Corporate Income Tax: What is it good for?
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Given that he is ignorant about his future position, what sort of tax institutions would we expect the rational citizen-taxpayer to select as elements in the constitution?\(^1\)

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ABSTRACT

This article attempts a top-down analysis of what the corporate income tax is capable of achieving in terms of the public good. It considers how well the current configuration of the tax fares when weighed against the principles of equity, efficiency and simplicity. These principles, if carefully defined, provide an invaluable opportunity to think about the theoretical and practical limitations of any individual tax. Applying these principles to the corporate income tax results in the inescapable conclusion that it cannot be described as being an equitable, efficient or simple tax. However, given the need for incremental reform of our tax laws, the corporate income tax does have at least one saving grace: it can be a useful instrument of social and economic policy.

1.0 Introduction

Adam Smith made it quite clear that writing and enforcing laws is not like playing chess. Unlike chess pieces, people have their own ideas about what they want to do and how they want to live. He suggests therefore that the way to avoid misery and disorder is to align our laws with the principles of each individual.\(^2\) A modern spin on this idea is the doctrine of individual welfare maximisation – cannon of normative welfare economics – which stresses that the wants and preferences of self-actuating individuals should be taken account of when designing or reforming laws.

The literature seems to agree that fully realising individual welfare maximisation through a social welfare function is beyond present capabilities.\(^3\) Louis Kaplow notes that the standard treatments of tax policy analysis have instead tended to focus on equity,

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\(^2\) A. Smith, The Theory of Moral Sentiments (Cambridge: CUP, 2002) 275 (“The man of system … seems to imagine that he can arrange the different members of a great society with as much ease as the hand arranges the different pieces upon a chess-board; he does not consider that … in the great chess-board of human society, every single piece has a principle of motion of its own, altogether different from that which the legislature might choose to impress upon it. If those two principles coincide and act in the same direction, the game of human society will go on eerily and harmoniously, and is very likely to be happy and successful. If they are opposite or different, the game will go on miserably, and the society must be at all times in the highest degree of disorder”).

\(^3\) See R.W. Tresch, Public Finance: A Normative Theory, 2nd edn (London: Academic Press, 2002) 43 (the practical significance of the social welfare function for policy analysis is very much open to question and is “one of the more problematic constructs in all of economic theory”).
efficiency and simplicity, which serve “as loose, intuitive proxies for social welfare”. This is consistent with Richard Bird’s suggestion that the traditional litany of the tax designer is equity, efficiency and simplicity. Accordingly, this article seeks to articulate the theoretical and practical scope of the corporate income tax through the standard tax policy principles of taxation. Articulating the contribution of corporate income tax to the *summum bonum* in this way might be construed as a top-down analysis.

### 2.0 Tax Principles

Equity, efficiency and simplicity arguably constitute the core criteria by which tax systems, individual taxes and other aspects of a tax system are commonly judged, if for no other reason than they are the most frequently cited. However, other principles have also been adjudged as being important for taxation.

- **Administrative efficiency**: minimising the waste of valuable resources in the achievement of the functional objectives of the tax system (i.e. “reducing unproductive state consumption”).
- **Transparency and certainty**: the time and manner of payment, as well as the quantum, should be clear to the taxpayer and “every other person”.
- **Consistency**: those transactions having the same economic result or social effect should also have the same tax result.
- **Coherency**: tax law being fully in line with societal goals.
- **Effectiveness**: the capacity of the tax system to achieve its functional objectives.
- **Enforceability**: the ease by which the tax gatherer or other body can ensure the rules are followed and the requisite amounts are paid.
- **Flexibility**: the tax system’s responsiveness and capacity for change.

It is an open question why these principles have not also been regarded as ‘core’ principles. One possibility is that they are not standalone principles; rather, they form part of one of the three core principles. It is certainly arguable that many, if not all, of the ‘non-core’ principles outlined above form part of what we might today understand as the principle of simplicity.

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4 L. Kaplow, *Taxation* (Harvard John M. Olin Center for Law Economics and Business, Discussion Paper No. 542, 2006) 6. He also includes revenue adequacy and administrability. Whilst the former cannot be described as a principle, the latter is arguably a function of simplicity.


7 Whether these principles are fit for purpose in a resource-constrained world is a discussion best saved for a future article.


9 For a brief outline of some of these principles, see European Commission, *General Tax Principles* (Brussels: DG Taxation and Customs Union CCCTB Working Group, 2004).


Thinking about the possibility that the principle of simplicity is a composite principle raises the more general issue of the underlying nature of tax principles. A first observation is that there is a tendency to mix up (perhaps even confuse) the “objectives” or “broad economic policy goals” of the tax system with these principles. For example, in 2005, George W. Bush created an Advisory Panel on Federal Tax Reform for options to make tax law simpler, fairer and more conducive to economic growth. Economic growth, like revenue adequacy, is not so much a principle as it is a measurable outcome.

One of the more general meanings of principle in the Oxford English Dictionary is a “general law or rule adopted or professed as a guide to action; a settled ground or basis of conduct or practice”. Judith Freedman suggests that John Avery Jones understands legal principles as “something higher level than just a vague or broad rule” that can have “different weights depending on the circumstances”.

Can simplicity, equity and efficiency even be considered to be legal principles? They are definitely at a higher level than rules and clearly have different weights depending upon the circumstances. However, they are rarely prayed in aid by the legislature and judiciary, which is what one would expect from a legal principle. There is, though, at least some evidence that they form part of a legal hierarchy of norms. For example, section 26G(1)(e) of the Public Finance Act 1989 states that the New Zealand government must pursue its revenue strategy having regard to the principles of efficiency and fairness.

It is nonetheless entirely possible that they are not legal but economic principles, particularly given the close association of equity, allocative efficiency, administrative efficiency, transparency and certainty with Adam Smith, the father of modern economics. If they do, in fact, fall outside the legal sphere, it is quite tempting to conclude that our core tax principles are, in fact, something akin to a Kelsonian basic norm.

By way of a conclusion, the least controversial thing can be said about the nature of the principles of simplicity, equity and efficiency is that they constitute guides for the design of taxes and tax systems. If even this much is true, then it must also be true that they constitute a valid basis for evaluating those same taxes and tax systems. That they are capable of being employed more operationally when determining or interpreting tax law is, perhaps, a discussion for another time.

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14 See fn. 4 above.
16 See, for example, H. Kelson, “On the Basic Norm” (1959) *California Law Review* 47(1), 107 at 110 (“The basic norm of the Pure Theory of Law is the reason of the validity of a democratic as well as an autocratic law, of capitalistic as well as of a socialistic law, of any positive law, whether considered to be just or unjust”).
3.0 Equity

The principle of equity concerns the spread of the economic burden of taxation. This has both a theoretical and a practical dimension. The theoretical dimension is that there must be an operative distributive norm that determines how much each taxpayer should pay or sacrifice. The practical dimension is that it must be understood exactly where the true economic burden (or final incidence) of a particular tax falls.

3.1 The Theoretical Dimension

The theoretical dimension may well have its origins in the naturalis æquitas of Roman jurists, which concerned the recourse to general principles of justice to correct or supplement the written law. In more general usage, equity signifies fairness and, therefore, denotes what is right. Determining what is right or fair requires a guiding norm, just as the naturalis æquitas required the principles of justice to guide it. Identifying the need for a norm of distributive justice for taxation, though, is a much simpler task than choosing one.

The contending norms of distributive justice to be found in the tax literature arguably fit into one of three broad categories of theory:

- those advocating material equality (e.g., egalitarianism), where materiality involves the state allocation or distribution of material or physical goods;
- those advocating wellbeing (e.g., welfarism), which go beyond (but do not exclude) the state allocation or distribution of material goods;\(^\text{17}\) and
- those advocating voluntary co-operation (e.g., libertarianism), which reject any patterned, non-market allocative or distributive ideal and constrains state interference to matters of commutative, rather than distributive, justice.

The current trend is for egalitarianism, which has meant the adoption of horizontal and vertical equity for apportioning the tax burden.\(^\text{18}\) Both horizontal and vertical equity are linked to the legal principle of non-discrimination, whereby like cases should be treated alike (horizontal equity)\(^\text{19}\) and unlike cases should be treated in a way that is proportional to the relevant differences between them (vertical equity). Horizontal equity provides that taxpayers with a similar \textit{ex ante} pecuniary ability-to-pay should have the same cash burden imposed upon them.\(^\text{20}\) Vertical equity, on the other hand, provides that


\(^{18}\) It is beyond the scope of this article to critique egalitarianism as a distributive norm.

\(^{19}\) See, for example, B. Galle, "Tax Fairness" (2008) \textit{Washington and Lee Law Review} 65, 1323 at 1325 ("a fair tax is one that treats similarly situated individuals alike") and D. Elkins, "Horizontal Equity as a Principle of Tax Theory" (2006) \textit{Year Law and Policy Review} 24, 43 at 43 ("similarly situated individuals face similar tax burdens").

\(^{20}\) See Kaplow, \textit{Taxation}, above fn.4, 6 ("notions of fairness (such as “ability to pay”) are notoriously vague, subject to competing interpretations, and in some instances largely free of content").
taxpayers with a different *ex ante* pecuniary ability-to-pay should have a cash burden imposed upon them that is in proportion to that difference.\(^2\)

Establishing a case for the horizontal or vertical equity of the corporate income tax is a cumbersome endeavour. It requires drawing an economic equivalence between natural and legal persons.\(^22\) Despite some notional similarities – both are right holders that use up natural resources when they remove them from the common stock – the differences are insurmountable in short order. Thus, we are left to consider the extent to which the corporate income tax satisfies the practical dimension of the principle of equity.

### 3.2 The Practical Dimension

The practical dimension of equity is about understanding where the true economic burden or final incidence of a tax falls. The starting point with regards corporate income tax is that corporates are *persona ficta* and only natural persons can suffer the economic burden associated with the tax that they pay. Another way of thinking about this is that corporates cannot forgo the enjoyment of wealth – such as leisure or consumption – that taxation implies. Thus, it is ultimately some group of natural persons upon whom the economic burden of corporate income tax falls. However, precisely which group we are concerned with is, at best, debatable and, at worst, simply unknown. This makes it impossible to establish the equity (or inequity) of the corporate income tax.

The study of tax incidence has a long and rich history.\(^23\) In 1776, Adam Smith wrote of taxes on wages that they “could not properly be said to be even advanced by [the labourer]” and would “in different cases fall upon different persons”.\(^24\) The problem in respect of corporates, though, is much more pronounced: it can never be the corporate body that suffers the tax. Therefore, the burden must always fall elsewhere. The economics literature refers to the elasticities of the various tax bases and there can be little doubt that the majority of direct taxes can, to some extent, be passed on. However, it would appear that the corporate income tax is passed on in its entirety.\(^25\) To suggest that the effective incidence is not strictly correlated under all conditions with the final incidence, as with taxes on wages, is one thing; it is a very different proposition to suggest that the effective incidence is necessarily and absolutely divorced from the final incidence, as it is with corporate income tax.

21 See, for example, N. Kaufman, “Fairness and the Taxation of International Income” (1998) *Law and Policy in International Business* 29, 145 at 164 (vertical equity “exists when the tax distinguishes appropriately between taxpayers who are not equals – when the distribution of the tax burden reflects the correct degree of progressivity, proportionality, or regressivity”).

22 See Messere, de Kam and Heady, *Tax Policy*, above fn.8, 112 (a “formal justification for the corporate income tax is that a corporation has the status of a legal person and like physical persons, should therefore be liable to income tax”).

23 See, for example, E. Seligman, *The Shifting and Incidence of Taxation*, 2nd edn (London: Macmillan, 1899) who begins his treatise: “The problem of the incidence of taxation is one of the most neglected, as it is one of the most complicated, subjects in economic science. It has indeed been treated by many writers; but its discussion in scientific literature, as well as in everyday life, has frequently been marked by what Parieu calls the ‘simplicity of ignorance’. Yet no topic in public finance is more important”.


25 It is an open question the extent to which government policy might be able to control this shift. See, for example, R. Mooij, “Will Corporate Income Taxation Survive?” (2005) *De Economist* 153(3), 277 at 282 (corporate income should somehow be forcibly allocated to the households of shareholders).
The literature on the incidence of the corporate income tax is full of contradictions. The questions that the literature has tried, and failed, to answer are (i) whether corporate income tax is shifted forward through higher consumer prices or backwards onto workers and shareholders and (ii) whether corporate income tax is progressive or regressive.\textsuperscript{26}

The prevailing view until 1979, due to Arnold Harberger, was that the incidence fell mostly on shareholders. Harberger based his view on an early example of a general equilibrium model with two sectors: corporate (capital intensive, such as manufacturing) and non-corporate (labour intensive, such as agriculture). The assumptions underlying the model were perfect competition, a closed economy, a fixed supply of capital,\textsuperscript{27} and a classical system of taxation.\textsuperscript{28} Increasing the corporate income tax rate in the model increased the cost of:

1. capital in the corporate sector, thus discouraging the use of capital and increasing the demand for labour (a substitution effect); and
2. corporate goods relative to non-corporate goods, causing demand to shift from corporates to non-corporates (an output effect).

As the corporate sector is more capital intensive,\textsuperscript{29} the shift in demand results in more capital relative to labour being released from the corporate sector than the labour intensive non-corporate sector could absorb. The result is a surfeit of capital. Large amounts of uninvested capital means the rate of return has been depressed by the increase in the corporate income tax rate. The impact of this is that shareholders largely bear the burden of corporate income tax and, furthermore, corporate income tax is progressive.\textsuperscript{30}

Around the same time as Harberger, Marian Krzyzaniak and Richard Musgrave used statistical analysis to show a strong positive correlation between profits and the corporate tax rate. Consequently, they argued that corporates pass their taxes on to consumers as higher prices, lowering the effective income of those consumers.\textsuperscript{31} The implication being that corporate taxes have no impact on shareholder returns, the

\textsuperscript{27}M. Feldstein, J. Green and E. Sheshinski, “Corporate Financial Policy and Taxation in a Growing Economy” (1979) \textit{Quarterly Journal of Economics}, August XCIII(3), 411 (suggesting that this is the key (implicit) assumption behind Harberger’s conclusion).
\textsuperscript{29}Ibid. 216-217, where Harberger explains the correlation between heavy industry and incorporation at.
\textsuperscript{30}Mintz, \textit{The Corporation Tax}, above fn.26 (draws these specific conclusions in relation Harberger’s study).
\textsuperscript{31}Their main result was that for all manufacturing, the US corporate tax was 145% shifted forward to consumers. That is to say, corporate profitability rose disproportionately after a tax increase. See M. Krzyzaniak and R. Musgrave, \textit{The Shifting of the Corporation Income Tax: An empirical study of its short-run effect upon the rate of return} (Baltimore, Md.: Johns Hopkins Press, 1963) 43. Krzyzaniak and Musgrave’s results bear out the assertion of N.B. Kaldor, \textit{An Expenditure Tax} (Aldershot: Gregg Revivals, 1993; first published 1955) 169 (“provided that sufficiently long periods are taken into account, the taxation of business profits \textit{does} tend to get ‘passed on’, in the form of higher profit margins, and thus its true incidence is shifted from the shareholders to the general consumer”).
opposite conclusion to Harberger. Shifting corporation tax forward in this way onto consumers can be either progressive or regressive. If, for example, industries that produce staples are more highly taxed than those that produce luxury goods, then the corporate income tax will fall more heavily on people with low incomes and vice-versa.\(^{32}\)

In 1979, a paper by Martin Feldstein, Jerry Green and Eytan Sheshinski marked the shift, in the incidence debate, from considering states as closed to considering them as open economies. They showed that if capital can be sourced internationally, shareholders would not bear the economic burden.\(^{33}\) The logic being that if the interest rates faced by corporations are determined by international markets and not by the domestic supply or demand of capital, the corporate income tax cannot affect after-tax returns earned by shareholders. Instead, given the relative immobility of labour, especially unskilled labour, at the international level, corporate taxes will be shifted back onto fixed factors (labour and land).\(^{34}\) For a small open economy, this implies that the tax could be regressive, especially if lower-paid unskilled workers must bear the brunt of it.

In 2006, William Randolph used a general equilibrium model (two small open economies, five sectors, perfectly mobile capital, fixed stock of capital and labour) to examine the long-term incidence of a corporate income tax in an open economy. Although, as with any simplified model, the analysis is silent about the effect of the corporate income tax on savings, growth and other dynamics that may have important effects on incidence, the model shows, in relation to the economic burden, that:

- domestic workers bear approximately 70 per cent
- domestic shareholders bear approximately 30 per cent
- domestic landowners receive a small benefit
- foreign shareholders bear approximately 70 per cent, which is exactly offset by the benefits received by foreign workers and landowners.

According to his model, as capital becomes less mobile internationally, the burden on domestic workers falls but the burden on domestic shareholders increases.\(^{35}\)

According to Alan Auerbach, in the short term changes in the corporate income tax are most likely borne by existing shareholders.\(^{36}\) This view can be contrasted with the 2008 conclusions of Michael Devereux, Wiji Arulampalam and Giorgia Mafini.\(^{37}\)

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\(^{32}\) There are some pertinent criticisms of Harberger’s approach stemming from the work of Krzyzaniak and Musgrave that have led some commentators to cast the incidence question in the broader terms of market structure. See J. Whalley, The Incidence of the Corporate Tax Revisited (Ontario: Department of Finance, Technical Committee on Business Taxation, Working Paper 97-7, 1997) 8.

\(^{33}\) See Feldstein, Corporate Financial Policy, above fn.27.

\(^{34}\) S. Bond et al., Corporate Tax Harmonisation in Europe: A Guide to the Debate (IFS, 2000) 24 (this is true of the incidence of a source-based capital income tax in a small open economy)


\(^{36}\) A. Auerbach, "Who Bears the Corporate Tax? A Review of What We Know" in Colloquium on Tax Policy and Public Finance (NYU School of Law; 2006).
Antal Deutsch and Glenn Jenkins complicate things further by suggesting that the introduction of foreign tax credits means that host country corporate income tax is borne by the home country’s treasury. Yet more complexity is added when there is an attempt to account for market structure.

It can be seen that with each study, comes a different conclusion. It could be consumers, shareholders, workers, landowners, foreign treasuries or even future generations that bear the burden of corporate income taxes. In 1996, the US Congressional Budget Office (CBO) concluded tentatively and reservedly that:

- In the short term, the incidence is borne unequally by shareholders and investors.
- In a closed economy, long-term incidence is borne by shareholders.
- In an open economy, long-term incidence moves to immobile factors.
- In the very long run, the burden is transferred to labour.
- Most studies overlook the possibility that the burden is passed to consumers.

Increasing international capital mobility and the fact that most economies are in practice neither fully open nor closed, means that even the CBO’s tentative conclusions create uncertainty. Ultimately, there is still no agreement on where the true incidence falls. While some commentators are convinced that it washes through to the consumer, the only thing that can be agreed upon is that the final incidence of corporate income taxes does not fall upon the company itself.

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40 See, for example, W. Vickrey, "The Corporate Income Tax and How to Get Rid of It" in L. Eden (ed) Retrospectives on Public Finance (Durham, NC: Duke University Press, 1991) 118 (“under some not unreasonable assumptions it appears that the burden will be felt largely by future generations rather than by present taxpayers”).
42 The 1996 CBO study focuses on models. Thus, it ignores the Krzyzaniak and Musgrave empirical study. This is consistent with the CBO’s more recent disavowal of empirical studies. See J.C. Gravelle, Corporate Tax Incidence: A Review of Empirical Estimates and Analysis (Washington, DC: CBO Working Paper 2011-01) 29 (“the various methodological limitations put the reliability of those specific [empirical] estimates into question”).
45 See Messere, de Kam and Heady, Tax Policy, above fn.8, 112.
In terms of the objective of this article, the conclusion must be that it is too difficult to establish the equity of the corporate income tax. Being so unsure of where the final incidence falls means that there is no knowing who suffers the true economic burden of the tax. Without that knowledge it is impossible to know whether the tax is fair or not. If equity is considered to be as important as it is so often claimed, then there are seemingly two options open to the policymaker. First, it might be ‘retired’ and replaced with a type of tax whose incidence is more certain. Secondly, and alternatively, the policymaker might focus instead on more regulatory objectives, which are themselves (by definition) an anathema to the principle of tax equity. Assuming that the corporate income tax is here to stay for a while longer, it may well be better to adopt the latter stance, at least for now.

4.0 Efficiency

Economic or allocative efficiency is concerned with the optimal allocation of productive resources in the economy as a whole. While optimality could, in theory, contain an ideological bias, the broad pluralist consensus is that it refers to the creation of the greatest possible economic surplus. In other words, economic efficiency is about allocating resources such that the maximum amount of wealth possible is created. This is entirely consistent with an unconstrained model of capitalism.

The issue to be addressed by this section is whether the corporate income tax, as it is currently formulated, helps or hinders the optimal allocation of productive resources.46 The short answer is that it is inefficient for at least two related reasons. The first is that it taxes, thereby diminishing, retained earnings, which can also be thought of as potential investment capital.47 In a world without other considerations, it would seem ludicrous to suggest diminishing the store of homegrown investment capital from a vehicle whose sole societal function is to use capital to create wealth through the pooling of productive resources.48

The second reason that the corporate income tax is inefficient is that, by reducing the store of a company’s homegrown investment capital in the way it does, it creates a preference for debt financing (over equity financing) as an alternative source of funds. Debt financing generates transaction costs that, in extremis, can lead to organisational failure.49 This situation is exacerbated when the loan facility in question contains control clauses, which is not uncommon when the counterparty is a bank.

4.1 Understanding Efficiency

46 See R. Boadway and H. Kitchen, Canadian Tax Policy, 3rd edn (Toronto: Canadian Tax Foundation, no.103, 1999), 52 (the issue of efficiency involves the enquiry, “does the tax system interfere as little as possible with the use of the competitive price mechanism to allocate the economy’s scarce resources?”).

47 For an alternative formulation of the same basic idea, see J. Mirrlees et al. (eds), Tax by Design: The Mirrlees Review (Oxford: OUP, 2011) 416 (taxing the normal return on equity-financed corporate investment raises the cost of capital thus lowering corporate investment).

48 The artificial entity view of corporations implies that wealth creation is the primary societal function of private corporations. See Mark Bowler-Smith, The Taxing Road to Sustainable Growth: Resource Productivity and Corporate Taxation (Amsterdam: IBFD, 2013), 157.

49 It may be that corporate income taxes have other elements that do the same but, in the interests of brevity, they are not considered here.
Allocative efficiency should first be distinguished from technical efficiency, which describes the individual production processes of a firm in terms of the degree to which they reflect best practice. Rather than focusing on the individual firm, allocative efficiency focuses on the economy as a whole.

In the literature, allocative efficiency has attracted a number of different formulations. Pareto optimality is arguably the most famous. It holds that there is no alternative, with regards the distribution of wealth, in which there is at least one person better off and no one worse off. Unfortunately, Pareto optimality implies efficiency in some rather unpalatable scenarios. For example, it would be efficient for a starving person to stay starving as long as others garner more resources. This flaw is exposed nowhere better than in the formulation of Kaldor–Hicks efficiency, which is also sometimes referred to as the compensation principle. It holds that an outcome is more efficient if those that are made better off could in theory compensate those that are made worse off and lead to a Pareto optimal outcome. In a similar vein, but introducing an element of subsidiarity to the idea of efficiency, Robert Nozick suggests that at any given time, any group “contains exactly those allocations to consumers such that no subset of consumers can improve each member’s position by reallocating their own assets among themselves, independently of the other consumers in the economy.”

Marshallian efficiency is arguably a preferable formulation to Pareto, Kaldor-Hicks and Nozickean efficiency. It focuses instead on the maximisation of total economic surplus. Possible advantages that Marshallian efficiency has over these other formulations include:

- a focus on more productive resources rather than, for example, assets such as consumer items;
- no implicit or explicit reference to redistribution;
- the capturing of capitalism’s dynamic (i.e. it is not static or a ‘snap shot’); and
- more pluralism in that economic surplus is a more acceptable proxy for aggregate welfare.

50 See Bowler-Smith, *The Taxing Road to Sustainable Growth*, above fn.48, 55.
55 Note that none of these formulations take account of the sustainability of the process being discussed.
56 For a similar observation, see B. Ben-Amitai, *Wealth Maximisation as a Political Conception of Justice* (University of Cambridge PhD Thesis, 2007) 6 (wealth maximisation is a pluralist ideal that is
Other formulations of efficiency that have a similar bearing to that of Marshallian efficiency include:

- a “measure of how well society meets – in quality and quantity – the material wants of its members”,\(^\text{57}\) and
- a normative principle that “favours the allocation of scarce resources to their most highly valued uses in order to maximize aggregate welfare”.\(^\text{58}\)

### 4.2 Efficiency and the Tax System

Assuming, therefore, that we are referring to Marshallian efficiency when we refer to “efficiency”, the next step is to consider the relationship between efficiency and the tax system. The way one conceptualises that relationship depends, in the broadest terms, upon whether one thinks that competitive markets are capable or incapable of optimally allocating resources. This is because a tax is a non-market event (i.e. it does not involve voluntary exchange) that nevertheless affects market prices.

If competitive markets are considered to be incapable of optimally allocating resources, then taxes start to look like a possible means of correcting market failures and producing greater efficiency.\(^\text{59}\) If the opposite position is taken, taxes look to be at their best when they are neutral with regard to resource allocation.\(^\text{60}\)

Whether or not competitive markets are considered to be optimal with regards resource allocation rather depends upon the theoretical perspective of the observer. For example:

- **Liberal theory** holds that it is the principal task of government is to secure and distribute fairly the liberties and *economic resources* individuals need to lead freely chosen lives.\(^\text{61}\)
- **Libertarian theory** limits the role of government to “the narrow functions of protection against force, theft, fraud, enforcement of contracts, and so on”.\(^\text{62}\)
- **Communitarian theory** suggests that engaged communities oversee a government that in turn oversees a strong, judiciously contained market.\(^\text{63}\)


\(^{59}\) See B. Greenwald and J. Stiglitz, “Externalities in Economies with Imperfect Information and Incomplete Markets” (1986) *Quarterly Journal of Economics* 101(2), 229 at 230 (there “exist government interventions (e.g., taxes and subsidies) that can make everyone better off”). See also C. Bastable, *Public Finance*, 3rd edn (London: Macmillan, 1917), III.VII.13 (“First and most important of the principles that should guide the practical financier is that which declares that ‘taxation should be productive’”).

\(^{60}\) On the different meanings of tax neutrality, see Bowler-Smith, *The Taxing Road to Sustainable Growth*, above fn.48, 90.


Thus, it is those theoretical perspectives more closely associated with the libertarian viewpoint that deem competitive markets to be optimal in the allocation of productive resources. With regards both liberal and community-based theory, as well as what can be observed in the real world, it is government intervention in competitive markets that is the norm.

Despite the weight of theory and practice that favours some kind of government intervention, it is nonetheless difficult to understand the mechanism whereby a tax might help allocate resources better than competitive markets. This is one of the messages to have emerged from the optimal taxation literature and is nicely captured by this Winston Churchill quote:

“for a nation to try to tax itself into prosperity is like a man standing in a bucket and trying to lift himself up by the handle.”

It is perhaps for this reason that the principle of tax neutrality – the idea that a tax should not affect the allocation of resources – had enjoyed, almost by default, such dominance as a criterion of corporate taxation in the literature.

4.3 Competitive Markets

Rawls posits that competitive markets are a “major social institution” and, as such, they are able to “distribute fundamental rights and duties and determine the division of advantages from social cooperation”. Major social institutions are as close as Rawls comes to identifying the fundamental building blocks of a free and fair society. Given that even his harshest critics concede that others “must now either work within Rawls’s theory or explain why not”, it seems reasonable to hold out the existence and importance of competitive markets as both a starting premise and an underlying assumption of an analysis of efficiency.

A number of related consequences flow from the existence of competitive markets in a capitalist economy:

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63 See, for example, A. Etzioni, Next: The Road to the Good Society (New York: Basic Books, 2001).
65 P. Sørensen, "The Theory of Optimal Taxation: What is the policy relevance?" (University of Copenhagen, EPRU Working Papers Series, 06-07) 4. See also R. Bird and J. Mintz, "Future Developments in Tax Policy" (1994) Federal Law Review 22, 402 at 412 ("[t]ax 'neutrality', which for several decades has been the Holy Grail of tax reformers, seems likely to fade away in favour of an approach that sees taxation as just one of a broad set of public policies attempting to secure particular objectives and constraints").
1. They promote economic growth.\textsuperscript{68} They serve to allocate resources to the place in the economy where their return is greatest. They facilitate this allocation through price signals and other information that they provide.\textsuperscript{69} Adam Smith's ‘invisible hand’ embodies the idea that the individual pursuit of maximum profit guides capitalist markets to greater effectiveness in the creation of wealth.\textsuperscript{70}

2. They organise economic activity better than uncompetitive markets. Thus, they create more wealth than uncompetitive markets. This has sometimes been taken to mean that competitive markets organise economic activity more efficiently than any other alternative.

3. They stimulate innovation.\textsuperscript{71} Competition drives out less effective production processes through a combination of Darwinian selection and adaptive imitation by means of a self-correcting price mechanism (an idealisation of this function is ‘productive efficiency’).

Beyond these core functions, there is a concern that competitive markets are not a complete solution when it comes to the economic organisation of society.\textsuperscript{72} This is partially because, in practice:

1. Competitive markets do not exist within a vacuum and it falls to government to define the institutional framework within which they operate.\textsuperscript{73}

2. Real markets fail – and, under current institutional arrangements, it is government that must correct for that failure by either altering incentives or institutional rules.\textsuperscript{74}

However, institutional and regulatory frameworks reduce or impair the ability of market players to maximise their returns, the result is inefficiency. Furthermore, if one accepts the idea that a competitive market cannot be separated from its institutional and regulatory frameworks, inefficiency becomes inseparable from market failure. From this perspective, not only is it possible to show a tax is inefficient if it impedes wealth creation, but it is also inefficient if it can be shown to create those outcomes commonly associated with market failure.

\textsuperscript{68} G. Firebaugh and F. Beck, "Does Economic Growth Benefit the Masses? Growth, Dependence, and Welfare in the Third World" (1994) \textit{American Sociological Review} 59(5), 631 (defining growth as “an increase in the total value of goods and services produced per person”).


\textsuperscript{70} J. Stiglitz, "The Role of Government in Economic Development" in A. Bagchi (ed) \textit{Readings in Public Finance} (Oxford: OUP, 2005), 157 (that the modern incarnation of the invisible hand doctrine is one of the “fundamental theorems of welfare economics”).


\textsuperscript{72} See J. Stiglitz, "John Kenneth Galbraith understood capitalism as lived - not as theorized", \textit{The Christian Science Monitor}, 28 December 2006 (“Smith's ‘invisible hand’ … is so invisible because, quite often, it's just not there”).

\textsuperscript{73} See Boadway and Kitchen, \textit{Canadian Tax Policy}, above fn . 46.

4.3 Opportunity Cost

An early statement of the principle of efficiency in relation to taxation is that taxes should not

“obstruct the industry of the people, and discourage them from applying to certain branches of business which might give maintenance and employment to great multitudes. While it obliges the people to pay, it may thus diminish, or perhaps destroy, some of the funds which might enable them more easily to do so”.

This is arguably an early reference to the idea that a tax can have a high opportunity cost: that it is the foregone alternative that is more important than the revenue collected. A tax with a high opportunity cost restricts the ability to create the wealth from which future revenue is raised. First, a tax might diminish the personal gain available from otherwise wealth-creating activities, thus disincentiving such activity in the future. This can occur when the ‘right’ base is taxed too highly (an idea embodied by the Laffer curve, which illustrates the disincentive effect of higher tax rates on work, output and employment, with the result that the state enjoys lower aggregate tax revenues).

Alternatively, a tax might diminish existing stores of capital that would otherwise be put to good use creating wealth were it not for the levy. This can occur if the wrong base is taxed, which is arguably the case when retained corporate profits are taxed. By taxing retained earnings (or undistributed profits), extant stores of investment capital are necessarily diminished. All other things being equal, this means that future returns are reduced and the state will enjoy lower aggregate tax revenues.

There are those who argue that taxing retained earnings is not a levy on the ‘wrong’ base. They argue that corporate income tax is efficient insofar as it only attaches to economic rent: that it is acceptable to tax investment capital, so long as the stores of capital available for investment are not diminished beyond their ability to yield a profitable rate of return. What this view fails to account for is the fact that efficiency concerns wealth maximisation – economic surplus – not acceptable rates of return.

A possible rejoinder by those in favour of an economic rent tax is that corporates have other alternative sources of finance: they can either sell more equity or borrow money. However, replacing lost capital through debt or equity entails extra business costs and, from a wider economy perspective, other transaction costs.

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77 It is also arguable that an economic rent tax falls more heavily on knowledge-based capital (KBC) than physical capital, given that most physical inputs are deducted from the tax base. This is important because KBC is the only guarantor of long-term economic growth. On the importance of KBC, see OECD, *Supporting Investment in Knowledge Capital, Growth and Innovation* (Paris: OECD, 2013).
In conclusion, part of the opportunity cost of the corporate income tax is the future economic surplus lost through discouraging companies from reinvesting their profits in the business. In terms of stark choices, corporate managers might decide either not to invest in new projects or to do so via equity or debt finance. Therefore, the opportunity cost of the corporate income tax includes:

1. lost opportunities for company growth (or increases in corporate wealth);\footnote{See G. Donaldson, Managing Corporate Wealth (New York: Praeger, 1984) (concludes that managers of large firms are not driven by firm value maximization but by corporate wealth maximization).} and
2. negative outcomes that result from the adoption of funding alternatives, one of which is discussed in the next section.

4.4 The Differential Taxation of Debt and Equity

Corporate income tax creates a preference for debt financing over equity financing. It does so by allowing an interest deduction from corporate profits but disallowing any kind of deduction in relation to dividends paid to shareholders. The policy rationale for this differential tax treatment between debt and equity stems from the fact that interest payments are the \textit{de jure} cost of debt finance, whereas dividends are only a \textit{de facto} cost of raising equity finance. In other words, debt interest is a necessary business cost as it results from an underlying legal obligation to pay that interest, whereas a company is under no legal obligation to pay out dividends to its ordinary shareholders. Thus, dividends constitute purely discretionary payments.\footnote{For a more in-depth analysis, see Bowler-Smith, The Taxing Road to Sustainable Growth, above fn.48, 154.}

The fact that the “tax bias in favour of interest appears to encourage borrowing” raises the question “whether it encourages too much borrowing”.\footnote{A. Auerbach, M. Devereux, and H. Simpson, “Taxing Corporate Income” in J. Mirrlees et al. (eds), Dimensions of Tax Design: the Mirrlees Review (OUP: April 2010) 858.} In other words, given the present focus on efficiency, does the encouragement of borrowing help or hinder companies when it comes to the creation of wealth?

Debt has stronger control effects than equity. In certain circumstances, it can be argued that these control effects are positive. For example, in Michael Jensen’s view, the control effects of debt reduce the agency costs of free cash flows (i.e. “cash flow in excess of that required to fund all projects that have positive net present values when discounted at the relevant cost of capital”) as long as the firm does not become too highly leveraged. In a nutshell, his argument is that there is a point where it is better for corporate managers to disgorge ‘spare’ capital rather than spend it wastefully. However, not all firms are in the position of having free cash flows (or spare capital), particularly businesses that are growing or struggling.\footnote{M. Jensen, “The Agency Costs of Free Cash Flow: Corporate Finance and Takeovers” American Economic Review (1986) 76(2), 323.} Indeed, it is with such businesses that the control effect (i.e. the \textit{de jure} obligation to pay interest) becomes a potential millstone.

The Mirrlees Review panel has discussed the potential negatives of the control effect of debt from a tax perspective. Their suggestion is that, given the inherent uncertainty of
future project investment returns, using “more debt finance and less equity finance” means an increased “risk that lenders will not be repaid in full”. In practice, this might mean “more firms are likely to default in an economic downturn than would otherwise be the case”. Therefore, debt financing may increase the risk of organisational failure.

The risk of default may also trigger another of the negative control effects of debt. Some loan agreements place quite strong constraints on corporate managers when there is a risk of default. In the words of Kelli Alces, once a corporation is

“at risk of defaulting on major bank loans, an effective change in control occurs, and the mechanisms that tied the managers’ interests to those of the corporation through the interests of shareholders fail”.83

Such constraints or ‘pre-emptive control’ provisions may affect the redeployment of firm-specific assets, either when there is a risk of default or in anticipation that such a risk might arise. It may be felt that these assets should be utilised such that the continuing obligation to service the debt be honoured, rather than being put to other, possibly more profitable, uses.

Both the need to service the debt in full (and the associated increased risk of organisational failure) and the loan covenants arguably promote risk aversion (or constrain the risk profile of a firm) at crucial times in the life of that firm. For example, but for the debt, a firm that failed might have developed a successful strategy to weather the economic downturn. As Alces suggests, deference to creditors is not “the path to corporate wealth maximization”.84

The US Joint Committee on Taxation adjudged the “differential taxation of debt and equity” to be sufficiently serious so as to constitute what it once called a “tax-induced structural distortion”, which they defined as a structural element of a tax that materially affects economic decisions in a manner that imposes substantial efficiency costs.85 The Mirrlees Review panel also considered this ‘distortion’ to be sufficiently serious that it recommended rebalancing the corporate tax base by granting corporations a tax allowance in respect of the equity in the corporation.

In conclusion, debt interest deductibility is inefficient. It’s control effects can negatively affect the risk profile of firms and even contribute to organisational failure. Taken together with the fact that it diminishes retained earnings, the corporate income tax, in its current form, cannot be said to help the optimal allocation of productive resources. Thus, the corporate income tax is not an efficient tax.

82 “Taxing Corporate Income” in J. Mirrlees et al. (eds), Tax by Design: the Mirrlees Review (OUP: April 2011), [17.2].
84 Ibid. She went on to suggest that “adopting the course of action preferred by either the shareholders or creditors will not necessarily guarantee that the managers will make the decision or adopt the level of risk that is best for the firm. Neither constituent can be relied upon to advocate consistently for positions that would lead to wealth-maximizing behavior. The best way to address this problem is to balance the amount of influence each group can exert over corporate managers throughout the life of the firm”.
Of course, that does not mean that there is not scope for it to be a more efficient tax, particularly if it can generate positive externalities. One can see, for example, just such a general intention behind R&D tax incentive regimes.86

5.0 Simplicity

As a normative tax principle, simplicity is arguably about freedom from elements of limited utility, which includes not multiplying functional elements beyond necessity.87 Thus, not only should each element of a tax system be beneficial, effective and scalable, but there should also be as few elements as possible with the same functionality.88

From a functional perspective, while it makes no show of redistributing wealth, the corporate income tax undoubtedly does a good job of raising revenue and regulating some aspects of corporate conduct. Thus, it cannot be said that the corporate income tax is of no functional utility. Where the corporate income tax falls down is from the perspective that, in its current form, it has limited utility given that (i) other taxes raise revenue more efficiently and equitably, and (ii) it can be shown that, as a regulatory instrument, some of its reliefs conflict with each other from a policy perspective.

5.1 Understanding Simplicity

In ordinary usage, simplicity is a state or quality of being simple in form or structure. It implies the absence of duplicity, dissimulation, guile, elaboration or artificiality. It connotes something open, straightforward, unpretentious, plain and unadorned. Thus, simplicity is the very opposite of complexity. One might expect, therefore, to find the inclusion of the following qualities in a simple or uncomplicated tax:

- ease of comprehension and conformity;
- ease of calculation and assessment;
- minimisation of resources wasted in payment or collection;
- ease of enforcement;
- freedom from elements of limited utility;
- little scope for contentious litigation;
- little scope for the exploitation of loopholes, arbitrage opportunities and other tax avoidance opportunities; and

86 See, for example, Division 355-5 of the ITAA 1997, which provides that the object of the regime “is to encourage industry to conduct research and development activities that might otherwise not be conducted because of an uncertain return from the activities, in cases where the knowledge gained is likely to benefit the wider Australian economy.”


88 E. Kant, Critique of Pure Reason (CUP, 1998) 597 or A656/B684 (“Entium varietates non temere esse minuentias” or “[t]he variety of entities should not be rashly diminished”).
• little scope for manipulating the time or manner of payment.  

If this is a credible list, it becomes arguable that simplicity as a tax principle is a proxy for a whole host of other desirable qualities or principles. For example, many of these qualities would help minimise the waste of resources in administering the tax system. Thus, administrative efficiency would appear to be an important component of simplicity. Certainty and transparency also emerge from this list, particularly in relation to there being little scope for manipulating the time or manner of payment.

Accordingly, simplicity may well be viewed as a core tax principle because of the fact it represents or embodies these other qualities and principles. Kaplow offers a similar conclusion when he suggests that simplicity is a proxy for other criteria. In the same vein, the European Commission has suggested that simplicity implies the minimisation of compliance and administrative costs linked to the operation of a tax system, as well as linking simplicity to certainty, effectiveness and transparency.

Given both the range of the constituent elements of simplicity from a tax perspective and a desire to understand what it is about simplicity that means it works as a proxy for these other desirable ends, philosophy provides some useful ideas. The idea of simplicity as an ‘inherently worthy quality’ has been the subject of much philosophical debate and reflection, arguably beginning with William of Occam (circa 1287-1347). It would appear that the literature has sought to find that quality of simplicity which, when considering the inherent value of things, makes simplicity a core guiding principle. A strong candidate for this ‘inherent value’, which has emerged from the literature, is that simplicity is the absence of unnecessary duplication.

Taking the idea that simplicity is the absence of unnecessary duplication back a step, there is arguably an assumption that the elements that should not be duplicated need to

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89 See Smith, The Wealth of Nations, above fn.11, 1044 (discussing the power of an official to “aggravate the tax upon any obnoxious contributor, or extort, by the terror of such aggravation, some present or perquisite to himself”).
90 For suggested definitions of these other tax principles, see p.2.
91 Some argue that administrative efficiency is the main constituent of simplicity but others go further and argue that they are one in the same thing. See, for example, J. Mintz, “The U.K.’s Conflicting Principles for International Tax Policy” (2007) Tax Notes Int’l 47, 667.
92 Kaplow, Taxation, above fn.4, 6. He also suggests that simplicity forms a subset of other criteria, which is a much less certain proposition (simplicity “is not a good in itself, but bears on efficiency and fairness”). See also A. Agúndez-García, The Delineation and Apportionment of an EU Consolidated Tax Base for Multi-Jurisdictional Corporate Income Taxatio: A Review of Issues and Options (Brussels: European Commission Taxation Working Paper, No. 9/2006) 4 and 32 (simplicity is one of the efficiency criteria).
94 On the tax literature’s approach to defining tax complexity, see G. Jones, P. Rice, J. Sherwood and J. Whiting, Developing a Tax Complexity Index for the UK (Office of Tax Simplification, www.gov.uk/government/publications/tax-complexity-project) 3 (“Typically, writers do not define tax complexity but list and categorise factors that contribute to complexity”).
95 See fn.87 above.
be of adequate utility in the first place. From a tax perspective, it would seem useful to state this explicitly. Therefore, a simple tax system is one that has few elements of limited utility, which implies *inter alia* no unnecessary duplication.

Utility can be measured both in general terms and in relation to the functional objectives of a tax system. The idea of a functional objective relates to the fact that all taxes have a job to do in society. The widest and most frequently articulated summation of this ‘job’ is the idea that tax systems have at least three core functional objectives: raising revenue, redistributing wealth and regulating behaviour.96 Thus, for an element of the tax system to have utility means either that it can be shown to contribute to the common good or – as a proxy for the common good – that it is directed towards revenue-raising, redistribution or regulation.

5.2 *Function Analysis*

Corporate income tax has no utility from a redistribution perspective.97 This stems from the idea already discussed that the final or effective incidence of the corporate income tax remains at best ambiguous and at worst unknown.98 In other words, if you don’t know who ultimately bears the burden of a tax, it becomes very hard to say that you are ‘taking from the rich, to give to the poor’.

Corporate income tax clearly has utility from a revenue-raising perspective. The Meade Report of 1978, which took “a fundamental look at the UK tax structure”,99 suggests that one purpose of corporate income taxation was to continue to provide a good source of revenue. And it continues to be a good source of revenue.100 In the OECD, the corporate income tax raises an average of 3% of GDP.101 In 2012, as a percentage of GDP, it raised 5.2% in Australia, 4.7% in New Zealand, 2.7% in the UK and 2.5% in the US.

However, the failure of corporate income tax is that it raises this revenue less efficiently and less equitably than other forms of taxation. Personal income taxes are arguably more equitable given that at least some proportion of the economic burden must fall on the payer. Consumption taxes, such as the VAT/GST, are arguably more efficient given that the tax base is, by definition, confined to funds that cannot be used for future investment. This means that despite being a good revenue-raiser, the corporate income tax is ultimately suboptimal and therefore of limited utility in this regard.

The next functional objective that comes under the microscope is regulation. In theory, as a price-based market instrument, the corporate income tax makes for a very effective

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96 For a discussion of these ‘functional objectives’, see Bowler-Smith, *The Taxing Road to Sustainable Growth*, above fn.48, 95.

97 This does not mean that the redistributional consequences can be ignored; rather, because those consequences are unknowable, other policy instruments must address inequality ‘after the fact’.

98 See section 3.2.


101 More precisely, according to OECD data, the average is 3.18% from 2003-2012.
regulatory tool.\(^{102}\) Regulation, for present purposes, can be subdivided into macroeconomic and microeconomic regulation. As to the former, Meade suggests that one of the purposes of corporate taxation is “short term demand management for the macro-economic control of economic activity”.\(^ {103}\) The idea being that a hike in corporate income tax rates would slow the economy, whereas a reduction would speed it up.\(^ {104}\)

Microeconomic regulation is clearly in evidence in corporate income tax, given the existence of the many targeted reliefs. The UK Office of Tax Simplification (OTS) estimated in July 2014 that the UK Corporation Tax has 119 reliefs.\(^ {105}\) These reliefs include 21 tax reliefs that the OTS has classified as ‘targeted’.\(^ {106}\) The following five regimes represent examples of these targeted reliefs:

1. accelerated depreciation;\(^ {107}\)
2. environmental protection;\(^ {108}\)
3. research and development (R&D);\(^ {109}\)
4. patent box;\(^ {110}\)
5. employee share schemes;\(^ {111}\) and
6. film production.\(^ {112}\)

In order to show that elements of the corporate income tax are of limited utility from a regulation perspective, it can be argued that the first three of these targeted reliefs are inconsistent with each other and, therefore, incoherent in relation to societal goals.\(^ {113}\)

**Oil and Gas Extraction vs Environmental Assets**

The first relief, listed above, relates to what the UK call capital allowances (i.e. depreciation relief). Businesses in the oil and gas sector with carefully defined ‘ring-fence trades’, get 100% depreciation relief in the first year for expenditure on plant or machinery for use wholly in that ring fence trade. The main point to note here is that this relief relates exclusively to physical capital. It is clearly an incentive to the oil and gas

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\(^{102}\) For a discussion as to why it is such an effective regulatory instrument, see Bowler-Smith, *The Taxing Road to Sustainable Growth*, above fn.48, 97.

\(^{103}\) See Meade, *The structure and reform of direct taxation*, fn.99 above, 5.

\(^{104}\) For an alternative conceptualisation of macroeconomic regulation, see R. Avi-Yonah, "Corporations, Society and the State: A defence of the corporate tax" (University of Michigan: Public Law and Legal Theory Research Paper No. 40, 2006) 42 (“corporate tax is justified as a way for a liberal democratic state to limit excessive accumulations of power in the hands of corporate management”).


\(^{106}\) The remainder are classified as ‘special case’, ‘threshold’ or ‘structural’. For a discussion of tax incentive classification, see Bowler-Smith, *The Taxing Road to Sustainable Growth*, above fn.48, 119.

\(^{107}\) See, for example, CAA 2001, s. 45F (100% first-year depreciation allowance for plant or machinery used in a ring-fence oil trade).

\(^{108}\) See, for example, CAA 2001, Sch 1A.

\(^{109}\) See, for example, CTA 2009, Pt. 13

\(^{110}\) See, for example, CTA 2010, Pt. 8A.

\(^{111}\) See, for example, CTA 2009, Pts. 11 & 12.

\(^{112}\) See, for example, CTA 2009, Pt. 15.

\(^{113}\) For a definition of coherency in a tax context, see p. 2 above (“tax law being fully in line with societal goals”).
sector, particularly in relation to the extraction of oil and gas. Not only has it been
argued that the careless and rampant extraction of oil and gas can be environmentally
damaging, it has also been argued that focusing on physical capital and natural resources
as a means to produce sustainable economic growth is a non-viable strategy (so-called
‘total factor productivity’ or “a change in output to all types of inputs”).

The second relief also relates to capital allowances. An environmental assets tax credit is
available to companies for any investments in specific, environmentally beneficial plant
or machinery. Companies can surrender a loss attributable to a claim for 100% capital
allowances for investments in these so-called ‘environmental assets’. The credit is a
refundable credit and is worth 19% of the loss. While the credit has certain advantages
over a deduction, it should be clear that this relief is more restrictive than the first relief
due to the fact it only concerns resulting losses, as opposed to any current year
expenditure.

The disconnect between these two reliefs is that one has an environmental objective, in
that it encourages the acquisition of environmentally friendly physical capital; the other
relief does nothing to encourage environmentally friendly physical capital and, arguably,
encourages the consumption of limited resources for the sole purpose of consuming
other limited (and environmentally damaging) resources. It is, therefore, arguable that
these two reliefs are incoherent from a policy perspective in that one seeks to regulate
behaviour so as to promote environmental objectives, while the other brings about just
the opposite.

Knowledge-Based Capital vs Oil and Gas Extraction

R&D incentives, the third of our reliefs, are widely recognised to be concerned with
promoting the creation of new scientific knowledge and technological innovation, which are variants of knowledge-based capital (KBC). The importance of KBC is
apparent from the following passage taken from a 2013 OECD report:

“Innovation is a key to business success, but where innovation comes from
is changing. Today’s firms are looking beyond [R&D] to drive innovation.
They invest in a wider range of intangible assets, such as data, software,
patents, designs, new organisational processes and firm-specific skills.
Together these non-physical assets make up [KBC]”.

Thus, the third relief is tasked with promoting innovation, the key to which lies with
nonphysical assets. The World Economic Forum (WEF) holds that technological
innovation represents the pinnacle of competitiveness and suggests that:

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Capital* (NER Working Paper 15094, 2009) 4 (“[i]deas, institutions, population, and human capital are
now at the center of growth theory. Physical capital has been pushed to the periphery”); and M. E.
prosperity is created, not inherited. It does not grow out of a country’s natural endowments”).

115 See Bowler-Smith, *The Taxing Road to Sustainable Growth*, who fn.48, 120. The same is arguably
true of patent box regimes.

116 OECD, *Supporting Investment in Knowledge Capital, Growth and Innovation* (OECD Publishing,
2013) 17.
“Although substantial gains can be obtained by improving institutions, building infrastructure, reducing macroeconomic instability, or improving human capital, all these factors eventually seem to run into diminishing returns. The same is true for the efficiency of the labor, financial, and goods markets. In the long run, standards of living can be enhanced only by technological innovation. Innovation is particularly important for economies as they approach the frontiers of knowledge and the possibility of integrating and adapting exogenous technologies tends to disappear”.\textsuperscript{117}

Once again there is arguably a disconnect between our first and third reliefs. The first relief seeks to promote total factor productivity, while our third relief seeks to promote resource productivity.\textsuperscript{118} These very different types of productivity are underpinned by very different views of what kind of economic growth best serves the common good. It is once again submitted, therefore, that at least these two elements of the corporate income tax are at odds in terms of serving societal goals.

6.0 Conclusion

The ultimate aim of this article has been to try and understand what the most prevalent direct tax on corporations, the corporate income tax, might best lend itself to practically and theoretically.

Compared to personal income tax, corporate income tax is a relatively recent development. It is therefore unremarkable that there is still a lot of confusion as to the true nature of corporate income taxation. In the unambiguous words of Malcolm Gammie:

“corporate taxation has no clear theoretical basis, no agreed form and an uncertain jurisdictional basis - both in terms of the basis for claiming tax and the amount of the claim. And there is no legal framework within which to attempt to resolve any of those issues.”\textsuperscript{119}

This article has attempted to bring together ideas that are, for the most part, already in the literature so as to begin the process of better understanding corporate income tax. By adopting a framework that depends upon what are, quite unarguably, the core principles by which all taxes should ultimately be judged, it is hoped that some clarity has been brought to our collective understanding of the true nature of corporate income tax.

While there appear to be some strong arguments that corporate income tax fails to satisfy the basic requirements of equity, efficiency and simplicity, there is also a


\textsuperscript{118} Total factor productivity can be defined as the "change in output to all types of inputs", whereas resource productivity can be defined as "the money value of outputs relative to the money value of material resource and non-renewable energy inputs". See Bowler-Smith, \textit{The Taxing Road to Sustainable Growth}, above fn.48, 223 and 224.

\textsuperscript{119} See M. Gammie, \textit{European Communities - Fifteenth Report} (Select Committee on the European Communities, House of Lords, London, 1999) [225].
glimmer of hope to be found in the foregoing analysis. I have argued elsewhere that corporate income tax is potentially a flexible, cost-effective and administratively efficient regulatory instrument. It, therefore, has tremendous scope for helping society to reach its goals. This is particularly important given the context in which the corporate income tax currently operates. Not only do corporations create the lion’s share of societal wealth but there can be little doubt that their activity dispersal (function shifting) has caused no end of problems for domestic tax authorities (profit shifting).

It is my view that corporate income tax, in its current form, has no future in the long-term. However, given that it provides policy makers with a pre-existing legal framework, which makes it a cost effective regulatory instrument, there is a lot to be said for its regulatory utility in the short to medium term.

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120 See Bowler-Smith, *The Taxing Road to Sustainable Growth*, above fn.48, 97.