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THE IRISH ACCOUNTING AND FINANCE ASSOCIATION

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The Irish Accounting Association was founded in 1987 to bring together academics from all parts of Ireland in order to advance teaching and research in accounting and related disciplines. In 1991, the name and objectives were changed to include finance.

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Membership is open to those engaged in teaching, research or educational administration in accounting, finance or related disciplines and to those engaged in similar activities acceptable to the Council for membership purposes.

The Association now has members in virtually all third-level colleges that employ accounting and finance academics in both Northern Ireland and the Republic of Ireland. The annual membership fee is €35/£25.

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The *Accounting, Finance & Governance Review* is dedicated to publishing high-quality original scholarly work in accounting, finance and governance. It is eclectic and pluralistic. Papers in all categories of scholarly activity will be considered, including (but not limited to) reports on empirical research, analytical papers, review articles, papers dealing with pedagogical issues and critical essays. Possible topics include financial accounting, management accounting, finance, financial management, capital markets research, governance, performance management, auditing, taxation, public and not-for-profit sector accounting, social and environmental accounting, accounting education and accounting history. The journal encourages critical assessment of current practice, investigations of the impact of accounting, finance and governance on the socio-economic and political environment, and analysis of the implications of policy alternatives. Papers drawing on evidence from specific national settings or wider comparative international settings are welcome.

All submissions that pass an initial editorial scrutiny will be subject to double-blind refereeing. Referees will be asked to assess papers on the basis of their relevance, originality, readability and quality (including, for empirical work, research design and execution).

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Accounting, Finance & Governance Review

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SPECIAL ISSUE ON ACCOUNTING EDUCATION

Guest Editors: Dr Margaret Healy, University College Cork, Ireland & Dr Brid Murphy, Dublin City University, Ireland.

Full paper submission deadline: 29 June 2018

The *Accounting, Finance & Governance Review* is the journal of the Irish Accounting and Finance Association (IAFA) and is dedicated to publishing high-quality original scholarly work in accounting, finance, governance and cognate disciplines.

One of the hallmarks of a profession is the knowledge base to which its members stake ownership and the means through which control over future entrants is enacted and enabled. The epistemology and ontology of professional accountancy practice (Axford, 2005) serve to bind members to a common sense of identity, comprising the communities of practice representative of the accounting profession. Growing demands around employability and the toolkit of a set of transferrable skills place increasing pressures on accounting educators. Coupled with increasing pressure on resources, the increasingly managerialist nature of business school administration has led to concerns regarding the recruitment and training of future accountants and accounting academics (Flood, 2014; Fogarty, 2014; Guthrie et al., 2012). Greater insights into tensions appearing at the interface between expectations of students, employers, academics and professional bodies are needed to inform the future of accounting education.

It is against such backdrop that this call for papers is made for a special issue of the *Accounting, Finance & Governance Review* dedicated to the subject of Accounting Education within its various disciplinary and professional contexts. Robust research from both positivist and interpretivist paradigms is welcomed. The journal also encourages critical assessment of current practices and pedagogies. Papers drawing on evidence from specific national settings or wider comparative international settings are welcome. Possible research areas include, but are not limited to, the following:

- The future of the accounting profession
- The accounting curriculum (including ethical reasoning, employability, technical knowledge base, the development of competence-based learning practices, the skills agenda)
- Transitions to and from the accounting workplace
- Professional scepticism

- Assurance of learning
- Continuing professional development
- The changing role of the accountant
- Student engagement with active learning

SUBMISSION AND PUBLICATION INFORMATION

Submission of full paper: 29 June 2018

Publication (approximately): Summer/Autumn 2019

PAPER SUBMISSION PROCEDURE

Please submit two copies of the manuscript (one with a cover page identifying the author(s) and one without a cover page), in word or pdf format, on or before 29 June 2018, to the following email addresses: Margaret.healy@ucc.ie; brid.murphy@dcu.ie.

Early submission is encouraged.

Papers should not normally exceed 8,000 words. Manuscripts should not have been previously published or be under consideration for publication elsewhere. They must be in English and include an abstract of fewer than 300 words. The cover page should contain the paper's title, the author(s)'s name, affiliation, address and email address. Please refer to the journal's notes for contributors for further information at <http://www.iafa.ie/accingovrev/notes-for-contributors.html>.

All submissions that pass an initial editorial scrutiny will be subject to double-blind refereeing. Referees will be asked to assess papers on the basis of their relevance, originality, readability and quality (including, for empirical work, research design and execution).

REFERENCES

- Axford, B. (2005) Entering Professional Practice in the New Work Order: A Study of Undergraduate Students and Their Induction into Professional Work, *The Australian Educational Researcher*, Vol. 32, No. 2, pp. 87-104.
- Flood, B. (2014) The Case of Change in Accounting Education, in R. Wilson (ed.) *The Routledge Companion to Accounting Education*, pp. 81-101, Oxford: Routledge.
- Fogarty, T. (2014) The Bloom Is Off the Rose: Deprofessionalization in Public Accounting, in S. Mintz (ed.) *Accounting for the Public Interest: Perspectives on Accountability, Professionalism and Role in Society*, pp. 51-72, Dordrecht: Springer.
- Guthrie, J., Burritt, R. and Evans, E. (2012) Challenges for Accounting Pathways in Australia in 2012: An Introduction, in E. Evans, R. Burritt and J. Guthrie (eds) *Emerging Pathways for the Next Generation of Accountants*, pp. 9-15, Academic Leadership series, Volume 3, Sydney, NSW: The Institute of Chartered Accountants in Australia/Centre for Accounting, Governance and Sustainability, University of South Australia.

PERFORMANCE MEASUREMENT IN IRISH NONPROFIT ORGANISATIONS - AN EMPIRICAL STUDY ON THE STATE OF PLAY

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ABSTRACT

Nonprofit organisations (NPOs) depend on trust and the appearance of competency to maintain legitimacy in the eyes of the general public upon whom they depend for funding. In the absence of an all-embracing figure such as profit, NPOs can use the provision of performance information to demonstrate their competency. Using a performance framework, this research analyses the quantity and variety of performance information provided by 50 of the largest NPOs in Ireland. It is found that there is much room for improvement as most NPOs are providing very limited performance information.

INTRODUCTION

Nonprofit organisations (NPOs) play an increasingly important role in the delivery of services in many countries. They rely on their reputation in order to maintain their funding from government sources and from the general public. However, in recent times, the NPO sectors in the UK and Ireland have been beset by scandals arising from concerns about their approach to fundraising, salary levels, and how much of the money raised is spent on the beneficiaries whom the NPO serves. In the specific case of Ireland, the reputations of a number of prominent NPOs in Ireland were badly damaged by the publicity arising from high pay levels, inappropriate expenditure and the use of NPO funds to pay for pension top-ups. These scandals have focused attention on the NPO sector in Ireland and questions have been raised about the role and purpose of many NPOs and whether there is too much duplication. The crucial question being asked is whether the sector is delivering value for

money. For example, there are over 4,700 registered NPOs listed on the Charities Regulatory Authority's (CRA) website. In addition, there are over one hundred registered NPOs dealing with cancer. These figures should be examined in the light of Ireland's population which is around 4.6 million.

The establishment of the CRA has focused attention on the role and performance of NPOs in Ireland. The CRA's role is to increase public trust in the management of NPOs, increase accountability and ensure the effective use of assets (Charities Regulatory Authority, 2014). Therefore, the focus of this article is to examine how NPOs can report their achievements and to what extent that they are doing so. It can be argued that the provision of performance information may help to allay concerns about their efficiency and effectiveness.

As a result of the increased role of NPOs in the delivery of public services, there is a demand for increased scrutiny of these organisations and the results that they are achieving (Connolly and Dhanani, 2009). In addition, NPOs depend on public trust in order to survive, which may be gained or maintained through the provision of information on good performance. It is suggested that a '*trustworthy charity is one that meets the expectations of the public*' (Yang et al., 2014, p. 791). However, this can be a two-edged sword because if the information shows the NPO in a poor light, there may be repercussions for the organisation (Dhanani and Connolly, 2012). Nonetheless, the provision of performance information can help to maintain or improve the legitimacy of the NPOs in the eyes of the general public.

It is argued that given their valued status in society due to their good deeds, they are particularly susceptible to public disillusionment when things go wrong (Gibelman and Gelman, 2004). This point is further emphasised when Jeavons (1994) when he suggests that the public expect to be let down by private companies but that when it comes to NPOs, they have a higher set of standards. Therefore, NPOs must ensure that they maintain their reputation and legitimacy in the eyes of the general public.

There has been limited research on performance reporting by NPOs in Ireland. A previous study (Connolly and Hyndman, 2004) found that Irish NPOs published substantially less performance information than NPOs in UK. This study suggested that this was due to the weaker legislative and regulatory environment a lack of focus on control and monitoring, and limited investigation by researchers. However, changes are happening – the Charities Act, 2009 sets out a legislative framework for managing NPOs and the establishment of the CRA in 2014 likely leads to tighter regulation of the sector. In addition, legitimacy theory suggests that NPOs can continue to exist only if they are seen as legitimate and legitimacy is based on trust and the maintenance of a 'social contract'. In other words, the NPO values must be in accord with those of wider society (Lindblom, 1994; Mathews, 1993; Shocker and Sethi, 1973). The scandals mentioned above have increased focus on the sector.

The purpose of this paper is to build on the earlier work by Connolly and Hyndman (2004) by identifying the quantity and variety of performance indicators published by a sample of large Irish NPOs, and this will be examined through the lens of legitimacy theory. This paper contributes to the literature in two ways. Firstly, using legitimacy theory to contextualize NPO performance, it develops a framework for the reporting of performance through public disclosures. Secondly,

employing this framework, it assesses the quantity and variety of performance information provided by 50 of the larger NPOs in Ireland.

The format of the paper is as follows: the next section examines legitimacy theory as the theoretical framework for the subsequent empirical work, the difficulties involved in the measurement of performance in NPOs and the key elements of a performance management system for NPOs. Following that the methodology used in the study and the research findings are outlined. The final section outlines the conclusions and areas for further research.

THEORETICAL FRAMEWORK - LEGITIMACY THEORY

As outlined above, trust is a critical element for NPOs, and legitimacy theory places great emphasis on the need to maintain and develop trust. Legitimacy theory has been widely used as a framework for analysing company disclosures related to corporate social responsibility (Campbell et al., 2006; Deegan, 2002; Tilling and Tilt, 2010) and largely centres on the idea that organisations can gain acceptance by meeting society's expectations (Samkin and Schneider, 2010). However, it has not been widely used by scholars in relation to NPOs but it is suggested that legitimacy theory is well suited to NPOs because of the '...focus on strategies organizations employ, above and beyond legal requirements, to negotiate the demands of various stakeholders with different levels of authority in a complex environment' (Tremblay-Boire and Prakesh, 2015, p. 696).

Legitimacy theory suggests that organisations can only continue to exist if they are considered legitimate (Deegan, 2002). It is argued that an organisation is legitimate if its values are in line with society's values. However, if there are different sets of values, then the organisation may lose its legitimacy (Lindblom, 1994). Legitimacy has been defined in the following terms: 'Legitimacy is a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate with some socially constructed system of norms, values, beliefs and definition' (Suchman, 1995, p. 574). It has been closely linked to the idea of a social contract which suggests that organisational survival is threatened if this contract is breached (Mathews, 1993; Kent and Zunker, 2013). A social contract whether expressed or implied can be defined in terms of the delivery of socially desirable ends or the distribution of benefits to different groups (Shocker and Sethi, 1973). Furthermore, Shocker and Sethi argue that NPOs must constantly meet the twin tests of legitimacy and relevance by showing that society requires its services and that the groups benefiting from its existence have the society's approval.

Trust and public confidence are critical elements for NPOs, and these must be maintained in order for the organisation to remain legitimate and survive long-term (Connolly et al., 2013; Mueller et al., 2005; Taylor and Taylor, 2014). Therefore, legitimacy can be seen as a resource that establishes the NPO's credibility and therefore gives continued access to resources (Luke et al., 2013). Furthermore, it is argued that trust requires the organisation to show that it is well managed and make a positive difference to the cause that they are working on (Taylor and Taylor, 2014; Sargeant et al., 2006). This suggests that NPOs need to be able to show how the money was

being spent; for example, how much of the NPO's funds were being spent on the client as opposed to administration, and what was its impact on NPO. This requires the NPOs to measure the outcomes and performance and communicate achievements to their stakeholders in order to maintain their legitimacy (Moxham, 2014). The performance framework outlined below is a basis for NPOs to report on their achievements to their stakeholders.

Thus, public disclosure of performance information can help in developing trust and legitimacy (Deegan, 2002; Yang et al., 2014). Taylor and Taylor (2014) agree with this when they argue that donors depend on trust and trust relies on the perception of performance. Therefore, donors are likely to demand more performance information as evidence that their donations are being spent efficiently and effectively. LeRoux and Wright (2010, p. 584) argue that performance information can convey their achievements to their stakeholders and they outline their views as follows: '...nonprofits can use performance measurements not only to report achievements but also to ensure their survival and success within the sector. Performance measurement can help nonprofits to better manage their programs, services and resources, in their marketing efforts; in strengthening their relationship with stakeholders; and in conveying their record of performance to current and prospective clients, donors, volunteers and board members.' This suggests that performance information that shows the NPO in a good light will help the organisation to maintain the public's trust and be seen as legitimate. However, this could be a 'double-edged sword' because if some of the information being put into the public arena is negative, this could have a serious impact on the NPO. This is particularly the case when media reporting tends to be negative because it is argued that the media ignores success or balances accounts in favour of an increased focus on the negative (Flinders, 2011).

Trembay-Boire and Prakesh (2015) argue that trust is a crucial issue for NPOs for two reasons. Firstly, to protect the organisation's ability to raise funds when scandals hit other NPOs. Suchman (1995, p. 579) also agrees that a legitimate organisation can protect itself from bad news. He outlines this view as follows: 'Also in times of adversity, widespread belief in an organization's good character may dampen the delegitimizing effect of isolated failures, miscues and reversals'. Secondly, there are low barriers to entry which allows many NPOs to be set up. This can make it difficult to distinguish between credible and non-credible NPOs.

Suchman (1995) draws a distinction between strategic legitimacy and institutional legitimacy. Strategic legitimacy involves the deliberate use of symbols to garner support for the organisation. This also involves organisational management looking out to determine what needs to be done to pursue the organisation's goals. Whereas institutional legitimacy requires the organisation to conform to expectations. Therefore, in the context of performance measurement by NPOs, organisations pursuing strategic legitimacy will use performance indicators to show that they are spending resources well and are making a difference. In the context of scandals impacting the NPO sector in Ireland, it is intended that this will protect the organisation's funding. Suchman (1995) also argues that communication is a crucial part of managing legitimacy.

The annual report is a crucial means of communications for NPOs and can be used as an opportunity to gain public trust by setting out detailed information for

stakeholders which can help win acceptance from the general public and demonstrate competence (Flack and Ryan, 2003). As such, the annual report can help the organisation gain or maintain its legitimacy through the provision of performance information. Furthermore, it is postulated that short reports that meet minimum requirements are a lost opportunity (Grant Thornton, 2013, p. 3), which is outlined as follows: 'Annual reports represent a real opportunity for organisations to demonstrate transparency and trust showing how they are governed, what they have achieved and their culture...minimalist annual reports comply with the law but, we believe, are a wasted opportunity.' Furthermore, Flack and Ryan (2003) suggest that the contents of the annual report can provide a window into what is deemed important by the organisation.

It is argued that the annual report is a key mechanism of accountability to the organisation's stakeholders and that the annual report can tell the performance story (Connolly and Hyndman, 2003; Connolly et al., 2013). The information provided should cover areas such as governance arrangements, outcomes achieved and how the money was spent. It is also suggested that non-financial information is very important in fulfilling the accountability requirements of NPOs. Hyndman (1990, p. 298) outlines the importance of non-financial information in the following terms: '...contributors provided resources for altruistic rather than economic reasons and would be primarily interested in the past achievements of, and future plans regarding charitable objectives. These objectives would largely be expressed in non-financial terms.' Therefore, disclosures can help to legitimise the organisation's actions (Kent and Zunker, 2013).

Difficulties in Measuring NPO Performance

In order to achieve legitimacy as outlined above, the measures used must be seen to be legitimate (Luke et al., 2013). The measurement of performance in NPOs is inherently difficult and most of the difficulties faced by NPOs in measuring performance arise from the characteristics of NPOs (Taylor and Taylor, 2014). These include their unique culture, diffuse power structures and special value systems (Cairns et al., 2005). This may make it difficult for NPOs to engage in the concept of performance measurement because it may distract staff away from the real mission of the organisation (Moxham, 2010, p. 348), and Moxham outlines this point of view (from the perspective of an international aid organisation) in the following terms 'As the fundamental reason ... was the activity of alleviating poverty, some staff and partners felt that it was this activity that was important rather than the measurement of outcome or impact. A number of staff felt that (they) should be "walking with the poor" and should not be asking questions about effectiveness or about the quality of work; "We should just be supporting them".'

Furthermore, it is suggested that they have multiple and nebulous goals (Callen et al., 2010). Therefore, the key challenge involves developing explicit and quantifiable objectives while at the same time allowing for the more qualitative nature of the work to be measured (Connolly and Hyndman, 2004). In addition, the aspirational nature of the organisations' goals and the long-term nature of many of these goals (Dacombe, 2011) make it difficult to capture the right kind of people changing data to allow for an assessment of progress (Carnochan et al., 2014). Furthermore, it is

suggested that it can be difficult to isolate the effect of the efforts of the NPOs from the efforts of other organisations (Brecknell et al., 2011).

The legitimacy of the organisation may be undermined by the existence of many stakeholders because the different stakeholders may measure performance in different ways (Cairns et al., 2005). This is compounded by the distinctive ownership and governance structures in place (Billis and Glennerster, 1998, p. 81) and they outline the problems that complexity causes in the following terms: '... the traditional division of stakeholders, such as owners, paid staff and consumers or users is replaced in voluntary agencies by a bewildering complexity of overlapping roles'. Finally, NPOs have no bottom line against which to measure performance (Callen et al., 2010). This can be contrasted to for profit organisations, where it can be suggested that the ultimate measure of success is profit. Forbes (1998, p. 184) suggests that NPOs will have difficulty 'developing surrogate quantitative measures of organizational performance... because [they] frequently have goals that are amorphous and offer services that are intangible'.

However, it is important to realise that it is not possible to gather perfect performance information (Connolly and Hyndman, 2003), and it is suggested that performance data involve finding a balance between what is affordable, available and appropriate. It is argued that these difficulties can be overcome, ensuring legitimacy by establishing a consensus among the stakeholders on the key performance indicators and that the information is used for organisation learning rather than apportioning blame (Moxham, 2014). The importance of legitimacy in ensuring organisational survival has been outlined above. Legitimacy can be obtained by NPOs by meeting the society's expectations of the society. Therefore, managers must understand what society expects of the organisation and work towards meeting these expectations (Moxham, 2010). However, if these expectations are unrealistic, then managers must challenge these (Herman and Renz, 2008).

PERFORMANCE ELEMENTS

The absence of a bottom-line figure such as profit makes it difficult to measure the overall organisational efficiency and effectiveness. Therefore, it is argued that a multi-dimensional approach is required for measuring performance (Lecy et al., 2012). It is suggested that there are three broad elements that can be examined (Goodin, 2003): intentions or motives of the organisation, their actions – what they did, and their results – what they achieved. Connolly and Dhanani (2009) develop this further when they suggest that intentions can be examined through the objectives that they are working towards, that their actions can be examined through their activities and programmes, and that the results can be examined in terms of the extent through which they have achieved their mission and objectives. A review of the literature suggests a wide variety of possible performance indicators that could be used by NPOs to measure their performance in non-financial terms. The key elements are outlined in Table 1 (with examples drawn from annual reports) and are mapped to Goodin's elements – intentions, actions and results.

TABLE 1: PERFORMANCE ANALYSIS FRAMEWORK

Elements		Explanation	Example	Reference
Intentions/motives – mission/vision/objectives	Goals/objectives	Goals/objectives outline what the organisation wants to achieve	'Our main priorities for 2014 are as follows: Conclude our plans to reconfigure Sundial/Orchid house into long term accommodation offering 50 homes to people with a history of long term homelessness...' (Depaul)	Connolly and Hyndman (2004)
Action – activities/programmes	Cost ratios (including charitable activity ratio, administration, fundraising or governance costs as a per cent of total costs or income)	Charitable activity ratio – per cent spent on charitable activities (as opposed to amounts spent on administration); administration/fundraising/governance costs as a per cent of revenue	'How our money was spent, relief and development (87.4%), fundraising (9.1%), development education and advocacy (3%), governance (0.5%)' (of total expenditure, Concern)	Hyndman and McConville (2015)
	Outputs	The direct and countable goods/services produced as a result of the activity being carried out	'In 2013, the IWA [Irish Wheelchair Association] provided 1.1 million hours of assisted living to 1,718 adults and children across Ireland' (Irish Wheelchair Association)	Bagnoli and Megali (2011)
	Efficiency indicators (including productivity and unit cost)	Describes the relationship between the output and input of the organisation	'Available bed days 36,420, Bed days occupied 29,054, % occupancy 82%' (Cappagh Hospital)	MacIndoe and Barman (2013); LeRoux and Wright (2010)
	Inputs – amount spent	The resources that contribute to the activities being undertaken	'In 2013, Enable Ireland employed 1,143 staff' (Enable Ireland)	Bagnoli and Megali (2011)

(Continued)

TABLE 1: (CONTINUED)

Elements	Explanation	Example	Reference
Results of action – extent to which objectives are achieved	The benefits or impact for the beneficiaries or society	'91 per cent of people who completed programmes at National Learning Network training centres in 2012 progressed to employment or higher levels of training and education' (Rehab Group)	Brecknell et al., (2011)
Client satisfaction	Are the beneficiaries satisfied with the service provided?	'Overall satisfaction with Cluid, 84% of respondents said they were satisfied or very satisfied. Only 4% said they were dissatisfied or very dissatisfied' (Cluid)	Moxham (2014); LeRoux and Wright (2010)
Other	Any performance indicators that do not fit into the above definitions	'Average absenteeism rate in 2013 – 3.36%, target 3.5%' (Cappagh Hospital)	

Connolly and Hyndman (2003) suggest that two of the key pieces of information sought by outsiders are a statement of the goals/objectives of the organisation and administration cost which they suggest is a financial indicator of efficiency. In relation to goals and objectives, it is argued that these should form the basis of developing a performance management system and that NPOs need to focus their limited resources on a small number of objectives (Kaplan, 2001). Otherwise, they will be ineffective. Kaplan (2001, p. 359) outlines this view in the following terms: 'Nonprofits ... have to focus their limited resources on a limited set of objectives and constituents. Attempting to be everything for everyone virtually guarantees organizational ineffectiveness.' With regard to costs, the focus has been moved to look at a wider definition of costs and includes fundraising, governance and administration (Hyndman and McConville, 2015; Sargeant et al., 2009). In addition, there is an increased focus on how much of the funds raised are spent on the charitable activities for which the funds were raised (Connolly and Dhanani, 2006). However, there is a danger that a reduction in administrative expenditure could reduce the overall organisational effectiveness (Tinkelman and Donabedian, 2007).

Bagnoli and Megali (2011) suggest that measuring the inputs, outputs and outcomes are important for NPOs. Other indicators suggested can be put under broad category of efficiency (which relates the organisation's outputs with regard to its inputs or the amount of input per unit of output) and include indicators

such as unit cost and productivity (LeRoux and Wright, 2010; MacIndoe and Barman, 2013). Finally, some measurement of client satisfaction is deemed important (Moxham, 2014; LeRoux and Wright, 2010) as it is suggested that meeting the needs of the organisations' stakeholders is how NPOs need to measure success (Kaplan, 2001).

METHODOLOGY

The purpose of this paper is to build on the earlier work of Connolly and Hyndman (2004) by examining through the lens of legitimacy theory, quantity and variety of performance indicators published by a sample of large Irish NPOs. The suggestion would be that the greater the quantity and variety of information being provided, the greater the assurances that the general public would have that their funds are being spent well. The empirical work in this paper is based on a detailed analysis of the annual report published by 50 larger NPOs in Ireland (Boardmatch Ireland, 2013) to determine the quantity and variety of performance information outlined in the annual report. The latest annual report was downloaded from the NPO's website.

Annual reports are generally recognised as key documents in the discharge of accountability to external users, and all NPOs in both Ireland and the UK are required to publish such documents. *The Corporate Report* (Accounting Standards Committee, 1975, p. 16) states that such information packages are 'the primary means by which management of an entity is able to fulfil its reporting responsibility'. It is argued that more substantial annual reports can improve the level of accountability (Dobell and Zussman, 1981). As statutory documents in most Western economies, annual reports attract a degree of authenticity not associated with other reporting formats and are often the principal means through which management fulfils its reporting obligations (Boyne and Law, 1991; Coy et al., 2001; Gray et al., 2006; Kent and Zunker, 2013; Leung et al., 2015). The importance of the annual report is outlined in the following terms by Dhanani and Connolly (2012, p. 1141): 'As a statutory document in most western economies, it attracts a degree of authenticity not associated with other such media and has become the principal means through which management fulfil their reporting responsibilities'.

A performance framework was developed based on the literature (Table 2). For analysis purposes, information was considered disclosed if it was highlighted in some way (hard copy) and not contained in the main narrative of the annual report (soft copy). This approach was used before (Connolly and Hyndman, 2004), where it was argued that soft copy was difficult for users to isolate and use, as it is often embedded in a mass of subjective comment. In addition, it is argued that such information may be given in a form that may make it difficult for the user to understand its significance (Hyndman, 1990). While it could be argued that this is just a matter of presentation, information that is highlighted and concise is deemed to be substantially more useful in terms of communicating to users; this is particularly the case where users of annual reports have limited resources and are unlikely to be able to cross-examine the management of the organisation.

TABLE 2: PERFORMANCE INDICATORS PUBLISHED BY IRISH NPOS

Types of Indicators	Total Number	%	No. of Organisations Who Report This Type of Indicator	% of Organisations Who Report This Type of Indicator	% of Organisations Who Report This Type of Indicator in Connolly and Hyndman (2004)
Goals/objectives	n/a	n/a	15	30	49
Cost information (administration/ fundraising or governance)	11	2	11	22	n/a
Inputs	89	13	48	96	13
Outputs	340	50	32	64	30
Efficiency	32	5	6	12	2
Outcomes	9	1	6	12	27
Client satisfaction	15	2	6	12	n/a
Other	178	27	30	60	n/a
Total	674	100			

Definitions and rules¹ were developed to reduce the impact of subjectivity and these are outlined in Table 1. The rules include: information presented in more than one way is only counted once in its more detailed form and performance indicators had to be measurable in order to be included in the analysis.

FINDINGS

Previous work by Connolly and Hyndman (2004) showed that Irish NPOs were publishing a limited amount of performance information. A summary of their findings are outlined in Table 2. This study was based on fifteen large NPOs in Ireland (defined as having an income greater than £650K) and sixty eight small Irish NPOs (defined as having income greater than £100k but less than £650K). A comparison of the findings of Connolly and Hyndman (2004) findings and this study would suggest that the reporting of goals/objectives and outcomes has disimproved; while the reporting of inputs, outputs and efficiency has improved over the intervening years. The annual reports for the 50 NPOs were examined to determine the quantity and variety of performance indicators disclosed. The reports are analysed using the performance framework outlined in Table 1. The results of this analysis are summarised in Table 2 which shows that the 50 organisations are reporting 674 performance indicators across seven headings.

In relation to goals/objectives, only fifteen (30 per cent) organisations set out goals or objectives. This is likely to make it difficult for the readers of the annual report to have a clear picture of what the organisation was trying to achieve. The discussion above also suggests that the goals/objectives provide the starting point for developing the performance management system. Therefore, it could be argued

that the absence of goals makes the assessment of the performance information provided more difficult as the reader may not be sure what the organisation is trying to achieve.

In relation to the performance indicators found in the annual reports, the three most frequently reported are inputs, outputs and 'other'. Overall, these account for 90 per cent of all of the performance indicators reported. In relation to inputs (e.g., staff numbers and/or income), these total 89 for all 50 organisations and account for 13 per cent of the performance indicators outlined. Furthermore, 48 (96 per cent) of the organisations report at least one input indicator. With regard to outputs, these total 340 represent 50 per cent of all of the performance indicators outlined. Furthermore, 32 organisations (64 per cent) outline at least one output indicator, but a detailed analysis shows that 70 per cent of the output indicators are accounted for by ten organisations. Therefore, the remaining organisations report a small number of output indicators. The term 'other' indicators captures all of the indicators that do not fall under the variables administration costs, outputs, inputs, efficiency, outcomes and customer satisfaction. Therefore 'other' indicators amount to 178 (27 per cent of the total) and 30 organisations (60 per cent) have at least one 'other' indicator.

In relation to information on costs, it was suggested above that this is a key measure of efficiency as it shows how much of the funds donated are spent on the end service. In the light of recent controversies, it would be expected that this would be a key indicator for NPOs as it may help to regain the public's trust by showing how the funds raised are being used. Therefore, it is surprising that only 11 organisations (22 per cent) outline a performance indicator for costs. However, it should be noted that there would need to be clear definitions as to what administration costs are and what programme costs are. Otherwise, NPOs may be tempted to change their allocations to appear more efficient (Tinkelman and Donabedian, 2007).

It is suggested that indicators such as outputs are short-term indicators and that organisations need long-term indicators covering areas such as outcomes (Kaplan, 2001). In total, there are nine outcome indicators and only six organisations report such indicators. This would suggest that Irish NPOs may be unwilling or unable to provide such information. This is a matter of concern as organisations also need to be able to determine the impact they are having on the lives of their clients. But the discussion above suggests that this type of information is difficult to obtain due to the timescale involved (it may take many years to obtain information on the impact of a service and the outcome may be affected by many factors outside the control of the NPO) and the costs involved in obtaining this type of information. This latter point in relation to costs suggests that if an NPO invests in systems to capture information on outcomes, this may have a negative impact on the costs.

Indicators of efficiency account for 5 per cent of the total (32 indicators). However, 23 of these are outlined by one organisation. Therefore, only six organisations in total outline an efficiency indicator. In relation to client satisfaction, another key indicator identified in the literature, a total of fifteen indicators are outlined by six organisations. Again, this would suggest that organisations may be unwilling or unable to develop indicators of client satisfaction.

In overall terms, indicators of efficiency (including information on costs), outcomes and client satisfaction account for 8 per cent of the indicators reported.

However, only six NPOs (12 per cent) report an indicator under each of these three categories. It could be argued that these three headings are likely to be of greater importance in communicating organisational efficiency and effectiveness to the wider public.

While, the overall number of performance indicators being published might suggest that Irish NPOs were publishing a reasonable amount of performance information (with an average of 13.5 indicators per organisation), a review of the range of performance indicators being published by the 50 organisations demonstrates that this is misleading. Table 3 shows that twenty organisations (40 per cent) outline five or less indicators, while twelve organisations publish twenty-one or more indicators. These twelve organisations account for 64 per cent of the indicators published by the fifty NPOs. This shows that the overall figures are being heavily skewed by a small number of organisations publishing a large number of performance indicators. This is not to suggest that the more indicators that a NPO publishes the better, as many of these may be low-level and unfocused performance indicators which may confuse the reader. The above discussion suggests that in the absence of an all-embracing performance indicator such as profit, a variety of performance indicators will be required to give the readers of the annual report a rounded view of organisational performance. Table 3 suggests that many NPOs are not publishing sufficient performance information that will allow the readers of their annual report (and potential donors) to evaluate the overall efficiency and effectiveness in delivering services to clients.

TABLE 3: RANGE OF INDICATORS PUBLISHED BY IRISH NPOS

Range	No. of Organisations	% of Organisations
0-5	20	40
6-10	9	18
11-20	9	18
21+	12	24
	50	100

CONCLUSIONS

The purpose of this paper was to examine the quantity and variety of performance information being provided by 50 of the largest NPOs in Ireland through the lens of legitimacy theory. Legitimacy theory suggests that organisations can gain acceptance by meeting society's expectations (Samkin and Schneider, 2010) and that legitimacy is based on trust and maintenance of a 'social contract'. In other words, the NPOs' values must be in accord with those of wider society (Lindblom, 1994; Mathews, 1993; Shocker and Sethi, 1973). Due to the nature of their work, NPOs in Ireland have a valued status, but this makes them particularly susceptible to disillusionment when things go wrong (Gibelman and Gelman, 2004). It was contended above that trust and public confidence are important for NPOs (Yang et al., 2014) as they give them access to continued funding (Luke et al., 2013; Suchman, 1995).

The literature suggest that the provision of performance information can help maintain public confidence and trust (Connolly and Dhanani, 2009; Dhanani and Connolly, 2012; Tremblay-Boire and Prakesh, 2015).

A number of scandals in Irish NPOs (involving excessive pay levels and misuse of funds) have reduced confidence in NPOs and raised concerns about whether the NPO sector is delivering value for money. Questions have been raised about the overall number of NPOs and the level of duplication (e.g., over one hundred cancer charities have been listed in the CRA website). As a result, the fundraising efforts of all NPOs have been impacted. In order to address these concerns, the expectation would be that the 50 large Irish NPOs surveyed would be publishing sufficient performance information to show that they are well managed and making a difference.

However, the findings outlined above suggest that there is much room for improvement. While overall, the 50 NPOs are reporting 674 performance indicators. Most of these are produced by a small number of NPOs (with twelve NPOs accounting for 64 per cent of the total and twenty NPOs report five or less indicators). Furthermore, there is very limited reporting of outcomes (there were nine indicators across six organisations); client satisfaction (fifteen indicators in total across six organisations) and cost information (eleven indicators in eleven organisations). Therefore, it is unlikely that the reader of an annual report would be able to assess whether the NPO was being run well and was making a difference.

The findings are somewhat surprising as it would be expected that NPOs would be looking to protect themselves against a general backlash against the wider NPO sector. Such a process was described as 'strategic legitimacy' (Suchman, 1995), and this involves managers using symbols (such as performance indicators) to garner support for the organisation. In addition, strategic legitimacy also requires managers to look outwards to determine what needs to be done in order to achieve the organisation's goals. Communication is a critical part of managing legitimacy (Suchman, 1995) and the disclosure of performance can help legitimise organisational actions (Kent and Zunker, 2013). It is also suggested that the annual report is a key tool for communicating organisational achievements (Dhanani and Connolly, 2012). The evidence presented here suggests that Irish NPOs need to increase the level of performance reporting if they want to maintain or regain their legitimacy and meet society's expectations. This will require them to engage with their stakeholders to identify the type of information that would convey the success of the organisation.

In the absence of a bottom-line figure, there is much debate on how NPOs can measure their performance. Goodin (2003) suggests that performance can be assessed across three broad elements: intentions, actions and results. The literature identified a number of key of indicators that could be mapped onto these three elements. These include goals/objectives, costs, inputs, outputs, efficiency, outcomes and client satisfaction, which are outlined in Table 1.

However, there are a number of difficulties in assessing the performance of NPOs. These include the fact that NPOs have multiple objectives that are often nebulous in nature and have a long-term focus (Forbes, 1998). Furthermore, the culture of NPOs is different with many stakeholders having an input into policy-making and the sense that NPOs have a higher mission that may be sullied through the use of management tools such as performance indicators (Cairns et al., 2005; Moxham, 2010).

But it is suggested that these difficulties can be ameliorated through stakeholder engagement on what constitutes success and that performance information is used for organisational learning rather than apportioning blame (Moxham, 2010, 2014).

The research presented here is confined to the information contained in the annual report. It is possible that NPOs may be using more performance information than is indicated by this research. Therefore, further research could determine the level of performance information used internally, review how this might be conveyed better to the NPOs stakeholders and examine reasons why many NPOs are reluctant to publish performance information. Other research areas could include research with stakeholders to determine the type of performance information that NPOs should be providing and whether the funding sources impact the level of performance reporting.

Overall, this paper contributes to insights into a major area of weakness in NPO reporting, namely the reporting of performance. The low level of performance reporting threatens to undermine the legitimacy and trust of the general public in individual NPOs but also in the whole NPO sector. Recent scandals suggest that the 'taken-for-granted goodness' of NPOs is no longer valid and that NPOs need to develop a strategy on how they can report on their efficiency and effectiveness. It is hoped that these research findings will contribute to the debate on how performance reporting can be developed so that trust and legitimacy can be maintained and developed in Ireland and elsewhere.

ENDNOTES

¹ A copy of the rules used can be requested from the author.

APPENDIX 1

LISTING OF NPOS AND THE NUMBER OF PERFORMANCE INDICATORS CONTAINED IN THEIR ANNUAL REPORTS

	Charity Name	Revenue €	No. of indicators outlined in annual report
1	Ability West	22.4	2
2	Acquired Brain Injury Ireland	12.1	6
3	Barnardos	22.7	11
4	Bothair	6.4	7
5	Cappagh National Orthopaedic Hospital	35.2	58
6	Carriglea Cairde Services	10.0	2
7	Cheshire Ireland	29.5	1
8	Childvision	6.7	1
9	Cluid Housing Association	13.7	11
10	Concern Worldwide	127.0	14

(Continued)

(CONTINUED)

	Charity Name	Revenue €	No. of indicators outlined in annual report
11	Cope Foundation	53.0	7
12	Cork Simon Community	7.1	10
13	Depaul Ireland	7.6	13
14	Dublin Simon Community	5.4	11
15	Enable Ireland	46.0	41
16	Focus Ireland	18.3	16
17	Goal	60.5	4
18	Gorta	5.1	8
19	Irish Cancer Society	20.2	26
20	Irish Heart Foundation	5	10
21	Irish Society for the Prevention of Cruelty to Children	5.3	20
22	Irish Wheelchair Association	51.0	25
23	Kerry Parents and Friends Association	9.0	1
24	Mater Misericordiae Hospital	258.0	9
25	Milford Care Centre	17.0	25
26	Miseann Cara	16.2	3
27	Multiple Sclerosis Ireland	6.7	13
28	National College of Ireland	17.2	44
29	NCBI	12.0	1
30	Our Lady's Children's Hospital Crumlin	112.3	2
31	Our Lady's Hospice and Care	38.0	34
32	Oxfam Ireland	11.8	7
33	Peamount Healthcare	23.9	5
34	Plan Ireland	12.2	35
35	Prosper Fingal	7.0	7
36	Rehab Group	178.0	42
37	Respond	15.1	1
38	St. Francis Hospice Dublin	12.1	21
39	St. John of God Hospital and St. Joseph's Centre	31.3	1
40	St. Joseph's Foundation	14.8	2
41	St. Michael's House	87.0	5
42	St. Patrick's Hospital	13.0	53
43	Self Help Africa	13.1	5
44	SOS Kilkenny	7.7	2
45	Sunbeam House Services	22.2	2
46	The Alzheimer's Society of Ireland	15.1	3
47	The Economic and Social Research Institute	13.7	0
48	Unicef Ireland	6.0	26
49	Western Care Association	29.2	19
50	World Vision of Ireland	6.6	2

REFERENCES

- Accounting Standards Committee (1975). *The Corporate Report*, London: ASC.
- Bagnoli, L. and Megali, C. (2011). Measuring Performance in Social Enterprises, *Nonprofit and Voluntary Sector Quarterly*, Vol. 40, No. 1, pp. 149–165.
- Billis, D. and Glennerster, H. (1998). Human Services and the Voluntary Sector: Towards a Theory of Comparative Advantage, *Journal of Social Policy*, Vol. 27, No. 1, pp. 79–98.
- Boardmatch Ireland (2013). *Charity 100 Index*, Dublin: Boardmatch Ireland.
- Boyne, G. and Law, J. (1991). Accountability and Local Authority Annual Reports: The Case of the Welsh District Councils, *Financial Accountability & Management*, Vol. 7, No. 3, pp. 179–194.
- Brecknell, P., Harrison, K. and Robert, N. (2015). *Impact Reporting in the UK Charity Sector*, <<http://www.cfg.org.uk/resources/~/media/Files/Resources/Impacts%20reporting%20in%20the%20UK%20Charity%20Sector.ashx> 2011>, accessed 5 May 2015.
- Cairns, B., Harris, M., Hutchinson, R. and Tricker, M. (2005). Improving Performance? The Adoption and Implementation of Quality Systems in UK Nonprofits, *Nonprofit Management & Leadership*, Vol. 16, No. 2, pp. 135–151.
- Callen, J., Klein, A. and Tinkelman, D. (2010). The Contextual Impact of Nonprofit Board Composition and Structure on Organizational Performance: Agency and Resource Dependency Perspectives, *Voluntas: International Journal of Voluntary and Nonprofit Organisation*, Vol. 21, No. 1, pp. 101–125.
- Campbell, D., Moore, G. and Shrivs, P. (2006). Cross-Sectional Effects in Community Disclosure, *Accounting, Auditing & Accountability Journal*, Vol. 19, No. 1, pp.96–114.
- Carnochan, S., Samples, M., Myers, M. and Austin, M.J. (2014). Performance Measurement Challenges in Nonprofit Human Service Organizations, *Nonprofit and Voluntary Sector Quarterly*, Vol. 43, No. 6, pp. 1014–1032.
- Charities Regulatory Authority (2014). *Functions of the Charities Regulatory Authority* [cited 11 December 2014].
- Connolly, C. and Dhanani, A. (2006). Accounting Narratives: The Reporting Practices of British Charities, *Journal for Public and Nonprofit Services*, Vol. 3, No. 5, pp. 39–62.
- Connolly, C. and Dhanani, A. (2009). *Narrative Reporting by UK Charities*, London: The Association of Chartered Certified Accountants.
- Connolly, C. and Hyndman, N. (2003). *Performance Reporting by UK Charities: Approaches, Difficulties and Current Practices*, Edinburgh: Institute of Chartered Accountants of Scotland.
- Connolly, C. and Hyndman, N. (2004). Performance Reporting: A Comparative Study of British and Irish Charities, *The British Accounting Review*, Vol. 36, pp. 127–154.
- Connolly, C., Hyndman, N. and McConville, D. (2013). UK Charity Accounting: An Exercise in Widening Stakeholder Engagement, *The British Accounting Review*, Vol. 45, pp. 58–69.
- Coy, D., Fischer, M. and Gordon, T. (2001). Public Accountability: A New Paradigm for College and University Reports, *Critical Perspectives in Accounting*, Vol. 12, pp. 1–31.
- Dacombe, R. (2011). Can We Argue Against It? Performance Management and State Funding of Voluntary Organisations in the UK, *Public Money and Management*, Vol. 31, No. 3, pp. 159–166.
- Deegan, C. (2002). Introduction: The Legitimising Effect of Social and Environmental Disclosures – A Theoretical Foundation, *Accounting, Auditing & Accountability Journal*, Vol. 15, No. 3, pp. 282–311.
- Dhanani, A. and Connolly, C. (2012). Discharging Not-for-Profit Accountability: UK Charities and Public Discourse, *Accounting, Auditing & Accountability Journal*, Vol. 25, No. 7, pp. 1140–1169.

- Dobell, R. and Zussman, D. (1981). An Evaluation Strategy for Government: If Politics is Theatre Then Evaluation Is (Mostly) Art, *Canadian Public Administration*, Vol. 24, No. 3, pp. 404–427.
- Flinders, M. (2011). Daring to Be Daniel, The Pathology of Politicized Accountability in a Monitory Democracy, *Administration & Society*, Vol. 43, No. 5, pp. 595–619.
- Forbes, D.P. (1998). Measuring the Unmeasurable: Empirical Studies of Nonprofit Organization Effectiveness from 1977 to 1997, *Nonprofit and voluntary sector quarterly*, Vol. 27, No. 2, pp. 183–202.
- Gibelman, M. and Gelman, S. (2004). A Loss of Credibility: Patterns of Wrongdoing Among Nongovernmental Organizations, *Voluntas: International Journal of Voluntary and Nonprofit Organisation*, Vol. 15, No. 4, pp. 355–381.
- Goodin, R. (2003). Democratic Accountability: The Distinctiveness of the Third Sector, *European Journal of Sociology*, Vol. 44, No. 3, pp. 359–371.
- Gray, K., Bebbington, J. and Collison, D. (2006). NGOs, Civil Society and Accountability: Making the People Accountable to Capital, *Accounting, Auditing and Accountability Journal*, Vol. 19, No. 3, pp. 319–348.
- Herman, R.D. and Renz, D.O. (2008). Advancing Nonprofit Organizational Effectiveness Research and Theory Nine Theses, *Nonprofit Management & Leadership*, Vol. 18, No. 4, pp. 399–415.
- Hyndman, N. (1990). Charity Accounting – An Empirical Study of the Information Needs of Contributors to UK Fund Raising Charities, *Financial Accountability and Management*, Vol. 6, No. 4, pp. 295–307.
- Hyndman, N. and McConville, D. (2015). Transparency in Reporting on Charities' Efficiency A Framework for Analysis, *Nonprofit and Voluntary Sector Quarterly*, Vol. 45, No. 4, pp. 844–865.
- Jeavons, T.H. (1994). Stewardship Revisited: Secular and Sacred Views of Governance and Management, *Nonprofit and Voluntary Sector Quarterly*, Vol. 23, No. 2, pp. 107–122.
- Kaplan, R.S. (2001). Strategic Performance Measurement and Management in Nonprofit Organizations, *Nonprofit Management & Leadership*, Vol. 11, No. 3, pp. 353–370.
- Kent, P. and Zunker, T. (2013). Attaining Legitimacy by Employee Information in Annual Reports, *Accounting, Auditing & Accountability Journal*, Vol. 26, No. 7, pp. 1072–1106.
- Lecy, J.D., Schmitz, H.P. and Swedlund, H. (2012). Non-Governmental and Not-for-Profit Organizational Effectiveness: A Modern Synthesis, *Voluntas: International Journal of Voluntary and Nonprofit Organisation*, Vol. 23, No. 2, pp. 434–457.
- LeRoux, K. and Wright, N. (2010). Does Performance Measurement Improve Strategic Decision Making? Findings from a National Survey of Nonprofit Social Service Agencies, *Nonprofit and Voluntary Sector Quarterly*, Vol. 39, No. 4, pp. 571–587.
- Leung, S., Parker, L. and Courtis, J. (2015). Impression Management through Minimal Narrative Disclosure in Annual Reports, *British Accounting Review*, Vol. 47, No. 3, pp. 275–289.
- Lindblom, C.K. (1994). Implications of Organizational Legitimacy for Corporate Social Performance and Disclosure, in *Critical Perspectives on Accounting*, New York.
- Luke, B., Barraket, J. and Eversole, R. (2013). Measurement as Legitimacy Versus Legitimacy of Measures: Performance Evaluation of Social Enterprise, *Qualitative Research in Accounting and Management*, Vol. 10, No. 3, pp. 234–258.
- MacIndoe, H. and Barman, E. (2013). How Organisational Stakeholders Shape Performance Measurement in Nonprofits: Exploring a Multidimensional Measure, *Nonprofit and Voluntary Sector Quarterly*, Vol. 42, No. 4, pp. 716–738.
- Mathews, M.R. (1993). *Socially Responsible Accounting*, London: Chapman Hall.

- Moxham, C. (2010). Help or Hindrance? Examining the Role of Performance Measurement in UK Nonprofit Organizations, *Public Performance & Management Review*, Vol. 33, No. 3, pp. 342-354.
- Moxham, C. (2014). Understanding Third Sector Performance Measurement System Design: A Literature Review, *International Journal of Productivity and Performance Management*, Vol. 63, No. 6, pp. 704-726.
- Mueller, J., Williams, D., Higgins, A. and Tou, M. (2005). The Measurement of Responsible Governance and Management of NPOs in New Zealand: An Evaluation Tool for NPOs, Donors and Government, *Corporate Governance*, Vol. 5, No. 2, pp. 159-173.
- Samkin, G. and Schneider, A. (2010). Accountability, Narrative Reporting and Legitimation, *Accounting, Auditing & Accountability Journal*, Vol. 23, No. 2, pp. 256-289.
- Sargeant, A., Ford, B. and West, D.C. (2006). Perceptual Determinants of Nonprofit Giving Behaviour, *Journal of Business Research*, Vol. 59, No. 2, pp. 155-165.
- Sargeant, A., Lee, S. and Jay, E. (2009). Communicating the "Realities" of Charity Costs, *Non-profit and Voluntary Sector Quarterly*, Vol. 38, No. 2, pp. 333-342.
- Shocker, A.D. and Sethi, S.P. (1973). An Approach to Incorporating Societal Preferences in Developing Corporate Action Strategies, *California Management Review* Summer, pp. 97-105.
- Suchman, M.C. (1995). Managing Legitimacy: Strategic and Institutional Approaches, *Academy of Management Journal*, Vol. 20, No. 3, pp. 571-610.
- Taylor, M. and Taylor, A. (2014). Performance Measurement in the Third Sector: The Development of a Stakeholder-Focussed Research Agenda, *Production Planning & Control*, Vol. 25, No. 16, pp. 1370-1385.
- Tilling, M.V. and Tilt, C.A. (2010). The Edge of Legitimacy, *Accounting, Auditing and Accountability Journal*, Vol. 23, No. 1, pp. 55-81.
- Tinkelman, D. and Donabedian, B. (2007). Street Lamps, Alleys, Ratio Analysis, and Non-profit Organizations, *Nonprofit Management & Leadership*, Vol. 18, No. 1, pp. 5-17.
- Tremblay-Boire, J. and Prakesh, A. (2015). Accountability.org: Online Disclosures by U.S. Nonprofits, *Voluntas: International Journal of Voluntary and Nonprofit Organisation*, Vol. 26, No. 2, pp. 693-719.
- Yang, Y., Brennan, I. and Wilkinson, M. (2014). Public Trust and Performance Measurement in Charitable Organizations, *International Journal of Productivity and Performance Management*, Vol. 63, No. 6, pp. 779-796.

SUSTAINABILITY ACCOUNTING AND REPORTING AT A SECTOR LEVEL: MAPPING THE TERRAIN

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ABSTRACT

The aim of this paper is to develop our understanding of accounting and reporting for sustainability at a sector level, an area where there is a significant deficit of literature. As sustainability is a system-based concept, there is a growing recognition that sustainability reporting needs to move beyond single-entity reports towards multiple organisation reporting, such as industry, supply chain and sector-level reports. However, few studies have explored the challenges and possibilities of multiple organisation reporting, and no established sector-level reporting guidelines exist. This study advances the sustainability accounting literature by mapping the field of multiple organisation sustainability reporting, drawing together any existing literature and reviewing emerging voluntary reporting mechanisms. We identify different levels of sustainability parameters and reporting: global, national, sectoral, organisational and product. We then evaluate emerging reporting frameworks at a sectoral level, with reference to the agri-food sector, an industry with significant ecological impacts. We review these frameworks, along with a practitioner example of sustainability reporting at a sectoral level in the form of Bord Bia's Origin Green programme, in the context of global sustainability parameters, namely planetary boundaries and the Sustainable Development Goals. In doing so we identify a lack of coherent linkages among these global parameters of sustainability and emerging reporting frameworks and reporting. We suggest directions for future research by which these gaps may be addressed.

INTRODUCTION

Traditional reporting and accountability places at its centre the 'economic organisation' (the entity concept) and assumes it will continue indefinitely (the going concern concept). **Sustainability, however, requires a collective and cumulative assessment of economic activity relative to a resource base.** Organisation-based assessment and reporting, then, no matter how well extended with social and environmental impact information, will not be sufficient to demonstrate sustainability if it fails to consider the cumulative effect of all activity – and therefore quite probably multiple organisations – on the carrying capacity of given ecosystems.

(Gray and Milne, 2002, p. 3; emphasis added)

Accounting scholars are increasingly engaged with sustainability (Bebbington et al., 2014; Burritt and Schaltegger, 2010), and sustainability accounting and reporting is of growing interest to practice; 92 per cent of the world's top 250 companies now produce a sustainability report (KPMG, 2015), and from FY2017, the new EU Non-Financial Reporting Directive will require EU companies with over 500 employees to disclose social and environmental data. Accounting is an entity-based concept, and the sustainability accounting and reporting literature has focused largely on single entities. Sustainability, however, is a system-based concept, better understood economically at the level of multiple rather than single entities (Gray, 2010). To date, little is known in practice or in the literature about the challenges and possibilities of reporting at the level of multiple organisations. Although entity sustainability reports are numerous, sector-level or supply chain reports are rare, and no established guidelines exist for multiple organisation sustainability reporting.

In addition, persuasive evidence from the natural sciences suggests that human activity is threatening the carrying capacity of the Earth system (Steffen et al., 2015). There is an increasing recognition that to contribute substantively in this area, sustainability accounting and reporting research must move from a single entity to a multiple organisation focus and engage with sustainable development science, in particular, global parameters such as planetary boundaries (Gray, 2010; Bebbington and Larrinaga, 2014; see also Whiteman et al., 2013). The two planetary processes that are most beyond boundary limits are biodiversity loss and the nitrogen cycle (Bebbington and Larrinaga, 2014, p. 401). The implications of the nitrogen cycle have yet to be translated into organisational research, and Bebbington and Larrinaga (2014, p. 401) suggest that area where one would make the connection (in operational terms) to the nitrogen cycle is through research focused on the farming industry or food.

In an Irish context, the agri-food sector is the country's most greenhouse gas (GHG)-intensive sector, responsible for 33 per cent of annual GHG emissions (EPA, 2016). It is also crucial to the economic and social fabric of Ireland, accounting for 11 per cent of total exports and supporting 250,000 jobs (Careers Portal, 2017). Sustainability is an increasing concern within the sector (EPA, 2016), and Bord Bia, the semi-state body responsible for the international promotion of the Irish agri-food sector, has recently launched its Origin Green sustainability programme for the industry, publishing Sustainability Reports in 2015 and 2016. On this basis, we

consider this an opportune time to analyse emerging sustainability guidelines and reporting for this sector. This paper seeks to map the terrain of sector-level sustainability accounting and reporting and analyse the linkages between emerging guidelines for sector-level sustainability reporting, Bord Bia's Origin Green report and planetary boundaries. In doing so the study provides insight into the potential of sector-level reporting to advance the field of sustainability reporting.

The paper is structured as follows: first, we identify and review the existing literature on accounting for sustainability at the multiple organisation level. After a discussion of research methods, we analyse sustainability parameters at global, national, organisation and product level. We then narrow our focus to the sectoral level, specifically the agri-food sector, analysing emerging guidelines for sustainability reporting and the Origin Green report, with reference to planetary boundaries and the UN Sustainable Development Goals (SDGs). Finally, we consider the implications of our analysis for the sustainability accounting and reporting field and suggest some avenues for future research.

ACCOUNTING FOR SUSTAINABILITY IN MULTIPLE ORGANISATIONS

Research on accounting for social and environmental issues has grown steadily since early work on social audit (e.g. Medawar, 1976) and environmental accounting (e.g. Ullmann, 1976). Several methods of environmental accounting at an organisational level have been developed, such as full-cost accounting (Herbohn, 2005), the sustainable cost calculation (Bebbington and Gray, 2001) and the Sustainability Assessment Model (Bebbington, 2007). There has also been considerable work analysing stand-alone reporting (see Thomson, 2014, and Parker, 2005, for reviews). Single-entity social and environmental disclosure has been analysed through the lenses of, *inter alia*, accountability (e.g. Gray, 2006), legitimacy (e.g. Deegan et al., 2002; Milne and Patten, 2002; O'Dwyer, 2002) and stakeholder theory (e.g. Gray et al., 1997; Rinaldi et al., 2014). In addition, there is an extensive literature on content analysis (see Fifka, 2013, and Guthrie and Abeysekera, 2006 for reviews) and a growing body of work analysing the discourse and rhetoric of stand-alone reports (e.g. Milne et al., 2009; Tregidga et al., 2014).

Very little of this work, with a few exceptions (Georgakopoulos and Thomson, 2008; Russell and Thomson, 2009; and Spence and Rinaldi, 2010, 2014), goes beyond a single-entity focus. However, single-entity actions and measurement may not be sufficient to address systemic sustainability challenges (Gray and Milne, 2002; Whiteman et al., 2013). The nature of sustainability, as Gray and Milne (2002) argue, is such that it must be conceptualised at a system level, which means considering the cumulative effect of multiple organisations on ecological and social systems. Measures of sustainability at a global level, such as planetary boundaries (ecological) and the UN's SDGs (social and ecological), require an engagement with the concept of multiple organisation activity, for example at a supply chain or sectoral level. While we do not observe a distinct body of literature on accounting for sustainability at the level of multiple organisations, a small number of scholars, namely Georgakopoulos and Thomson (2008), Russell and Thomson (2009) and

Spence and Rinaldi (2010, 2014), have conducted valuable studies in which they consider reporting beyond a single organisation.

Russell and Thomson (2009) explore the possibility of accounting for a 'sustainable Scotland'. They argue that accounting can be used to make aspects of sustainability 'thinkable' and 'governable', an observation which suggests that there is potential for more powerful actors within a sector to use the sustainability accounting process to change the behaviour of other actors.

Georgakopoulos and Thomson (2008) examine social reporting in the salmon farming industry, mapping the reporting 'arena' and interviewing constituent stakeholders. They find that the social reports of the salmon farming organisations 'were designed to allow others to monitor compliance with voluntary and regulatory standards' and that social reporting practices are 'explained by power differentials' (Georgakopoulos and Thomson, 2008, pp. 1136–1137). For example, the Scottish Salmon Grower's Association, an industry body, gathered data on behalf of its members and used the ensuing reports to, among other things, lobby for regulatory reform. Georgakopoulos and Thomson suggest that the association was addressing what it saw as a 'power imbalance' between the producer organisations and the political institutions and rule enforcers.

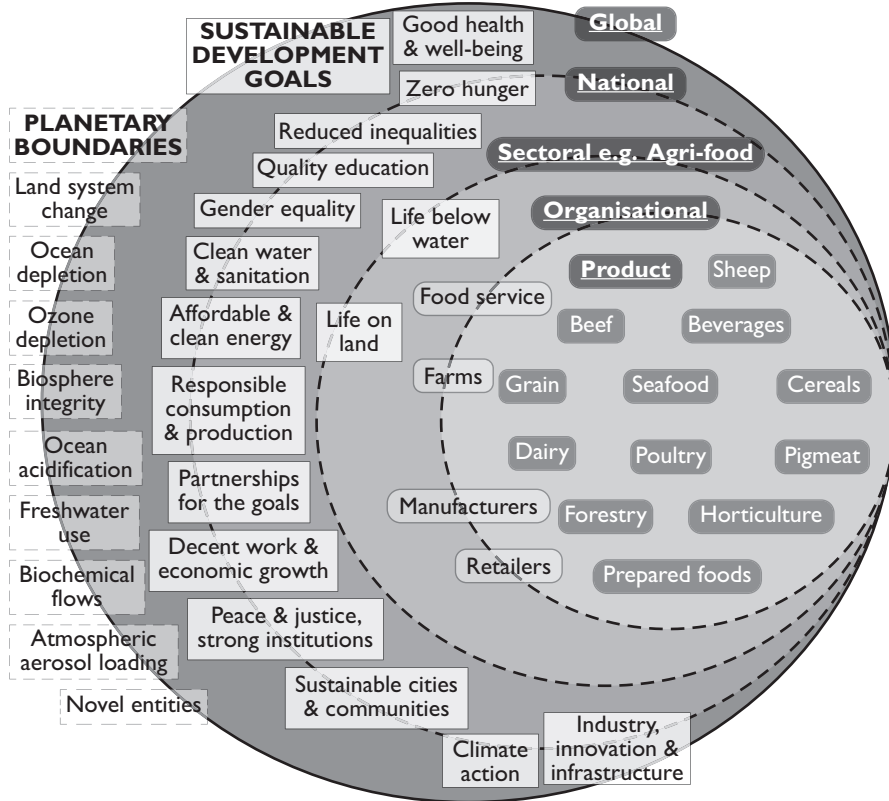
Spence and Rinaldi (2010, 2014) examine the efforts of a large supermarket to govern sustainability issues in its lamb supply chain. Their work reveals a number of challenges of reporting at a multiple organisation level, including the complexity of the supply chain (involving multiple participants, not just the farmer and supermarket), the power relations between these participants, and the supremacy of commercial priorities.

While these studies do not tell us about the content and structure of 'accounts' of sustainability at the level of multiple organisations, they offer some valuable insight into the related complexities. Each study highlights the power relations between the different organisations involved, and this suggests that considerable negotiation would be involved in sector-level sustainability reporting, making it significantly more challenging than single-entity reporting. In mapping the field of sector-level sustainability reporting, our study will add further insight to this small body of literature, providing guidance for researchers seeking to analyse and evaluate emerging sector-level sustainability reports.

In addition to our limited understanding of multiple organisational reporting, Bebbington and Larrinaga (2014, p. 401) suggest that the issues considered in social and environmental accounting 'are those that are most closely related to operational concerns of large for-profit entities' and accounting researchers have 'insufficient exposure to the ecological concerns that emerge from the sustainable development field' (Bebbington and Larrinaga, 2014, p. 401). These sentiments echo those of other scholars who suggest that management and accounting researchers must engage more substantively with the complex and urgent concerns of sustainable development (e.g. Gray, 2010; Milne and Gray, 2013; Dyllick and Muff, 2016). Therefore, although we are conscious of the extensive body of prior literature on social and environmental accounting and reporting in organisations, we draw on Bebbington and Larrinaga's (2014, pp. 397–398) argument 'that accounting for sustainable development implies a research approach that is distinctively different from that

of accounting, environmental accounting and social accounting’. Following Bebbington and Larrinaga (2014, p. 401), we wish to situate our work in the field of accounting for sustainable development and to take concerns from the field of sustainable development, specifically the nine planetary boundaries (modelled in Figure 1 identified by Rockstrom et al., 2009), as the departure point for this study.

FIGURE 1: CONCEPTUALISING SECTOR-LEVEL SUSTAINABILITY: LAYERS OF IMPACT



The two planetary processes that are most beyond boundary limits are biodiversity loss and the nitrogen cycle (Bebbington and Larrinaga, 2014, p. 401). There is an emerging accounting literature on biodiversity; however, the implications of the nitrogen cycle have yet to be translated into organisational research (Bebbington and Larrinaga, 2014, p. 401). Bebbington and Larrinaga (2014, p. 401) suggest that the area where one would make the connection (in operational terms) to the nitrogen cycle is through research focused on the farming industry or food. Using Origin Green as our operational anchoring point, this paper contributes to the literature on sustainability reporting by analysing the linkages or lack of linkages between the Origin Green report, emerging guidelines of sustainability reporting in the agri-food sector and planetary boundaries.

RESEARCH METHODS

A range of documentary data related to measuring and reporting on sustainability or accounting for sustainable development was analysed for the study.¹ Guided by Bebbington and Larrinaga (2014), we began our documentary data collection by engaging with the sustainability science literature, and in particular with planetary boundaries (Rockstrom et al., 2009). As the section 'Sustainability Indicators and Reporting Guidelines' discusses, we examined how sustainability parameters have been identified in the natural sciences literature and applied at global and national levels (e.g. Fang et al., 2015b; Lammers et al., 2008). The documentary data collection was also guided by the literature related to sustainability indicators at an organisational level, the sustainability accounting literature (e.g. Bebbington and Gray, 2001; Bebbington et al., 2001), and work on product life-cycle assessment (e.g. ISO14044; Bjorn et al., 2016). In addition, reflecting our focus on the agri-food sector, we searched for data related to sustainability reporting in this sector.

As Table 1 illustrates, typical documents collected were reports produced by regulatory/standard-setting bodies such as the EU, UN and OECD, and academic studies in the ecological economics and sustainability accounting areas. Google searches were also conducted for terms such as 'sector-level sustainability reporting' or 'supply chain sustainability accounting'. The documents analysed included existing reporting guidelines such as the G4 Global Reporting Initiative (GRI) Guidelines and projects in progress at a policy level such as the EU's Organisation and Product Environmental Footprint pilots. To select the documents for analysis, we searched for literature in four categories:

TABLE 1: DOCUMENTARY DATA RELATING TO EXISTING SUSTAINABILITY REPORTING GUIDELINES AND FRAMEWORKS

Existing single-entity reporting standards

Global Reporting Initiative (GRI) (2016). GRI Standards, available from: <<https://www.globalreporting.org/standards>>, accessed 5 December 2016 [Registration Required].

International Organisation for Standardization (ISO) (2016). ISO 26000:2010(en) Guidance on Social Responsibility, available from: <<https://www.iso.org/obp/ui/#iso:std:iso:26000:ed-1:v1:en>>, accessed 5 December 2016 [Purchase Required].

United Nations Global Compact (2016). The Ten Principles of the United Nations Global Compact, available from: <<https://www.unglobalcompact.org/what-is-gc/mission/principles>>, 5 December 2016.

Academic studies

Bebbington, J. (2007). *Accounting for Sustainable Development Performance*, Oxford: CIMA.

Bebbington, J. and Gray, R. (2001). An Account of Sustainability: Failure, Success and a Reconceptualization, *Critical Perspectives on Accounting*, Vol. 12, No. 5, pp. 557–587.

Ekins, P., Simon, S., Deutsch, L., Folke, C. and De Groot, R. (2003). A Framework for the Practical Application of the Concepts of Critical Natural Capital and Strong Sustainability, *Ecological Economics*, Vol. 44, No. 2, pp. 165–185.

(Continued)

TABLE 1: (CONTINUED)

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- Fang, K., Heijungs, R. and De Snoo, G.R. (2015a). Understanding the Complementary Linkages Between Environmental Footprints and Planetary Boundaries in a Footprint–Boundary Environmental Sustainability Assessment Framework, *Ecological Economics*, Vol. 114, pp. 218–226.
- Figge, F. and Hahn, T. (2004). Sustainable Value Added—Measuring Corporate Contributions to Sustainability Beyond Eco-Efficiency, *Ecological Economics*, Vol. 48, No. 2, pp. 173–187.
- Herbohn, K. (2005). A Full Cost Environmental Accounting Experiment, *Accounting, Organizations and Society*, Vol. 30, No. 6, pp. 519–536.
- Hess, T.M., Chatterton, J. and Williams, A. (2012). *The Water Footprint of Irish Meat and Dairy Products*, Cranfield University.
- Hoekstra, A.Y. and Wiedmann, T.O. (2014). Humanity’s Unsustainable Environmental Footprint, *Science*, Vol. 344, No. 6188, pp. 1114–1117.
- Obst, C.G. (2015). Reflections on Natural Capital Accounting at the National Level: Advances in the System of Environmental-Economic Accounting, *Sustainability Accounting, Management and Policy Journal*, Vol. 6, No. 3, pp. 315–339.
- Pretty, J., Smith, G., Goulding, K.W.T., Groves, S.J., Henderson, I., Hine, R.E., King, V., Van Oostrum, J., Pendlington, D.J., Vis, J.K. and Walter, C. (2008). Multi-Year Assessment of Unilever’s Progress towards Agricultural Sustainability I: Indicators, Methodology and Pilot Farm Results, *International Journal of Agricultural Sustainability*, Vol. 6, No. 1, pp. 37–62.
- Wackernagel, M., Onisto, L., Bello, P., Linares, A.C., Falfán, I.S.L., Garcia, J.M., Guerrero, A.I.S. and Guerrero, M.G.S. (1999). National Natural Capital Accounting with the Ecological Footprint Concept, *Ecological Economics*, Vol. 29, No. 3, pp. 375–390.
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Emerging guidelines

- EU (2008). *Sustainable Consumption and Production and Sustainable Industrial Policy Action Plan – Council Conclusions*. Brussels: Council of the European Union.
- EU (2016). *OEI Retail Data Collection Template*, available from: <<https://webgate.ec.europa.eu/fpfis/wikis/display/EUENVPF/Stakeholder+workspace%3A+OEFSR+pilot+Retail>>, accessed 5 December 2016 [Registration Required].
- EU (2017). *The Environmental Footprint Pilots*, available from: <http://ec.europa.eu/environment/eussd/smgp/ef_pilots.htm>, accessed 7 February 2017.
- Natural Capital Coalition (2016). *Natural Capital Protocol: Food and Beverage Sector Guide*. Natural Capital Coalition, available from: <http://naturalcapitalcoalition.org/wp-content/uploads/2016/07/NCC_FoodAndBeverage_WEB_2016-07-12.pdf>, accessed 6 December 2016.
- UNFAO (Food and Agriculture Organisation of the United Nations) (2016). *System of Environmental-Economic Accounting for Agriculture, Forestry and Fisheries - SEEA Agriculture CONSULTATION DRAFT*, available from: <https://unstats.un.org/unsd/envaccounting/aff/2GC_Draft.pdf>, 8 December 2016.
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Quantitative data

- OECD (2013a). 2013 Edition of the OECD Environmental Database: Data for Ireland, available from: <<http://stats.oecd.org/Index.aspx?QueryId=48648>>, accessed 7 December 2016.
- OECD (2013b). Food Waste, available from: <https://stats.oecd.org/Index.aspx?DataSetCode=FOOD_WASTE>, accessed 7 December 2016.
- OECD (2017). Generation of Waste by Sector, available from: <<https://stats.oecd.org/Index.aspx?DataSetCode=WSECTOR>>, accessed 24 February 2017.
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- Existing single-entity reporting standards.
- Academic studies linking accounting and sustainability science for example studies on ecological footprint accounting, accounting for planetary boundaries, natural capital accounting. In particular, we searched for studies relevant to the agri-food sector.
- Emerging guidelines for sustainability reporting at a multiple organisation level, particularly in the agri-food sector.
- Quantitative data relating to the environmental impact of the agri-food sector.

The next section presents our review of the documentary data collected. This analysis, coupled with the review of the sustainability accounting literature detailed in the 'Accounting for Sustainability in Multiple Organisations' section, indicated that there are no established guidelines for sector-level sustainability reporting, and little work analysing how the emerging guidelines may or may not link to higher-level parameters like the planetary boundaries and the UN SDGs.

SUSTAINABILITY INDICATORS AND REPORTING GUIDELINES

How to define and measure sustainability is the subject of continuing debate (e.g. Bansal and Song, 2017; Montiel and Delgado-Ceballos, 2014), and there are myriad ecological and social indicators at a planetary level, many generated by international bodies such as the UN (e.g. UNMEA, 2004; UNDP, 2015; UNEP, 2016) and environmental NGOS (e.g. Worldwatch Institute, 2013; WWF, 2016). As discussed in the 'Accounting for Sustainability in Multiple Organisations' section, we find the concept of 'planetary boundaries', a comprehensive contemporary measure of the Earth's carrying capacity developed by Rockstrom et al. (2009) and updated by Steffen et al. (2015), a useful point to begin our analysis.

Rockstrom et al. (2009) identify nine ultimate planetary boundaries, scientific measures of ecological degradation such as ozone depletion and ocean acidification which, if breached, could threaten the resilience of the Earth system. The planetary boundaries are natural processes that are being affected by human action. Steffen et al. (2015) show that two of these boundaries are already in the high-risk zone: biosphere integrity and biochemical flows. The nine planetary boundaries are:

- Stratospheric ozone depletion – O₃ concentration in the stratosphere, which has been reducing as the ozone hole is repairing
- Biosphere integrity – biodiversity loss and extinctions
- Novel entities – new substances or new forms of existing substances introduced by humans for example plastic polymers, chemicals such as chlorofluorocarbons (CFCs)
- Climate change – atmospheric concentration of CO₂
- Ocean acidification – change in ocean pH caused by CO₂ concentration

- Freshwater use – freshwater consumption and changes to the global hydrological cycle
- Land system change – land converted for human use and its function for example agricultural, residential
- Biochemical (nitrogen and phosphorus) flows to the biosphere and oceans
- Atmospheric aerosol loading – atmospheric aerosol pollution, measured by aerosol optical depth

A number of scholars have suggested that management and accounting scholars must begin to engage with the planetary boundaries framework, but acknowledge that this is challenging, as system-level indicators of sustainability like planetary boundaries are not obviously compatible with traditional entity-focused management and accounting performance measures (Whiteman et al., 2013; Bebbington et al., 2014). To translate the concept to a sectoral level is equally complex, as we seek to illustrate in Figure 1.

Figure 1 is a heuristic that attempts to conceptualise how sustainability might translate from a global level to a sectoral level, specifically the agri-food sector in Ireland. The outer layer of Figure 1 is the global level, where we place the nine planetary boundaries. Steffen et al. (2015) stress that the model is not designed to be scaled down to nations and communities, but can ‘inform and support global sustainability goals and pathways’. They suggest that it ‘will need to be implemented alongside the achievement of targets aimed at more immediate human needs, such as provision of clean, affordable and accessible energy and the adequate supply of food’. Steffen et al. suggest the UN SDGs as a framework, which provides these targets, and the SDGs have been used to frame global and national policies in relation to sustainability.² For example, each country that has signed up to the SDGs is required to periodically report its progress on each goal to the UN. For these reasons, we have situated the SDGs as the next level below planetary boundaries in Figure 1, spanning both the global and national layers of the diagram. The next layer that we identify is the sectoral level, in this case the Irish agri-food sector and the different types of organisations and products within it. However, we note a point of complication here; that sectors transcend national boundaries, and reporting at the level of global supply chains is complex (e.g. see Marshall et al., 2016). For example, a significant percentage of Irish agri-food output is exported for example 90 per cent of beef production in 2014 was exported (Teagasc, 2016).

To begin to conceptualise sector-level sustainability accounting and reporting, it is imperative to engage with sustainability at multiple levels. The layers of Figure 1 are tightly interconnected, for example the agri-food sector is responsible for 32 per cent of Ireland’s GHG emissions (EPA, 2016), meaning that the activity of the sector, and each organisation within it, has a direct impact on Ireland’s contribution to the SDGs, and on the integrity of planetary boundaries. This interconnectedness of systems has long been a key feature of the sustainability debate (e.g. Gladwin et al., 1995; Newton, 2002; Shrivastava and Kennelly, 2013). The question for scholars and practitioners becomes: how to begin to account for or report on sustainability in such a complex arena?

A useful place to begin is to identify existing indicators and sustainability reporting frameworks at each of the levels identified in Figure 1, which we summarise in Figure 2. First, we consider the global level, at which the planetary boundaries are but one set of indicators of sustainability. Other prominent measures are the ecological footprint, developed by Wackernagel and Rees (1996), and, inter alia, the water footprint, carbon footprint, chemical footprint etc. (see Fang et al., 2015a, for a review). A number of scholars have attempted to apply these measures at a national level (Wackernagel et al., 1999; Fang et al., 2015b; Lammers et al., 2008). These studies offer frameworks of sorts for measuring the ecological impact of individual states, so Ireland's impact on planetary boundaries could be calculated, or Ireland's ecological footprint, as the Global Footprint Network (2016) demonstrates. This brings us a step closer to sector-level indicators.

FIGURE 2: SUSTAINABILITY INDICATORS AND REPORTING FRAMEWORKS AT DIFFERENT LEVELS

Global SD indicators	<ul style="list-style-type: none"> • Planetary boundaries (Rockstrom et al., 2009; Steffen et al., 2015) • Sustainable Development Goals (UN, 2015) • Environmental footprints inc. water, ecological, carbon (Fang et al., 2015a)
National SD indicators	<ul style="list-style-type: none"> • Ecological footprint (WWF, 2016; Lammers et al., 2008; Wackernagel et al., 1999) • Environmental Economic Accounting (Obst, 2015; Edens and Hein, 2013; UNFAO, 2016a) • Planetary boundaries (Hayha et al., 2016; Fang et al., 2015b)
Sector-level	<ul style="list-style-type: none"> • Natural Capital Protocol (Natural Capital Coalition, 2016) • OECD Agri-environmental indicators (OECD, 2013) • EU's Organisation Environmental Footprint (EU, 2012) • System of Environmental Economic Accounting (SEEA) (UNSD, 2016)
Organisation-level	<p>Accounting tools e.g.</p> <ul style="list-style-type: none"> • Reporting standards e.g. GRI, ISO26000, UN Global Compact • Full Cost Accounting (Bebbington et al., 2001) • Sustainability Assessment Model (Bebbington et al., 2007) • Environmental P&L (Puma, 2011) • Sustainability indicators (Pretty et al., 2008)
Product-level	<ul style="list-style-type: none"> • Life cycle assessment e.g. ISO 14044 • Product Environmental Footprint (EU, 2013)

There are also many frameworks and indicators of sustainability at the organisation and product levels. ISO14044 provides a framework for individual product lifecycle assessment, while the EU in 2016 completed the pilot phase of its Product Environmental Footprint project, covering 22 products from batteries to pet food. Such assessments are complex, as illustrated by Gray and Bebbington's (2001) attempt to complete a life cycle assessment for a pencil.

The organisational level provides a rich array of sustainability indicators, with reporting standards such as ISO26000, the Sustainability Accounting and Standards

Board and, most prominently, the GRI Guidelines. These comprehensive guidelines are widely used, but have been extensively criticised (Fonesca et al., 2014; Milne and Gray, 2013; Marimon et al., 2012; Moneva et al., 2006). Furthermore, they do not as yet provide substantive guidance on multiple organisation reporting. Though thrice updated since their inception in 2000, the GRI guidelines remain largely limited to the organisational level. The only allusion towards industry or supply-chain level reporting is in the G4 Guidelines (the latest iteration), G4-EN4, which includes 'energy consumption outside of the organization'. This requires the organisation to identify relevant upstream or downstream energy consumption in activities or categories such as 'purchased goods and services' and 'use of sold products'. Organisations are not advised on how much detail to include in this disclosure.

Many scholars, particularly in the environmental accounting field, have done innovative work on accounting for sustainability at an organisational level (see Bebbington and Larrinaga, 2014, for a summary). In this category we place the work on full-cost accounting (Bebbington et al., 2001), sustainable cost calculation (Bebbington and Gray, 2001), sustainability gap analysis (Ekins et al., 2003), sustainable value-added (Figge and Hahn, 2004) and the environmental P&L (Puma, 2011). However, these calculations typically struggle with accounting for impacts beyond the boundaries of the organisation (Gray, 2010). For example, Lamberton (2000, p. 601) attempts to develop an account of sustainability in a small organic farm, but concludes that 'the goal of ecological sustainability appears out of reach of individual business organisations at least in the medium term' because they 'operate within an ecologically unsustainable industrial system'. Lamberton (2000, p. 603) observes that businesses that prioritise ecological sustainability are 'forced to be competitive with organisations that do not consistently pursue ecological and social goals', an issue also discussed by Young and Tilley (2006). Sector-level sustainability reporting is an interesting prospect in this regard, as it would likely require shared goals between multiple organisations.

There is also an extensive literature on sustainable supply chain management (see Seuring and Muller, 2008 for a review) which engages with sustainability in multiple organisations. However, this work, as far as we are aware, has little engagement with the accounting and reporting literature. Furthermore, it focuses largely on how individual organisations can minimise risk in their supply chain and whether it 'pays to be green' (Pagell and Shevchenko, 2014), rather than measuring and reporting the environmental and social impacts of multiple organisations or the supply chain as a whole.

TOWARDS SECTOR-LEVEL SUSTAINABILITY REPORTING IN THE AGRI-FOOD SECTOR?

We now turn our attention to emerging guidelines for sector-level sustainability reporting, specifically in the agri-food sector. After the review process undertaken in 'Sustainability Indicators and Reporting Guidelines' section, four sources of sector-level sustainability indicators were identified, as detailed in Table 2. Each of these sources could potentially offer a framework for sector-level sustainability

TABLE 2: ANALYSIS OF EMERGING REPORTING FRAMEWORKS AND ORIGIN GREEN REPORT

Guidelines	Objective	Audience	Link	Connections to Planetary boundaries	Connections to SDGs
OECD agri-environmental indicators	To help improve measurement of the environmental performance of agriculture, OECD has established a set of agri-environmental indicators (OECD, 2013a)	Policy makers and society (OECD, 2013a)	https://stats.oecd.org/Indx.aspx?QueryId=48648	Land system change Biochemical flows Freshwater use Climate change Biosphere integrity Atmospheric aerosol loading Ozone depletion (7/9)	Life on land Life below water Affordable and clean energy Climate action Clean water and sanitation (5/17)
EU's Organisation Environmental Footprint	OEF studies are produced for the overarching purpose of seeking to reduce the environmental impacts associated with organisational activities, taking into account supply chain activities (EU, 2012)	Organisations – for benchmarking and performance tracking (EU, 2012)	http://ec.europa.eu/environment/eussd/smgp/ef_pilots.htm	Freshwater use Climate change Novel entities Atmospheric aerosol loading (4/9)	Life on land Life below water Climate action Clean water and sanitation Affordable and clean energy Decent work and economic growth Industry, innovation and infrastructure (7/17)
System of Environmental Economic Accounting (SEEA)	A statistical system for organising data to enable the description and analysis of the relationship between the environment and the economic activities of agriculture, forestry and fisheries (UNSD, 2016)	Users of information and compilers of statistics and accounts (UNSD, 2016)	https://unstats.un.org/unsd/envaccounting/default.asp	Land system change Biochemical flows Freshwater use Climate change (4/9)	Life on land Life below water Affordable and clean energy Climate action Clean water and sanitation Zero hunger Decent work and economic growth Industry, innovation and infrastructure (8/17)

(Continued)

TABLE 2: (CONTINUED)

Guidelines	Objective	Audience	Link	Connections to Planetary boundaries	Connections to SDGs
Natural Capital Protocol (Natural Capital Coalition)	The Protocol is a standardised framework to help businesses identify, measure, and value their impacts and dependences on natural capital (NCC, 2016)	Organisations – managers from sustainability, environmental, health & safety, and operations (NCC, 2016)	http://naturalcapitalcoalition.org/protocol/	Freshwater use Climate change Novel entities Land system change Biochemical flows Biosphere integrity	Clean water and sanitation Zero hunger Good health and well-being Affordable and clean energy Life below water Life on land Climate action Industry, innovation and infrastructure Partnerships for the goals (9/17)
Report	Objective	Audience	Link	Connections to Planetary boundaries	Connections to SDGs
Origin Green	Origin Green enables Ireland's farmers and food producers to set and achieve measurable sustainability targets, reduce environmental impact and serve local communities more effectively. The overall ambition of the programme is that every farm and food manufacturing business throughout Ireland will be on the road to sustainable production by the end of 2016. (Bord Bia, 2015, p. 1)	"... consumers and trade customers internationally" (Bord Bia, 2015, p. 8)	https://www.origingreen.ie/	Freshwater use Climate change Biosphere integrity Land system change Biochemical flows Novel entities	Zero hunger Clean and affordable energy Life on land Good health and well-being Clean water and sanitation Industry, innovation and infrastructure Decent work and economic growth Climate action Peace, justice and strong institutions Sustainable cities and communities Partnership for the goals (11/17)

reporting.³ We review each of these four emerging frameworks below, which is summarised in Table 2. Reflecting the importance of considering sustainability at multiple levels, as illustrated in Figure 1, in our review we seek to identify linkages, if any, between these indicator sets and both Rockstrom et al.'s (2009) planetary boundaries and the UN SDGs. We also use this method to review Bord Bia's 2015 Origin Green report, a practitioner example of a sector-level sustainability report and our operational anchoring point for the study. A summary of the key characteristics of the four frameworks evaluated, plus the Origin Green report, including their connections to planetary boundaries and the SDGs, is illustrated in Table 2.

OECD Agri-Environmental Indicators

The OECD agri-environmental indicators (OECD, 2013a) offer a comprehensive framework for reporting environmental impacts at farm level, incorporating 98 indicators in 15 categories, including agricultural land use, nutrients, pesticides, GHG emissions and water quality. The latest report, published in 2013, provides data on a selection of these indicators for the Irish agri-food industry from 1990 to 2010. Data are drawn from Eurostat and FAO, the Food and Agriculture Organisation of the United Nations. The OECD has published a number of reports on environmental indicators, but the agri-environmental indicators report appears to be the only one that reports on a specific sector. The only other potentially relevant report for sector-level reporting is one that calculates waste per sector in the agriculture, energy, mining and construction sectors (OECD, 2017).

The OECD agri-environmental indicators engage at some level with seven of the nine planetary boundaries, making this framework, of those we analysed, the one that relates most directly to the planetary boundaries concept. For example, Land System Change is addressed by various indicators relating to agricultural land use, such as 'share of agricultural land area in the national land area', while Biochemical Flows is addressed by a number of indicators relating to nitrogen and phosphorus balance. There are also several indicators related to Climate Change and Freshwater Use, but only one, 'farmland bird index', measuring biosphere integrity. The framework is less closely aligned to the SDGs, matching only to the goals that address environmental aspects of development, such as Life on Land, Life below Water and Climate Action. Some of the SDGs that we might expect the framework to address are those related to the agri-food system such as Zero Hunger and Good Health and Well-Being, but these do not appear to be engaged with.

EU Organisation Environmental Footprint

The EU's Organisation Environmental Footprint is an ongoing project, which forms part of the EU's work on Sustainable Consumption and Production, which emphasises a sectoral approach to sustainability. The pilot phase of the project, which also looked at Product Environmental Footprint for products as diverse as IT equipment, footwear and dairy, was completed between 2013 and 2016 and covered two sectors – Retail and Copper Production.

The EU's draft guidelines for measuring Organisation Environmental Footprint in the Retail sector define 'system boundaries' that extend beyond the typical

single-entity boundary. The EU suggests that the organisation ‘shall’ take account of its upstream (supplier) activities and ‘should’ take account of downstream (customer) activities. The EU has provided an Excel spreadsheet designed for data collection in relation to 137 indicators across the retailer’s factories, retail places, distributors and support services. These indicators range from the expansive (‘number of employees at each site’) to the minute (‘are vegetarian meals suggested in the employee canteen?’). They also cover some important impacts on the processing, retail and transport stages of the supply chain, such as ‘refrigerant gasses – annual loss’ or ‘fraction of consumer coming by car’.

Our review indicates that the EU OEF framework engages with four planetary boundaries. It is particularly focused on toxic chemicals and pollutants, including measures for refrigerant gases, hazardous wastes and GHG emissions. It also refers to Novel Entities, looking at ‘plastic recycling’ and ‘repacking plastic consumption’, which the OECD agri-environmental indicators do not. Like the OECD indicators, the EU OEF engages largely with the environmentally focused SDGs, although it does additionally address Decent Work and Economic Growth and Industry, Innovation and Infrastructure to an extent through indicators such as ‘number of full-time employees’.

System of Environmental Economic Accounting

The System of Environmental Economic Accounting (SEEA) is an ongoing project by the United Nations Statistics Division (UNSD). It is based on the premise of national environmental economic accounts, which calculate a country’s stocks and changes in environmental assets. The primary focus of the project is on water and energy, but the UNSD also published a consultation document in 2016 related to SEEA for Agriculture, Forestry and Fisheries. Two types of accounts are proposed, asset and physical flow accounts, for resources such as water, energy and land and groups of agricultural assets for example livestock and crops. Sector-level reports are drawn from the accounts to show economic and environmental variables such as production quantity and GHG emissions respectively.

As Table 2 illustrates, the SEEA engages with four planetary boundaries. Like the OECD agri-environmental indicators, Land System Change is measured by ‘Agricultural land area’, and phosphorus and nitrogen balance are also measured. In relation to Freshwater Use, the SEEA asks for data on ‘total agricultural water withdrawals’, as does the OECD. Looking at the SDGs, a feature of the SEEA is that it engages to an extent with Zero Hunger by measuring ‘Total food purchased/obtained by households’ and ‘kcal per capita per day’. Apart from this, it is again the environmental SDGs that are addressed for example Life on Land, Life below Water, Affordable and Clean Energy.

Natural Capital Protocol

The Natural Capital Coalition (NCC) is an international collaboration between almost 250 organisations, including business, academia, NGOs, policy-makers and standard setters, including the Institute of Chartered Accountants in England and Wales (ICAEW) and the GRI. The NCC was created with the aim of integrating natural capital into business decision-making. Natural capital refers to the ‘stocks’ of

natural resources for example water, air, plants, soil, on which business impacts or is dependent on.

The NCC has developed the Natural Capital Protocol, a framework intended to be 'complementary' with other frameworks like the SDGs and GRI Guidelines, which allows the organisation to integrate natural capital into business decision-making. The Protocol asks organisations to 'identify, measure and value their impacts and dependencies on natural capital' (Natural Capital Coalition, 2017).

The scope of the Natural Capital Protocol covers the full life-cycle of a product, with organisations asked to account for upstream, direct operations and downstream activities, including purchase, use and disposal of products. In this way, the Protocol offers a potential framework for accounting for sustainability at a sectoral level. NCC has also created detailed sector guidance for the Food & Beverage and Apparel sectors, including practical examples of risks and opportunities across the P&L, and they welcome any organisations interested in developing further sector-specific guides.

The Protocol lists specific 'impact drivers' (Natural Capital Coalition, 2016, p. 43), which we have used to analyse its engagement with planetary boundaries and the SDGs. Looking at Land System Change and Freshwater Use, the Protocol asks organisations to calculate figures such as 'Area of agriculture by type, area of forest plantation by type, area of open cast mine by type, etc' and 'Area of wetland, ponds, lakes, streams, rivers or peatland necessary to provide ecosystem services'. It also looks at the 'volume of waste by classification' (Novel Entities) and 'Crop pest control, pollination' (Biosphere Integrity). In relation to the SDGs, we posit that the Natural Capital Protocol engages at a basic level with the SDG of Zero Hunger by including the measure 'Human or animal food' and with Good Health and Well-Being through 'Employee satisfaction and stress release, sacred sites and indigenous traditions that support company staff or operations'.

Emerging Reporting: Origin Green

To the best of our knowledge, Bord Bia's Origin Green programme represents a unique attempt to account for sustainability at a sectoral level. Launched in 2012 the programme is a 'national sustainability programme for the Irish food and drink industry' (Bord Bia, 2015). The stated aim of the programme is to lower the industry's carbon footprint, and it requires Bord Bia to form partnerships with farmers and food and drink companies. In the 2016 report, data are presented from 62,000 farms and 220 member companies. As such it serves as an example of multiple organisational reporting in the environmentally significant agri-food sector and the operational anchoring point for our study.

The first Origin Green report, a 113-page account of farm assessment and company targets, was produced in 2015. Figures are presented in the report for energy use, emissions, water use and waste in member companies, both per unit of output and in absolute terms. Although the report does not attempt to comprehensively calculate what Gray and Milne (2002) refer to as the 'cumulative effect' of organisational activity on the 'carrying capacity of given ecosystems', there is some evidence that Bord Bia is seeking to engage with reporting on the cumulative effect of the agri-food industry. In the 2015 report they report on the farm and processing stages

of the supply chain, and within that average emissions per kilo (as opposed to total emissions) are calculated for two product categories, beef and dairy, while in the 2016 report they expand to the retail and food service stage, engaging with Musgraves (a large Irish-based retailer) and McDonalds. This suggests that to comprehensively account and report for sustainability across all stages of the supply chain might be a very challenging aim for practitioners, requiring both substantive engagement across the sector and a commitment and ability to report quantitatively in this way.

The engagement of the 2015 and 2016 Origin Green reports with the planetary boundaries and SDGs was also analysed. The 2015 Report engages to an extent with six of the nine planetary boundaries, with Freshwater Use, Climate Change and Biosphere Integrity (in the form of biodiversity) measured in relation to both farms and companies. Novel Entities are addressed by setting waste and packaging reduction targets for companies. Biochemical Flows are only engaged within a small section written by the EPA, where nitrogen and phosphorus levels in water are briefly mentioned. Land System Change is addressed in the form of efforts to encourage forestry planting on farmland, but the percentage of land used for agriculture, present in both the OECD agri-Environmental indicators and the Natural Capital Protocol, is not measured. The 2016 report engages with the same planetary boundaries, largely to the same extent. However, this report does not refer to forestry and although water quality is discussed, nitrogen and phosphorus are not specifically mentioned.

Our analysis suggests that the 2015 Origin Green report engages to some extent with 11 of the 17 SDGs, indicating awareness of global development issues. This means that the Origin Green framework is ostensibly more engaged with the SDGs than the emerging guidelines we reviewed. This is largely because the Origin Green reports engage implicitly with aspects of social sustainability, such as Decent Work and Economic Growth, Sustainable Cities and Communities, and Good Health and Well-Being, through the Social Sustainability targets for member companies. The 2015 report also engages in an implicit way with the goal of Zero Hunger by referring to 'meeting the ever-increasing demand for food' (Bord Bia, 2015, p. 3). The 2016 report engages explicitly with the SDGs, with Bord Bia suggesting that Origin Green aligns with nine of the goals: Good Health and Well-Being, Clean Water and Sanitation, Affordable and Clean Energy, Sustainable Communities, Responsible Consumption & Production, Climate Action, Life Below Water, Life on Land and Partnership. The report states that they identified relevant goals by assessing 'where the industry has impact on a goal.... or where it can contribute to the actual achievement of a goal'. However, the report does not discuss whether the industry has a positive or negative impact on a goal and does not consider the potential tensions between the ambitious growth targets for the industry consistent with the Irish government's FoodHarvest2020, and the SDG of Responsible Consumption and Production*.

* There are also potential tensions to consider within the SDGs themselves for example the tension between the goals of Zero Hunger and Responsible Consumption and Production.

DISCUSSION

The literature review revealed few existing studies on multiple organisation sustainability reporting, none of which have looked at sector-level sustainability reporting. This paper has sought to offer a first-focused mapping of the terrain of sector-level sustainability reporting, to review the existing literature and emerging reporting guidelines, and provide guidance to researchers and practitioners seeking to engage with this area.

Our analysis of emerging guidelines, summarised in Table 2, suggests that there are several projects in progress that take different approaches, both in method and content, to accounting for sustainability at the level of multiple organisations. We saw that institutions such as the EU, the OECD and the UN are all developing multiple organisation sustainability reporting frameworks, although there are no cohesive guidelines in place as yet. This raises issues as to how practitioners will or will not engage with the work of these institutions when reporting, for example Bord Bia has chosen to date not to engage with these emerging guidelines in their 2015 and 2016 Origin Green reports. Some guidelines, such as the OECD agri-environmental indicators, relate more to the planetary boundaries concept and some, such as the Natural Capital Protocol, to the SDGs. None of the guidelines we reviewed address all elements of either of these high-level frameworks, indicating a lack of consideration of broader sustainability parameters in the development of the guidelines. The Origin Green report is the only emerging reporting framework we identified that explicitly references the SDGs. It appears that there is a disconnection between global sustainability parameters, emerging guidelines and practitioner reporting.

Mapping the terrain of sector-level sustainability reporting and identifying the linkages, between global parameters of sustainable development, emerging guidelines for sector-level sustainability reporting and emerging reporting in the form of Bord Bia's Origin Green program, provides insight into the potential of sector-level reporting to advance the field of sustainability reporting. It is suggested that multiple organisation reporting can contribute to the development of substantive sustainability reporting, helping to quantify the ecological impact of particular industries, supply chains or clusters of organisations and ultimately measuring the impact of business activity on planetary boundaries. However, it is not clear that measuring and reporting on the sustainability frameworks and indicators for the agri-food sector emerging from the EU, OECD, UN and others will necessarily bring us closer to sustainability. While the guidelines identified and the Origin Green report engage with aspects of global frameworks, they do not attempt to report on the cumulative effect of activity on ecological carrying capacity. For example, the 2015 and 2016 Origin Green reports suggest that Bord Bia has engaged with actors at various stages of the supply chain, but even with this scale of engagement, the reporting is still incomplete; Origin Green does not yet report the cumulative effect of activity in the sector. This highlights the significant challenge of reporting on sustainability at a sectoral or multiple organisation level.

Furthermore, the guidelines at the moment are diverse, incomplete, and also potentially onerous. For example, if an organisation was to report on every indicator

in the four emerging guidelines we analysed, they would be reporting on at least 200 indicators. This raises questions as to the ability of practitioners to navigate these guidelines. To gather data to populate frameworks such as the UN SEEA would be a significant task, requiring co-ordination with every farm, manufacturer, retailer, food service organisation, arguably every consumer in the supply chain. With its Origin Green programme Bord Bia has engaged with many of these actors, but its report does not offer any cumulative assessment of the ecological impact of the sector. This highlights the challenge of multiple organisation reporting, which could be affected by a number of factors. The literature (i.e. Russell and Thomson, 2009; Spence and Rinaldi, 2010, 2014) tells us that power relations between different actors in the supply chain may be important and in the case of Origin Green, there may be issues such as trust, commercial sensitivity, the need to protect members from adverse publicity, or the fact that members may not be progressing. There is also the broader issue of gaps in scientific knowledge for example some of the planetary boundaries are not defined.

In addition, to whom should the responsibility of compiling a sector-level sustainability report fall? In the case of the agri-food industry in Ireland, a semi-state body, Bord Bia, has taken on that responsibility, but it is unlikely that every industry would have an equivalent body with the motivation and resources to complete such a complicated exercise. Our review suggests that sector-level sustainability reporting will require negotiation between organisations on what should and/or can be reported, by whom and for whom. This is likely to be a major challenge for practitioners and regulators. For example, in piloting its Organisation Environmental Footprint project, the EU initially selected three sectors of study, but was forced to abandon its study of the Household Sanitary Goods and Toiletries industry when it 'became progressively evident that the pilot was not sufficiently backed by the major producers and the relevant European associations' (EU, 2017). The EU notes that the pilot was cancelled because 'the Commission position about this exercise has always been not to impose anything to industry but rather to help addressing needs on their side' (EU, 2017). Single-entity reporting on social and environmental impacts has hitherto been voluntary – the GRI Guidelines are guidelines rather than regulations – but from FY2017 the EU Non-Financial Reporting Directive requires mandatory non-financial disclosure by certain organisation for the first time. We do not know how major producers and industry associations would react to mandatory multiple organisation sustainability reporting.

There is, however, the potential for substantive reporting of important data, which could not be accessed from single-entity reporting, from some of the emerging guidelines we have reviewed. For example, the OECD's agri-environmental indicators give us data on on-farm energy consumption (273,000 tonnes oil equivalent in 2010), pesticide sales (2,638 tonnes of active ingredients in 2010) and nitrogen balance (213,724 tonnes in 2009) in Ireland. These are substantive figures that give us some insight into how the Irish agri-food industry and the organisations within it are impacting planetary boundaries. Research is required to develop frameworks that can account for sector-level data such as this and allow scholars to influence policy and practice on substantive multiple organisation sustainability reporting.

CONCLUDING REMARKS

It is increasingly acknowledged that to substantively report on sustainability, accounting scholars must consider the cumulative impact of multiple organisations on ecological systems (Gray and Milne, 2002; Bebbington and Larrinaga, 2014). Sustainability reporting at the industry, supply chain or sectoral level could allow us to calculate the impact of an industry on global sustainability parameters like planetary boundaries or the UN SDGs, and seek to reduce that impact. Guidelines for multiple organisation reporting are beginning to emerge and we also see a practitioner reporting example in the form of Bord Bia's Origin Green program. However, our analysis showed that both these emerging guidelines and the Origin Green report are largely disconnected from global parameters of sustainability, and do not provide a 'collective and cumulative assessment of economic activity relative to a resource base'. Our study indicates that sector-level reporting has the potential to advance the field of sustainability reporting, but is not as yet connected to key parameters of global sustainability.

As such the study raises several questions for future research. Firstly, how will organisations manage multiple organisation sustainability reporting? We do not yet know how sector-level, supply chain and industry-level sustainability reporting will manifest in practice. Empirical research is needed on practical issues – what systems, expertise and resources will be required; who in the organisation will manage the process and who the audience for such reports might be. Secondly, how will organisations negotiate reporting at the level of multiple organisations? Our insights, along with those of Spence and Rinaldi (2014, 2010), Georgakopolous and Thomson (2008) and Russell and Thomson (2009), suggest that power differentials will have a significant impact on how multiple organisation sustainability accounting is approached and implemented. Further research, using methods, such as interviews, case studies and ethnography, is required to understand how organisations will negotiate reporting at a sectoral level. Thirdly, what role will legislation play and is regulation appropriate or possible? Our review of emerging frameworks for sector-level sustainability reporting suggests that a number of international institutions are engaging with the concept of sustainability accounting and reporting at the level of multiple organisations. Some of these organisations, such as the EU, are potential regulators. Further research is required to assess the potential for and implications of related legislation for practitioners.

In addition, how can scholars seek to influence policy in this area? As this paper has illustrated, there are no existing cohesive guidelines for multiple organisation sustainability reporting. There is an opportunity for scholars to develop frameworks that can drive best practice in sustainability reporting at sector and supply chain levels. Furthermore, can single-entity reporting guidelines be extended to incorporate multiple organisations? As highlighted in Figure 1, sector-level sustainability reporting is far more complex than single-entity reporting. However, single-entity reporting is well-established and, as Figure 2 illustrates, there are several guiding frameworks for sustainability reporting at this level, along with an emerging regulatory framework in the form of the EU's new Non-financial Reporting

Directive. Further research could explore the possibilities of extending these guidelines to a multiple organisation level.

This study has provided an initial mapping of the terrain of multiple organisation sustainability reporting. Our analysis leads us to conclude that it is imperative that management and accounting scholars engage with these issues and ultimately work to understand how 'accounting can contribute to a more sustainable/less unsustainable society' (Bebbington and Larrinaga, 2014, p. 410).

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ENDNOTES

- ¹ While conscious that Bebbington and Larrinaga (2014) refer to 'accounting for sustainable development', we use the term 'sustainability accounting and reporting' in the paper as consistent with the language used in the documentary data we collected.
- ² Holden et al. (2017) argue that the SDGs do not reflect planetary boundaries, but are based on the 'triple bottom line' concept, where sustainability has three elements, social-environmental-economic, which has been widely criticised by sustainability accounting researchers (e.g. Henriques et al., 2004). Although we recognise this critique of the SDGs, we note that Steffen et al. (2015) suggest that the SDGs can be used alongside planetary boundaries to set development targets.
- ³ It is noted that the indicators identified are largely environmental; it appears that there is little data required by institutions such as the EU and OECD on social sustainability at a sector level.

REFERENCES

- Aras, G. and Crowther, D. (2009). 'Corporate Sustainability Reporting: A Study in Disingenuity?', *Journal of Business Ethics*, Vol. 87, No. 1, pp. 279–288.
- Bansal, P. and Song, H.C. (2017). 'Similar but not the same: Differentiating Corporate Responsibility from Sustainability', *Academy of Management Annals*, Vol. 11, No. 1, pp. 105–149.
- Bebbington, J. (2007). *Accounting for Sustainable Development Performance*, Oxford: CIMA.
- Bebbington, J. and Gray, R. (2001). 'An Account of Sustainability: Failure, Success and a Reconceptualization', *Critical Perspectives on Accounting*, Vol. 12, No. 5, pp. 557–587.
- Bebbington, J. and Larrinaga, C. (2014). 'Accounting and Sustainable Development: An Exploration', *Accounting, Organizations and Society*, Vol. 39, No. 6, pp. 395–413.
- Bebbington, J., Brown, J. and Frame, B. (2007). 'Accounting Technologies and Sustainability Assessment Models', *Ecological Economics*, Vol. 61, No. 2, pp. 224–236.
- Bebbington, J., Gray, R., Hibbitt, C. and Kirk, E. (2001). *Full Cost Accounting: An Agenda for Action*. ACCA Research Report. London: ACCA.

- Bebbington, J., Unerman, J. and O'Dwyer, B. (2014). *Sustainability Accounting and Accountability*. Abingdon: Routledge.
- Bjørn, A., Margni, M., Roy, P.O., Bulle, C. and Hauschild, M.Z. (2016). 'A Proposal to Measure Absolute Environmental Sustainability in Life Cycle Assessment', *Ecological Indicators*, Vol. 63, pp. 1–13.
- Bord Bia (2015). *Sustainability Report 2015*. Dublin: Bord Bia.
- Burritt, R.L. and Schaltegger, S. (2010). 'Sustainability Accounting and Reporting: Fad or Trend?', *Accounting, Auditing & Accountability Journal*, Vol. 23, No. 7, pp. 829–846.
- Careers Portal (2017). 'Agriculture, Horticulture, Forestry & Food', available from: <http://www.careersportal.ie/sectors/sectors.php?sector_id=2#.WK2e1vKS8Ys>, accessed 22 February 2017.
- Cho, C.H., Laine, M., Roberts, R.W. and Rodrigue, M. (2015). 'Organized Hypocrisy, Organizational Façades, and Sustainability Reporting', *Accounting, Organizations and Society*, Vol. 40, No. 1, pp. 78–94.
- Deegan, C., Rankin, M. and Tobin, J. (2002). 'An Examination of the Corporate Social and Environmental Disclosures of BHP from 1983-1997: A Test of Legitimacy Theory', *Accounting, Auditing & Accountability Journal*, Vol. 15, No. 3, pp. 312–343.
- Dyllick, T. and Muff, K. (2016). 'Clarifying the Meaning of Sustainable Business: Introducing a Typology from Business-as-usual to True Business Sustainability', *Organization & Environment*, Vol. 29, No. 2, pp. 156–174.
- Edens, B. and Hein, L. (2013). 'Towards a Consistent Approach for Ecosystem Accounting', *Ecological Economics*, Vol. 90, pp. 41–52.
- Ekins, P., Simon, S., Deutsch, L., Folke, C. and De Groot, R. (2003). 'A Framework for the Practical Application of the Concepts of Critical Natural Capital and Strong Sustainability', *Ecological Economics*, Vol. 44, No. 2, pp. 165–185.
- Environmental Pillar (2016). *Not so Green: Debunking the Myths around Irish Agriculture*. Boyle: Environmental Pillar.
- EPA (Environmental Protection Agency) (2009). *Food Waste Prevention and Home Composting Report*. Dublin: Environmental Protection Agency.
- EPA (Environmental Protection Agency) (2016). *Ireland's Environment an Assessment 2016*. Johnstown Castle: Environmental Protection Agency.
- EU (2008). *Sustainable Consumption and Production and Sustainable Industrial Policy Action Plan – Council Conclusions*. Brussels: Council of the European Union.
- EU (2016). *OEF Retail Data Collection Template*, available from: <<https://webgate.ec.europa.eu/fpfis/wikis/display/EUENVFP/Stakeholder+workspace%3A+OEFSR+pilot+Retail>>, accessed 5 December 2016 [Registration Required].
- EU (2017). *The Environmental Footprint Pilots*, available from: <http://ec.europa.eu/environment/eussd/smgp/ef_pilots.htm>, accessed 7 February 2017.
- Fang, K., Heijungs, R. and De Snoo, G.R. (2015a). 'Understanding the Complementary Linkages Between Environmental Footprints and Planetary Boundaries in a Footprint-boundary Environmental Sustainability Assessment Framework', *Ecological Economics*, Vol. 114, pp. 18–226.
- Fang, K., Heijungs, R., Duan, Z. and de Snoo, G.R. (2015b). 'The Environmental Sustainability of Nations: Benchmarking the Carbon, Water and Land Footprints Against Allocated Planetary Boundaries', *Sustainability*, Vol. 7, No. 8, pp. 11285–11305.
- Fifka, M.S. (2013). 'Corporate Responsibility Reporting and Its Determinants in Comparative Perspective – A Review of the Empirical Literature and a Meta-Analysis', *Business Strategy and the Environment*, Vol. 22, No. 1, pp. 1–35.
- Figge, F. and Hahn, T. (2004). 'Sustainable Value Added – Measuring Corporate Contributions to Sustainability Beyond Eco-Efficiency', *Ecological Economics*, Vol. 48, No. 2, pp. 173–187.

- Fonseca, A., McAllister, M.L. and Fitzpatrick, P. (2014). 'Sustainability Reporting Among Mining Corporations: A Constructive Critique of the GRI Approach', *Journal of Cleaner Production*, Vol. 84, No. 1, pp. 70-83.
- Georgakopoulos, G. and Thomson, I. (2008). 'Social Reporting, Engagements, Controversies and Conflict in an Arena Context', *Accounting, Auditing & Accountability Journal*, Vol. 21, No. 8, pp. 1116-1143.
- Gladwin, T.N., Kennelly, J.J. and Krause, T.S. (1995). 'Shifting Paradigms for Sustainable Development: Implications for Management Theory and Research', *Academy of Management Review*, Vol. 20, No. 4, pp. 874-907.
- Global Reporting Initiative (2017). G4-EN4 Energy Consumption Outside of the Organisation, available from: <<https://g4.globalreporting.org/specific-standard-disclosures/environmental/energy/Pages/G4-EN4.aspx>>, accessed 23 February 2017.
- Gray, R. (2006). 'Social, Environmental and Sustainability Reporting and Organisational Value Creation? Whose Value? Whose Creation?', *Accounting, Auditing & Accountability Journal*, Vol. 19, No. 6, pp. 793-819.
- Gray, R. (2010). 'Is Accounting for Sustainability Actually Accounting for Sustainability... and How Would We Know? An Exploration of Narratives of Organisations and the Planet', *Accounting, Organizations and Society*, Vol. 35, No. 1, pp. 47-62.
- Gray, R. and Bebbington, J. (2001). *Accounting for the Environment*, London: Sage.
- Gray, R. and Milne, M. (2002). 'Sustainability Reporting: Who's Kidding Whom?', *Chartered Accountants Journal of New Zealand*, Vol. 81, No. 6, pp. 66-70.
- Gray, R., Dey, C., Owen, D., Evans, R. and Zadek, S. (1997). 'Struggling with the Praxis of Social Accounting: Stakeholders, Accountability, Audits and Procedures', *Accounting, Auditing & Accountability Journal*, Vol. 10, No. 3, pp. 325-364.
- Guthrie, J. and Abeysekera, I. (2006). 'Content Analysis of Social, Environmental Reporting: What Is New?', *Journal of Human Resource Costing & Accounting*, Vol. 10, No. 2, pp. 114-126.
- Häyhä, T., Lucas, P.L., van Vuuren, D.P., Cornell, S.E. and Hoff, H. (2016). 'From Planetary Boundaries to National Fair Shares of the Global Safe Operating Space - How Can the Scales Be Bridged?', *Global Environmental Change*, Vol. 40, pp. 60-72.
- Henriques, A. and Richardson, J. (eds) (2004). *The Triple Bottom Line: Does It All Add Up?*, Abingdon: Routledge.
- Herbohn, K. (2005). 'A Full Cost Environmental Accounting Experiment', *Accounting, Organizations and Society*, Vol. 30, No. 6, pp. 519-536.
- Hess, T.M., Chatterton, J. and Williams, A. (2012). *The Water Footprint of Irish Meat and Dairy Products*, Cranfield University.
- Hoekstra, A.Y. and Wiedmann, T.O. (2014). 'Humanity's Unsustainable Environmental Footprint', *Science*, Vol. 344, No. 6188, pp. 1114-1117.
- Hoffman, A.J. and Jennings, P.D. (2015). 'Institutional Theory and the Natural Environment: Research in (and on) the Anthropocene', *Organization & Environment*, Vol. 28, No. 1, pp. 8-31.
- Holden, E., Linnerud, K. and Banister, D. (2017). 'The Imperatives of Sustainable Development', *Sustainable Development*, Vol. 25, No. 3, pp. 213-226.
- KPMG (2015). *KPMG Survey of Corporate Responsibility Reporting*, The Netherlands: KPMG International.
- Laine, M. (2010). 'Towards Sustaining the Status Quo: Business Talk of Sustainability in Finnish Corporate Disclosures 1987-2005', *European Accounting Review*, Vol. 19, No. 2, pp. 247-274.
- Lamberton, G. (2000). 'Accounting for Sustainable Development - A Case Study of City Farm', *Critical Perspectives on Accounting*, Vol. 11, No. 5, pp. 583-605.

- Lammers, A., Moles, R., Walsh, C. and Huijbregts, M.A. (2008). 'Ireland's Footprint: A Time Series for 1983–2001', *Land Use Policy*, Vol. 15, No. 1, pp. 53–58.
- Mäkelä, H. and Laine, M. (2011). 'A CEO with Many Messages: Comparing the Ideological Representations Provided by Different Corporate Reports', *Accounting Forum*, Vol. 35, No. 4, pp. 217–231.
- Marimon, F., del Mar Alonso-Almeida, M., del Pilar Rodríguez, M. and Alejandro, K.A.C. (2012). 'The Worldwide Diffusion of the Global Reporting Initiative: What is the Point?', *Journal of Cleaner Production*, Vol. 33, pp. 132–144.
- Medawar, C. (1976). 'The Social Audit: A Political View', *Accounting, Organizations and Society*, Vol. 1, No. 4, pp. 389–394.
- Milne, M.J. and Gray, R. (2013). 'W(h)ither Ecology? The Triple Bottom Line, the Global Reporting Initiative, and Corporate Sustainability Reporting', *Journal of Business Ethics*, Vol. 118, No. 1, pp. 13–29.
- Milne, M.J. and Patten, D.M. (2002). 'Securing Organizational Legitimacy: An Experimental Decision Case Examining the Impact of Environmental Disclosures', *Accounting, Auditing & Accountability Journal*, Vol. 15, pp. 372–405.
- Milne, M.J., Tregidga, H. and Walton, S. (2009). 'Words Not Actions! The Ideological Role of Sustainable Development Reporting', *Accounting, Auditing & Accountability Journal*, Vol. 22, No. 8, pp. 1211–1257.
- Milne, M.J., Kearins, K.N. and Walton, S. (2006). 'Creating Adventures in Wonderland: The Journey Metaphor and Environmental Sustainability', *Organization*, Vol. 13, No. 6, pp. 801–839.
- Moneva, J.M., Archel, P. and Correa, C. (2006). 'GRI and the Camouflaging of Corporate Unsustainability', *Accounting Forum*, Vol. 30, No. 2, pp. 121–137.
- Montiel, I. and Delgado-Ceballos, J. (2014). 'Defining and Measuring Corporate Sustainability: Are We There Yet?', *Organization & Environment*, Vol. 27, No. 2, pp. 113–139.
- Natural Capital Coalition (2016). *Natural Capital Protocol: Food and Beverage Sector Guide*. Natural Capital Coalition, available from: <http://naturalcapitalcoalition.org/wp-content/uploads/2016/07/NCC_FoodAndBeverage_WEB_2016-07-12.pdf>, accessed 6 December 2016.
- Newton, T.J. (2002). 'Creating the New Ecological Order? Elias and Actor-network Theory', *Academy of Management Review*, Vol. 27, No. 4, pp. 523–540.
- O'Dwyer, B. (2002). 'Managerial Perceptions of Corporate Social Disclosure: An Irish Story', *Accounting, Auditing & Accountability Journal*, Vol. 15, No. 3, pp. 406–436.
- Obst, C.G. (2015). 'Reflections on Natural Capital Accounting at the National Level: Advances in the System of Environmental-Economic Accounting', *Sustainability Accounting, Management and Policy Journal*, Vol. 6, No. 3, pp. 315–339.
- OECD (2013a). 2013 Edition of the OECD Environmental Database: Data for Ireland, available from: <<http://stats.oecd.org/Index.aspx?QueryId=48648>>, accessed 7 December 2016.
- OECD (2013b). Food Waste, available from: <https://stats.oecd.org/Index.aspx?DataSetCode=FOOD_WASTE>, accessed 7 December 2016.
- OECD (2017). Generation of Waste by Sector, available from: <<https://stats.oecd.org/Index.aspx?DataSetCode=WSECTOR>>, accessed 24 February 2017.
- Pagell, M. and Shevchenko, A. (2014). 'Why Research in Sustainable Supply Chain Management Should Have No Future', *Journal of Supply Chain Management*, Vol. 50, No. 1, pp. 44–55.
- Parker, L.D. (2005). 'Social and Environmental Accountability Research: A View from the Commentary Box', *Accounting, Auditing & Accountability Journal*, Vol. 18, No. 6, pp. 842–860.

- Pretty, J., Smith, G., Goulding, K.W.T., Groves, S.J., Henderson, I., Hine, R.E., King, V., Van Oostrum, J., Pendlington, D.J., Vis, J.K. and Walter, C. (2008). 'Multi-Year Assessment of Unilever's Progress towards Agricultural Sustainability: Indicators, Methodology and Pilot Farm Results', *International Journal of Agricultural Sustainability*, Vol. 6, No. 1, pp. 37–62.
- PUMA (2011). PUMA's Environmental Profit and Loss Account for the year ended 31 December 2010, available from: <<http://about.puma.com/damfiles/default/sustainability/environment/e-p-l/EPL080212final-3cdfc1bdca0821c6ec1cf4b89935bb5f.pdf>>, accessed 23 February 2017.
- Rinaldi, L., Unerman, J. and Tilt, C. (2014). 'The Role of Stakeholder Engagement and Dialogue within the Sustainability Accounting and Reporting Process', in J. Bebbington, J. Unerman and B. O'Dwyer (eds) *Sustainability Accounting and Accountability*. Abingdon: Routledge, pp. 86–117.
- Rockström, J., Steffen, W., Noone, K., Persson, Å., Chapin, F.S., Lambin, E.F., Lenton, T.M., Scheffer, M., Folke, C., Schellnhuber, H.J. and Nykvist, B. (2009). 'A Safe Operating Space for Humanity', *Nature*, Vol. 461, No. 7263, pp. 472–475.
- Russell, S.L. and Thomson, I. (2009). 'Analysing the Role of Sustainable Development Indicators in Accounting for and Constructing a Sustainable Scotland', *Accounting Forum*, Vol. 33, No. 3, pp. 225–244.
- Schaltegger, S. and Burritt, R.L. (2010). 'Sustainability Accounting for Companies: Catchphrase or Decision Support for Business Leaders?', *Journal of World Business*, Vol. 45, No. 4, pp. 375–384.
- Seuring, S. and Müller, M. (2008). 'From a Literature Review to a Conceptual Framework for Sustainable Supply Chain Management', *Journal of Cleaner Production*, Vol. 16, No. 15, pp. 1699–1710.
- Shrivastava, P. and Kennelly, J.J. (2013). 'Sustainability and Place-Based Enterprise', *Organization & Environment*, Vol. 26, No. 1, pp. 83–101.
- Spence, C. (2007). 'Social and Environmental Reporting and Hegemonic Discourse', *Accounting, Auditing & Accountability Journal*, Vol. 20, No. 6, pp. 855–882.
- Spence, L.J. and Rinaldi, L. (2014). 'Governmentality in Accounting and Accountability: A Case Study of Embedding Sustainability in a Supply Chain', *Accounting, Organizations and Society*, Vol. 39, No. 6, pp. 433–452.
- Spence, L.J. and Rinaldi, L. (2010). 'Sainsbury's: Embedding Sustainability within the Supermarket Supply Chain', in A. Hopwood, J. Unerman and J. Fries (eds), *Accounting for Sustainability: Practical Insights*, London: Earthscan, pp. 48–71.
- Steffen, W., Richardson, K., Rockström, J., Cornell, S.E., Fetzer, I., Bennett, E.M., Biggs, R., Carpenter, S.R., de Vries, W., de Wit, C.A. and Folke, C., (2015). 'Planetary Boundaries: Guiding Human Development on a Changing Planet', *Science*, Vol. 347, No. 6223, p. 1259855.
- Thomson, I. (2014). 'Mapping the Terrain of Sustainability and Accounting for Sustainability', in J. Bebbington, J. Unerman and B. O'Dwyer (eds), *Sustainability Accounting and Accountability*. Abingdon: Routledge, pp. 38–51.
- Tregidga, H., Milne, M. and Kearins, K. (2014). '(Re) Presenting "Sustainable Organizations"', *Accounting, Organizations and Society*, Vol. 39, No. 6, pp. 477–494.
- Ullmann, A.A. (1976). 'The Corporate Environmental Accounting System: A Management Tool for Fighting Environmental Degradation', *Accounting, Organizations and Society*, Vol. 1, No. 1, pp. 71–79.
- UNDP (United Nations Development Programme) (2015). *Human Development Report 2015*, New York: UNDP.

- UNEP (United Nations Environment Programme) (2016). *The Emissions Gap Report 2016*, Nairobi: UNEP.
- UNFAO (Food and Agriculture Organisation of the United Nations) (2016). System of Environmental-Economic Accounting for Agriculture, Forestry and Fisheries – SEEA Agriculture CONSULTATION DRAFT, available from: <https://unstats.un.org/unsd/envaccounting/aff/2GC_Draft.pdf>, accessed 8 December 2016.
- UNMEA (UN Millennium Ecosystem Assessment) (2004). 'Living Beyond Our Means: Natural Assets and Human Well-Being: Statement from the Board', available from: <<http://www.millenniumassessment.org/en/Products.BoardStatement>>, accessed 15 October 2009.
- Wackernagel, M. and Rees, W. (1996). *Our Ecological Footprint*. Philadelphia, PA: New Society Publishers.
- Wackernagel, M., Onisto, L., Bello, P., Linares, A.C., Falfán, I.S.L., Garcia, J.M., Guerrero, A.I.S. and Guerrero, M.G.S., (1999). 'National Natural Capital Accounting with the Ecological Footprint Concept', *Ecological Economics*, Vol. 29, No. 3, pp. 375–390.
- Whiteman, G., Walker, B. and Perego, P. (2013). 'Planetary Boundaries: Ecological Foundations for Corporate Sustainability', *Journal of Management Studies*, Vol. 50, No. 2, pp. 307–336.
- Worldwatch Institute (2013). *State of the World 2013: Is Sustainability Still Possible?*, Washington D.C.: Worldwatch Institute.
- WWF (Worldwide Fund for Nature) (2016). *Living Planet Report 2016*, Switzerland: WWF.

PERFORMANCE ACCOUNTABILITY: A STUDY OF THE UK AND IRISH CHARITY PRACTICES AT A TIME OF CHANGE

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ABSTRACT

The charity sector has major economic, cultural and social impacts on society. To maintain confidence and build trust, good accounting and reporting systems are essential. Indeed, such could be viewed as necessary conditions for the health and growth of the sector. Well-developed and appropriate accounting and reporting systems (particularly with respect to performance) can help charities discharge accountability to external stakeholders and establish legitimacy in wider society. This paper explores and compares performance reporting by large charities in the United Kingdom (UK) (which has a more-established regulatory architecture) and in the Republic of Ireland (RoI) (which has a much-less developed regulatory framework) at a time when new reporting regulations are being introduced. Through an analysis of the annual reports and annual reviews of 50 large charities, this paper highlights continuing weak performance accountability in both jurisdictions (especially in the RoI). The implications of this are discussed. It is argued that much has yet to be done by charities themselves, and by those concerned with the administration and control of the sector, to rectify this weakness and provide a foundation for better accountability, legitimacy and trust.

INTRODUCTION

The charity sector is quite different from either the private or the public sectors in terms of its orientation and motivation, the nature of its activities, its resource availability and the manner of its contribution to the public good. Regardless of their size, charities play a significant and vital role in society, often serving and assisting those who are most disadvantaged, marginalised or helpless. In both the United

Kingdom (UK) and the Republic of Ireland (RoI), an organisation is considered to be a charity if its purposes are deemed to be 'charitable' and it fulfils a 'public benefit' (with the law in each jurisdiction specifying how such factors are determined). The charity sectors in the UK and RoI are significant socially and economically. In the UK, there are over 200,000 registered charities with an estimated total annual income approaching £80 billion (Charity Commission, 2016; Charity Commission for Northern Ireland (CCNI), 2017; Office of the Scottish Charity Regulator (OSCR), 2017). In the RoI, although it is more difficult to get accurate estimates of numbers and economic significance (partly because of a regulatory framework more in its infancy), Breen and Carroll (2015) suggest that there may be over 8,000 charities, which are a subset of a larger not-for-profit (NFP) sector of 12,000 organisations with an annual income of approximately €6 billion (approximately £5.3 billion).

The growth in the size and influence of the sector (Cabinet Office, 2002), combined with a number of highly publicised governance and fundraising scandals, has led to increased sector visibility and public scrutiny in both the UK and RoI (Burke-Kennedy, 2013; O'Brien, 2013; Hind, 2017). In particular, the need for the sector to operate transparently and discharge accountability appropriately has been widely articulated (Charity Commission, 2000a, 2005; Ebrahim, 2003; Accounting Standards Board (ASB), 2007; Breen and Carroll, 2015). Under the 2006 Charities Act, the Charity Commission in England and Wales (hereafter referred to as Charity Commission) has been charged with the responsibility to enhance charitable accountability, increase public trust and confidence and also promote the effective use of charitable funds. In Scotland and Northern Ireland (NI), major changes in the regulatory environment have emphasised similar themes. In the RoI, the Department of Justice, Law Reform and Equality is responsible for charity regulation. The Charities Regulatory Authority (CRA) was established in October 2014, with a key task being to improve the accountability and transparency of the sector.

Accountability can be viewed as being related to the requirement to be answerable for one's conduct and responsibilities. A key argument is that good accountability by charities supports building of trust, and trust is essential to ensure the health of the sector (including its ability to access funding). While accountability is wider than accounting (no matter how widely we define accounting), good accounting and reporting are key aspects of a good system of accountability. With regard to accountability, two key questions emerge: to whom is a charity accountable; and for what is a charity accountable? Reflecting ideas from both agency theory as related to charities (Laughlin, 1990) and Mitchell, Agle and Wood's (1997) theory of stakeholder identification and salience, it can be argued that donors (including funders) is a key upward stakeholder group to whom an account is owed. Donors/funders provide resources to a charity and often receive no direct economic benefit in return; without their support, charities cannot function and charitable activity will cease. In terms of the form of the account, it has been argued that while financial accountability (possibly through audited financial statements) is important (e.g. to indicate that the money raised has been used for the appropriate purposes and that the charity has 'lived within its means'), such accounts are likely only to be of secondary importance to donors/funders (and other important stakeholders) (Gray, 1983). Other wider information, particularly relating to performance, is likely to

be paramount in discharging accountability, and this will require the telling of 'the story' of the charity in a way that is truthful, consequential and engages with them (Boyne and Law, 1991; Stone and Ostrower, 2007; Connolly and Hyndman, 2013).

The widespread adoption of appropriate accounting and reporting practices, and the ongoing renewal of such, has the potential to support charities in discharging accountability, particularly to donors/funders. A vital aspect of this has been the evolving development of a Statement of Recommended Practice (SORP)¹ for charities. Over time, through its various iterations, the SORP, which consists of financial statement and trustees' annual report (TAR) requirements,² has increasingly emphasised the importance of performance information both in discharging accountability and as a basis for sharpening mission focus (Hyndman and McConville, 2017).

Reflecting a differential jurisdictional focus on the regulation of charities, most of the UK charities has had a charity regulator since the 19th century, while the CRA in the RoI was only established recently (2014). Indeed, possibly reflecting this, compliance with the SORP is a legal requirement for the largest UK charities³ (including all of those in this study), although only best practice for RoI charities. Against a backdrop of high-visibility governance and fundraising scandals, new accounting and reporting guidance and emerging legislative adjustments, the objective of this paper is to explore performance reporting by large charities in each jurisdiction in the light of the literature on accountability and stakeholder theory. This study offers a twofold theoretical contribution. Following stakeholder theory, it suggests that charities perceive key stakeholders (including donors/funders and the general public) as particularly interested in the activities they carry out, rather than in 'cold' numbers measuring their efficiency and effectiveness; hence, a focus on more descriptive information relating to performance is provided in charities' reports. Moreover, the results hint that having a mandatory reporting system in place potentially increases the likelihood of more general disclosure. This is evident in the case of the UK when compared to the RoI. The paper begins by discussing charity accounting and accountability, with a particular emphasis on performance reporting. This is followed by an overview of the changing landscape with respect to the accountability of charities in the UK and RoI; here, prior, related research is also presented. Then, after explaining the research methods, the results are reported and discussed. A key contribution of this paper is that it highlights continuing weak performance accountability in both jurisdictions (especially in the RoI). It is argued that much has yet to be done by charities themselves, and by those concerned with the administration and control of the sector, to rectify this weakness and provide a foundation for better accountability, legitimacy and trust. It is contended that such is necessary if the development of the sector is to be encouraged, and the ongoing health of it is to be safeguarded.

FINANCIAL AND PERFORMANCE ACCOUNTABILITY

Accounting and Accountability

Conventional views of accounting see it as a purposive activity, directed towards a specified end, which is the meeting of users' (or stakeholders') information needs,

with a stakeholder being defined as any 'group or individual who can affect or is affected by an organisation's achievements' (Freeman, 1984, p. 46) (e.g. beneficiaries, donors/funders, regulators or the public at large). It is viewed as being concerned with providing information to satisfy the needs of users/stakeholders (Accounting Standards Committee (ASC), 1975; ASB, 1999), and interpretations of this in the context of not-for-profit organisations (NFPOs) (ASB, 2007) highlight a similar thrust. Accountability can be viewed as being related to the requirement to be answerable for one's conduct and responsibilities; a concept that comes more into focus when faced with a changing and dynamic external environment (e.g. influenced by high-profile scandals and changing legislative frameworks). While accountability is more than accounting, good accounting and reporting are key aspects of a good system of accountability (Jackson, 1982).

In the context of charities, the Charity Commission (2004a, p. 2) sees accountability in terms of a charity's response to the legitimate information needs of its stakeholders, an aspect of which is often made through annual reports that should provide 'adequate information to allow stakeholders to assess the overall performance of the charity'. Emphasising a wider perspective, Roberts and Scapens (1985, p. 447) describe accountability as a relationship where parties explain and take responsibility for their actions through 'the giving and demanding of reasons for conduct'. In a similar light, Fry (1995, p. 184) views accountability in terms of 'public account-giving' that might include 'justifications, rationalisations, stories, excuses'.

This accountability relationship (or stakeholder/user-needs model) can be seen as a principal-agent association (reflecting ideas connected to agency theory) whereby a principal transfers resources to an agent and has expectations regarding the transfer. This forms the basis of an accountability relationship, and as Laughlin (1996) highlights, these expectations are complex and may be written and explicit or unwritten and implicit. In a charity context, the principal could be viewed as a donor or major funder (often considered a key stakeholder) who transfers resources (without any direct economic benefit to themselves anticipated) to an agent (the charity). With such a transfer, comes expectations (frequently not specifically detailed in anything resembling contractual terms) on the part of the donor/funder (principal) that the resources will be used to further the mission and objectives of the charity (often expressed in terms of supporting beneficiary need, or creating a wider public benefit); and expectations that information will be provided regarding what a charity has done or plans to do (possibly in terms of activities, stories, plans and spending). Accountability is discharged (or an account is given) as such information is communicated (through a variety of mechanisms and channels) to the donor/funder (principal) regarding this. On this basis, the principal (donor/funder) holds the agent (the charity) to account by responding to such information through action (e.g. continuing to provide funds or ceasing to provide funds) or communication (e.g. by congratulating or censoring the charity).

In considering the accountability, two key questions emerge: to whom is a charity accountable; and for what is a charity accountable?

To Whom Is a Charity Accountable?

Several authors have identified (or speculated about) the stakeholders who, in the language of Freeman (1984), are 'affected' or 'affect' the operation of NFPOs (including charities) (Hyndman and McDonnell, 2009). In these studies, the key external stakeholders identified include: beneficiaries, government and regulators, donors/funders and the public at large. Given the breadth of parties who might be considered stakeholders, the issue of how organisations can identify 'who or what really counts' and prioritise competing stakeholder claims is considered by Mitchell et al. (1997, p. 853). They argue that the salience of stakeholders (or the degree to which they and their arguments are perceived to count) depends upon the stakeholder possessing three attributes: power, legitimacy and urgency. It is suggested that the most salient to the organisation are the stakeholders who are perceived to have the greatest amount of these attributes and that the claims of these 'definitive stakeholders' (p. 878) are likely to be prioritised. For charities, the language of stakeholder theory resonates with the Charity Commission's advocacy of needing to report to meet the information needs of stakeholders (Charity Commission, 2004a); developing good relationships with stakeholders as one of the *Hallmarks of an Effective Charity* (Charity Commission, 2004b); and involving key stakeholders in governance, such as including beneficiaries on boards of trustees (Charity Commission, 2000b).

By being accountable to donors/funders and regulators (upward stakeholders), possibly by focusing on financial probity, efficiency and impact on beneficiaries and societies, charities can gain external legitimacy from such parties (Ebrahim, 2003; ASB, 2007). This has become increasingly important as charities are being placed under growing scrutiny and the need to maintain (or reinstate) public trust and confidence, either voluntarily or on demand, is particularly emphasised (Hind, 2017). To an extent, charity donors/funders are somewhat akin to shareholders of commercial organisations (ASB, 2007). Yet while donors/funders are arguably less likely to monitor charities as closely as shareholders may commercial organisations, they are more likely to terminate their support if their trust and confidence wane as their personal welfare is not dependent upon this support. Accountability and transparency are, therefore, critical attributes through which to gain and maintain donor/funder support and trust.

In contrast to upward stakeholders (such as donors/funders), downward stakeholders (such as beneficiaries) may possess little power. However, reflecting an egalitarian ethical stance that may be present in charities, this should not necessarily result in limited and weak accounting to beneficiaries. Rather, it could be argued that recognising the weak position of downward stakeholders, charities (as value-driven organisations) should choose to prioritise them in the discharge of accountability. In addition, accounting to and for downward stakeholders enables charities to develop intangible sources of external legitimacy such as credibility, reputation, trust and integrity, which, in turn, are likely to engender the trust and support, not only of beneficiaries, but also of donors/funders (Connolly and Hyndman, 2017). In other words, consistent with the notion of a broad accountability paradigm, charities have an 'upward' accountability to their donors/funders and financial supporters, government and oversight agencies and the public at

large, and also a 'downward' accountability to the beneficiary groups and clients who use their services.

For What Is a Charity Accountable?

While Stewart (1984, p. 16) recognises that 'the purpose of the account and hence the basis of accountability can vary'; he argues that an accountability information system should report on a number of levels of accountability. Two main types of information (or types of accountability) that may be particularly important in this regard with respect to charities are: (i) financial information as contained in traditional financial reports (e.g. to indicate the sources of funding and the nature of expenditure) and (ii) wider performance information, often of a non-financial nature (possibly relating to the goals, objectives, output, impact, efficiency and effectiveness of the charity). Regarding accountability, the information needs, and desired engagement (if any), of each stakeholder group (e.g. beneficiaries/users of services, regulators and donors/funders) is likely to be different. For example, beneficiaries (and possibly donors/funders) may emphasise the output, or effectiveness, of a charity, while the concern of regulators may be more on efficiency and probity.

It has been suggested by several writers that, with charities, there may be temptation to focus accountability reporting on traditional financial accounts (and providing a 'financial' account) at the expense of wider performance reporting (and a 'performance' account). This is possibly because of the existence of standard rules and templates relating to a 'financial' account and the fact that accountants (who are often central to the information-provision process) may be particularly 'comfortable' and 'familiar' with such accounts. In addition, the determination of what is appropriate performance information (and the capturing of this information in an objective manner) is much more contestable and difficult than well-established financial interpretations. However, it has been argued that such a focus might undermine accountability by concentrating on the less important (Gray, 1983; Connolly and Hyndman, 2013). Gray (1983, 1984), in particular, highlights this danger, arguing that financial accounts only fully discharge accountability in 'special cases', the best example of which is the business enterprise/shareholder relationship. He suggests that, with charities, such reporting can only go a small way towards supporting the discharge of accountability.

Measuring Performance in a Charity

Given the importance of performance and performance accountability, how can 'performance' be viewed in the context of NFPOs, including charities? With NFPOs, it is common to examine performance in terms of a production process. Details of the elements of a range of NFPO production-process models are presented in Table 1.

While there are no standardised definitions for the terms input, processes (activities), output and result/outcome/impact, the following explanation may aid understanding. Input relates to the resources used in providing a service (e.g. expenditure incurred and number of staff). Processes represent the activities undertaken by an organisation (e.g. number of visits made, number of cancer research projects funded). Output is the actual goods or services produced for consumption (e.g. number of children fed, number of cancer research projects completed).

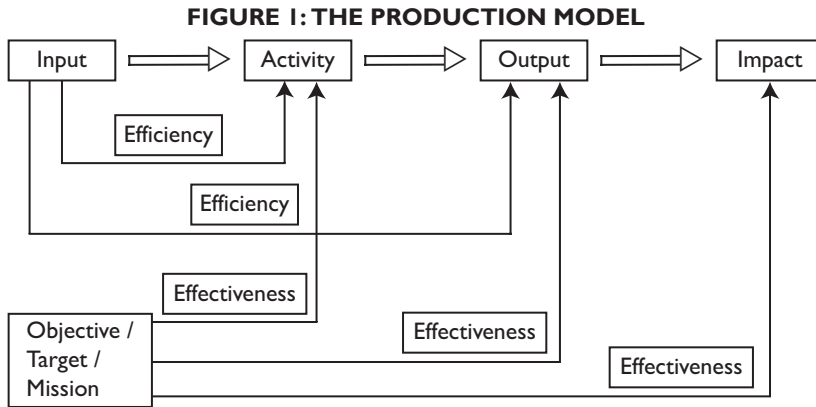
TABLE 1: ELEMENTS OF THE PRODUCTION PROCESS IN NOT-FOR-PROFIT ORGANISATIONS

	American Brace et al. (1980)	Accounting Association (1989)	Carter et al. (1992)	Connolly and Hyndman (2003)	The W. K. Kellogg Foundation (2004)	Connolly and Dhanani (2009)	Breckell et al. (2011)
Input	Cost and Input	Input	Input	Resources / Input	Input		
Process		Process	Process	Activities			
Output	Output	Output	Output	Output	Output	Output	Output
Result	Outcome	Outcome	Outcome / Result	Outcome / Impact	Result / Impact	Outcome / Impact	

Result (or outcome/impact) is concerned with the effect of an organisation's activities on individual beneficiaries and society more widely (e.g. change in the level of education, overall level of satisfaction with the services provided). While these stages of the 'production process' are represented as being distinct, in reality there may be some blurring at the edges. Difficulties, for example, may arise in distinguishing between an output and result (outcome/impact) in certain circumstances. For convenience, the term 'impact' will be used throughout the remainder of this paper (rather than result or outcome).

Notwithstanding such difficulties, it is clear that the term 'impact' has, of late, gained particular prominence and usage. For larger funders (and particularly those commissioning public services), such information is demanded as a basis for the targeting of resources at proven solutions to social problems (Lumley et al., 2011). In addition, the UK government has highlighted the importance of focusing on societal impact in government decision-making, and, in particular, when funding nongovernment organisations in the delivery of social programmes (HM Treasury, 2011). The UK government has also funded a cross-sector group known as 'Inspiring Impact', which seeks to encourage and support good practice in reporting on impact (Lumley et al., 2011) and has developed a *Code of Good Impact Practice* (Inspiring Impact, 2013). Interestingly, as mentioned earlier, the extant SORP (Charity Commission and OSCR, 2014) encourages impact reporting in the TAR.

Given this production process, it can be argued that the two key criteria for judging performance are efficiency (the ratio of output to input) and effectiveness (the relationship between an organisation's impact, or activities/output, and its objectives). An example of an efficiency measure for a charity might be the cost (an input) per child fed (an output), or the number of cases handled (an output) per employee (an input). A measure of effectiveness could be the number of children fed versus the planned number, or the decrease in blindness in a particular area versus the planned decrease as a result of a particular intervention. Often these criteria are used in a comparative, rather than an absolute sense. For example, it is *not* normally said that an organisation is 90 per cent efficient, but rather that it is more (or less) efficient than a comparable organisation, than it was last year or than budgeted for. A representation of a performance model that brings together the elements of the production process and relates them to the two key performance criteria (efficiency and effectiveness) is shown in Figure 1.



There are two key reasons for measuring performance in a charity. Firstly, performance measures can form the basis for discharging accountability (and help build connections with key stakeholders; this may be vital in establishing external legitimacy), which is the focus of this paper. Secondly, it can provide essential information to improve management planning and control systems within the organisation. These two reasons interconnect. For example, in the public sector, it has been argued that the external pressure provided by the need to disclose performance information externally frequently encourages a focus on performance by management and provides a catalyst for performance improvement (Eden and Hyndman, 1999). Similar claims are relevant to the charity sector. Indeed, the external reporting of performance information by charities can provide a visibility to the activities and achievements of the organisation, enabling informed discussion (and decision-making) on the part of stakeholders. Moreover, the potential benefits of developing linkages between the use of performance information in a charity’s planning and control system and the discharge of performance accountability are unmistakable (Hyndman and Anderson, 1997; Anthony and Young, 2002), with a clearly articulated and performance-focused planning and control framework supporting the discharge of accountability (Charities Aid Foundation, 2001; Charity Commission, 2004a, 2004b).

Although the need to develop appropriate performance measures in charities is well founded (Connolly and Dhanani, 2009; Nevill and Lumley, 2011; Charity Commission and OSCR, 2014; McConville, 2017), there are considerable difficulties in designing an information system which provides such information. For example, in many cases, mission and objectives are so vaguely drafted that they inhibit useful performance measures being developed (Williams, 1985). In addition, defining objectives in terms of activities, rather than impact related to the organisation’s mission, can be problematic since more activity (and more expense) does not necessarily lead to more, or better, impact. Furthermore, aligning high-level and low-level performance measures is often challenging because of multiple (frequently competing) organisational goals, multiple stakeholder influences, unclear input-output relationships and the fact that many costs and benefits arise over the long term (Hedley et al., 2010; Nevill and Lumley, 2011). Moreover, whilst accepting

that setting objectives is critical to performance measurement, there is a danger that, unless care is taken in developing useful systems (that are frequently refreshed), the process will degenerate into a formal ceremony that does little to improve charity accountability, efficiency and effectiveness (Thompson, 1995).

It has been argued that accounting information should possess qualities such as relevance, objectivity, understandability, reliability and timeliness (ASB, 1999). Some of these characteristics pull in opposite directions and trade-offs are often required. For example, the price of improved relevance may be less objectivity, or the most reliable results may not be the timeliest. Thus, managers must exercise judgement in the selection of appropriate performance measures, with a particularly important issue being the comparability and reliability of information (Pendlebury et al., 1994). Whilst Mayston (1985) suggests introducing similar disciplines on the external reporting of performance information that are imposed on financial accounting information (e.g. disclosure requirements and external auditing), there are clear cost/benefit issues that have to be considered (Hedley et al., 2010; Hyndman and McConville, 2017). Notwithstanding the profound difficulties of measuring performance, not attempting to do so (no matter how contestable the resulting measures may be) can significantly undermine the strategic focus of the charity and weaken the discharge of accountability.

CHANGING ACCOUNTING AND ACCOUNTABILITY

Despite the importance of good accounting and reporting to the charity sector, until the 1980s the framework for such was extremely weak (Goodman Committee, 1976; Austin and Posnett, 1979; Bird and Morgan-Jones, 1981). In the UK and RoI, regulation was much less developed than it is today, with the lone regulator at that time (only England and Wales had such a functionary) not focusing to any significant extent on the reviewing and monitoring issues relating to accounting, reporting and accountability. Charity law was diverse and had little to say about charity accounting and the publication of financial statements. While charities were often under an obligation to keep proper books of account and to prepare financial statements regularly, frequently such statements did not have to show a 'true and fair view' and were not required to be audited. While this was not the case with charities incorporated as limited companies (these being subject to the reporting requirements of the companies' Acts), in practice, the detailed application of accounting standards to the financial statements of such incorporation was commonly ignored (and auditors rarely commented on lack of adherence to such standards) because of misunderstanding and inertia (Austin and Posnett, 1979). Overall, in the UK and RoI, there was limited pressure to improve charity reporting from legislation, accounting standards, or an effective regulatory body, and wider reporting (such as that relating to governance and performance) was rarely on the agenda (Connolly and Hyndman, 2004; Breen and Carroll, 2015).

This has changed considerably in the UK in the 1980s, with the development (in 1988) and periodic 'refreshing' (in 1995, 2000, 2005 and 2014) of a SORP relating to charity accounting and reporting; a SORP that, over time, has become mandatory

for most large UK charities, and best practice for RoI charities. This has emphasised both the important 'financial account' and, the arguably, even more important 'performance account' (or telling the charity story – Connolly et al., 2013). While the original SORP (ASC, 1988) is largely sought to reduce the diversity in charity financial statements (based almost entirely on applying business accounting principles), subsequent revisions are required for financial statements to be much more charity specific and focused attention on the content of narrative information (in recognition of its significance in discharging accountability).

As implied earlier, while financial reporting is a necessary aspect for a charity's accountability framework, it is often an insufficient discharge of accountability for many (if not all) stakeholders. Charities are set up to provide services to specific beneficiaries (or society at large), and donors provide resources to facilitate such provision with no expectation of direct benefit to themselves. Throughout the evolution of the charities SORP, there has been an increasing recognition of the importance of performance reporting. This, for example, is reflected in recent debate calling for charities to focus on (and report) their performance or impact, with this information being suggested as having potential to strengthen both upward accountability to donors/funders and downward accountability to beneficiaries (Benjamin, 2012; Connolly and Hyndman, 2013). Indeed, the importance of this has been particularly recognised in the latest SORP (the 'FRS 102 SORP') (Charity Commission and OSCR, 2014, para. 1.43) **which**, while clearly acknowledging the challenges, explicitly encourages charities to develop and use impact reporting in the TAR as a basis for discharging performance accountability:

In reviewing achievements and performance, charities may consider the difference they have made by reference to terms such as inputs, activities, outputs, outcomes and impacts, with impact viewed in terms of the long-term effect of a charity's activities on both individual beneficiaries and at a societal level. Charities are encouraged to develop and use impact reporting (impact, arguably, being the ultimate expression of the performance of a charity), although it is acknowledged that there may be major measurement problems associated with this in many situations.

As discussed, two main types of information that are particularly important in discharging accountability are financial information and wider performance information. Prior research examining charity accounting and reporting in the UK and RoI (most of which has focused solely in the UK) can be broadly categorised into studies that have investigated the quality of charity financial statements and disclosure patterns of information accompanying annual financial statements, particularly relating to performance. While these categorisations are a convenient way to present the material, many of the previous studies relate to both categories (and sometimes more widely as well).

With respect to the first, a number of studies have explored the extent to which charity financial statements comply with best-practice financial accounting recommendations (Bird and Morgan-Jones, 1981; Ashford, 1989; Gambling et al., 1990; Hines and Jones, 1992; Williams and Palmer, 1998; Connolly and Hyndman, 2000, 2001, 2002; Palmer et al., 2001). These studies are often based on the presumption that this is important to a range of stakeholders. Whether such accounts are of

interest to stakeholders, including the public (evidenced by an extensive and interested readership), or whether such publications are in the public interest (whereby a few interested and equipped parties will/may explore the detail and highlight areas of concern), often dominates discussions. It is likely that although many stakeholders have limited interest (and probably understanding) of the technical detail of financial accounts, it is in the public (and wider stakeholder) interest that such accounts are produced and audited (and, at the very least, have the potential to be scrutinised by a limited number of informed and interested individuals).

Over time, the focus of much empirical work has shifted away from financial accountability (usually framed in terms of compliance with the extant financial requirements of the SORP) to accountability for performance. Here, the key recurrent idea is that good financial reporting is a necessary, but not sufficient, focus for accountability and that the provision of other wider information, particularly relating to performance, is paramount in discharging accountability to a range of stakeholders (Hyndman, 1990, 1991; Connolly and Hyndman, 2003, 2004; Connolly and Dhanani, 2006, 2009; Dhanani, 2009; Jetty and Beattie, 2009; Hyndman and McConville, 2016, 2017). Overall, the findings from previous research indicate that while the extent of performance reporting has increased over time, it remains poor (and particularly poor in the RoI) and there are significant shortcomings in terms of making such reporting transparent. It is argued that these inadequacies made assessing performance difficult for most users.

RESEARCH METHOD

While most forms of data reaching the public domain can be considered to be part of the accountability discharge function, and whilst acknowledging the importance of traditional financial statements (in discharging financial accountability), this research focuses on the disclosure of performance information contained in the annual reports (in the TAR section) and annual reviews (if one is published) of large UK and RoI charities. The annual report is a statutory document, often seen as the key official accountability document, the content of which is regulated and subject to independent monitoring. The annual review is a voluntary form of communication with external stakeholders which many charities prepare alongside their annual report as a means of both marketing the charity and discharging accountability to external stakeholders. It is frequently written in less formal language and includes a higher proportion of stories, photographs and figures than TARs. These two channels were chosen as suitable units of analysis because they are within direct managerial control (Guthrie and Parker, 1989) and also because they have a level of formality that goes beyond a marketing/publicity type document.

Utilising the classification of charities in terms of what they (primarily) do and who they (primarily) help, the following five broad categories of charitable activities were developed:

1. Medical/Health/Sickness
2. Medical Research

3. Overseas Aid/Famine Relief;
4. Animal Welfare
5. Wider Social Objects (Children/Poverty/Social Welfare)

To identify the performance information made available publicly to charity stakeholders, 25 UK and 25 RoI charities were selected and their most recent annual reports and annual reviews (if one was published) were obtained from their website. In order to acquire a sample of UK charities, the Advanced Search Features available on the Charity Commission's website⁴ were used to select five large charities based upon the total income from each of the aforementioned five categories. As a similar facility is not available for RoI charities, this sample was drawn from the Boardmatch (2013) *Charity 100 index*. However, while the twenty-five RoI charities were selected, as it was only possible to obtain three RoI 'animal welfare' charities due to the number of such organisations represented on the index, additional charities from categories 1 and 2 above were selected (Table 2). Of the fifty charities selected, twenty (UK – 16; RoI – 4) prepared a separate annual review (or equivalent) document (Table 2).

TABLE 2: DOCUMENT CONTENT ANALYSIS SAMPLE

	Medical / Health / Sickness	Medical Research	Overseas Aid / Famine Relief	Animal Welfare	Wider Social Objects	Annual Report	Annual Review
UK	5	5	5	5	5	25	16
RoI	6	6	5	3	5	25	4
<i>Total</i>	<i>11</i>	<i>11</i>	<i>10</i>	<i>8</i>	<i>10</i>	<i>50</i>	<i>20</i>

As outlined earlier, it has been argued that focusing and reporting on performance is critical in discharging accountability to key stakeholders (particularly donors/funders), and the elements of disclosure highlighted in Figure 1 represent key aspects of such communications. In addition, it can be argued that other complementary information that can support the analysis and interpretation of performance measures, and provide context, may also be useful in discharging performance accountability. For example, it is suggested that charities should explain their objectives and the significant activities undertaken in pursuit of the achievement of those objectives (Lumley et al., 2011; Charity Commission and OSCAR, 2014; McConville, 2017). Moreover, it has been advocated that future target information and information on any lessons learned from an analysis of past performance can complement such disclosures, particularly to enable stakeholders to assess both direction of travel and the challenges that a charity may face in delivering performance (Hyndman, 1990; Ní Ógáin et al., 2012).

Based upon the framework shown in Figure 1, supplemented by reflections on prior empirical research and other related argumentation, a checklist was developed⁵ to capture the performance accountability disclosures. As Table 3 shows, nine separate categories of performance information were reported. The importance of these was identified from previous studies that explored the potential significance

of performance disclosure to key stakeholders, largely drawing on ideas reflecting accountability frameworks and stakeholder theory (Ebrahim, 2003; Dhanani, 2009; Hyndman and McDonnell, 2009; Hyndman and McConville, 2017). It is argued that the disclosure (or non-disclosure) of these nine key performance items in the annual reports or annual reviews of charities is indicative of the extent to which performance accountability has (or has not) been discharged. In terms of 'how' the data was collected, the checklist was originally tested on a small sample of organisations and then revised accordingly to enable the collection of a complete, objective and reliable source of data that: (i) captured the disclosures provided in the TAR and annual review that could be classified as performance accountability; and (ii) produced an objective and reliable final coding instrument. Definitions and rules were developed for classifying the highlighted copy information in order to reduce the impact of subjectivity. The rules included: information presented in more than one way was only counted once (in its most detailed form); when there was an efficiency target and the actual achievement of efficiency was given, this was counted as a measure of efficiency only; and when there was a quality target and the actual achievement of quality was given, this was counted as a measure of effectiveness. This approach ensured that, as far as possible, terms were being used in the same manner for each charity. The research identified whether any information relating to each of the nine category types was disclosed, not the amount of disclosure by category type.

RESEARCH FINDINGS

The results of the analysis are presented in Table 3 and identify (by jurisdiction) the extent to which each of the suggested nine performance-related disclosures (detailed earlier, and indicative of a meaningful discharge of performance accountability) was routinely made available to stakeholders through the more-formal communication channel of the TAR, and the less-formal annual review channel. For each item of information, it reports the number (and percentage) of charities disclosing by jurisdiction (UK and RoI). Using chi-square tests, significant differences (at the 1 per cent and 5 per cent levels) relating to these disclosures between jurisdictions are also shown.⁶

Before examining the disclosure of the items individually (Table 3 items (a)–(i)), it is worth noting that the average percentage of the UK and RoI charities disclosing the nine items ((a)–(i)) in both TARs and annual reviews was relatively low, with the average overall disclosure rate of all nine information types being 49 per cent in both TARs and annual reviews (when the charities from each jurisdiction were combined). Comparing jurisdictions, while the overall average disclosure was similar for annual reviews (49 per cent vs. 50 per cent), it was higher for the UK charities (56 per cent) compared with RoI charities (42 per cent) with regards to the TAR. However, with respect to the seven items ((c)–(i)) of performance information (which generally were more at the measurable, or 'sharp' end, of the performance process), the average disclosure by the UK and RoI charities in the TARs and annual reviews was, on average, considerably lower. In other words, there was more substantial

disclosure of descriptions of aims and the types of activities undertaken (in a non-measurable descriptive manner), but much less ‘calculation’ of performance.

With respect to the performance-related disclosures, when comparisons were made between jurisdictions, it is seen from Table 3 that, with TARs, the disclosure levels were greater for eight of the nine items in the UK charities. Only with respect to item (b), activities carried out, was the percentage of disclosing charities higher in RoI charities; and, in each jurisdiction there was almost total (96 per cent in the UK), or total (100 per cent in RoI), disclosure with respect of this item. More strikingly, when focusing specifically on the sharper measurement of performance, items (c) to (i) (the seven information types in the lower part of Table 3), it is seen that the UK charities were more likely to disclose in each case. For example, 80 per cent of the UK charities disclosed at least one output measure (item (d)) in their TAR, compared with only 44 per cent of RoI charities. When chi-square tests were carried out between jurisdictions, focusing on each individual information type separately, statistically significant differences (at either the 1 per cent or 5 per cent level) were identified in three cases (items (d) output, (e) impact and (g) effectiveness). Arguably, these disclosures could be viewed as some of the most important (or higher-level) performance-related indicators (see earlier discussion on performance reporting) and were much more prevalent in the UK TARs. With respect to annual reviews, the jurisdictional differences were less clear-cut. For example, while the disclosure rates of five of the nine information types were higher with RoI charities, the overall average disclosure rate was similar in each jurisdiction (Table 3). However, given that only four RoI charities produced an annual review (compared with sixteen UK charities), care must be exercised in interpreting the results with respect to such communication channels.

Particularly with respect to TARs, these findings are consistent with those from previous research studies (e.g. Connolly and Hyndman, 2001, 2004), which show a greater tendency for the UK charities to disclose performance compared to their RoI counterparts. This is despite the fact that, of late, much has been trailed in the RoI regarding the need to improve accountability and establish an effective regulatory process that promotes accountability issues (Burke-Kennedy, 2013; The Wheel, 2014; Breen and Carroll, 2015). Nevertheless, accountability and regulatory processes are considerably more long-standing and institutionalised in the UK (England and Wales has had a Charity Commission since 1853, compared to the establishment of CRA in the RoI in 2014) and the charity reporting framework has been more embedded. For example, the charities SORP has been effectively mandatory for large UK charities for a number of years; in contrast, it has been only (and remains at the time of writing – October 2017) best practice for RoI charities.

Each of the nine items shown in Table 3 (item (a)–(i)) is now discussed in turn.

(a) Aims and objectives

It is important that organisations explain why they exist and the changes they seek. All but one (a charity in the RoI) of the fifty charities provided details of their aims and objectives in their TAR, with the information typically being presented as a single overarching ‘mission’ or ‘vision’ supplemented by more detailed objectives.

TABLE 3: PERFORMANCE ACCOUNTABILITY DISCLOSURES*

	United Kingdom		Republic of Ireland		Total	
	Trustees' Annual Report (n = 25)	Annual Review (n = 16)	Trustees' Annual Report (n = 25)	Annual Review (n = 4)	Trustees' Annual Report (n = 50)	Annual Review (n = 20)
Objectives and activities						
(a) Aims and objectives	25 (100%)	16 (100%)	24 (96%)	4 (100%)	49 (98%)	20 (100%)
(b) What activities does the organisation carry out to achieve its aims?	24 (96%)	15 (94%)	25 (100%)	4 (100%)	49 (98%)	19 (95%)
Performance						
(c) Input	6 (24%)	0 (0%)	2 (8%)	1 (25%)	8 (16%)	1 (5%)
(d) Output	20 (80%)	8 (50%)	11 (44%)	3 (75%)	31 (62%) ^{^^}	11 (55%)
(e) Impact	23 (92%)	16 (100%)	20 (80%)	4 (100%)	43 (86%) ^{^^}	20 (100%)
(f) Efficiency	6 (24%)	9 (56%)	5 (20%)	1 (25%)	11 (22%)	10 (50%)
(g) Effectiveness	8 (32%)	1 (6%)	0 (0%)	0 (0%)	8 (16%) [^]	1 (5%)
(h) Future target information	11 (44%)	2 (13%)	6 (24%)	1 (25%)	17 (34%)	3 (15%)
(i) Lessons learned	4 (16%)	3 (19%)	2 (8%)	0 (0%)	6 (12%)	3 (15%)
<i>Total of items disclosed by all charities</i>	<i>127</i>	<i>70</i>	<i>95</i>	<i>18</i>	<i>222</i>	<i>88</i>
<i>Average number of charities (percentage) disclosing</i>	<i>14.11 (56%)</i>	<i>7.78 (49%)</i>	<i>10.56 (42%)</i>	<i>2.00 (50%)</i>	<i>24.67 (49%)</i>	<i>9.78 (49%)</i>

*Provides data on the number (and percentages) of charities making at least one disclosure of each of the nine information types. Percentages are based on the number making at least one disclosure divided by the number of TARs or annual reviews. Averages are based on the summation of the numbers making disclosures divided by the number of TARs/annual reviews. For example, with the UK TARs, there are 127 items of information disclosed when the disclosures for all nine information types are summed. This is divided by nine (the nine information types) to give the average disclosure of 14.11 charities, with an average percentage of charities disclosing of 56 per cent (14.11 divided by 25 TARs).

Statistical differences

[^]Difference in disclosure between the UK and RoI charities in the TAR significant at the 1 per cent level.

^{^^}Difference in disclosure between the UK and RoI charities in the TAR significant at the 5 per cent level.

Each of the twenty charities publishing a separate annual review provided details of their aims and objectives in this document.

(b) What activities does the organisation carry out to achieve its aims?

It can be argued that charities should explain their aims and objectives (item (a)) and the activities undertaken to achieve those objectives (item (b)) to enable readers

to understand and assess the performance of the organisation. Indeed, the current SORP (Charity Commission and OSCR, 2014) encourages such disclosures. Only one (a UK charity) of the fifty charities did not describe the activities undertaken to achieve their objectives in their TAR; one RoI charity illustrated this graphically (not shown in Table 3). With respect to those charities producing an annual review (twenty charities), all but one (a UK charity) described the activities undertaken to achieve their objectives.

As discussed earlier and illustrated in Figure 1, performance may be viewed in terms of a production model that includes organisational input, output, impact, efficiency and effectiveness. The disclosure of these five items is reported in Table 3 (items (c)-(g)) and discussed in the following text. It has been argued that such disclosures are of distinctive importance as vehicles for delivering performance accountability (Hyndman and McConville, 2016, 2017).

(c) Input

This represents the resources used in providing the charity's service(s) (e.g. spending by activity or line item, volunteer hours). Eight (16 per cent) charities (UK - six (24 per cent); RoI - two (8 per cent)) provided input information in the narrative section of their TAR. Two provided such information in monetary terms (e.g. spending), while six provided it in non-monetary terms (e.g. staffing/volunteer levels) (detail not shown in Table 3). Only one charity (from the RoI) provided details of inputs consumed in delivering its services in its annual review.

(d) Output

This information relates to goods and services produced (e.g. number of tests/inspections, number of people assisted or trained); it does not measure the impact upon clients or problems (Anthony and Young (2002) - 'process measures'). Thirty-one (62 per cent) charities (UK - twenty (80 per cent); RoI - eleven (44 per cent)) disclosed output information in their TAR; the difference in disclosure levels between the UK and RoI charities being statistically significant at the 5 per cent level. Eleven (55 per cent) charities (UK - eight (50 per cent); RoI - three (75 per cent)) disclosed output information in their annual review. Frequently, this information was presented in graphical form, both in TARs and annual reviews.

(e) Impact

Impact represents the difference that an activity makes to those the organisation is trying to help (e.g. change in percentage of the population in a particular area gaining employment, reaction to a service provision by those using it, personal stories). Forty-three (86 per cent) of the 50 charities (UK - twenty-three (92 per cent); RoI - twenty (80 per cent)) surveyed presented details of the impact of their activities in their TAR. Each of the charities publishing an annual review discussed the impact of their activities in such a document. Impact information, whether in TARs or annual reviews, often focused on the quality of the services provided.

(f) Efficiency

This type of information indicates the relationship between input and output (e.g. cost per person assisted, number of operations performed per doctor). Eleven

(22 per cent) charities (UK – six (24 per cent); RoI – five (20 per cent)) provided information on efficiency in their TAR. The information disclosed was primarily presented in monetary terms; for example, ‘90 pence of every £1 received was spent directly on delivery services directly to beneficiaries’. Ten (50 per cent) of the twenty charities producing an annual review (UK – nine (56 per cent); RoI – one (25 per cent)) provided information on efficiency in such a communication. Again, this was primarily presented in monetary terms, with two (UK) charities presenting the details graphically (not shown in Table 3).

(g) Effectiveness

This represents the relationship between output and objectives (e.g. actual number of operations versus number of operations planned). In total, eight (16 per cent) charities (all UK-based) disclosed effectiveness information in their TAR (no RoI charity disclosed this information); the difference in disclosure levels between UK and RoI charities being significant at the 1 per cent level. Only one charity (a UK charity) provided effectiveness information in their annual review.

(h) Future target information

As future target information is required to subsequently assess future effectiveness (and give stakeholders a detailed, quantitative perspective of what the charity intends to do going forward), it can be argued that charities should provide this basis for comparison. In addition, it allows stakeholders, particularly donors/funders, to get perspective on what any current donations are likely to be directed towards (as well as providing useful context) (Jackson, 1982; Charity Commission and OSCAR, 2014). Seventeen (34 per cent) of the fifty charities (UK – eleven (44 per cent); RoI – six (24 per cent)) presented future target information (e.g. future development projects to be undertaken) in their TAR. Three (15 per cent) of the twenty charities (UK – two (13 per cent); RoI – one (25 per cent)) producing an annual review included future target information in such a document.

(i) Lessons learned

Ní Ógáin et al. (2012) posit that as part of a performance accountability framework, an organisation should, in addition to providing information in relation to the usual elements of a production process of service delivery, also provide details of any lessons learned from operations over the previous period(s). Such reflection, it is argued, can enhance learning and sharpen performance delivery in the future. Six (12 per cent) of the fifty charities (UK – four (16 per cent); RoI – two (8 per cent)) described in their TAR how the organisation had improved or changed as a result of its experiences; three provided such information in their annual review (15 per cent of the twenty charities utilising this communication channel).

DISCUSSION AND CONCLUSION

The UK and RoI charity sectors have grown significantly over time, and are continuing to grow. They have major economic, cultural and social impacts. To maintain

confidence, and build trust, good accounting and reporting systems are essential. Indeed, such could be viewed as necessary conditions for the health and growth of these sectors. Well-developed and appropriate accounting and reporting systems can help charities discharge accountability to external stakeholders, as well as supporting internal managers in making planning and control decisions that sharpen mission focus. Within such a framework, the importance of performance accountability and performance reporting is considerable. Indeed, in the charity sector, it is often argued that while financial accountability (e.g. through the provision of audited financial statements) is necessary, performance accountability (through telling the performance story via service delivery narratives and metrics – often in terms related to aims, outputs, impacts, efficiency and effectiveness) is paramount. Not only do the existence of such systems have the potential to discharge accountability for performance to external stakeholders (particularly in the case of donors/funders) in a manner consistent with a principal-agent relationship (Laughlin, 1990), but they also have the capacity to reduce the likelihood of scandals by requiring greater transparency, acting as ‘sunlight’ to provide positive illuminating and ‘disinfectant’ properties (Heald, 2006). Moreover, such systems can support the establishment and maintenance of legitimacy and trust with key external stakeholders, essential qualities required to attract and grow funding flows. This paper explores and compares performance reporting by large charities in both the UK and RoI (by considering performance disclosures in more formal TARs and, less formal, annual reviews) and analyses the results in the context of both accountability and legitimacy. Specifically it highlights, and comments on, the current state of charity performance reporting in each of these jurisdictions.

Before discussing the disclosure of performance information, it is worth noting that in this study of reporting practices there was evidence of the very limited use of annual reviews as a channel of communication by RoI charities. Only 16 per cent (four) of RoI charities surveyed published such a document compared with 64 per cent (sixteen) of the UK charities. Annual reviews, compared with annual reports (of which the TAR is an aspect): (i) are normally shorter, pithier publications that include some of the information in the annual report (but commonly in a more condensed form); (ii) are frequently written in less formal language; and (iii) often include a higher proportion of stories, photographs and diagrams. Notwithstanding cost considerations (which always come into play with any communications), annual reviews have been found to be more engaged with than TARs and, as such, provide greater general visibility (Connolly and Hyndman, 2013). Given that they ‘connect’ more with external stakeholders (particularly individual donors), a lack of utilisation of such formats in the RoI suggests a weaker accountability architecture in terms of donors.

Performance accountability disclosures address the impact of the organisation on society. As illustrated in Table 3, the disclosure of nine items ((a)-(i)) of performance-accountability information were collected and collated under two sub-headings: aims and objectives, and performance. The former (items (a) and (b)) incorporates the provision of information that enables readers to understand the aims and objectives set by the charity and the main strategies and activities undertaken to achieve them. Accordingly, on the basis of arguments consistently

appearing in both recent iterations of the charities SORP and broader sector-wide debates and discussions, charities should explain their objectives, together with an explanation and review of the significant activities undertaken in pursuit of the achievement of those objectives. More specific (and often measurable) performance information (items (c)–(g)) includes an analysis of organisational input, output, impact, efficiency and effectiveness, with complementary future target information (item (h)) and lessons learned (item (i)) being potentially useful to stakeholders in assessing both direction of travel in terms of performance reporting and the challenges of delivering performance.

On the whole, the average percentage of the UK and RoI charities providing performance-accountability disclosures in both their TARs and annual reviews was low. The overall average disclosure rate by the fifty charities surveyed (twenty-five UK, twenty-five RoI) of the nine information types used in this analysis was slightly below 50 per cent (Table 3, items (a)–(i)). Moreover, it is noteworthy that with respect to the seven items of information that focused more on the ‘calculation’ of performance (Table 3, items (c)–(i)), the percentage of UK and RoI charities disclosing this information was even lower (both in the TARs and the annual reviews). Looking at the disclosure of the nine items (Table 3, items (a)–(i)) in the TARs and annual reviews more closely reveals that a higher percentage of charities provided the information in the TARs with respect to five of the items (items (b), (c), (d), (g) and (h)), of which four represent the ‘performance’ aspect of the disclosures (items (c), (d), (g) and (h)). The percentage disclosure levels were higher in the annual reviews for four items (items (a), (e), (f) and (i)), of which three fell under the ‘performance’ category (items (e), (f) and (i)). Given the importance of performance-accountability disclosures, and allowing for the fact that there are many difficulties experienced by charities in seeking to measure and report performance, the results suggest weak performance accountability. As a consequence, the relevance of reporting via TARs and annual reviews can be questioned, as can be the extent to which such documents support the building of a charity’s legitimacy in the eyes of the wider world. For example, a significant proportion of charities reported no information on effectiveness and efficiency, two crucial criteria for judging performance (and key information viewed as important to stakeholders – Hyndman, 1990; Connolly and Hyndman, 2013). Such shortcomings can undermine trust and confidence in the sector, and damage reputation, which, ultimately, could impact on funding flows.

With respect to the provision of performance-accountability disclosures in the UK TARs compared with their RoI counterparts, a higher percentage of the UK charities disclosed eight of the nine performance items used in the analysis. Only item (b) (activities carried out) had higher disclosure for RoI charities (Table 3); although disclosure of this was extensive for all charities in both the UK and RoI. Moreover, a higher percentage of the UK charities provided each of the performance information items ((c)–(i)) compared with RoI charities, with the difference in the level of disclosure being significant at either the 1 per cent or 5 per cent level in three cases (items (d) output, (e) impact and (g) effectiveness). In relation to performance-accountability disclosures in the UK and RoI annual reviews, the inter-jurisdictional comparisons were more similar, with RoI charities having higher average disclosure rates with four of the nine items (Table 3). However, the limited use of annual

reviews as a communication channel in the RoI (with only four of the twenty-five RoI charities producing such a document) encourages caution in drawing definitive conclusions here. However, despite the caveats in relation to annual reviews, overall the results indicate much greater use of performance reporting in the UK. To an extent, this possibly reflects the greater engagement of the UK charities in such performance-accountability discussions (relating to SORP developments and contact with the Charity Commission over a number of years) and the greater presence and push for such reporting from the UK groups (such as Inspiring Impact, New Philanthropy Capital and the National Council for Voluntary Organisations). Due to the more undeveloped and less-regulated sector in the RoI (Breen and Carroll, 2015), such pressures have not been present to the same extent (not least because of the absence, until very recently, of a regulator).

Previous charity accounting research has indicated the critical nature of performance information in discharging accountability to stakeholders (Ebrahim, 2003; Dhanani, 2009; Hyndman and McConville, 2017). This is largely recognised by providers of information, but this alone does not appear to be a trigger for wide dissemination of such information (Hyndman, 1991). While difficulties in developing useful performance measurement and reporting systems by charities may provide some explanation for the limited reporting, other factors may have an impact. These include the desire or willingness of charities to report, the cost of reporting and the possible repercussions of highlighting poor performance (Thompson, 1995; Connolly and Hyndman, 2013). However, as discussed in this article, a lack of disclosure can weaken accountability, trust and legitimacy. Moreover, greater transparency of performance has the potential to keep a charity 'honest' and reduce the possibility of scandals (Hind, 2017). In addition, limited external reporting of performance (as is evidenced in this research) might indicate that performance information is unavailable internally to management, which may weaken their ability to plan and control effectively. It has been argued by some that managers in charities and, more widely, NFPOs may prefer limited performance reporting because they seek to avoid accountability (Eden and Hyndman, 1999; Connolly and Hyndman, 2004), although this argument ignores the commitment and professionalism of charity managers and the ethically founded desire of many in the sector to do the 'right thing' (Hind, 2011; Hyndman and McConville, 2017). Despite these caveats and challenges, there is a persuasive case (related to concepts of accountability, trust building and legitimacy) for greater endeavour by individual charities (and the sector more widely) in the development and use of more substantial charity performance measurement and reporting systems as a basis for meeting stakeholders information needs.

A number of researchers have stressed the idea that big donors/funders (largely because of their economic power) can more easily gain direct access to charities' performance information beyond that which is included in official documents such as the TAR (Gray, 1983; Hyndman and McConville, 2017). From a stakeholder theory perspective (Freeman, 1984; Hyndman and McDonnell, 2009), this study suggests that other stakeholders (including the general public) may be particularly interested (or this may, at least, be the charities' perception) in the actual activities carried out by the charity rather than any specific 'measurable' (or calculable) achievements. Such could be an influencing factor in terms of determining the content of

TARs (and annual reviews). While these stakeholders may have difficulty in assessing and understanding (and in being emotionally affected by) specific efficiency and effectiveness indicators, they may be much more drawn to what a charity has actually done (particularly when it is presented in the form of a story). This might explain the more descriptive (rather than indicator-based) information provided in both jurisdictions. However, in addition to this, the disclosure of more-specific, numerical indicators (albeit that these often also rely on subjective judgement), may increase the potential for 'misread' and misinterpretation. Such disclosures, particularly when exploited by the media, may risk reputational damage. Therefore, there may be reluctance on the part of some charities to present such 'hostages to fortune' in public documents (despite any perceived or actual importance to stakeholders).

From an accountability and transparency point of view (Fry, 1995; Laughlin, 1996; Connolly and Hyndman, 2013), the results of this study also intimate that having a mandatory reporting system (however advanced) increases the likelihood of general disclosure. This is suggested by the UK case when compared to the RoI case. Although this research cannot comment on the actual use of information by stakeholders (this being beyond its scope), the UK charities, for which the SORP is mandatory by law, generally disclose more information and are more inclined to communicate it through different channels (such as that of annual reviews).

Of a more managerial concern, an important issue relates to the reliability of performance information that is disclosed externally. If no verification of the performance numbers reported by a charity is required, then there may be a temptation to present performance in a manner that is perceived as more acceptable to the reader, for example by exaggerating good performance, regardless of its accuracy. As external parties often use externally reported performance information to make judgements and decisions regarding a charity, there is a strong case for some degree of independent verification (perhaps similar to that which is imposed on financial accounting information i.e. disclosure requirements, external auditing and standard setting after consultation with interested parties). It should be noted that performance accountability disclosures analysed in this research have not been subject to independent verification (as is the case with such information reported by most of the NFPOs). However, with some charities, there is evidence that attempts have been made to provide stakeholders with the basis of the collection and analysis of the performance information as it is reported, presumably as a basis to improve their understanding (Hyndman and McConville, 2016).

With respect to possible further research, it is possible that differences in the extent of the reporting of performance information by charities may be influenced by the type of charities reporting. For example, some charities may have greater incentive to produce such information (e.g. charities operating on the fringe of the public sector), while other charities are demand led and may encounter greater difficulty in this regard (e.g. disaster relief charities). Such research could provide valuable additional understanding of the reason for reporting practices. Furthermore, research considering different sizes of organisation, different organisational forms, or charities engaged with particular causes or means of operation could identify (and explain) differences in performance reporting relating to such variables. This research identified weak accountability with respect to performance reporting,

but (not being its focus) did not provide evidence regarding reasons for this. Qualitative research, possibly utilising interviews, might help to provide useful insights to help explain the reasons for the nature and extent of current reporting practices with respect to performance.

A key theme of this paper is that good performance accountability supports the building of trust and legitimacy, and trust and legitimacy are essential to ensure the continuing health of the sector (including its ability to access funding). Conversely, poor performance accountability has the potential to undermine accountability; undermined accountability can damage trust and legitimacy, and damaged trust and legitimacy weakens the sector (and makes it more difficult to access funding). Therefore, good performance accountability is vital. To encourage the development and use of performance information, it would seem appropriate that charity-specific guidance should be provided by those concerned with the administration and control of the sector, both in the UK and RoI. This may include the various, more-established, charity regulators in the UK (Charity Commission, CCNI and OSCR) and the more-emerging CRA in the RoI. In particular with respect to the RoI, and reflecting the results of this study, moves to provide such steering would seem especially apposite. Indeed, given charities' expertise, focus and limited resource base, to expect individual charities (whether in the UK or RoI) to develop meaningful and extensive performance reporting systems without guidance (and perhaps regulatory backing) is perhaps too optimistic.

ENDNOTES

- ¹ SORPs are recommendations on accounting practice for specialised industries or sectors, and they supplement other legal and regulatory requirements. Where a separate SORP exists for a particular class of charity (e.g. for the Further and Higher Education sector or Registered Social Landlords), those charities should adhere to that SORP. In the UK, the Charity Commission and OSCR are the joint SORP-making body for charities. Large UK charities must comply with the extant charities SORP, with compliance in RoI being considered best practice. At the time of writing (October 2017), the extant charities SORP is the 'FRS 102 SORP' (Charity Commission and OSCR, 2014).
- ² In this article, the term 'annual report' is used to refer to the TAR and financial statements. This research, while recognising the importance of traditional financial statements, focuses on information contained in the TAR (i.e. excluding the financial statements). The term 'financial statements' is used in this context to include the statement of financial activities, balance sheet, statement of cash flows and related notes.
- ³ The SORP applies to all charities required to produce accruals accounts (unless a more specialised SORP applies to a particular class of charity). Company charities, irrespective of size, must prepare accruals accounts that give a true and fair view. In England, Northern Ireland, Scotland and Wales, the threshold at which accruals accounts must be produced by non-company charities is a gross annual income of more than £250,000. In the RoI, a charity with a gross annual income of €10,001 or more is required to prepare a profit and loss account (or income and expenditure account and statement of assets and liabilities) for the reporting period. 'Larger charities' is a term used in the FRS 102 Charities SORP to identify those charities with a gross income exceeding £500,000 or €500,000 in the reporting period.
- ⁴ See <http://apps.charitycommission.gov.uk/ShowCharity/RegisterOfCharities/AdvancedSearch.aspx>.
- ⁵ A copy of the checklist is available from the authors on request.
- ⁶ Given the small number of RoI charities producing an annual review, chi-square tests were not carried out to identify if there were significant differences in the number of UK and RoI charities reporting performance information in their annual reviews.

REFERENCES

- Accounting Standards Board (ASB) (1999). *Statement of Principles for Financial Reporting*, London: ASB.
- ASB (2007). *Statement of Principles for Financial Reporting: Interpretation for Public Benefit Entities*, London: ASB.
- Accounting Standards Committee (ASC) (1975). *The Corporate Report*, London: ASC.
- ASC (1988). *Accounting by Charities, Statement of Recommended Practice No. 2*, London: ASC.
- American Accounting Association (1989). *Measuring the Performance of Non-profit Organisations: The State of the Art*, Sarasota: American Accounting Association.
- Anthony, R.N. and Young, D.W. (2002). *Management Control in Non-Profit Organisations*, 7th edn, New York, USA: McGraw Hill.
- Ashford, J.K. (1989). 'Charity Accounts', in L.C.L. Skerratt and D.J. Tonkins (eds.), *Financial Reporting 1989-90: A Survey of UK Reporting Practice*, London: Institute of Chartered Accountants in England and Wales, pp. 23-48.
- Austin, M. and Posnett, J. (1979). The Charity Sector in England and Wales - Characteristics and Public Accountability, *National Westminster Bank Quarterly Review*, No. 3, pp. 40-51
- Benjamin, L.M. (2012). The Potential of Outcome Measurement for Strengthening Non-profits' Accountability to Beneficiaries, *Nonprofit and Voluntary Sector Quarterly*, Vol. 42, No. 6, pp. 1224-44.
- Bird, P. and Morgan-Jones, P. (1981). *Financial Reporting by Charities*, London: Institute of Chartered Accountants in England and Wales.
- Boardmatch Ireland (2013). *Charity 100 index*, December, available from: <<http://www.boardmatchireland.ie/wp-content/uploads/2013/12/Final-Version-CI-100.pdf>>.
- Brace, P., Elkin, R., Robinson, D. and Steinberg, H. (1980). *Reporting of Service Efforts and Accomplishments (Research Report)*, Stamford, USA: Financial Accounting Standards Board.
- Breckell, P., Harrison, K. and Robert. N. (2011). *Impact Reporting in the UK Charity Sector*, London: Charity Finance Group.
- Breen, O.B. and Carroll, J. (2015). Giving in Ireland: A Nation of Givers in a Largely Unregulated Arena, in P. Wiepking and F. Handy (eds), *The Palgrave Handbook of Global Philanthropy*, Basingstoke, UK: Palgrave Macmillan, pp. 190-210.
- Burke-Kennedy, E. (2013). Charity donations 'plummet 40%' in wake of CRC revelations, December, available from: <<http://www.irishtimes.com/news/social-affairs/charity-donations-plummet-40-in-wake-of-crc-revelations-1.1626936>>.
- Cabinet Office (2002). *Private Action, Public Benefit: A Review of Charities and the Wider Not-For-Profit Sector: Strategy Unit Report*, London: Cabinet Office.
- Carter N., Klein, K. and Day, P. (1992). *How Organisations Measure Success: The Use of Performance Indicators in Government*, London: Routledge.
- Charities Aid Foundation (2001). *Tell the Main Story: Guidance on Effective Annual Reporting*, London: Charities Aid Foundation.
- Charity Commission (2000a). *Accounting and Reporting by Charities: Statement of Recommended Practice (SORP 2000)*, London: Charity Commission.
- Charity Commission (2000b). *Users on Boards: Beneficiaries who Become Trustees*, London: Charity Commission.
- Charity Commission (2004a). *RS8: Transparency and Accountability*, London: Charity Commission.
- Charity Commission (2004b). *The Hallmarks of an Effective Charity*, London: Charity Commission.
- Charity Commission (2005). *Accounting and Reporting by Charities: Statement of Recommended Practice (SORP 2005)*, London: Charity Commission.

- Charity Commission (2016). *Charities in England and Wales*, available from: <<http://apps.charitycommission.gov.uk/showcharity/registerofcharities/SectorData/SectorOverview.aspx>>, accessed 31 March 2016.
- Charity Commission and Office of the Scottish Charity Regulator (OSCR) (2014). *Charities SORP (FRS 102) Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) (effective 1 January 2015)*, London: Charity Commission and OSCR.
- Charity Commission for Northern Ireland (2017). *The 'Deemed' List of Northern Ireland Charities*, available from: <http://www.charitycommissionni.org.uk/Our_regulatory_activity/List_of_deemed_charities.aspx>.
- Charity Finance Group (CFG) (2012). *Managing Charities in the New Normal – A Perfect Storm?* London: CFG.
- Connolly, C. and Dhanani, A. (2006). Accounting Narratives: The Reporting Practices of British Charities, *Journal for Public and Nonprofit Services*, Vol. 35, No. 1, pp. 39–62.
- Connolly, C. and Dhanani, A. (2009). *Research Report 109: Narrative Reporting by UK Charities*, London: Association of Chartered Certified Accountants.
- Connolly, C. and Hyndman, N. (2000). Charity Accounting: An Empirical Analysis of the Impact of Recent Changes, *The British Accounting Review*, Vol. 32, No. 1, pp. 77–100.
- Connolly, C. and Hyndman, N. (2001). A Comparative Study of the Impact of Revised SORP 2 on British and Irish Charities, *Financial Accountability & Management*, Vol. 17, No. 1, pp. 73–97.
- Connolly, C. and Hyndman, N. (2002). The State of Charity Accounting in Ireland: A Study by Jurisdiction and Size, *Irish Accounting Review*, Vol. 9, No. 1, pp. 57–92.
- Connolly, C. and Hyndman, N. (2003). *Performance Reporting by UK Charities: Approaches, Difficulties and Current Practice*, Edinburgh: Institute of Chartered Accountants of Scotland.
- Connolly, C. and Hyndman, N. (2004). Performance Reporting: A Comparative Study of British and Irish Charities, *British Accounting Review*, Vol. 36, No. 2, pp. 127–154.
- Connolly, C. and Hyndman, N. (2013). Towards Charity Accountability: Narrowing the Gap Between Provision and Needs?, *Public Management Review*, Vol. 15, No. 1, pp. 1–24.
- Connolly, C. and Hyndman, N. (2017). The Donor-Beneficiary Charity Accountability Paradox: A Tale of Two Stakeholders, *Public Money & Management*, Vol. 37, No. 3, pp. 157–164.
- Connolly, C., Hyndman, N. and McConville, D. (2013). UK Charity Accounting: An Exercise in Widening Stakeholder Engagement, *British Accounting Review*, Vol. 45, No. 1, pp. 58–69.
- Dhanani, A. (2009). Accountability of UK Charities, *Public Money & Management*, Vol. 29, No. 3, pp. 183–190.
- Ebrahim, A. (2003). Accountability in Practice: Mechanisms for NGOs, *World Development*, Vol. 31, No. 5, pp. 813–829.
- Eden, R. and Hyndman, N. (1999). Performance Measurement in the UK Public Sector: Poisoned Chalice or Holy Grail?, *Optimum: The Journal of the Public Sector*, Vol. 29, No. 1, pp. 9–15.
- Freeman, R.E. (1984). *Strategic Management: A Stakeholder Approach*, Boston: Pitman.
- Fry, R.E. (1995). Accountability in Organisational Life: Problem or Opportunity for Nonprofits?, *Nonprofit Management and Leadership*, Vol. 6, No. 2, pp. 181–195.
- Gambling, T., Jones, R., Kunz, C. and Pendlebury, M. (1990). *Research Report 21: Accounting by Charities: The Application of SORP2*, London: Association of Chartered Certified Accountants.
- Gray, R. (1983). Accounting, Financial Reporting and Not-for-Profit Organisations, *AUTA Review*, Vol. 15, No. 1, pp. 3–23.
- Gray, R. (1984). Uncharitable View of Accounting, *Accountancy*, Vol. 94, No. 1096, p. 84.

- Guthrie, J. and Parker, L. (1989). Corporate Social Reporting: A Rebuttal of Legitimacy Theory, *Accounting and Business Research*, Vol. 19, No. 76, pp. 343–353.
- Heald, D. (2006). Transparency as an Instrumental Value, in C. Hood and D. Heald (eds), *Transparency: The Key to Better Governance? Proceedings of the British Academy 135*, Oxford: Oxford University Press.
- Hedley, S., Keen, S., Lumley, T., Ní Ógáin, E., Thomas, J. and Williams, M. (2010). *Talking About Results*, London: New Philanthropy Capital.
- Hind, A. (2011). Increasing Public Trust and Confidence in Charities: On the Side of the Angels, *Public Money & Management*, Vol. 31, No. 3, pp. 201–205.
- Hind, A. (2017). Fundraising in UK Charities: Stepping Back from the Abyss, *Public Money & Management*, Vol. 37, No. 3, pp. 205–210.
- Hines, A. and Jones, M.J. (1992). The Impact of SORP on the UK Charitable Sector: An Empirical Study, *Financial Accountability & Management*, Vol. 8, No. 1, pp. 49–67.
- HM Treasury (2011). *HM Treasury and Department for Work and Pensions: Green Book discussion paper on valuing social impacts*, London: HM Treasury.
- Hyndman, N. (1990). Charity Accounting: An Empirical Study of the Information Needs of Contributors to UK Fundraising Charities, *Financial Accountability & Management*, Vol. 6, No. 4, pp. 295–307.
- Hyndman, N. (1991). Contributors to Charities – A Comparison of Their Information Needs and the Perceptions of Such by the Providers of Information, *Financial Accountability & Management*, Vol. 7, No. 2, pp. 69–82.
- Hyndman, N. and Anderson, R. (1997). A Longitudinal Study of the Use of Performance Measures in the Annual Reports of UK Executive Agencies, *The Irish Accounting Review*, Vol. 4, No. 1, pp. 43–74.
- Hyndman, N. and McConville, D. (2016). Transparency in Reporting on Charities' Efficiency: A Framework for Analysis, *Nonprofit and Voluntary Sector Quarterly*, Vol. 45, No. 4, pp. 844–865.
- Hyndman, N. and McConville, D. (2017). Making Charity Effectiveness Transparent: Building a Stakeholder-Focused Framework of Reporting, *Financial Accountability & Management*, forthcoming.
- Hyndman, N. and McDonnell, P. (2009). Governance and Charities: An Exploration of Key Themes and the Development of a Research Agenda, *Financial Accountability & Management*, Vol. 25, No. 1, pp. 5–31.
- Inspiring Impact (2013). *The Code of Good Impact Practice*, London: National Council for Voluntary Organisations.
- Irish Nonprofit Knowledge Exchange (2012). *Irish Nonprofits: What Do We Know? A Report by Irish Nonprofits Knowledge Exchange*, available from: <http://www.wheel.ie/sites/default/files/Irish%20Nonprofits%20-%20What%20do%20we%20know_%20Report%20January%202012.pdf>.
- Jackson, P.M. (1982). *The Political Economy of Bureaucracy*, London: Philip Allan.
- Jetty, J. and Beattie, V. (2009). *Research Report 108: Charity Reporting – A Study of Disclosure Practices and Policies of UK Charities*, London: Association of Chartered Certified Accountants.
- Laughlin, R. (1990). A Model of Financial Accountability and the Church of England, *Financial Accountability & Management*, Vol. 6, No. 2, pp. 93–114.
- Laughlin, R. (1996). Principals and Higher Principals: Accounting for Accountability in the Caring Profession, in R. Munro and J. Mouritsen (eds), *Accountability: Power, Ethos and the Technologies of Managing*, London: International Thomson Business Press, pp. 225–244.
- Lumley, T., Rickey, B. and Pike, M. (2011). *Inspiring Impact: Working Together for a Bigger Impact in the UK Social Sector*, London: New Philanthropy Capital.

- Mayston, D. (1985). Non-Profit Performance Indicators in the Public Sector, *Financial Accountability & Management*, Vol. 1, No. 1, pp. 51-74.
- McConville, D. (2017). Transparent Impact Reporting in Charity Annual Reports: Benefits, Challenges and Areas for Development, *Public Money & Management*, Vol. 37, No. 3, pp. 211-215.
- Mitchell, R.K., Agle, B.R. and Wood, D.J. (1997). Toward a Theory of Stakeholder Identification and Salience: Defining the Principle of Who and What Really Counts, *Academy of Management Review*, Vol. 22, No. 4, pp. 853-886.
- National Council for Voluntary Organisations/Charities Aid Foundation (2012). *UK Giving 2012: An Overview of Charitable Giving in the UK 2011/12*, available from: <<https://www.cafonline.org/publications/2012-publications/uk-giving-2012.aspx>>.
- Nevill, C. and Lumley, T. (2011). *Measuring Together: Impact Measurement in the Youth Justice Sector*, London: New Philanthropy Capital.
- Ní Ógáin, E., Lumley, T. and Pritchard, D. (2012). *Making an Impact: Impact Measurement among Charities and Social Enterprises in the UK*, London: New Philanthropy Capital.
- O'Brien, C. (2013). *Former CRC Chief Executive Received €200,000 Lump Sum from Charitable Funds*, available from <<http://www.irishtimes.com/news/health/former-crc-chief-executive-received-200-000-lump-sum-from-charitable-funds-1.1624374>>.
- Office of the Scottish Charity Regulator (2017). *About OSCR*, available from <<http://www.oscr.org.uk/about-scottish-charities/>>.
- Palmer, P., Isaacs, M. and D'Silva, K. (2001). Charity SORP Compliance - Findings of a Research Study, *Managerial Auditing Journal*, Vol. 16, No. 5, pp. 255-262.
- Pendlebury, M., Jones, R. and Karbhari, Y. (1994). Developments in the Accountability and Financial Reporting Practices of Executive Agencies, *Financial Accountability & Management*, Vol. 10, No. 1, pp. 33-46.
- Roberts, R. and Scapens, R. (1985). Accounting Systems and Systems of Accountability - Understanding Accounting Practices in Their Organisational Contexts, *Accounting, Organizations and Society*, Vol. 10, No. 4, pp. 443-456.
- Stewart, J.D. (1984). The Role of Information in Public Accountability, in A.G. Hopwood and C.R. Tomkins (eds), *Issues in Public Sector Accounting*, London: Philip Allan.
- The Wheel (2014). *A Portrait of Ireland's Non-profit Sector*, Dublin: The Wheel.
- The W.K. Kellogg Foundation (2004). *Using Logic Models to Bring Together Planning, Evaluation and Action: Logic Model Development Guide*, Battle Creek, MI: The W.K. Kellogg Foundation.
- Thompson, G.D. (1995) Problems with Service Performance Reporting: The Case of Public Art Galleries, *Financial Accountability & Management*, Vol. 11, No. 4, pp. 337-350.
- Williams, A. (1985). *Performance Measurement in the Public Sector: Paving the Road to Hell?*, Glasgow: University of Glasgow Publications.
- Williams, S. and Palmer, P. (1998). The State of Charity Accounting - Developments, Improvements and Continuing Problems, *Financial Accountability and Management*, Vol. 14, No. 4, pp. 265-279.

PAPERS SUBMITTED FOR IAFA 2017

The titles of papers presented at the thirtieth Annual Conference of the Irish Accounting and Finance Association (18–19 May 2017), Athlone Institute of Technology, were as follows:

Author(s)	Paper Title
Alkaraan, Fadi	Analysis of Strategic Investment Decision Making Using Strong Structuration Theory: Agents-in-Focus and Agents-in-Context
Brennan, Niamh M. & Clancy, Annette	War of Words, Words of War: Ethical Implications of Combat Metaphors in Business
Brennan, Niamh M. & Merkl-Davies, Doris M.	What Constitutes Successful Communication in a Corporate Reporting Context?
Brosnan, Sandra & Cleary, Peter	An Analysis of the Intellectual Capital Disclosures of the Top 20 FTSE 100 Companies
Burke, Anthony, Byrne, Séan, Casey, John & Griffin, Ray	The Sacrificial Accountant: On the Scapegoating of Contemporary Accountants
Byrne, Brian, Shang, Jennifer & Zhang, Yinqiu	Accounting for Employee Stock Options: A Small Refinement to the Lattice Approach
Campa, D. Cao, Tongyu & Donnelly, Ray,	Asset Disposal as a Method of Real Earnings Management: Evidence from the UK
Canning, Mary, O'Dwyer, Brendan & Georgakopoulos, George	Processes of Auditability in Sustainability Assurance – The Case of Materiality Construction
Carr, Michelle	Transforming Students into Active Learners: Using Clickers to Enhance Student Engagement and Performance
Carr, Michelle, Flood, Barbara & Pierce, Bernard	Clinicians and Resource Management – The Role of Management Control Practices
Casey, John	Stock Market Reaction to Brexit: Rational Panic?
Cheikh, Riad, Mulligan, Emer & Sweeney, Breda	The Impact of Moral Intensity on Tax Compliance Decisions
Cleary, Peter & Brosnan, Sandra	A Comparative Analysis of the Intangible Asset and Intellectual Capital Disclosures of Two Firms During a Global Financial Crisis

Papers Presented at the Thirtieth Annual Conference

Author(s)	Paper Title
Cleary, Peter, Quinn, Martin, Rikhardsson, Pall & Batt, Catherine	An Empirical Investigation of the Management Accounting and Control Practices in Irish SMEs – Preliminary Findings
Cosgrove, Mary	Taxpayers’ Rights in the European Convention on Human Rights; Comparing Where We Are Not to the Road Not Travelled
Culhane, Sarah	The Impact of Introducing Active Learning into an Introductory Accounting Course
De Widt, Dennis, Oats, Lynne & Mulligan, Emer	Cooperative Compliance: Tax Administration and Taxpayers Working Together?
Deeney, Peter & Morahan Peter	Financial Risks Facing the Chinese Emissions Trading Scheme
Doyle, Elaine, Patrick Buckley & Joanne Whelan	Student-Authored Multiple Choice Questions: Lecturer Observations and Student Perceptions
Edgar, Victoria & Beck, Matthias	Policy Persistence and Isomorphism: The Development of the UK Private Finance Initiative in Light of Broader European Experiences
Feeney, Orla, Jollands, Stephen & Quinn, Martin	Domestic Waste Policy in Ireland – Calculation, Political and Social Aspects
Flynn, Maureen A. & Brennan, Niamh M.	Interpretation by Practitioners of ‘Clinical Governance’ in Praxis
Gibney, Desmond	Making Sense of Some of the Accounting Numbers for Irish Water
Gordon, Nora, O’Keeffe, Cormac & O’Donohoe, Sheila	Analysts’ Recommendations: Gender Matters – A Irish Perspective
Healy, Margaret, O’Sullivan-Rochford, Claire, Doran, John & McCutcheon, Maeve	Pathways to Success: Accountants’ Reflections on Their Trainee Experience
Fitzgerald, James & Ryan, James	Do Firm Characteristics Influence Speed of Adjustment to Target Leverage? A UK Study
King, Daniel	A Practice-Led Approach to Aligning Teaching and Learning Strategies with Learning Styles in a Third-Level Management Accounting Module
Mattimoe, Ruth & Hayden, Michael	Financial Management in Family Businesses: Tourism and Farming in Ireland
McCallig, John	Design Concepts for a Financial Reporting Information System: Establishing the Credibility of the Public Disclosure of Private Information
McLarney, Brendan & Fannon, Luke	Personal Tutoring Service for First Year Students – A Study of Stakeholder Engagement and Satisfaction

Author(s)	Paper Title
McMahon, Michael	Modeling the Impact of IFRS 17 – Insurance
Mulligan, Emer, Wijeratne, Dinali, & Maher, Michelle	Pensions and Taxation in Ireland
Nyland, Kari, Pettersen, Inger Johanne & Robbins, Geraldine	Multi-Party Service Production and the Challenges of Transactional Contracting in the Public Sector
Papavassiliou, Vassilios & O’Sullivan, Conall	Measuring and Analyzing Liquidity and Volatility Dynamics in the Euro-Area Government Bond Market
Quinn, Martin & Jollands, Stephen	Over-Politicising a Sustainable Domestic Water Supply? Ireland’s Domestic Water Charges and Accounting Concepts
Rodgers, Waymond & Housel, Thomas J.	Implications of International Exploratory and Exploitative Knowledge on Organisational Learning, Knowledge Management, and Decision Making
Sheppard, Gail & Beck, Matthias	The Sustainability of Public-Private Partnership in Ireland: A Methodological Approach
Stewart, Elaine & Connolly, Ciaran	Recent Accounting Reforms in the Public Sector: Experiences from UK Central Government
Zavadska, Miroslava, Morales, Lucía & Coughlan, Joseph	Efficiency of Crude Oil Spot and Futures Prices: A Moving Window Approach
Ward, Anne Marie & Brennan, Niamh	Student-Doctoral Education Fit: Factors Affecting Accounting Doctoral Timely, Untimely and Non-Completion

NOTES FOR CONTRIBUTORS

1. Papers should be submitted electronically. Papers should not normally exceed 8,000 words.
2. There should be a separate file containing the title, author(s), affiliation(s) and one address to which correspondence regarding the paper (including proofs) should be sent. An abstract of not more than 100 words should be given at the beginning of the paper.
3. Citations in the text should be by author's name and year of publication, for example, Black (1972) or (Brown, 1972). In the case of citations of books or specific quotations, page numbers should be given, for example (White, 1992, pp. 10-11). Where more than one publication by the same author in a given year is cited, they should be distinguished by lowercase letters after the year, for example (Green, 1987a; Green, 1987b). Where there are more than two authors, all names should be given in the first citation with 'et al.' used subsequently.
4. References should be listed alphabetically at the end of the manuscript in the following style:

DeAngelo, L.E. (1981). Auditor Size and Audit Quality, *Journal of Accounting and Economics*, Vol. 3, No. 3, pp. 183-199.

European Commission (1996). *Green Paper on the Role, the Position and the Liability of the Statutory Auditor Within the European Union*, October, Brussels: European Commission.

Faulkner, R.R. (1982). Improvising on a Triad, in *Varieties of Qualitative Research*, Vol. 5, Van Maanen, J., Dabbs, J.M. and Faulkner, R.R. (eds.), pp. 65-101, Beverly Hills, CA: Sage Publications.

Fielding, N.G. and Fielding, J.L. (1986). *Linking Data: Qualitative Research Methods*, Beverly Hills, CA: Sage Publications.

Only works referred to in the text should be listed, and a general bibliography should not be included.

5. Essential notes should be included as endnotes rather than footnotes.
6. In initial submissions, tables and diagrams may be either included at the appropriate point in the text or after the references with their positions indicated in the text. Do not submit any separate Excel documents. Any exceptional costs of artwork for diagrams will be charged to authors.

7. Mathematics should be used only if they contribute to clarity or economy of presentation. The conclusions of mathematical papers or elements of papers should be made intelligible to readers who are not mathematicians.
8. Papers should not be submitted while under consideration by any other journal.
9. Papers are accepted for publication on the understanding that they are subject to editorial revision and have not previously been published.
10. In the preparation of papers, authors must observe copyright rules and practices.
11. Authors should correct proofs quickly and should not make revisions to proofs.
12. Authors submitting a paper do so on the understanding that, if it is accepted for publication, copyright of the paper is assigned to the publisher. The Irish Accounting and Finance Association, as publisher, will not impose restrictions on the author(s) regarding the use of material from the paper in other published works.



ABOUT CHARTERED ACCOUNTANTS IRELAND EDUCATIONAL TRUST (CAIET)

“to further and develop the science and teaching of accountancy”

Chartered Accountants Ireland Educational Trust (CAIET) was established in 1981.

The principal objects of the Trust are **to further and develop the science of accountancy in all its branches and to promote educational facilities for the teaching of the science and practice of accountancy, auditing, finance and other related subjects.**

The Trustees interpret the science of accounting as including audit & assurance, reporting to stakeholders, management information, taxation policy and procedures, governance, risk management, business and professional ethics, and business regulation. It would not normally include the separate sciences of economics, management theory, and business studies.

The policy of the Trustees is to act as a catalyst for activities in the sphere of accountancy education and research and to provide financial assistance where such activities would not otherwise be feasible.

The Trust is particularly interested in collaborative projects between academics and practitioners.

To apply for funding from the Trust, applicants should first read the funding policy. Applicants can either submit a one-page enquiry form as a precursor to a full application, or can go straight to the application form. If applicants are applying for seed funding for small projects they can use the Seed-Funding Application Form.

Applicants can submit an application for funding at any time. A decision will be communicated through the Trust Administrator as soon as the Trustees have considered the application.

STEP 1: FUNDING POLICY

1. The Trust welcomes applications from the academic research community both within and outside the island of Ireland. It is particularly interested in applications based on professional, business and/or international collaboration.
2. Grants cover the direct expenditure attributable to the project (Note: College/ University fees are not paid for). Following any decision by the Trust to approve

funding, claims for reimbursement should be supported by vouched expenses or other appropriate evidence.

3. The Trust is not limited to supporting academic research only. It is also available to those in practice or in any other form of activity that promotes the science of accounting and/or accountancy education.
4. It must be clearly acknowledged in each project that the Trust has supported it. The suggested form of wording to be used in such acknowledgement is:

This article/report/book is based on research carried out in collaboration with xxxx from xxxx and with financial support from the Chartered Accountants Ireland Educational Trust.

5. Copies of the research outputs must be made available to the Trust. The Trust reserves the right to publish such outputs on its website or in its journal or any other Chartered Accountants Ireland publication. There is a requirement that among the research outputs from a funded project there should be one submission to the official academic journal of the IAFA, at present entitled the **Accounting, Finance and Governance Review** (this is a journal funded by the Trust), and a shorter, professionally-focused paper submitted to **Accountancy Ireland**.
6. Projects which are unduly delayed may be reassessed by the Trustees. Grant recipients are required to provide written progress updates to the Trustees at least twice per annum (March and August).
7. Seed funding is available for small projects (typically c.€1K/£1K). If the project is linked to PhD studies, the following must be noted:
 - The name, title, position, institution of the principal supervisor must be provided.
 - The candidate must identify the exact requirements for funding (e.g. transcription costs following conducted interviews), and identify the expected impact of same.
 - The candidate must commit to outputs based on research for which the funding is required, and not the final PhD output.
 - Please note that college/university fees are not paid for.
8. The Trust has identified broad research themes to stimulate applications for funding and they may come from the following areas:
 - Audit and assurance
 - Business ethics
 - Business reporting
 - Governance: both in business and in other organisational forms
 - Management accounting and financial management

- Methodologies of education and training
- Not-for-profit and public sector accounting reporting and regulation: this can include state agencies, charities or credit unions

STEP 2: IDENTIFY FUNDING TYPE

Two Types of Funding

- Standard funding
- Seed funding (typically c. €1,000/£1,000)

Examples of projects funded in the past*

Examples of projects	Fund amount (€/£)	Funding type
Integrated Reporting: State of the Art and Challenges Ahead (one-day thought-leadership workshop NUIG/ CAI joint event)	€1,500 – €3,000	Standard
How do Irish companies use the latitude afforded by IAS 36 with regard to Impairment Reversals?	€3,000 – €5000	Standard
New approach to the delivery of Accounting Cases to Large Groups in the Irish Educational Setting	€3,000 – €5000	Standard
The Independence of Non-Executive Directors in UK Firms	€1,500 – €3,000	Standard
The Implementation of accruals accounting in the Irish public sector: a comparative study of Northern Ireland (NI) and the Republic of Ireland (RoI)	£9,000 – £11,000	Standard
Self-regulation and Prudence in Credit Unions in Northern Ireland	£8,000 - £10,000	Standard

*Seed-funding was introduced in November 2017, so the above list does not include examples of seed-funding projects.

Once you have determined which type of funding your project qualifies for, download the preferred form.

STEP 3: APPLY

Don't forget to submit your CV. Please print and submit these **by post and by email**.

- Download and fill in the form
- Print your **CV** and the **form**
- Send both CV and form **by post and email**

Send application forms to:

Forms are to be sent (**both by post & email**) to Maria Murphy via the below:

By post

Maria Murphy
CAI Educational Trust
Chartered Accountants
House, 47-49 Pearse St,
Dublin 2, Ireland

By email

E: Maria.Murphy@charteredaccountants.ie

Enquiries to:

For more information, please contact our Research Programme Manager, Susan Rossney.

Use email below or the **enquiries form** (send to Susan Rossney).

E: Susan.Rossney@charteredaccountants.ie

Still unsure your research qualifies for funding?

If you are still not sure your research will qualify for consideration, you can submit an enquiry form first. You will receive a Y/N answer to proceed. Please note this enquiry form is for Standard Applications only, not for seed-funding applications.

(Please note that an invitation to proceed with a full application is not a guarantee of ultimate funding.)



**CHARTERED
ACCOUNTANTS
IRELAND
EDUCATIONAL TRUST**

Application Form

1. APPLICANT(S)

Name: _____

Title & Position Held: _____

Institution: _____

Address: _____

Tel: _____ Email: _____

Note that detailed CV(s) of the applicant(s) should be appended to this application form

2. RESEARCH PROJECT

Title: _____

Brief Description of the Project:

A fuller description of the project should be appended to this document

3. FUNDING AMOUNT REQUESTED _____

Give an indication of a breakdown of the costs related to the project:

Staff:
Travel:
Conference fees:
Transcription costs:
Other:
Total:

4. OTHER FUNDING

Has application been made to any other funding body in respect of this project?
If yes, please provide details:

5. PROJECT MILESTONES

Detailed milestones* of the project, ensuing costs and estimated time to completion:

Milestone	Cost	Target milestone completion date
1.		
2.		
3.		
4.		
5. Copy of project sent to the Trust		

* Literature review, gathering information, analysis, etc.

6. PREVIOUS APPLICATIONS TO THE TRUST

Has the applicant being in receipt of funding from the Trust in the past and, if yes, for what project:

To qualify for Grant assistance the project must “enhance the science of accountancy”. The Trustees interpret the science of accounting as including audit and assurance, reporting to stakeholders, management information, taxation policy and procedures, governance, risk management, business and professional ethics, and business regulation. It would not normally include the separate sciences of economics, management theory and business studies.

7. CAIET TERMS OF REFERENCE

Please briefly explain how this project is linked to CAIET's research agenda and how it will enhance the science and teaching of accountancy, auditing, finance or other related subjects:

Date: _____

Completed applications should be sent to:

M. Murphy
CAIET Administrator
Chartered Accountants Ireland Educational Trust
Chartered Accountants House
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**Seed-Funding Application Form
(typically for funding of c. €1K/£1K for small projects)**

1. Name, title, position and institution of applicant(s)

2. Email address

3. Title of project

4. If linked to PhD studies - principal supervisor (name, title, position, institution):

5. Estimated funding (in Euro/£s)

6. Proposed timing and duration of project

7. Brief description of project and link to CAIET's research agenda?

8. Project's anticipated impact and influence

9. What outputs can be expected?

10. Date proposal form submitted



Enquiry Form

This form is for candidates who are unsure if their research will qualify for consideration. Candidates submitting this form will receive a Y/N answer to proceed to a full application.

Please note: this form is not to be used to enquire about seed-funding applications.

1. Name, title, position and institution of applicant(s)

2. Email address(es)

3. Title of project

4. Approximate estimated funding (in Euro/£s)

5. Proposed timing and duration of project

6. Brief description of project and link to CAIET's research agenda?

7. Project's anticipated impact and influence

8. What outputs can be expected?

9. Date proposal form submitted
