

Taxation and Corporate Governance: An Economic Approach

Mihir A. Desai
Harvard University and NBER
mdesai@hbs.edu

Dhammika Dharmapala
University of Connecticut and University of Michigan
dhammika@umich.edu

April 2007

Abstract

How do the tax system and corporate governance arrangements interact? This chapter begins by reviewing an emerging literature that explores how agency problems create such interactions and provides evidence on their importance. This literature has neglected how taxation can interact with the various mechanisms that have arisen to ameliorate the corporate governance problem, such as concentrated ownership, accounting and information systems, high-powered incentives, financing choices, payout policy, and the market for corporate control. The remainder of the chapter outlines potentially fruitful areas for future research into how these mechanisms may respond to the tax system.

Keywords: Taxes, tax avoidance, tax shelters, governance, firm value
JEL Codes: G32, H25, H26, K34

Acknowledgments: This chapter was prepared for the Conference on Taxation and Corporate Governance at the Max Planck Institute in Munich, December 4-5, 2006. We thank conference participants, and seminar participants at Harvard Law School and UCLA Law School, for helpful comments. Desai acknowledges the financial support of the Division of Research of Harvard Business School.

I. Introduction

When Adolf Berle and Gardiner Means launched the study of the agency problem - that managers appointed by shareholders may pursue their own interests - in the corporate setting, they were inspired by the role of taxes in diffusing ownership in the American economy.¹ This link between corporate governance and taxation has been neglected in subsequent decades as the study of these two important features of an economy became segregated. Corporate finance scholars have treated taxes only as market imperfections that influence capital structure and dividend policies, while public finance scholars have not incorporated the possibility of agency problems in their analyses. An emerging literature suggests that revisiting this link can generate new insights into the real effects of tax policies and the workings of corporate governance. This chapter reviews this incipient literature and suggests paths forward for understanding this link more deeply.

The rediscovery of this link has been spurred by two developments. First, rising concerns over the proliferation of corporate tax shelters has led to greater interest in the mechanics and motivations for such transactions,² especially in the context of growing concerns about managerial malfeasance. As discussed below, initial explorations of these shelters suggest that a purely tax-driven motivation for these activities is not sufficient to account for many of their features. Second, the magnitude of corporate tax rates is sufficiently high relative to levels of ownership concentration that it is reasonable to characterize the state as the largest claimant on pretax corporate cash flows.

Before proceeding, it is useful to underscore the centrality of the agency problem to the intersection of corporate governance and taxation. There is great enthusiasm for labeling any issue (including, for example, tax shelters) as a corporate governance problem. Yet, tax shelters need not have any consequences for corporate governance. For example, a tax shelter undertaken by a corporation that is wholly owned and managed by an individual has no corporate governance implications. Such a transaction merely diverts resources from the state to shareholders. For there to be a meaningful

¹ See Desai, Dharmapala, and Fung (2007) for a discussion of the Berle-Means (1932) argument.

² For more on tax shelters, see e.g. Bankman (2004) and Weisbach (2002).

intersection of taxation and corporate governance, it must be the case that ownership and management are separated, and that the incomplete nature of contracting and monitoring creates the scope for managerial opportunism.

This chapter proceeds by first outlining current research on the intersection of corporate governance and taxation. This research has emphasized that the tax system can mitigate or amplify the corporate governance problem. In addition, it has emphasized that the nature of corporate governance environment can influence the nature and consequences of the tax system. Section 2 begins by motivating these links; then, Section 3 reviews the growing evidence of their importance. The literature has neglected how taxation can interact with the various mechanisms that have arisen to ameliorate the corporate governance problem. Section 4 outlines the research opportunities that flow from systematically considering these mechanisms and how they might respond to taxation. Section 5 concludes.

II. How Taxation and Corporate Governance Interact

The basic intuition for how corporate governance and taxation interact is that tax avoidance demands complexity and obfuscation to prevent detection. These characteristics, in turn, can become a shield for managerial opportunism. This logic is perhaps best understood by example. Suppose that managers of a firm begin creating several special purpose entities (SPEs) in tax havens. These entities are rationalized as providing the means for reducing tax obligations. The details of the structures and transactions cannot be explicated fully or widely, explains management, due to the likelihood of detection by the tax system and the revocation of those benefits. Such structures and secrecy may also allow managers the ability to engage in various activities that may be harmful to shareholders. More specifically, such entities may facilitate earnings manipulation (by creating vehicles that can manufacture earnings without enabling investors to understand their source), the concealment of obligations (by taking on debt that is not fully consolidated), or outright diversion (by allowing for insider transactions that are not reported widely). The secrecy laws of tax havens may well assist managers in obscuring these actions, all of which are rationalized as tax avoidance undertaken for the shareholders' benefit.

More formally, the technologies of tax avoidance and managerial diversion can be thought to be complementary. That is, undertaking tax avoidance can reduce the costs of managerial diversion or, alternatively, reduce the likelihood of detection. This complementarity is modeled in Desai, Dyck, and Zingales (2007) as creating an interaction between resources diverted by managers and the amount of tax savings created by shelters. Another form of this complementarity is modeled in Desai and Dharmapala (2006a) as creating an interaction between the ability to reduce taxable income and inflate book income in a setting of dual reporting. This view can be thought of as, narrowly, an “agency perspective on tax avoidance” or, more broadly, as the “corporate governance view of taxation.” These models yield several predictions that are elaborated on below.

II. A. Some motivating examples

Prior to discussing these predictions and the extant evidence, it is useful to provide some real-world illustrations of these interactions. Such examples are necessarily taken from court proceedings and thus reflect the experiences of firms caught in malfeasance. Nonetheless, the examples are illustrative of the broader phenomena, and they also point to the more widespread nature of these activities.

Initially attracted by the tax benefits of a shelter, Dynegy (an energy company) gave up plans to undertake the shelter when a journalist reported on the proliferation of such transactions. Their appetite for the shelter reappeared as investors began to question the quality of Dynegy’s earnings. As a result of these pressures, managers began looking for devices to meet earnings and cash flow targets. Ultimately, they structured the tax shelter transaction so that it provided operating cash flows on Dynegy’s financial statements. Indeed, the transaction size was determined by the amount of proceeds that would allow for a \$300 million increase in operating cash flow and a 12 percent rise in net income. When the financial accounting treatment was in jeopardy, several Dynegy officials began maintaining two sets of documents in order to ensure that the transaction could close. Ultimately, several Dynegy employees admitted to federal fraud and conspiracy charges related to disguising a loan as operating cash flow, and one employee was convicted of those charges (Desai and Dharmapala, 2006a).

This brief summary of the Dynegy example provides some intuition for how sheltering activities might give rise to opportunities for managers to pursue activities designed to mislead investors. First, a tax-oriented transaction became desirable when it morphed into a vehicle for misleading the capital markets. Second, features of the transaction designed to make it more opaque to the capital markets were justified on the basis of secrecy, supposedly necessitated by tax objectives. Finally, actions that served as the origins of the conspiracy to mislead the auditors were also justified on this same basis.

Earning manipulation was also central to Enron's extensive use of tax shelters. In summarizing various transactions, the Joint Committee on Taxation (JCT) concluded that Enron's management realized quickly that tax-motivated transactions could generate sizable financial accounting benefits. Accordingly, "Enron looked to its tax department to devise transactions that increased financial accounting income. In effect, the tax department was converted into an Enron business unit, complete with annual revenue targets. The tax department, in consultation with outside experts, then designed transactions to meet or approximate the technical requirements of tax provisions with the primary purpose of manufacturing financial statement income." (JCT, 2003)

One example of such a transaction was "Project Steele." As Enron had already guaranteed that it would not pay taxes well into the future through previous tax shelters, this transaction was motivated by the fact that it would create \$133 million in pretax financial accounting income. Ironically, in order to generate favorable tax treatment, Enron admitted that its "purported principal business purpose for the transaction was to generate financial accounting income." (JCT, 2003). In addition to the fact that no current tax savings were generated, it is also useful to note that the very complex structure was extremely costly to undertake. Project fees were estimated at over \$11 million. As such, shareholders did not benefit from material tax savings, were manipulated by managers with financial accounting goals, and paid considerable fees in the process.

How representative is such a transaction in depicting what motivates corporate tax shelters? The documents released through the JCT's investigations reveal that the purveyors of the transaction recognized the centrality of financial accounting benefits to

corporate tax shelters. Bankers Trust, the advisor to Enron on this transaction, initially showed a variant on the final structure that did not provide financial accounting benefits. Internal documents reveal that Bankers Trust concluded “that it would not receive much, if any, interest for the tax benefits alone but if the transaction were redesigned to provide for financial accounting benefits, as well, then corporate clients would be extremely interested and would pay a substantial fee. . . other less expensive alternatives exist to generate equivalent tax benefits.” (JCT, 2003)

These examples illustrate how central financial accounting motivations are to undertaking tax shelters. Desai and Dharmapala (2006b) provide a more general stylized example of how earnings manipulation goals can be facilitated by tax shelters. The wider theme here is that tax shelters may provide diversionary opportunities through obfuscation that is easily rationalized as tax avoidance, as in the Sibneft example in Desai, Dyck, and Zingales (2007). These interactions between avoidance decisions and managerial misbehavior are the critical grounding of the agency perspective on tax avoidance.

III. Empirical Evidence

The corporate governance view of taxation yields three distinct predictions that can be tested in various settings. First, characteristics of a tax system – such as the structure of rates and the nature of enforcement – will influence managerial actions and hence the extent of the agency problem. Second, the nature of the corporate governance environment – e.g. the protections afforded dispersed outside investors and the laws that regulate self-dealing – will influence the workings of the tax system. Third, tax avoidance need not represent a simple transfer of resources from the state to shareholders; rather, managers may capture a share of the benefits of tax avoidance. The first two of these predictions have been evaluated in the international setting (with particular emphasis on developing countries) while the third has been evaluated using U.S. data.

III. A. International evidence

Desai, Dyck, and Zingales (2007) develop a model that yields a series of novel hypotheses about the interaction between the strength of corporate governance

institutions and the tax system. Their model predicts that increases in corporate tax rates should lead to larger revenue increases in countries with stronger corporate governance institutions. Managers or controlling shareholders of firms in countries with weaker governance find it easier to divert from shareholders, and so have a greater incentive to avoid corporate taxes; in effect, they act as residual claimants on the firms' cash flows. This hypothesis is tested using data on a panel of countries with differing corporate governance institutions. As predicted, corporate tax rate increases lead to increased revenues only in countries with strong corporate governance. For countries with weak corporate governance, the estimates suggest that revenues *decline* with higher tax rates, because of the interactions with the corporate governance system.

The model of Desai, Dyck, and Zingales (2007) also predicts that tax enforcement may benefit shareholders if the resulting decline in diversion by insiders is sufficiently large to offset the direct loss of shareholder value due to increased tax payments. This is tested using an episode from recent Russian history – the Putin administration's crackdown on tax evasion by corporations in 2000. They find that firms targeted by these enforcement efforts experienced an *increase* in market value, and that the voting premia for these firms (a proxy for private benefits of control) declined. This test exploits heterogeneity across industries in firms' ability to evade taxes, and is robust to various alternative explanations. Indeed, it coincides with contemporaneous accounts of the crackdown which noted that tax avoiding companies “have begun closing offshore subsidiaries and consolidating their operations within Russia. To comply with the law, they have to declare higher profits and pay higher taxes. They must also show the true extent of their financial operations to outside shareholders, who are just as keen to have a share of the proceeds as the tax inspector.” (Jack, 2001). This evidence is hard to reconcile with traditional views of tax avoidance.

III. B. Evidence on Tax Avoidance in the U.S.

While the international evidence discussed above may seem far removed from the developed country setting, an emerging literature has found significant interactions between taxation and corporate governance in the U.S. These empirical investigations are of course hampered by the difficulty of measuring tax avoidance. Building on

research in the accounting literature, Desai and Dharmapala (2006a) construct a proxy for tax avoidance activity based on so-called “book-tax gaps” – the difference between financial income, as reported by the firm to its shareholders and the SEC (using generally accepted accounting principles, GAAP) and the tax income it reports to the IRS. However, because tax returns are confidential, the book-tax gap is not directly observable to most researchers or to investors. This problem can be addressed by estimating firms’ taxable income using observable financial reporting data. In particular, Manzon and Plesko (2002) develop an approach that involves using a firm’s reported tax expense in its financial statements, and grossing up this amount by the corporate tax rate in order to estimate its taxable income. This estimated taxable income is then subtracted from the firms’ reported pretax financial income in order to compute the estimated book-tax gap. While there are a number of important caveats to this approach (reviewed e.g. in Hanlon, 2003), it remains the only available procedure for measuring book-tax gaps, in the absence of direct observation of firms’ tax returns. Moreover, this measure has the distinct advantage of being observable to investors.

However, book-tax gaps may be due to factors other than tax avoidance; in particular, they may reflect earnings management (i.e. the overreporting of financial income). In order to incorporate the effects of earnings management, Desai and Dharmapala (2006a) implement a procedure that seeks to correct the book-tax gap for the influence of earnings management. In the accounting literature, a widely-used proxy for earnings management is the use of accruals - adjustments to realized cash flows made by managers in computing the firm’s net income - as these provide a measure of the extent of managerial discretion in the reporting of the firm’s income. The approach developed in Desai and Dharmapala (2006a) isolates the component of the estimated book-tax gap that is not explained by accruals or abnormal accruals.

How good is the resulting proxy for firms’ tax avoidance activity? Clearly, no such measure can be perfect, but Desai and Dharmapala (2006c) provide a simple validation check that uses a sample of firms involved in litigation relating to aggressive

tax sheltering activity.³ The proxy for tax avoidance takes on larger values for a given firm in those years in which it is accused of aggressive tax sheltering. While the sample of firms involved in litigation is small, this provides some reassurance that the proxy is correlated with tax avoidance activity.

In order to test the implications of the agency model discussed above, this measure of tax avoidance can be related to the nature of managerial incentives and to market values to understand how markets value tax avoidance. Desai and Dharmapala (2006a) present a simple model in which the impact of greater incentive-alignment between shareholders and managers has an ambiguous effect on the extent to which managers undertake tax avoidance activities. On the one hand, higher-powered incentives create a direct motivation to increase after-tax firm value, and hence to increase tax avoidance. On the other hand, higher-powered compensation schemes dissuade managers from acts of opportunism that may be complementary with tax sheltering. In turn, this induces managers to reduce tax avoidance activity as well. For example, consider a manager who can use a tax shelter to not only reduce tax obligations, but also to manipulate financial reporting to move earnings into the current period, and sell stock in the firm at temporarily higher prices. A compensation scheme based on stock options will reduce the incentive to engage in this type of earnings manipulation, and will also reduce the manager's benefits from using the tax shelter, possibly to such a degree as to offset its tax benefits.

Given this ambiguity, the effect of managerial incentives on tax avoidance is an empirical question. The results presented in Desai and Dharmapala (2006a) indicate a negative relationship between their incentive compensation and tax avoidance measures. This negative relationship contradicts the straightforward view of corporate tax avoidance as simply a means of reducing tax obligations, but is consistent with managerial opportunism being an important consideration and with the existence of complementarities between tax avoidance and managerial opportunism. Moreover, this view is supported by further analysis that focuses on the differences in the governance

³ This sample of firms was first identified and studied by Graham and Tucker (2006). However, the number of firms involved in such litigation is small, and so their measure of tax sheltering activity is not suitable for a large-sample approach.

characteristics of the firms in the sample.⁴ The negative relationship is driven primarily by firms with relatively weaker governance environments, where managerial opportunism is likely to be a more important factor.

In a related paper, Desai and Dharmapala (2006c) investigate the effects of their proxy for tax avoidance on firm valuation. Given the theoretical framework sketched above, the central prediction is that firms' governance institutions should be an important determinant of how investors value managers' efforts to avoid corporate taxes. Specifically, tax avoidance should lead to larger increases in firm value at better-governed firms. This is not simply because of a tendency among managers of poorly-governed firms to waste or dissipate a larger share of any value-generating activity they may engage in, but also because complex and obfuscatory tax avoidance activities create a potential shield for managerial opportunism, and this factor will naturally loom larger at firms where governance institutions are weaker. Consistent with this prediction, they find that the impact of tax avoidance on firm value (as measured by Tobin's q) is significantly greater at better-governed firms. This result is robust to the use of a wide variety of controls and various extensions to the model. It also holds when a 1997 change in tax regulations (that apparently reduced the costs of tax avoidance for a subsample of firms) is used as a source of exogenous variation in tax avoidance activity.

III. C. Other evidence

The emerging literature on the corporate governance view of taxation has begun to receive support more broadly from a variety of studies. These studies come in two varieties. First, several studies have also noted that market valuations of tax avoidance appear not to be consistent with the naïve view that tax avoidance is a transfer of value from the state to shareholders. For example, Hanlon and Slemrod (2007) study market reactions to news reports about tax sheltering activity by corporations.⁵ They find a small negative reaction to news about tax sheltering. However, the reaction is more positive for better-governed firms, which is consistent with the theoretical framework developed in

⁴ Governance characteristics are measured using the index constructed by Gompers, Ishii and Metrick (2003) and by a measure of the extent of institutional ownership.

⁵ This sample includes a total of 108 events, and so (while somewhat broader than that constructed by Graham and Tucker, 2006) is quite small.

Desai and Dharmapala (2006a) and outlined above. Similarly, Desai and Hines (2002) study market reactions to corporate expatriations or inversions – transactions in which a US parent corporation becomes the subsidiary of its former tax haven subsidiary through a share swap. Although inversions are presumably motivated by tax savings (in particular, the avoidance of US tax on foreign-source income and possibly also the avoidance of tax on US income in certain circumstances), market reactions are not typically positive, as might be expected under the naïve view.

The second type of evidence relates to the role of the IRS as a meaningful monitor of managerial misbehavior. Erickson, Hanlon and Maydew (2004) analyze a sample of firms that were found by the SEC to have fraudulently overstated earnings. They find that these firms paid a significant amount of taxes on these fraudulent earnings. This suggests that, at least for this sample of firms, the threat of IRS monitoring of their taxable income loomed larger than did investor monitoring of their financial statements. Similarly, Guedhami and Pittman (2007) find evidence that debt financing is cheaper when the probability of a face-to-face IRS audit is higher. The role of IRS oversight on debt financing costs is also related to the ownership structure of firms and the presumed agency costs of those arrangements. Thus, managers and investors appear to appreciate the role of a tax enforcement agency as a monitor of managerial opportunism.

IV. Mechanisms to Address the Agency Problem

The extant literature has emphasized the role of taxes in influencing the nature of managerial misbehavior. However, the role of taxes in shaping the various mechanisms that constitute the overall corporate governance environment has been neglected. To take one example, ownership patterns (such as concentrated ownership) can ameliorate one type of agency problem and give rise to another. The role of taxes in shaping ownership patterns can then have corporate governance implications. Similarly, corporate governance environments can lead to particular ownership structures (such as the pyramidal form) that can then modify the impact of tax policy. This section presents a

somewhat speculative discussion of these links for five critical features of the corporate governance environment.⁶

IV. A. Ownership Patterns

As discussed above, ownership patterns may change in response to problems created by the broader corporate governance environment. Indeed, in much of the world, the most common solution to the agency problem is for large shareholders to own controlling stakes in firms, thereby giving them both the incentive and opportunity to monitor managers. The prevalence of concentrated ownership around the world has been attributed to weak investor protection (La Porta, Lopez de Silanes and Shleifer, 1999) or to political factors (Roe, 2002). Of course, this solution entails its own costs, notably the emergence of a different type of agency problem, the potential expropriation of minority shareholders by the controller.

The American experience of dispersed ownership is anomalous by worldwide standards and the tax system may have played in a role in this situation. Indeed, Berle and Means (1932) motivated their original analysis of the agency problem by assessing the role of progressive taxes in shaping the diffusion of stock ownership in the U.S. Berle and Means noted that highly progressive taxes enacted at the time of WWI gave incentives for a reallocation of stock ownership from the wealthy to a broader investor base. Desai, Dharmapala, and Fung (2007) revisit this intuition, and analyze it formally in the framework of the Miller (1977) model of financial equilibrium. In this setup, different income groups (which face different marginal tax rates due to the graduated structure of the tax system) may form tax clienteles for corporate stock or bonds. Their empirical analysis shows that changes to the progressivity of the income tax have been associated with changes in the patterns of stock ownership across different income groups in the U.S. through the 20th century.

In a related vein, Morck (2005) and Morck and Yeung (2005) argue that one important reason that the US is an exception to the worldwide pattern of concentrated

⁶ In the following, we limit our attention to the for-profit sector. It is worth briefly noting that the tax system is particularly important to governance of non-profit organizations. For example, tax returns for non-profits are made public and tax benefits can be contingent on operational decisions (levels of charitable activities) or financing decisions (payout decisions for foundations). For more on the governance of non-profits, see Desai and Yetman (2006).

ownership is a tax reform in the 1930's that discouraged pyramidal ownership. In particular, it is argued that this is the effect of the unique tax treatment of intercorporate dividends in the US. Finally, Desai and Gentry (2004) show that the tax treatment of corporate capital gains can significantly influence corporate cross-ownership patterns. Specifically, a realization-based capital gains tax paid by corporations appears to create lock-in effects at the corporate level.

The role of taxes in shaping ownership patterns has yet to be explored in other countries, but some current evidence is suggestive of the potential of such investigations. For example, Edwards, Lang, Maydew, and Shackelford (2004) investigate market reactions to the 1999 announcement of a major German tax reform that repealed the sizable capital gains tax on sales of corporate crossholdings. They report a positive association between firms' event period abnormal returns and the extent of their crossholdings, consistent with taxes acting as a barrier to the efficient allocation of ownership. Subsequent anecdotal evidence is consistent with the tax reform leading to a major overhaul of the ownership patterns in Germany. Holmen and Högfeltdt (2006) also trace out the role of tax changes in influencing pyramidal ownership in Sweden. Morck, Percy, Tian, and Yeung (2004) emphasize the role of estate taxes in shaping ownership patterns in Canada. While much remains to be done on the international front, it appears that taxes can have a first-order effect on the ownership patterns that are a critical component of the corporate governance environment.

One further connection between ownership patterns and taxes has yet to be fully explored. The private benefits enjoyed by controllers can take either pecuniary forms (such as through tunnelling into firms where the controller has high cash flow rights) or nonpecuniary ones (such as the power and prestige associated with domination of a large firm). The tax system only burdens the pecuniary forms, and so implicitly subsidizes nonpecuniary private benefits. This bias may, in turn, influence the nature of ownership patterns in economies.

The nature of ownership patterns may also have implications for the workings of tax policy. For example, pyramidal ownership forms may have profound implications for tax policy, particularly in developing countries. For example, transfer pricing issues that

are typically considered with regard to cross-border activities become primary aspects of enforcing a corporate tax domestically. In a related vein, the agency perspective on tax avoidance suggests that concentrated ownership leads to a greater incentive to avoid taxes. The dominance of concentrated owners and family firms may lead to distinctive patterns of tax revenue sources and may affect the feasibility of corporate taxes in many economies.

Finally, cross-border activities may be shaped by governance institutions and then have implications for tax policy. For example, weak institutional arrangements have been found to lead to greater intrafirm transactions, as in Desai, Foley, and Hines (2006). This increased reliance on intrafirm transactions, such as intrafirm borrowing, may also be associated with greater tax avoidance activity. Antras, Desai, and Foley (2007) and Ju and Wei (2007) also suggest that weak corporate governance environments can lead to a reliance on foreign direct investment or changed patterns of foreign direct investment. As such, corporate governance institutions may give rise to distinct biases between domestic and foreign ownership and this mix of ownership can lead to distinct tax policy issues.⁷

Finally, norms of optimal taxation of foreign source income, such as capital export neutrality and capital import neutrality, have viewed capital flows as generic with limited attention to the identity of owners. If ownership matters for the productivity of capital – a bedrock of corporate governance analysis - then optimal taxation of foreign source income can take on quite distinctive forms, as demonstrated in Desai and Hines (2004). Most ambitiously, optimal taxation analyses could incorporate changes to owner identities in the domestic and foreign setting to arrive at new insights on how to design efficient tax regimes.

IV. B. Information systems

Accounting systems play a crucial role in producing information for both an audience of investors and for the tax authorities. The design of information systems for investors has received much attention in the accounting literature. In contrast, the

⁷ One aspect of cross-border activity, taxes and ownership patterns that has yet to be explored is the role of taxes in changing foreign portfolio flows.

information system embodied in tax regimes has received limited attention. If one views the state as a shareholder because of the tax system, then the question of the optimal design of information systems for both the state and investors becomes central.⁸

In the American setting, the literature has centered on the degree to which shareholders can infer information about tax payments from public financial statements. Hanlon (2003) conducts a detailed review of a handful of public financial statements and concludes that it is very difficult to infer anything consistent from public financial statements about tax payments. Large sample evidence that compares tax returns to public financial statements yields a contradictory set of conclusions on the degree to which public financial statements can yield meaningful information on tax payments (Graham and Mills, 2006; Plesko, 2006). Recent reforms in tax reporting, as advanced in Mills and Plesko (2005), have led to an increased ability to match public financial statements to tax returns for tax authorities without any increased access to this information for shareholders.

The disparity in these information systems has led to reform proposals to bring the information systems into greater conformity. Desai (2006) calls for a restoration of financial reporting as the basis for tax returns to allow for reductions in compliance costs, lower marginal rates, and the benefits of joint monitoring by investors and the state on the same report. Hanlon and Maydew (2006) estimate that conformity could result in revenue-neutral corporate tax reductions to a statutory rate of 26%. Critics of conformity, as in Shackelford (2006), emphasize the loss of information to investors from a potential conformed system. Evidence for this point of view draws on studies of several countries with conformity and instances analyses of the imposition of conformity in particular parts of the reporting environment.

The cross-country evidence, unfortunately, is limited by the handful of countries that are analyzed and by the fact that this evidence is most properly interpreted as indicating that a cluster of institutions – concentrated ownership, bank based systems and book-tax conformed income – are associated with less informative earnings. Indeed,

⁸ For a review of the history of the dual information system, see Lenter, Slemrod, and Shackelford (2005), Knott and Rosenfeld (2003) and Desai (2005).

studies by scholars in countries with conformity experiences (such as Schön (2005)) suggest that many of the concerns over conformity are overstated. Examining a narrow change to reporting rules toward conformity may also not be informative about a wholesale change toward conformity – much as narrow tax reforms may lead to misleading implications about the consequences of wholesale tax reforms.

In short, very little is known about the imposition of conformity from an empirical perspective. Recent experience in the U.K., the E.U. and Australia toward conformity, as detailed in Freedman (2004), may offer a promising empirical setting for considering these questions. More generally, there is limited theoretical work on the merits or costs of dual reporting systems. Given the centrality of information systems to both tax systems and investor rights, it would seem that greater empirical and theoretical work is warranted.

IV. C. High powered incentives

Alignment of managerial and shareholder interests has been a central research agenda for corporate finance scholars interested in the agency problem. Tax rules have the potential to influence the nature of optimal contracting between managers and shareholders by changing the mix between cash and incentives (cash vs. stock), the nature of incentives (stock vs. options), and the timing of compensation (deferred benefit plans vs. current compensation).

Responding to apparent public concern about the size of CEO salaries, Congress in 1993 enacted Section 162(m) of the tax code, limiting firms' deductibility of executive compensation to \$1 million, except where the compensation is "performance-based." Perry and Zenner (2001) analyze the impact of Section 162(m) on the composition of executive compensation, concluding that it led to an increase in stock-based forms of compensation (and thus contributed to the rapid growth of incentive pay for executives during the 1990's). However, Rose and Wolfram (2002) find no such impact, and attribute the contrary findings of Perry and Zenner (2001) to mean reversion in executive compensation. The extent of the impact of Section 162(m) on managerial incentives, and the wider question of whether tax incentives can shape the structure of executive compensation, thus remains unclear, and warrants further research.

The personal taxes faced by managers may also have an impact on the optimal compensation contract, and hence the power of managerial incentives (Katuscak, 2004). Tax incentives may also be relevant to the choice of the form of stock-based compensation (restricted stock vs. options) and the choice of deferred compensation. Indeed, in recent testimony before the Senate Finance Committee, Lucian Bebchuk has emphasized the tax treatment of executive pensions and defined contribution plans to explain their rapid rise (Bebchuk, 2007).

Beyond the specific issues discussed above, it may also be the case that the tax system plays an important role in providing the foundations underlying the current system of incentive-based executive compensation. For stock-based compensation to provide high-powered incentives for managers, an essential precondition is that managers are prevented from hedging the stock options that they receive. Schizer (2000) argues that the tax system plays an under-appreciated (and perhaps unintended) role in this context. Tax rules designed to prevent taxpayers from avoiding capital gains taxes also make it costly for managers to hedge their options. While hedging can also be restricted contractually, and certain forms of hedging may be prohibited under corporate law, the tax system may play a role in ensuring that stock-based compensation has the intended effect of incentivizing managers.

IV. D. Financing Choices and Payout Policy

Major corporate financing choices – particularly the choice between debt and equity and payout policy – can have important agency dimensions. In particular, debt and dividends have been hypothesized to play a monitoring role that can alleviate agency concerns. Debt is, of course, favored by the tax system due to the deductibility of interest payments,⁹ although a longstanding puzzle in the corporate and public finance literatures is why firms do not use more debt. The use of debt potentially has significant governance implications, as monitoring of managers by lenders may serve as a substitute for monitoring by equityholders. However, it is also possible that the use of debt may give rise to a different agency problem, namely that between lenders and shareholders (Jensen

⁹ Indeed, a large class of hybrid instruments that blurs the distinction between debt and equity appears to have central tax-motivated foundations.

and Meckling, 1976). Graham and Tucker (2006), using a small sample of firms involved in tax shelter litigation, find that firms alleged to be sheltering have lower debt-equity ratios than do otherwise comparable firms. They interpret this evidence as indicating that tax shelters serve as non-debt tax shields that lower the tax benefits of debt, but it may also suggest that sheltering firms may experience a lower degree of monitoring by lenders.

The choice between paying dividends and engaging in share repurchases (and the associated puzzle of the prevalence of tax-disfavored dividends) has dominated the literature on taxes and payout policy. Jensen's (1986) well-known model of the agency costs of free cash flow has led to the common argument that dividend taxation discourages the disgorgement of free cash flow by firms, and thus exacerbates agency problems.¹⁰ In 1936, the Roosevelt administration sought to counteract the tax incentive for firms to retain earnings by imposing an additional tax on undistributed profits. Christie and Nanda (1994) find that the imposition of this tax led to a positive market reaction, especially among firms that paid low dividends. They interpret this as evidence of agency conflicts between shareholders and managers concerning payout policy. Bank (2003) provides a broader overview of the evolution of the double taxation of dividends and its interactions with corporate governance during the interwar period.

Researchers analyzing payout policy have been fortunate in recent years in that Congress has provide a major natural experiment through the reduction in dividend taxes in 2003. Chetty and Saez (2005) analyze the effects of the tax cut on firms' dividend payments, and find a substantial increase along both the extensive margin (with many firms initiating dividends) and the intensive margin (with previously dividend-paying firms increasing their dividend payments). Brown, Liang and Weisbenner (2007) find that firms' response to the tax cut varied according to the structure of executive compensation and ownership. Firms where managers held substantial stock ownership responded with large increases in dividends (which would benefit managers as well as other shareholder) while the response was weaker among firms where mangers held stock options (which are typically not adjusted in value for dividends paid out). Thus the recent

¹⁰ Arlen and Weiss (1995) argue that the persistence of the double taxation of dividends is itself attributable to an agency problem, as managers have insufficient incentives to lobby for corporate tax integration.

literature on the effects of taxes on dividend payout has uncovered interactions among the tax system, managerial compensation and ownership, and corporate governance.

The tax system may affect the financing choices not only of established corporations, but also those of new startups. Bankman (1994) highlights the anomaly that most Silicon Valley startups during the technology boom were structured as new companies, even though the tax benefits of the deductions for the costs of the new project would typically be more valuable were the project to be undertaken under the aegis of an established company or through a partnership. On the other hand, Gilson and Schizer (2003) argue that tax considerations help to explain why most venture capital providers structure their investments in the form of convertible preferred stock.

Finally, economists have explored the role of capital gains taxes in determining the level of venture capital activity. Poterba (1989) argues that capital gains taxes may have a significant influence on entrepreneurs' demand for venture capital, and on their decisions to receive compensation in the form of stock rather than cash. More recently, Cullen and Gordon (2002) find evidence of large effects of tax rates and the structure of the tax system on entrepreneurial activity, while Keuschnigg and Nielsen (2003) develop a theoretical framework for analyzing the effects of taxes on venture capital activity.

IV. E. Corporate control

The market for corporate control constitutes a central pillar of the corporate governance environment by allowing for the threat of management removal. At the same time, the evidence on the massive scale of value destruction through mergers suggests that mergers themselves are a critical domain for managerial misbehavior (see Moeller, Shlingemann, Stulz (2005)). Taxation can influence the financing choices for mergers, the desirability of undertaking such transactions and the devices used to deter such transactions. This area represents one of the most underdeveloped areas for understanding how taxation influences corporate governance but a few obvious examples of these interactions are already apparent, though underexplored.

The U.S. tax system differentiates mergers by their financing, creating an incentive to use stock to finance mergers. Stock financed mergers have been found to be the source of a disproportionate share of the value destruction associated with mergers.

Indeed, Shleifer and Vishny (2003) provide a theoretical model to explain that stock-financed mergers can be used by acquirers to monetize overvalued shares. The tax system may also facilitate mechanisms that entrench managers. For example, poison pills that reduce the vulnerability of managers to outside takeovers have been deemed a non-taxable event, presumably altering the desirability of undertaking such maneuvers. More generally, Gilson, Scholes and Wolfson (1988) provide an overview of tax motivations for acquisitions.

V. *Conclusion*

The historic divide between the study of taxation and the analysis of corporate governance appears to have obscured many fertile areas of research. While some issues at the intersection of taxation and corporate governance have received renewed attention in recent years (primarily due to a concern with tax shelters and managerial malfeasance), taxation can also have significant implications for the various mechanisms that have arisen to ameliorate governance problems.

In particular, the impact of tax systems on corporate ownership patterns, and how ownership patterns in turn constrain corporate taxation, appears to warrant further analysis, especially in an international and comparative setting. The relationship between financial reporting and taxation has attracted widespread scholarly and public attention, but the most important empirical issues remain unresolved. Similarly, the role of the tax system in influencing patterns of managerial compensation warrants further analysis, building on an existing empirical literature that has found mixed results. It has also been noted that the well-established literature on the effects of taxes on firms' debt and payout policies is being enriched by the incorporation of considerations relating to corporate governance and managerial compensation. Finally, the impact of the tax system on the market for corporate control remains substantially under-explored.

References

- Antras, Pol, Mihir A. Desai, and C. Fritz Foley. 2007. Multinational Firms, FDI Flows and Imperfect Capital Markets. NBER Working Paper No. 12855.
- Arlen, Jennifer and Deborah M. Weiss. 1995. A Political Theory of Corporate Taxation. *Yale Law Journal* 105: 325-391.
- Bank, Steven A. 2003. Is Double Taxation a Scapegoat for Declining Dividends? Evidence from History, *Tax Law Review* 56: 463, 471-472.
- Bankman, Joseph. 1994. The Structure of Silicon Valley Startups. *UCLA Law Review* 41: 1737-1768.
- Bankman, Joseph. 2004. The Tax Shelter Problem. *National Tax Journal* 57: 925-36.
- Bebchuk, Lucian A. 2007. Testimony before House Financial Services Committee on Shareholder Advisory Votes on Compensation. http://www.law.harvard.edu/faculty/bebchuk/pdfs/2007_HFSC.pdf
- Berle, Adolphe and Gardiner C. Means. 1932. *The Modern Corporation and Private Property*. New York: Macmillan.
- Brown, Jeffrey R., Nellie Liang and Scott Weisbenner. 2007. Executive Financial Incentives and Payout Policy: Evidence from the 2003 Dividend Tax Cut. Forthcoming in *Journal of Finance*.
- Chetty, Raj and Emmanuel Saez. 2005. Dividend Taxes and Corporate Behavior: Evidence from the 2003 Dividend Tax Cut. *Quarterly Journal of Economics* 120 (3): 791-834.
- Christie, William, and Vikram Nanda. 1994. Free cash flow, shareholder value, and the Undistributed Profits Tax of 1936 and 1937. *Journal of Finance* 49: 1727-1754.
- Cullen, Julie B. and Roger H. Gordon 2002. Taxes and Entrepreneurial Activity: Theory and Evidence for the US. NBER Working Paper 9015.
- Desai, Mihir A. 2005. The Degradation of Reported Corporate Profits. *Journal of Economic Perspectives* 19 (4): 171-192.
- Desai, Mihir A., 2006. Reform Alternatives for the Corporate Tax, Subcommittee on Select Revenue Measures, Committee on Ways and Means, House of Representatives, Washington DC May 9, 2006, <http://waysandmeans.house.gov/hearings.asp?formmode=view&id=4936>
- Desai, Mihir A. and Dhammika Dharmapala. 2006a. Corporate Tax Avoidance and High Powered Incentives. *Journal of Financial Economics* 79 (1): 145-179.
- Desai, Mihir A. and Dhammika Dharmapala. 2006b. Earnings Management and Corporate Tax Shelters. Harvard Business School Finance Working Paper 884812.
- Desai, Mihir A. and Dhammika Dharmapala 2006c. Corporate Tax Avoidance and Firm Value. Working Paper.
- Desai, Mihir A., Dhammika Dharmapala, and Winnie Fung. 2007. Taxation and the Evolution of Aggregate Corporate Ownership Concentration. Forthcoming in *Taxing*

- Corporate Income in the 21st Century*, edited by Alan Auerbach, James R. Hines Jr. and Joel Slemrod. Cambridge University Press.
- Desai, Mihir A., Alexander Dyck, and Luigi Zingales. 2007. Theft and Taxes. Forthcoming in *Journal of Financial Economics*.
- Desai, Mihir A, C. Fritz Foley and James R. Hines, Jr. 2006. The Demand for Tax Haven Operations. *Journal of Public Economics* 90 (3): 513-531.
- Desai, Mihir A. and William M. Gentry. 2004. The Character and Determinants of Corporate Capital Gains. In *Tax Policy and the Economy* 18, edited by James Poterba, 1-36. MIT Press: Cambridge, MA.
- Desai, Mihir A. and James R. Hines, Jr. 2004. Old Rules and New Realities: Corporate Tax Policy in a Global Setting. *National Tax Journal* 57 (4): 967-960.
- Desai, Mihir A. and James R. Hines Jr. 2002. Expectations and Expatriations: Tracing the Causes and Consequences of Corporate Inversions. *National Tax Journal* 55 (3): 409-440.
- Desai, Mihir A. and Robert J. Yetman. 2006. Constraining Managers without Owners: Governance of the Not-for-Profit Enterprise. NBER Working Paper No. 11140.
- Edwards, Courtney, Mark H. Lang, Edward L. Maydew, and Douglas A. Shackelford. 2004. Germany's Repeal of the Corporate Capital Gains Tax: The Equity Market Response. *Journal of the American Taxation Association* 26 Supplement: 73-97.
- Erickson, Merle, Michelle Hanlon, and Edward L. Maydew. 2004. How Much Will Firms Pay for Earnings That Do Not Exist? Evidence of Taxes Paid on Allegedly Fraudulent Earnings. *Accounting Review* 79: 387-408.
- Freedman, Judith. 2004. Aligning Taxable Profits and Accounting Profits: Accounting Standards, Legislators and Judges. *eJournal of Tax Research* 2 (1): 71-99.
- Gilson, Ronald J., Myron S. Scholes & Mark A. Wolfson. 1988. Taxation and the Dynamics of Corporate Control: The Uncertain Case for Tax Motivated Acquisitions. In *Knights, Raiders, and Targets: The Impact of the Hostile Takeover* 271, edited by J. Coffee, Louis Lowenstein & Susan Rose-Ackerman, 271-299. New York and Oxford: Oxford University Press.
- Gilson, Ronald J. and David Schizer. 2003. Understanding Venture Capital Structure: A Tax Explanation for Convertible Preferred Stock. *Harvard Law Review* 116: 874-916.
- Gompers, Paul A., Joy L. Ishii, and Andrew Metrick. 2003. Corporate Governance and Equity Prices. *Quarterly Journal of Economics* 118 (1): 107-156.
- Graham, John R. and Lillian F. Mills. 2007. Using Tax Return Data to Simulate Corporate Marginal Tax Rates. Working Paper. Available at SSRN: <http://ssrn.com/abstract=959245>.
- Graham, John R. and Alan Tucker. 2006. Tax Shelters and Corporate Debt Policy. *Journal of Financial Economics* 81: 563-594.
- Guedhami, Omrane and Jeff Pittman. 2006. The Importance of IRS Monitoring to Debt Pricing in Private Firms. Working Paper.

- Hanlon, Michelle. 2003. What Can We Infer About a Firm's Taxable Income from its Financial Statements? *National Tax Journal* 56: 831-863.
- Hanlon, Michelle and Joel Slemrod. 2007. What Does Tax Aggressiveness Signal? Evidence from Stock Price Reactions to News About Tax Aggressiveness. Working Paper.
- Hanlon, Michelle, Lillian F. Mills, and Joel Slemrod. 2007. An Empirical Examination of Corporate Tax Noncompliance. Forthcoming in *Taxing Corporate Income in the 21st Century*, Alan J. Auerbach, James R. Hines Jr., and Joel Slemrod. Cambridge: Cambridge University Press.
- Holmen, Martin and Peter Högfeldt. 2005. Pyramidal Discounts: Tunneling or Agency Costs? ECGI Working Paper Series in Finance. Available at SSRN: <http://ssrn.com/abstract=676506>
- Jack, Andrew. 2001. Russia starts paying dividends: Shareholders are benefiting from improved corporate governance, says Andrew Jack, *Financial Times*, September 17, p. 32.
- Jensen, Michael C. 1986. Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers. *American Economic Review Papers and Proceedings* 76 (2): 323-329.
- Jensen, Michael C. and William Meckling. 1976. Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics* 3: 305-360.
- Joint Committee on Taxation 2003. Report of Investigation of Enron Corporation and Related Entities Regarding Federal Tax and Compensation Issues, and Policy Recommendations, vol. 1-3. <http://www.access.gpo.gov/congress/joint/hjoint01cp108.html>
- Ju, Jiandong and Shang-Jin Wei. 2007. Domestic Institutions and the Bypass Effect of International Capital Flows. IMF Working Paper.
- Katuscak, Peter. 2004. The Impact of Personal Income Taxation on Executive Compensation. Working paper.
- Keuschnigg, Christian and Soren Bo Nielsen. 2003. Tax policy, venture capital, and entrepreneurship. *Journal of Public Economics* 87 (1): 175-203.
- Knott, Alvin D. and Jacob D. Rosenfeld. 2003. Book and Tax: A Selective Exploration of Two Parallel Universes, Parts One and Two. *Tax Notes* 99 (6): 865-897 and *Tax Notes* 99 (7): 1043-1080.
- La Porta, Rafael, Florencio Lopez de Silanes and Andrei Shleifer. 1999. Corporate Ownership around the World. *Journal of Finance* 54: 471-517.
- Lenter, David, Joel Slemrod, and Douglas A. Shackelford. 2003. Public Disclosure of Corporate Tax Return Information: Accounting, Economics, and Legal Perspectives. *National Tax Journal* 56: 803-830.
- Manzon, Gil B., Jr. and George A. Plesko 2002. The Relation Between Financial and Tax Reporting Measures of Income. *Tax Law Review* 55: 175-214.

- Miller, Merton 1977. Debt and Taxes, *Journal of Finance* 32 (2): 261-275.
- Mills, Lillian F. and George A. Plesko. Bridging the reporting gap: a proposal for more informative reconciling of book and tax income. *National Tax Journal* 56: 865-893.
- Moeller, Sara B., Frederik P. Schlingemann and Rene M. Stulz. 2005. Wealth destruction on a massive scale? *Journal of Finance* 60(2): 757-782.
- Morck, Randall. 2005. How to Eliminate Pyramidal Business Groups: The Double Taxation of Inter-corporate Dividends and Other Incisive Uses of Tax Policy. In *Tax Policy and the Economy*, edited by James Poterba, 135-179. Chicago: University of Chicago Press.
- Morck, Randall, Michael Percy, Gloria Tian, and Bernard Yeung. 2004. The Rise and Fall of the Widely Held Firm: A History of Canadian Corporate Ownership. In *A History of Corporate Governance around the World*, edited by Randall Morck, 65-148. Chicago: University of Chicago Press.
- Morck, Randall and Bernard Yeung. 2005. Dividend Taxation and Corporate Governance. *Journal of Economic Perspectives* 19(3): 163-180.
- Perry, Todd and Mark Zenner. 2001. Pay for performance? Government regulation and the structure of compensation contracts. *Journal of Financial Economics* 62: 453-488.
- Plesko, George A. 2006. Corporate Tax Avoidance and the Properties of Corporate Earnings. *National Tax Journal* 5 (September): 729-737.
- Poterba, James. 1989. Venture Capital and Capital Gains Taxation. In *Tax Policy and the Economy* 3, 47-67, edited by Lawrence H. Summers. Cambridge: MIT Press.
- Roe, Mark J. 2002. Corporate Law's Limits. *Journal of Legal Studies* 31: 233-272.
- Rose, Nancy L. and Catherine Wolfram 2002. Regulating Executive Pay: Using the Tax Code to Influence Chief Executive Officer Compensation. *Journal of Labor Economics* 20: S138-S175.
- Schizer, David. 2000. Executives and Hedging: The Fragile Legal Foundation of Incentive Compatibility. *Columbia Law Review* 100 (2): 440-504.
- Schön, Wolfgang. 2004. International Accounting Standards – a Starting Point for a Common European Tax Base? *European Taxation* 44 (10): 426-440.
- Shackelford, Douglas A. 2006. Testimony before the Subcommittee on Select Revenue Measures of the House Committee on Ways and Means May 09, 2006. <http://waysandmeans.house.gov/hearings.asp?formmode=view&id=144>
- Shleifer, Andrei and Robert Vishny. 2003. Stock Market Driven Acquisitions *Journal of Financial Economics* 70: 295-311.
- Weisbach, David 2002. Ten Truths about Tax Shelters. *Tax Law Review* 55: 215-253.