton, *Sweden*, in THE TAXATION OF INCOME FROM CAPITAL: A COMPARATIVE STUDY OF THE UNITED STATES, THE UNITED KINGDOM, SWEDEN, AND GERMANY 95 (Mervyn A. King & Don Fullerton eds., 1984).

⁴³ For confusion on this issue see chapter 10 in Treasury 1992 and particularly footnote 9. There, they assert that because they reject the new view in favor of the traditional view, that integration should be extended to all equity. Their reasoning is in part that, under the traditional view, there is no windfall gain to existing shareholders because the dividend tax is not fully capitalized into the share price. But this does not mean that there are no efficiency benefits of extending integration to existing equity and a substantial revenue cost. Also the text relating to footnote 9 says (erroneously), “More importantly, preserving a dual system to limit the benefits of integration to new equity, would thwart the very goal of economic reform by perpetuating the very distortions the new system seeks to eliminate.”

To illustrate, suppose that we had a method for eliminating the tax on dividends attributable to new equity but not old equity. Consider again our corporation that is considering financing a \$100 project with new equity, debt, or retained earnings. As above, assume that the project has a 10% rate of return and that both the corporate and individual tax rates are 40%. This means that, as before, if the individual invests the \$100 outside of a corporation, the individual would get a 6% after-tax return.

Suppose that individual invests in new equity of a corporation and that we have a method of exempting dividends attributable to investments made with new equity. The corporation would invest the \$100 and receive \$106 after paying the 40% corporate tax. It then distributes the \$106 to the shareholder. This distribution is not taxed, so the investor is left with \$106 and a 6% after-tax return, which is exactly what he would have with a non-corporate investment. The same holds if the individual invests in corporate debt. Finally, if the corporation uses \$100 of retained earnings, corporate investment decisions are not distorted, as demonstrated above.

Moreover, because, by hypothesis, dividends attributable to existing equity are still taxed, the stock price does not change, so there are no windfall gains to existing shareholders. Therefore, regardless of whether the marginal source of funds is new equity or retained earnings, if dividends attributable to new equity are exempt from tax, corporate investment is not distorted. The appendix proves this result within a simple model of corporate investment taken from Raj Chetty and Emmanuel Saez's 2010 model of dividend taxation.⁴⁴

One way to frame the conclusion is that the conflict between New and Traditional views of dividend taxation over the merits of integration is conditional on the choices being limited to full integration or none. If there is a third choice, integration just for new equity, both views would support the third choice. The

⁴⁴ Raj Chetty & Emmanuel Saez, *Dividend and Corporate Taxation in an Agency Model of the Firm*, 2 AM. ECON. J. ECON. POL'Y 1 (2010).

reason is that new equity integration eliminates the distortions from the double-level tax without creating windfall gains to existing equity.

While widely ignored in the debates over integration, this understanding is in fact not new. In his 2002 review of the economics of corporate taxation, Alan Auerbach makes precisely this point.⁴⁵ Even though found in the existing literature, the point is sufficiently subtle that the best analysts sometimes get it wrong. For example, the Treasury Department in 1992 argued that the empirical literature supported the Traditional View and, therefore, full integration was warranted.⁴⁶ It dismissed the ALI's 1982 proposal for new equity integration on the basis that it was not a "true" integration method.⁴⁷ In fact, if it were feasible, the ALI's 1982 proposal would have precisely addressed the problems with the corporate tax that Treasury was attempting to address and might have done so at a substantially lower cost.

As Alan Auerbach pointed out, the reason why new equity integration is largely ignored seems to be that it is thought that the administrative problems are too difficult. In a secondary offering of common stock, the new stock would be identical to and fungible with existing stock. A system of integration limited to new equity would have to be able to distinguish new stock issued after enactment from stock existing at the time of enactment when the terms of the different shares are identical and the shares trade fungibly in the same market. That is, the main issue in choosing an integration method is one of design: how hard is it to implement a system of integration that applies only to new equity? Without understanding the design issues with new equity integration, it is a false choice to consider only full integration or no integration.

⁴⁵ Auerbach, *supra* note 1, at 1262.

⁴⁶ TREASURY INTEGRATION REPORT, *supra* note 3, at 117.

⁴⁷ *See id.*, at 109.

B. Consumption tax design

My second claim is that there are straightforward methods of limiting integration to new equity. The basic idea is to apply to dividends what we know about the transition to a consumption tax.

In particular, we know from the literature on consumption taxation that a newly imposed cash-flow consumption tax exempts the returns on new capital while taxing all existing capital.⁴⁸ This happens automatically, without any special rules to distinguish new and existing capital and even if new and existing capital are indistinguishable on inspection. This effect – taxing old capital and exempting new capital – is exactly the desired effect for stock: we want to exempt from tax dividends on new equity while continuing to tax dividends on existing equity. The same cash-flow consumption tax mechanics that exempt new capital and tax old capital, when imposed on stock, exempt new equity while taxing existing equity.

To illustrate how this works, I first explain the mechanics and effects of a cash-flow consumption tax and then discuss how these mechanics can be applied to equity.

Cash flow consumption tax mechanics and effects. A cash flow consumption tax allows an immediate (refundable) deduction for the cost of investments and imposes a tax on the proceeds from the sale of investments.⁴⁹ Consider how this system affects new and existing assets, using the same example as above, where

⁴⁸ See, e.g., David F. Bradford, *Consumption Taxes: Some Fundamental Transition Issues*, in FRONTIERS OF TAX REFORM (Michael J. Boskin ed., 1996); Louis Kaplow, *Capital Levies and Transition to a Consumption Tax*, in INSTITUTIONAL FOUNDATIONS OF PUBLIC FINANCE: ECONOMIC AND LEGAL PERSPECTIVES (Auerbach & Shapiro eds., 2008).

⁴⁹ See, e.g., NICHOLAS KALDOR, AN EXPENDITURE TAX 176–178 (1955); William D. Andrews, *A Consumption-Type or Cash Flow Personal Income Tax*, 87 HARV. L. REV. 1113 (1974).; DAVID F. BRADFORD, *Transition to and Tax-Rate Flexibility in a Cash-Flow-Type Tax*, in TAXATION, WEALTH, AND SAVING (2000); Kaplow, *supra* note 48.

an investor has \$100 of capital that he wishes to invest and he can get a return of \$110 in one year. Assume that the tax rate is 40%.

Suppose that a cash flow tax is already in place. The individual newly investing \$100 (say, from his salary) would claim an immediate deduction of the \$100, which is worth \$40. When the investment is sold for \$110, the individual owes taxes on the \$110 of proceeds, so the tax is 40% of \$110, or \$44.

The tax of \$44 is precisely the future value of the \$40 tax savings from the deduction (computed using the rate of return on the available investment). The net present value of the tax savings and the tax is zero. Therefore, the investment is effectively tax-exempt. It is as if the government gave the investor, in the form of a deduction, an additional \$40 to invest on its behalf, and the government claims the \$44 return, in the form of taxes.

IRA's and 401(k) accounts are taxed on a cash flow basis: there is an effective deduction when money is contributed (because it is pre-tax salary) and returns are fully taxed when withdrawn. Relying on precisely the logic given above, they are viewed as tax exempt.

Now consider what happens to investments that are already in place at the time the cash-flow tax is imposed. Suppose that the day before the cash-flow tax is imposed, the individual invests the \$100. Because there was no cash-flow tax at the time of the investment, the individual could not deduct the \$100. The next day, the cash-flow tax is imposed. When the individual sells the investment for \$110, he owes \$44 in taxes because of the cash flow tax. The net tax is \$44.

The tax of \$44 when the investment is sold is the same in present value terms as a tax of \$40 when the investment was made. Therefore, we can think of the cash-flow tax as imposing a tax on the value of existing investments at the time of enactment, collected (in future value terms) when the investments are sold.

Applied to equity. We can use this understanding to design an integration system that applies to new and only new equity. To do so, we simply impose a cash-flow tax on stock (for now, for purchases from and sales to the issuing corporation). New investments in stock would be deductible and distributions

with respect to stock (or repurchases) would be fully taxed.⁵⁰ What this would mean is that the return to new equity and only new equity would be exempt from tax, exactly as desired.

We can illustrate the effects using the running example, modified to allow us to compare new and existing equity. Suppose that the corporation has \$100 of existing equity and plans to issue \$100 of new equity. The shareholder purchasing the new equity gets a \$100 deduction, saving him \$40 in taxes. The corporation would receive \$100 and invest it, earning \$110. After paying corporate taxes, it would be left with \$106. When this is distributed, the new shareholder is taxed on the full \$106 and would owe \$42.40. This is precisely the future value of the \$40 of tax savings, at the after-tax 6% rate of return.⁵¹ Shareholders purchasing new equity get the same after-tax return as investors outside the corporate sector and investors in corporate debt, as desired.

The shareholders who own the \$100 of equity that existed at the time of the enactment of the system would not get a deduction for the purchase of this equity. When the \$106 of corporate earnings is returned to these shareholders, it is fully taxed. Therefore, existing shareholders remain taxed, as desired. The system, by providing cash flow taxation to new shareholders, gives them a zero present value

⁵⁰ As noted, there are a number of prior discussions of this idea. *See, e.g.,* Warren, *The Relation and Integration of Individual and Corporate Income Taxes*, *supra* note 1, at 741–744; ALI 1989 PROPOSAL, *supra* note 4, at 88–89. Warren rejects a shareholder deduction because it is at the shareholder rate not the corporate rate. He wants corporate income to be at the shareholder rate, as in imputation credit. But if we accept a flat corporate rate tax on corporate income, this is not a problem. Also, the strong concentration of shares in the top bracket means that the main issue is tax exempt shareholders, which raise somewhat different issues than progressivity applied to individuals.

⁵¹ Note that in the consumption tax example immediately above, the interest rate used to discount future taxes was the pre-tax rate of 10% while in this case it is the after-tax rate of 6%. The reason for the difference is that in a consumption tax, interest is not taxed so the pre—tax and after-tax rates are the same and, in the example, both are 10%. In the stock example, the overall tax system is an income tax and interest income is taxed under an income tax, so the correct discount rate is the after-tax rate of 6%.

tax while continuing to impose a tax on existing shareholders (because they do not get a deduction for their purchase of stock from the corporation).

One important problem is that existing shareholders will have basis in their stock. This generates a number of complex issues, dealt with in Part D below in the discussion of churning. Note, for now, however, that we can allow basis recovery when earnings are distributed (either in redemption of stock or, if desired, on dividend distributions). If we allow basis recovery and the existing shareholder in the example has a \$100 basis, he would be taxed only on the \$6 of gain, exactly as under current law. New shareholders, having deducted their stock purchases, would have a \$0 basis, and would be taxed on the full \$106, as desired.

There are a number of implementation problems with this system, the most important of which is churning. Before turning to an examination of these issues, let us examine how using what we know about the transition to a consumption tax can help clarify the relationships among integration methods.

C. Consumption tax analysis of integration generally

Corporate-level new equity integration. The system suggested above worked at the shareholder level: shareholders were given a deduction for stock purchases and taxed on distributions. The system could alternatively be implemented at the corporate level. Corporations would be given a deduction for stock issuances and taxed on distributions. Dividends paid to shareholders would not be taxed because of the corporate-level tax on distributions.

The same present value analysis would apply. In our running example, the corporation would get a deduction of \$100 when it issues \$100 of new stock, saving it \$40 in taxes. When it pays out its \$106 after-tax return, it would have \$106 in income and owe \$42.40 in taxes, which is the future value of the \$40 in tax savings, computed at the after-tax rate of return. The corporation would not get a deduction for the \$100 of existing equity in our example because it was raised prior to enactment of the system. When the future value of that equity (\$106) is distributed, the corporation would owe \$42.40 in taxes without the offsetting deduction, so existing equity would be fully taxed.

As with the shareholder deduction system, an allowance could be given for basis in existing stock, although because basis is a shareholder-level account, doing so would require the corporation to be able to estimate shareholder basis. If the corporation estimated that shareholder basis at the time of enactment was \$100, the corporation's tax on its \$106 distribution on existing equity would be offset by a recovery of the \$100 of shareholder basis.

The difference in the two systems is where (and at whose tax rate) the deduction and inclusion take place. In the system first discussed, the deduction and inclusion would be at the shareholder level and at the shareholder's tax rate. In the corporate-level modification described here, the deductions and inclusions would be by corporations rather than by shareholders.

Note that part of this system, imposing the distributions tax at the corporate rather than the shareholder level was proposed by the ALI in 1982 and 1989 as part of a proposed corporate tax reform, and was elaborated on by George Yin 1990.⁵² By adding a deduction for issuing new equity, the system would be transformed into a system of new equity integration.

Half and half. We could, if desired, split the deduction and inclusion between the corporation and its shareholders. For example, the corporation could be given the deduction for issuing new equity and the shareholders taxed on distributions, or vice versa. We could also allow both to claim deductions for new equity and tax them on distributions, but at a split rate.

Reverse direction means full integration. The systems discussed above, which gave a deduction for stock issuances and imposed a tax on distributions relied on the fact that the net present value of the issuances and distributions was zero. This means that we can also flip the sign of the tax: we can tax issuances and allow a deduction for distributions. The net present value of the tax and the deduction would still be zero. Reversing the direction, however, reverses the

⁵² ALI 1982 PROPOSAL, *supra* note 4, at 327–340; ALI 1989 PROPOSAL, *supra* note 4, at 54–79; George K. Yin, *A Different Approach to the Taxation of Corporate Distributions: Theory and Implementation of a Uniform Corporate-Level Distributions Tax*, 78 GEO. L. J. 1837 (1990).

transition effects: old equity would not be subject to the tax on issuance but the returns would be eligible for the deduction on distributions. This means that reversing the direction would effectively grandfather old equity, or, in other words, provide full integration rather than new equity integration.

Yield-exemption and full integration. As noted, in 1992, the Treasury Department, and in 2003, the Bush administration, proposed to integrate the corporate and individual taxes by exempting dividends from taxation. We can think of this system as a cash-flow system with transition relief for old equity.

To see this, recall that a cash-flow system, in present value terms, exempted the return on new investments from tax. Therefore, rather than imposing a cash-flow system, we can simply not tax returns. This is how we tax Roth IRA's and Roth 401(k)'s.⁵³ We do not allow a deduction for contributions – after-tax money is put in – but the return is tax exempt. In present value terms, Roth and regular IRA's are the same, but they use different mechanisms to get to the desired results.⁵⁴

The key difference between a cash-flow system and a yield-exemption system is the implicit transition rule. If applied to all flows after enactment, a cash-flow system imposes a tax on existing capital while a yield-exemption system exempts it. To illustrate, consider our individual above who invested \$100 the day before the tax was imposed. As illustrated, the cash-flow system taxes his \$100 of existing capital. If instead we were to impose a yield-exemption system, he would bear no tax when he sells his investment for \$110, so existing capital would not be taxed. The implicit transition rule for yield-exemption is to grandfather (i.e., not tax) existing capital while the implicit transition rule for a cash-flow system is to tax existing capital

⁵³ See I.R.C. § 408A (2016); I.R.C. § 402A (2016).

⁵⁴ See DAVID F. BRADFORD, DEP'T OF THE TREASURY, BLUEPRINTS FOR BASIC TAX REFORM 57–58 (1977).

Treasury's dividend exclusion system is a yield-exemption system for stock: it is an explicit exemption from taxation for dividends. The transition rule is to exempt old equity. That is, we can think of the deduction for new equity and the dividend exclusion system as related in precisely the same way that a cash-flow system and a yield-exemption system are related. The key difference is how they treat existing capital.

There is one other important difference between cash-flow and yield-exemption systems, which is the treatment of what the literature has called inframarginal returns or rents. Suppose that in our running example that the rate of return on the investment was 15% when other investments have a return of 10%. Moreover, assume that the 15% investment was unique, in the sense that only \$100 can be invested at that rate and any additional amounts have a 10% return. In a cash flow-system, the initial deduction for the investment would still be worth \$40. The tax on the return would be 40% of \$115 or \$46. Because the discount rate is 10% – this is the rate of return available on normal investments – the present value of the tax is greater than the deduction.⁵⁵ The extra tax is the \$2 of additional tax (\$46 minus \$44) due on the \$5 return that is above the normal rate of return. A cash-flow system taxes inframarginal returns or rents. A yield-exemption system exempts the entire \$115, so it would not.

The choice between a cash-flow system for stock and a yield-exempt system, therefore, is not only one of transition. Using a cash-flow system also means that rents, to the extent that they are available, are taxed when distributed while using a yield-exemption system means that they are not. In both cases, rents would normally be taxed at the corporate level, although this depends on the particulars of the corporate-level income tax. For example, if, as considered below, the corporate tax rate is lowered considerably, the tax on rents at the corporate level would also be lowered. Taxing rents at the shareholder level may, correspondingly, become more desirable.

⁵⁵ The example uses the pre-tax interest rate, as is standard in illustrating this point because of the general assumption that the two systems (cash-flow and yield-exemption) are being used to implement a consumption tax.

Dividend deduction, credit imputation. As noted, a dividend exclusion system and a dividend deduction system are fundamentally the same, with the difference being whether the corporation or its shareholders remit taxes. With a dividend exclusion system, corporations remit taxes while with a dividend deduction system, shareholders remit taxes. The economics are basically the same in both systems: shifting from a dividend exemption system to a dividend deduction system simply creates offsetting deductions (to corporations) and inclusions (to shareholders). Both systems effectively tax dividends on a consumption basis with relief for existing capital.

Adding withholding on dividends does not change the economics (except to the extent tax-exempt and foreign shareholders cannot use the withholding credit). Withholding is primarily a compliance measure rather than a change in the basic economics. Also, as noted, credit imputation systems, like the ALI 1993 proposal, are the same as dividend deduction/withholding systems with different labels, so these systems have the same economics as well.⁵⁶

ALI 1982/1989 dividend deduction for new equity. The ALI's 1982 and 1989 proposals limit the dividend deduction to dividends paid on newly contributed capital.⁵⁷ The ALI would do this by requiring corporations to keep track of new capital and granting them a deduction for a specified return on new capital.

There are two components to this system. The first is a measure of net new equity. Net new equity is new stock issuances less extraordinary distributions. (The ALI would not reduce the account for regular distributions, although it is not clear why.) For example, if a corporation had \$900 of existing equity prior to enactment and issued \$100 of new shares, it would have \$100 in its new equity account. If it redeemed \$50, its new equity account would go down to \$50.

⁵⁶ See *supra* note 33 and accompanying text.

⁵⁷ ALI 1982 PROPOSAL, *supra* note 4, at 330–331; ALI 1989 PROPOSAL, *supra* note 4, at 88–89.

The second component is a measure of the distributions on new equity as opposed to on old equity. One way to do this would have been to pro rate distributions between new and existing equity, allowing a deduction only for new equity's pro rata share. This, however, would require valuation of old equity so that we know the total and can do the division. For example, if the above corporation issued the \$100 of new equity when the value of old equity is \$900, new equity would have a 1/10 share of the total. If old equity were worth \$1,000 at the time of issuance, new equity would have a 1/11 share.

Rather than trying to pro rate distributions, the ALI attributes a return to new equity and allows deductions up to that return, effectively stacking new equity first. If the imputed return is reasonably accurate, the net result is a consumption-type tax on new equity. For example, if the imputed return were 10%, and the corporation pays out all of its retained earnings, the net result would be a consumption tax on new equity. The corporation with \$1,000 invested at 10% would earn \$100. On the distribution of the \$100, \$10 would be deductible (because its new equity account is \$100 and is given a 10% imputed return). This would effectively exempt the return on new equity but not old equity.⁵⁸

The difference between a cash-flow system and the ALI 1982/1989 system is that the cash flow system applies to the entire cash flow, that is, to the entire contribution for new equity and distribution on all equity, while the ALI system applies only to the amount treated as a return on investment. To illustrate, if there is a receipt of \$100 and a payment the next year of \$110, a cash-flow system applies to the \$100 and the \$110 while the ALI system applies just to the \$10 return. Both achieve the same economic effect which is to exempt the return on new equity investments.

Note also that if we were to add withholding on dividends, the ALI 1982/1989 system could be thought of as a credit imputation system applied only to new stock. The ALI could, alternatively, have allowed dividends to be

⁵⁸ If, however, the corporation pays out less than all of its earnings, the ALI would have attributed the payout to new equity up to the assumed rate of return. Only payouts beyond that amount would be attributed to old equity, so the system does not pro rate distributions.

excluded up to the specified return on new capital, creating a new equity dividend exclusion system. Once the tracing system is set up through the new equity account and the assumed return, it can be applied to any number of integration systems.

Tax on existing equity or e&p. The difference between full integration and new equity integration is that the former exempts existing equity while the latter taxes it. In a 1990 paper, Alan Auerbach noted if we allow full integration, such as by exempting existing equity, but then impose an offsetting tax on existing equity, we get new equity integration.⁵⁹

To illustrate, consider our corporation with \$900 of existing equity that issues \$100 of new equity. Full integration exempts the return on the \$1,000 of equity while new equity integration exempts the return on just the \$100 of new equity. If we exempt the return on all equity but impose a tax on the \$900 of existing equity, the net result is a tax just on the \$100 of new equity.

The way that Auerbach explains the idea is that full integration creates a windfall gain to existing equity equal to its value multiplied by the dividend tax rate. We can eliminate that windfall by imposing a transition tax equal to the value of existing equity multiplied by the dividend tax rate.

There are a number of ways we could implement this system. One is to use the corporate earnings and profits account, which is the measure of dividend paying capacity used by the corporate tax system. The tax would be on the value of this account as of a specified date or its value averaged over a given time period. To avoid manipulation, the date or specified period could be in the immediate past, such as the value of corporate earnings and profits as of the first day of the year prior to enactment.

Corporate earnings and profits accounts in many cases may not be kept accurately. The reason is that if a corporation's e&p account significantly exceeds

⁵⁹ Alan J. Auerbach, *Debt, Equity, and the Taxation of Corporate Cash Flows*, in DEBT, TAXES, AND CORPORATE RESTRUCTURING 91, 115 (John Shoven & Joel Waldfoget eds., 1990).

the dividends that it pays, its exact value does not matter. An alternative if e&p accounts are too indeterminate is to use the value of the stock of a corporation as of a chosen date. While this does not perfectly reflect the taxable dividends that will eventually be distributed, it has the advantage of being readily observable (at least for public companies), harder to manipulate, and of not reflecting various foibles of the tax law such as the realization requirement. It might be a better reflection, on net, of future taxable dividends.⁶⁰

D. *Churning*

The most difficult problem faced by new equity integration is ensuring that taxpayers cannot engage in transactions to get old stock treated as new stock, known as churning. Depending on how new equity integration is implemented, transactions as simple as repurchasing existing stock and issuing new stock may allow churning. In this section, I consider the problem of churning and methods to address it.

It is important, before considering details, to frame the question properly. The analysis above shows that if new equity integration is administratively feasible, there would be no reason to prefer full integration over new equity integration. New equity integration achieves all of the efficiency benefits without creating windfall gains to existing shareholders. We can think of full integration as new equity integration (a policy driven by efficiency concerns) plus granting transition relief to existing equity (a choice driven entirely by administrative concerns). Churning is just a transactional way of getting transition relief for existing equity. That is, we can think of full integration as new equity integration with automatic churning.

My third claim is that we should think of full integration as a decision to allow automatic churning that is akin to a decision not to attempt to stop tax

⁶⁰ We can think of the current value of a share of stock as the present value of the market's expectation of future dividends using a discount rate that the market believes appropriate for stock of that type. Even if this identity holds, however, the current market value is not necessarily the present value of future *taxable* dividends, which is what we are after.

sheltering. We can get a very rough sense of the size of such a choice using a back-of-the-envelope calculation. The market capitalization of stocks listed in the United States is roughly \$23 trillion (as of 2015).⁶¹ As will be discussed below, at least 25 percent, and possibly more, of those shares are ultimately held by U.S. taxpayers (i.e., shareholders who will pay tax on dividends) and another 25 percent, roughly, are foreigners subject to a withholding tax on dividends. If those shareholders pay tax on dividends at a 20% rate, the revenue from the transition tax would be \$2.3 trillion (and correspondingly lower if the average applicable rate is lower).⁶² A choice to allow full integration instead of new equity integration because of the problem of stopping churning is a choice to not attempt to collect \$2.3 trillion in tax because it would be too difficult.

It is not necessarily a bad choice, although it is somewhat unusual, particularly given the size of the revenue that would be lost. Suppose, for example, that the best possible rules to prevent a particular shelter are largely ineffective, so that the sheltering and revenue loss occurs regardless. If the costs of ineffectively attempting to stop a shelter are sufficiently high and the rule sufficiently ineffective, it might be better to just allow it. If you can't beat 'em, join 'em.⁶³

The check-the-box rules are an example. Before check-the-box, the law attempted to make a distinction between corporations and partnerships. Taxpayers, however, were easily able to create entities which fell on whichever side of the line gave a better tax treatment. Notwithstanding a fairly long period of attempts, there seemed to be no way to police the line. While taxpayers were

⁶¹ Steven Rosenthal & Lydia Austin, *The Dwindling Taxable Share of U.S. Corporate Stock*, 151 TAX NOTES 923, 926 (May 16, 2016) ("Table 1. C Corporation Equity Outstanding").

⁶² There are all kinds of problems with this calculation. Companies listed in the United States may be foreign, the market capitalization does not reflect earnings and profits, the calculation does not include privately held companies, and so forth. The goal is to just get a sense of the order of magnitude involved, not to have a precise number.

⁶³ For literature exploring the costs and benefits of tax shelter enforcement, see *Symposium on Corporate Tax Shelters*, 55 TAX L. REV. 125 (2002).

getting the treatment that they wanted, they had to pay lawyers and bankers to structure deals (which, from at least my perspective, is a really great thing) and the government had to pay staff to try to enforce the line. With the check the box rules, the government threw in the towel and simply made the treatment elective. By making the treatment elective rather than trying to enforce a distinction that was impossible to enforce, we eliminated the structuring costs, without, at least in theory, changing the law as it was actually applied on the ground.⁶⁴

Perhaps churning to avoid the limits of new equity integration is like structuring entities to be either partnerships or corporations. It is simply so difficult to stop churning that we should give up and allow it freely. Note, however, that the check-the-box approach is a rare exception. In almost all cases, we instead try to enforce avoided rules rather than to make the avoidance easier. It is hard to think of another example like check-the-box.⁶⁵

With this framing, we can now turn to an analysis of churning.

Churning through redemptions: To understand churning, suppose that we implemented a cash-flow consumption tax system for stock as a method of imposing new equity integration. Suppose also that we permitted the recovery of existing basis in stock on the theory that basis represents income that has already been taxed. New stock purchases, under this system, would be deductible and distributions taxable to the extent that they exceed basis. For example, an investor who purchases new stock for \$100 and a year later receives a distribution of \$110 would get a \$100 deduction when the stock is purchased and be taxed on the distribution of \$110 the next year. Someone who owns stock prior to enactment and has a basis of \$100, would pay tax on the \$10 of gain if he receives a \$110

⁶⁴ It turns out that the government was wrong about the facts for foreign entities and check the box is thought to generate substantial revenue losses for cross-border transactions. With respect to domestic entities, however, the government's factual premises appear to have been correct, and in the domestic context, it is viewed as a success.

⁶⁵ See David A. Weisbach, *Ten Truths About Tax Shelters*, 55 TAX L. REV. 215, 222–225 (2002).

distribution. He would receive a taxable distribution of \$110 but be allowed to use his \$100 basis to reduce the taxable amount.

Now suppose that the day after the new system was enacted, the corporation redeems the old shareholder's stock for \$100 (plus a few cents to reflect the return on investing for two days). The shareholder would have no gain because he would be able to use his \$100 basis against the \$100 distribution. The shareholder then purchases new stock for \$100, deducting the purchase. There would be no change in corporate equity or in the position of the shareholder but the shareholder would be able to claim a net deduction equal to his basis in the stock.

The same analysis applies if we were to implement the system at the corporate level through a deduction for new equity and a tax on distributions (exempting distributions at the shareholder level). If the tax on distributions was offset by pre-enactment capital (or basis), corporations could issue new equity and redeem old equity, generating a net deduction. For example, suppose that prior to enactment a corporation had \$100 of capital. After enactment, a corporation could issue \$100 of new capital, claiming a \$100 deduction and immediately redeem its old capital. If the tax on the \$100 redemption were offset by the \$100 existing capital, there would be no net tax on the redemption. The net would be a deduction equal to the existing capital of the corporation, or churning.

Churning through stock sales. Depending on how sales of stock between shareholders are treated, stock sales may also create churning opportunities. Suppose that stock sales and purchases between shareholders are put on a cash flow basis, so that purchasers deduct the cost of any stock that they buy and sellers are taxed on the receipt. Suppose also that we allow basis recovery, so that sellers reduce the taxable amount of their receipts by their pre-enactment basis. This system would allow churning through the sale of stock between shareholders. For example, suppose a shareholder has a basis of \$100 in a share of stock before enactment of the new system. A sale from the old shareholder to a

new would generate a deduction of \$100 to the new but the old shareholder would not face a tax because he can use his \$100 basis against his receipt.⁶⁶

Solution #1: Basis wipeout. There is a simple solution to the churning problems, which is to not allow recovery of existing basis in stock. Consider the churning transaction described above, of redeeming existing stock and issuing new stock. If no recovery of basis were allowed, the redemption of \$100 of existing would generate \$100 of gain and the issuance of new stock a \$100 deduction. The net would be offsetting gains and deductions, with zero overall effect. Similarly, sales between stockholders taxed on a cash-flow basis would no net tax.

A problem with this solution is that if it is anticipated, shareholders could sell their stock to tax-exempt entities prior to enactment of the system, using their basis to offset gain. Immediately after enactment, they could buy their stock back, generating a deduction. To illustrate, suppose a shareholder has a basis of \$100 in stock worth \$100 prior to enactment. Before enactment, he sells his stock to a pension fund for \$100, generating no gain or loss. Immediately after enactment, he purchases his stock back, deducting his \$100 purchase price. The pension fund, because it is tax-exempt, would not suffer a corresponding tax on the sale of the stock back to the original owner. Similarly, corporations could redeem stock prior to enactment and issue new stock after.

For these churning transactions to work, shareholders have to be able to anticipate enactment. One possible solution is to have a surprise effective date, such as an announcement by the relevant legislative body (e.g., the heads of the

⁶⁶ Note that we cannot solve the problem by using the normal basis rules for sales between stockholders (i.e., give the buyers of stock in the secondary market a \$100 basis instead of a \$100 deduction) while giving a deduction for new stock. To illustrate, suppose that an investor, after the enactment of the system, purchases new stock from a corporation for \$100. He deducts the purchase and has a zero basis. If he were to sell the stock, he would have \$100 of gain. If the buyer got a \$100 basis, the net effect would be to eliminate the deduction for the stock purchase, defeating the goal of the system.

tax writing committees) of an immediate effective date for any future legislation. Alternatively, the effective date could be made retroactive.

If it works, basis elimination could be efficient in the sense that it would be a lump sum tax. It would also be quite substantial. The analysis of basis elimination would be similar to the analysis of a surprise transition to a consumption tax.⁶⁷

Solution #2: basis amortization. A milder system that might also prevent churning is to allow basis recovery for existing stock but to do so based on a statutory amortization schedule unrelated to stock sales. Our shareholder with basis of \$100 would, effectively, put that basis in a special account and recover it over time. Stock sales would be on a cash flow system as if existing basis were zero. This system would also have to be imposed on a surprise basis because otherwise, tax-exempts would sell their stock to taxable shareholders just before enactment so that the taxable shareholders could get the basis amortization.

Solutions #1A and #2A: The same analysis applies to the corporate-level version of the above two solutions to churning (i.e., where the corporation gets a deduction for new equity and is taxed on distributions). If the corporation is fully taxed on all distribution without an offset for existing capital or basis, the effect is the same as elimination of basis at the shareholder level. Because the tax system would look very different than current law, the basis elimination would not be as obvious as it would be for a shareholder system, but the effect would be the same. And similarly, corporations could amortize existing capital.

Solution #3: tracing: An alternative method of preventing churning is what we might call tracing. Tracing approaches attempt to identify net new capital and to limit the benefits of integration to this amount. The ALI's 1982 and 1989 approach to integration can be thought of as a tracing approach. The ALI would have required corporations to maintain an account that is equal to new capital (i.e., stock issuances after enactment) reduced by distributions (with an exception for dividends paid in the ordinary course of business). Deductions for dividends

⁶⁷ For a survey of this literature, see Kaplow, *Capital Levies and Transition to a Consumption Tax*, *supra* note 48.

were limited to a specified return on this account. If a corporation issued new stock for \$100 and redeemed old stock for \$100 in an attempted churning transaction, the account would be zero because no net new capital would have been issued. Correspondingly, no deduction for dividends would be allowed.

Realistically tracing methods have to be implemented at the corporate level because they attempt to measure net new capital which is a corporate-level measurement, not a measurement for any particular shareholder. For example, if an old shareholder were redeemed and a week later new stock issued to someone else, there would be no straightforward way for the old shareholder to take the offsetting stock issuance into account when determining the treatment of his redemption. This means that something like the ALI corporate account is the most promising tracing system.

The tracing approach of the ALI would have a number of complexities if actually applied. For example, it would need rules to determine how the capital account is treated when corporations divide, acquire one another, and recapitalize. It would also need rules governing the allocation of the dividend deduction to different classes of shares. The ALI report provides possible rules to govern these cases.

Solution #4: explicit transition tax. As noted, in 1990, Alan Auerbach suggested that we can implement new equity integration by using a full integration system and imposing a tax on existing equity.⁶⁸ Because this system would not depend on transactions, it would not be susceptible to churning, at least in the same way that methods based on share issuances would be.

As noted, the most obvious way to tax existing equity is to impose the tax on the value of a corporation's e&p as of a chosen date or period because this account represents the amount of taxable dividends as of that date. Earnings and profits accounts, however, are tax constructs, so there are likely ways to

⁶⁸ See *supra* note 9 and accompanying text.

manipulate the accounts.⁶⁹ Manipulation would be particularly prevalent if the tax were administered on the value of the account on a given day or a relatively short period of time, so that tax planners only have to lower the account momentarily. For example, selective realization of losses during the specified period when the earnings and profits account is valued would permanently lower taxes. As noted, one response to this is to use e&p as of a date prior to enactment or averaged over a period of time.⁷⁰ While corporations that correctly anticipate enactment will be able to manipulate their accounts, we should expect much less manipulation than if the valuation date were after enactment.

An alternative would be to use the value of existing stock on a chosen date. This is a real value, and for public corporations, observable from market transactions, rather than an accounting value. It would, therefore, be less subject to manipulation than earnings and profits accounts.

A possible response to an explicit tax on existing equity is that the problems with computing e&p or, in the alternative, current value, make it infeasible. Corporations will lower their transition tax by claiming to have low earnings and profits, either by simply under-stating the value of the account or through manipulation. But the alternative is to set their transition tax to zero by default. If the true value of a corporation's e&p were, say, \$100, and it reports a value of, say, \$70, it is hard to see why the response to the low claimed value should be to set the value to \$0. The same holds for using current value as a proxy for future dividends.

Evaluation: A full evaluation of anti-churning rules would need estimates of the size of the revenue losses from churning and the costs of the administrative complexity, which could be compared with the costs of the automatic churning which comes with full integration. From this preliminary examination, however, it is hard to see why full integration is a better approach than attempting to stop churning. As noted, it is extremely unusual to think sheltering opportunity is so

⁶⁹ See *supra* notes 59–60 and accompanying text.

⁷⁰ *Id.*

difficult to stop that we just give up and allow it rather than try to fight it.⁷¹ There are a number of methods to reduce churning, possibly substantially. At a minimum, we should not proceed with full integration without a careful examination of the cost savings from new equity integration with anti-churning rules.

3. Generalizing: tax-exempt and foreign shareholders and foreign income

The analysis so far has been made under the assumption that investors are taxable and that all corporate earnings are subject to current tax (thereby assuming away the problem of foreign earnings). This section relaxes these assumptions.

I start by relaxing only the assumption that all shareholders are taxable at the same rate. While there is some dispute about the numbers, estimates of U.S. equities held by households in taxable accounts (including equities held indirectly through mutual funds and other investment vehicles) range from 24%⁷² to 44%.⁷³ The share held by tax-exempt entities such as pension funds, retirement accounts, and charities is about 42%. The share held by foreign investors is in the range of 26%. When shareholders are in different tax positions, the analysis and the design of integration systems can change considerably. In particular, the corporate tax rate can no longer be set at the same rate as the shareholder tax rate if there is more than one shareholder tax rate, and this has implications for design.

After considering the implication of shareholders heterogeneity, I relax the assumptions that all income of U.S. corporations is taxed domestically. A large,

⁷¹ See *supra* note 63 and accompanying text.

⁷² Rosenthal & Austin, *supra* note 61, at 926.

⁷³ Joseph Rosenberg, *Corporate Dividends Paid and Received, 2003-2009*, 136 TAX NOTES 1475 (Sept. 17, 2012).

and growing, portion of the income of U.S. corporations is earned abroad.⁷⁴ In addition, U.S. corporations hold about \$2 trillion of cash abroad and some attribute the size of these holdings to taxes.⁷⁵ The problem of how best to tax foreign income of domestic corporations is complex and goes well beyond the analysis here. There is little consensus on how to think about these issues, or even the scope of the problem, and there is no consensus on the best solution. I offer only preliminary thoughts on the implications of foreign income for corporate integration.

A. Shareholders in different tax positions

1. Economic effects – tax exempts

As noted, more than 40% of the shares of U.S. corporations are held by entities that are exempt from taxation, such as pension funds, retirement accounts and charities. The analysis of the effects of the corporate tax on these investors follows the same blueprint as above except that there is no tax at the shareholder level, so that in the notation used above, $p = 0$ and $d = 0$. As above, we can consider an investment that the investor can either make outside of corporate sector, through new equity in a corporation, by lending to the corporation, and through retained earnings in a corporation whose stock is held by the tax-exempt investor. The basic formulas remain the same, with the key difference being that the values of p and d are different, but it is worth running through the specifics.

Non-corporate investment and lending to corporations. A tax-exempt investor that invests outside of the corporate sector, or that invests in corporate debt, is not subject to tax on the return. If it invests \$100 and earns \$10 before

⁷⁴ Harry Grubert, *Foreign Taxes and the Growing Share of U.S. Multinational Company Income Abroad: Profits, Not Sales, Are Being Globalized*, 65 NAT'L TAX J. 247 (2012).

⁷⁵ See, e.g., Edward D. Kleinbard, *Competitiveness Has Nothing to Do With It*, 144 TAX NOTES 1055 (2014).

taxes, it gets to keep \$110. Algebraically, it ends up with $(1+r)^n$ if it invests \$1 at a rate of return r for n years.⁷⁶

New equity. Suppose instead that the tax-exempt investor purchases \$100 of new stock of a corporation, and the corporation invests the money. When the corporation earns \$10 after one year, it must pay a tax. Using the 40% tax rate from above, the corporation would have to pay a tax of \$4 and would be left with \$106. When the corporation distributes this money, the tax-exempt investor pays no additional tax, and is left with \$106. Algebraically, the tax exempt investor is left with $\$(1+r(1-c))^n$ after n years if it invest \$1 in new equity.

Retained earnings. Suppose instead that corporation has \$100 of retained earnings that it invests at a 10% rate of return. The corporation must pay tax on the earnings, leaving it, after one period, with \$106. When the retained earnings are distributed, the tax-exempt investor does not pay tax on distribution, and is left with \$106. Algebraically, the tax exempt investor is left with $(1+r(1-c))^n$ after n years, which is exactly the same as for new equity. One way to understand this result is that tax-exempt investors are already “integrated” in the sense that there is no dividend tax, so they get one of the results of integration, which is that the returns to new equity and retained earnings are the same.

If the corporation immediately distributed the \$100 of retained earnings, the tax-exempt investor would have no tax on the distribution and could invest the full \$100. After one year, it would have \$110, which is the same as for outside investments and greater than if the corporation were to retain the earnings for another year. Algebraically, the investor has $(1+r)^n$ after n years.

Summary. We can summarize the results by restating Table 1, adjusted for a tax-exempt investor:

⁷⁶ Some forms of investment by tax-exempts are subject to the Unrelated Business Income Tax or UBIT. I discuss the extent of UBIT and how it does, or does not, change the analysis below.

Table 2: Investment returns for tax-exempt investors

Investment choice	After-tax return
Non-corporate	$(1 + r)^n$
New equity	$(1 + r(1 - c))^n$
Debt	$(1 + r)^n$
Retained earnings, corporate investment	$(1 + r(1 - c))^n$
Retained earnings, immediate distribution	$(1 + r)^n$

As can be seen from examination of Table 2, to avoid distortions in investment patterns for tax-exempt investors, the corporate tax rate on income attributable to their investments must be zero. If it is zero, new equity, retained earnings, debt, and outside investments all face the same tax rate. If the corporate tax rate is above zero, there is an incentive to distribute earnings and to avoid new equity.

The analysis applies more generally: to avoid incentives to retain or distribute earnings (or generally, to invest through corporations or through other vehicles), the tax rate on corporate earnings has to be the same as the tax on earnings elsewhere. Given the same pre-tax opportunity, investors will want to make the investment where the tax rate is lowest. The analysis applies to taxable investors as well as tax-exempt. If the tax rate on corporate earnings is not equal to the personal tax rate, there will be an incentive for personal investors to change their investment patterns.⁷⁷

⁷⁷ This is the same logic used to analyze the problem of incentives to retain earnings abroad. See, e.g., Alvin C. Warren Jr., *Income of Foreign Subsidiaries: A Review of the Basic Analytics*, 145 TAX NOTES 321 (2014) (“if the repatriation tax rate (t_r) does not decrease, the tax advantage of delaying repatriation of foreign earnings under current law come *not* from delaying the repatriation tax but from the application of a foreign tax rate (t_f) on earnings during the period of deferral that is lower than the U.S. tax rate (t_{US}) applicable to those earnings.”) (emphasis added).

The relevant tax rate here is the tax on corporate earnings not the tax on distributions. The distributions tax, d , is uniformly zero in Table 2. All of the distortions arise because of the corporate-level tax. As a result, whether the New or Traditional View holds is irrelevant to this effect because these models are about the effect of the dividend tax. This means the problem is not limited to earnings on new equity. It applies to all equity. This can be seen in Table 2, where the new equity and the retained earnings lines have a lower after-tax rate of return than the others.

The key problem is that if investors face different tax rates on outside investments, they must also have different tax rates on their corporate investments. The question for the design of integration systems is whether this can be achieved, a question which is taken up below.

The conclusion that tax-exempt investors should face a zero tax rate on their investments in corporate stock is often resisted because of the substantial revenue costs. Under current law, when a tax-exempt entity purchases corporate stock, the return is taxed at the corporate level, at corporate rate. Reducing this rate to zero would eliminate the tax revenue from those earnings.

Revenue needs, however, have to be assessed in the context of the overall tax system rather than by examining only a subset of issues or by holding the revenue from one particular sector of the economy fixed. It could be the case that the additional revenue from taxing tax-exempts' investments in stock make it desirable to distort their investments choices, but to understand whether such a policy is desirable, we need to understand the reasons why we want to raise revenue by distorting that margin as opposed to some other margin. It is not enough to say that changing the system to eliminate an investment distortion is costly.

Similar arguments apply to distributive concerns. Extending integration to tax-exempts, without other compensating changes to their taxation, will reduce the tax on tax-exempts, generating distributive consequences. Such a policy would reduce taxes on retirement savers and charitable endowments. These distributive consequences might be undesirable (or they might be desirable), perhaps depending on who bears the offsetting tax increase.

The Treasury Department in its 1992 report concluded that there is no need to lower the tax rate on tax-exempt investors in stock by arguing that their earnings outside of the corporate sector are subject to the Unrelated Business Income Tax, or UBIT.⁷⁸ This tax applies if a tax-exempt entity runs a side business, such as a law school running a macaroni factory.⁷⁹ It also applies more generally to investments that are the equivalent of running a business. If tax-exempt investors are subject to the same, or to a similar tax as individual investors on outside investments, the problem of shareholder heterogeneity goes away, and Table 2 would look identical to Table 1.

The facts do not seem to support this argument, however. According to a recent report from the Urban-Brookings Tax Policy Center, tax-exempt entities paid about \$10.3 billion in UBIT tax in 2008 but had total income of \$1.35 trillion, which means that more than 99% of their income was not subject to UBIT.⁸⁰ This is not quite the right comparison, we want to know how much of their non-corporate income was subject to UBIT, not of their total income and ideally, we would want to know how the marginal investment is taxed. Nevertheless, this data gives a strong sense that the Treasury's approach is not consistent with the facts.

The American Law Institute's 1993 study proposed to deal with shareholder heterogeneity by eliminating it: it would have imposed a tax on the earnings of tax-exempt investors.⁸¹ While such a tax would solve the problem of

⁷⁸ TREASURY INTEGRATION REPORT, *supra* note 3, at 67–71.

⁷⁹ John Brooks, *The Marts of Trade: The Law School and the Noodle Factory*, THE NEW YORKER, Dec. 26, 1977, <http://www.newyorker.com/magazine/1977/12/26/the-law-school-and-the-noodle-factory>.

⁸⁰ Katherine Toran, *The Unrelated Business Income Tax*, URBAN INSTITUTE (2016), <http://www.urban.org/research/publication/unrelated-business-income-tax> [<https://perma.cc/CH22-GLSM>].

⁸¹ See WARREN ALI INTEGRATION STUDY, *supra* note 5, at 163–167.

shareholders having different tax rates on outside investments, it would also be a significant policy change unrelated to the design of corporate tax.

2. Economic Effects - Foreign Investors

As noted, about 26% of the holders of U.S stocks are foreigners. Dividends paid to foreign investors are subject to a 30% tax (called a withholding tax, but the name is misleading, it is a final tax).⁸² This tax is often reduced by treaty to 15% or even 5%.⁸³ Foreign investors in U.S. debt, including corporate debt, generally are not taxed on the receipt of interest payments.⁸⁴ The analysis of the effects of this set of taxes follows a now-familiar pattern.

We can see the conclusions by restating Tables 1 and 2, adjusting it for the rates applicable to foreign investors. We do not know what the rate is for non-corporate investments by foreign investors because it will depend on their home country tax system and where they invest. Denote whatever rate this happens to be by f . Denote the dividend withholding tax rate by w . Foreign investors in U.S. debt are, for the most part, not subject to a withholding tax but may be subject to taxation in their home country. Denote this by f_d (foreign tax rate on debt).

Table 3: Investment returns for foreign investors

Investment choice	After-tax return
Non-corporate	$(1 + r(1 - f))^n$
New equity	$(1 + r(1 - c)(1 - w))^n$
Debt	$(1 + r(1 - f_d))^n$

⁸² I.R.C. § 1441.

⁸³ Internal Revenue Service, Table 1: Withholding Tax Rates on Income Other Than Personal Service Income Under Chapter 3, Internal Revenue Code, and Income Tax Treaties (2016), www.irs.gov/PUP/individuals/international/Tax_Treaty_Table_1.pdf.

⁸⁴ I.R.C. § 871(h).

Retained earnings, corporate investment	$(1 + r(1 - c))^n (1 - w)$
Retained earnings, immediate distribution	$(1 - w)(1 + r(1 - f))^n$

The overall analysis is identical to the analysis above. We need the corporate tax rate to equal the rate on outside investments, or $c = f$. Because foreign investors can come from many different countries, there may be many different foreign tax rates. Moreover, we want to reduce the dividend withholding tax w only for new equity.

In the international context, there is an additional consideration that affects the tax rate on corporate earnings. A number of economists have argued that if capital is mobile, so that it can be invested in a large number of different countries, owners of capital will be able to demand and to receive the global after-tax rate of return regardless of where their money is invested.⁸⁵ For example, if mobile capital is able to avoid income taxes, so that $f = 0$ and its after-tax rate of return is r , the pre-tax return on U.S. stocks will have to be high enough so that the after-tax return is r . If the United States imposes a corporate tax at rate c , the pre-tax rate of return has to be $r/(1-c)$ so that foreign investors will receive c . If the United States imposes a withholding tax, the pre-tax return would have to be higher still.

To pay these higher returns, payments to other factors of production have to be reduced. In particular, economists have argued that the burden of taxes on foreign investment are shifted to labor. Moreover, they argue that if the taxes are

⁸⁵ See, e.g., Roger H. Gordon & A. Lars Bovenberg, *Why Is Capital So Immobile Internationally? Possible Explanations and Implications for Capital Income Taxation*, 86 AM. ECON. REV. 1057 (1996); Rachel Griffith, James Hines & Peter Birch Sørensen, *International Capital Taxation*, in DIMENSIONS OF TAX DESIGN: THE MIRRLEES REVIEW (Sir James Mirrlees et al. eds., 2010); *Corporate Taxation in an International Context*, in TAX BY DESIGN: THE MIRRLEES REVIEW (James Mirrlees et al. eds., 2011).

shifted to labor, it is better to directly tax labor rather than to implicitly tax labor through a tax on foreign investment.⁸⁶

This argument applies to what are called “small open economies”, which are economies that are open to foreign investment and that offer no particular advantage over other economies. The U.S. likely has some advantages in attracting foreign investment. We might think of this as the U.S. offering an effective pre-tax rate of return higher than r in some cases and for some investors. This means that the U.S. can afford to have some residual corporate tax because foreign investors can be forced to bear that tax. In effect, the U.S. has some market power that it can exploit in setting the tax rate on foreign investment. The same argument may hold for tax-exempt investment in the U.S. corporate sector.

3. Implications for systems of integration

The analysis above leads to the following two conclusions. First, the tax rate on corporate earnings should match the tax rate on outside earnings available to investors. Because different types of investors face different tax rates on outside earnings, the ultimate tax on corporate earnings should be determined by reference to the tax attributes of the shareholders.

A caveat to this first conclusion there may be room for a residual corporate tax because of the unique benefits of investing in the US corporate sector. In the language of international tax economics, the US is not a small open economy. While it is beyond the scope of this paper, an important design issue is whether this residual tax should be based on a measure of income or consumption.

Second, introducing heterogeneous shareholders does not change the arguments made in Part 2 above that integration should only be extended to new equity. In particular, even with heterogeneous shareholders, the tax on distributions on new equity should be zero but the tax on distributions on old equity should be retained. The distributions tax that is to be retained, however, may vary by shareholder: shareholder heterogeneity means that different

⁸⁶ See, e.g., Corporate Taxation in an International Context, *supra* note 85, at 437–438.

shareholders pay different distributions taxes. Comparing Tables 1, 2, and 3, we can see that the distributions tax varies between the normal dividend tax d , the withholding tax, w , and zero (the distributions tax paid by tax-exempts).

Taking these points together, there are two elements to the design of an integration system: setting the corporate tax rate, c , to equal the shareholder rate and setting the tax on distributions, d or w , to be the shareholder rate on old equity and zero on new equity. Limiting systems to those that meet these requirements restricts the set of choices and may require compromises where this goal is difficult to achieve. For example, systems that determine tax liability only at the corporate level, such as a dividend exclusion system, are generally not optimal.

The problem of setting the ultimate corporate tax rate equal to the shareholder rate is somewhat easier than the problem of reducing the dividend tax to zero only for new equity. A number of systems achieve, or roughly achieve, the former.

The most straightforward is a dividend deduction system. In a dividend deduction system, corporations remit tax on their income but can claim a deduction for dividends paid. Dividends are then taxed at the shareholder rate. If all corporate income is distributed when earned, the effect of the three items (corporate tax on the income, corporate deduction for the distribution of the income, and shareholder inclusion at the shareholder rate) is to tax corporate income at shareholder rates. If corporate income is retained for some period, the system is not an exact equivalent because the tax on retained earnings, as they grow, is different than the tax on that growth would have been had the earnings been distributed.⁸⁷

If we add withholding to the dividend deduction system (or equivalently, consider a credit imputation system), it becomes more difficult to match the rate on corporate earnings to the shareholder rate. In these systems, the corporation remits a tax on its income. Shareholders are then taxed on dividends but can treat their share of corporate tax as a credit against taxes due on their dividends. The

⁸⁷ Appendix 2 provides the analytics.

corporate tax becomes a withholding tax that operates similarly to the way that withholding on wages works. For taxable shareholders, the system imposes a tax that is close to the tax on other income, at least if earnings are distributed currently.

Tax-exempt shareholders, however, would have to have a way of claiming the credit even though they pay no tax as a general matter. Effectively, they would have to file returns and the credit would have to be refundable to them, which might generate tax administration problems.⁸⁸ The treatment of foreign shareholders depends on their home country tax system. If they can offset taxes paid to the United States against their home country taxes through a foreign tax credit system, their tax on investments in the United States may be similar to their tax on investments elsewhere.

An alternative is to tax shareholders on a mark to market basis or an equivalent. Under this system, there is no (or a minimal) corporate tax. Instead, the measure of corporate income would be the change in value of the corporation's stock and the tax would be paid by shareholders. Taxable shareholders would pay tax on the change in value of their stock at their tax rate. Tax-exempt shareholders would not owe any tax. Foreign shareholders would be taxed under their home country systems. Several recent proposals pair mark to market or equivalent systems with a modest (15%) residual tax on corporate income.⁸⁹

Designing a distributions tax that retains the current tax burden on old equity but exempts new equity is somewhat more complex when there is shareholder heterogeneity. To see the problems, consider the cash-flow consumption tax system for stock introduced in Part 2, in which shareholder deducted purchases of

⁸⁸ For example, the corporation might incorrectly report to its tax-exempt shareholders that they get a credit because of a miscalculation of corporate income.

⁸⁹ See, e.g., Toder & Viard, *supra* note 39; Harry Grubert & Rosanne Altshuler, *Shifting the Burden of Taxation from the Corporate to the Personal Level and Getting the Corporate Tax Rate Down to 15 Percent*, 69 NATL. TAX J. ___ (forthcoming 2016).

new stock and are taxed on distributions. This achieves a zero tax on new equity while retaining the tax on existing equity. This works for taxable investors, as explored above. It also works for tax-exempt investors because they would neither deduct nor include anything (or equivalently, deducting and including at their zero rate). It would be difficult to make it work for foreign investors, however. Foreign investors subject to withholding taxes may not otherwise file a U.S. tax return so there would be no easy way to allow them to deduct new stock purchases.

An alternative is to impose the system at the corporate level. For example, the deduction for stock issuances and the tax on distributions could be on corporations rather than shareholders. Similarly, the explicit transition tax on corporate e&p could be at the corporate level. These systems, however, would not readily be able to impose the right distributions tax on the right shareholders. They could set the rate so that overall the tax on old equity matches the taxes on old equity that would be due under current law, but they could not impose the correct tax on particular shareholders. For example, if we estimate that about half of shareholders would pay tax on distributions because they are either taxable or foreign but subject to a withholding tax, we could impose a transition tax on half of corporate e&p at a rate that reflects the blend of current taxable and foreign shareholders. The \$2.3 trillion estimate of the transition tax above used this approach.⁹⁰ If the tax is paid by the corporation, however, it would effectively be on all equity, not just on equity owned by taxable and foreign shareholders.

One way to think about the problem of meeting these two demands – a corporate tax ultimately equal to the shareholder tax and zero distributions tax only on new equity – is that they generate conflicting design problems. Setting the corporate rate equal to the shareholder rate is easiest with full integration. The systems considered above, such as a dividend deduction, credit imputation, or shareholder mark to market were full integration systems. The reason is because the goal is to set the corporate rate for all corporate earnings equal to the shareholder rate. Limiting the reduction in the distributions tax to new equity requires layering on top of these full integration systems a method of preventing

⁹⁰ See *supra* note 62 and accompanying text.

dividend tax reductions for existing equity. It may not be easily possible to meet both goals, requiring a compromise.

B. *Foreign income of U.S. corporations*

In this section I briefly consider the problems of the taxation of outbound investments of U.S. corporations, that is, investment by U.S. corporations in foreign countries. This topic is the subject of a vast literature, and the treatment here can barely scratch the surface.⁹¹ Nevertheless, it is worth covering, if only briefly, for three reasons. First, the taxation of foreign investment of U.S. corporations is viewed as central to corporate tax reform. As I write, most proposed reforms are largely about changing the treatment of outbound investment. Second, there is a substantial overlap between the economics of outbound investment and the economics of corporate integration, which in turn means that the solutions have some overlap. Finally, there have been recent suggestions that corporate integration can help address some of the problems of current law regarding outbound investment.⁹²

I draw two conclusions. The first is that to a great extent, the choices regarding the taxation of the foreign income of U.S. corporations are orthogonal to the choice of integration methods. Most integration methods are compatible with most choices for the taxation of outbound investments. We can think about integration as about the relationship between shareholder taxation and corporate taxation and we can think of the taxation of outbound investments as about the proper scope of the tax base. There are connections between the two but they are also, to some extent, distinct.

Second, a commonly proposed system for reducing the problems with outbound investments is to reduce the U.S. corporate tax rate. Imposing a corporate tax rate significantly below the rate imposed on taxable U.S.

⁹¹ Summaries of this literature can be found in Michael J. Graetz, *Foundations of International Income Taxation* (2003).

⁹² See, e.g., Graetz and Warren, *supra* note 1.

shareholders generates some problems, none of which are insurmountable but which must be addressed.

Nutshell version of US taxation of foreign income.

While the system for taxing foreign income of U.S. corporations (including defining what is foreign as compared to US income) is among the most complex systems in the tax law, the basics are straightforward. U.S. corporations are taxed on their worldwide income including income earned by foreign subsidiaries. Income earned by foreign subsidiaries, however, is taxed only when it is repatriated, such as through a payment of a dividend from the subsidiary to the U.S. parent. Moreover, the tax on repatriated foreign income is net of any foreign taxes paid. The netting is achieved by allowing foreign taxes to be credited against any U.S. taxes that are due. For example, suppose a U.S. corporation earns \$100 in foreign country F. F will likely impose a tax on that income. Suppose that the tax is \$30. If the U.S. tax rate is 35%, when the corporation repatriates the remaining \$70, it will owe \$35 in U.S. tax on its \$100 of foreign earnings. The corporation will be able to offset that tax by the \$30 in taxes paid to F and pay only \$5 to the U.S. government.⁹³

To some extent, the economics of this system are the same as the economics of the double-level corporate tax discussed above. In the outbound investment case, the “shareholder” is the U.S. corporation, which is the entity that has the investable funds and is choosing whether and where to make an investment. The “corporation” is the foreign subsidiary that receives the funds and makes the investment. The “corporate tax” is the tax imposed by the foreign country on the foreign subsidiary’s income. The dividend tax is the tax (net of the foreign tax credit) imposed by the U.S. on repatriation.

With this change in labels, the analysis is similar to that described above. In particular, the repatriation tax has no effect in the timing of repatriation in the same way that the dividend tax has no effect on the timing of dividends under the New View. If the foreign tax on income earned in F is lower than the U.S. tax on

⁹³ See Joseph Isenbergh, *International Taxation* 16–17 (2010).

income earned here, there may, however, be an incentive to defer repatriations in the same way that if the corporate rate is lower than the individual rate, there is an incentive to defer dividends.

One important difference between the rules for outbound investment and the corporate tax rules described in the first part of this paper is that the repatriation tax is set at a rate so that the combined foreign tax rate and repatriation tax rate is equal to the U.S. tax rate. In the example above, the foreign tax rate was 30% and the U.S. tax rate was 35%, so the repatriation tax was 5%. If the foreign rate were 25%, the repatriation tax would be 10%. The exception to this rule is if the foreign tax rate is higher than the U.S. tax rate: the repatriation tax is zero in this case rather than negative.

This feature of the tax system for outbound investment makes it look like an integrated system and in particular, a credit imputation system. The design and apparent goal of the system is to impose a single tax on the worldwide income of U.S. corporations, not a double tax. The reason it resembles the double-tax system is that it imposes a tax on repatriation in the same way that the double-tax system imposes a tax on dividends.

One widely discussed reform of the tax system for outbound investments is to eliminate the requirement that earnings be repatriated before they are taxed, creating a true worldwide tax on the income of U.S. corporations.⁹⁴ In the example, if F taxed the \$100 of earnings at a 30% rate, the U.S. would impose a tax at a 5% rate (made up of a 35% nominal rate reduced by the foreign tax credit of 30%), regardless of whether the earnings are repatriated. The repatriation tax would no longer be needed, and, therefore, would be eliminated. This system would eliminate any difference in taxes for U.S. corporations investing domestically and investing abroad. We can think of this as switching from the current law credit imputation system to a shareholder allocation system of integration. The key difference in those systems is that current earnings of the corporation (here the foreign subsidiary) are taxed at the shareholder (here the

⁹⁴ See, e.g., The White House & Dep't of the Treasury, The President's Framework for Business Tax Reform: An Update 24 (April, 2016).

U.S. corporation) rate under a shareholder allocation system while they are taxed at the corporate rate (here the foreign country tax rate) under a credit imputation system.

There is a key difference, however, in the outbound investment case and the analysis of integration above. In the outbound investment case, investors from third countries may also invest in F, and these countries may have tax systems that differ from ours. The result can be distortions in investment and ownership decisions if the United States imposed a tax on worldwide income.

To illustrate suppose that F has a low tax rate, say 15%. In this case, the U.S. tax will be 20% (whether imposed on repatriation or immediately) so that the total tax on foreign income is 35%. Now suppose that a third country, G, imposes no tax on foreign income, so that when G corporations invest in F, the tax is just 15%. In this case, G corporations will be able to outbid U.S. corporations for investments in F (as would F corporations). The result will be distortions in the investment patterns and ownership patterns of investments.

Moreover, if the U.S. tax system imposes a disadvantage on U.S. corporations because of its tax on worldwide income (whether via a repatriations tax or through a true worldwide system), there will be an incentive to avoid being a U.S. corporation in the first place. New corporations may be formed abroad and existing corporations may seek to become foreign corporations. There are a large number of rules designed to prevent exit but these rules tend to be incomplete, draconian, or both.⁹⁵ Moreover, these rules do not, and cannot easily be amended to, apply to new corporations.

⁹⁵ See e.g., DEP'T OF THE TREASURY, FACT SHEET: TREASURY ISSUES INVERSION REGULATIONS AND PROPOSED EARNINGS STRIPPING REGULATIONS (Apr. 4, 2016), <https://www.treasury.gov/press-center/press-releases/Pages/j10404.aspx>; Brooke Sutherland, *Jack Lew's Long Reach*, BLOOMBERG (Apr. 6, 2016), <https://www.bloomberg.com/gadfly/articles/2016-04-06/foreign-firms-face-collateral-damage-from-inversion-crackdown>; Dylan F. Moroses, Kat Lucero, & Stephen K. Cooper, *Hatch, Brady Renew Effort to Stop Treasury's Debt-Equity Regs*, TAX ANALYSTS (Aug. 23, 2016),

One possible conclusion is that the United States should not tax foreign income of U.S. corporations, adopting what is known as a territorial system. A territorial system would allow efficient ownership of investments within different countries. On the other hand, a territorial system would make the choice of where to invest depend on taxes, which may create inefficient investment choices. If investments in both the United States and F have the same pre-tax return, investments in F may have a higher after-tax return if the U.S. tax rate is higher than the tax rate in F.

There is no easy way to solve both problems: to ensure that U.S. corporations face the same tax rate on all of their investment opportunities and to ensure that investments in a given country all face the same rate. The best solution likely depends on the sizes of the respective distortions and on administrative concerns.

Implications for systems of integration

Recent discussions of corporate tax reform have revolved around how to balance these and related considerations.⁹⁶ The question here is how reforms of the system for outbound investment and the double tax relate to one another. I make three points.

First, most integration decisions are compatible with most choices regarding the taxation of income from outbound investments. For example, a credit imputation system can work with a worldwide tax system (i.e., one that taxes worldwide income even if not repatriated), a repatriation system like current law, or a territorial system. All of these are also compatible with limitations of the

<http://www.taxnotes.com/tax-notes-today/debt-instruments/hatch-brady-renew-effort-stop-treasurys-debt-equity-regs/2016/08/23/18577441?highlight=inversions>.

⁹⁶ See, e.g., THE PRESIDENT'S FRAMEWORK FOR BUSINESS TAX REFORM: AN UPDATE, *supra* note 94; DEP'T OF THE TREASURY, *supra* note 95; Graetz & Warren, *supra* note 1, at 16–19; H. WAYS AND MEANS COMM., 113th Cong., 2nd Sess., *Tax Reform Act of 2014*, Title III, §§ 3001–3140 (Feb. 21, 2014) [https://perma.cc/4BFR-XL9V]; REPUBLICAN STAFF OF THE SENATE FINANCE COMMITTEE, *supra* note 32.

integration to new equity, although in each case, the details of implementation have to be carefully worked out.

Second, there is an important policy choice regarding the treatment of foreign income within an integration system. To illustrate the issue, consider our running example of a U.S. corporation with \$100 of income. In a purely domestic system, the corporation would pay \$35 in tax. To fix ideas, consider a credit imputation (or equivalently, a dividend deduction plus withholding) system. When the corporation distributes its remaining \$65 of cash to the shareholder, the shareholder is treated as receiving a \$100 dividend and having \$35 in tax withheld. If the shareholder rate were 40%, say, the shareholder would owe \$40 in taxes but be able to claim a \$35 tax credit, so he would owe a net of \$5.

Now suppose that the \$100 of income is earned in F and that F imposes a \$30 tax on the income. If the United States retains a worldwide tax with foreign tax credits, the U.S. corporation would owe \$5 of additional tax. The question is what happens when the corporation distributes the \$65 to its shareholders?

There are two focal possibilities. One is to treat the taxes paid to F exactly the same way as taxes paid to the United States. The shareholder would be treated as receiving a \$100 dividend with \$35 of taxes withheld. He would owe another \$5 if his tax bracket were 40%.

An alternative, which is used by Australia in its credit imputation system is to count only taxes paid to the home country government. This would mean that the distribution is treated as a dividend of only \$70 with \$5 of taxes withheld. The shareholder would owe a 35% tax on this distribution reduced by the \$5 credit, or \$19.50 ($0.35 \times \$70 - \5). This approach effectively treats the foreign tax as a deductible expense.

The 1993 ALI study recommends the former treatment.⁹⁷ It argues that if the United States retains a foreign tax credit system, it makes sense to extend that treatment to an integrated corporate tax. That is, a choice to cede F the first \$30 of

⁹⁷ WARREN ALI INTEGRATION STUDY, *supra* note 5, at 180 (“Outbound Investment”).

tax on the \$100 income by granting the U.S. corporation a tax credit is a policy choice, and there is no reason to deviate from that choice because we have eliminated the double-level tax.

Others, such as the Treasury 1992 study and the recent paper by Michael Graetz and Al Warren argue that the Australian approach is better.⁹⁸ The benefit of the Australian system is that it creates an incentive to pay Australian tax because Australian but not foreign taxes are treated as withheld taxes. This means that the Australian system reduces incentives to avoid taxes and in particular, to shift income to low-tax jurisdictions. Without resolving the issue, it is not clear, at least to me, why a choice to treat foreign taxes as deductible rather than creditable is connected to integration and, if we think a deduction system is better, why that should not be adopted at the corporate level in the first place rather than achieve the equivalent through the choice of integration systems.

Third, one way to reduce the difficulty of balancing the various concerns outlined above is to reduce the corporate tax rate. With a low U.S. corporate tax rate, a worldwide tax with foreign tax credits looks a lot like a territorial system because there will be few cases where there is any residual U.S. tax. Moreover, the distortions that arise from compromises will be smaller: distortions tend to rise with the square of the tax rate so lowering the tax rate can significantly reduce the pressure on the system.⁹⁹ And the U.S. corporate tax rate is currently among the highest in the world, which generates its own pressure for rate reductions. As a result, there seems to be broad consensus in an otherwise contentious area, that lowering the U.S. corporate tax rate is desirable.

Pressure to lower the U.S. corporate tax rate because of international considerations, however, means that the tax rate might not be the same as the rate that would be chosen based solely in domestic and corporate integration

⁹⁸ TREASURY INTEGRATION RECOMMENDATION, *supra* note 3, at 2; Graetz & Warren, *supra* note 1.

⁹⁹ Alan J. Auerbach & James R. Hines Jr., *Taxation and Economic Efficiency*, in HANDBOOK OF PUBLIC ECONOMICS (Alan J. Auerbach and Martin Feldstein eds., 2002).

considerations. In particular, as discussed above, the corporate rate c and the individual rate, p , should be the same. If international considerations push c significantly below p , then there will be an incentive to retain earnings. The design of the integration system must consider how to reduce the resulting economic distortions.

The extent of the problem depends on the size of the rate differentials. Two recent proposals suggest reducing the corporate rate to 15% while retaining current law individual rates of around 40%.¹⁰⁰ This rate differential is large enough that the incentive to retain earnings (and use corporations as pocketbooks) would be substantial. As a result, both proposals have a mark to market or equivalent tax on stock, effectively shifting the remittance of the tax on corporate earnings to shareholders.

4. Conclusions

The analysis here has attempted to isolate certain features of the corporate tax and to examine the implications. The initial focus was on the where all shareholders are taxable at the same rate and all corporate income is fully taxed. In this setting, I concluded that, (1) ignoring administrative issues, limiting integration to new equity is preferable to full integration and to no integration; (2) there are a number of systems that limit integration to new equity, many that use the same economics as a transition to a consumption tax; and (3) while many systems will have problems with churning, problems with churning are similar to, and should be analyzed the same way as other tax avoidance problems; the possibility of churning should not be a reason to extend integration to all equity, not just new equity.

Relaxing the assumption that all shareholders are taxable at the same rate makes the picture somewhat more complex. In particular, ideal integration systems would ensure that corporate income is taxed at the same rate as other opportunities available to shareholders are taxed. This means that the tax rate on corporate income has to be ultimately determined by reference to each

¹⁰⁰ See Toder & Viard, *supra* note 89; Grubert & Altschuler, *supra* note 89.

shareholder's attributes. The choice of integration systems and ways of limiting integration to new equity are correspondingly limited. Full integration systems are better at taxing corporate income at shareholder rates than are new equity integration systems. The result might be a compromise between different goals.

There are a number of issues that I did not consider which might change these conclusions. In no particular order of importance, these include the following. I did not consider whether or how the capital gains tax on stock sales might change the conclusions. Standard integration proposals retain the capital gains tax but sometimes offer ways to reduce the tax if the gains represent income that has already been taxed at the corporate level. The issue becomes quite complex when considering corporate mergers and acquisitions, where the differences between selling the stock of a company and selling all of its assets can be significant.

Second, I did not consider how corporate tax preferences or untaxed corporate income should be dealt with under an integration system. Both the Treasury 1992 study and the ALI 1993 study carefully considered this issue and both concluded that untaxed income should not get the benefit of integration.¹⁰¹ The later Treasury 1992 proposal, however, would have extended integration to some forms of untaxed income.¹⁰²

A recent major study of the UK tax system suggested shifting the corporate tax base to a consumption base from an income base.¹⁰³ The analysis above assumed an income tax, and might change considerably if the corporate base were on consumption.

¹⁰¹ TREASURY INTEGRATION REPORT, *supra* note 3, at 15; WARREN ALI INTEGRATION STUDY, *supra* note 5, at 67 (“Mechanisms to Prevent Superintegration”)

¹⁰² TREASURY INTEGRATION RECOMMENDATION, *supra* note 3, at 4–5.

¹⁰³ James Mirrlees et al., *The Mirrlees Review: Conclusions and Recommendations for Reform*, 32 FISC. STUD. 331, 347 (2011).

Most centrally, the goal of the analysis was to try to understand the core effects of the corporate tax and of systems of integration. Choosing among the various compromises requires much more and in particular, an understanding of the size of the various effects, such as the size of the distortions and of the administrative and compliance costs in different systems.

Appendix 1: Proof of efficiency of new equity integration

In this section, I show that within the model of the new and traditional view used in Chetty and Saez (2010), a deduction for new equity eliminates the distortions from the dividend tax. I first present their model as is (basically repeating their presentation) and then show how allowing a deduction for new equity alters the results.

Chetty and Saez consider a corporation that operates for two periods. The corporation has initial cash holdings of X and can distribute $D \leq X$ in period 0. It can also issue new equity E in period 0. It invests what remains $(X - D + E)$ which generates a return $f(X - D + E)$ in period 1, where f is strictly concave. It pays taxes on the return, leaving it with $(1 - c)f(X + E - D) + X - D + E$. It then liquidates, distributing its assets.

The net of tax payout in period 0 is $(1 - \delta)D$ and the net of tax payout in period 1 is $(1 - \delta)[(1 - c)f(X - D + E) + X - D] + E$. The logic of the latter is that the corporate tax applies to the profits $f(\cdot)$, and the dividend tax applies to the full undistributed amount, but for the basis attributable to new equity, E .

The goal of the corporation, it is assumed, is to set its investment policy to maximize the net present value of after-tax payouts. Assume that the discount rate required by the market, r , is exogenously given. The corporation sets D and E to maximize the net present value of corporate distributions:

$$(1) \quad V = (1 - \delta)D - E + \frac{(1 - \delta)[(1 - c)f(X + E - D) + X - D] + E}{1 + r}.$$

First consider cash rich firms, meaning that the after-corporate tax marginal return to investment is below the hurdle rate: $(1 - c)f'(I) < r$. Chetty and Saez show that these firms do not issue new equity, because simultaneously reducing dividends and new equity saves taxes. In this case, $E = 0$. If we take the first order condition with respect to D (at $E = 0$) we get:

$$(2) \quad (1 - c)f'(x - D^*) = r.$$

The after-corporate tax marginal rate of return is equal to the discount rate. The dividend tax rate has no effect on investment. It is easy to see why: if there is no new equity, so that we set $E = 0$, the dividend tax factors out of equation (1). These firms are “new view firms” in that they rely on retained earnings rather than on new equity to finance projects. Project choice for these firms is unaffected by the dividend tax.

Suppose a firm is cash poor in the sense that the marginal return to investment is greater than the discount rate: $(1 - c)f'(X) > r$. These firms will want to invest more than the cash they have on hand. In this case, we can show that firms pay no dividends: $D = 0$. Take the first order condition with respect to E to get:

$$(3) \quad (1 - c)f'(X + E) = \frac{r}{(1 - \delta)}.$$

There are two cases to consider. The first is if $(1 - \delta)(1 - c)f'(X) < r$. For these firms, the after dividend tax, after-corporate tax marginal return is below the hurdle rate. They will not want to issue any new equity. The dividend tax on new equity is sufficiently punitive that they just use their cash on hand.

The second case is if $(1 - \delta)(1 - c)f'(X) \geq r$. These firms can benefit from issuing new equity. The set E^* to satisfy (3), which means that the required marginal rate of return on corporate investments is grossed up by the dividend tax. As the dividend tax rate goes up, marginal corporate investment and new equity issuances go down.

These latter cash-constrained firms are “traditional view firms.” They reduce dividends and new equity issuances because of the dividend tax. That is, for these firms, the dividend tax distorts corporate investment.

Now suppose we modify the corporate tax so that new equity issuances are deductible and distributions are fully taxable. The value of the corporation is now:

$$(4) \quad V = (1-\delta)D - (1-\delta)E + \frac{(1-\delta)[(1-c)f(X+E-D) + X - D + E]}{1+r}.$$

The second term on the right hand side is period 0 new equity issuances E . The cost to shareholders of buying new equity is reduced by the deduction, so they can purchase E of equity at a cost of $(1-\delta)E$. The last term on the right hand side is modified so that the distribution of E is subject to the dividend tax because shareholders will have a zero basis in their new stock due to the deduction when they purchased it.

Use the same procedure to determine optimal investment policy under this tax system as under the actual tax system. For cash rich firms, ($E = 0$), the first order condition is the same, and investment is not distorted by the dividend tax.

For cash poor firms ($E \geq 0$ and $D = 0$), the first order condition becomes:

$$(5) \quad (1-c)f'(X+E) = r.$$

The dividend tax no longer distorts corporate investment, which is what is desired. The reason is that the dividend tax now factors out of the maximand even when there is new equity.

Therefore, a deduction for purchases of new equity and a tax on the distribution eliminates the distortions from the dividend tax. Note that full integration sets $\delta = 0$. This also eliminates the distortion in investment patterns when $E > 0$. It is, however, not a necessary condition, and it produces windfall gains to existing shareholders.

Appendix 2: Retained earnings under a dividend deduction system

Immediate distribution:

Assume the corporation earns \$1 of pre-tax income. It pays a tax of c and is left with $\$1(1-c)$.

When this is distributed, the corporation deducts the distribution at rate c and the shareholder includes it at rate p .

The effect is a tax at rate p .

$$\$(1-c)\left(\frac{1-p}{1-c}\right) = \$(1-p).$$

If the shareholder invests this amount for n periods, he has

$$(6) \quad \$(1-p)(1+r(1-p))^n.$$

Retained earnings

Now suppose that the corporation retains its earnings and distributes them in n periods. It can invest $\$(1-c)$ after tax.

This grows at $(1+r(1-c))^n$

On distribution, corporation gets a deduction of this amount and shareholders include. Net after-distribution amount is

$$(7) \quad \$(1-c)(1+r(1-c))^n\left(\frac{1-p}{1-c}\right) = \$(1-p)(1+r(1-c))^n.$$

Conclusion:

Comparing (6) with (7), we can see that any difference between the corporate rate and the shareholder rate not only generates a difference between the value of the deduction on distribution and the tax on distribution but also on the after-tax return to the retained earnings.

This also holds for credit imputation systems and dividend deduction with withholding systems.