How Corporate Integration Could Kill the Market for Corporate Tax Shelters

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MARK P. GERGEN*

1. Introduction

This Essay examines an overlooked effect of a model of corporate integration in which income reported by the firm is taxed at the investor's rate. Under current law all investors benefit when a firm shields income from tax because it reduces the firm's tax cost and so increases available income. Taxing income reported by the firm at the investor's rate creates a conflict among investors over the value of the firm's shielding income from being reported as taxable. Tax-insensitive investors, who hold a majority of publicly traded equity, get no tax benefit from shielding while the benefit to tax-sensitive investors varies depending on an investor's tax rate and investment horizon. There is good reason to expect that firms will respond to integration by abjuring the use of costly tax shields. Whether this would be an improvement on the status quo is less clear. It would eliminate the market for corporate tax shelters as well as other less dramatic inefficiencies that result from tax shielding. A reduction in shielding complicates the revenue effects of integration as tax-paying investors, who hold a significant fraction of corporate equity, will pay tax on higher reported income. Firms could respond, however, by devising ways to stream reported and unreported returns to the value-maximizing tax clienteles, which would create new problems. Current integration proposals probably would not constrain streaming. Properly designed anti-streaming rules might succeed, as I will explain.

There are several proposals on the table to eliminate double taxation of corporate income within the framework of the current income tax, which is committed to taxing accretions in wealth subject to the tough constraint of the realization principle. Two proposals—the

* Fondren Chair for Faculty Excellence, University of Texas School of Law. Earlier versions of this essay were presented to the Harvard Tax Policy workshop in 2003 and to the Michigan Tax Policy workshop in 2005.
1 See note 39.
2 These two commitments necessitate what might be called a binocular approach to taxing corporate income. By this I mean an approach that must look at events both at the firm level and at the investor level to measure income. Under a cash-flow consumption tax we could ignore events at the firm level and look solely at cash individual owners take from

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conduit model\(^3\) and the shareholder credit model with a refundable credit\(^4\)—tax income reported by the firm at the investor's tax rate. Under the conduit model shareholders pay tax on income reported by the firm.\(^5\) Under the shareholder credit model with a refundable credit the firm pays what is in effect a withholding tax at the top individual rate.\(^6\) When a dividend is declared out of previously taxed income, a shareholder calculates tax at its rate on the income represented by the dividend and takes a credit for tax paid by the firm.\(^7\) When the credit is refundable, income reported by the firm that is distributed to shareholders ultimately bears tax at the shareholder's rate. A third integration proposal—the dividend exclusion model—imposes a single level of tax on reported income at the firm's rate.\(^8\) Dividends would not be taxed again at the investor level if tax has been paid at the firm level.\(^9\) This model also creates a divergence in payoffs from shielding to different tax clienteles but it is not likely to deter shielding at the firm level because tax insensitive investors and tax sensitive investors with a long investment horizon have similar payoffs that favor a high level of shielding.

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3 Subchapter K—the system for taxing partnerships—is the most familiar conduit model. ALI, Federal Income Tax Project, Taxation of Private Business Enterprises: Reporters' Study 67-101 (1999) (concluding this model is best in principle but that it is too difficult to administer). The ALI focused on a conduit model resembling subchapter K in which losses and preference income reported by a firm pass through to investors. The system for taxing mutual funds is a simpler conduit model.

4 ALI, Federal Income Tax Project, Integration of the Individual and Corporate Income Taxes (1993) (favoring this model). If the credit is not refundable, then the shareholder credit model imposes tax at the firm's rate. Id. at 680-85.

5 See ALI, note 3, at 68.

6 See ALI, note 4, at 50-1.

7 The dividend is grossed up to include the tax paid by the firm. Dividend Reinvestment Plans (DRIPS) enable a firm to make what is in effect a deemed dividend to enable shareholders to take the credit without a cash distribution. Treasury Dep't, Report on Integration of the Individual and Corporate Tax Systems: Taxing Business Income Once 87-8 (1992), available at http://www.ustreas.gov/offices/tax-policy/library/integration-paper/ (advocating the dividend exclusion model).

8 Id. at 17. This is the form of integration President Bush proposed in 2003. Joint Comm. on Tax'n, Economic Growth and Job Creation: Background and Proposals Relating to Incentives for Consumption and Investment, at 65-70 (2003), available at http://www.house.gov/jct/x-9-03.pdf. A firm would keep record of returns on which it has paid tax in an Excludible Distributions Account ("EDA"). Treasury Dep't, note 7, at 19. Dividends paid on a positive balance in the EDA account would not be taxed when realized by investors. See id. DRIPS shield an investor from tax when a corporation retains taxed income by allowing the corporation to declare a dividend that would increase an investor's basis. See id. at 24. The model can be made more like a conduit approach by making these outside basis adjustments mandatory.

9 Treasury Dep't, note 7, at 17.
That integration creates a conflict between investors regarding the desirability of shielding income at the firm level has been overlooked in the literature on integration. Previous studies of integration proposals focus on the benefits of eliminating or reducing the biases created by the traditional corporate income tax for using debt over equity in capital structure, for distributing earnings in forms other than dividends, and for retaining earnings. Each of the leading integration proposals is predicted to produce welfare gains by reducing these biases, though they are not predicted to perform equally well in these regards. Practical concerns are thought to outweigh the differences in the models. A 1992 Treasury study opts for the dividend exclusion model because it is simpler and closer to the familiar classical corporate income tax. It rejects a conduit approach because of its complexity. A 1999 ALI Reporter's study by George Yin and David Shakow concludes that "[c]onsiderations of tax compliance and administration" are the only reasons to reject the conduit approach. While there has been thoughtful analysis of the differences in the susceptibility of the models to opportunistic tax planning, this analysis has focused on dimensions of tax planning other than shielding income at the firm level by means other than substituting debt for equity in the capital structure. That the conduit and shareholder credit models create a conflict between investors over shielding at the firm

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11 Id. at 7-8.
12 Id.
13 Treasury Dep't, note 7, at 77.
14 Id. at 97.
15 ALI, note 3, at 76.
16 Michael Schler shows that "creative and aggressive tax lawyers" can exploit the dividend exclusion and shareholder credit models. Michael L. Schler, Taxing Corporate Income Once (or Hopefully Not at All): A Practitioner’s Comparison of the Treasury and ALI Integration Models, 47 Tax L. Rev. 509, 562 (1992). He concludes these models "should not [automatically] be viewed as a step towards tax simplification." Id. Yin and Shakow identify several problem areas common to the three models. ALI, note 3, at 76-100. Yin shows that under Treasury’s dividend exclusion prototype the tax burden on corporate-source income varies from a negative tax rate to a positive tax rate—in the highest case stacking the corporate rate and the individual rate—depending on whether corporate income is preference or nonpreference income, how an investor realizes the income (dividend distribution, nondividend distribution, or stock sale), the investor's basis in his stock, and the tax position of the price-setting purchaser of the stock. George K. Yin, Corporate Tax Integration and the Search for the Pragmatic Ideal, 47 Tax L. Rev. 431, 451-63, 463 tbl.7 (summary). Yin observes "[t]he principal reason for this failure, and the source of most of the distortions, is the proposed inconsistent treatment between capital gains and dividends." Id. at 468. Alvin Warren’s 1993 ALI Study and the 1992 Treasury Report, while advocating the shareholder credit and dividend exclusion models, concede the need for anti-abuse rules to prevent dividend stripping and streaming returns to preferred tax clientele.
level is an important difference between the conduit model and the shareholder credit model and the dividend exclusion model. Taxing reported income at the shareholder rate would simplify tax law on important dimensions if it induces firms to forgo shielding income. Of course, this would complicate tax law on other dimensions.

Recent developments show that firms have a fair amount of control over the share of economic income reported as taxable by means other than substituting debt for equity.\textsuperscript{17} Ed Kleinbard observed in 1999 that “[S]enior corporate managers now perceive a corporation’s tax liability . . . as a necessary cost that responds to aggressive management, just like other corporate expenses.”\textsuperscript{18} What we have learned since about the tax practices of Enron corroborates Kleinbard’s observation.\textsuperscript{19} This anecdotal evidence perhaps is buttressed by recent data showing a general decline in the effective tax rate on corporate in-

\textsuperscript{17} Graham and Tucker find that corporations who have been publicly identified as using tax shelters through deficiency assessments have significantly lower levels of debt during the periods in which the shelters shielded income from tax. John R. Graham & Alan Tucker, Tax Shelters and Corporate Debt Policy, 81 J. Fin. Econ. 563, 585 (2006). The inference is that tax shields are used as a substitute for debt.

\textsuperscript{18} Edward D. Kleinbard, Corporate Tax Shelters and Corporate Tax Management, 51 Tax Executive 235, 238 (1999).


A major task of the group was to review transactions brought to the firm by promoters. Id. at 104-06. It developed one transaction internally. Id. at 265. The group’s self-congratulatory business plan from June 2000 is revealing. See B-681 to B-708. There were fourteen professionals in the group. Id. at B-683. During that six-month period they oversaw nine transactions, initiated three new transactions, and were considering others. Id. at B-688, B-693. The group claimed to have added an average of $165 million net income to Enron in the prior three years and projected that it could steadily improve on this performance. Id. at B-683. Enron’s expense in fees on the twelve transactions was $87.6 million. Volume I, supra, at 10. It is difficult to determine Enron’s capital commitment or exposure to financial risk. A December 31, 2000 balance sheet shows that almost 20% of Enron’s assets were used in structured transactions. Volume II, supra, at B-585. Most of the transactions used Enron’s existing assets and liabilities, such as its office buildings. Id. A few involved the acquisition of financial assets. Id.
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come and a growth in the gap between book income and taxable income. There are, however, other interpretations of this data. These changes may result in part from firms overstating book earnings rather than shielding real earnings from tax. Again Enron is a case in point for several of the firm's tax transactions were designed to increase reported earnings by overstating the actual value of the tax benefits.

The analysis that follows assumes a firm faces rising costs as it shields a larger share of its income. While I have no hard data to back this up, there are good reasons to think this plausible. Many things firms do to reduce reported income are nearly cost-free, such as doing the paperwork to claim a deduction on an expenditure that would be

The transactions delivered a variety of tax benefits. Project Tanya and Project Valor accelerated the use of future expenses, turning them into capital losses that could be used to offset capital gains realized by Enron on asset sales. Volume I, supra, at 118-34. Project Steele and Project Cochise enabled Enron to use write-offs from built-in losses that belonged to other firms. Id. at 135-58. Project Tomas enabled Enron to dispose of low-basis, high-value assets for cash without recognizing gain. Id. at 189-207. In two transactions Enron served as counter-party facilitating tax-advantaged transactions for other firms. The group was looking for more of this work when Enron imploded. Id. at 106. A transaction developed in house—NOLy—shows a high degree of tactical gamesmanship. It produced artificial income to absorb losses from prior years so the statute of limitations would close on the returns Enron filed in those years. Id. at 260. The report does not say what Enron was trying to hide in those years. The transactions exploited diverse complex areas of tax law including corporate tax, partnership tax, the consolidated return regulations, the REMIC rules, and the FASIT rules. Id. at 109-273. Not one had a real business purpose. Id. at 105. In several a purpose was found in the positive financial effects of reporting the tax savings. Id. at 105 n.196.

The work of the structured transaction group is only part of the story. Enron was an early and repeat issuer of MIPS and other forms of tax-deductible preferred stock. Volume I, supra, at 313-21. It used convertible debt to monetize (sell) appreciated assets while deferring recognition of gain. Id. at 333-39. And it had a large piece of the COLI pie. Id. at 298-303. This covers much of the waterfront of innovative corporate tax planning in the 1990's except for the international arena, where Enron's tax planners could do little creative because a large foreign loss account left it with a pile of unusable foreign tax credits. Id. at 370.


22 More precisely the goal was to increase cash flow as measured by EBITDA (earnings before income, taxes and depreciation, and amortization), a common benchmark used by analysts for valuing a company. Joint Comm. on Tax'n, Volume I, note 19, at 102-03. Indeed, a number of the structured transactions were accounting driven. The transactions delivered deferred tax benefits but were designed to convert those future tax savings into current operating income that could be reported without discounting the savings to present value or subtracting an offsetting tax liability.
made in any event. Other actions impose real costs that may not be perceived as such. An example is a decision to defer recognition of a gain at the end of the tax year by several days. Some actions taken by firms to reduce reported income have significant visible costs. Corporations that invest in preferred stock consciously trade off significant points in yield to shelter returns with the dividends received deduction. In the litigated corporate tax shelter cases the reported up front cash costs of the shelter (fees paid to promoters, counterparties, and opinion writers) often are in the range of ten to thirty cents on the dollar of promised tax savings. Some actions entail visible non-monetary costs. An example is a corporate inversion (moving the nominal home offshore), which generates bad will.

A related question is how aggressively firms utilize available tax shields. Erickson, Goolsbee, and Maydew find that taxpaying corporations fail to utilize or to fully utilize a legal tax arbitrage opportunity with investments in municipal bonds. They do not offer much in the way of an explanation. If their finding is accurate and the phenomena more general, its import depends upon why firms do not fully utilize available tax shields. It may be a manifestation of a corporate culture in which tax liability is not thought of as something that can be managed. Kleinbard tells us and the Enron story suggests that this culture began to change in the 1990’s. Firms may be evolving towards behaving as this paper assumes they do.

II. HOW INTEGRATION CREATES A CONFLICT BETWEEN TAX CLIENTELES

This Part uses a very simple model to show how integration creates a conflict between investors who face different marginal rates or who have different investment horizons over the desirability of shielding income at the firm level when income reported by the firm is taxed at the investor’s rate. A simple model will do because the effect is dra-

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25 Merle Erickson, Austan Goolsbee & Edward Maydew, How Prevalent Is Tax Arbitrage? Evidence from the Market for Municipal Bonds, 56 Nat’l Tax J. 259 (2003). The authors suggest unobserved fixed transaction costs may explain why some firms do not exploit what would appear to be a profitable arbitrage opportunity. Id. at 267-68. The most intriguing finding is that firms that do exploit the opportunity, which mostly are in the financial sector, do not exploit it to the extent permitted by a safe harbor in tax law. Id. at 264. The authors cannot think of a good explanation for this behavior. They suggest as a possibility that increasing borrowing to purchase tax-exempt bonds adversely affects the debt-equity ratio or otherwise sends a negative signal to investors. Id. at 268.
26 See Kleinbard, note 18, at 238.
mantic. Assume a firm has economic income $r$ in a period. By expend-
ing $c$ a manager may predictably and permanently shield part or all of
this income from being reported as taxable by the firm. An increase
in $c$ ($\Delta c$) shields an increasing fraction of $r$ ($\Delta s$ with $s$ being the un-
reported fraction of $r$) with a diminishing marginal return. This is how
the world might look to a very proactive tax department that engages
in transactions that are essentially tax driven, such as corporate inver-
sions or tax shelters. Taxpaying investors and/or the firm will pay
tax on reported income at rate $t$. A taxpaying investor will pay tax on
unreported firm income when she sells the investment. Unreported
income is taxed at rate $t_{cg}$. One might think of $t_{cg}$ as the expected ef-
factive tax rate on capital gains. The expected effective tax rate on
capital gains can be significantly lower than the tax rate on reported
earnings ($t$) because of the value of the timing option, the capital gains
preference, and the possibility that gain will escape tax on death. The
firm has multiple tax clienteles for shareholders. One clientele is
tax-insensitive. These are investors who pay no investor-level tax.
The other clienteles consist of tax-sensitive investors who face differ-
ent tax rates or who have different investment horizons. The invest-
ment horizon determines the effective tax rate on capital gains.

The diagrams isolate the extreme cases of a very long horizon and a
fairly short horizon tax-sensitive investors who respectively face a very
low (2%) and fairly high (20%) effective tax rate on capital gains. I
assume $t$ is 40%. I assume the cost of shielding ($c$) increases on a
gently sloping concave curve that makes shielding 100% of $r$ cost-pro-
hibitive. Steepening the curve in the range in which shielding is cost
effective makes the effect more dramatic. Increasing the range of $r$
for which shielding is cost effective also makes the effect more
dramatic.

Some shielding is permanent. An example is moving earnings offshore when the firm
can reap the value of the earnings without repatriating them. Other tax shields defer in-
come. An example is a leveraged leasing transaction such as a LILO or a SILO in which
artificial income eventually nets out artificial tax loss. See, e.g., Rev. Rul. 2002-69, 2002-2
C.B. 760 (providing a detailed explanation of a LILO transaction). To simplify I assume
shielding is permanent.

The standard financial tests instead take tax consequences into account in analyzing
projects that are assumed to have significant nontax payoffs. If a project has favorable tax
attributes (for example, accelerated depreciation, tax credits, or deferral), these reduce the
tax burden and improve the project's return. The financial tests used by managers to eval-
uate projects—the most commonly used test is net present value—take account of firm-level
taxes but not investor-level taxes. See Troy A. Adair, Jr., Corporate Finance Demystified
125-27 (2006) (explaining the next present value calculation and the factors it includes).

IRC § 1(h)(11).

IRC § 1014.
The traditional corporate income tax (double taxation)

There is no conflict between tax clienteles. Tax-insensitive investors want the firm to expend $c$ to shield $r$ so long as $\Delta sr * t - \Delta c > 0$ or $\Delta sr * t > \Delta c$. Tax-sensitive investors want the firm to expend $c$ to shield $r$ so long as $(\Delta sr * t - \Delta c)(1 - t_{cg}) > 0$ or $\Delta sr * t > \Delta c$. The optimal level of shielding to a tax-sensitive investor is not affected by varying the effective tax rate on capital gains. Figure 1 makes this point graphically. It shows the return to a tax-insensitive investor and the illustrative tax-sensitive investors at increasing levels of shielding. At the breakeven point marked by the vertical line it is not cost-effective to shield additional income. This point is the same for the three illustrative investors.

RETURNS FROM SHIELDING TO DIFFERENT CLIENTELES UNDER THE TRADITIONAL CORPORATE INCOME TAX

Integration taxing reported earnings at the investor’s rate

The return to a tax-insensitive investor from shielding generally is the cost or $-c$. An investor with a zero marginal rate gets no benefit from a firm shielding income because the investor pays no tax on reported income. For a tax-sensitive investor the return from expending $c$ to shield $r$ is $r * t - c - (r - c) * t_{cg}$, or the current tax savings minus the cost of shielding reduced by the expected cost of the tax on unreported returns on disposition of the investment. The investor wants the firm to shield so long as $\Delta sr * t - (\Delta sr - \Delta c) * t_{cg} > \Delta c$. As the

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31 The dividend credit model adds a small twist. A tax-insensitive shareholder benefits from shielding income from reporting by the firm to the extent there is a lag between the time the firm pays the tax on reported income and the time the shareholders receives a refund of the tax paid.
effective tax rate on capital gains increases, the investor’s payoff from shielding decreases, ultimately becoming negative as \( t_{cg} \) nears \( t \). Figure 2 illustrates using the three investors. The vertical lines mark the optimal level of shielding for the two illustrative tax-sensitive investors.

**Returns from shielding when income reported by the firm is taxed at the shareholder’s rate**

![Diagram showing optimal level of shielding]

Integration taxing reported earnings at the corporate rate

Under the dividend exclusion model reported earnings are taxed once at the corporate rate.\(^3\) This also creates a divergence in payoffs to investors who face different tax rates or who have different investment horizons. The payoff to a tax-insensitive investor from shielding equals \( r * t - c \). Shielding eliminates the firm-level tax and there is no adverse tax consequence to the shareholder. A tax-insensitive investor wants the firm to shield so long as \( \Delta sr * t_c > \Delta c \). The payoff to tax-sensitive investors equals \( r * t - c - (r - c) * t_{cg} \), or the present tax savings minus the cost of shielding reduced by the expected cost of the tax on unreported returns on disposition of the interest. A tax-sensitive investor wants the firm to shield so long as \( \Delta sr * t - (\Delta sr - \Delta c) * t_{cg} > \Delta c \). As the investment horizon lengthens and \( t_{cg} \) nears 0 a tax-sensitive investor’s interests converge with those of a tax-insensitive investor. As the investment horizon shortens and \( t_{cg} \) nears \( t \) a tax-sensitive investor’s benefit from shielding decreases and eventually becomes negative. Figure 3 illustrates. Again the vertical lines mark the optimal level of shielding for each investor.

There is good reason to believe this divergence in payoffs from shielding will not discourage shielding by firms. The interests of long-horizon, tax-sensitive investors and tax-insensitive investors align and

encourage a fairly high level of shielding. The interests of these two groups diverge only if a firm pursues a policy of shielding income aggressively such that it is between the two optimums. In addition, shielding to reduce taxes paid by the firm improves the cash position of the firm, something managers might value independently of the effect on shareholders. While aggressive shielding is against the interest of short-horizon, tax-sensitive investors, a manager might well believe that such investors are unlikely to punish the firm for pursuing a tax-minimizing strategy that enriches other investors at their expense. Much short-horizon, tax-sensitive invested capital is managed by mutual funds that combine the different tax clienteles. And investors who realize what is going on may protect themselves in ways that do not inure to the detriment of a firm that pursues a strategy of minimizing reported income. For example, individual investors may move short-term investments into tax-deferred accounts.

III. How Will Firms and Investors Respond to the Conflict?

How a firm will respond to the conflict depends in the first instance on the goals the manager pursues. A manager who strives to maximize cash retained by the firm will act very differently under integration then will a manager who strives to maximize share price. If one assumes a manager strives to maximize share price, then the response

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depends upon who the manager expects to be the marginal (price-setting) clientele for the firm's equity. How securities markets organize around tax clienteles is a matter of considerable mystery. The response also depends upon the cost curve of shielding. Whatever motivates managers and however securities markets organize around tax clienteles, integration will have little effect on the use of tax shields if shielding entails no material cost throughout the feasible range. Finally, introducing a possibility of streaming reported and unreported earnings to the preferred tax clientele radically changes the likely response. Discussion of the last point is deferred until the next Part. This Part briefly summarizes what we know about the behavior of investors and managers and concludes that there is good reason to expect that most non-family owned firms will abjure shielding when it involves a material cost if tax is paid at the investor's rate.

William Bratton observes that before the 1980's "managers did not pursue shareholder value maximization. Instead they behaved in risk-averse ways, seeking to make the company bigger and safer whether or not this meant more for the shareholders. ** Things changed in the 1990s. Managers internalized the norm, building resumes as shareholder value maximizers." Bratton, a critic of the shareholder value-maximization norm, offers Enron as a case in point of the particular vice of managers striving to drive up share price by manipulating earnings to satisfy analysts' expectations. If managers sought (as Bratton says they once did) to "to make the company bigger and safer whether or not this meant more for the shareholders," then the choice between a conduit model and the shareholder credit model would be

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34 John Graham concludes in a recent survey of finance literature on taxes that "In general, we need more market evidence about the importance of personal taxes affecting asset prices, the effective equity tax rate for the marginal investors, and information related to the identity of the marginal investors between different securities." John R. Graham, Taxes and Corporate Finance: A Review, 16 Rev. Fin. Stud. 1075, 1120 (2003).

35 William Bratton, Does Corporate Law Protect the Interests of Shareholders and Other Stakeholders?: Enron and the Dark Side of Shareholder Value, 76 Tulane L. Rev. 1275, 1358-59 (2002). Others make the same general point. See Robert Shiller, Celebrity CEOs Share the Blame for Street Scandals, Wall St. J., June 27, 2002, at A20 (claiming in the late 1990's the "nature of management changed fundamentally" towards managers "who focused on increasing the share price over all else.")

hugely important. Under the conduit model shareholders pay tax on income reported by the firm. Under the shareholder credit model the firm pays the tax at the highest individual rate and the tax is refunded to shareholders with a lower marginal rate. Managers who behaved as Bratton describes would be indifferent to the amount of reported income under the conduit model because the tax would be borne by shareholders. Those same managers would strive mightily to shield income under the shareholder credit model because reducing reported income would improve the firm's cash position. They would be indifferent to the fact that the firm's tax saving would be partly offset by additional tax paid by shareholders.

Today the dominant norm is maximizing shareholder value or the crude proxy, maximizing share price. If it is possible but costly to shield a significant part of the firm's economic income from being reported as taxable income, then maximizing shareholder value or share price requires serving an identified tax clientele. A strategy of serving an identified clientele commends itself for other reasons. Serving an identified tax clientele finesses the conflict between shareholders. A firm can facilitate shareholder value maximization (the ne plus ultra of the principled manager) by announcing the clientele they serve and then let investors sort themselves out. Serving an identified clientele also has practical value. Managers could plug the tax attributes of the firm's chosen clientele into the financial test they use to evaluate projects (for example, net present value or economic value added).

Corporate equity currently is held by several tax clienteles. Over 60% is in the hands of tax-insensitive investors. These include individuals and mutual funds investing funds held in tax-deferred accounts, pension funds, governments, nonprofits, and foreigners. For my pur-
poses tax-insensitive investors generally can be treated as monolithic. Tax-sensitive investors have different sensitivities depending upon their tax rate, investment horizon, and their aversion to paying taxes. Tax-sensitive investors with a short investment horizon get a much smaller benefit from shielding than do tax-sensitive investors with a long investment horizon. The largest identifiable block of short horizon investment is through mutual funds held by individuals in non-tax deferred accounts. In 1998 households held 8.63% of their total portfolios (and roughly 16% of their overall holdings of equities) in mutual funds in non-tax deferred accounts. Notwithstanding the fact that a large majority of corporate equity is in the hands of tax-insensitive investors or short-horizon, tax-sensitive investors, equity (particularly nondividend paying equity) is a tax-favored investment to long-horizon, tax-sensitive investors. The tax characteristics of nondividend paying equity make it the next best security after municipal bonds in the sense that it bears the next lowest effective tax rate.

Historically nonprofits average 15.7% of the household sector. James Poterba, Andrew A. Samwick, Andrei Shleifer & Robert J. Shiller, Stock Ownership Patterns, Stock Market Fluctuations, and Consumption, Brookings Papers on Economic Activity 295, 314 (1995), available at http://links.jstor.org/sici?sici=0007-2303%281995%291995%3A32%3Cs95%3ASOOPS%3E2.0.CO%3B2-W. At this ratio nonprofits would have held 5.75% of equities in the first quarter of 2003 and 45.6% of equities would be in tax insensitive hands.

Mutual funds held $2,083.8 billion in equity—18.33% of the total—in the first quarter of 2003. (Closed end funds held $34.8 billion and exchange traded funds held $97.2 billion.) Federal Reserve Report, supra. The Flow of Funds Report does not break down ownership of mutual funds by sector. Nor does it break out equities held by the household sector through individual tax-deferred accounts. A 2002 survey by the Investment Company Institute fills in some of this information. It estimates that $553 billion was invested in U.S. equities through mutual fund tax deferred accounts at the end of 2002. Investment Company Inst., Mutual Funds and the US Retirement Market in 2002 at 7 fig.7 (June 2003), available at http://www.ici.org/stats/mf/fm-vf12n1.pdf. Another $99 billion was in hybrid funds. This increases the percentage of equities in tax-insensitive hands to around 50%. The ICI estimates that another $794 billion in securities were held in tax-deferred brokerage accounts at the end of 2002. Id. at 6 fig.6. It does not say what percentage of these securities were equities. Presumably it is quite large. Pension funds also have substantial holdings in mutual funds.

Foreign residents may be tax-sensitive. They are subject to a 30% withholding tax on periodic income, which includes dividends and excludes capital gains (unless the investor is an individual in the United States for 183 or more days in the year the gain is realized). IRC §§ 871(a)(1), 881. Tax treaties reduce the tax rate on dividends often to 15%. See Robert J. Staffaroni, Foreign Investors in RICs and REITs, 56 Tax Law. 511, 512 (2003). Under current law foreign equity holders in U.S. partnerships are taxed on U.S. source partnership income. IRC § 875(l). Gain on the sale of a U.S. partnership interest also is subject to U.S. tax. IRC § 741.

There is evidence that corporate equity now bears an implicit tax, which suggests that long-horizon, tax-sensitive investors now are the marginal (price-setting) clientele.

We have limited experience from mutual funds on how managers behave under a conduit model in which investors pay tax on reported earnings. It seems that mutual fund managers pay little attention to the tax consequences of their decisions to investors. Mutual fund managers pursue investment strategies that impose unnecessary taxes on investors by rolling over investments rapidly in a way that denies tax-sensitive investors the benefits of deferral and the capital gains rate. One study estimates that more tax-wise realization strategies might have saved investors in the range of $1.5 billion to $3 billion in 1993. Investors seem not to choose funds based on their after-tax return. Another study finds that funds with better after-tax returns have higher inflows but that a large capital-gain overhang reduces

41 David Aboody & Michael Williams, Evidence of Implicit Taxes on Equity Using Data from Futures Markets to Control for Risk (2001), available at http://ssrn.com/abstract=286321, tries to measure the implicit tax on equity using the swap and repo rate as a benchmark risk-free taxable rate of return and comparing this to the expected return on hedged positions in equity portfolios to eliminate the need to estimate risk premia. Their estimates of implicit taxes can be found in Table 1. The estimates—ranging from 6% on the NYSE to 10% on the NASDAQ 100— are significantly lower than the implicit tax on tax-exempt bonds found by Johnson during the same period (the mid and late 1990's) using less refined methods. See Calvin H. Johnson, Thermometer for the Tax System: The Overall Health of the Tax System as Measured by the Implicit Tax, 56 SMU L. Rev. 13, 22-23 (2003).

42 In theory, firms face a similar conflict in setting dividend policy. There is some evidence that the income tax rates of large shareholders may influence dividend policy. See Francisco Perez-Gonzalez, Large Shareholders and Dividends: Evidence from U.S. Tax Reforms (2002), available at http://ssrn.com/abstract=337640. There is no evidence, however, that investor tax preferences significantly influence dividend policy. There is speculation that firms might pay out dividends to attract institutional investors who are indifferent to taxes. The thought is that institutional investment has a desirable signaling effect. There is also speculation that firms might elect share repurchases over dividends because of the lower tax-cost to individual investors. A survey of CFOs and treasurers found that taxes are at most of “second order” importance in setting dividend policy, that is whether to pay or increase dividends or whether to prefer share repurchases over dividends. See Alon Brav, John R. Graham, Campbell R. Harvey & Roni Michaely, Payout Policy in the 21st Century, 77 J. Fin. Econ. 483, 485 (2005). The dominant reason for preferring share repurchases was flexibility. Id. Indeed, among the minority of firms that paid dividends, many respondents said that individual investors were the clientele that would be upset by a reduction or elimination of dividends. See id. at 499. Individual investors are likely to face a higher tax burden on dividends.

43 Joel Dickson & John Shover, Taxation and Mutual Funds: An Investor Perspective, in 9 Tax Pol'y and the Econ. 151, 175 (1995). This is an estimate of the value of deferral as a fraction—one quarter to one-half—of the amount of tax paid on realized capital gain in the year. See id.

44 Capital gains are allocated to all investors equally when such gains are realized by the fund. Daniel Bergstresser & James Porterba, Do After-tax Returns Affect Mutual Fund Inflows?, 63 J. Fin. Econ. 381, 403-04 (2002) (studying the impact of personal taxation on returns earned by mutual fund investors). Thus, new investors in a fund with unrealized capital gains (that is, capital gains overhang) will have phantom gains. See id.
inflows.\textsuperscript{45} The change in flows is relatively small and the authors were unable to attribute the effect conclusively to investors responding to tax-wise fund management because of several confounding factors.\textsuperscript{46} In sum, the empirical evidence from mutual funds does not show a strong response by investors to move funds to punish managers for bad tax management or reward them for good tax management.

The experience with mutual funds is probably not indicative of how firms will behave if faced with a decision whether to shield income from being reported as taxable when this affects the after-tax return to the significant number of investors who hold equity in non-tax deferred accounts. By nature mutual funds are terrible vehicles for exploiting the timing option. Fund managers are constrained by the need to balance their portfolios and liquidate shares to satisfy redemption requests. Tax law puts mutual funds at a competitive disadvantage in exploiting the timing option because an overhang of unrealized capital gains deters new money and raises the probability that realizations will be necessary to satisfy redemption requests. And mutual funds provide compensating benefits of liquidity, low transaction costs, and easy diversification. In a nutshell, most investors probably are not looking for tax-wise investment management when they invest in mutual funds.

While the relative tax burden seems not to have much effect on the flow of money between mutual funds, the relative tax burden on investments does influence people's broader portfolio choices at the margin. Poterba and Samwick investigate the effects of tax burdens on household portfolio composition using data from the triennial Survey of Consumer Finances.\textsuperscript{47} They find that many households hold a mix of assets.\textsuperscript{48} For example, in 1998 for the households that held equity in tax-deferred accounts, there was a 34.97\% probability that they also directly held equity while there was a 48.79\% probability that they held equity through mutual funds.\textsuperscript{49} The wealthiest households, which hold a very high percentage of the nation's equity, were particularly likely to hold both tax-favored and tax-disfavored assets (for example, exempt bonds alongside taxable bonds and equity mu-

\textsuperscript{45} Id. at 405.

\textsuperscript{46} Id. First, Bergstresser and Poterba cannot identify when funds are invested through tax-deferred accounts. See id. Second, it is not apparent that most individual investors were informed about the tax performance of funds. See id. And third, while funds that committed to pursue tax-efficient strategies grew rapidly in the 1990's and faster than others, their overall market share remained low. See id.

\textsuperscript{47} Poterba & Samwick, note 40, at 10-20.

\textsuperscript{48} Id. at 15.

\textsuperscript{49} Id. at 13 tbl.2. Poterba and Samwick estimate aggregate household portfolio shares in 1998 for all assets as follows:

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tual funds in non-deferred accounts). Poterba and Samwick conclude that the data "does not suggest the presence of strong, tax-related asset clientele." But they also find that household portfolios are sensitive to marginal rates. High tax rate households tend to hold a higher percentage of tax-favored assets (that is, tax-deferred accounts, exempt bonds, and directly held equity) in their portfolios and a lower percentage of tax-disfavored assets (that is, taxable bonds and equity mutual funds in non-tax-deferred accounts).

It seems likely that, if firms reduced shielding because there is no visible payoff to the firm or because there is no payoff to tax-insensitive investors, then the resulting increase in the tax burden to tax-paying investors and the reduction in yield would induce some investors to shift from holding equity in non-tax deferred accounts to other investments. If these tax-sensitive investors were the marginal (price-setting) clientele, the price of equity would decline. Could this prospect induce a manager whose goal is to maximize share price to pursue a policy of shielding?

Probably not. While shielding income makes a firm's equity relatively more attractive to long-horizon, tax-sensitive investors, it makes it relatively less attractive to tax-insensitive investors. To maximize the price of its equity, the firm should choose one clientele or the other. Pursuing a middle-path will please no one. In choosing a clien-

<table>
<thead>
<tr>
<th>Asset Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directly held equity</td>
<td>27.35</td>
</tr>
<tr>
<td>Equity mutual funds</td>
<td>8.63</td>
</tr>
<tr>
<td>Tax-deferred equity</td>
<td>18.91</td>
</tr>
<tr>
<td>Tax-deferred bonds</td>
<td>8.76</td>
</tr>
<tr>
<td>Tax-exempt bonds</td>
<td>4.62</td>
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<tr>
<td>Taxable bonds</td>
<td>4.80</td>
</tr>
<tr>
<td>Interest bearing accounts</td>
<td>14.92</td>
</tr>
<tr>
<td>Other financial assets</td>
<td>12.01</td>
</tr>
</tbody>
</table>

Id. at 14 tbl.4. Poterba later investigated with Bergstresser the allocation of tax-favored financial assets (principally equity) and tax-disfavored assets (taxable bonds) between tax-deferred and non-tax deferred accounts. Daniel Bergstresser & James Poterba, Asset Allocation and Asset Location: Household Evidence from the Survey of Consumer Finances, 88 J. Pub. Econ. 1893 (2004). They found that 59% of households that held both taxable bonds and equity pursued the efficient tax strategy of holding the taxable bonds and equity in tax-deferred accounts and low-tax assets in non-tax deferred accounts. Id. at 1906 tbl.8. A small percentage of households (11%) held low-tax assets in non-tax deferred accounts and taxable bonds equity in tax-deferred accounts, which is not a tax-efficient allocation, but that the amounts were relatively small. Id.

51 Id. at 13.
52 Id. at 23.
53 Id. at 25 tbl.6, 26.
54 If equity becomes a tax-disfavored asset, then people could respond in several directions, including (1) shifting from equity to taxable bonds; (2) shifting from equity to tax-favored assets (tax-exempt bonds and savings bonds); or (3) shifting equity from non-tax deferred accounts to tax-deferred accounts.
tele to cater to, a firm is in effect choosing between competing in the financial market against tax-exempt bonds by offering a tax-preferred security or competing against taxable bonds by offering a security without desirable tax features. Which policy will yield the maximum price for a firm’s equity depends upon the implicit tax rate on tax-favored securities and the firm’s cost of shielding. At a low implicit tax rate or a cost of shielding that makes it prohibitively expensive to shield a significant fraction of the firm’s income, a strategy of not shielding will dominate a strategy of shielding.

How the implicit tax rate and the cost of shielding determines the optimal strategy for a manager whose goal is to maximize share price can be made more concrete using the simple model from Part II. Again the effect is very pronounced so a simple model will do. Let \( i_t \) be the risk-adjusted interest rate on taxable bonds and \( i_e \) be the risk-adjusted interest rate on tax-exempt bonds. The implicit tax rate on tax-exempt bonds is \((i_t - i_e)/i_t\). The firm’s economic income is \( r \), and assume it can permanently and predictably shield all or a fraction of \( r \) from being reported at cost \( c \). Assume tax-insensitive investors price the firm’s equity against taxable bonds while tax-sensitive investors price the firm’s equity against tax-exempt bonds.\(^{55}\) If the firm does not shield, then tax-insensitive investors will bid up or down the price of its equity by the factor \( r/i_t \), while tax-sensitive investors will bid up or down the price of its equity by the factor \( r(1-t)/i_e \). Shielding income from being reported at cost \( c \) increases the price that tax-sensitive investors are willing to pay. A tax-sensitive investor will bid up or down the price by the factor \( \left[ (r-c)s(1-t_{cg}) + (r-c)(1-s)(1-t) \right]/i_e \), where \( s \) equals the fraction of the return shielded from tax at cost \( c \). Shielding decreases the price that tax-insensitive investors are willing to pay. They will bid up or down the price of the equity by the factor \( (r-c)/i_t \). A strategy of shielding yields the highest price for the firm’s equity if \( \left[ (r-c)s(1-t_{cg}) + (r-c)(1-s)(1-t) \right]/i_e > r/i_t \). The relevance of the implicit tax rate becomes clear if we simplify by assuming a firm shields 100% of its income at cost \( c \) and that the effective tax rate on capital gains \( t_{cg} \) equals zero. Under these conditions, shielding yields the highest price for a firm’s equity if \( (r-c)/i_e > r/i_t \) or if \( (i_t - i_e)/i_t > c/r \), or if the implicit tax rate on tax-exempt bonds exceeds the per-dollar cost of shielding income from being reported as taxable. If a firm has partially reported returns and/or the marginal investor faces a positive effective capital gains rate,

\(^{55}\) This assumes a world in which there are different marginal clienteles who arbitrage different financial markets. For a model and an argument supporting this assumption, see Michael Williams, Tax Clienteles and Implicit Taxes: Interaction of Multiple Clienteles in Financial Markets 22 (Oct. 2001), available at http://ssrn.com/abstract=286320.

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then the cost of shielding must be that much lower to make shielding the price-maximizing strategy.

The implicit tax rate on tax-exempt bonds has been in the range of 2% to 6% in the recent past.\textsuperscript{56} In this environment shielding would have to be astoundingly cheap and fulsome and the effective tax rate on capital gains for the expected marginal (price-setting) clientele would have to be low to make shielding the price-maximizing strategy. It requires a combination of a high implicit tax rate, cheap and fulsome shielding, and a low effective tax rate on capital gains to make shielding the price-maximizing strategy. For example, under the simple model, at an implicit tax rate of 25% and an effective capital gains rate of 2%, shielding is the price-maximizing strategy only if the firm can shield 100% of its income at cost of slightly less than 17% of its return. Correspondingly, if shielding is more expensive and less fulsome such that the best a firm can do is to shield 71% of its income at a cost of 14.6% of its return, then shielding is the price maximizing strategy only at an implicit tax rate nearing 35%.

Other factors will encourage firms to cater to tax-insensitive investors and abjure shielding if shielding has a material cost. Institutional investors by and large are tax insensitive or are mutual funds that serve a mixed clientele. They tend to have more influence over corporate management because they own large blocks of shares and sometimes are represented on the board of directors. A policy of abjuring shielding simplifies corporate decisionmaking. A tax department can be reduced to the function of collecting and reporting data on firm income and expense. A countervailing factor is that as firms abjure shielding, tax-sensitive investors will shift from holding corporate equity to tax-exempt bonds, increasing the implicit tax rate and with it the payoff from adopting a strategy of shielding returns.\textsuperscript{57} But a self-limiting force comes into play to discourage firms from offering shielded returns. A firm that decides to pursue this strategy must announce it to the world, bringing attention from the Service, which increases the cost and reduces the return from shielding at the margin. Integration can be implemented in ways that increase the likelihood that firms will abjure shielding. Having the investor pay the tax on

\textsuperscript{56} See Johnson, note 41, at 23 (calculating the implicit tax on 30-year AAA municipal bonds, from 1981 to 2001).

\textsuperscript{57} The amount of tax-exempt bonds ($1,815.9 billion in the second quarter of 2003) is a fraction of the amount of corporate equity ($11,370.5 billion in the same quarter). Federal Reserve Statistical Release, note 39, at L.211, L.213. James Poterba and Andrew Samwick estimate using data from the triennial Survey of Consumer Finances that in 1998, 4.62% of household portfolios was tax-exempt bonds while 35.98% was corporate equity not in tax-exempt accounts (27.35% directly held and 8.63% in mutual funds). Poterba & Samwick, note 40, at 14 tbl.4.
income reported by the firm eliminates the cash payoff to the firm from shielding. Making the firm liable for the investor-level tax on deficiencies gives the firm an incentive not to under-report income and to avoid risky tax positions. There are countervailing reasons to require the firm to withhold the tax through the dividend credit model. Eliminating a visible tax payment will suppress investor sensitivity to the tax burden while collecting the tax from the firm will increase compliance.

How integration will play out in a world where streaming is constrained ultimately depends on the cost curve for corporate tax shields and the elasticity of demand for equity by tax-paying investors in non-tax deferred accounts. If the cost curve for tax shields is upward sloping, shielding is potentially cost-effective for a large share of firm income, and demand for equity by taxpaying investors in non-tax deferred accounts is highly inelastic, then a shift to integration could actually increase the revenue collected from the corporate sector at a reduced deadweight loss. But there is little point to dwelling on this beguiling possibility for it assumes streaming is constrained. Current integration proposals probably do not constrain streaming. Integration plays out very differently if it is possible to stream shielded and reported returns to the value-maximizing tax clientele. I turn to this issue now.

IV. STREAMING

To this point I have assumed that investors share pro rata in shielded and reported economic income. In this Part I consider the effects of a firm being able to stream shielded and reported economic income to the value-maximizing tax clientele under a system of integration in which income reported by the firm is taxed at the investor's rate. By streaming I mean having two classes of equity that in the extreme case differ only in that reported, taxable income accrues to one class while shielded income accrues to the other. I call these T-common and S-common. The most basic form of streaming under the traditional corporate income tax is for a firm to direct periodic risk-free returns to tax-insensitive investors through debt and non-periodic risky returns to tax-sensitive investors through non-dividend paying

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58 Special allocations in a partnership are an example. Under the shareholder credit model a corporation could stream reported (taxed) returns to tax-insensitive investors to eliminate the tax at the investor level through the refund. Under the dividend exclusion model a corporation could stream reported (taxed) income to short-horizon, tax-sensitive investors by issuing a class of equity with a preference on dividends or deemed dividends.
This capital structure eliminates the corporate-level tax on risk-free returns while maximizing the value of deferral and the timing option on risky returns. The existing integration proposals try to constrain streaming with what I call an economic effect rule. The gist of the rule is that T-common must have preferential cash rights no less than the taxable income allocated to it. The rule does not prohibit a firm from guaranteeing T-common and S-common equal cash rights once this preferential right is satisfied. There are various ways to make the two securities economic equivalents. For example, a firm could make side contracts to hedge against the risk that the returns might not suffice to give the two classes equal cash rights. Or the S-common could be made convertible into T-common. Or purchasers of S-common who are concerned about the potential difference in payoffs could sell a put on the S-common and buy a call on the T-common.

To begin consider how a firm would act if there are no costs or frictions to a firm having two classes of common stock (for example, it is common knowledge that the two securities are economic equivalents and the thinning of the market for each does not increase trading cost), there is no leakage of reported income and shielded income between the two classes of common (for example, the S-common attracts all the shielded returns and only the shielded returns), and the cost of shielding is borne entirely by S-common. Under these assumptions a firm can freely increase the aggregate value of its equity by issuing S-common to take advantage of the tax shields inherent in its business. S-common will command a higher price (for example, bear an implicit tax) because of the lower tax burden. The extent to which the firm can increase aggregate equity value by shielding additional returns to allocate a greater share of its returns to S-common depends on the implicit tax rate. A firm maximizes aggregate share value by expending $\Delta c$ to shield additional fraction $\Delta s$ of $r$ so long as 

$$[r\Delta s (1 - t_{c\Delta s}) - \Delta c/ i_e > r\Delta s/ i_e].$$

To simplify assume that $t_{c\Delta s} = 0$. A firm maximizes aggregate share value by expending $\Delta c$ to shield the additional fraction $\Delta s$ of $r$ so long as 

$$\left(i_i - i_e\right)/ i_e > \Delta c/r\Delta s).$$

At a low implicit tax rate a firm would do little shielding in the range involving a material cost but no tax would be collected on corporate income unless taxpaying investors foolishly held T-common in non-tax deferred ac-

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59 Robert H. Scarborough, How Derivatives Use Affects Double Taxation of Corporate Income, 55 Tax L. Rev. 465, 465-66 (2002), explains two ways that risk-free or time-value returns can be completely separated from risky or wager returns. One is for a firm to raise capital by issuing debt and simultaneously entering into a short forward contract on its shares. The other is for a firm to hedge risk with side contracts so that it can increase the amount of its debt without increasing the riskiness of its debt.
counts. The implicit tax rate should decline because a flood of S-common would compete with tax-exempt bonds.

It is possible to constrain streaming while allowing firms to have multiple classes of equity that are near economic equivalents but that have different tax attributes. A particularly effective constraint at a low implicit tax rate is to require all of a firm's equity to bear at least some of its reported, taxable income. If the implicit tax rate is low even a small tax burden on S-common can eliminate the payoff to the firm from creating a class of S-common to soak up shielded returns by making the S-common uncompetitive with tax-exempt bonds. While this point is intuitive, formalizing it using the simple model from Parts II and III may help to clarify a further point. Assume a firm's overall economic income \( r \) is divided between a shielded fraction \( s \) and a reported fraction \( 1-s \). The firm considers issuing a class of S-common to soak up the shielded income. The S-common, however, will bear a fraction of the reported income \( \lambda \). The firm expects its S-common to be priced against tax-exempt bonds with a risk-adjusted rate of return of \( i_e \) and its T-common to be priced against taxable bonds with a risk-adjusted rate of return of \( i_t \).

The firm's aggregate share price if it issues the two classes of common is \[ \frac{r(1-s)(1-\lambda)}{i_t} + \frac{rs(1-tc)}{i_t} + \frac{r(1-s)\lambda(1-t)}{i_t} \] / \( i_t \). The left-hand side of the expression is the aggregate price of T-common and the right-hand side is the aggregate price of S-common. An increase in the fraction of reported income borne by the S-common \( \Delta \lambda \) changes aggregate share price \( r\Delta \lambda / i_t - r\Delta \lambda / i_e \), or the increase in value of S-common due to the additional return minus the decrease in value of T-common because of the lower return. The net loss from an increase in \( \lambda \) is a straightforward function of the difference between \( t \) and the implicit tax rate \( (i_t - i_e) \).

It is much less effective to require the T-common to bear a share of the shielded returns, which is essentially what an economic effect rule does. Using the same assumptions the firm's aggregate share price if it issues two classes of equity is \[ \frac{r(1-s) + rs\lambda}{i_t} + \frac{rs(1-\lambda)(1-tc)}{i_t} \] / \( i_t \). Now an increase in \( \lambda \) changes aggregate share price \( r\Delta \lambda / i_t - r\Delta \lambda(1-tc) / i_t \). As the implicit tax rate nears zero, the tax-exempt rate \( i_e \) nears the taxable rate \( i_t \) and an increase in \( \lambda \) has a dwindling effect on aggregate share value. An upshot is that an economic effect rule is a poor constraint on streaming. A firm could satisfy an economic effect rule by leaving its T-common with a cushion of shielded earnings to increase the probability of being able to satisfy the preferential cash rights without impairing the rights of the S-common.

An anti-abuse rule that creates a risk that S-common will be collapsed into T-common and so bear a share of the firm's reported in-
come has an effect similar to a rule requiring S-common to bear a fraction of the firm's reported income. Presumably the rule would come into play if the S-common and the T-common were economic equivalents or near equivalents. If so, the possibility is open for a firm to offer tax-sensitive investors a non-equivalent security that assuredly would bear none of the firm's reported income. For example, the firm could structure the T-common as preferred stock and the S-common as straight common stock. Or the T-common could be straight common and the firm could offer tax-sensitive investors long-term options on its common. How this will play out depends upon how markets respond to the real or perceived economic differences in the securities. Fragmented claims on residual cash flow may be discounted by investors because of the additional uncertainty and increased trading costs. Even a small discount may suffice to eliminate the payoff from issuing a separate class of S-common if the implicit tax rate is low.

Successfully constraining streaming will cause problems elsewhere. The possibility remains for tax items to be shifted from one investor to another by equity exchanges at the investor level and by non pro rata redemptions. Tax items also can be shifted in mass by corporate acquisitions, reorganizations, and reformations. And other arrangements that do not nominally involve capital structure and distribution policy can be used to stream tax items to particular stakeholders. For example, a contribution of capital can be structured as a lease to stream depreciation and tax credits to an investor. And a leveraged lease can be used to sell the tax benefits associated with an asset to a nominal buyer/lessor without a commitment of capital.

To some extent these techniques are substitutes. Consider the position of a firm that decides to abjure shielding to cater to tax-insensitive investors when reported income is taxed at the investor's rate. A firm has several options for cashing in on tax shields such as expenses, losses, depreciation, and tax credits that are inherent in its business. One is to issue a separate class of equity to which it streams shielded income. If this is checked, then the firm can transfer depreciation and tax credits by leasing its buildings and equipment. If the firm does not use these techniques it can pursue an accumulation strategy by deferring reporting expenses and realizing losses. The firm can eventually cash in on accumulated shields by being acquired by a firm that values

60 For example, under the shareholder credit model tax-sensitive investors could sell shares to tax-insensitive investors pending the declaration or distribution of a dividend bearing a creditable tax. The tax-sensitive investor would convert what would in effect be taxed as ordinary income into capital gain.

61 For example, under the shareholder credit model a firm could stream dividends bearing creditable taxes to tax-insensitive investors by redeeming out tax-sensitive investors, which again in effect converts ordinary income into capital gain.
tax shields. Or as the accumulation of deferred losses and expenses reduces the firm's cost of shielding, the firm may switch from serving tax-insensitive investors to serving tax-sensitive investors. This switch requires an exchange of equity at the investor level or redemptions.

The techniques are imperfect substitutes because they differ in scope and involve different costs and payoffs to the firm, managers, and investors. Selling depreciation and tax credits by leasing almost uniquely provides a negotiated cash payoff to the firm but the technique only is possible for some shields and is likely to have a small payoff. The payoff from streaming shielded income to a separate class of equity is a higher price for equity and perhaps a lower cost of capital. Accumulation strategies are best suited for cashing in on the tax value of unexpected losses but they are poorly suited for exploiting the tax value of depreciation, tax credits, and expenses. The payoff to the firm from an accumulation strategy is attenuated in several respects. The payoff is deferred. Managers have a disincentive to pursue a tax strategy that makes firm a more attractive take-over target. And cashing in on accumulated shields requires either a major firm-level restructuring (for example, a spin-off, acquisition, or merger) or exchanges of equity at the investor level.

V. Conclusion

The existing literature on corporate integration has overlooked a significant feature of a model of integration in which income reported by the firm is taxed at the investor's rate. This creates a conflict between investors who face different tax rates or who have different investment horizons over the desirability of a firm shielding income from being reported as taxable. If streaming of reported and shielded income to the value-maximizing tax clientele can be constrained, then there is good reason to believe that moving to a system of integration would induce most firms to abjure the use of costly tax shields. The ultimate effect depends on many unknowns, in particular, the shape of the cost curve for corporate tax shields, the inclination of firms to exploit tax shields, and the elasticity of the demand by taxpaying investors for corporate equity held in non-tax deferred accounts. One thing I can confidently predict is that integration would shake up the world of corporate tax compliance and financial markets in heretofore uncontemplated ways. It would be a massive scale human subject experiment.