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Research article

Choices of financial reporting regimes and techniques and underlying decision-making processes: a case study analysis of a port authority

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Abstract: This paper examines how financial reporting modes are determined within a company, from the perspective of perceived costs and benefits. The modes investigated include financial reporting regimes (e.g. International Financial Reporting Standards, UK Generally Accepted Accounting Principles) and the financial reporting techniques which support them (e.g. valuing intangibles and investments, treatment of development costs). A stated preference approach is adopted and applied to a fieldwork analysis of the functioning of a large port authority, which was a member of a group and prepared both consolidated and subsidiary accounts. The analysis is largely qualitative, exploring in-depth such matters as key factors in making choices, the decision-making processes behind choices, and the staging of decisions, but underpinned by a quantitative basis, using a metric for determining net benefits of financial reporting regimes and techniques. Our analysis aims to improve our understanding of a company's choice processes underlying its financial reporting, including its handling of complexity and uncertainty, and its use of innovations in techniques and organisational forms for decision support.

Keywords: financial reporting; decision-making processes; case study; stated preference; fieldwork

JEL Codes: C81, D01, G3, L91, M41

Abbreviations: AQ: Administered Questionnaire; CA: Chartered Accountant; CFO: Chief Financial Officer; CPD: Continuing Professional Development; FRS: Financial Reporting Standard; FRSSE: Financial Reporting Standard for Smaller Entities; GAAP: Generally Accepted Accounting Principles; IFRS: International Financial Reporting Standard; SIC: Standard Industrial Classification; SSI: Semi-Structured Interview

1. Introduction

This paper applies a stated preference approach, i.e. one based on asking respondents, rather than on market data, cf. Adamowicz et al. (1994), to explore a company's choice of financial reporting modes and to investigate the rationale underlying those decisions. It aims to provide, analyse, and interpret empirical evidence on a company's choice behaviour, and hence to enhance our understanding of financial reporting choices, cf. Power & Reid (2018). There are three major parts to this paper: first, a scoping section, on the use of a stated preference approach to the process of making choices over financial reporting regimes and techniques; second, a methodology section, explaining the fieldwork approach adopted, and the two instruments (an administered questionnaire and a semi-structured interview) which were used to explore the choice-making in a UK context; and third, a case study section, illustrative of our approach, reporting on face-to-face interview evidence from a UK port authority, exploring its rationale for choices made over regimes and techniques. In sum, the structure of the paper is: Scope, Methodology, Case Study, and Conclusions.

We used primary source data collected from a UK company on their choice problem (potentially of two stage form) of deciding reporting regime and techniques. This evidence is based on a face-to-face interview, permitting an in-depth analysis of motives and strategies lying behind choices. The paper reports on our design and use of two instruments: first, briefly, an administered questionnaire (AQ) [see Appendix A], which looked at company characteristics, current and expected adoption of regimes and techniques, costs and benefits of adoption, their perceived importance and the way in which regimes and techniques interact; and second, in considerable detail, a semi-structured interview (SSI) [See Table 2 below] looking in depth at how choosing occurs for both regimes and techniques, and the decision-making processes that connect such choices and their rationale.

This paper applies a stated preference approach to the study of financial reports, and aims to enhance our understanding of firms' choice behaviour, and the costs and benefits of adopting financial reporting modes. Through providing, analysing and interpreting empirical evidence on UK practice, this paper sets aims: first, to advance the research literature by providing fuller explanation, and better-founded empirical evidence on financial reporting choices (Fields et al., 2001; Bruggemann et al., 2013); second, to develop improved research instrumentation in this area (Schipper, 2010); third, to reveal the merits of a new approach to firms' financial reporting choices, and the techniques they use to support their choices; and fourth, to take account of recent changes in the financial reporting landscape in the UK, thereby to provide policy insights into potential net benefits to companies, investors, and standard-setters.

Table 1 illustrates the two types of choices we investigate: regime choices (to the left); and technique choices (to the right). For UK national purposes, which are relevant to the context of our case study, there were only three financial reporting regime choices available: IFRS, UK GAAP and FRSSE. This choice set is further restricted if one takes account of firm type and/or firm size, as indicated by the decomposition of firm types to the left of Table 1. As the first column under regime choices indicates, IFRS is ubiquitous and is a choice open to all firm types, public or private, large or

small. The FRSSE is the most restrictive regime choice (third choice column, Table 1) being a bespoke regime-type specifically fitted to small firms. UK GAAP, or (since 2015) New UK GAAP are relevant to regime choices made by all but public firms. There are many technique choices open to UK firms for supporting reporting protocols, under each regime choice. We have chosen to limit attention to just three areas in which techniques have play, namely intangibles, development costs, and investments. Under intangibles, we identify three techniques: the cost, income or market approaches. Under development costs we identify only the expense or asset approaches. Finally, under investments, we identify the market value, fair value and cost approaches.

The choice framework open to relevant decision makers in the firm (typically the CFO) may be conceived to have three possible forms. First, the regime choice is made, and then the choice is made as to which technique(s) will be used to support the chosen regime. Second, the technique choice is made initially (perhaps on the grounds of goodness of fit to the skills of existing staff), and then that regime is chosen which most comfortably accommodates to those known technique capabilities. Third, the technique and regimes are not chosen sequentially, in one order or another, but rather are chosen *simultaneously*. The first and second choice frameworks are examples of *two-stage decision making*, and may be adopted for cognitive reasons, like bounded rationality. This implies that the third framework would generally be more demanding to decision-makers, in terms of cognition. However, in certain circumstances, it could be a parsimonious framework. This would be so if the decision-maker had “tied hands” for institutional reasons, such as there being only one regime choice available, the so-called Hobson’s Choice. To illustrate, this would be true for a unitary, large public firm, which in statuary terms can only adopt IFRS. In such as case, the decision maker’s only area of discretionary choice would be on techniques. In practice, if firms have organizational forms of any complexity (e.g. involving subsidiaries) decision-making in financial reporting within the firm as a whole could be a mix of “tied” and “untied” (i.e. “free”) choices. This would be true, for example, if a parent firm had a subsidiary which was a small, private firm, for which three regime choices would be open to it, IFRS, UK GAAP or FRSSE (see Table 1 bottom row left), whereas the parent firm itself would only have the “tied choice” of IFRS.

Having set out potential choice patterns, we can now explore how they can be investigated. The approach we adopt applies a cost-benefit methodology to preferences stated in questionnaires or interviews. Schipper (2010) discusses the use of cost-benefit analysis in financial reporting standards, and indicates the limitation of current research instruments in this area. Reid & Smith (2007) were the first to apply the stated preference approach to study the adoption of Financial Reporting Standard for Smaller Entities (FRSSE), using calibrated costs and benefits. Applications of stated preference theory are diverse (Hensher, 1994; Schlapfer et al., 2008). They have the merit of allowing researchers to capture individuals’ preferences in areas where there may be no direct market observations of choosing. Our research builds upon Reid & Smith (2007).

Table 1. Matrix of possible choices.

Regimes and Techniques		Regime Choices			Technique Choices							
					Intangibles			Development Costs		Investments		
Firms		IFRS	UK GAAP*	FRSSE	Cost Approach	Income Approach	Market Approach	Recognise as Expenses	Recognise as Assets	Market Value	Fair Value	Cost Approach
Public firms	All size	√	X#	X	√	√	√	√	√	√	√	√
Private firms	Large and Medium	√	√	X	√	√	√	√	√	√	√	√
	Small	√	√	√	√	√	√	√	√	√	√	√

Notes:

(a) √ Denotes possible choice. X Denotes impossible choice.

(b) # Publicly listed firms must adopt IFRS for their consolidated accounts, but they have the option to adopt UK GAAP for their individual accounts (e.g. for subsidiaries).

(c) * From 2015 UK GAAP becomes new UK GAAP, and is available to all firm types, except the consolidated accounts of public firms.

(d) US GAAP may be used by companies headquartered in the UK who nominate to report in the USA.

Table 2. Agenda outline.

Agenda outline	
1. Choice of Financial Reporting Regimes	1.1 Choices available and the regime chosen
	1.2 Key factors in choosing
	1.3 Weighing costs/benefits in choosing
	1.4 Influence of choice of technique on regime choice
	1.5 Regime choices over different accounts
	1.6 Impact of emerging policy on choice
2. Choice of Financial Reporting Techniques	2.1 Valuing intangibles
	2.2 Treating development costs
	2.3 Valuing investments
	2.4 Importance of techniques to all types of financial reports
3. Relation between Choices, and their Rationale	3.1 Relation between choices over regimes and techniques
	3.2 Staging and the decision-making process
	3.3 Reasoning behind the choosing process
	3.4 Characteristics of the decision-making process

The use of stated preferences (as in the classical account of Hensher, 1994) is facilitated in this paper by its two instruments, an administered questionnaire (AQ), and a semi-structured interview (SSI). The administered questionnaire allows a metric to be attached to the choosing of financial reporting regimes and techniques, and the semi-structured interview allows an exploration of the rationale underlying those choices. Thus benefits (B) and costs (C), assigned by the respondents (typically the CFO), are taken to reveal their preferences. In our case, the preferences are stated in the AQ using a Likert scale of integers, from one to five (see details in the next section). Then net benefits can be measured either by the ratio (B/C) or the difference (B–C), with the former being slightly preferable on statistical grounds. To illustrate, if the ratio form (B/C) is used, then (B/C) = 1 is the crucial dividing line between stated preferences which lead to net beneficial (B/C) > 1 or net unbeneficial choices (B/C) < 1 of regimes or techniques, from the respondent's standpoint.

Further, if choices are limited by regulation, it still allows an evaluation of whether limited (or lack of) choice is yet perceived to be of net benefit or not, on balance. If "not", this would suggest pressure exists for policy change. Illustrative of this is the net benefit calculation for the parent company of the port authority which is the subject of our case study. As shown in Table 1 to the top left, a large public firm like this port authority used to be must report under IFRS. Thus, the regime choice is "tied" by regulatory statue. When one looks at interview responses on benefits (B) and costs (C) of implementation of IFRS (at the point of adoption), they were perceived in the AQ as being Low (B = 2) and High (C = 4), respectively, giving a very low benefit-cost ratio of (B/C) = 2/4 = 0.5 << 1. In other words, if this firm were not *required* to report under IFRS it would have been seeking another better option for financial reporting.

It is should be borne in mind that all compulsory reporting could have unfavourable benefit-cost ratios, in which case it would be rational to choose the least worst option. It is also relevant that regulatory compliance costs could be a major factor in inflating the costs of "obeying the rules", Boden and Froud (1996). Finally, from the international perspective, it now appears that US firms are becoming increasingly attracted to the more flexible principles-based accounting standards of IFRS; or alternatively are exerting policy pressure to have US GAAP modified towards a similar orientation (see Messier et al., 2014). A further possible policy pressure, but a less radical one, is to have US reporting under IFRS implemented in a way which brings it closer to US GAAP.

In terms of the literature, financial reporting choice is part of the mainstream of financial studies (Holthausen, 1990). Most of the literature emphasises the choice of financial reporting techniques, given a financial reporting regime (Graham et al., 2005; Cazavan-Jeny et al., 2011). However, a few scholars are now starting to investigate how firms choose their financial reporting regimes (Reid & Smith, 2007). Furthermore, the extant literature does not discuss the decision-making behind choices of financial reporting regime and of financial reporting technique (e.g. whether such choices involve sequential or simultaneous decision making). Fields et al. (2001) indicate the need for studying multiple financial reporting choices, and the need for more theoretical explanation of financial reporting choices. Rising to the challenge, this paper explores the efficacy of a two-stage choice model of financial reporting mode in order to enhance our understanding of firms' choice behaviour. At its simplest, the first stage of this model is the choice of financial reporting regime; and the second stage is the choice of financial reporting technique.

Finally, the approach of this paper is relevant to the emerging UK policy framework of financial reporting standards especially of IFRS (Ball, 2006), but also of New UK GAAP of 2015. For example, it has been widely debated, in the US and elsewhere, whether companies should adopt IFRS.

Bruggemann et al. (2013) study the consequences of mandatory IFRS adoption; and thereby suggest further exploration of its basis, in terms of costs and benefits. Hence, the research agenda pursued in our paper could lead to improved insights—for policy decision-makers and companies alike.

2. Methods

The evidence on which this research is based was obtained by a detailed face-to-face meeting with the senior financial manager (viz. the group financial controller) who reported directly to the chief financial officer. Two instruments were used: first, an administered questionnaire (AQ) which provided outline company information, and explored stated preferences of the respondent over financial regimes and techniques, using Likert scales to establish a metric for perceived benefits and costs; and second, a three-part semi-structured interview agenda (SSI), our main focus of this paper, which looked at (a) the choice of financial reporting regimes; (b) the choice of financial reporting techniques; and (c) the relation between these choices and their rational. The interview was conducted by two persons, one of whom worked through the questionnaire and interview agenda with the respondent, and the other of whom took detailed field notes. Prior to interview, the participant was asked to confirm their consent to the use of material for research purposes. University ethical protocols were followed at every stage of the research. The transcript notes were reviewed for accuracy by both investigators immediately after the face-to-face meeting, and subsequently converted into agreed draft form, the day after the interview. The interview was conducted in May 2014.

The administered questionnaire (AQ) looked at basic company information (e.g. size, ownership, leverage, organization), financial reporting regimes and techniques, and their costs and benefits. To preserve confidentiality about the port authority, we provide just approximate figures to give a rough idea of the magnitudes of its key attributes. We also convey the kind of corporate profile the port authority possessed. In organizational structure it was not highly hierarchical, but rather was more team based, including in its decision-making. It had been founded several decades ago, and had over a thousand employees. It had assets approaching a thousand million (£) and an annual turnover of a few hundred million (£). What made this firm of particular interest as a case study was that, considered as an entire entity (e.g. parent and its subsidiaries) it had quite diverse choices over financial reporting regimes and techniques (e.g. as regards regimes, embracing all of IFRS, UK GAAP and FRSSE).

A couple of examples will explain how the stated preference approach was used to create a metric of net benefit. First, take the case of New UK GAAP–FRS 101 (the reduced disclosure framework, RDF). The respondent was asked to specify the expected cost (C) of adopting this regime from 2015, which required making choices over: N/A | Zero | Low | Medium | High | Extreme

A similar question was posed, with the same response options, for the expected benefit (B) of this regime. We coded “N/A” as “0”, and “Zero” to “Extreme” as the positive integers 1, 2, … 5. In this choice setting, which related to a subsidiary, the cost (C) was rated as Low (=2) and the benefit (B) as Medium (=3). Thus the benefit-cost ration (B/C) in this case is $B/C = 3/2 = 1.5 > 1$, suggesting the intention in 2015 is to choose New UK GAAP – FRS 101 for this subsidiary.

Second, take the case now of choice of technique, rather than regime. The respondent was asked how investments were valued, and she regarded the fair value and cost approaches as the principal options. *Fair value* had a cost (C) which was High (=4) and a benefit (B) which was Medium (=3), giving a benefit-cost ratio which was $(B/C) = 3/4 = 0.75 < 1$. The *cost approach* to valuing investment was given a cost (C) of Low (=2) and a benefit was also rated as Low (=2) so the benefit-cost ratio was

(B/C) = 2/2 = 1. In brief, for the two options in the choice set, the *cost approach* may have been equivocal (B/C = 1) but the *fair value approach*, despite having higher raw benefit (3 > 2), had a lower *net* perceived benefit (0.75) than the *cost approach* (1.0)—which would favour the adoption of the *cost approach*. We know from elsewhere in the administered questionnaire (AQ) that the *cost approach* to valuing investment was indeed the technique adopted. Thus stated preferences in the AQ are consistent with actual historic choices.

We now turn our attention to the main instrument from the standpoint of this paper, the semi-structured interview (SSI). It is important to know that the AQ and the SSI are intrinsically linked, though the respondent was not briefed on this link, nor did the respondent typically perceive them as necessarily linked. A summary of the interview agenda is given in Table 2. Briefly, its design captures what we have called earlier the potential *two-stage* decision character of the choice problem the CFO regularly faces. One decision is about regime, another is about techniques, but which comes first (if either) and how are they linked (if at all)? In a structured way, these are the issues the SSI addressed. The rest of Section 3 explores in further detail the three main areas of investigation in the SSI, namely regime choice, technique choice, and the link between the two.

2.1. Choice of financial reporting regimes

This section sought to elicit background information on the preparation of financial accounts, and what choices were available and/or used by the respondent in preparing those accounts. So, for example, we started by exploring the degree of consolidation of accounts; were they prepared for consolidated reporting, parent accounts and subsidiary accounts? Once that was determined, we wondered what regime choices were available, for example, in terms of reporting under IFRS or UK GAAP, and whether these choices were available and/or used at each level of reporting. We were particularly interested in exploring what influenced the choices available, for example, influences might include regulation, firm size, and whether or not the organisation was publicly listed. A further concern was to identify which particular reporting regime was chosen for each component of the organisation.

Once we had explored the nature and variety of the financial reporting in the organisation, our next interest was in the key factors that determined the choice of reporting format. What were those key factors, and how was the decision made as to which options were relevant? Why were those particular factors of such importance to this organisation? And how (if at all) did such considerations differ, according to whether the relevant reporting entity was preparing individual compared to consolidated accounts? More specifically, we wondered how the respondent would choose to weigh costs against benefits when choosing regimes. Was this something that they actively considered and, to the extent that they did, how were costs and benefits weighed? For example, would they use a metric of some sort, was it done more subjectively, or could they identify some other method?

We next investigated whether or not the respondent would consider what techniques are available (within various regimes) when making a regime choice; and if so, how the choice of technique might influence their regime choice. We then probed further on the choice of techniques across different levels of financial reporting, for example, for consolidated accounts, and individual accounts, whether for parent or subsidiary. We wondered whether different regimes might be adopted for different accounts, and if so why. Further, what was the relation between the different choices made on accounts and regimes? Then, what impact did compulsory adoption for consolidated accounts have on the respondent's regime choice for individual accounts?

Given the prospective changes to financial reporting anticipated in 2015, we wanted to assess the impact of these future changes on the organisation's financial reporting. So, we first examined the respondent's awareness of the new regimes to be introduced from 2015, asking, for example, what financial reporting choices would become available to you in the future. Would these options differ from what were available at the time of interview, and if so, in what sense would they differ? If the respondent expected to maintain the current regime, why was that the case? For example, was it because of regulation, or because of previous adoption experience? If the organisation expected to change its financial reporting regime, why had it made that decision, and for what accounts would this be true? Further, what role would be played by, for example, regulation changes, the firm's new targets, or greater benefit/cost, and so on? How did they evaluate and decide upon whether to change regime or to stay with the status quo? And what were the key factors driving any change in regime?

2.2. Choice of financial reporting techniques

A number of techniques are available for financial reporting purposes: for example, in valuing intangibles (e.g. using a cost, market, or income approach); dealing with development costs (e.g. recognizing them as expenses or assets); and valuing investments (e.g. at market value, cost, or fair value). Respondents were therefore asked to identity what technique(s) they had chosen. If they thought that they had no choice, why was that so (e.g. regulation) and what was its impact (e.g. on technique chosen, and in terms of costs and benefits)? On the other hand, if they were able to identify an element of choice, what were the key factors in making that choice, and how did they weigh the costs and benefits in choosing? Then, for each element, what was the influence of regime choice on the technique they adopted and used?

We further probed on what were the most important techniques or aspects, across all types of financial reports, including consolidated, parent, and subsidiary accounts. Why, we wondered, are these techniques or aspects so important; what roles in financial reporting choices do they play; and how do they influence the quality of decision-making e.g. in terms of speed, precision, compliance, transparency, and salience?

2.3. Relation between choices, and their rationale

The interaction of regime choices and the techniques employed was explored next, by asking whether the two choices (viz. regime, technique) influence each other, and if so, how. How important was the regime choice to the technique choice; and, vice versa, how important was the technique choice to the regime choice? Did the respondent feel that the regime and technique choices were intrinsically linked (i.e. mutually connected and influential) or not?

In terms of the implementation of techniques, we asked how the choice of regimes and techniques would proceed. For example, was it staged e.g. regime choice is made first (or is involuntary), then the technique choice is made? If so, how were such choices ordered, and executed? On the other hand, was it un-staged i.e. regime choice and technique choice are made together as part of a complete choice process, which ends up with a regime choice (and then the techniques being chosen to support it)? Did they think that staging could lead to a different choice pattern from no staging?

Why were decisions (on regimes and techniques) made through the process described by the respondent? For example, were factors like transparency, speed of execution, ease of execution, regulatory

compliance, and so on, important? To what extent was their decision process judgment-based (e.g. on previous experience, intuition, hunch, etc) or procedurally-based (e.g. on computational technology, decision support, rule of thumb, yardstick comparison etc)?

Regarding more specific characteristics of the decision-making process, how did complexity affect the decision-making process, and what were the key characteristics of complexity in this context? How did uncertainty and risk affect the decision-making process? For example, were "hard" risk measures (e.g. actuarial or statistical estimates) or "soft" risk measures (e.g. risk classes, subjective estimates) more influential in this context? Did the respondent feel that they had have enough information to enable them to make rational decisions, and were decisions made by individuals, teams or both? Did they feel that their decision-making was subject to any time pressure?

3. Results and discussion

Our approach in this Section is largely qualitative (cf. Covaleski and Dirsmith, 1990). The evidence adduced is largely narrative, and constitutes a kind of mosaic of solid fact, social and organizational context, business judgement, and perspective on accounting institutions (including accounting standards themselves).

3.1. Background

The case study presented here is based on evidence gathered from a face-to-face interview with the Group Financial Controller of a Limited Company. To set it in context, the business is a dynamic UK-based owner (and operator) of ports, which are strategically positioned to serve as logistical gateways across the UK. The company offers a wide range of diverse, port-related services, and helps to connect the UK with Europe and the rest of the world. It owns and operates a number of commercial ports throughout the UK, and offers high levels of handling and logistic-related services to customers who are looking for solutions to problems of moving goods cost-effectively, and providing efficient warehousing and storage facilities.

3.2. Choice of financial reporting regimes

The respondent began by explaining the nature of the organisation, as follows: "We have a group; we have holding companies and trading companies. We look after the group consolidation here. In total, we have about 10 trading companies, including the Head Office entity. They have either different types or geographies, sometimes due to statutory requirements: e.g. [one] has its own statutory harbour authority. They are spatially distributed and tend to be in other ports."

In terms of financial accounting, the company would produce consolidated accounts for the group, and separate financial accounts for each subsidiary. As the respondent explained, they did have a choice as to which reporting regime they could use, which included IFRS, UK GAAP and FRSSE, but they had adopted IFRS in 1996 for all, for consistency: "Currently, we do have choice. [The organisation] used to be listed, so it was driven down the IFRS route. Every entity in the Group is currently IFRS. With FRS 101, we are now considering it for this year—we are looking at whether it makes sense to move to FRS 101 and reduced disclosure."

Whilst there was an opportunity to choose how to report, the practicalities made it difficult to change from the status quo: “Practically, there is a lack of time and people to contemplate and evaluate it. We would like it to simplify and reduce the time we spend on it. It was an option to change this year, but it was pushed down the list of priorities. Our year end is 31 December. If we were to apply it, it would be to all subsidiaries. The Group Consolidated would keep IFRS. It’s primarily to be considered on an efficiency basis—the number of pages in the accounts. The shareholders and stakeholders of subsidiaries are limited. The accounts provide additional information that is nice to have, but not necessary.”

When asked what factors would determine the regime under which financial accounts were prepared, the respondent answered as follows: “It’s about focusing the information for the users of the accounts e.g. they are not interested in related-party transactions. A cash flow statement that doesn’t really say anything is a waste of paper, if nothing else. It is quite a flat structure—the decision-making ability is here. I become aware of changes, and have initial considerations of the changes involved, considering the costs, and so on. I report to the CFO directly, who would make decisions. He’s one of 3 executive directors (and there are 5 non-execs), and is on the Board. We have an audit committee too. We would advise them of our intentions. The CFO makes a decision and would report it to the Board. With IFRS—we make decisions based on whether there’s a simpler and easier way of doing it, and we can make sure that the opportunity cost is not lose (whether it is ‘lost’?).”

When asked whether things would be different, depending upon the reporting entity, the respondent added: “I don’t think considerations will differ for consolidated vs individual accounts. I have asked my tax manager to have a look thoroughly and to explore it [i.e. the implications of moving to FRS101]. There is no goodwill at the subsidiary level. Deferred tax is the specific area—it was an area of big difference when we moved from UK GAAP to IFRS.”

We asked the respondent to talk about how they weighed up the costs and benefits of making decisions about financial reporting: “It’s not just cost. It’s around, is there anything lost? Would our suppliers be worried if anything was removed? It wasn’t as scientific as a metric. If we were looking at going from [UK] GAAP to IFRS, it would be much more scientific. The more options you’ve got, the more opportunity for error. This is more about simplifying, particularly if there’s an issue of adding value.” At the time this organization had chosen to adopt IFRS, they perceived the costs of adoption to be “high” (on a scale from “low”, through “medium” and “high” to “extreme”); and at the same time, they perceived the benefits of this decision to be “low”.

We then further asked about the influence of choice of technique on regime choice, and were told, “yes, they have a bearing. Do you need to outsource, train staff? For example, we measure investment property at fair value, but there’s an expectation that, every so often, you’ll do that externally. We use hedge accounting, having the skills and knowledge to deal with that internally. Contracting out is quite common. It depends on the frequency of the task or action. If it’s investment, you need someone certified. With deferred tax, if you have a good tax manager he or she can coach the information out of lesser qualified staff. We have a large property team, and we were very careful to keep the right members of that team contracted post-recession. How do we maximize our property software to minimize the information required of our external contractors? We don’t really develop software in-house, but we put in a new financial system last year. Could we automate some of the information production, and make sure we get as good information as we did previously? If something is particularly judgemental or guidance is unclear, we would seek external advice.”

When it came to regime choices over different accounts, we were told that, “given the small number we have, most of the accounts production is driven from Head Office. Our new financial system allows

some automated production of accounting. Consistency of reporting across subsidiaries is important. [With] the nature of costs, we probably could put a figure on it. Hours and teams and headcount and audit cost. I would expect to see a saving coming through. How much time do I need them to spend on looking at adjustments? I suspect that, over the next month or so, we would need to make a decision [about whether or not to adopt FRS101], to be effective by the year end. There will be no re-training, as there are only a few people. They are all CA [chartered accountant] qualified and CPD [continuing professional development] trained to keep up with changes. They will be able to deal with it."

With a mind on the changes forthcoming in 2015, we were interested in the impact of emerging policy on choice. This organization was entitled to adopt new UK GAAP from 2015. However, in terms of what they would actually do, there was a "high" chance of continuing with IFRS (with associated "zero" cost and "zero" perceived benefit) and a "medium" chance of adopting new UK GAAP (at "low" cost and "medium" benefit) for subsidiaries. The respondent explained that consolidated accounted were required in IFRS for financing purposes as "it will influence the perceived value of having us. FRS102 could be relevant for our subsidiaries, but as it would probably lead to more differences and work, it's not one that we would consider at the moment. [With] FRS102, because it would have a more significant impact on the Group, we would be more likely to consult our audit committee. If we were to move subsidiaries back to UK GAAP, we wouldn't want to do it, unless we could move the whole group back to UK GAAP. For example, would there be advantages to having goodwill impairment compared to the current amortisation?"

3.3. Choice of financial reporting techniques

Having discussed potential choices of reporting regimes, our discussion moved on to the techniques used within the financial reporting regime. See, for example, the discussion of techniques by Haka (1987) which referred to discounting versus non-discounting cash flow techniques. We first asked the respondent to identify the three *most* important aspects of their financial reporting techniques, which were given as follows: (1) treatment of intangible properties; (2) treatment of tangible assets; and (3) pension plan. The three *least* important aspects were then identified as: (1) treatment of development costs; (2) treatment of leases; and (3) treatment of contingencies.

We investigated more closely the valuing of intangibles. This organization could use either the market-based (at "high" cost) or income-based ("medium" cost, "medium" benefit) approach, and ranked the latter as being more important. As the respondent told us, "We have been in corporate existence since about 1991—for 30 years or so. The reputational brand is very long-lived and a lot of our customers are very long-standing. To me, personally, the valuation of intangibles is important. Who are ultimately our major stakeholders? It's our shareholders. They look at [our] trading operations. Goodwill was recognised when they acquired the group. We don't have a large number or a wide variety of intangible assets. We have goodwill, and some customer relationship assets."

We use fairly simplistic discounted cash flow modelling, based on approved 5 years plans (which are updated annually and rolled forward). We do sensitivity analysis—sometimes the initial window is much shorter. If a significant intangible is being measured for the first time, we would consider getting external advice. When the company was taken over, they got external consultants to come and do internal training, as they recognised that the skills were not available in-house.

Development costs were "not particularly relevant" to this group, and to the extent that they did occur, would be recognised as expenses, with "zero" cost and "low" benefit of doing so. The

respondent commented that, “within the group there’s a recognition that we don’t like putting things on the balance sheet unnecessarily, especially if they have a short-life. We would record development costs as expenses. For our new finance system last year, the vast majority of costs were external. It was relatively easy to capture and capitalise those costs. There is some variation—some will be treated as expenses. Techniques are pretty much a done deal once the regime is chosen. Back to when IFRS was implemented, the regime choice can affect technique choice.”

When it came to valuing investments, this organisation liked to “try to keep things simple”, and could use either a cost-based approach (at “low” cost and benefit of implementation) or fair value (“high” cost, “medium” benefit), with a preference for a cost-based measure. For example, with “statutory accounts—at cost (in the entity’s accounts)—Investments are recognised at the subsidiary level. What did you pay for it? Is it still supportable? If we have a subsidiary as an investment, is it still performing or is there some impairment? It may not be worth that any more. It was listed when acquired, and there was a market value at the time. Consolidated accounts—stock was looked at, in that stock managers walked around to see if any stock was impaired. Typically, finance (the subsidiary’s accountant) will look at it. If nothing else, when the accounts are audited there will be no surprises. It is also included in the 5 years plan for that entity.”

There are 4 accountants across the group—with both formal and informal meetings. Divisional financial meetings are held quarterly. We had a write-down this year and reported this to the audit committee. We were selling companies after the year end, so we knew what we were being paid. We looked at the other investments in the group (internal audit) and looked at discounted future cash flows techniques. We wrote them down to recoverable value. We use common sense, in terms of planning ahead and giving clear instructions to finance directors, to they have the opportunity to feed back to Head office and to avoid any surprises.

Finally, on the importance of techniques to all types of financial reports, the main concern was on accounting for the Group’s two pension schemes, as “everything else is fairly straightforward.” The pensions schemes were described as follows, “we have two key defined benefits schemes, [one internal] and one with a business that we bought, and a number of small industry schemes. We would consider consolidation. Can we merge them? We would need to consider HMRC, Pensions regulations, investors, auditors—it would involve a lot of external advice and support? Looking at the 2 pension schemes would be a larger consideration. You would need to look at the actuarial side, the tax side, the legal side, and have consultation with employees. It would probably involve a steering group and external advice. Minimising the administrative cost of running the schemes; ultimately, this would benefit the beneficiaries of the schemes.”

3.4. Relation between choices, and their rationale

The choices of regimes and techniques were thought to influence each other. For example, “with hedge accounting, UK GAAP reporters were considering FRS25 [Financial Instruments: presentation] and FRS26 [Financial Instruments: recognition and measurement]—do we adopt or not? We consider, are we capable? Do we have the knowledge and expertise? What will our external stakeholders say? With pensions etc, will they allow us to do it? There is definitely an interaction. Whichever regime you look at will give you the options—e.g. a prescriptive model, or options, that determine your choice. Do you want to be told what to do, or to have the option to choose? Techniques can be learned. You probably have fairly well educated staff. We have RICS

qualified property team, and CA qualifications. It would be harder to justify in-house valuations if you didn't have the staff with professional qualifications."

In implementing the decision-making process, staging was thought to be helpful: "if staged, it helps to assess the impact, and need for a response and offers a chance to compare results to other divisions. We quite methodically look at the implications and ramifications of each, and add them up to see what will be the impact at the end. Then we'd look at 'staging posts'—for example, if this is going to wipe out half of our profit (on paper), at what point do we say 'stop'? We have quarterly finance meetings and a Group Financial Controller. with inventory vs PPE [personal protective equipment]—I read the technical side, and produced a brief memo with the key facts. I communicated this to the divisional finance managers with the same request to all. The responses were diverse. Some people looked at it, and said informally, we need to do a lot more work. A lot of it is down to personality and style. If we want a standard response, we'll give a template. It might change the route, or path, or efficiency, by which you get there. You need to pitch at the right time to make sure you get there, but without leaving it so long to get there so that they get distracted by other things."

Regular reporting was an important consideration in the choosing process, "we think about what impact it will have on the end result, and then work back [using backwards induction]. It's primarily judgement-based—here's a standard that give us two options for example about annual depreciation. But does that make sense? The modelling aspect would be more about modelling the numbers. There was a procedure about methodically going through the accounts."

The decision processes behind choices of reporting regimes and techniques (e.g. as summarised in stated preference scores) are neither well understood, nor frequently explored. In this paper, we aim to remedy this deficiency. We find that the major concerns of decision-making in our reporting contest are the managing of risk and the managing of complexity. A selection of quotes from face-to-face discussion, which corroborate our summary comments, are given in Appendix B. Generically, the decision-processes we encountered in our case study were largely team-based and used a blend of quantitative evidence (e.g. risk scoring) and qualitative evidence (e.g. experienced business judgements).

More specifically, under the headings of risk and complexity, our findings are as follows. Risk is a major focus of attention. Uninsurable exogenous risk factors include the weather (particularly important to a port authority) and the financial system. Some types of risk (e.g. political, climate) must just be borne, but this case study indicated that there are many ways in which a firm can seek to attenuate risk (e.g. by assigning risk classes to major sources of risk, and using currency swaps to mitigate financial risk).

Complexity, like risk, was targeted for reduction by our case study firm. Strategies for risk reduction were diverse, including: defining, and working to, clear time horizons; investing trust in executive actions; streamlining financial and management functions; reducing the frequency of meetings; and investing in IT for communications.

4. Conclusions

It was found in our case study that costs and benefits do have a bearing on the choices of both regimes and techniques, but that these choices are also constrained by regulatory considerations. Of most interest are: the relationship between choices of regimes and techniques (and how they are interconnected); the staging of decision-making processes; and the reasoning behind these choosing processes. Briefly, we find that there is a mutual influence between choices of regimes and techniques.

For example, with hedge accounting, (under financial instruments), the firm considered how capability, knowledge and expertise would affect reporting over dimensions like presentation, recognition and measurement. Most important, a "staging" approach was found to be part of the decision-making process over regimes and techniques, which involved careful consideration of impact and profitability. This did lend support to our own general framework of a two-stage decision process.

The reasoning behind choosing processes is found to be primarily judgement-based, with decision support being provided by various modelling methods. Decision-making, as such, involves a mixture of hard and soft measures, and a scored approach to uncertainty is adopted (e.g. use of a risk matrix, likelihood scoring, risk analysis and attrition). Decision-making aims to be evidence-based, and seeks to reduce complexity. The latter is achieved by a variety of means, including: establishing known time horizons, streamlining finance, reducing meetings, and accelerating information flows through communications technologies. Overall, our finding is that theoretical approaches to choice processes and their underlying decision frameworks are well supported by our case study.

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Conflict of interest

All authors declare no conflicts of interest in this paper.

References

Adamowicz W, Louviere J, Williams M (1994) Combining Revealed and Stated Preference Methods for Valuing Environmental Amenities. *J Environ Econ Manage* 26: 271–292.

Ball R (2006) International Financial Reporting Standards (IFRS): Pros and Cons for Investors. *Accounting Bus Res* 36: 5–27.

Boden R, Froud J (1996) Obeying the rules: Accounting for regulatory compliance costs in the United Kingdom. *Accounting Organ Society* 21: 529–547.

Bruggemann U, Hitz J, Sellhorn T (2013) Intended and Unintended Consequences of Mandatory IFRS Adoption: A Review of Extant Evidence and Suggestions for Future Research. *Eur Accounting Rev* 22: 1–37.

Cazavan-Jeny A, Jeanjean T, Joos P (2011) Accounting choice and future performance: The case of R&D accounting in France. *J Accounting Public Policy* 30: 145–165.

Covaleski MA, Dirsmith MW (1990) Dialectic tension, double reflexivity and the everyday accounting researcher: on using qualitative methods. *Accounting Organ Society* 15: 543–573.

Fields TD, Lys TZ, Vincent L (2001) Empirical research on accounting choice. *J Accounting Econ* 31: 255–307.

Graham JR, Harvey CR, Rajgopal S (2005) The economic implications of corporate financial reporting. *J Accounting Econ* 40: 3–73.

Haka SF (1987) Capital budgeting techniques and firm specific contingencies: a correlational analysis. *Accounting Organ Society* 12: 31–48.

Hensher DA (1994) Stated Preference Analysis of Travel Choices: The State of Practice. *Transportation* 21: 107–133.

Holthausen RW (1990) Accounting method choice. *J Accounting Econ* 12: 207–218.

Messier WF, Quick LA, Vandervelde SD (2014) The influence of process accountability and accounting standard type on auditor usage of a status quo heuristic. *Accounting Organ Society* 39: 59–74.

Power B, Reid GC (2018) Decision support for firm performance by real options analytics. *Managerial Decis Econ* 39: 56–64.

Reid GC, Smith JA (2007) Reporting in Small Firms. *Financ Manage*, 31–33.

Schipper K (2010) How Can We Measure the Costs and Benefits of Changes in Financial Reporting Standards? *Accounting Bus Res* 40: 309–327.

Schlapfer F, Schmitt M, Roschewiz A (2008) Competitive Politics, Simplified Heuristics, and Preference for Public Goods. *Ecol Econ* 65: 574–589.

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