



## Stated Preferences for the Adoption of IFRS and UK GAAP: Case Study Vignettes

Yu-Lin Hsu<sup>1\*</sup> and Gavin C. Reid<sup>2,3</sup>

<sup>1</sup>Department of Accounting and Finance, University of Strathclyde, Level 3, Stenhouse Wing, 199 Cathedral Street, Glasgow, G4 0QU, UK.

<sup>2</sup>School of Economics and Finance, University of St Andrews, Castlecliffe 1, The Scores, St Andrews, Fife, KY16 9AR, UK.

<sup>3</sup>Centre for Business Research at Cambridge Judge Business School, University of Cambridge, Trumpington Street, Cambridge, CB2 1AG, UK.

### Authors' contributions

*This work was carried out in collaboration between both authors. Both authors designed the study, managed the literature searches and the analyses of the study and conducted fieldwork. Author YLH performed the statistical analysis and wrote the first draft of the manuscript. Author GCR further improved the manuscript. Both authors read and approved the final manuscript.*

### Article Information

DOI: 10.9734/AJEBA/2021/v21i430368

#### Editor(s):

(1) Dr. Fang Xiang, University of International and Business Economics, China.

#### Reviewers:

(1) Nischal Risal, Tribhuvan University, Nepal.

(2) Haruna Maama, Durban University of Technology, South Africa.

Complete Peer review History: <http://www.sdiarticle4.com/review-history/66469>

Original Research Article

Received 10 January 2021

Accepted 16 March 2021

Published 23 March 2021

### ABSTRACT

Our aim is to see if the adoption of International Financial Reporting Standards (IFRS) is beneficial. Our methodology involved both quantitative methods (with non-parametric tests) and qualitative methods (with case study vignettes) in a complementary way, as in the 'mixed method'. Our objective was to use a formal metric, adapted from economic choice theory, to analyze choosing behavior in firms over financial reporting standards, using calculated ratio and net utilities. Our evidence and analysis are based on a random sample of twenty-one UK firms. From these firms, primary source data were collected, using questionnaires and fieldwork interview tools, to enable the testing of our hypothesis that the adoption of IFRS was beneficial. Using robust non-parametric statistical tests, we found that public firms which had to adopt IFRS, as a matter of necessary policy compliance, often perceived this imposed choice to be unbeneficial, refuting our null hypothesis. This finding is highly statistically significant. The implication of our qualitative evidence was that this perception of lack of benefit in adopting IFRS created a voice for regulatory change.

\*Corresponding author: E-mail: [yulin.hsu@strath.ac.uk](mailto:yulin.hsu@strath.ac.uk);

*Keywords: accounting standards; stated preferences; fieldwork; decision analysis.*

## 1. INTRODUCTION

Our aim is to understand firms' choices of financial reporting standards, like choosing between International Financial Reporting Standards (IFRS) and Generally Accepted Accounting Practice in the UK (UK GAAP) [1,2]. We do this using a rational choice framework [3], as implemented by the stated preference approach [4-6]. Our methodology allowed us to identify firms whose choices felt unnecessarily 'constrained' by regulations – in the sense that what they would freely choose was different from what they were able to choose under regulation. This can create a business pressure for regulatory change [7] and, in turn, can engender perverse adaptations like parent companies begrudgingly accepting regulatory imperatives, while, exercising latitude over the accounting reporting of unregulated subsidiaries. Our paper fills a gap in the research literature, between formal economic cost-benefit [8] and qualitative analysis [9].

The accounting literature has been critical of IFRS as a standard [10,11]. Some have argued that understanding the adoption of standards requires a cost-benefit analysis [8], with costs like compliance and entry barriers and benefits like productivity and innovation. However, even identifying and measuring all potential costs and benefits is difficult [12]. Given this, we adopt a 'stated preference' approach, which has been noted as feasible in accounting [4-6], but rarely adopted.

Although firms need to follow the financial reporting standards set by their policy makers, they typically have discretion over their mode of financial reporting [13], e.g., companies may determine whether to disclose information voluntarily (e.g., their earnings forecasts) and how often should they do so [14]. A PWC [15] report on IFRS suggested firms in several countries were free to choose IFRS or other standards. Specifically, private small firms in the UK had wide discretion over adoption choices, amounting to three: IFRS, UK GAAP or FRSSE (Financial Reporting Standard for Smaller Entities) in our fieldwork period. A later report by PWC [1] summarized the differences between UK GAAP, New UK GAAP and IFRS.

Studying such choices is part of the mainstream of financial and accounting studies [2,16,17].

Such literature explores the choices between IFRS/International Accounting Standards (IAS) and local GAAP, and analyzes the determinants or the consequences of IFRS/IAS adoption [18,19]. Several scholars show the incentives to adopt IFRS affect the perceived benefits from adoption, such as better reporting quality or lower costs of capital [19,20]. However, there is still an ongoing debate on whether adopting IFRS is beneficial or unbeneficial for companies [18]. Prior research indicates the lack of empirical evidence on accounting costs and benefits (mainly due to the difficulty of measurement), and urges further work on this area [18,21].

## 2. METHODOLOGY

### 2.1 The Mixed Method and Instrumentation

Applying the mixed method [22], we conducted a survey of UK firms by email questionnaires, followed up by interviews. The advantage of the mixed method is that it enables the acquiring of 'thick' data, which included narratives on motives, thought processes, decision-making and so on, in a fashion that is complementary to numerical data. The questionnaire design was predicated on the adoption framework for financial reporting standards in the UK. Our concern was the 'what and why' of choices of financial reporting standards. This data collection for this research occurred in 2013 - 2014 when there were three relevant financial reporting standards in the UK: IFRS, UK GAAP, and FRSSE. The interview itself allowed, at several points, open explanations of choices (e.g., under the current adoption framework, accounting regimes and techniques choices; and under the future adoption framework, aspects of policy changes).

The sampling frame was of public UK firms in Datastream and private UK firms in Bloomberg's databases. From these, we obtained a random sample of twenty-one firms willing to participate in our research: twenty public and one private. The sample included firms from all the SIC codes from 10-30 (Heavy Manufactures) to 84-99 (Public, Private and Social Services). The modal sector (43%) was SIC 59-83 (Professional and Financial Services). Responses from the questionnaire survey and interviews were

encrypted for anonymity in reporting<sup>1</sup>. In addition to questionnaire data, we obtained significant further information on our firms, both from the interviews and from public domain sources. These supplemented our questionnaire responses and helped to build up the thick contextual material required for the three vignettes reported on in Section 3.2. Table 1 provides summary statistics (mean, median, range) for our sample, indicating diversity by size, sales and assets.

Some investment companies had no sales (e.g., they could be shell companies for facilitating start-ups, takeovers, IPOs or investments outside of domestic regimes), so the income from their main operations was used. Further, for the one company, which was an investment trust and delegated its day-to-day operations to a third party, there were no employees, so a nominal 1 was used. A partner of the company answered our questions. The firms sampled are generally large enterprises, but a wide range of firms is represented, so we have ensured diversity of firm types in our investigation of their preference over financial reporting standards.

Table 2 summarizes the choices that could be made by these UK firms. The main divisions in this table are between Firms (the column aspect) and Financial Reporting Standards (the row aspect). Firms are either Public or Private, and within this are categorized by size. UK companies with various sizes and listing status had different choices regarding financial reporting standards, e.g., from 2005, it was compulsory for UK publicly listed firms to adopt IFRS for their consolidated accounts. Since 2008, small firms have had the option of adopting the FRSSSE.

## 2.2 Instrumentation

### 2.2.1 Structure of questionnaire

Instrumentation design followed Reid and Smith's research [4,5] which used a stated preference approach to study the adoption of FRSSSE. This approach is based on the microeconomics of preferences [3]. We designed and implemented an electronic questionnaire with two sections relevant to this paper: basic company information; and choice of financial reporting standards. Table 3 provides further

information on the structure of our instrumentation.

In the first section of the questionnaire (see Table 3), we asked for basic company information, such as firm size, sector, and organizational structure. This allowed us to consider whether firm specific characteristics influence firms' choices of financial reporting. For instance, large firms and small firms may have different adoption costs and behave differently when preparing their financial reports [4,5,23].

In the second section of the questionnaire, we investigated firms' choices of financial reporting standards, asking whether choices were perceived to be beneficial, based on perceived costs and benefits. Reid and Smith [4,5] had already found that cost-benefit ratios influenced the firm's adoption of FRSSSE. We extended that binary choice to exploring whether costs and benefits influenced firms' choice among IFRS, UK GAAP and FRSSSE. We also checked whether adopting IFRS was beneficial for firms, and whether they would adopt IFRS if it were not compulsory [18]. Further, in this questionnaire, we included questions about both *contemporary* decisions, and *expected* decisions, for example, viewed from 2015 when a major policy change was expected [1]. This allowed us to investigate whether cost and benefit principles applied to both present and future circumstances.

### 2.2.2 Types of questions

Two types of questions in the questionnaire were used to investigate firms' choices of financial reporting modes [24,25]. The first type focused on firms' contemporaneous, or future, choice of financial reporting standards. Table 4 shows how this question type helped us to acquire information on firms' choices of financial reporting standards. There we show how we asked about: the specific standards chosen and the range of choices available (i.e., the choice set).

The second type of question aimed to explore the costs and benefits of implementing a certain standard. Specifically, based on stated preferences, we used a five-point Likert Scale to capture firms' costs (and benefits) of implementing a certain standard [4,5,24,25]. Table 5 shows the question we used to examine firms' costs of adopting IFRS. Benefits were measured similarly. We coded the perceived levels of costs and benefits using the integers: 1 to 5.

<sup>1</sup> The data and related documentation of this research are available from the Strathclyde University Data Depository [33].

**2.2.3 Measuring utilities**

From firms' stated costs and benefits of adopting a certain standard, we created a measure of firm's net utility and ratio utility [5,7,26]. We define the *net utility* as the perceived benefit (B) minus the perceived cost (C) of adopting a certain standard (i.e., B - C); and we define the *ratio utility* as the ratio of the benefit to the cost of adopting a certain standard (i.e., B/C). Since we code benefits and the costs of adopting a financial reporting mode using the integer set {1, 2, 3, 4, 5}, the implied range of our net utility measure is defined simply by the ordered set {-4,

-3, -2, -1, 0, 1, 2, 3, 4}. In a similar (but less obvious) fashion, the implied range of ratio utility (B/C) is defined by the ordered set {[0.2, 0.8], 1, [1.25, 5]}, for which the squared brackets denote closed intervals. If the adoption is beneficial, it should lead to a positive *net utility* (B - C > 0); or to a ratio utility larger than unity (B/C > 1). The case of net utility is therefore reasonably clear about hypothesis testing of potential benefit. The case of ratio utility is a bit less obvious, but it is readily confirmed that there is dis-benefit if (B/C) ∈ [0.2, 0.8], benefit if (B/C) ∈ [1.25, 5]; and it is equivocal if (B/C) = 1.

**Table 1. Summary statistics on the sample**

	Mean	Median	Min	Max
Employees	4k	854	1	43k
Annual Sales (£)	1,496 m	247 m	27k	12,000 m
Total Assets (£)	3,432 m	357 m	2m	33,764 m

Notes: m = million; k = thousand; £ = GBP

**Table 2. Matrix of choices over financial reporting standards**

Standards		Choices over Financial Reporting Standards		
		IFRS	UK GAAP*	FRSSE*
Firms				
Public firms	All size	√	X <sup>#</sup>	X
Private firms	Large and Medium	√	√	X
	Small	√	√	√

Notes: (a) √ denotes possible choice. X denotes impossible choice

(b) <sup>#</sup> Public 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 would become new UK GAAP, and is available to all firm types by size, except (the consolidated accounts of) public firms. FRSSE is also replaced by the new UK GAAP from 2016

**Table 3. Structure of questionnaire**

Main questionnaire sections	Explanation
1. Basic Company Information	Firm size; firm age; financial data; sectors; organizational structure.
2. Choice of Regimes (i.e., Financial Reporting Standards)	Firms' choices of financial reporting regimes, and their perceived costs and benefits of adopting specific regimes (including contemporary choices, and choices from 2015).

**Table 4. Choice of financial reporting standards**

2.1.1 Current choice of financial reporting regime
2.1.1.1 What is the current financial reporting regime you adopt? (please circle) IFRS   UKGAAP   FRSSE   Other _____
2.1.1.2 Do you have other choices if you do not adopt your current financial reporting regime? (please circle) No (Go to Question 2.1.2)   Yes
2.1.1.3 What are the other financial reporting regimes you can choose? (please circle) IFRS   UKGAAP   FRSSE   Other _____

**Table 5. Ranking the Perceived Costs of Financial Reporting Standards**

What are your perceived <b>costs</b> of adopting the following financial reporting regimes? (please circle)						
IFRS	N/A	Zero	Low	Medium	High	Extreme

**3. RESULTS AND DISCUSSION**

**3.1 Hypotheses and Statistical Testing**

We use the nonparametric test of Wilcoxon [27] for hypothesis testing. Its usage and sampling distribution are well documented [28]. For a sample size of  $N$ , for which one has  $2N$  data points of pairs,  $x_{1i}, x_{2i}$  ( $i = 1, \dots, N$ ), the null hypothesis is that the pairs follow a symmetric distribution about zero, and the alternative hypothesis is that they do not. The test statistic  $W$  has a complicated expression, but this has been tabulated [28].  $W$  is asymptotically normal, but, for tests on our typically small sample sizes (e.g.,  $N_R < 20$ ) in this paper, the ready-computed and tabulated critical values are used. The null hypothesis is rejected when the modulus of  $W$  is greater than the tabulated significance value for a sample size of  $N_R$ .

**3.1.1 The key hypothesis**

In our sample, 16 firms reported upon their perceived costs and benefits of adopting IFRS.<sup>2</sup> Using perceived cost and benefit reasoning, we argue that a rational chooser will elect to report under the financial reporting standard that creates the greatest net benefit. This establishes the null ( $H_0$ ) and alternative ( $H_1$ ) hypotheses:

- $H_0$ : Adopting IFRS is beneficial.
- $H_1$ : Adopting IFRS is unbeneficial.

**3.1.2 Investigating net utilities (B-C)**

Table 6 illustrates our first calculation, which was to determine the net utility of adopting IFRS, defined as the adoption benefits of IFRS minus the adoption costs of IFRS [7,26]. Net utilities (with a range of - 3 to + 2) are given in the first column. The data relate to 16 respondents, and raw frequencies are given in column two, and relative frequencies in column three, in Table 6. The modal relative frequency (37.5%) occurs at zero net utility (i.e.,  $B - C = 0$ ), and the negative

and positive net utilities lying immediately on either side of this (i.e.,  $B - C = 1$  and  $B - C = -1$ ) are equally frequent (18.75%). However, overall, there appears to be more weight on the negative net utility side, compared to the positive net utility side.

Since adopting IFRS, even if choice is constrained (viz., a *tied choice*), is evidentially beneficial if such an adoption can generate positive net utility, the null and alternative hypotheses used here will be as follows:

- $H_{0a}$ : Adopting IFRS leads to positive net utility (i.e., net utility  $> 0 \rightarrow$  net utility  $\geq 1$ ).
- $H_{1a}$ : Adopting IFRS does not lead to positive net utility (i.e., net utility  $\leq 0 \rightarrow$  net utility  $< 1$ ).

The form of these hypotheses follows from the observation made in the previous section that the range of net utility is given by the ordered set  $\{-4, -3, -2, -1, 0, 1, 2, 3, 4\}$  in which the net utilities may positive, zero or negative integers (but cannot be fractional). If the adoption is beneficial, it should result in a positive net utility, and hence it will be equal to, or greater than, unity. If the adoption is unbeneficial, it will lead to zero or negative net utility, and this can be treated as being less than unity for statistical convenience (because there is no net utility lying between one and zero, under our metric). The results of the Wilcoxon signed-rank test are presented in Table 7. Here, we see that the  $P = .001$  suggesting strong evidence for rejecting the null hypothesis that adopting IFRS leads to positive net utility.

Since rational choosers would only adopt IFRS if there were a positive net utility attaching to this action, it seems that some of the most noted UK public companies would not adopt IFRS were it not compulsory.

**3.1.3 Investigating ratio utilities (B/C)**

A related exercise is to calculate the *ratio utility* (as opposed to the previous *net utility*) of adopting IFRS which is defined as: the adoption benefits of IFRS divided by the adoption costs of IFRS [4,5,26]. Table 8 presents the frequencies of the various ratio utilities of adopting IFRS. As in the case of the net utility calculations, for the ratio utility the equivocal case, i.e.,  $(B/C) = 1$ , is

<sup>2</sup> Amongst the 16 firms that reported stated costs and benefits, 15 are public and one is private. The statistical results excluding the private firm are not significantly different from the main results discussed in this paper.

the most frequent (37.5%), around which lie the same relative frequencies (i.e., 12.5%) for the immediately greater and lesser (B/C) ratios.

We now use, as before, the Wilcoxon signed-rank test [27], along with the concept of *ratio utility*, to test whether adopting IFRS is beneficial. Since adopting IFRS is beneficial if the adoption can generate a ratio utility which is greater than unity, the null and alternative hypotheses for this case were specifically as follows:

$H_{0b}$ : Adopting IFRS leads to a ratio utility greater than unity (i.e., ratio utility  $> 1 \rightarrow$  ratio utility  $\geq 1.25$ ).

$H_{1b}$ : Adopting IFRS does not lead to a ratio utility larger than unity (i.e., ratio utility  $\leq 1 \rightarrow$  ratio utility  $< 1.25$ ).

As indicated in the previous (Instrumentation) section, the range of ratio utility is given by the ordered set  $\{[0.2,0.8], 1, [1.25,5]\}$ , where closed intervals are indicated by square brackets. If the

adoption is beneficial, the ratio utility should be greater than unity; and indeed, in this case, to be more precise, it must be greater than or equal to 1.25. If the adoption is unbeneficial, it will lead to a ratio utility less than or equal to unity, which can be treated as 'less than 1.25' for statistical convenience (because there is no ratio utility that will lie between unity and 1.25).

Results of the Wilcoxon signed-rank test for the ratio utility case are in Table 9. Positive signs are much below the expected, and negative signs are much above the expected. Table 9 indicates that the  $P = .01$ , rejecting the null hypothesis (that adopting IFRS leads to a ratio utility larger than unity).

Rational choosers would only adopt IFRS if the ratio utility were greater than unity. Since the results again suggest that adopting IFRS is generally unbeneficial, UK public companies in our sample would probably not adopt IFRS were it not compulsory.

**Table 6. Frequencies of the net utility (Benefits - Costs) of adopting IFRS**

Net Utility	Frequencies	Percentage	Cumulative Percentage
-3	1	6.25	6.25
-2	2	12.50	18.75
-1	3	18.75	37.50
0	6	37.50	75.00
1	3	18.75	93.75
2	1	6.25	100.00
	Total= 16	Total= 100.00	

**Table 7. Wilcoxon signed-rank test of the net utility**

Sign	Observations	Sum Ranks	Expected
+	1	7	65
-	12	123	65
0	3	6	6
All	16	136	136
unadjusted variance	374.00	$H_{0a}$ : net utility $\geq 1$	
adjustment for ties	-7.63	$H_{1a}$ : net utility $< 1$	
adjustment for zeros	-3.50	$z = -3.045$	
adjusted variance	362.88	$P$ -value = .001	

**Table 8. Frequencies of the ratio utility (Benefits ÷ Costs) of adopting IFRS**

Ratio Utility	Frequencies	Percentage	Cumulative Percentage
0.25	1	6.25	6.25
0.5	3	18.75	25.00
0.75	2	12.50	37.50
1	6	37.50	75.00
1.33	2	12.50	87.50
1.5	1	6.25	93.75
3	1	6.25	100.00
	Total = 16	Total = 100.00	

**Table 9. Wilcoxon signed-rank test of the ratio utility**

Sign	Observations	Sum Ranks	Expected
+	4	25	68
-	12	111	68
0	0	0	0
All	16	136	136
unadjusted variance	374.00	$H_{0b}$ : ratio utility $\geq 1.25$	
adjustment for ties	-7.75	$H_{1b}$ : ratio utility $< 1.25$	
adjustment for zeros	0.00	$z = -2.247$	
adjusted variance	366.25	$P\text{-value} = .01$	

### 3.2 Case Study Vignettes and Policy Discussion

We see that the statistical evidence is clear in its resolution of preferences on IFRS adoption. Here we introduce three short case studies (called 'vignettes'), concluding by some policy discussion rounding out our findings, viewed from the basis of professional practice. They are not full case studies, but rather illustrative mini-case studies. For anonymity, firms are called *Company Alpha*, *Company Delta*, and *Company Echo*.

Company Alpha was a UK private reinsurance business in the professional and financial services (SIC 59-83) sector. It was founded about 30 years ago. Its ownership was held 100% by just a few insiders. It was a private medium-sized firm, with less than 100 employees. Under contemporaneous UK reporting policy, it could choose between IFRS and UK GAAP when preparing its financial reports [15]. Its choice in 2013 was UK GAAP. We found Company Alpha's choices were consistent with its perceived adoption costs and benefits. In the questionnaire, Company Alpha reported it had high adoption costs with IFRS allied to low adoption benefits. With free choice (which it did have), Company Alpha was unlikely to adopt IFRS. Our metric confirms this, as the ratio and net utilities from their stated preferences were, respectively:  $(B/C)_{IFRS} = 0.5 < 1$  and  $(B - C)_{IFRS} = -2 < 0$ , which both reject IFRS adoption. By contrast, their stated preferences for the adoption of contemporary UK GAAP were unambiguously the opposite. In this case, adoption costs were effectively rated as zero and the adoption benefits were rated as high. For Company Alpha, adopting contemporary UK GAAP did generate net benefit, with the ratio and net utilities being, respectively:  $(B/C)_{UKGAAP} = 4 > 1$  and  $(B - C)_{UKGAAP} = 3 > 0$ . Further, direct comparisons between the two financial reporting standards confirm that UK GAAP is preferred

over IFRS, as:  $(B/C)_{IFRS} = 0.5 < 4 = (B/C)_{UKGAAP}$  and  $(B - C)_{IFRS} = -2 < 3 = (B - C)_{UKGAAP}$ . In its real-world decision-making, Company Alpha did indeed voluntarily adopt UK GAAP. This is consistent with both stand-alone perceived utility ('what do I get from this financial reporting standard?') and comparison utility ('what is this standard doing for me compared to the alternative?'). We conclude that Company Alpha did indeed behave in ways which were consistent with stated preference theory, as its decisions on adoption of financial reporting standards were consistent with their perceived utilities of alternative actions. Furthermore, Company Alpha found that the new regulations like IFRS often come with high costs and low benefits. In the light of this, it was unwilling to adopt IFRS, so eventually, Company Alpha decided to use UK GAAP when the choice was available.

Company Delta was a medium-sized public company in publishing related services. As a publicly listed company in the UK, it was obliged to adopt IFRS from 2005 for its consolidated accounts [15,18]. It was one of just four firms in our sample of 21 firms which had a positive net utility of adopting IFRS. Three of these companies were very large (over 2000 employees), whereas Company Delta was a medium sized firm. However, it behaved differently from other SMEs in our sample, which generally recorded a negative net utility of adopting IFRS. A possible explanation is as follows. Company Delta was founded in 2007, which was after 2005, when public UK companies were required compulsorily to adopt IFRS. Company Delta therefore probably had lower costs of adopting IFRS (e.g., lower transitional costs), compared to other companies which had often used other financial reporting standards, for many years, before 2005 [29].

In addition, we note that Company Delta had the same positive net utility (i.e., 1) for contemporary UK GAAP and IFRS (see Table 10, last column).

That is,  $(B - C)_{IFRS} = 1 = (B - C)_{UKGAAP}$ . However, its ratio utility of adopting UK GAAP (1.5 in Table 10) is higher than that of adopting IFRS (1.33 in Table 10). That is,  $(B/C)_{UKGAAP} = 1.5 > 1.33 = (B/C)_{IFRS}$ , indicating that Company Delta indeed has a tied choice. If the adoption of IFRS were not compulsory, Company Delta would probably have chosen UK GAAP rather than IFRS. Finally, we ask what happened after the introduction of New UK GAAP from the year 2015? Company Delta was not entitled to adopt it, yet we see that it preferred this new standard because:  $(B/C)_{NUKGAAP} = 1.5 > 1.33 = (B/C)_{IFRS}$ . Therefore, Company Delta continued to be tied in its choice after 2015. To conclude this discussion, while Company Delta did at least have a positive net utility (of 1) for IFRS, its choice of this standard might be 'reluctant'.

Company Echo is our third and final vignette. It was a large, public UK-based mail delivery firm, with about 2.5k employees. It was classified in professional and financial services (SIC 59-83). Company Echo had several subsidiaries. It had to adopt IFRS compulsorily for its consolidated accounts. It could also adopt IFRS for individual accounts but was not obliged to. Therefore, the subsidiaries of Company Echo had choices between IFRS and UK GAAP.

Table 11 reports on net and ratio utilities of adopting financial reporting standards, for Company Echo, with the 'choice set' being IFRS and contemporaneous UK GAAP. The calculations in Table 11 superficially suggest an equivocal stance by Company Echo, as computed ratio and net utilities are identical:  $(B/C)_{IFRS} = 1 = (B/C)_{UKGAAP}$  and  $(B - C)_{IFRS} = 0 = (B - C)_{UKGAAP}$ . However, Table 11 suggests

additional insights, according to the following logic. First, while perceived benefits are higher for IFRS,  $B_{IFRS} = 3 > 2 = B_{UKGAAP}$ , UK GAAP is advantaged over IFRS by lower costs:  $C_{UKGAAP} = 2 < 3 = C_{IFRS}$ . Second, since, on balance, IFRS adoption has no clear advantage over UK GAAP (i.e., irresolution by both B/C and B - C calculations). Company Echo may not be heavily incentivized to adopt IFRS for its individual accounts, considering the standard per se. Third, since the subsidiary is small compared to the group, UK GAAP might be a better fit to the needs of subsidiaries. Finally, conversely, IFRS might be a better fit to larger companies, like the parent, Company Echo, as suggested by the likes of Jones and Higgins [30], Schiebel [31], and indeed the IFRS Foundation [32] itself.

In our interview, the respondent of Company Echo stated that they deliberately chose IFRS for all accounts to maintain the consistency within the firm. This implies that for consistency in financial reporting, rather than the IFRS's intrinsic features, promoted Company Echo to adopt IFRS for subsidiaries' accounts.

To cap the argument with a last element of evidence, we do know that Company Echo switched from IFRS to Financial Reporting Standard 101 (FRS 101; part of the new UK GAAP) from the second quarter of 2016 for subsidiaries' accounts. FRS 101 provides a framework consistent with IFRS but requires fewer disclosures. By adopting FRS 101, Company Echo could maintain the consistency within the group and reduce the adoption cost. This finding supports well the evidence from both stated costs and benefits, and the respondent's explanation.

**Table 10. Company delta's ratio utility and net utility of adopting financial reporting standards**

Standards	Adoption costs	Adoption benefits	Ratio utility (Benefits ÷ Costs)	Net utility (Benefits - Costs)
Present	IFRS*	Medium (3)	1.33	1
	Contemporary UK GAAP	Low (2)	1.5	1
From 2015	IFRS*	Medium (3)	1.33	1
	New UK GAAP	Low (2)	1.5	1

Note: \* denotes choice of Company Delta



**Table 11. Company Echo: Ratio utility and net utility of adopting financial reporting standards**

Standards		Adoption costs	Adoption benefits	Ratio utility (Benefits ÷ Costs)	Net utility (Benefits - Costs)
Present	IFRS*	Medium (3)	Medium (3)	1	0
	Contemporary UK GAAP	Low (2)	Low (2)	1	0

Note: \* denotes choice of company echo

#### 4. CONCLUSION

This paper has taken a new approach to decision making in the firm, using choice theory to explain how decisions are made about financial reporting standards. We adopted the ‘mixed method’, using quantitative and qualitative methods side-by-side [22]. Our evidence is UK based, and examined a sample of twenty-one UK firms, using Datastream and Bloomberg sampling frames. We developed a new, formal metric for choosing behavior of firms, using net or ratio utilities [5]. Using non-parametric tests, we found that public firms which had to adopt IFRS, as a matter of policy compliance, often perceived this imposed choice to be unbeneficial. This finding is highly statistically significant. Our statistical work is backed up with three illustrative case study vignettes. These cases show, in practice, how difficulties with IFRS implementation occur. Our quantitative and qualitative findings all suggest that, post-implementation of IFRS, there has been a significant business voice for regulatory change. This comes from firms who feel, in a sense, unwillingly regulated.

#### CONSENT

As per university standards, participants’ written consents were collected and preserved by the author(s).

#### ACKNOWLEDGEMENTS

The fieldwork was undertaken by the authors on a Carnegie Trust grant of Dr Julia Smith of the Department of Accounting and Finance, Strathclyde University. We give her our thanks for positive research leadership. Comments on this paper at the 2014 British Accounting and Finance Association and 2014 European Accounting Association annual conferences were also useful to the development of this paper. Our thanks too must go to Professor Geoff Meeks (Cambridge University), Professor Katherine Schipper (Duke University), and Professor Christine Cooper (Edinburgh University), for

insightful and constructive comment. However, responsibility for the final form of this paper is entirely that of the authors.

#### COMPETING INTERESTS

Authors have declared that no competing interests exist.

#### REFERENCES

1. PWC. Summary of key differences between old UK GAAP, new UK GAAP (FRS 102) and IFRS; 2015. Accessed: 1 January 2017 Available: <https://inform.pwc.com/inform2/s/how?action=informContent&id=1317233404103278>
2. Collis J, Jarvis R, Skerratt L. The role and current status of IFRS in the completion of national accounting rules—Evidence from the UK. *Accounting in Europe*. 2017;14(1-2):235-247.
3. Bryant WDA. *Advanced Microeconomics: theory, applications and tests*. Singapore: World Scientific; 2021.
4. Reid GC, Smith JA. Practitioner views on financial reporting for smaller entities. *CRIEFF Discussion Paper, School of Economics & Finance, University of St Andrews*. 2007;0701.
5. Reid GC, Smith JA. Reporting in small firms. *Financial Management*. 2007;31-33.
6. Schipper K. How can we measure the costs and benefits of changes in financial reporting standards? *Accounting and Business Research*. 2010;40(3):309-327.
7. Watts RL, Zimmerman JL. Towards a positive theory of the determination of accounting standards. *The Accounting Review*. 1978;53(1):112-134.
8. Meeks G, Swann GP. Accounting standards and the economics of standards. *Accounting and Business Research*. 2009;39(3):191-210.
9. Fox A, Hannah G, Helliar C, Veneziani M. The costs and benefits of IFRS

- implementation in the UK and Italy. *Journal of Applied Accounting Research*. 2013;14(1):86-101.
10. Bamber M, McMeeking K. An examination of international accounting standard-setting due process and the implications for legitimacy. *British Accounting Review*. 2016;48(1):59-73.
  11. Nobes C. The continued survival of international differences under IFRS. *Accounting and Business Research*. 2013;43(2):83-111.
  12. Franks JR, Schaefer SM, Staunton MD. The direct and compliance costs of financial regulation. *Journal of Banking & Finance*. 1997;21(11-12):1547-1572.
  13. Gordon MJ. Postulates, principles and research in accounting. *The Accounting Review*. 1964;39(2):251-263.
  14. Ben Amar W, He L, Li T, Magnan M. The corrosive effect of offshore financial centers on multinational firms' disclosure strategy. *European Accounting Review*. 2019;28(3):483-512.
  15. PWC. IFRS adoption by country; 2011. Accessed: 30 July 2018. Available:<https://www.pwc.com/us/en/cfodirect/issues/ifrs-adoption-convergence/ifrs-status-country.html>
  16. Fields TD, Lys TZ, Vincent L. Empirical research on accounting choice. *Journal of Accounting and Economics*. 2001;31(1-3):255-307.
  17. Collis J, Holt A, Hussey R. *Business accounting*. 3<sup>rd</sup> ed. London: Palgrave; 2017.
  18. Brüggemann U, Hitz JM, Sellhorn T. Intended and unintended consequences of mandatory IFRS adoption: A review of extant evidence and suggestions for future research. *European Accounting Review*. 2013;22(1):1-37.
  19. Christensen HB, Lee E, Walker M, Zeng C. Incentives or standards: What determines accounting quality changes around IFRS adoption? *European Accounting Review*. 2015;24(1):31-61.
  20. Daske H, Hail L, Leuz C, Verdi R. Adopting a label: Heterogeneity in the economic consequences around IAS/IFRS adoptions. *Journal of Accounting Research*. 2013;51(3):495-547.
  21. Gwilliam D, Macve R, Meeks G. The costs and benefits of increased accounting regulation: a case study of Lloyd's of London. *Accounting and Business Research*. 2005;35(2):129-146.
  22. Tashakkori A, Teddlie C, editors. *Handbook of mixed methods in social and behavioral research*. Thousand Oaks (CA): Sage Publications Ltd; 2003.
  23. Graham JR, Harvey CR, Rajgopal S. The economic implications of corporate financial reporting. *Journal of Accounting and Economics*. 2005;40(1-3):3-73.
  24. Gillham B. *Developing a questionnaire*. London: Continuum; 2000.
  25. Oppenheim AN. *Questionnaire design, interviewing and attitude measurement*. London: Pinter Publishers Ltd; 1992.
  26. Schwab B, Lusztyg P. A Comparative analysis of the net present value and the benefit-cost ratio as measures of the economic desirability of investments. *Journal of Finance*. 1969;24(3):507-516.
  27. Wilcoxon F. Individual comparisons by ranking methods. *Biometrics Bulletin*. 1945;1(6):80-83.
  28. Deshpande JV, Naik-Nimbalkar U, Dewan I. *Nonparametric statistics: theory and methods*. Singapore: World Scientific; 2017.
  29. Jermakowicz EK, Gornik-Tomaszewski S. Implementing IFRS from the perspective of EU publicly traded companies. *Journal of International Accounting, Auditing and Taxation*. 2006;15(2):170-196.
  30. Jones S, Higgins AD. Australia's switch to international financial reporting standards: A perspective from account preparers. *Accounting & Finance*. 2006;46(4):629-652.
  31. Schiebel A. Is there a solid empirical foundation for the IASB's draft IFRS for SMEs? SSRN 2008 Accessed: 30 July 2018 Available:[https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=994684](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=994684)
  32. The IFRS Foundation. *IFRS for SMEs*; 2013. Accessed: 30 July 2018 Available:<http://www.ifrs.org/IFRS-for-SMEs/Pages/IFRS-for-SMEs.aspx>
  33. Hsu YL, Reid GC, Smith JA. Data for "Stated preferences: Accounting costs and benefits of UK firms 2013-2014". University of Strathclyde 2021. Available:<https://doi.org/10.15129/51540e98-0613-4772-9f9a-fe0b908473bb>

**APPENDIX**

**Table (A). Details of primary data acquisition**

Company Alpha	Email questionnaire	Received on 12 August, 2013	Self reporting
Company Delta	Email questionnaire	Received on 27 July, 2013	Self reporting
Company Echo	Email questionnaire	Received on 30 July, 2013	Self reporting
	Interview	Financial controller, 1.5 hours, on 2 April, 2014	Face to face with the manual recording of key points of semi-structured interview agenda in fieldwork notes by two fieldworkers
Further companies	Interviews	-20 March 2014 -3 April 2014 -10 April 2014 -12 May 2014	Ditto

© 2021 Hsu and Reid; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

*Peer-review history:*  
*The peer review history for this paper can be accessed here:*  
<http://www.sdiarticle4.com/review-history/66469>