

Corporate sustainability: accounting standards vs tax by design

David Russell

David Russell is the Head of Department Accounting & Finance based at Department of Accounting & Finance, DeMontfort University, Leicester, UK.

Abstract

Purpose – *The purpose of this paper is to examine the contradiction between sustainability and accounting practices, underpinned by reporting standards and question whether financial statements prepared in this way represent a true and fair view? The paper highlights the disregard for externalities as a fundamental obstacle to sustainable reporting and proposes taxation designs to recognise the costs associated with externalities as the basis for equitable reporting, pricing and sustainable business practices.*

Design/methodology/approach – *The approach taken uses Smith's (1776) tenets of a good tax, to consider characteristics of taxation that may be harnessed for financial reporting, valuation, economic substance and legal form.*

Findings – *The findings reveal a case for further examination of the efficacy of taxation, alongside a full-cost accounting approach, to benefit sustainable reporting.*

Research limitations/implications – *The implications of the research are a possible whole reappraisal of costs and prices to recognise the sustainability dimension and place it at the heart of the corporate agenda. The limitations arise from contestable valuation of sustainable matters, arising from a lack of an agreed theoretical framework.*

Originality/value – *The paper proposes a realignment of costs and prices to correct market imperfection through the innovative application of taxation, but without a fundamental reappraisal of the economic status quo upon which Western-style capitalism is underpinned.*

Keywords *Corporate social responsibility, International accounting standards, Full-cost accounting, Taxation design*

Paper type *Conceptual paper*

Introduction

The environment and sustainability are being increasingly focused upon for society, partly as a consequence of the expansion of the global energy system (Jaccard, 2006), providing unparalleled increase in the destruction of the natural environment, with little concern or accountability for the same in corporate reporting.

Environmental sustainability matters are inextricably linked with the implications for the long-term survival of society. The financial implications arising from a lack of recognition of sustainability matters is, in the absence of a conceptual framework for *full-cost* reporting, difficult to account for with credibility.

There is inconsistency between sustainability and an economic model which through the implementation of accounting practices underpinned by accounting standards, appears to contradict fundamental accounting concepts. Financial reporting recognises value, without acknowledging the full costs of sustainability, which would be expected of the “matching” concept. For “prudent” accounting practices to conclude that activities are viable, whilst disregarding the rate of consumption of scarce resources resulting in finite resource depletion would appear contradictory. Finally, the failure to adequately account for sustainability may challenge the fundamental concept of “going concern”, which assumes

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that the organisation will continue in perpetuity. Values reported on this basis may alter significantly if it were no longer the case. The disregard of sustainability implications in fundamental accounting concepts would appear incongruous. This raises the question as to whether financial statements which fail to adequately account for sustainability should be qualified?

The full costs of sustainability are not recognised, as they are not easily captured and posted into accounting systems. To do so would introduce costs into companies that have been previously disregarded. This would result in recognition of a different and probably lower value for business activity and may question the viability of certain activities that involve excessive resource consumption and pollution compared to their value added.

This paper argues that the tenets of accounting, with regard to valuation, prosecuted through the application of accounting standards for reporting, should be challenged. The discourse questions whether accounting itself, in its present form, is sustainable and discusses the feasibility of a paradigm shift, utilising existing means to realign accounting to economic theory, to recognise previously disregarded externalities in an attempt to improve reporting.

Background

The world has witnessed an exponential increase in the consumption of finite non-renewable resources for energy production (Jaccard, 2006), coupled with substantial destruction of the natural environment. Weizsacker and Jesinghaus (1992) observed that the consequence of further growth in this way would jeopardise prosperity, highlighting its unsustainability.

The Brundtland Report (1987) referred to sustainable development as “Development that meets the needs of the present, without compromising the ability of future generations to meet their own needs” (UNCED, 1987, p. 8).

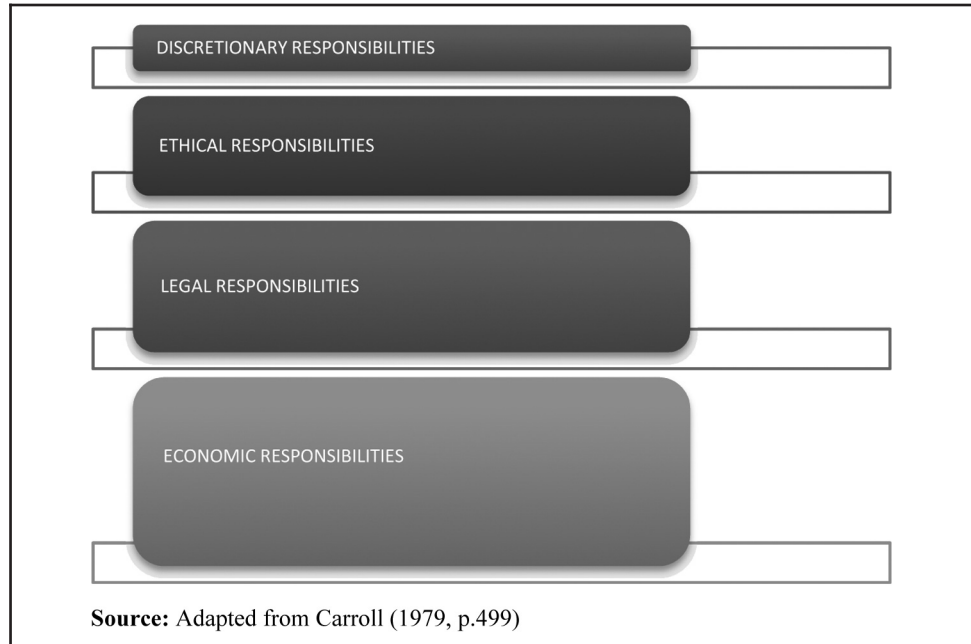
Interest into how to account for sustainability matters has become an area of considerable debate for the accounting profession. Aras and Crowther (2011) contend that resource depletion with respect to energy has ignited the current interest in sustainability as we approach *Hubbert's Peak*, after which oil production will start to decline (Hubbert, 1956).

Corporate reporting, applying internationally agreed accounting standards, is an attempt to harmonise measurement and provide some consistency for the reporting of company performance. The absence of specific International Financial Reporting Standards (IFRS) for environmental sustainability, with regard to credible valuation, or alternatively, sustainability being embedded into all standards, points to a regulatory failure of an order of magnitude. This possibly represents a deficiency in our economic, theoretical or conceptual framework.

The definitions of the fundamental concepts of accounting appear too narrow to encompass matters of significance with regard to sustainability, generally being confined to contingent liabilities, or narrative for corporate social responsibility (CSR), the latter designed for consumption by a wider audience than financial analysts. Indeed, the lack of an agreed definition of what constitutes CSR (Ortiz-Martinez and Crowther, 2005) or how CSR may be effectively quantified and reported, remains problematic, not least because those that are involved may be affected by institutional influences and may, as a consequence, respond in a variety of ways. (Scott, 2005).

Carroll (1979) discussed a three-dimensional conceptual model of corporate performance, encompassing a definition of CSR, social issues for the organisation and the social responsiveness of an organisation. Carroll (1979) categorised social responsibility into four groups using a relative proportions diagram to illustrate “the magnitude of each responsibility” (Carroll, 1979, p. 499; Figure 1)

Figure 1 A four-group relative proportions diagram illustrating the magnitude of responsibility



The dichotomy between CSR and financial reporting, the latter emphasising maximising shareholder wealth (Aras and Crowther, 2011), results in CSR and sustainability reporting of a variable quality. This may be as a consequence of several institutional conditions, which may impact on this relationship (Campbell, 2007) which vary between regulative elements (North, 1990) normative elements (Hughes, 1939) and cultural – cognitive elements (Scott, 2001). However, as Carroll (1979) points out, “social responsibility is not separate and distinct from economic performance” (Carroll, 1979, p. 503), instead it should be viewed as a component part of the social responsibility of business. Financial reporting standards, in their current form, fail to meet these expectations because social responsibility is not explicitly recognised through financial reporting, except to the extent of an immediate impact on bottom-line financial performance within the year, as opposed to any recognition of CSR as an asset or liability within the statement of financial position.

The views of proponents of CSR are contradicted by Friedman (1962) who argued that social responsibility has the potential to undermine free society and that the responsibility of company executives must not extend beyond maximisation of shareholder wealth.

The consequences of unabated increasing rates of consumption of natural capital lead to an urgency to recognise environment and energy challenges in financial reporting through the realignment of accounting policies, economic theory and, specifically, the contribution that accounting for sustainability can make for specific forms of (non-substitutable) natural capital by internalising previously disregarded externalities. Gray (1992) acknowledged these limitations of accounting and proposed a paradigm shift to recognise such matters as part of reporting. The theoretical challenge lies in determining a conceptual framework underpinning accounting, which accurately reflects and assigns damage and repair costs to an entity.

Theoretical underpinning

IFRS should underpin a reporting system, which demonstrates the extent to which actions in an organisation are desirable, proper or appropriate (Suchman, 1995) and this requires agreements on social constructs to legitimise the former. Legitimacy in this context is not

a benign process (Lindblom, 1994). Carroll (1979), Wartick and Cochran (1985) and Wood (1995) attempted the construction of models for corporate social performance. These models emphasise social responsibility, social responsiveness and corporate behaviour (Moir, 2001). However, Gonella *et al.* (1998) acknowledge that measurement in this context remains problematic. Such methods are subject to ongoing debate (Moir, 2001), although there appears to be some consensus around the principles of stakeholder analysis.

To consider a conceptual framework acknowledging sustainability, some appreciation of sustainability in an economic context is necessary. Neumayer (1999) suggested that there are two very different economic paradigms of sustainability, based upon weak and strong forms of sustainability.

In its weak form, sustainability requires the maintenance of the combined aggregate total of man-made capital and natural capital to be constant. The weak sustainability paradigm asserts that natural capital may be depleted as long as man-made capital is substituted. On the other hand, in its strong form, sustainability essentially asserts that natural capital is non-substitutable with other forms of capital.

Daly (1995, p. 50) observed that “More and more it is [the] remaining natural capital that now plays the role of limiting factor”. Aras and Crowther (2011, p. 3) concur that the planet’s finite resources are the “limiting factor to growth and development”.

The flaw in the current system of financial reporting is that value added is only recognised as a by-product of consumption of capital, resulting in accounting being harnessed to present an incomplete picture, based upon misplaced values (Aras and Crowther, 2011), which fundamentally ignore the strong sustainability paradigm. In this context, the financial reporting of success could be viewed as a contraindication to sustainability.

There is a need to address the deficiencies of financial reporting, whilst recognising that the fundamental attributes of our economic system are unlikely to change in pursuance of a strong sustainability agenda. There are many vested interests in the status quo. However, notwithstanding that, the possibilities of socially and politically acceptable reforms exist using accounting, which could provide opportunities through incentive for improvement to position sustainability at the heart of reporting.

Deficiencies of accounting

From an environmental sustainability perspective, current prices may not encompass all environmental matters, resulting in a situation where private decisions taken do not report the full or total public cost of the actions. These *externalities* arise when the global costs of a private decision are not entirely borne by the decision maker, but are borne in society as a whole. Such costs, it is argued, should be monetised, internalised and accounted for such that the costs are borne only by the entity concerned. For example, the accumulation of CO₂ resulting in climate-related problems is a cost. Climate change caused by human activity is an externality, as explained by Pigou (1912), and it remains uncorrected by the market or any institution. Stern (2007) concurs that such costs are not addressed via markets, or in other ways, allowing the full consequences of the cost of these actions to remain unaccounted for.

IFRS should require that such external costs are fully addressed by those responsible. However, internalising externalities presents many theoretical challenges. If (say) pollution costs are to be accounted for, the costs of the particular pollution must first be identified and monetised. To include the implications of pollution in economic, costing and financial reporting systems is not an easy task. Stern (2007) noted that the approach to addressing such externalities is further complicated because the impact of, in this case pollution, is independent to its emission as the effect of pollution is dependent on geography and other factors such as reliance on agriculture.

The ownership of externalities that arise in this context, notwithstanding the substance over form debate, is also fundamental to reporting. This inability to recognise the value of something that exists without the transfer of private property rights (e.g. fresh air) may result in economic and business decisions being made with little or no bona fide concern for the environment and without the determination and recognition of possible future contingent liabilities which may crystallise when IFRS for sustainability are developed and implemented. Such reporting standards would have to go beyond the scope of [IAS 37 \(2012\)](#), Provisions, Contingent Liabilities and Contingent Assets, which does not extend to environmental and social responsibilities due to a lack of “appropriate recognition criteria and measurement bases” ([IAS 37, 2012](#), p. 1). The possibility of disclosure, rather than recognition of a contingent liability exists, where existence will be confirmed by the occurrence of one or more uncertain future events.

However, it may be hypothesised that such matters are more likely to be more comprehensively disclosed with voluntary corporate environmental reports, using guidelines under the Global Reporting Initiative (GRI) 2000, sustainability reporting guidelines and ISO 14031 environmental performance evaluation ([Morhardt et al., 2002](#)). There is evidence of increased reporting for a variety of reasons, including regulatory compliance and reducing the costs of future compliance ([Dechant et al., 1994](#)), compliance with industry codes ([Howard et al., 1999](#)), environmental visibility ([Bowen, 2000](#)) and improving stakeholder relations ([Rivera-Camino, 2001](#)). However, in practice, such voluntary reporting reveals a minimal approach to disclosure and that “most companies are content to leave their financial reporting to their annual financial reports” ([Morhardt et al., 2002](#), p. 225). This maintains the status quo for income value and capital ([Hicks, 1946](#)); income cannot be defined without reference to assets or liabilities ([Bromwich et al., 2005](#)).

It may be theorised that externalities should be imputed into accounting systems alongside the costs traditionally incurred by the organisation such that externality recognition and valuation feature in corporate reporting. However, whether the reporting of imputed costs is sufficient to change behaviour is debatable. From an environmental sustainability viewpoint, reporting alone would not prohibit some of these costs being borne elsewhere by parties not responsible for causing the cost in the first place. However, imputed costs could be used as a basis to lock in reserves to prevent all profits recognised from being utilised, for example as dividend, but retained to cover contingent liabilities as implied earlier. Such reserves retained in this way could be disclosed separately and provide an immediate quantification of corporate environmental impact and, moreover, give an indication as to the extent of potential contingent liabilities that may not otherwise be formally recognised at that point in time.

In the absence of a conceptual and theoretical framework to encompass externalities, intervention through the application of specific IFRS to achieve this becomes necessary.

According to [Bebbington and Thomson \(1996\)](#) accounting has the potential to address environmental and sustainability issues in two ways: first, in leading decision-making within the organisation and second in how an organisation communicates to stakeholders. However, [Bebbington and Gray \(2001\)](#) made two significant observations when attempting to develop a framework for sustainability and accounting. First, linking sustainability to accounting serves to highlight an enterprise’s unsustainability. In addition, second, the acknowledgement of this link precludes a business as usual scenario.

Externalities: the challenge

The deficiencies in our economic system give rise to externalities, arising from, for example, property rights not assigned to individuals, permitting free access to resources ([Newbery, 1980](#)). Externalities may also arise as opportunity costs, requiring cost determination in perpetuity for the use of a scarce resource now. Such matters should be reflected in the

development of theory and models in pursuit of the valuation and monetisation. However, the efficacy of accountability in this context requires environmental impact to be recognised for an association with the activity that caused the impact to be identified. The methodology for monetising externalities and inclusion for reporting purposes must be conceptually feasible, credible and practically viable. The ambiguities associated with this are acknowledged by Stern (2007) highlighting the uncertainty for incentives to innovate.

Full-cost accounting (FCA) is the principle of economic valuation for the consumption of the environment as part of economic activity of an organisation. The International Federation of Accountants (IFAC) defined FCA as “the commonly accepted term applied to the identification, evaluation and allocation of a combined and potentially complex set of conventional costs, environmental costs and social costs”.

Bebbington *et al.* (2001) devised a four-stage approach to FCA Figure 2.

Provided the reservations of “both a technical and political nature” (Bebbington *et al.*, 2001, p. 16) can be overcome, an FCA model could provide for externality identification, recognition and quantification alongside the recognition of external impact. Moreover, in so doing, FCA provides the means to improve analysis and scrutiny (Macve, 1997). FCA does not appear to contradict the tenants of established economic principles; on the contrary, it may provide an opportunity to legitimise an imperfect economic model, possibly increasing the likelihood of acceptance and adoption, by stakeholders with some bias towards the existing economic status quo.

From a technical perspective, organisations will need to capture and audit trail an increasing amount of data, which may not arise via transaction processing systems. This may necessitate new approaches to data capture and verification.

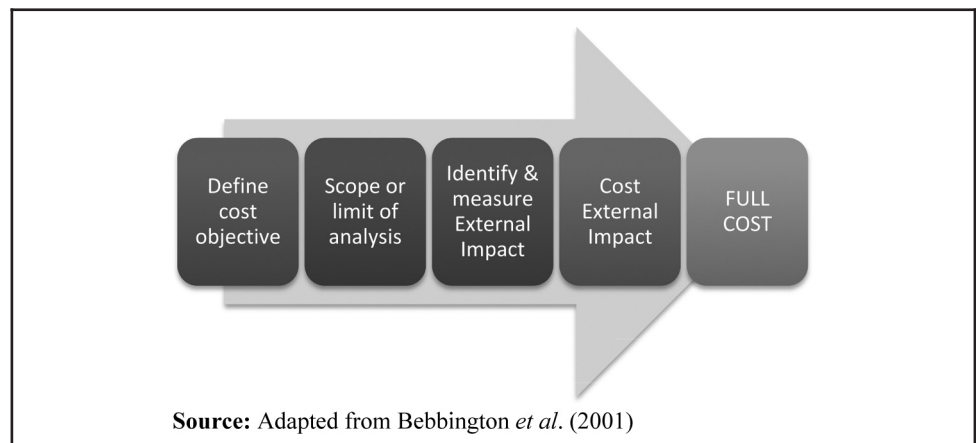
From a political perspective, the efficacy of an FCA approach relies upon adjusted prices for goods and services, which is beyond a pure accountability exercise, resulting in higher reported costs and the consequences.

It should be recognised that resistance to such an approach may be encountered on an increasing scale, lead by the most unsustainable practices giving rise to the greatest financial gains.

A paradigm shift or adjustment?

CSR could be described as a mode of “sustainability governance that actually integrates three dimensions: a business, a societal and a political dimension” (Barth and Wolff, 2009, p. 6), These relationships between organisations, society and public administration were acknowledged by Albareda *et al.* (2007). The recognition of the necessity of externality

Figure 2 A four-stage approach to FCA



valuations for financial reporting purposes in pursuit of “sustainability governance” is very significant. In addition, the need for the prices of goods and services to be modified through a paradigm shift, based upon a redefinition of economic principles or rationally adjusted, using an agreed analytical framework, presents the accounting profession with a theoretical challenge, requiring the derivation of appropriate IFRS to accommodate. This presents both a theoretical challenge and a test of the independence of the profession, in the case of the latter, being able to resist the lobbying of stakeholders with the greatest unsustainable practices.

The basis for a conceptual framework for accounting for sustainability realised through accounting standards requires an acknowledgement of the necessity to preserve natural capital through the internalisation of previously disregarded externalities into reporting systems and recognising the liability potential this may pose. Whether this takes the form of imputed costs, which are subsequently “locked into the accounts” through undistributable reserves, leaving existing costing and pricing mechanisms intact, rather than a wholesale review of costs and prices to permit the consequences of unsustainable actions to enter the supply chain, as proposed by strong sustainability advocates is debatable.

However, it can be acknowledged that the principle’s of FCA offer some scope for accounting standards reform. Such a reform to pursue either a weak or strong sustainability agenda would be subject to politics and compromise along the way, which is unlikely to result in a paradigm shift, or changes of an order of magnitude to achieve the desired objectives. [Russell \(2011\)](#) suggests that such an agenda may be pursued with greater efficacy through adjustments to prices by a levy on the supply side through adjustment to the system of taxation.

Adjustment through taxation

“The case for pricing environmental externalities through the tax system is a strong one” ([Mirrlees et al., 2011](#), p. 345). Taxation is “a compulsory levy made by public authorities for which nothing is received directly in return” ([James and Nobes, 2000](#), p. 10). This levy is used, at least in part, to endow society with services for the public good. Moreover, “environmental taxes can be powerful policy instruments” ([Foley, 2003](#), p. 21) and may serve the requirement of preservation of natural capital well, either by discouraging consumption and pollution and/or the possibility of repair or clean up of natural capital, feasible through hypothecation of environmental taxes.

[Pearson and Smith \(1990\)](#) argued that “A tax (if set at the right level – an important proviso!) will often be more economically efficient” [than regulation] and “allow individuals to weigh up the costs and benefits of their behaviour on a case-by-case basis” ([Pearson and Smith, 1990](#), p. 2). It follows that adjustments to the system of taxation could serve as an alternative to wholesale IFRS reform, or possibly complement IFRS reforms, underpinned by a conceptual model recognising a sustainability paradigm.

Taxes provide an opportunity to recognise the requirement for a conceptual framework underpinning FCA to attribute a monetary value to a previously disregarded externality and, in so doing, report the “full cost” associated with the consumption of natural capital.

In this context, taxation may provide, first, a reporting, and second, an accountability opportunity for economic entities, which permits the reporting of the financial implications of the consumption of natural capital, along traditional reporting lines, without the need for imputing values to represent this; the latter providing an artificial barrier to the use of reserves for the organisation. Instead, the reporting of lower profits would have the same effect, with the difference being retained or transferred to the exchequer for hypothecation. However, such an approach should not increase the overall burden of taxation for business ([Ekins, 1999](#)) so as not to depress profitability, but to incentivise the more efficient use of resources and pursue more sustainable practices.

The potential for economic distortion exists, as sustainability is increasingly recognised in this way. Material changes to prices for goods and services will occur. Whether this is regarded as an economic distortion is contestable, as it may be asserted that this is more a recognition that prices have been distorted and unsustainable practices have been undervalued. What is less contestable is that such a measure would change relative prices, and this may result in higher production costs (Tulpule *et al.*, 1998) which, in turn, may have an effect on international competitiveness (Ekins, 1994). Individual companies that have previously engaged in the most unsustainable practices would suffer the greatest adverse effects in these circumstances. Pearson and Smith (1990) addressed this by placing reliance on a floating exchange rate to maintain competitiveness.

Canons of taxation

Smith (1776) proposed four canons of taxation:

1. Equity – the fairness of the tax taking into account relative contributions.
2. Certainty – the certainty (not arbitrariness) of tax liabilities.
3. Convenience – the payment of tax and the timing for this.
4. Efficiency – the costs of collection should be a small proportion of revenue raised. Distortionary effects on the taxpayer should be avoided.

Kay and King (1991) emphasised the distinction between “formal incidence” and “effective incidence” of taxation. The former refers to those who have legal responsibility for payment, whereas the latter is concerned with those who will ultimately bear the taxation burden. For example, where a manufacturer includes tax on the selling price of finished goods, but these goods are eventually purchased by consumers. The incidence of taxation may be significant in understanding how taxation may be used in corporate reporting, in that taxes may be shared with several parties, which has implications as to their efficacy in affecting demand, based upon price changes as a consequence of revised taxation arrangements.

A distinction should be drawn in the application of taxation in this context, between the use of taxation to affect costs, prices, influence demand and possibly substitutability with the use of taxation to primarily recognise previously disregarded externalities, using an FCA approach in financial reporting to “lock in” value into the business, thus preventing higher than prudent reserves being recognised and potentially distributed.

It is worthy of mention that any taxation reform, either progressive or regressive, will have distributional consequences. Although Kaplow (2011) suggested that concerns over such consequences may be unnecessary. It is not the purpose of this paper to consider the implications of the same except to acknowledge that such consequences may be difficult to model with precision and that where the effects are increasingly adverse, the acceptability of the tax is likely to diminish.

Such tax developments may be best engineered as a modification to existing taxes, with a history of a high degree of compliance. The rate of tax should be sufficiently significant to recognise a sustainability agenda and the consequences of consumption.

The tenants of taxation design

The underlying principle of economic valuation for consumption of the environment as part of the economic activity of an organisation is only one part of the challenge. How such valuation may demonstrate efficacy, whilst simultaneously providing the opportunity of internalisation of previously disregarded externalities, in pursuit of the “Holy Grail” of natural capital maintenance internalised by utilising a system of taxation requires the identification of characteristics, which must be consistent with the four “canons” of taxation (Smith, 1776) to underpin taxation design.

Those taxation characteristics, which remain consistent with the four “canons” of taxation whilst simultaneously providing the opportunity to recognise the “full costs” of business activity, could provide the basis for the tenants of taxation design, which would underpin a conceptual framework for taxation in this context. Such characteristics may be identified from earlier studies and evaluated against [Smith \(1776\)](#) for this purpose. [Table I](#) summarises this.

The conceptual challenge is how to recognise these characteristics of taxation design alongside an FCA approach to underpin financial reporting to address the current contradiction between sustainability and accounting practices in pursuit of a strong sustainability agenda.

Conclusion

Optimal taxation theory “encapsulates the nature of the value judgements affecting policy choices” ([Creedy, 2011](#), p. 367) and is ultimately constrained by government budgets ([Creedy, 2011](#)). Taxation reform will inevitably involve trade-offs and estimates of elasticity, which can be seen as reasons to resist reforms. It is acknowledged that there are always tensions between “what is economically desirable and what is politically practical” ([Chote, 2010](#)), but the identification of characteristics of taxation design, which are consistent with that of the study by [Smith \(1776\)](#) in the context of pursuit of the reporting of “full costs” is significant in contributing to the debate on corporate sustainability.

The advisory committee on Business and the Environment (1996) acknowledged the feasibility of partial internalisation of externalities and the significance of economic instruments in achieving this. IFRS should permit accounting to be realigned to take into account as far as is possible the sustainable implications of economic and business decisions. There is scope to extend the IAS 37 to include environmental and social responsibilities, which could internalise previously unaccounted costs, without recourse to taxation modification. This requires recognition by the accounting profession that it has a fundamental role to play in disclosure through asset and liability measures in financial statements, beyond sustainability reporting. Such recognition challenges the profession to reappraise the fundamental purpose of financial reporting, through redefinition of

Table I Characteristics of taxation design and the four “canons” of taxation

| <i>Characteristics</i> | <i>Equity</i> | <i>Certainty</i> | <i>Convenience</i> | <i>Efficiency</i> |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
| Specific group of existing taxpayers (OECD, 1976) | | | | <input type="checkbox"/> |
| Sliding Scale of Taxation (Pearce, 1991 ; Pearson and Smith, 1990 ; Russell, 2011 ; Uzawa, 2003) | <input type="checkbox"/> | <input type="checkbox"/> | | |
| Based upon existing system of taxation (with high degree of compliance) (Kay and King, 1991 ; Smith, 1993 ; Titenberg, 1985) | | | <input type="checkbox"/> | <input type="checkbox"/> |
| Low compliance costs (Kaufmann, 1991) | | | <input type="checkbox"/> | <input type="checkbox"/> |
| Revenue neutrality (Ekins, 1994, 1999) | <input type="checkbox"/> | | | |
| Significant tax increases for high natural capital consumption (Smith, 1993) | <input type="checkbox"/> | | | |
| Opportunity to reduce tax paid (through reduction in natural capital consumption) (Smith, 1997) | <input type="checkbox"/> | <input type="checkbox"/> | | |
| Prior anticipation of change (Ekins, 1999) | | <input type="checkbox"/> | <input type="checkbox"/> | |
| Compulsory taxation component (Russell, 2011) | <input type="checkbox"/> | <input type="checkbox"/> | | |
| Utilisation of “Benefit in Kind” (Russell, 2011) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

stakeholders and recognising the necessity for a systematic approach to sustainability. This may require contributing to a broader public policy debate.

The modification of reporting standards, using taxation may contribute to arresting the consumption of natural capital. Taxation provides the opportunity for the accounting profession to move towards a strong sustainability reporting agenda without wholesale review or change of economic theory. Moreover, taxation provides a “double dividend” potential (Pearce, 1991, p. 940) in terms of raising revenue and mitigating unsustainable behaviour.

Implicit in the implementation of a revised system of taxation is the need to recognise the characteristics of such taxes that are consistent with the four “canons” of taxation (Smith, 1776) which, in turn, are likely to lead to efficacy in taxation to meet the principles laid down in the Brundland report (1987).

The characteristics of taxation design identified are significant in themselves, but the rates of taxation and how this may be integrated with an FCA approach requires further research.

Taxation-based sustainability accounting, underpinned by Smith (1776) adopting the principles of an FCA approach, provides opportunities for improvement for the environment and the financial reporting system. It is acknowledged that the rate of taxation required to curb or preclude consumption activity requires specific data on elasticity (Pearce, 1991), and the rates of taxation to achieve this is unlikely to be consistent with the repair cost. Moreover, sustainability taxation may lead to the earmarking or hypothecation of such proceeds (Smith, 1993), which, in turn, may be influenced by revenue considerations (Smith, 1993).

There is little appetite for accounting standards reform, nor taxation reform to pursue a “strong” sustainability agenda, both of which have the potential to suppress profits. The latter may also provide for tax planning/avoidance opportunities, requiring a careful scrutiny of the “tax gap” (James and Nobes, 2000) between compliance and non-compliance.

However, without intervention, in a rather similar vein to banking, companies may in the short term, continue to report performance on the basis of unsustainable practices, which contradict the fundamental principles of accounting. In the long term, these liabilities arising from the overconsumption of natural capital will have to be recognised and declared. As natural capital becomes scarcer, the financial implications of unsustainable practices become significantly greater. In addition, without the necessary provisions for such liabilities crystallising, society may again be faced with underwriting the consequences of consumption decisions, where profits have been overstated, reported and distributed, before the extent of liabilities are fully understood or disclosed.

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About the author

David Russell is the Head of the Department of Accounting and Finance at the De Montfort University, Leicester, UK. David conducts research and lectures on accounting and taxation matters with regard to the environment. David Russell can be contacted at: drussell@dmu.ac.uk

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