

A3. Linking sustainability, accounting and financial management

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This paper describes a Level 3 undergraduate module, *Social and Environmental Accounting*¹. The module is designed to be an integral element in a balanced and modern study of accounting, reflecting the strong and increasing interest shown by opinion-leaders in the accounting profession such as national and international professional accounting institutes and leading accountancy firms. This in turn reflects increasing recognition generally that sustainability can no longer be seen as merely a matter of either personal conviction or a need for minimal compliance with regulatory standards, or even of corporate reputation (which is in any case not necessarily a concern for all companies). Rather, sustainability is an aspect of businesses' strategic environments that is likely to become increasingly significant as a determinant of business success as defined and measured by the achievement of conventional financial objectives².

Sustainability in all its dimensions has recently become particularly topical and well recognised, with publications such as the Stern Report (2006) hitting the newspaper headlines and impacting on governmental policies in the UK. This has highlighted for students and the general public the extent to which environmental public policies may be implemented by governments through economic instruments such as taxes and 'cap-and-trade' schemes such as the European Emissions Trading Scheme, as well as through the natural market laws of supply and demand, which impact directly on costs, profits and values. Rather than starting from a perspective which is antagonistic to conventional business operations *per se*, this module deliberately takes a business perspective and asks how mainstream business accounting methods can be related to, and adapted

¹ The module is designed to cover the main aspects of sustainability accounting as a whole, although its content reflects the fact that, at least to date, most research and practice has been in accounting which is related to environmental rather than social issues.

² The module deals with accounting at the level of an individual company or equivalent entity such as a public-sector agency or charity, rather than with accounting at the level of (for example) national income. Although these entities are not restricted to only the incorporated private sector, for simplicity the terms 'company' and 'corporate' are used here.

to support exploration of, the issues of sustainability. For this reason students who express views derived from Friedmanite neo-classical economics are positively welcomed on the module as this provides an opportunity to explore how sustainability can be part of an enlightened and long-term pursuit of profits and value, rather than solely the concern of those with a personal value-driven conviction.

Aims

The main approach of the module is to take a selection of the leading research outputs that have been published to date and for students to critically appraise and evaluate these. Through this exercise the module aims are achieved. These are to increase students' knowledge of current research on environmental accounting; to develop understanding of the environmental context of the economy and sustainability, including the political and macro-economic issues underlying this; and to develop students' critical evaluative abilities.

Rationale

The module was developed in response to several stimuli including support of the University's position on sustainable development and its Strategic Plan, but primarily in recognition of the obvious increasing importance of sustainability to business and therefore to accounting and business studies students. The growing body of research on environmental accounting that has been generated and which is available to support a degree programme was an additional impetus.

Although there is a substantial and growing body of research materials, in an as-yet immature area such as environmental accounting these are more akin to a collection of separately developed experimental projects and techniques rather than a coherent and generally recognised body of expertise. There is as yet nothing equivalent to the set of principles and methods that are reflected in Financial Reporting Standards and generally referred to within the accounting profession as Generally Accepted Accounting Practice (or GAAP), or even a similar degree of consensus over what constitutes generally recognised good practice in areas of accounting which are not subject to GAAP, such as its use internally within organisations to support their managements in decision-making (Management Accounting).

The intellectual approach underlying the design of the module is therefore to approach the subject in the same way as an accountant in practice or business would (or indeed, any manager from any function), and to take an open but critically questioning approach to the diverse body of existing knowledge. The module is therefore designed around a number of leading studies, reports and case studies, in each case evaluating its internal logic and evidence base and assessing the business situations in which it may be relevant for use³. The pedagogic approach is therefore fundamentally different from that with which most students will already be familiar from their previous studies of many other aspects of accounting such as (for example) financial reporting and taxation, where the methods and techniques may be highly complex but there is usually little doubt over their relevance in particular situations so that a more didactic approach is appropriate and largely inevitable. Helping students to appreciate that a similar rule-based approach is not universally appropriate is intended to encourage them to become more eclectic in their acceptance and readiness to vary their approaches and to fit these to differing specific situations, as well as to become more tolerant of differences in approaches in future colleagues from other disciplinary backgrounds and managerial functions. It also has a critical role in developing students' skills in inquiry, presenting a case effectively to different audiences and in different contexts, in teamwork and working to a consensus, and other skills required by graduates who face the demands of the contemporary workplace.

A further underlying theme running through the module is to relate the module content to what students will have already learned in previous accounting and finance modules (and so far as possible to any employment experience through placements or otherwise), and to encourage them to see sustainability accounting as being to a large extent a specific application of conventional accounting principles and techniques to a particular aspect of management. For example, the well-known 'five capitals' model of sustainability is positioned in the context of the long-established concept of 'capital maintenance' in economics and accounting, with the different definitions of 'capital' that this can mean. Students are encouraged to apply the well-established management accounting distinction between 'attention-directing' and 'problem-solving' information

³ This literature is supplementary to, rather than a replacement for, a wider background reading of more general literature.

as a criterion to distinguish between different prescriptive models of environmental accounting.

Implementation

Copies of selected research papers and reports are distributed to students at the end of a class with a request that they read these before the next class and arrive at that class ready to discuss those papers/reports. In the following week's class small groups of four or five students are set and each is provided with a list of discussion topics in order to provide some focus, although students are also encouraged to think beyond what is contained in these topics. The groups are randomly set so that so far as possible students will find themselves working in a number of different combinations over the semester, in order to encourage the development of their ability to work at short notice in task-based teams with strangers (the natural default if students are left to make their own choices tends to be that the same groups of friends end up working together every time).

Groups are then left to discuss and form their own responses to these topics, with the tutor on hand and sitting in on each group in turn to ensure that it is working effectively, and available to be called on for information and advice if needed. At the end of the pre-set group-working time the de-brief period commences, during which each group is asked in sequence for its responses to each topic. A specific student is nominated (at random) for each topic rather than leaving the group to nominate its own spokesperson, in order to provide an equal opportunity (and responsibility) for both the naturally voluble and those of a more retiring disposition (and also as a deterrent against possible 'free riders' during the group-working, who might hold back from full participation in the expectation that others will cover for them in the de-brief).

As each group reports back, the tutor summarises the main aspects of their response on a whiteboard or flip chart. At the end of the responses on each topic the tutor initiates an open discussion by either raising questions of specific responses or (preferably) by identifying aspects where different teams' responses differ and encouraging them to confront their differences and see if these can be reconciled.

This practice-derived approach is also followed in the main module assessment. This is an assignment in which each student is required to select a pair of companies' published Sustainability Reports and evaluate

these from the perspective of a hypothetical third organisation which is itself considering publishing such a report for the first time and is interested to learn from existing examples of good practice⁴. Each student therefore bases his/her assignments on:

- Their chosen pair of companies' reports (the assignment is constructed so that each student's choice of companies is unique, so students can be positively encouraged to collaborate since there is no consequent risk of corrupting the integrity of the assessment results);
- The Sustainability Reporting Guidelines of the Global Reporting Initiative (GRI), which students are encouraged to use as criteria;
- As a guide to current recognised good practice, the results and Judges' Reports from the annual Sustainability Reporting Awards Scheme run by the Association of Chartered Certified Accountants (ACCA).

Links to environmental, social and economic sustainability

The module has an obvious direct relevance for economic sustainability at a corporate level, in common with most accounting and financial management modules. The linkages with environmental and social sustainability relate both to the capacity of the accounting function to support the company's management of its sustainability issues (for example, by applying well-developed accounting principles to the preparation and publication of corporate sustainability reports), and the relevance of sustainability to business performance as defined and measured in conventional financial terms.

Feedback

Some students have initially found the learning style unfamiliar and a cause of uncertainty, particularly when they have previously been accustomed to a more didactic style of teaching, but the majority have expressed

⁴ External publication of a sustainability (or environmental, or social, or corporate responsibility, and so on) report is entirely voluntary for each company, and there are no binding rules on their content. Most major companies voluntarily choose to publish some form of sustainability report, although predictably there is a wide diversity in their content and form which is generally unhelpful to their readers.

appreciation for this as a complement to the skills that they have developed through other approaches. Some have also found the participative style unfamiliar and difficult, with the requirement to be ready to speak up in class when asked to report on their group's results, in particular those from other cultures where this is less customary. However by the end of the module the consensus amongst the majority of these students too has been that although this might have been found initially difficult, it was an important aspect of their own development as accountants and managers able to operate in an international context. Students invariably commented positively on the group discussions approach, for example, 'excellent way of expressing ideas and gaining an understanding of the topic' and the relevance of the subject matter, for example, 'introduced a new subject area' and 'a current issue for businesses today'.

Some students initially expressed discomfort at open-ended and uncertain nature of both the learning approach, for example, in reply to 'did you have any learning difficulty? 'Trying to see through all the information to get to the basics, the core information' and of the assessment task but then clearly overcame this and showed considerable commitment, perceptiveness and creativity in their submitted assessments.

Strengths and weaknesses

The strengths of the module are its positioning sustainability as an integral element in the current business environment rather than a separate and specialist issue of interest and relevance to only a personally committed minority; relating the content to other mainstream accounting and business management skills and knowledge which students will also be learning in other modules of their degrees; and helping students to develop new skills in learning and working with other that they may not have encountered in other aspects of their studies

There are a number of practical challenges involved in delivering the module, including that the logistics as explained above are potentially rather cumbersome and expensive in both staff time and printed or photocopied papers⁵.

⁵ Fortunately copyright is not a problem with any of the materials selected for this module – one of the helpful aspects of this area is that because a lot of materials are produced or sponsored by either public sector or charitable bodies or companies who are keen to disseminate their outputs, they are free of copyright constraints.

Distribution of materials can prove difficult when students miss classes and are unable to collect the hard copies. This can happen frequently for a variety of reasons, particularly (though not only) in the early weeks of the semester, when students are still deciding on their options. For papers that the tutor has available in electronic format, these are posted onto the University website after they have been initially handed out in class and can subsequently be downloaded and printed off by students (which also creates an additional small financial incentive for being there to collect the hard copy in the first place). However some materials are provided by their publishers only in hard copy so this approach is not always possible, in which case the only practical solutions are approximate *ad hoc* methods such as leaving spare copies in a common space from where students can subsequently collect them.

Predictably, not all students do in fact actually read all the materials before class. There is little that can be done here other than so far as possible to rely on peer pressure to encourage pre-reading and to emphasise the importance to students of this, since not to do this will inevitably reduce the value that they can personally derive from attending classes.

As noted above, this module design and the related method of distributing materials is unavoidably heavy in paper, although any attempt to replace hard copies with electronic distribution would be academically counter-productive since it would inevitably mean that more students either had not pre-read the materials before class or did not have copies to refer to in class. It could also be both environmentally counter-productive and economically inefficient too since it could double the quantity of paper required (students' printers usually print only on one side of the paper, whereas the University's Reprographics service can print both double-sided and at lower cost per page).

The inevitable observation sooner or later from a student that because of the high use of paper the module does not invariably 'practice what it preaches' also provides an excellent introduction to a sub-theme of the module, that a rational economic and accounting-based approach to sustainability offers a method of analysis that can be used to address some frequently-found misconceptions: in this case, that sustainability is necessarily a matter of private virtue rather than of pragmatic policy. The latter would take the stance that so long as all resources are assessed at their full costs when decisions are taken, including any sustainability-related

costs, then there is no reason to attach irrationally excessive weight to a limited set of the more easily visible factors such as paper use. This is explained to be an example of several other frequently found partial solutions to sustainability challenges which in the absence of rigorous analysis can gain common currency. Other similar frequently found 'environmental sacred cows' which are similarly challenged on the module include, for example, the frequently found perceptions that high recycling rates necessarily indicate positive environmental performance; that a measure of 'food miles' taken on its own is necessarily a complete and relevant indicator; and that public transport (and its positive encouragement by governments, for example, by subsidies) is *ipso facto* environmentally positive.

Programmes

The module is 15 CATS at Level 3 and is studied as an option by between 20 and 30 students each year, in a single presentation of 12 classes of 2 hours each. Most students are Accounting or Business Management majors, with also some students who are majoring in other disciplines who have selected to study this option; the majority are British with a substantial minority of overseas students, the largest group of these being Chinese.

References

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Websites

As noted above (in footnote 5), in this area there are many research outputs and reports published by businesses, academia and research 'think-tanks', and the public sector which their publishers are keen to disseminate widely and therefore make available without charge on the Internet. Students are encouraged to apply their Internet search skills (which are frequently already well developed) to accessing these in their private study; the following leading sites are provided in order to provide some initial encouragement, as well as in some cases also being sources of some of the references listed above.

http://www.accaglobal.com/publications/as_index/	Association of Chartered Certified Accountants; provides a bi-monthly 'Accounting and Sustainability Newsletter', and access to several downloadable documents and a comprehensive range of links to other sites, including the websites of companies who have published environmental/sustainability reports
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http://www.accountingforsustainability.org.uk	'Accounting for Sustainability' project set up by the Prince of Wales in 2006. Provides a very good and up-to-date literature review and report on empirical research done by the project team
http://www.uksif.org/R/Z/Z/sri/main/index.shtml	UK Social Investment Forum
http://www.eman-eu.net	Environmental Management Accounting Network - Europe
http://www.globalreporting.org/	Global Reporting Initiative
http://www.corporateregister.com	a free online database of published environmental and social reports
http://www.ifac.org	International Federation of Accountants
http://www.wbcds.ch	World Business Council for Sustainable Development: international industry association
http://www.wri.org	World Resources Institute, Washington

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