

Revisiting the uneasy case for corporate taxation in an uneasy world

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Abstract: Just as the public increasingly wants corporate taxation to serve as a mechanism for ensuring that business contributes to society, the sustainability of corporate taxation is increasingly under challenge by a changing global landscape. This tension between the heightened demands placed on the corporate tax system and its reduced capacity prompts the question: How can an increasingly tenuous fiscal instrument be modified to accommodate rising expectations? In this paper, we address this question by reviewing the empirical evidence on, and conceptual underpinnings of, the corporate tax. We place the taxation of corporations in a wider context that links it to ongoing debates on corporate law and governance and on corporate social responsibility. Drawing on an agency cost perspective on the corporate tax, we argue that one approach to its reform is to focus on circumstances in which there may exist a coincidence of interests between shareholders and the general public. This perspective encompasses many of the themes of current debates surrounding the taxation of corporations. We also outline three possible alternative futures for the corporate tax that have quite different implications for efficiency and distribution. One involves enhanced multilateral cooperation to preserve the corporate tax, another involves abandoning (corporate and personal) income taxation in favour of consumption taxation, and the third entails abolishing the corporate tax (while transforming personal taxation to address the resulting tax planning opportunities for individuals).

Keywords: corporate tax; tax avoidance; corporate governance; corporate social responsibility.

“Our goal is to develop services that significantly improve the lives of as many people as possible [...] Don't be evil. We believe strongly that in the long term, we will be better served—as shareholders and in all other ways—by a company that does good things for the world even if we forgo some short term gains.”

— 2004 Founders IPO Prospectus, Alphabet Inc.¹

“You [Google] use smoke and mirrors to avoid paying tax [...] I think you do evil.”

— Margaret Hodge, MP, Chair of the Public Accounts Committee of the House of Commons²

Executive Summary

The dynamics of tax policy in a world of mobile corporations has become considerably more complex. There is a view that firms have become increasingly aggressive in seeking tax advantages, while there has been growing popular discontent about the apparent ability of corporations to relocate activity in response to tax differences.

These trends are thought to be manifest in declines in corporate tax rates around the world. The paper shows how this applies to four groups of countries where corporate tax rates have declined by an average of over 40% in 1980 to around 25% today. The authors suggest that the erosion of corporate tax also poses challenges for the sustainability of personal income tax systems.

Company tax no longer fits the realities of the contemporary world and must either be abandoned or thoroughly transformed to accord with global realities, the authors argue. Such issues are a manifestation of deep tension between nation states and firms, and also serve as a prism through which to consider the responsibilities of a corporation to a ‘home’ country.

Corporate tax makes the government (and by extension society at large) one of the principals of a corporation because of its interest in receiving revenue. Tax avoidance by corporations imposes a fiscal externality on other taxpayers -- but whether society should be viewed as the ultimate principal of corporate entities is a matter for normative judgement.

The paper addresses how corporate taxation needs to change in an increasingly digital and global setting. It examines existing scholarly literature on company taxation in the global economy, providing a framework for future debate. It offers three alternatives for corporate tax and assess them with respect to various policy objectives, including efficiency, administrability, corporate responsibility, the perceived legitimacy of tax systems, and equity.

One option involves the development of multilateral taxing authorities, matching the global reach of corporations, which would mitigate against tax competition between countries, even at the risk of increased efficiency costs.

If the world is heading towards a dystopian future of de-globalisation, among the implications are increasing frictions for cross-border mobility and reductions in tax competition. This might make a corporation easier to tax but is also likely to reverse the substantial growth in global prosperity enjoyed in recent decades.

¹ Alphabet Inc, “Founders’ IPO Letter, 2004”, Alphabet website, at <https://abc.xyz/investor/founders-letters/2004/ipo-letter.html>, accessed April 2018.

² Margaret Hodge, MP, Chair of the Public Accounts Committee of the House of Commons (UK Parliament) addressing Matt Brittin, Google VP of Sales and Operations for Northern Europe, May 15, 2013, from Tom Berginn “UK lawmakers challenge Google's 'smoke and mirrors' on tax,” May Reuters.com, May 16, 2013, at <https://www.reuters.com/article/us-google-britain-tax/uk-lawmakers-challenge-googles-smoke-and-mirrors-on-tax-idUSBRE94E0WL20130516>, accessed April 2018.

If income taxation of individuals and corporations is closely tied together, another alternative may be to jettison both personal and corporate income taxation, in favour of various forms of consumption taxation, implemented through the familiar VAT (Value added tax) system or other mechanisms. While this approach offers considerable efficiency gains, the degree of progressivity achieved by income taxation could be affected.

The authors note that the absence or erosion of company tax has created tax planning opportunities for individuals, who may use corporations as vehicles for the deferral of taxes. This can be eliminated by imposing personal income tax on an accrual basis, abolishing the realisation requirement that has long been an integral element of income tax.

This approach, which has been considered by previous studies, would render income tax viable even in the absence of a company tax. Accrual-based taxation faces substantial challenges, but the authors argue that it eliminate entity-level company tax while achieving any desired degree of progressivity through an accrual-based personal income tax.

1. Introduction

As commerce has globalised and digitised, the dynamics of corporate tax policy have become considerably more complex and more politically salient. Firms are thought to have become increasingly aggressive in seeking tax advantages and there has been growing popular discontent about the seeming ability of corporations to relocate activity and profits in response to tax differences. These trends are widely thought to have become manifest in declining corporate tax rates around the world. Figure 1 illustrates this phenomenon for four groups of countries, defined by income level, over the period 1980-2015. Corporate tax rates have declined for all these groups of countries, from an average of over 40% in 1980 to around 25% today. For many, this reflects a possibly harmful process of tax competition among countries. For others, who place greater emphasis on the various economic inefficiencies associated with corporate taxation, this phenomenon may be more welcome.

Two recent examples manifest the deep tension between nation states and firms in an era of global commerce and mobile corporations. The UK instituted, and Australia followed, a novel approach to tax avoidance through the Diverted Profits Tax (DPT) in 2015. This instrument, widely known as the “Google Tax”, is a levy on profits that are diverted to tax havens via “contrived arrangements”, though the specifics are notably vague. Similarly, the recent U.S. tax reform introduced a global minimum tax and a base erosion provision that presumptively declares that intrafirm payments for services are motivated by tax avoidance. These novel and aggressive mechanisms respond to a deep distrust of corporations.³ Despite these widely publicized efforts to crack down on tax avoidance, many of these same jurisdictions have pursued preferential regimes for particularly mobile intellectual property income, suggesting an ambivalent, if not schizophrenic, approach to the taxation of multinational firms.

These developments raise several questions that are likely to dominate the debate on corporations and taxation for years to come. First, is the corporate tax, as currently structured, consistent with the realities of the contemporary world or must it either be abandoned or thoroughly transformed? Second, how does the debate over the corporate tax illuminate broader questions on the responsibilities of a corporation to a “home country?” Finally, how can political preferences be reconciled with economic realities in restructuring the corporate tax?

In Section 2, we review the scholarly literature on company taxation in the global economy, as any consideration of these issues must be built on an understanding of what is feasible given corporate responsiveness. In Section 3, we provide a framework for addressing these questions. Specifically, we ground this discussion in the various theories that have been proposed for why corporate taxation exists (or why it should not exist). In Section 4, we explore three “alternative futures” for the corporate tax and assess them with respect to various policy objectives. Section 5 concludes.

³ Christian Aid surveyed British citizens and found 90% of respondents found corporate tax avoidance morally wrong, even if technically legal, and 85% think multinational firms have easy ways to avoid paying taxes that they owe - see: <https://www.theguardian.com/business/2017/nov/27/tax-avoidance-by-big-firms-is-morally-wrong-say-nine-out-of-10-in-uk>

2. The Consequences of the Corporate Tax

Any contemplation of the future of the corporate tax must build on an appreciation of the economic role of the tax as currently structured. Figures 2a and 2b provide data on the role of corporate tax revenues for developed economies. The corporate tax has delivered a significant and stable share of government revenues, despite deep concerns over the viability of the corporate tax. In combination with Figure 1's depiction of declining rates, the corporate tax appears to be becoming broader given the steady share of government revenues. However, given rising levels of corporate profitability, these figures actually imply a lower effective tax rate on corporations.

In the following subsections, we consider the effects of the corporate tax on real and financial decisions and on profit shifting, as well as discussing tax competition and recent reforms. We conclude with a discussion of the incidence of the corporate tax which is critical for understanding its distributional consequences. We review these issues relatively briefly, as there is a vast scholarly literature on these topics. In particular, the documents produced by the Mirrlees Review (Mirrlees et al, 2011, and especially Auerbach, Devereux and Simpson (2010)) provide a comprehensive treatment of the scholarly consensus on the corporate tax.⁴ In considering the efficiency consequences of the corporate tax, it is helpful to bear in mind that the benchmark used in this literature is a counterfactual world with no corporate tax, and all else held equal.

2.1) The Impact of Corporate Taxation on the Real and Financial Decisions of Firms

The company tax has been shown to have a substantial impact on the investment and locational decisions of firms along the intensive margin (i.e. how much to invest in a given jurisdiction) and the extensive margin (i.e. whether to invest at all in a given jurisdiction). Decisions of the former type depend on marginal tax rates - the tax rate on an extra dollar of income generated by a small amount of additional investment, while decisions about the latter depend on the average tax rate faced by the entire investment in that particular jurisdiction. Distortions to these choices occur because efficiency requires maximizing the pretax return on investments (which includes both the firm's after-tax return and governments' tax revenues), whereas firms care only about their own after-tax return.⁵

The impact of the corporate tax on financial and organisational choices also generates efficiency costs. Corporations' interest payments on debt may be deductible, unlike the payment of dividends to shareholders. This creates an incentive for corporations to use more debt finance than they would otherwise choose. When firms use more debt due to the tax deductibility of interest payments, the costs of insolvency and reorganization are incurred more frequently. Higher levels of debt may also exacerbate agency costs of debt (which cause shareholders to seek to transfer wealth to themselves from bondholders through increased risk-taking). The efficiency costs of debt bias are generally thought to be quite modest in magnitude (e.g. Gordon, 2010). This modest size

⁴ The efficiency consequences of the company tax are also surveyed in greater detail in Dharmapala (2017).

⁵ There is a large empirical literature studying the effects of taxes on the amount and location of investment. For example, de Mooij and Ederveen (2003) report that the median tax rate elasticity found in the literature on foreign direct investment is around -3.3 (that is, a one percentage point reduction in a country's tax rate raises investment by 3.3%), implying a substantial response of the location of investment to taxes. Devereux and Griffith (1998) study a sample of US firms operating in Europe to analyse discrete choices of investment in different countries. They find that a one percentage point increase in the UK's average tax rate reduces the probability of a US firm producing in the UK by 1.3 percentage points, suggesting a sizeable tax effect on discrete location choices.

reflects the relatively small size of the deadweight costs of bankruptcy, along with the fact that the incremental impact of debt bias on the probability of insolvency is typically modest. Since the global financial crisis of 2008, however, a new focus has emerged on the role of tax-induced leverage in affecting financial stability and the likelihood of financial crises (e.g. de Mooij, 2012; de Mooij, Keen and Orihara, 2013). While this issue remains the subject of ongoing debate, if the tax bias towards debt is indeed associated with financial instability then its efficiency costs may be much larger than previously thought.

Corporations' decisions about payout – i.e. whether to pay dividends to shareholders, to repurchase shares, or to retain cash – depend in part on a combination of corporate taxation and shareholder-level personal taxation. In general, the retention of cash and the repurchase of shares have tended to be tax-favoured for a number of reasons. In many tax systems, the tax rate on dividend income is lower than the tax rate on capital gains, there is an advantage to deferring personal taxation until the realization of capital gains, and repurchases partly represent a recovery of basis. The tax bias towards retention creates inefficiencies in the form of increased agency costs of free cash flow, for instance inducing managers to undertake negative-value investments with retained cash.

The corporation tax is by its nature a tax imposed only on a particular legal form of business organisation – the corporation. Hence, it clearly affects firms' choices about whether to incorporate or to operate in a noncorporate legal form (where income is passed through to the individual owners and taxed at the applicable personal rate). While the corporate tax imposes an entity-level tax on corporations, incorporation also creates opportunities for deferring personal taxation by retaining cash within the corporation. Thus, the tax system may either discourage or encourage incorporation, depending on the relative rates of corporate tax and personal tax on dividends and capital gains.

There is evidence suggesting that the choice of organisational form is quite sensitive to relative tax rates on corporations and pass-through entities. For instance, Goolsbee (2004) analyses organisational form choices across US states, and finds that a one percentage point increase in the corporate income tax rate reduces the corporate share of firms by 2.5%. However, the efficiency costs of organisational form distortions are quite difficult to pinpoint – for instance, Goolsbee (2004) finds no impact of organisational form on firms' business operations. It is possible that incorporation entails higher transaction costs, but quantification of this has proven elusive.⁶

2.2) The Corporate Tax and Profit Shifting

Tax rate differences create incentives for multinational firms to shift profits from high-tax to low-tax jurisdictions, through strategic transfer pricing (for instance, using low prices for goods and services transferred from high-tax to low-tax affiliates) and intrafirm debt (for instance, financing high-tax affiliates by borrowing from low-tax affiliates) (e.g. Dharmapala, 2008, 2014a, 2017). There is a large and growing body of empirical evidence on the magnitude of multinational firms' propensity to shift reported income from higher-tax to lower-tax jurisdictions.⁷

⁶ In the international setting, Desai and Hines (1999) and Desai, Foley and Hines (2004) show that ownership and organizational form decisions are significantly impacted for multinational firms because of home country rules and differing tax rates across jurisdictions. For a more general perspective on taxation and the organisational form of small businesses, see Freedman and Crawford (2010).

⁷ This literature is reviewed in more detail in Dharmapala (2014a).

One of the most influential approaches to the measurement of profit shifting was developed by Hines and Rice (1994). It assumes that the observed pretax income of an affiliate represents the sum of “true” income and “shifted” income. Measures of the capital and labour inputs used by the affiliate are used to predict the counterfactual “true” level of income. The tax incentive to shift income is measured by the tax rate difference across affiliates of the MNC. The recent literature using this approach applied to large micro-level datasets has estimated a magnitude of profit shifting that can be summarised as follows (Dharmapala, 2014a): a 10 percentage point increase in the tax rate difference between an affiliate and its parent (e.g. because the tax rate in the affiliate’s country falls from 35% to 25%) would increase the pretax income reported by the affiliate by 8% (for example, from £100,000 to £108,000). This magnitude is relatively modest, at least in comparison to estimates made in the past. More recently, some scholars have argued in favour of using the larger estimates generated using aggregate country-level data (e.g. Clausing, 2016), while Dowd, Landefeld and Moore (2017) show (using a dataset of US multinational firms’ tax returns) that profit shifting may be more responsive when taking specific account of zero-tax jurisdictions.

The efficiency costs of profit shifting depend in part on how the costs of tax planning are conceptualised. Tax planning should be understood as transferring resources to tax professionals rather than being directly socially wasteful. Even so, tax planning involves an efficiency cost because tax planners’ activities may not be as socially valuable as their alternative occupations. Dharmapala (2014b, p. 12) suggests that this efficiency cost “should be understood primarily as a misallocation of talent - for example, where someone who could have been another Mozart or could have found a cure for cancer instead toils away producing transfer pricing documentation.” When the payments received by tax planners are equal to their wage in their next-best (socially valuable) occupation, the magnitude of profit shifting is informative about the magnitude of the efficiency losses from profit shifting (Dharmapala, 2017).

There may also be important interactions between firms’ real economic responses to corporate taxes and their profit shifting responses. When profit shifting is more prevalent, we would expect real responses to be less pronounced because the tax burden in a high-tax jurisdiction is mitigated by the ability to report profits instead in a low-tax jurisdiction.⁸ Thus, profit shifting and real distortions are likely to be substitutes.⁹ Indeed, a growing literature finds that foreclosing profit-shifting opportunities is associated with reduced investment by firms. For instance, de Mooij and Liu (2018) use a global panel dataset and find that stricter transfer pricing regulations lead to substantial declines in investment by multinational firms. Suarez Serrato (2018) analyses the 1996 repeal of a US tax law provision that facilitated profit shifting to Puerto Rico, finding substantial declines in investment and employment in the US operations of US firms that previously engaged in profit-shifting to Puerto Rico. Moreover, these declines led to damaging long-term consequences for immobile workers located in areas where such firms were concentrated.

2.3) Tax Competition and Multilateral Cooperation

⁸ This interaction can help explain why high-tax jurisdictions may not be as aggressive toward low-tax jurisdictions as they may be otherwise.

⁹ However, it is possible that there are special circumstances in which profit shifting and real distortions are complementary (for instance, if tax laws require some minimal level of real investment in a low-tax jurisdiction in order to shift profit there).

The term tax competition refers to a process in which countries reduce their company tax rates in response to other countries' rate reductions. The pioneering models of tax competition developed in the 1980s, which applied to competition among subnational jurisdictions as well as among countries, implied that tax competition is inefficient in the sense that all countries could be made better off through multilateral coordination that results in higher company tax rates. There is a widespread impression among commentators that the pattern of declining corporate tax rates in recent decades (shown in Figure 1) reflects a process of tax competition. The recent dramatic reduction in the US corporate tax rate may be viewed as confirming this notion (though the stability of corporate tax revenues belies it).

Establishing the role of tax competition empirically has been challenging as tax competition is not always easy to distinguish from the diffusion of policy ideas or from independent but similar policy responses to common global developments. Devereux, Lockwood and Redoano (2008), however, show that corporate tax rate reductions among OECD countries can be explained by a model in which countries compete over two dimensions – for real investment, competing over the tax burden on marginal new investment (which takes account of investment allowances and depreciation as well as the statutory tax rate), and for reported profit (by competing over the statutory tax rate).

One particularly prominent component of international tax competition is the spread of “patent box” (or intellectual property (IP) box) regimes. These involve favourable treatment of income derived from patents or other IP. Policymakers have become increasingly interested in attracting income from patents and other forms of IP to their jurisdictions, recognizing that this type of income is especially mobile across borders. The existing evidence suggests that multinationals are highly responsive to tax differences in deciding which of their affiliates holds IP (e.g. Alstadsæter et al., 2018). Countries can thus attract substantial IP holdings by applying lower tax rates, and indeed a number of European countries and China have adopted patent box regimes. The US tax changes in 2017 also included a provision that resembles an IP box, although favourable tax treatment does not depend directly on the holding of IP, but rather on generating extra-normal returns relative to tangible assets (e.g. Dharmapala, 2018a); moreover, unlike IP box regimes this provision applies only to export income, and thus faces an uncertain future under World Trade Organisation (WTO) rules.

A particularly extreme form of tax competition appears to be manifest in the existence of tax haven jurisdictions that impose zero or very low corporate tax rates (e.g. Dharmapala, 2008; Dharmapala and Hines, 2009). The existence of tax havens and preferential regimes, however, may mitigate tax competition among nonhaven countries (e.g. Keen, 2001; Hines, 2007). The existence of havens allows nonhaven countries to permit highly mobile firms to shift profits outwards, while maintaining a relatively high tax rate for immobile firms. In the absence of havens, on the other hand, countries would compete more aggressively over tax rates, unnecessarily benefiting immobile firms as well as mobile ones.

While this last point is an important caveat, standard models tend to suggest that tax competition is inefficient and imply that multilateral cooperation can make all countries better off. The global corporate tax environment is shaped by an extensive network of bilateral tax treaties between countries. While there has historically been only limited multilateral cooperation in tax

policy, recent developments such as the OECD and G20 Base Erosion and Profit Shifting (BEPS) initiative have changed this picture, spurred by growing public concern about MNCs' tax avoidance. This initiative led to a major report issued in February 2013 (OECD 2013a) and to an action plan produced in July 2013 (OECD 2013b). The latter consists of fifteen specific action items that are intended to facilitate multilateral cooperation among governments with regard to the taxation of multinationals, with the objective of seeking to "better align rights to tax with economic activity" (OECD 2013b, p. 11). Subsequently, the OECD has released a set of recommendations to address these action items in more concrete terms, and has developed an Inclusive Framework on BEPS that brings together over 100 jurisdictions to cooperate on this implementation process.¹⁰

While the details of multilateral cooperation are highly complex, it is possible to understand the potential benefits from multilateral cooperation in a simple and highly stylized example (that nonetheless captures many relevant features of the corporate tax in its global setting).¹¹ Assume there are two countries - A and B – that are residence countries of MNCs and are also locations of MNC operations. Each imposes a 20% corporate tax on a territorial basis. There is also a zero-tax haven H. There are two MNCs with (fixed) corporate residence: Firm A (resident in country A) and Firm B (resident in country B). Firm A generates £50 of (pretax) profits in each of countries A and B, while Firm B generates £50 of (pretax) profits in each of countries A and B. Income can be shifted to H from other jurisdictions, at a cost of £2 (incurred for each affiliate that shifts income out).

A standard characterisation of national welfare for countries A and B is that it is the sum of the after-tax profits of its resident MNC and its (total) tax revenue. As depicted in Table 1a, these countries can impose controlled foreign corporation (CFC) rules on their resident MNCs, involving residence country taxation of passive foreign income reported in H. In the absence of CFC rules, Firm A generates £100 of pretax profit and Firm B generates £100 of pretax profit. Each affiliate shifts all income out to H. As shown in Table 1b, each firm has after-tax profit of £96 (£100 minus the £2 cost of profit-shifting at each affiliate), while revenue is zero for each country.

Neither country has an incentive to unilaterally introduce a CFC rule. For instance, if country A does so, Firm A will no longer shift income to H; it generates £100 of pretax profit, incurs zero tax planning costs, and pays tax of £10 to A and £10 to B. This tax payment to country B reduces country A's national welfare, without any offsetting increase in the revenue it derives from the local affiliate of firm B; as shown in Table 1b, country A is clearly worse off by unilaterally introducing a CFC rule. Suppose instead that countries A and B simultaneously impose CFC rules. Then, each MNC will earn £100 of pretax profit, incur zero tax planning costs, and pay £10 tax to each country. As shown in Table 1b, both countries are better off if they can each commit to introducing a CFC rule through a multilateral mechanism – while giving up revenue to the other country, it can also collect more tax from the local affiliate of the other country's MNC. Moreover, global welfare is higher because the costs of tax planning are not incurred.

2.4) Tax Reforms in a Global Setting

¹⁰ See: <http://www.oecd.org/tax/beps/beps-about.htm>

¹¹ This is a simplified version of the example developed in Dharmapala (2014b).

Many countries (such as France and Germany) have long had territorial (or participation exemption) systems of international taxation. Others, including the UK, Japan and the US, traditionally sought to tax dividends paid by foreign affiliates to their resident MNC parents (“worldwide” taxation). A particular focus of recent tax reform efforts in the latter group of countries (the UK and Japan in 2009, and the United States in 2017) has been on replacing worldwide systems of taxation (that tax the foreign income of resident multinationals) with territorial or participation exemption systems (that exempt this foreign income in most circumstances). Arguably, reforms of this nature have arisen in response to pressures related to the changing global landscape of business activity.

Worldwide taxation creates inefficiencies related to the burden of residence country taxation on MNCs. One type of inefficiency arises from the repatriation tax – i.e. the tax on dividends paid by foreign affiliates to their parent entity, which under worldwide taxation is typically imposed at the time this dividend is paid. This tax creates an incentive for MNCs to defer the payment of dividends from foreign affiliates, in order to delay the imposition of the repatriation and therefore reduce its burden in present value terms. This incentive to delay payment of dividends to the parent gives rise to what has become known as the “lockout” effect (because retained cash held abroad is said to be “locked out” of the parent). The delay in repatriating foreign cash delays payout to the ultimate shareholders of the MNC. This in itself is unlikely to cause much of an efficiency loss, as shareholders tend to have access to credit markets and so their consumption patterns will not be much affected by delays in repatriation. It is also unlikely that most parent firms are sufficiently financially constrained as to forego profitable investment opportunities by delaying repatriation (e.g. Dharmapala, Foley and Forbes, 2011). However, there is a possibility of negative-value investments by foreign affiliates due to the tax costs of repatriating cash to the parent (e.g. Hanlon, Lester and Verdi, 2015).

The repatriation tax represents only one component of the tax burdens associated with corporate residence created by worldwide taxation. A worldwide tax based on corporate residence affects global patterns of ownership of assets by MNCs resident in different countries. Contemporary theories of firms’ multinationality emphasise the importance of the advantages of the common ownership of assets across locations. The widely used OLI (ownership, location and internalization) framework stresses that the identity of the firms that own particular assets affects the productivity of these assets. This framework suggests the importance of tax regimes that do not distort the pattern of ownership of assets across locations (e.g. Desai and Hines, 2003). The efficiency cost of worldwide tax regimes is that they lead to ownership distortions (for instance, an asset in country X being owned by an MNC based in (low-residence-tax) country Y, even when it would be more productive if owned by an MNC based in (high residence-tax) country Z).

A substantial body of evidence shows that residence-based taxation of foreign income has significant effects on the patterns and value of cross-border mergers and acquisitions (M&A), thus creating distortions to patterns of ownership (in particular, to which affiliates are owned by which parents).¹² Residence-based taxation can also affect patterns of global portfolio investment. Desai

¹² For example, Huizinga and Voget (2009) estimate that eliminating the US residence-based tax would have increased the prevalence of post-merger entities with US domiciles from 53% to 58% for cross-border M&A transactions over

and Dharmapala (2009a) - by combining data on US outbound FPI and US outbound FDI in 50 countries over 1994-2005 - find evidence suggesting that US MNCs were disadvantaged by worldwide taxation as vehicles for investment by US portfolio investors.¹³ As would be expected from these findings, the evidence from the 2009 territorial reforms in the UK and Japan tend to suggest considerable benefits from these reforms.¹⁴

2.5) The Incidence of the Corporate Tax

A central question in the study of the corporate tax is its economic incidence - the extent to which its burden is borne by workers, consumers or shareholders - as opposed to its statutory incidence. Economic theory implies that the corporate tax reduces the supply of capital by reducing its (after-tax) return. This reduction in the amount of capital used in production lowers the productivity - and hence the wages - of workers. The theoretical analysis of corporate tax incidence began with Harberger's (1962) model of a closed economy with capital held in both corporate form and by noncorporate entities. In his framework, the burden of the corporate tax is borne by owners of both types of capital (as capital can readily flow from corporate to noncorporate sectors). Later research has expanded the analysis to consider open economies, where capital is internationally mobile. Typically, a substantial portion of the burden falls on labour in these models, as capital flows abroad in response to the tax.

Isolating the incidence of a corporation tax faces numerous empirical difficulties so there are widely varying estimates of the share of the burden that falls on labour. A particularly significant recent contribution is Fuest, Peichl and Siegloch (2018), which finds that about half of the burden of the German local business tax falls on workers. However, the extent to which it is possible to extrapolate from local business taxes to a national-level corporate tax is unclear. While the precise economic incidence of the corporation tax remains contested, the notion that "corporations" pay it lacks coherence, and the idea that shareholders bear the entire burden seems tenuous.

2.6) The Uneasy Case for the Corporation Tax

This brief survey of the evidence on the consequences of the corporate tax suggests the following conclusions. First, the high responsiveness of multinational firms implies that the efficiency consequences of the corporate tax can be quite large. Second, distributional considerations (which depend to a substantial degree on the incidence of the tax) do not yield

1985-2004. Voget (2011) finds that a 10 percentage point higher repatriation tax increases MNCs' propensity to relocate their headquarters by a third.

¹³ The 2017 tax changes in the US abolished the repatriation tax; however, a new tax on foreign income was imposed on a residence basis (independently of whether this income was repatriated). Overall, this new tax and other features of the legislation may well have the effect of increasing the tax burden on US residence for many US MNCs. Ironically, this may exacerbate, rather than mitigate, the global ownership distortions attributable to worldwide taxation that have prompted the movement towards reform of worldwide taxation (Dharmapala, 2018a).

¹⁴ Egger et al. (2015) find a substantial increase in repatriations by UK-owned foreign affiliates, using affiliate-level data; their estimated effect amounts to over 25% of the mean level of repatriations by UK-owned affiliates in their sample. Hasegawa and Kiyota (2017) find that repatriations from Japanese-owned foreign affiliates with large amounts of retained earnings increased after Japan's 2009 reform. Feld et al. (2013) find that the number of M&A transactions with a Japanese acquirer increased by about 32% following the 2009 Japanese reform. Liu (2018) finds that the 2009 UK territorial reform increased UK MNCs' investment in lower-tax foreign countries, where the repatriation tax was previously most burdensome. However, this increase was not accompanied by a detectable decrease in activity in higher-tax foreign countries or in the UK itself.

simple answers. It is likely that the burden is shared across the economy, and may be regressive if the burden on workers is sufficiently large. Taken together, these factors suggest, at best, an uneasy case for the corporation tax. With this in mind, we turn to a reconsideration of the theoretical foundations of the corporate tax.

3. Revisiting the Foundations of the Corporate Tax

A number of different theories have been proposed for why company taxation at the business entity level exists (or why it should not exist). Any such theory must necessarily reckon with the extensive efficiency costs of corporate taxation detailed above. We review and critically evaluate these theories, although our aim is to illuminate rather than to fully resolve the many difficult conceptual issues raised by the corporate tax. We propose an agency cost framework that encompasses many of these theories, and provides a way to understand the different assumptions and claims of supporters and critics of the corporate tax.¹⁵

3.1) An economic approach to the corporate tax

The economic approach to the corporate tax marries together two somewhat distinct strands - theoretical results on the optimality of capital taxation in highly abstract settings, and more practical considerations of tax system design that take account of the unique organisational attributes of the corporate tax.

3.1.1. Welfare considerations in an optimal tax framework

As traditionally formulated, the optimal tax approach implies that capital income should not be taxed. The underlying idea is that future consumption (i.e. savings) is just another commodity, and all commodity taxes are dominated by nonlinear income taxes. Under the assumption of preferences that are weakly separable between labour and consumption, all commodity taxes create distortions to both labour supply and the timing of consumption. In contrast, taxes on labour income distort only the former margin (Atkinson and Stiglitz, 1976).¹⁶ In the infinite horizon setting and with a wide variety of preferences, optimal capital tax rates approximate zero because of the dynamics of capital accumulation and the degree to which efficiency costs rise in a nonlinear manner as returns compound (e.g. Chamley, 1986; Judd, 1985).

Plausible arguments for the optimality of taxing capital emerge from disaggregating the returns to capital into normal returns and supernormal returns that may emerge from risk-taking or the presence of rents. The advisability of taxing returns to risk-taking depend on the degree to which capital markets imperfections limit the redistribution of revenues in a manner that leaves risk-taking unaffected. Where pure rents can be identified, the economic approach has traditionally advocated a high (even confiscatory) tax rate. The advisability of taxing rents, however, must consider the source of the rents and the mobility of the sources of those rents. For instance, as previously discussed, the locational decisions of MNCs may depend on the relative taxation of

¹⁵ One potentially important political factor is that the ambiguity over the incidence of the tax is precisely what makes the tax an attractive policy instrument. As noted above, there is no widespread scholarly consensus on the issue of incidence but the corporate tax may be politically attractive even if there were such a consensus, as the mechanisms that determine incidence may be fairly opaque to the general public. The absence of clear losers from the tax may inhibit the formation of political coalitions or interest groups who oppose it.

¹⁶ The argument that the optimal tax on capital income is zero is closely related to the argument for the superiority of consumption taxation over income taxation (e.g. Kaplow, 2006; Bankman and Weisbach, 2006).

rents in different jurisdictions. Finally, in many entrepreneurial settings, labour income can be disguised as capital income, requiring a positive capital tax rate as a way of taxing labour income.

More recent contributions within “new dynamic public finance” have identified certain conditions under which the taxation of capital income may be optimal (e.g. Golosov et al., 2006). Many of these results are derived from the intuition that the classic optimal income tax problem of high ability workers masquerading as low ability workers is exacerbated when the former can draw on savings (i.e. capital income) - taxing capital income limits this possibility.¹⁷

The corporate income tax as it actually exists differs in many respects from the abstract notion of a capital income tax used in optimal tax theory. The particularities of the design of the corporate income tax can create a second layer of taxation on capital, or create effects that are consistent with the recommendations of the literature on capital taxation. For instance, a cash flow tax with immediate expensing of investments and no debt-equity distinction holds out the promise of exempting the normal return to capital (as some influential formulations of optimal tax theory would recommend). However, such a structure bears less resemblance to a classic corporate income tax than to a consumption tax.¹⁸ More traditional corporate income taxes that provide accelerated depreciation schedules and interest deductibility can create negative tax rates. At a first pass, this discussion of welfare considerations illustrates the tenuous case for capital taxation and amplifies the ambivalence suggested in the empirical section on the advisability of corporate income taxes.

3.1.2. Overall tax system design

These optimality considerations need to be combined with pragmatic considerations on tax system design. Specifically, it is useful to imagine the problems created in a world without a corporate tax. In the absence of a corporate tax, corporations can function as a tax shelter from the perspective of the personal income tax system. In particular, individuals can establish corporations that would serve as recipients of their labour and capital income. Such corporations would disburse payouts as needed for owners’ consumption purposes, but would otherwise defer taxation by accumulating cash within the corporate form. Ultimately, the merits of this technique rest on the relative rates of labour, corporate and capital taxation and the ability to retrieve cash from corporate form without additional taxes. The corporate tax is thus arguably required in order to preserve the integrity of the personal income tax, preventing individuals from achieving consumption tax treatment of their income.

There are limitations to this argument. First, it is premised on the desirability of the personal income tax (and so is unlikely to convince proponents of consumption-type taxation). The problem of individuals forming corporations for tax deferral may be addressed by anti-avoidance rules or through special measures applying to closely-held corporations, such as higher tax rates or pass-through treatment (e.g. Dharmapala, 2017). However, note that *existing* publicly-

¹⁷ Departures from rationality inspired by the rise of behavioural public finance create innumerable possibilities depending on the nature of the irrationality - from subsidizing savings to taxing returns to capital.

¹⁸ Under fairly general conditions, the primary difference between an ideal income-type tax and an ideal consumption-type tax is that the former (but not the latter) taxes the normal return to capital (e.g. Bankman and Griffith, 1991). A cash flow tax (that taxes cash receipts with an immediate deduction for cash outflows) would exempt the normal return to capital and so is a consumption-type tax rather than an income tax.

traded corporations (especially those that tend to retain cash) would also become tax shelters in a regime without corporate taxation.

One piece of evidence can be derived from cross-country data on tax systems and structures assembled by the IMF.¹⁹ In this dataset, there are 144 countries (out of a total of 169) that report revenue from personal income taxation in recent years (and that also have nonmissing data on corporate tax revenue).²⁰ Of these, *all* also have a corporate income tax.²¹ There are 20 countries that do not report revenue from personal income taxation over the same period (and that also have nonmissing data on corporate tax revenue). Of these, 10 have a corporate income tax and 10 do not. This pattern is shown in Figure 2. Of course, there are a number of alternative interpretations of this correlation. However, it is at least consistent with the idea that personal income tax systems are difficult to maintain in the absence of a corporate tax; systems of personal income taxation tend not to exist without being accompanied by the corporate income tax.

It is also possible to argue that the corporate tax is a type of benefit tax. In particular, those who transact through the corporate form receive benefits (such as limited liability to tort creditors) that cannot be replicated contractually. In principle, a Pigovian tax may induce corporate actors to internalise spillovers that the corporation would otherwise externalise due to limited liability. However, the existing corporate tax bears little resemblance to such a Pigovian tax, for instance not being calibrated to potential harms to tort creditors.

Another tax system design argument for taxing corporations is simply based on convenience. Corporations represent aggregations of resources, and governments have generally found it easier to tax corporate entities than to develop the capacity to impose personal income taxes on individuals through self-assessment. This is especially true of developing countries, which tend to derive a substantially larger fraction of revenue from the corporate tax than do more affluent countries. This underlines that the consequences of moving away from corporate taxation may be quite different for developed and developing countries.

3.2) An Agency Perspective on the Corporate Tax

A potentially rewarding path for consideration of a broad array of concerns on corporate behavior that can be addressed through an income tax is provided by widening a preexisting lens on the corporate tax - the agency perspective. Within the agency perspective, the agency problem between shareholders and managers is paramount and the corporate tax, understood as a claim on pre-tax cash flows, can be conceptualised as an ownership claim alongside those of other shareholders.²² Desai and Dharmapala (2008) argue that the corporate tax makes the government

¹⁹ This is the World Revenue Longitudinal Dataset (WoRLD), available at: <http://data.imf.org/revenues>

²⁰ Specifically, we treat any country that reports strictly positive personal income tax revenue for at least one year during 2004-2013 as having a personal income tax. However, the point made in the text is robust to various alternative definitions.

²¹ Specifically, all of these countries report strictly positive corporate income tax revenue for at least one year during 2004-2013.

²² An analogy with an argument developed by Armour and Gordon (2014) in the context of systemically important financial institutions may be instructive. They argue that the maximization of shareholder value by such a firm involves a level of risk-taking that potentially creates negative spillovers for other firms (in the event of a financial crisis), thereby lowering the value of a diversified shareholder's portfolio. Shareholders would thus prefer that systemically important financial institutions not take on the firm-value-maximizing level of risk. By analogy, if a particular firm engages in the firm-value-maximizing level of tax avoidance, this will lead to higher taxes on other firms also owned by the diversified shareholder, or to higher personal taxation of the shareholder, or to a lower level

(and by extension society at large) one of the principals of corporations because of its interest in receiving revenue (see also Desai, Dyck and Zingales, 2007). Tax avoidance by corporations thus imposes a fiscal externality on other taxpayers, and the benefits of corporate tax avoidance to diversified shareholders who are subject to domestic personal taxation may be lower than it might appear. With this foundation, this approach yields novel insights on corporate tax avoidance and, as we describe below, broader lesson on the design of the corporate income tax. In particular, this approach suggests designing a corporate income tax that is attuned to the overlapping interests of the state and shareholders.

3.2.1 An agency based view of tax avoidance

A standard agency perspective would view tax avoidance as one of many activities that generate after-tax value for shareholders. This would imply that better incentive-alignment (e.g. through more stock-based compensation) would always lead to higher levels of tax avoidance. Desai and Dharmapala (2006a, 2008, 2009b) develop a more nuanced agency perspective on tax avoidance that highlights potential complementarities between tax avoidance and managerial opportunism. For instance, the complexity of transactions undertaken to avoid taxes may hinder shareholder monitoring and thus reduce the cost of insider opportunism. Greater incentive-alignment between shareholders and managers then has a potentially ambiguous effect on tax avoidance activity. While higher-powered incentives create a direct motivation to increase after-tax firm value by (among other things) engaging in more tax avoidance, they may also dissuade managers from engaging in acts of opportunism that are complementary with tax avoidance.

Desai and Dharmapala (2006a) construct a measure of firms' tax avoidance activity for a large panel of US firms, using "book-tax gaps" – i.e. differences between financial income and taxable income (as reported in financial accounting statements) - adjusted to take account of the possible over-reporting of financial income. Desai and Dharmapala (2006a) find that higher-powered managerial compensation is associated with lower tax avoidance. This negative relationship arises primarily among firms with weaker governance,²³ consistent with their theoretical framework. Desai and Dharmapala (2009b) analyse the effects of their measure of tax avoidance on firm value, finding that tax avoidance leads to larger increases in firm value at better-governed firms.

More recent quasi-experimental evidence has tended to find support for this perspective. For instance, Bird and Karolyi (2017) analyse the impact on tax avoidance activity of the (essentially random) inclusion of firms in the Russell index of the US stock market. Inclusion in the index typically spurs an increase in holdings by institutional investors, and hence arguably leads to greater shareholder monitoring. Using a regression discontinuity design, Bird and Karolyi (2017) find significant increases in tax avoidance after inclusion in the index. These increases are

of public services for the shareholder. The extent to which this holds depends, however, on a variety of factors, such as the relative numbers of shareholders and non-shareholders among taxpayers, the relative tax burdens among shareholders and non-shareholders, and the relative efficiency costs of corporate and personal taxation.

²³ This analysis uses standard measures of corporate governance, including an index of anti-takeover provisions applicable to the firm, and the level of institutional ownership.

smaller for firms with stronger governance and greater incentive-alignment, suggesting that weak governance acts as a constraint on corporate tax avoidance.²⁴

3.2.2. Widening the Agency Perspective

Widening the agency perspective on the corporate tax requires one to understand the corporate tax as an instrument of the state to achieve a variety of goals that may or may not be consistent with shareholder interests. In the tax avoidance setting above, the revenue needs of the government overlap with shareholder interests in returns given the symmetry of their claims. Widening the agency perspective requires focusing on how problematic managerial behaviour creates coincident interests for the state and shareholders. Such a coincidence of interests may arise in a variety of contexts beyond that of tax avoidance.

For example, in a setting without agency costs, the bribery of public officials (however socially undesirable for other reasons) would presumptively advance shareholder interests and firm value. In the presence of agency costs, however, bribery may arguably advance insiders' interests at the expense of shareholders, as it generally entails secrecy that precludes shareholder monitoring of managers' choices about paying bribes. Indeed, the agency perspective on this issue closely tracks the OECD Anti-Bribery Convention of 1997, which recommends that member states explicitly disallow tax deductions for bribes paid to foreign officials.²⁵ Disallowing deductions in effect imposes a (higher) corporate tax on these transactions, consistent with the idea of using the corporate tax as a regulatory instrument in contexts where agency costs are likely to be particularly acute.

Somewhat similar considerations are likely to exist with regard to corporations' lobbying activity. Even if these activities are publicly disclosed, it may be difficult for shareholders to monitor managers' decisions about whom to lobby and how to do so. It is thus noteworthy that some jurisdictions disallow deductions for certain types of lobbying expenditures.²⁶ The agency perspective can thus be used to explain features of the existing corporate tax that may otherwise seem puzzling (bribes and lobbying expenditures being, after all, business expenses that may appear no different from other such expenses from a tax law perspective). It can also explain current practices in situations where the tax is (in effect) not imposed. For example, the deductibility of interest payments (but not of returns to shareholders) has long been a feature of the corporate tax. Interest payments are fixed and thus managerial discretion over cash flows used for this purpose is limited (in contrast to managerial discretion over residual cash flows that may or may not be used for shareholder payout). Moreover, creditors generally have the incentive and ability to monitor these payments. Thus, the agency perspective would suggest exempting cash flows used for interest payments from the corporate tax (as is accomplished by the interest deduction).

The agency perspective also implies that the application of the corporate tax should be attuned to circumstances where agency problems are more or less severe. For example, entity-level taxes should typically be less relevant for closely-held corporations than for widely-held and

²⁴ Khan, Srinivasan and Tan (2017) also use the Russell index as a source of exogenous variation in institutional ownership, and also find increases in tax avoidance following inclusion in the index.

²⁵ See <http://www.oecd.org/corruption/oecdantibriberyconvention.htm>. Some jurisdictions also impose criminal penalties for transnational bribery.

²⁶ For instance, the US - see IRC Section 162(e).

publicly-traded corporations. The existing corporate tax does not draw such distinctions (but the parallel system of taxing business income earned through pass-through entities that have limitations on the numbers of holders arguably does so). In such circumstances, the agency perspective can potentially be used to construct an agenda for reforms that are based on a shareholder-centric perspective but nonetheless take serious account of wider social concerns.

Finally, a very generous treatment toward the production of intangible assets - R&D tax credits, expensing and patent boxes - can also be understood as a reflection of the shared agenda of society and shareholders. If spillovers are operative with intangible assets, then tax subsidization can be justified given their potential underprovision - at the same time, the excess returns created by intangible assets suggest that shareholders may like subsidies targeted in that direction.

In understanding the agency perspective and its limits, it is helpful to situate it within a wider intellectual context. A century ago, the dominant perspective on the corporation among legal scholars was that it was a “real entity” that had not only a legal personality but also a real existence (from which a corporate tax could be readily justified). Subsequently, company law scholars moved increasingly towards a view that emphasized the corporation as a “nexus of contracts” among its various stakeholders - a legal fiction that facilitated the activities of natural persons rather than a real entity. Generally speaking, this view is consistent with the “look-through” perspective of the economic approach (which does not attribute real existence to the corporate entity), and typically implies that the corporate tax should be seen merely as a mechanism to tax shareholders (and to burden other relevant stakeholders).

More recently, real entity theories have experienced something of a revival among legal scholars (e.g. Teubner, 1988).²⁷ These developments in company law scholarship have significant implications for the stance of legal scholars with respect to the company tax. For instance, Avi Yonah (2004) proposes a revival of aspects of the real entity view, focusing in particular on the corporation as a locus of power. He argues that corporate managers have significant amounts of discretion over how to use the significant accumulations of resources within the corporate form. This gives them, via the corporate form, three distinct types of power – political power, economic power, and power with respect to product markets. Avi Yonah (2004) makes a normative argument for restricting corporate power based on both democracy and accountability concerns and on a notion of equality. In particular, it is argued that there exists a regulatory rationale for the corporate

²⁷ Although it is rather distinct from the “real entity” tradition, a growing strand of legal scholarship has emphasized the important role of entities and of organisational law to a greater extent than is typical of the “nexus-of-contracts” view. Traditionally, a primary advantage of the corporate form was thought to be the protection of shareholders’ personal assets from those (such as tort creditors) with claims against the corporation. Hansmann and Kraakman (2000) argue that a more important function of company law is to protect the assets of the corporation from the shareholders. For instance, the latter may wish to withdraw their investment and liquidate the corporation’s assets in order to satisfy their personal creditors. Organisational law prevents this, and the resulting “asset partitioning” enables corporations to engage in long-term projects that lock in shareholders’ initial investments. As this view highlights the importance of the corporate entity, it may be thought to support the imposition of an entity-level tax, for instance because asset partitioning limits shareholders’ liquidity or because personal taxation cannot adequately tax the deferred returns of shareholders. However, shareholders’ stock is often highly liquid even though they cannot reach the assets of the corporation. When stock is illiquid, this is a more serious concern, but personal taxes can potentially be imposed at the time of sale, while being adjusted to eliminate shareholders’ deferral advantage (as discussed in Section 4 below).

tax as a means of limiting the accumulation of corporate resources under the effective control of corporate managers.

A standard principal-agent perspective on the corporation can make sense of the claim that managers have significant amounts of discretion over corporate resources and that this leads to managers exercising discretionary authority, or “power”. What the more nuanced agency perspective described above adds is the idea that there may be some degree of alignment between the interests of “society” in curbing managerial power and the interests of shareholders in limiting agency costs (especially in a relatively weak corporate governance environment). This is arguably important because it creates scope for corporate taxation to play a role in limiting managerial discretion even within the context of a primarily shareholder-centric vision of the purposes of the corporation. At the same time, the agency perspective also provides a framework for trading off the benefits from the corporate tax against its costs (such as distortions to investment); this is an advantage in relation to real entity theories of corporate power, which provide little guidance on how much inefficiency should be tolerated in reducing the resources available to managers.

There are limits to the nuanced agency perspective - in particular, strong corporate governance environments limit managerial discretion and tightly circumscribe the issues highlighted by an agency perspective. Measures designed to limit the accumulation of corporate resources will then inevitably harm shareholders as well as managers. Nonetheless, there are important advantages to the agency perspective. Its grounding in a shareholder-centred view (while acknowledging the role of social purposes), avoids certain difficulties associated with claiming a broad social purpose for corporations (as is characteristic of “stakeholder” views of the corporation and often of real entity theories as well). Such stakeholder theories posit conflicts between “society” and the corporation (including both its insiders and its outside shareholders), and envisage a variety of social purposes that do not advance the interests of shareholders *qua* shareholders. This view may, for instance, permit the use of a corporate tax to limit corporate resources or further what are seen as socially desirable ends.

While the nuanced agency view goes beyond the standard economic perspective on corporations, it generally stops short of endorsing an extremely broad view of the corporation and its purposes. For example, one powerful argument made by proponents of a shareholder-centric view of the corporation is a practical one – shareholders are the residual claimants of corporate value, and are the primary stakeholders empowered by company law to monitor the activities of insiders. A regime in which insiders are permitted to appeal to the interests of non-shareholder stakeholders is one in which they effectively have no principals: any course of action of action they wish to undertake can be rationalised as furthering the interests of one or other stakeholder group. In effect, managers and insiders are empowered in relation to all other stakeholders (not only to shareholders).²⁸ This possibility must be weighed against any potential benefits from a broader view of corporate purpose.²⁹

²⁸ See, for example, Dewatripoint et al. (1999).

²⁹ It is also unclear whether the “society” to which a broader social purpose might be owed is the nation-state or some wider notion of a global community. Even if it is the former, the nation-state in which a firm is headquartered, other nation-states where the firm engages in economic activity, and still other nation-states where the firm’s shareholders or customers reside may all lay claim to the fruits of this broader social purpose. Differences in the definition of “society” may have enormously important practical implications. For example, one argument that is sometimes made

3.3) An Agency Perspective on Tax and Corporate Social Responsibility

Growing calls for responsible behaviour by corporations are most clearly manifest in the corporate social responsibility (CSR) movement. This movement prompts at least three questions concerning the interaction with corporate tax policy. First, how does the rise of CSR change the role of corporate tax policy? Second, should corporate tax policy accommodate CSR expenses as tax deductible? Finally, it raises more general questions the relationship between taxation and CSR (e.g. Desai and Dharmapala, 2006b; Freedman, 2006); for instance, should governments allow firms to substitute CSR payments for tax payments or mandate that they do so?

An agency perspective on CSR and tax policy emphasises the underlying motivations of managers in pursuing CSR and the degree to which they may conflict with the interests of society and/or shareholders. In particular, CSR directed toward community investments in public goods could benefit both broader society and shareholders. Agency concerns would be most clearly manifest when contributions enable managerial misbehaviour or when contributions are used to undermine the integrity of the political process. At its heart, the agency perspective emphasises how devices such as the sentiment associated with CSR (much like the machinations associated with tax avoidance) can shield managerial opportunism.³⁰

These agency considerations appear to be operative in CSR, with evidence suggesting that CSR activity and corporate philanthropy are associated with earnings management and with political influence.³¹ Moreover, List and Momeni (2017) show that CSR can engender misbehaviour by providing “moral licensing” (as previously proposed by Benabou and Tirole (2007) and suggested by the evidence in Merritt et al. (2010)): employees of corporations that drape themselves in the mantle of corporate social responsibility become more willing to cheat on other obligations or other constituencies. This last possibility of moral licensing is particularly noteworthy in the setting of technology companies that deem themselves to be socially benevolent yet seem to have little compunction pursuing relatively aggressive tax avoidance strategies.³²

These problematic strains in the CSR movement highlighted by an agency perspective draw attention to the importance of tax policy in motivating these activities. By allowing deductions for CSR expenditures, the state is arguably a co-investor in these activities, allowing a private actor to direct public resources. This dynamic is even more pronounced when CSR payments are mandated or used as substitutes for tax payments.³³

for imposing corporate-level (rather than shareholder-level) taxation is that the former burdens foreign shareholders of domestic firms (at least, if the country in question has some degree of market power in global capital markets). Regardless of the strength of this argument, it is clear that it depends crucially on a national rather than global notion of “society”.

³⁰ A related agency perspective emphasizes problematic behaviour by government officials and envisions CSR as a method for obviating problematic behaviour by public actors.

³¹ Petrovits (2006) demonstrates that contributions to corporate-sponsored foundations are used to manage earnings and that “firms use their charitable foundations as off-balance sheet reserves.” Richter (2016) shows that CSR and corporate lobbying are complementary activities. Bertrand et al. (2018) show that corporate foundation giving is used in a manner that seems designed to influence government decision-makers.

³² Firms with CSR programs may also pursue more aggressive tax strategies also because of the “halo” effect that CSR provides - Hong and Liskovich (2015) show that foreign bribery cases are pursued less aggressively against firms that have greater CSR efforts.

³³ A policy that has attracted significant attention is a provision (Section 135) of India’s 2013 Companies Act that provides (on a comply-or-explain basis) that firms satisfying certain size thresholds must either spend 2% of their

These interactions parallel those operative in the deductibility of charitable contributions for individuals but with the added complication of the potentially conflicting agendas of managers and shareholders. CSR can sometimes be rationalized as delegated giving by shareholders; an agency perspective suggests how problematic that is given the evidence on how managers use charitable contributions in ways that seem to embody their personal preferences.³⁴ Providing deductibility at the corporate level for charitable contributions effectively sanctions that delegation and thus incurs those agency costs.

3.4) Public Perceptions of the Corporate Tax

The complexity of the corporate tax implies that public perceptions – including perceptions of legitimacy and accountability – are likely to be based on “optics” rather than the complicated reality of the tax. To what extent should policymakers accommodate a public concern driven by optics that is in contrast to economic considerations?

This question has become increasingly urgent as public expressions of concern about corporate tax avoidance have become more frequent. Sheffrin (2013) argues that public perceptions with regard to taxation can be unified by a notion of “folk justice” that captures everyday notions of fairness and reciprocity, while differing in important ways from ideas of fairness and equity developed within economics, law, philosophy and other academic disciplines. Particularly relevant here is the concept of “entity bias” (Sheffrin, 2013), which arguably involves anthropomorphizing corporations, extending folk ideas of fairness among natural persons to fairness among legal entities (or across some combination of natural persons and legal entities). Thus, it appears important to much of the public that firms appear to pay significant amounts of tax.

What is unclear is how deeply the public understands the ultimate economic incidence of taxes and what shapes those perceptions. There are at least two interpretations of this public preference for corporate taxation. One is that, even if folk notions of tax justice are internally coherent in other respects, extending them to legal entities simply represents an error by the public, that is, a misapplication of folk justice. This is because moral theories (both folk and academic) focus on relations among natural persons (i.e. human beings), rather than on legal fictions (even though the latter may have legal personhood). If we adopt this “misapplication” view, then one possibility is that policymakers should seek to “debias” or challenge these public perceptions.

Alternatively, they may seek to accommodate public concern with policies such as the DPT that may be politically powerful but not overly economically disruptive. It is an open question whether the latter type of approach would satisfy the public or legitimise the concerns (leading to demands for more to be done). For example, as is well-known, many taxes – including the personal income tax on workers and the VAT – are *remitted* by firms. Might the public be satisfied with

income on CSR activity or explain their failure to do so (see e.g. Dharmapala and Khanna, 2017). This provision has certain features in common with a corporate tax, although it is different in many respects. One possible way to rationalise why governments may favour such an approach is to assume a setting where the top level of government is relatively benevolent but where agency costs within the government imply that middle-level officials’ targeting of tax revenues may be suspect, either because of insufficient incentives to find high-yielding projects or because of corruption. Then, a mandate imposed on firms may lead to potentially better outcomes, if firms have stronger incentives to target CSR spending effectively (for instance, in order to generate positive publicity). Of course, it is easy to imagine much less optimistic scenarios as well.

³⁴ See Petrovits (2003) for a review of this literature.

mere remittance (as with the VAT), or is the corporate income tax distinctive in the public's mind as an instrument to limit the resources available to corporations? Answers to such questions are elusive, but nonetheless are crucial for the future of corporate taxation.³⁵ In a related vein, policymakers must consider the degree to which they emphasise the beneficial consequences of the overseas activity of domestically-based multinational firms. The evidence suggests beneficial effects on the domestic economy of these activities (e.g. Desai, Foley and Hines, 2009), while popular beliefs are tilted toward the negative consequences of overseas activities by multinational firms.

A second interpretation might be that public concern with the corporate tax may reflect a more sophisticated, albeit rough, assessment of the probable incidence of the tax and of its distributional consequences. A variant of this interpretation may ascribe to the public a strong preference for personal income taxation and a concern that the erosion of the corporate tax would undermine personal income taxation. This interpretation would suggest that policymakers should take public concerns seriously in formulating policy. While there are certainly wide areas of agreement among scholars (for instance, that tax burdens can be borne only by natural persons), the lack of scholarly consensus on many of the more nuanced issues makes it difficult to dismiss the concerns of the public as being misguided. A broader normative question that is also relevant is the extent to which policymaking should cater to public perceptions or instead rely on expert assessments that may be at variance with these perceptions, especially in a world where expertise has increasingly come to be viewed with suspicion by sections of the public.

4) The Future of the Company Tax

One of the important themes that emerges from Sections 2 and 3 is that any defence of the social benefits of corporate taxation must take seriously the efficiency costs described in Section 2, and seek to establish that the benefits outweigh these costs. With this in mind, we turn to the possible future(s) of the corporate tax. The framework we develop for addressing conceptual and policy questions on company taxation envisages three "alternative futures". We assess each of these with respect to various policy objectives that are widely viewed as being important, including efficiency, administrability, corporate responsibility, the perceived legitimacy of tax systems, and equity.

In addition to these three possibilities, another is that the status quo is sustainable. Within this view, the recent U.S. tax reform signals an end to an unprecedented era of corporate tax avoidance by U.S. multinational firms facing dysfunctional tax rules. With a considerably lower U.S. rate and a minimum tax for U.S. multinational firms (and with BEPS actions on tax havens), tax-aggressive behaviour will have lower rewards, and no radically different alternative future is required. This view is predicated on the primacy of U.S. multinationals in tax avoidance dynamics and of the U.S. in setting tax policy. However, the dynamics of post-TCJA behaviour by states and corporations are not yet apparent. Moreover, the U.S. reform is sufficiently unstable and the

³⁵ For example, the destination-based cash flow tax (DBCFT) has attracted considerable attention lately as a potential replacement for the corporate tax (e.g. Auerbach, 2010). The DBCFT is essentially a consumption-type tax, but its optics superficially resemble those of the corporate income tax, potentially a significant advantage if policymaking is driven by perceptions.

international provisions sufficiently baroque that another era of tax competition may soon await. Perhaps, the leading reason to believe in the sustainability of the status quo is the disposition toward inertia in policymaking.

4.1) Multilateral Cooperation to Preserve the Company Tax

One possible future for the corporate tax involves extensive coordination and perhaps the development of multilateral taxing authorities analogous to the WTO and its global trade architecture. The global reach of modern corporations would then be matched by taxing authorities with a similarly global range. This would enable the company tax in its present form to survive by mitigating tax competition among countries and by limiting profit shifting. If this path ends up being followed, the agency perspective described above arguably provides a framework for using the corporate tax as a regulatory instrument in certain circumstances, in order to enhance the welfare of both shareholders and the general public in various respects.

However, an inevitable concomitant of this approach would be to maintain and perhaps exacerbate the efficiency costs associated with company taxation reviewed in Section 2 above. This is because multilateral cooperation is likely to entail higher corporate income tax rates and lower levels of profit shifting than would prevail in its absence. Consequently, corporate taxes will have larger effects on real economic activity and firms' locational choices for real investment than they currently do. For this reason, this path would be most attractive to those who believe that the continued existence of the corporate tax creates benefits that outweigh the economic inefficiencies highlighted in Section 2. These benefits may involve the preservation of the personal income tax with its opportunities for extensive redistribution, and the perceived value to the public of the "optics" of the corporate tax. This path may also especially benefit developing countries, which tend to be more reliant on corporate taxation for revenue.

To the extent that the current corporate tax enjoys a perception of legitimacy among the public, multilateral cooperation to preserve it is also likely to be perceived as legitimate. It may also be viewed as enhancing equity and the idea of firms paying a "fair share" of tax. However, the actual effects on equity depend on the incidence of the corporate tax, especially the extent to which it burdens workers through lower wages resulting from lower levels of investment or through changes in locational choices.

The feasibility of such cooperation may be doubted in an era of growing nationalism and distrust of global institutions. Indeed, some observers suggest that the world is currently heading towards a dystopian future of de-globalization. While we do not claim any special insights with regard to such predictions, we note some possible implications for the future of the corporate tax. In particular, such a development would involve increasing frictions for cross-border mobility and a consequent reduction in tax competition among countries. This would make the company tax easier to sustain in an environment of reduced global competition and interaction, even in the absence of explicit multilateral cooperation. However, de-globalization is likely to lead to a reversal of the dramatic growth in global prosperity experienced over recent decades as result of global economic integration. The economic decline created by de-globalization may unleash political forces that further inhibit global cooperation.

The preservation of the current company tax through greater multilateral cooperation is an ideal strongly promoted by organisations such as the OECD. Ultimately, however, there are

reasons to doubt that a sufficient degree of multilateral cooperation will emerge, given present-day political realities. Thus, our remaining two alternatives both involve the abolition of the corporate tax, although they take diametrically opposed approaches to addressing the consequences of this abolition for the personal income tax.

4.2) Consumption Taxation

Our discussion in Section 3 highlighted the idea that the income taxation of individuals is closely tied, and to some extent reliant on, the existence of a corporate tax. Thus, the future of the company tax is inextricably linked to the future of income taxation more generally. Any attempt to eliminate the company tax must recognise that the personal income tax in its current form would no longer be sustainable. One potential solution is to abolish both the corporate and personal income taxes, in favour of some form of consumption taxation. The latter may be implemented through the familiar value-added tax (VAT) or through various alternative mechanisms, such as a cash flow tax on businesses.³⁶ Note, however, that this scenario is quite different from the Destination-based Cash Flow Tax (DBCFT) that has recently been widely discussed. The DBCFT is a consumption-type tax imposed on business entities, but it does not address the issue of changing the existing system of personal income taxation.

There are substantial efficiency gains that may potentially be realized from moving towards consumption-type taxation. In particular, the normal return to capital would no longer be subject to taxation, and so the timing of consumption would not be distorted (as it is under an income tax). The inefficiencies that are specific to the corporate income tax (reviewed in Section 2 above) would of course be eliminated. Thus, this potential future path ranks highly in terms of efficiency. It would appeal to those who view the inefficiencies in Section 2 as outweighing the possible benefits from retaining the corporate tax, and who are also willing to jettison the income tax altogether. It is also administratively feasible, especially in the form of a full-replacement VAT (i.e. a VAT that completely replaces the corporate and personal income tax systems), as the VAT has been successfully implemented in virtually all countries (both developed and developing) and its structural features are quite well understood. Moreover, a full-replacement VAT would relieve households of the not inconsiderable burdens of income tax compliance and filing.

However, there are significant challenges in replicating the degree of progressivity achieved by income taxation. Progressivity should ideally be assessed with respect to the overall tax-transfer system and not with respect to the revenue-raising mechanism alone. Thus, it is possible that with sufficient progressivity in expenditures, a full-replacement VAT may be quite progressive overall. Nonetheless, the distributional challenges faced by a full-replacement VAT represent an important concern with respect to this potential alternative future path. This factor

³⁶ Tax scholars have proposed a number of variants of the VAT that involve the collection from individuals rather than businesses of the tax on value added by labour; these include the Hall-Rabushka flat tax and Bradford's X-tax. The point of doing so is in order to facilitate greater progressivity, by varying the tax rate on value added by labour based on workers' circumstances. However, in reality, these proposals have never been adopted, and the dominant form of consumption taxation is the destination-based credit-invoice method VAT, which has important administrative advantages over other forms of consumption taxation.

may undermine the perceived legitimacy of this approach. The “optics” of abolishing corporate and personal income taxes are also likely to be unfavourable.³⁷

4.3) Accrual-based Personal Income Taxation

As discussed in Section 3, the absence or erosion of the company tax creates tax planning opportunities for individuals facing a personal income tax. These opportunities primarily rely on the use of corporations as vehicles for the deferral of taxes. Deferral-based planning opportunities exist primarily because of the realisation requirement - that gains are typically taxed upon a realisation event such as a sale, rather than upon accrual - that has long been an integral element of the income tax. If the personal income tax were imposed on an accrual basis – essentially abolishing the realisation requirement – then personal income taxation would continue to be viable even in the absence of a company tax. Thus, a third possible future path is to eliminate the company tax, while transforming the personal income tax to an accrual rather than realisation basis.

As is well known, accrual-based taxation faces substantial practical challenges. Traditionally, these have been classified under the headings of measurement, certainty, and liquidity – i.e. that gains cannot be measured and remain uncertain, and taxpayers will not necessarily have the cash to meet their tax obligations, until a realisation event occurs. While these are important concerns, mechanisms that address them – by deferring taxation until realisation while adjusting tax liability to eliminate the deferral advantage – have long been discussed by scholars. Many decades ago, Vickrey (1939) proposed that taxation be imposed at the time of realisation with interest imposed to account for deferral, a proposal that would require knowledge of the time pattern of returns over the life of the asset. More recently, Auerbach (1991) proposed a “retrospective tax” under which tax would be imposed at the time of realisation on a notional gain computed by assuming that the asset generated the risk-free rate of return over the period since its purchase. This tax would require knowledge of the date of purchase and the sale price, but (unlike the Vickrey tax) would not require knowing the time pattern of returns. Moreover, such approaches have recently become part of detailed policy proposals; for instance, Grubert and Altshuler (2016) propose an interest charge on individual capital gains taxes based on Vickrey (1939).

An alternative future path could potentially build on these proposals in order to eliminate the entity-level company tax, while achieving the degree of progressivity desired by society through an accrual-based personal income tax. In terms of efficiency, this would clearly represent an improvement over the status quo – the distortions attributable to the entity-level corporate income tax (discussed in Section 2) would disappear, as would inefficiencies of personal income taxation due to the realisation doctrine (such as the “lock-in” effect, where taxpayers hold assets for longer periods to delay realisation, and the costs of tax planning to take advantage of deferral opportunities). However, relative to a full-replacement VAT, some inefficiencies would remain, as the normal return to capital would be taxed and so the timing of consumption would be distorted.

The legitimacy of the tax system may be adversely affected if an entity-level company tax is viewed by the public as being an essential component of a legitimate tax regime. However, in

³⁷ Firms remit the VAT, so it is in a sense puzzling that a general public influenced by “entity bias” would view this differently than the corporate income tax. However, the incidence of the VAT may be somewhat less opaque to the public.

reality, any desired level of equity could be achieved through a progressive (accrual-based) personal income tax. As taxation would apply to individuals on a residence basis, there would no longer be an opportunity for countries to burden foreign shareholders through the corporate tax; however, this seems a relatively minor consideration, especially as imposing such a burden depends on having market power in global capital markets.

A major challenge for this possible future path is its administrative complexity.³⁸ Moreover, we do not know the full range of tax planning strategies that taxpayers may engage in under an accrual income tax, as this system has not been implemented. However, it should be remembered that an accrual system would not allow the extensive tax planning opportunities that currently exist under the realisation regime. Administrative challenges are likely to be especially significant for developing countries, which already face difficulties in effectively implementing personal income taxes (even without accrual or retrospective features). On the other hand, it is possible that future technological developments may make it easier for governments to keep track of taxpayers' assets, and so facilitate accrual-based taxation of individuals.

5) Conclusion

Navigating the rising expectations for, and diminished capacity of, the corporate tax represents a major challenge for the next several decades. A central tension is between the public perceptions of the corporate tax and the evidence and conceptualisations developed within academic scholarship. Any simplistic rhetoric of corporations paying their “fair share” is predicated on a faulty economic logic even if it is extremely effective politics. At its worst, such rhetoric risks burdening the very workers whom these exponents purport to defend. The empirical evidence on, and the conceptual arguments for, the corporate tax make it clear that the case for imposing a corporate tax is an uneasy one, though there are important functions it can play.

By placing the taxation of corporations in a wider context that links it to ongoing debates on corporate law and governance and on corporate social responsibility, we highlight an agency cost perspective on the corporate tax. This approach suggests reforms that focus on circumstances in which there may exist a coincidence of interests between shareholders and the general public. The agency cost perspective encompasses many of the themes of current debates surrounding the taxation of corporations, and illuminates the trade-offs involved in adopting more or less expansive views of the social role of corporations and the corporate tax.

The future of the corporate tax – as evinced by the discussion of various alternatives – appears fairly uncertain. Perhaps the most important question for policymakers, given the pervasive influence of the corporate tax on the activities of the most productive firms, is how to reconcile public pressures and perceptions with a commitment to evidence-based policymaking. We hope that by clarifying the relevant evidence and concepts, this paper can play a role in advancing this debate.

Acknowledgments

³⁸ Some commentators (e.g. Avi Yonah, 2004) view implementing accrual taxation at the personal level in order to eliminate the deferral advantage of untaxed corporations as being relatively straightforward. However, as discussed in the text, the challenges of doing so are arguably far from trivial.

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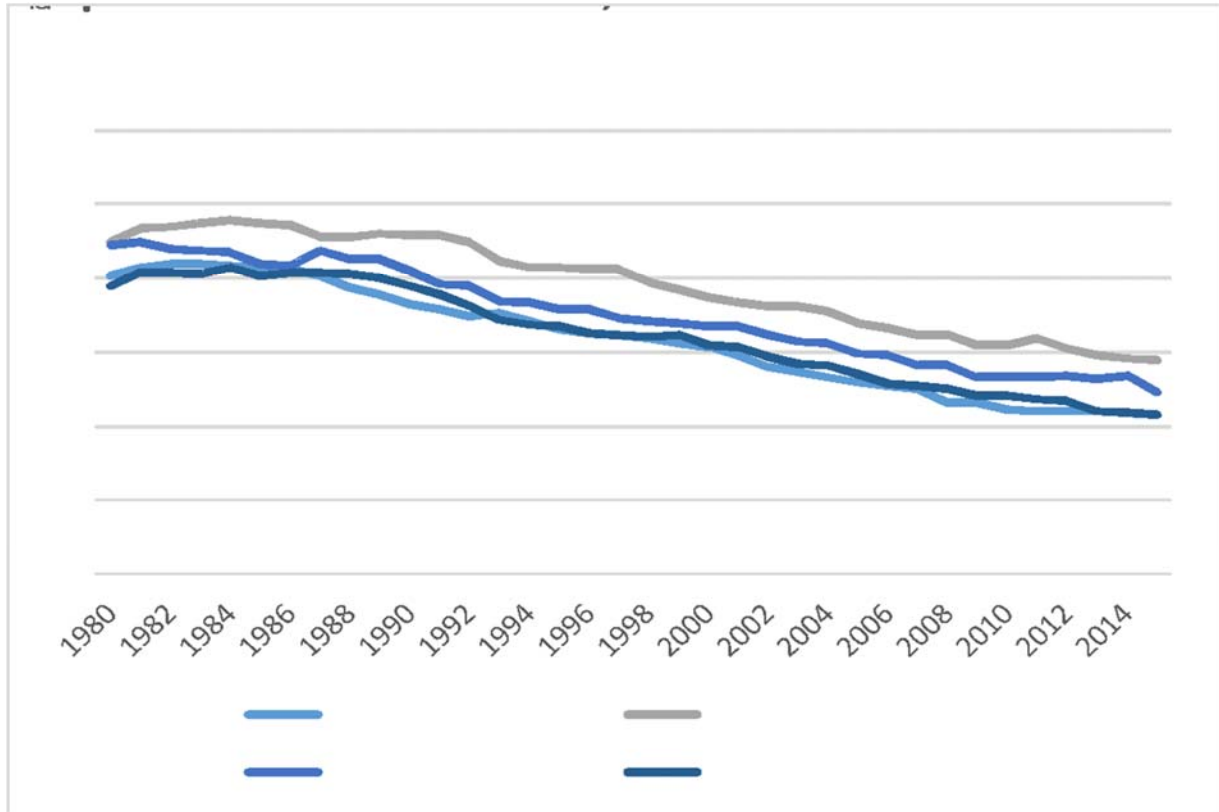
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Figure 1: Corporate Income Tax Rates, 1980-2015



Source: IMF Fiscal Affairs Department, Tax Policy Rates database.

Figure 2a

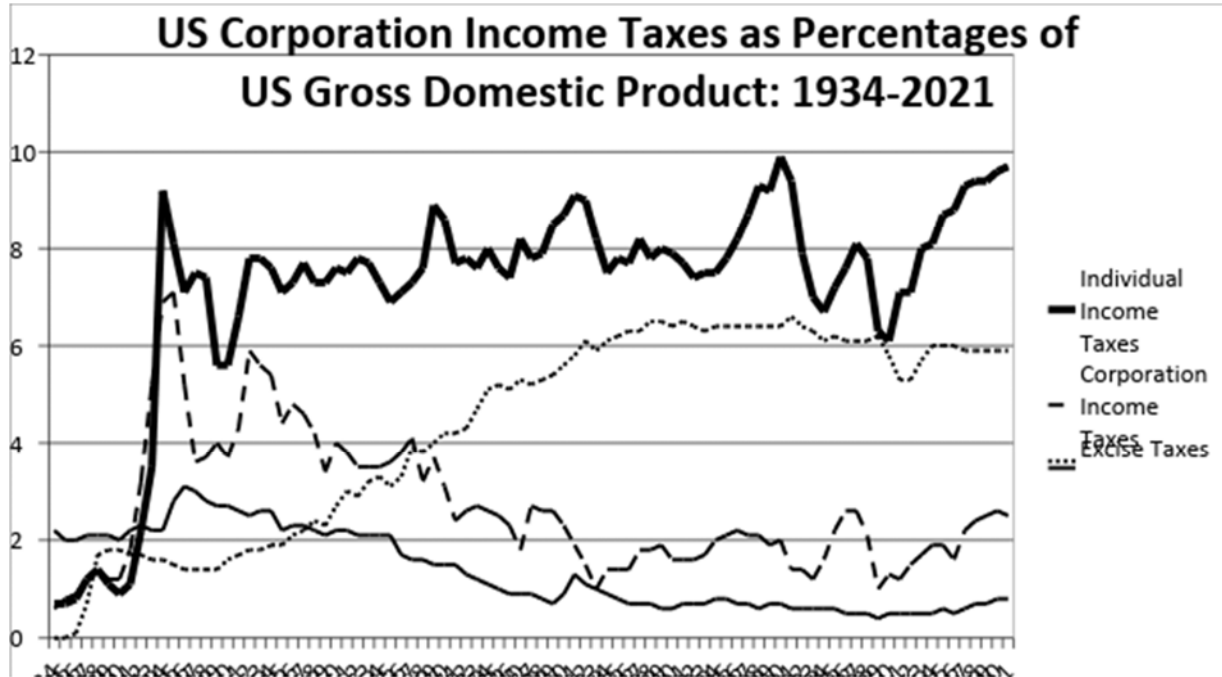


Figure 2B.

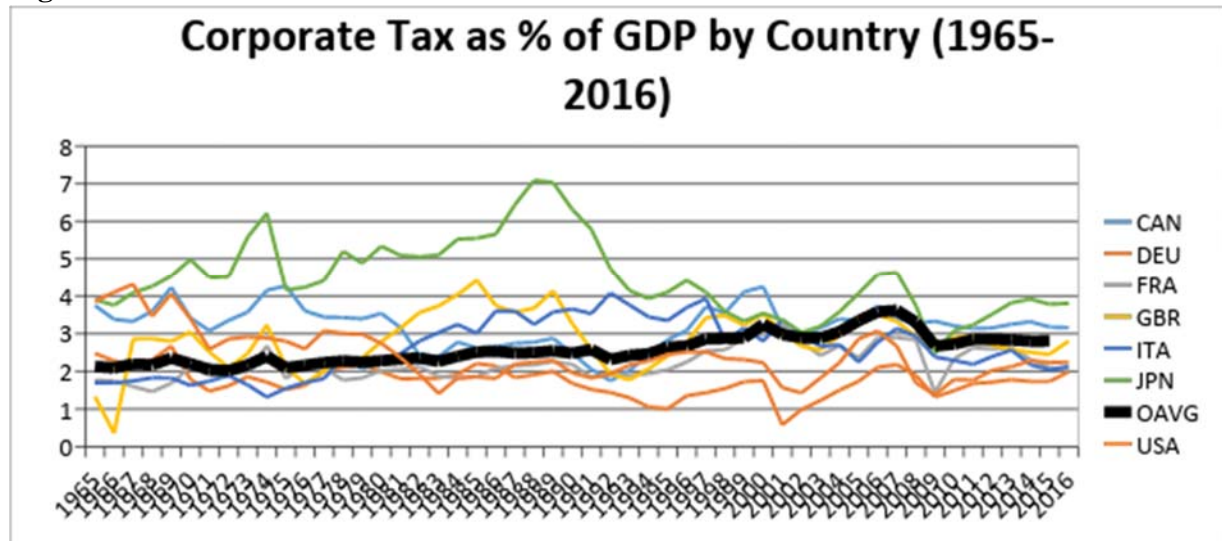
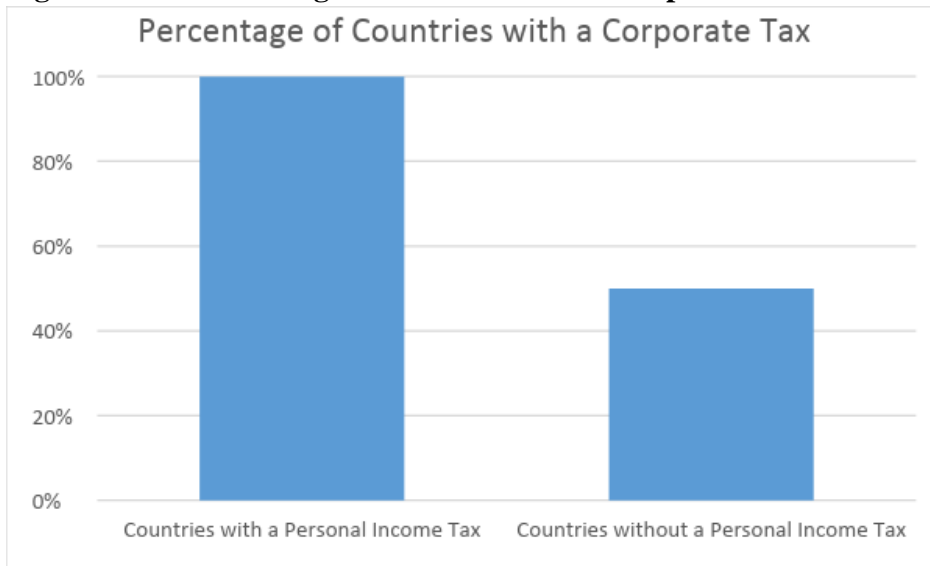


Figure 3: The Percentage of Countries with a Corporate Tax



Source: Authors' calculations, based on the IMF's World Revenue Longitudinal Dataset (WoRLD).

Table 1a: Choices of Countries A and B

		Country B	
		CFC Rule	No CFC Rule
Country A	CFC Rule	Firm A shifts no income to H (incurs zero cost) Firm B shifts no income to H (incurs zero cost) Country A's revenue = £20 Country B's revenue = £20	Firm A shifts no income to H (incurs zero cost) Firm B shifts all income to H (incurs £4 cost) Country A's revenue = £10 Country B's revenue = £10
	No CFC Rule	Firm A shifts all income to H (incurs £4 cost) Firm B shifts no income to H (incurs zero cost) Country A's revenue = £10 Country B's revenue = £10	Firm A shifts all income to H (incurs £4 cost) Firm B shifts all income to H (incurs £4 cost) Country A's revenue = 0 Country B's revenue = 0

Table 1b: Payoffs of Countries A and B

		Country B	
		CFC Rule	No CFC Rule
Country A	CFC Rule	100, 100	90, 106
	No CFC Rule	106, 90	96, 96

Source: Dharmapala (2014b)