

EARLY EFFECTS OF THE ECONOMIC DOWNTURN ON ACADEMIC LIBRARIES IN THE UK

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The global economy has experienced a steep downturn that is affecting all sectors of society. The UK officially entered a recession in January 2009 that made public spending cuts inevitable. Academic libraries are particularly vulnerable to changes in the world economy because of their reliance of highly-priced globally-sourced information products and dependence on expenditure allocations from parent institutions that are heavily dependent on public funding. An investigation of initial and anticipated effects of the downturn on libraries in UK higher education was conducted in summer 2009 to assess its impact on human resources and working practices, information resources and collection management, service portfolios, projects and developments. A pragmatic mixed methodology was employed combining a mainly quantitative sector-wide questionnaire survey (n=36) with in-depth semi-structured interviews of 12 senior managers at five universities. Quantitative data were analysed using descriptive statistics. Interview data were coded and analysed thematically using cross-sectional indexing to facilitate inter-institutional comparisons. Results showed staffing and journal subscriptions were most affected, with services and projects largely protected. Findings confirm prior assumptions about human and information resources as targets for cuts, demonstrate strong commitment to service provision, reveal complex effects on development projects and highlight critical dimensions of managerial behaviour.

Keywords: academic libraries, budgets, economic recession, higher education, surveys, university libraries.

Introduction

The world economy has recently experienced “a steep and synchronised global downturn” (HM Treasury, 2009: 2) that has been compared to the Great Depression (FSA, 2009; UN, 2009). The value of UK currency fell sharply between 2008 and 2009, with a drop in trading value of 19.3% (FSA, 2009) and the UK officially entered recession in January 2009. Recovery is expected to be slow and the squeeze on public spending severe (IFS, 2009).

The UK higher education (HE) sector expanded following the *Further and Higher Education Act 1992*, which established the Higher Education Funding Council for England (HEFCE) and abolished the distinction between universities and the former polytechnics and colleges/technical institutes (Jordan, 1998). According to the Higher Education Statistics Agency (HESA)¹, there were 165 higher education institutions (HEIs) in the UK in 2008-09. Twenty large research-intensive universities belong to the Russell Group², 19 smaller research universities form the 1994 Group³ and another 19 institutions whose status pre-dates 1992 and commonly referred to as ‘other pre-1992’ universities. Newer HEIs now outnumber the pre-1992 institutions, with 57 ‘post-1992’ universities and 50 HE colleges. The student population in HE has expanded dramatically in line with key policy documents (NCIHE, 1997; DfES, 2003). Nearly a quarter (22%) of 18-year-olds attended HE in 2000 (Mowat, 2006) and HESA data show almost 2.4 million students in HE in 2008-09.

¹ <http://www.hesa.ac.uk/>

² <http://www.russellgroup.ac.uk/our-universities/>

³ <http://www.1994group.ac.uk/memberinstitutions>

The HE sector relies heavily on public finance, with HESA figures showing large proportions of its income derived from funding body allocations (34.8%) and research grants (16.3%). Some HEIs rely heavily on funding from industry, which will naturally suffer with large sections of industry in decline (Gilbert, 2008; Mohrman et al., 2008). Libraries and information services (LIS) are in a distinctive position as not-for-profit units that rely on allocation of funds from their parent organisations (Smith, 2002). Although universities' expenditure on LIS grew significantly from £322M in 1997-98 to £550M in 2008-09, their share of total university expenditure fell from 3.0% to 2.1% during this period of expansion (RIN, 2010).

HE teaching has shifted towards independent, resource-based learning, often complemented by collaborative study (Abson, 2003; Marcum, 2001). In this resource-based learning context, LIS have a pivotal position "at the heart of the learning experience" (Webb, 1999: 158). LIS in HE have been radically changed by the "exponential growth of network access" (Feather, 2008: 90), which is now embedded in information provision (Atkinson and Morgan, 2007), enabling LIS to be "a means of access to information wherever it is held", as envisaged by the seminal Follett report (JFCLRG, 1993: 25).

There is limited research on the effects of economic conditions on LIS practice and few investigations of the impact of the current downturn. Related studies include Goulding's (1990) investigation of the effects of the economy on staff in a UK public library service, Foster's (2009) survey of the UK business sector and a longitudinal study of Canadian academic libraries (Auster and Taylor, 2004). The field lacks a rounded research study with a full review of the literature and a strong qualitative element, as most publications consist of aggregated data or opinion pieces.

The present study aimed to close this gap through a sector-wide survey combined with face-to-face interviews in five HEIs. Its central research question was "what have been the effects of the recent economic downturn upon LIS in UK HE?" The fieldwork was conducted in June-July 2009, with the specific objectives of investigating the effects of the downturn on areas identified as important themes in the literature, namely:

- Working practices and human resources (HR);
- Information resources and collection management;
- Special projects and other developments, such as space planning;
- Service portfolios (e.g. changes to services, reductions in hours).

The timing of the study in mid-2009 was too early to assess the full effects of the downturn; the findings provide a snapshot at a particular time, but offer an early indication of the sector's response and useful pointers for comparison with later surveys. This is the first time that the radically changed UK HE sector has faced an economic downturn. Management responses to the downturn will influence practice in the sector significantly, because financial planning and budget control are critical aspects of LIS management, even in prosperous periods. The issues examined are nationally and internationally significant, given the size of the sector and its global dimensions.

Shortly after this fieldwork was completed, reports of other investigations of the sector's response to the recession emerged, notably an interview-based study (Ipsos MORI, 2009) on behalf of the Joint Information Systems Committee (JISC), the Society of College National and University Libraries (SCONUL) and the Universities and Colleges Information Systems Association (UCISA) that involved service heads of 19 libraries and 9 converged services; an international cross-sectoral survey by Nicholas et al. (2010) that included 64 UK university libraries among its 835 participants and 3 related focus groups with 16 library directors, conducted for the Research Information Network (RIN, 2010). These studies have served to complement and validate our investigation, but do not deal with the same range of issues uncovered in our research and do not review the related literature; their findings are

noted for comparison, where relevant, alongside our own results (for example, in relation to service portfolios).

The next section of the paper reviews the literature that provides the background to the study. Later sections outline the research methodology and present key findings from the survey and interviews with reference to relevant literature (including the findings of the recent UK-related research), concentrating on the qualitative data that forms the major contribution of the study and concluding with suggestions for further study. The paper is based on an unpublished masters dissertation (Harper, 2009), which provides fuller details of the study and instruments used.

Literature Review

Economic Context

It is well-recognised that LIS depend heavily upon the financial position of their parent organisation and therefore largely reflect the state of that organisation (Roberts, 2003). This level of dependence puts any LIS in a vulnerable position (Hayes and Brown, 1994). The financial environment of LIS has moved towards greater accountability and formalised procedures, partly caused by competing demands for resources (Hayes and Brown, 1994; McKay, 2003; Roberts, 2003). LIS management requires acute knowledge of financial processes, often reflected by budgeting models making an explicit link to objectives, such as the Planning Program Budgeting System (PPBS) (McKay, 2003; Prentice, 1983).

Literature on LIS financial management focuses on the theme of instability, with the argument that “change is the only financial constant” (Hayes and Brown, 1994: 419). This is problematic as incremental budget models are based on historical precedent (Linn, 2007a). Zero-based budgeting (ZBB) places less emphasis on precedent, with a notable implementation at Aston University Library (Evans, 2001; Foskett and Brindley, 1991; McKay, 2003; Roberts, 1998). Defending the value of financial investment in LIS is difficult because “libraries lack a definable product or final output” (Roberts, 1998: 8), which is exacerbated by the unique status of information (Kingma, 2001; Feather, 2008; Raber, 2003). There is continuing growing interest in investigating the value of LIS, with several studies developing frameworks for cost analysis (Orr, 1973; Schwuchow, 1977; Kingma, 2001; Missingham, 2005).

Collection Management

There has been a micro-economic problem of periodical prices rising in excess of inflation (Follett, 2008; Schlingen and Kronenfeld, 2004). This is a serious issue for LIS in HE as serials expenditure is a major proportion (60-80%) of their materials budget and is a continuous budgetary commitment (Greco et al, 2007; Taylor-Roe, 2000). The high cost of serials can lead to decisions to cancel subscriptions (Kilpatrick and Preece, 1996).

There is a set of niche factors that increases the vulnerability of LIS. Bryson (1999), Fishwick (1986) and Kilpatrick and Preece (1996) agree that LIS are vulnerable to variations in exchange and inflation rates, evidenced by price rises at present being amplified by the declining value of the pound sterling (Greco et al., 2007; Scholarly Communications Report, 2008; Taylor-Roe, 2009). Another niche problem is the value added tax (VAT) charge on all electronic resources in the UK (Taylor-Roe, 2000). In addition, commitment to ‘big deals’ means that journals cannot be cancelled on an individual basis (Jones, 2007), which has led Schmidt (2004: 365) to identify a “perpetual famine” in budgets related to collections. There is consequently a policy drive to promote greater flexibility in licence agreements (ARL, 2009; ICOLC, 2009).

Economic downturns can detrimentally affect the collections budgets that LIS maintain and develop. There is ample evidence of reduced collection budgets in public and university LIS in the UK and US across different economic downturns (Roden, 1931; Reville,

1981; Tomer, 1992; American Libraries, 2009). Recent surveys give further evidence that budgets in general and book budgets in particular decrease in poor economic conditions (Hoffert, 2009; O'Donnell and Roberts, 2009).

Detailed anecdotal articles document specific effects on collections: the University of Ottawa leased out its holdings in 1988 (Kwong, 1993), whilst the collection at the University of Ibadan became inadequate for supporting research (Ekpenyong, 1993). Valuable research in Canada and the UK has found incremental but steady declines in collection quality in periods of economic contraction: Auster and Taylor (2004) surveyed 758 LIS professionals in Canadian universities and collated official data on the period 1982-83 to 1997-98, while Goulding's (1990) dissertation provides a detailed account of the effects of economic conditions on a single UK library system, namely Sheffield City Libraries.

Adverse effects on LIS collections can cause a cultural shift to enterprise risk management, with services relying on diversified funding (Hoffert, 2009; Robertson, 2008; Tebbetts, 2000). University LIS in Africa have relied on donations and supplementary charges to cope with lack of resources (Kanyengo, 2009; Ogunrombi et al., 1998), reinforcing the argument that

Reduced resources provide an opportunity to review programs and to develop new ways to meet objectives (Prentice, 1983: 8).

Positive marketing in reaction to such circumstances is a key feature of LIS responses to economic crises (Rooney-Browne, 2009). Some literature links enterprise to managerial competencies and dynamism (Evans, 2001; Hill, 2002; Hill, 2008; Kennard, 2008). Financial constraint can be a catalyst for radical changes, with the opportunity to make constructive improvements to organisational structure (Foskett and Brindley, 1991; Nitecki, 1984). A further effect on collection management can be more resource sharing, with ICOLC (2009) suggesting that consortial purchasing may increase as a result of the downturn. Collaborative collections have been widely viewed as beneficial for academic LIS, enhancing purchasing power and improving service to users (Follett, 2008; Kingma, 2001; Tebbetts, 2000). Line (1986) recognises that an academic library can never have a comprehensive collection, but points out the cost of unnecessary co-operative practice.

Human Resources

LIS are acknowledged as labour-intensive organisational units in which the largest single expenditure is typically staff, making that a major target for cuts (Martin, 1984; McKay, 2003). The vulnerability of HR in LIS contrasts with the notion that a workforce is an asset that appreciates in value over time (Roberts, 1998; White, 2007).

A common effect of poor economic conditions is reduction in staffing spend. Statistics collated by Davis (2009) suggest that fewer LIS professionals are employed during economic downturns. The Business Information Survey found that 75% of managers had lost or expected to lose staff (Foster, 2009). In contrast, some data show that LIS staff expenditure remains stable in downturns, with the special library sector suffering most (Griffiths et al., 2009). Published evidence suggests that universities in the USA and UK are likely to make cuts in the current crisis (Dalton, 2009; Times Higher Education, 2009), conforming to a pattern of evidence documenting staff cuts in both the USA and UK in recent and previous downturns (American Libraries, 2003; Brook, 2008; Higham, 1983; Roden, 1931; Tomer, 1992). This can negatively impact staff-student ratios (Kwong, 1993).

As a natural adjunct of job cuts, recruitment is often reduced in a downturn, with Evans (2001) suggesting that leaving vacant positions unfilled is less damaging for academic libraries than implementing redundancies. Tomer (1992) presents evidence of this at the

universities of Minnesota and Pittsburgh. A further effect can be more flexible staffing hours and more fixed-term contracts (D'Andraia, 1994; Hill, 2002). Davis (2009) suggests that salary levels in the LIS profession remain stable in economic downturns. Goulding's (1990) study identified blurring of boundaries between para-professional and professional job responsibilities in this context.

Partly due to their high cost, staff represent a "prime material to develop" (Gutiérrez-Witt, 1988: 25). Jordan and Lloyd (2002) note the greater consideration given to development of staff in LIS in recent decades. Continuing professional development (CPD) for LIS staff is now viewed as "an obligation rather than an option" (Partington, 1996). CPD can conflict with latent effects on morale and job satisfaction: Goulding (1990) found disenchantment and frustration among the 30-39 age group in LIS, with lack of opportunities for promotion or job progression. In their study of Canadian academic LIS, Auster and Taylor (2004: 410) similarly describe how

Staff morale and job satisfaction suffered, and cynicism, frustration and anger surfaced.

Low staff morale (whatever its cause) can lead to a "nadir of apathy and inertia" (Jordan and Lloyd, 2002: 32) in a workforce.

Service Portfolios

Given its dependency on HR, the service portfolio of LIS can similarly be affected by economic downturns. A library is typically viewed as a service provider, a crucial priority of a not-for-profit organisation (Jordan, 1998; Smith, 2002). There is a large body of evidence showing that use of public libraries in the UK and USA increases in economic downturns (American Libraries, 2003; Griffiths et al., 2009; Hoffert, 2009; Library Research Center, 2002; Rooney-Brown, 2009). The conjunction of increased use with service contraction has resulted in the idea that

During recessions, libraries are fortunate to simply maintain services, yet, paradoxically, the demand for their services grows (Evans et al., 2000: 77).

Service portfolios often suffer as a result of economic difficulties, as it can be an easy way to reduce costs (Line, 1986). Portfolios are contracting at present, with closures and reduced hours in progress in the US and UK (Library and Information Update, 2009; O'Donnell and Roberts, 2009; Topper, 2009b). Studwell (2001: 18) identifies the problem of an "information recession" with LIS unable to fund high-quality information technology (IT) facilities. IT and other technological equipment has high maintenance costs, requiring constant capital for up-keep and replacement (Schneider, 1998; Tebbetts, 2000). A tough economic climate can cause streamlining of services, eliminating unnecessary procedures and reducing costs (Hill, 2008; Kennard, 2008). There is a need for "radical scrutiny" (Line, 1986: 11) of basic activities, with charging for more expensive services sometimes considered (Cloutier, 2005; Line, 1986). Evidence suggests that downturns lead to concentration on the delivery of core services, which can lead to realignment of priorities (Coffman, 2006; Foster, 2009; Topper, 2009b).

Literature Summary

LIS thus face numerous effects of economic conditions, which vary across organisations and types of operation. The literature provides useful specific examples of economic influences, especially from the 1990s (Ekpenyong, 1993; Kwong, 1993; Kanyengo, 2009; Ogunrombi et al., 1998). The most significant research is Auster and Taylor's (2004) longitudinal study in

Canada, Goulding's (1990) investigation of Sheffield's public libraries and Foster's (2009) UK business information survey. However, the literature tends to approach the topic in a piecemeal fashion, rather than providing a synthesis of key issues. There are also significant gaps: most material concentrates on public or special libraries; there is little literature on the UK, with more material on African and North American LIS; and there is a paucity of in-depth analyses of the different aspects of LIS affected by economic developments.

Research Methodology

The study adopted a pragmatic mixed-methods approach, using a mainly quantitative questionnaire survey to obtain an overview of the impact of the downturn across the HE library sector, followed by semi-structured individual and group interviews at five institutions to examine effects at a deeper level. Quantitative and qualitative methods were thus combined in a sequential design that used the questionnaire to inform the interview schedule and interviews to support and illuminate the questionnaire results. Both instruments were piloted before use. A review of related literature informed the questionnaire design and contextualised the findings, drawing on monographs, opinion pieces and news items in addition to research-based articles, in view of the paucity of relevant prior research.

A quantitative survey was selected as appropriate and convenient for collecting data on a broad range of issues within a relatively short timeframe and facilitated the gathering of information and opinions in a standardised form from a geographically dispersed population. The instrument (see Appendix) contained 32 closed statements related to the four areas under investigation (answered through a five-point Likert scale), followed by four open questions asking about the most significant effects and expectations of the future. It was distributed on paper to delegates at the June 2009 SCOUNL Conference, which is usually attended by directors and/or senior managers of most UK HEIs, using strategic purposive sampling to reach the target population. Completed questionnaires were collected at the event to make it easy for busy professionals to participate. Thirty-six of the 93 eligible institutions represented at the conference participated, giving a response rate of 39%.

The interviews were intended to complement and extend the questionnaire data through further investigation of key issues in different institutional settings. The schedule followed the content and structure of the questionnaire, but covered additional points suggested by responses, including a section on organisational and managerial changes. The five institutions were located in one region for convenience to minimise travelling, but purposely chosen to provide a mix of sizes and types (see Table 1). In each case the service director was approached and invited to suggest other staff as suitable additional informants, using a 'snowball' sampling technique. The resulting mix of directors and section heads enabled both holistic and specialist perspectives to be represented. Twelve staff participated and each interview lasted for 45-60 minutes, with group interviews conducted by request at three sites to save time.

Quantitative data were entered in a spreadsheet and analysed with descriptive statistics. Free-text responses to the questionnaire were examined line-by-line to identify recurring topics and themes of interest. Interviews were recorded, transcribed and coded using cross-sectional indexing to facilitate comparative analysis across the sample, in an incremental cumulative process that suited the purpose and pragmatic approach of the study.

Results and Discussion

Although not all participants completed the open questions at the end of the questionnaire and answers were expressed in different ways, it was evident that staff cuts, journal cancellations and budget reductions generally were perceived as the most significant effects of the downturn already experienced or predicted for the short- to medium-term future,

servicing to validate the emphasis on HR and information resources in the survey. The following sub-sections summarise the characteristics of participants in the study and present key findings from the questionnaire and interviews in relation to the areas of interest identified in previous sections.

Sample Characteristics

The questionnaire generated 36 responses, representing 39% of the UK HEIs represented at the 2009 SCONUL conference and 22% of the total population of 165 HEIs in the UK. Responses were evenly divided between old universities (established pre-1992) and newer HEIs. The 18 old universities were spread across the three sub-groups, but with a bias towards the Russell Group (10 participants, compared with four each from the 1994 Group and other pre-1992). The post-1992 group included 15 universities and three HE colleges.

The interviews were conducted at five institutions in Yorkshire (two Russell Group, one 1994 Group and two new universities) and involved 12 participants in five individual interviews and three group interviews. Table 1 provides more details of the interview sample.

Table 1. Characteristics of interview sample

Institution	Group	Library size	Participants and roles (*Group interview)			
			1	2	3	4
A	1994	c100 staff	Director	Section Head*	Section Head*	Section Head*
B	New Uni	c200 staff	Director	Section Head	Head of LIS	
C	New Uni	c150 staff	Director*	Section Head*		
D	Russell	c200 staff	Director			
E	Russell	c300 staff	Director*	Section Head*		

Human Resources and Working Practices

Questionnaire responses indicated that recently vacated posts had been frozen at almost one-third of LIS in the sample (11 respondents or 31%). One respondent also reported their LIS was expecting a £109K reduction in its 2009-10 staff budget. The interviews showed amplified effects on recruitment, with freezes operating at 4 of the 5 institutions, confirming McKay's (2003) argument that HR is generally among the first areas examined for cuts. Institution B was most severely affected, with a 2% reduction in the 2008-09 staffing budget and a reduction of 5% (c£300K) expected in 2009-2010. Vacancies were being kept open across the university. B1 explained:

What we're doing is being very cautious in replacing staff, so our reduction in staff management would be as a result of retirements and resignations.

Like participants at B, D1 said that not filling vacant posts was a preferable tactic to redundancy, also asserting that economic conditions required a "very full look at staffing", with this the "first thing" to examine for savings, echoing McKay (2003). D1 explained that it was a case of "controlling the margins very tightly" in this area, which was challenging given their relatively low staffing spend (47% of LIS expenditure). No senior posts (above grade 4) were being filled at D. E1 also reported "the decision not to replace a number of posts".

C1 described the ambiguous status of unfilled posts as "ghost-load", referring to an unfilled senior vacancy. Frozen posts were being supplemented by voluntary severance schemes at C and E, instigated by the institution:

The library is likely to lose something in the order of 10 staff over the next couple of months and other departments in the university are losing similar members of staff (E1).

At C, the severance scheme was driven by the university's policy to ensure "it's as streamlined as it can be" (C1).

The need to streamline and work more efficiently was not covered directly in the questionnaire, but emerged as a common theme in the interviews. B3 suggested that the economic situation forced a "realignment of staff" (rather than redundancy), a notable example being the proposal to widen job descriptions of shelving assistants to include service-desk work, which was likely to be implemented in the near future. At E, job roles were going to change "radically" (E1), with some staff taking on additional responsibilities, as part of a major workforce plan introduced partly in response to the downturn.

Interview participants identified different effects of such adjustments. The need to perform some duties in a more efficient way that was perceived as a lower-quality service was "definitely a source of stress for staff" (B3), with streamlined processes (such as acquiring shelf-ready books) particularly disliked by staff who wanted to carry out tasks to a high standard. B2 suggested that the need to streamline processes had contributed to a lowering of morale on the basis that "some people actually find it quite difficult, because they can't do things to the same standard as they would have done". Similarly, B3 thought that the stretched front-line service was affecting job satisfaction, because staff were gradually being pulled back from services. B3 also observed that staff could feel "stressed and over-stretched" in busier periods, whilst having to "take on new roles".

Such comments support Goulding's (1990) conclusion that job roles and staff morale are affected by economic conditions and emphasise the importance of supporting staff in difficult periods (Topper, 2009a). One positive effect was a greater emphasis on a team ethic, because "everybody's very good at working as a team and everyone will chip in ideas" (B3). Similarly, staff were reportedly responding positively to the changes in job roles at E, with E1 "expecting [them] to co-operate" with these in the future. This supports the theory that expanding job responsibilities are a positive development capable of re-energizing staff (Malinski, 2002).

One striking finding from here was the evident determination to sustain staff development despite budget pressures. Most interviewees reported relatively minor effects of the downturn on staff development, for example:

We haven't actually taken a cut on staff development at all. We're still supporting people through courses and on conferences (A2).

C1 similarly stated that they had supported staff attendances at conferences: "I wouldn't say the downturn has changed our view of that; it's something we feel is very important". There was an emphasis on maintaining the supportive environment identified by Topper (2009a):

I can't change the world economy, but I absolutely can make sure we've got an environment here, even if its got strain, that is positive, forward-looking and gives people development opportunities (A1).

Like A, staff development at E was seen as more critical in the downturn:

But we've undertaken to invest in staff development, so that is more important rather than less (E1).

These comments support White's (2007) contention that HR is a major asset in academic LIS. However, there were some difficulties at B, where B3 noted that changes may occur because of difficulty in "being able to assign sufficient funds", whilst B2 suggested that one staff member was unlikely to commence a Higher National Diploma (HND) programme. In addition, B was now able to send only one staff member to the SCONUL conference, an example also highlighted by C2. B1 suggested that one recession effect might be the establishment of a regional training group, which would be "low cost, but high in terms of impact".

Overall, the staffing situation here confirms cuts and freezes reported elsewhere (e.g. American Libraries, 2009; Foster, 2009) and in previous downturns, with knock-on effects on work processes, job stresses and staff morale, but demonstrates continuing commitment to staff development. Interestingly, Nicholas et al. (2010) report that almost three times as many UK university libraries (72.3%) anticipated staff cuts as their US counterparts. RIN (2010) notes that library staff numbers have not matched growth in the sector and have been falling since 2007-08, indicating the severity of the problem.

Information Resources and Collection Management

Devaluation of the pound sterling was widely seen as having significant adverse effects on the purchase of information resources, with 32 questionnaire respondents (89%) strongly agreeing that they were experiencing rising prices because of fluctuating exchange rates, confirming comments in the literature (Bryson, 1999; Fishwick, 1986). Interview results supported the questionnaire, highlighting severe impacts on the price of content:

It's the specific circumstances that [...] have affected things like exchange rates very strongly, which has a large effect on our content budget for journals, both print and electronic forms (A1).

In 2008-09 A had spent "an extra 10% on the journals purely because of the currency problem" (A3). There were concerns about being able to maintain adequate provision, which was the biggest worry for C2:

The thing I'm most worried about is the information resources, and continuing being able to buy the amount, what we need; that's the most worrying thing. How on earth can we continue to provide the resources that we normally do?

C2 elaborated on the scale of the problem, explaining that 40% of their journals and e-resources were purchased in Euros or US Dollars. The Director of E similarly observed:

The collapse in the value of sterling, currency [...] has affected our ability to buy in content on behalf of our customers (E1).

Content prices were also affected at B:

The growth in the cost of journals and books...particularly journals, has been well beyond the annual uplift in our budgets, and that's been a real challenge to us (B1).

C1 cited a 13% year-on-year rise in inflation, leading to a "messy situation" (C2) when combined with the falling pound.

The majority of respondents (22 = 61%) agreed or strongly agreed that their institution had decided to cancel subscriptions, with five participants highlighting cancelled subscriptions as the most serious effect on their service. One referred to "inflation on journals becoming unsustainable". The interviews confirmed this picture: B and D had already

cancelled some journals, in D's case in consultation with schools, because they "had to draw back on the expenditure on our materials" (D1).

Figure 1 shows the more varied responses to a similar question on book purchases, with only 14 questionnaire respondents (39%) agreeing or strongly agreeing that they were reducing their budget in this area.

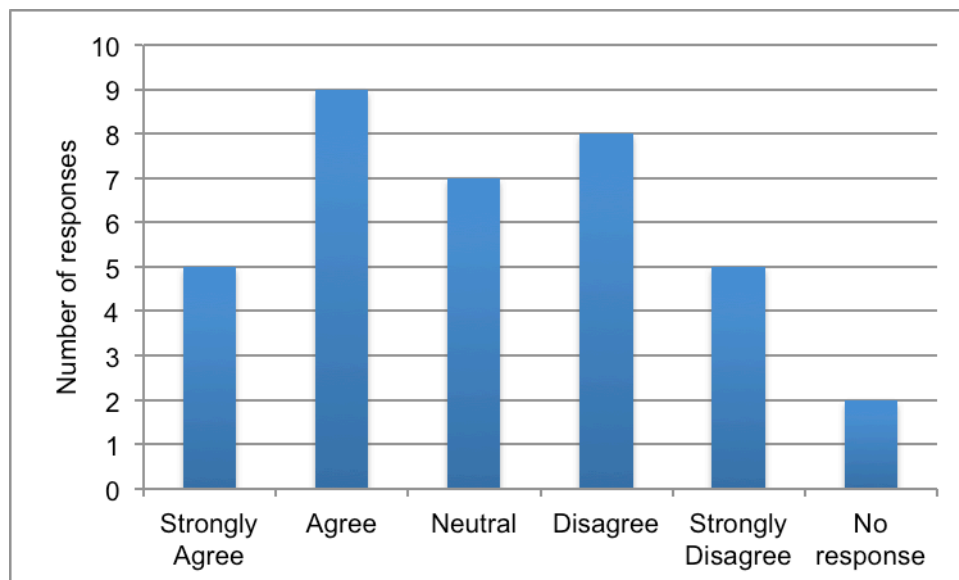


Figure 1. Effects on budgets for book purchases ($n=36$)

The interviews similarly revealed a mixed picture, with only A and D highlighting effects on monograph purchases. A1 stated that "we won't be buying everything we would have bought if times were better", which was confirmed by A4's comment: "we've not been able to buy as much on the book side". Institution D had delayed purchase of some research monographs, after a discussion within the institution.

Questions on projects and developments provided further insight into effects on collection development, confirming the variation already identified. Seven questionnaire respondents agreed that collections-based projects were on hold, but almost twice as many (12 = 33%) either disagreed or strongly disagreed with that statement, though it is worth noting the significant proportion of neutral responses to this question (15 = 42%). Two interview participants indicated a slight impact and a slowing-down rather than a halt to collections projects: there had been "very, very small reductions in collections projects" at D and the digitisation of reading list material at B was commencing at a "slow level" (B3), because staff resources were not available to fully support it.

An interesting finding from the interviews that was not anticipated in the questionnaire was the way that the downturn had actually acted as a catalyst for project acceleration, or even initiation, in relation to information resources. This had happened at both post-1992 universities. At B, a project to harvest online open access textbooks was "a direct result of our reaction to the recession – so innovation does come from difficulty" (B1). Similarly, at C there had been a long-term effort "to make resources work harder" (C1), with an initiative to provide key chapters and articles electronically. This pre-existed the downturn, but might now be accelerated.

The problems with adverse currency fluctuations and journal price inflation reported here are longstanding and well documented in the literature (e.g. Fishwick, 1986; Follett, 2008; Schlingen and Kronenfeld, 2004; Taylor-Roe, 2009), but the e-strategies being used to

maintain and develop book provision differ from previous downturns. Contemporary UK studies confirm the vulnerability of subscriptions, but Nicholas et al. (2010) suggest print purchases are more likely to be cut than e-resources, though they also note book budgets are likely to be better protected than journals to maintain student satisfaction; in addition, they found UK librarians more likely than US colleagues to seek open access solutions.

Projects and Developments

The mixed responses on collections-based projects were echoed in other development areas. Nine questionnaire respondents (25%) agreed or strongly agreed that funding for building or development work had decreased, but a much larger number (16 = 44%) disagreed or strongly disagreed that was the case, with 10 neutral responses. However, although funding seemed to be holding up reasonably well in this area, possibly because it came from different budgets, there was more evidence of delays with physical development work, with 14 respondents (39%) agreeing or strongly agreeing here, only slightly fewer than the 16 (44%) who disagreed or strongly disagreed.

Interview results similarly found complex effects on projects. There was a shared view that the downturn would cause greater selectivity and that there “weren’t as many opportunities to bid for funding for new developments” (A3). D1 said that the library would “perhaps not go so readily to develop as we would have three or four years ago in a slightly more stable environment”, whilst A1 focused on being “more judicious and selective about those things we support or don’t support”. E1 saw problems in future investment:

I think the real tension is not so much between the routine and value-added, but between sustaining existing services and investing in new services.

Some projects and developments were inhibited by the downturn. At B, a plan to purchase room booking software for c£25K was unlikely to commence, on the basis that “if it’s not broken, we aren’t going to run out to get a replacement” (B2). A had planned to purchase a book sorter costing c£100K, but A3 said “that’s one of the things that might just go”. B3 commented:

Projects can go out the window, unless they’re so important that you’d stop doing something else and put your resources into that particular project.

Just as acquisition budget pressures were stimulating collection-related projects, financial constraints seemed to be acting as a catalyst for other developments. C2 suggested that there could be a shift towards developments using open source platforms for library systems as a direct result of the downturn, arguing:

The marketplace might go full circle in that there’ll be local developments of systems again [...] So I think you could see that as a result of the recession actually.

Service Portfolios

Questionnaire results showed that service provision was the least affected and thus the most protected area, with a high mean average score of 3.7 across the five questions in this section (on a five-point scale where 5 meant “strongly disagree”). Figure 2 shows remarkable consistency of responses on the two key areas of opening hours and information literacy/user training: in both cases an overwhelming majority (more than four-fifths) disagreed or strongly disagreed that provision was being reduced; almost as many (28 = 78%) reported that fines were not being increased, which would have been one possible reaction to budget reductions.

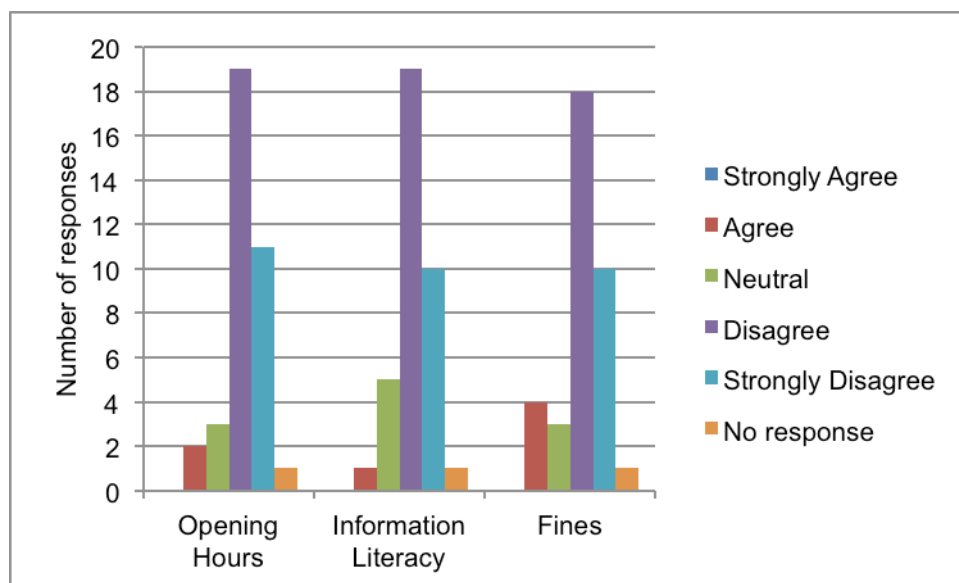


Figure 2. Effects on opening hours, information literacy and fines ($n=36$)

The interviews confirmed that services at most institutions had only been affected “at the edges” (D1). The relatively small effects contrast with Line’s (1986) view that services are a key target for reductions, but closely match the findings of Nicholas et al. (2010) and indicate the priority given to services in the wake of the Follett Report (JFCLRG, 1993). D1 explained the rationale for sustaining services across the portfolio:

Library core services are interrelated, of course they are, and there’s not much you can take out of one part without a whole chain erupting from that.

The high priority of services was explained by E1:

It would be foolish to say that services will not suffer because of the economic downturn, but as far as possible we’re looking to minimise the impact on our customers.

However, the alternative strategy of maintaining service levels by cutting less-used services (reported by Ipsos MORI, 2009) was also evident, at institution B:

I don’t think it’ll come to a standstill at all [...] I think though what will happen [...] is that we’re going have to make difficult choices and really prioritise what we will be investing in (B2).

In addition, some elements of services were being adversely affected by being stretched. In D, there was slowing of some services, with D1 indicating that “our services will be slower, less reliable” and would “slow down a bit for users”. C1 similarly noted that less technical processing might be carried out, in favour of services: “The shelving and the desks will get done, but perhaps the orders won’t go through as quickly”. Opening hours were affected in B and D, almost uniquely among all participants in the study, but only at the margins. B was planning a slight reduction in 24/7 opening hours during the assessment/examination period, with provision of 10 weeks being reduced to six or seven. At D, there were “very, very minor modifications to opening hours” during summer evenings. A key point here is the secondary effects on services of staff reductions at B, which supports Auster and Taylor’s (2004: 127) finding that “changes in access, collections, and services

came as a direct result of reductions in staff” and the general recognition that LIS contain interdependencies (Evans et al., 2000).

Another specific effect of the downturn on service delivery was increased use of self-service at one of B’s expanding campuses, which was again closely linked to reduced staffing: “in [Campus X] we just bought another self-service system to release staff resources” (B1). The service here was “facing expansion and limited resources available to sustain that expansion”, with self-service “pushed in our direction because of other pressures” (B1). Ipsos MORI (2009) reports two similar comments on expanding self-service while reducing staff levels. Information literacy support for researchers was also affected at B, as a “labour-intensive” activity (B3), which reflects some reductions in information skills training reported by RIN (2010). There was also the likely loss of a central information desk and the long-term knock-on effect of “making our staff less accessible to students” (B3).

Management Behaviour

As indicated previously, the interview discussions covered the same areas as the survey, but in addition asked managers about organisational and managerial changes necessitated by the changing economic climate, including a question about management style. Analysis of the responses suggested an underlying perception that effects of external economic conditions were being mediated to some extent by internal managerial choice and proactive behaviours. Thus A1 argued that “it’s about not putting things into reverse when things get difficult”, which contrasts somewhat with the idea in the literature of effects being imposed by external forces on LIS because of their vulnerability and contingency (Hayes and Brown, 1994). Four key dimensions of managerial behaviour emerged as critically important in this context: communication, leadership, strategy-making and budgeting.

Communication

E2 argued that communication “at a lot of levels and on a lot of fronts” was critical in responding positively to the effects, which is consistent with Urgo’s (2000: 59) view that

Communication is a key factor in a variety of challenges facing managers, including improved services, increased productivity and reduced turnover.

Information is a key means for senior managers to disseminate and share effectively with other staff messages on issues of concern (notably job security), evidenced particularly by difficulties faced by senior management at B. The workforce development programme at E (driven partly by the downturn) required a “clarification of the process of changing the work structure itself” (Malinski, 2002: 673).

Close relationships with academic departments become even more critical for LIS in HE during a downturn. In B and D, reductions in subscriptions were conducted in close co-ordination with schools. No respondents explicitly mentioned communication with students here, but a comment from A1 in relation to service delivery underlines the need for libraries to maintain contact effectively with user groups:

We’re not going to abandon personal contact and we’re not going to give up having... very good close personal relationships with user groups.

There is also a vital need to maintain good contact with senior university staff, with directors in B, C and E all mentioning effort put into promoting the role of the LIS and aligning this with institutional goals. B1 emphasised an important personal responsibility for securing ‘good working relationships’ in the university:

I think one of my jobs in time of recession is to make sure that my senior colleagues in the university stay with us and support us. So the job I have particularly is to ensure that relationships with academic leaders in the university (the deans) are good.

These comments support Grunig's (1992) argument that communication within an organisation is critical to success, rather than an optional 'add-on'.

Leadership

E2 highlighted the value of capable leaders, saying "we want people who can make decisions and we want people who can bring staff along with them". Leadership is not an effect of the downturn, but could be viewed as a professional quality critical to responding well to difficult circumstances, which links with Winston and Quinn's (2005: 411) view that there is a "need for leadership in periods of crisis and change". A1 underlined the need for responsible leadership that responded positively to reductions, because "a lot of this is about leadership style and attitude towards getting the best out of the money we've got". This correlates with links in the literature between leadership and vision (Evans et al., 2000). A1 and D1 raised issues related to planning for the future of their LIS in the light of forthcoming retirements. The need for strong leadership thus amplifies the need for constructive succession planning that equips future managers with skills needed in poor economic conditions, highlighting the importance of nurturing leadership potential within LIS (Roberts and Rowley, 2008).

Strategy-making

This study underlines the importance of a strategy that is focused and clearly aligned with wider institutional goals. C1 observed that library strategy "has to be absolutely in line with what the university's strategies and priorities are", whilst at D strategy was a clear foundation for budgetary decisions:

And we're now moving much closer to work on the financial implications of it and prioritise it. We've already set priorities but will probably have to prioritise further to manage it against the money (D1).

Responsiveness of strategy to the fluid situation was highlighted by E1:

And we have to be flexible in terms of our strategy and approach; so, if the university decides that it needs to do something radically different, we need to change.

A1 suggested that there may be "a slightly tighter and more focused range of strategic programmes going on" in response to reduced funding in the future. These comments support a growing call for strategic planning as a core and continuing part of managing LIS (Corrall, 2000; Linn, 2007b).

Budgeting

Questionnaire responses demonstrated clear knowledge of the implications of financial constraint, with several respondents providing precise figures on the scale of their savings, a facet also displayed in the clear explanations provided by interview participants. B3 also suggested that budgeting had become "more exacting" as a result of the economic downturn, reinforcing Corrall's (2000) point that budgeting is not merely a technical action, but involves a set of social and behavioural processes.

Conclusion

The effects of the economic downturn on LIS in HE have been partially, but not fully experienced at present. On the one hand, key areas of financial commitment take a long period to be affected by decisions on financial allocation: dramatic changes to HR, for instance, are limited by legal and regulatory obligations and changes in journal subscriptions can only be implemented as part of the regular cycle. On the other hand, future budget cuts resulting from further reductions in government spending on HE will surely follow on from the current phase of austerity measures.

This study therefore provides an insight into the short-term effects of the downturn, based on a snapshot at a particular time, rather than elucidating medium or long-term impacts. It can be argued that when the data were gathered the downturn was a factor of growing significance, likely to become a key driver in the near future, but not yet a major factor. The study provides one of the first empirical insights into the effects of the downturn on this sector and is among the first in this field to combine qualitative and quantitative methods. The findings on HR and information resources confirm evidence in the literature and the determination to protect services above collections is significant in confirming the culture change in the sector described by many as a feature of contemporary academic librarianship; our findings here were consistent with other recent comparable UK surveys, particularly in relation to anticipation of staff cuts, protection of service portfolios and acceleration of self-service. In addition, an important new insight is the complex effects on projects and developments, which can be variously inhibited, stimulated or unaffected by economic developments, singly or in combination.

There are several areas where further investigation is suggested, including the nature of changing job roles in constrained periods; the planning process in LIS and how it informs decision-making; the effects on practical budget management; and the distinctiveness of the current circumstances compared to previous situations. Other types of study could be undertaken to gain further insights, including the use of more documentary analysis to enhance accuracy; using more interpretive methods to investigate less tangible areas, such as staff morale; and examining effects on other sectors, notably public and government libraries and corporate information services. In addition, it would be useful to replicate the survey and interviews reported here in 2011 and later, to track progress and aid longitudinal comparison.

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