The secret life of STM publishing

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In the press you read financial reports on some of the companies you buy journals from. You see them being bought and sold; you are told that further consolidation is inevitable, driven by technological change, the hunt for economies of scale and the globalization of scientific research. Recently, new financial investors have entered the publishing business. We try to explain what is motivating all this activity, but we also give voice to the silent majority of publishers in the industry – the learned and professional societies – those who are small, stable and motivated by more than the search for greater profits. What are the differences and similarities between these organizations and the large commercial publishers? What specifically do they do and where does publishing fit into their overall mission? How are they responding to changing market dynamics and the looming prospect of open access?

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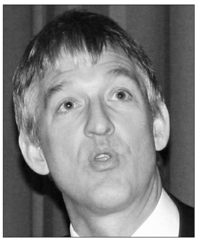

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Behind the headlines

We live in an age of 'news'. Change is what we notice, especially sudden change. Newspapers make a living reporting such changes. Financial newspapers focus on changes in ownership and value, so they are interested chiefly in companies which can be 'equitized' – bought and sold. Financial journalists hope to sell newspapers to investors. Financial analysts advise investors more directly and in greater depth. They work for banks or investment companies and are essentially marketing the services of those companies.

For some time now the STM serials business has attracted investor interest. In September 2002, for example, Morgan Stanley Equity Research[1] outlined the alluring attributes of this industry:

- historically (over 15 years) high growth rates
- strong cash flows
- improving margins as the move to online makes the need for physical production and distribution costs redundant.

In June of 2002 JP Morgan were still arguing that the larger publishers would continue to dominate.[2]

A year may be a long time in politics but it is not really that long in business. BNP Paribas Equities[3] took a radically different view in October 2003:

- Electronic publishing is unlikely to have a significant positive impact on margins.
- The existing subscription-based model of STM journal publishing may be challenged by alternative publishing initiatives.

Most recently, Credit Suisse First Boston's Equity Research Unit[4] argues that the profitability of STM rests on the presentation pillars: copyright, the peer review process and content bundling. Of the three, the only one they see as under imminent threat is the last.

Of course, in the period between September 2002 and March 2004, technology and markets have moved. But has the world really changed so much in such a short time? The answer is 'yes' and 'no'. Indeed, open access looms much larger today than it did in September 2002. Yet financial analysts, like financial journalists, are paid not just to report news but to have an opinion as well. These analyst reports aim to provoke – literally. They seek to establish their employers' expertise in a sector and to 'jolly' the market along, to stimulate transactions. They encourage people to make 'plays' by encouraging the purchase and sale of shares and of companies. They take a 'position' on where the market is going and on whom the winners and losers will be. With every transaction come management and arrangement fees: the higher the volume and value of transactions, the higher the fees! The merger of T&F and Informa, if it goes through, is expected to cost many millions in bankers' fees according to the *FT*. The BNP Paribas report has not dampened interest in the sector. The deals are still going on and the price-to-earnings ratios of the latest, mostly T&F acquisitions completed since their report, remained high.

The public marketplace

Table 1 below charts some of the recent merger and acquisition activity in the STM sector.

Essentially, there have been three movers and shakers in STM publishing over the last four years: Elsevier, Taylor & Francis and Cinven/Candover.

Elsevier, the biggest fish in the pond, had mooted a deal with Wolters Kluwer some years ago. This came to nothing in the face of potential regulatory objections and alleged disagreements between the two management teams. Then in 2001, under new leadership, Elsevier bought Harcourt General, subsequently selling on a piece of it to Thomson. The deal came under a lot of antitrust scrutiny at the time but was eventually approved. Elsevier was already the market leader and this purchase has put them so far ahead of the field in terms of size that they have ruled themselves out of any major future transaction and made themselves all but impossible to catch. The acquisition of Harcourt has generally been regarded as a success, though Elsevier have recently decided to amortise their investment over 40 years, a very long time in any business.

Shortly after its debut on the London Stock Exchange in the mid nineties Taylor & Francis bought Routledge, owned at that time by Cinven, which had in turn previously bought Carfax. T&F came up short in the bidding for both Kluwer Academic and Springer, but did win some consolation prizes in 2003; according to one analyst it spent nearly $300 million, mostly on the US companies CRC Press and Marcel Dekker. It paid $138 million for Marcel Dekker, a company with sales of $40 million. Most recently T&F have announced a merger with Informa, a company which organizes specialist conferences. They justify this deal on the basis of size and diversification, not cost savings.

Cinven and Candover are private equity investors who have been around a while. They bought, then sold Routledge (to T&F) and were in on the break-up of Vivendi, the French-based media conglomerate. They were determined to win Kluwer and Springer and beat out the so-called purely strategic players. They paid 600 million euros for Kluwer and 1.05 billion euros for Springer. It is important to note here that both these entities were already part of large publishing empires: Wolters Kluwer and Bertelsmann respectively.

As you can see, there are basically two types of purchaser. One is strategic – a company already in the sector, wishing to increase critical mass and market share. The other is financial, wishing simply to make a short-term gain on its investment. In our table here Elsevier and Taylor & Francis are strategic actors; Cinven/Candover is principally a financial operator. With all the advantages a strategic investor has, how could Cinven/Candover come from nowhere to fill the number 2 slot in terms of revenues?

SCORECARD			
	ELSEVIER	TAYLOR & FRANCIS	CINVEN/CANDOVER
2000	1,200 titles	768 titles	0 titles
2001	Acquires Harcourt General	Acquires Gordon & Breach	
2002			Acquires Kluwer Academic
2003		Acquires Frank Cass	
		Acquires CRC Press	
		Acquires Swets & Zeitlinger Publishers	Acquires Springer
2004		Acquires Marcel Dekker	
Estimated current no. of titles	**2,033**	**1,020**	**1,400**

Table 1. Recent mergers and acquisitions

The textbook answer

Let's close the newspapers' and analysts' reports now and open the textbook. Are there sound business reasons for this flourishing trade in companies? What does economic theory have to say about why mergers and acquisitions occur?

Three of the most common justifications are:

1. Greater size → economies of scale, economies of expertise, market dominance, more financial resources, greater brand recognition, and immunity against takeover
2. Diversification → spread of risks, cross-selling, serendipitous synergies
3. Competition → take out someone who's eating your lunch.

Enter the equity investor

The private equity investor is a risk-taker with attitude. He is a gambler, but more of a blackjack than a roulette player: he's 'hands-on'. He has a clear game plan. Typically, he hopes to stay in the game for three to five years, and get out with an annual return on his investment of 25%. He always has a clear idea of where the exits are located, i.e. how he will get his money out. But if things are looking interesting, he may stay in the game for another hand or two. And, if he can, he prefers to play mostly with other people's money. Let's look at a purely hypothetical case study to see how this works.

The Perfect Scenario

Step 1
Buy Company X for £100 million
Borrow £80 million from the bank; *put in £20 million of your own money*

Step 2
Buy Company Y for £100 million
Borrow £80 million from the bank; *put in £20 million of your own money*

TOTAL EQUITY INVESTMENT: £40 million
TOTAL BANK DEBT: £160 million

Step 3
Put in pressure cooker for about 5 years and service debt from trading cash-flows
Remove from cooker

Step 4
Sell or float new company for £400 million

Step 5
Pay off bank debt of £160 million

Step 6
Calculate gain of £240m or 45% per annum

Step 7
- Retire to a mansion in the country. Or…
- Roll the dice again.

If all goes well, the equity investor will have turned a £40 million initial investment into £240 million. Over five years this is an internal rate of return (IRR) of 45% p.a.

Nice money if you can get it. In this particular case we have combined the natural advantages of an equity investor (high levels of borrowings at low interest rates) with those of a strategic player (synergies, economies of scale, etc.).

Unpicking the value

So how have we managed to make 1 + 1 = not just 3 but 4? (see Figure 1 overleaf.)

First, there are the **variable cost savings**, i.e. inputs which change in proportion to the quantity of product being produced. Bigger companies can buy services such as production and distribution in bulk, so the 'average' unit costs decline.

Then there are the **fixed cost savings**. Rather than support two online delivery platforms, you now have one. Rather than two sales forces, you now have one. Individual managers may get higher salaries, but there are likely to be fewer of them in total in the new merged company than in the two stand-alone entities.

There are potential gains on the **market share** and revenue side, as well as in cost reductions. The new merged company has one fewer competitors than before and may now be in a stronger trading position vis-à-vis its customers and the remaining competitors.

Finally, and most nebulously of all, there is sometimes something called the '**merger credit**'. This catch-all covers a multitude of intangible potential benefits. In general, bigger companies should be more resilient to fluctuations in the market. They will be more visible to investors and therefore could attract higher price-to-earnings

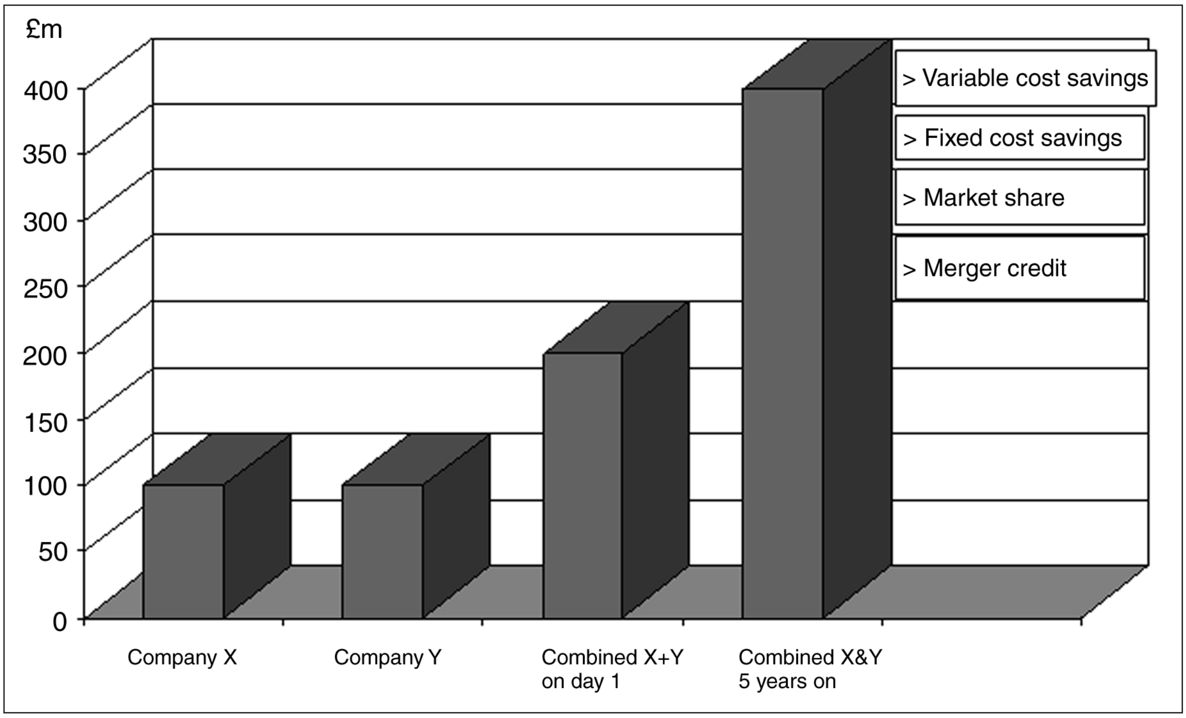

Figure 1. Unpicking the value

multiples. It is not inconceivable that the new owners, when the time comes, will do a better job of talking up the price than did the previous owners. (How many people buy houses with this view in mind?)

For the purposes of innovation we have assumed that each of these categories has contributed equally to the increase in market value of the combined entity. In this 'best of all worlds' our equity investor was able to enjoy the synergies of a strategic investor with the cheap money of a financial investor. It is easy to see how such a strategy will prevail against an alternative buyer who is 'purely' strategic or 'purely' financial. Of course, there is nothing to stop the strategic investor from turning the tables on the financial investor. He too can get cheap money from the banks, but he is unlikely to achieve the same leverage or gearing as the financial specialist.

What can go wrong?

Alas, life has a habit of contradicting theory. What can go wrong in our best of all possible worlds? As in life, quite a lot.

The business model can change suddenly. Interest rates can go up. The regulatory authorities could make trouble. The stock market could collapse. You could bet on the wrong management team. But perhaps the biggest risk is that *'the price to the seller has already risen, in anticipation of all these synergies'*.

So a big chunk of gain the private equity investor hoped to make has had to be shared out with the original seller.

What is to be done?

What should governments and regulatory bodies do about this phenomenon? Quite simply – nothing.

Why? This is the way all industry works. It is by no means necessarily or even usually the case that the consumer suffers as a result. The fact is that in global STM publishing there are economies of scale and synergies, which benefit both investor and customer. There is money to be saved in central management, in sales forces, in technology. Market share is often increased through merger; brands are strengthened.

So in part the rationale for mergers is genuine. The problem is that investors *anticipate* too much too quickly and this drives up the initial price. A management team that does not subsequently stick its neck out and risk going for broke may not survive long. There is real pressure to take risks and to 'work the assets hard'. Gordon Gecko may have said 'lunch is for wimps' but in the City the hunter's mantra is 'eat lunch or be lunch'.

Intervening to stop such mergers is not as easy as it seems. Unless you understand all the variables, your actions could have unforeseen consequences which would make matters worse for customers in terms of price and choice. The UK Office of Fair Trading looked at competitiveness in STM publishing a few years back[5] and said that market forces would tend to reduce any tendency towards monopoly. At the moment in the UK there is a Parliamentary Select Committee Inquiry into scientific publications. Let's suppose it decides the market isn't working and recommends government intervention. What is likely to constrain the effectiveness of any unilateral action by UK PLC?

Fact One:
Britain is a relatively small consumer of academic journals. Total UK academic library spending on all journals in the year 2001–2002[6] is £82 million. The global STM journals market has been estimated at about £3 billion.[7]

Fact Two:
Britain is a significant global producer of STM journals; UK-based journals have global subscription revenue of around £750 million.[8]

Put these two facts together and you see that UK PLC is a net exporter of STM content. UK university libraries account for a tiny portion of the total world market, so their ability to influence the behaviour of the global industry is very limited. Does this mean therefore that the publishing industry will become an oligopoly inexorably consolidated into the hands of a few players? Thankfully, no. In fact 'it's a big wide world' full of publishers.

Fact Three:
There are some 21,000 current and forthcoming peer-reviewed journals in _Ulrich's Periodicals Directory_. Nearly 4,500 of these (21%) are published by the largest three publishers; many of the rest come from publishers with just one or a few titles.

Taking these facts together and relating them back to our earlier discussion, you might well conclude that the real question is not: "Why is the publishing industry so consolidated?" but: "Why is it so dispersed?"

The invisible majority

Some small, private companies have been swallowed up, but some have in fact shown a remarkable ability to thrive. Societies generally own their copyrights and are jealous of their brand name and identity. They do not want to become just part of a massive database. Nevertheless they have managed to obtain many of the benefits of size without selling out. They band together to offer their own big deals. The ALPSP Learned Journals Collection is just one such collective, offering nearly 250 journals from 25 publishers. Others include BioOne (69 journals, 56 publishers) and Project Muse (234 journals, 42 publishers); HighWire Press (357 journals, 124 publishers) is considering doing the same for some or all of its client publishers.

Another way of protecting your market share and containing costs is to contract out services to a larger publisher in return for a royalty or profit share. By our current estimates 1,650 society journals are published under contract by the leading UK commercial publishers alone; a recent ALPSP/ Blackwell study showed that 50% of the respondent societies contract out some or all of their publishing. In these cases societies usually retain control over editorial and, to varying degrees, other aspects of publishing policy (e.g. pricing); if they are not satisfied, they have the ultimate sanction of taking their journal away.

What makes Blackwell Publishing unique is its relatively large size and the fact that its core business is publishing on behalf of non-profits. Of the 700 titles on its list 500 are society owned. Thirty new society journals join the list each year. Half of these are previously self-published and the remainder come from other publishers. This is a clear indication that societies are in a seller's market, able to get good services at market rates. As the Wellcome Trust reports:[9] 'In the UK Blackwell has a major stake in contract publishing and is reported to provide good customer care. It is able to retain most of its journals from one year to another because of the customer care which arises from its specialist interest in contract publishing and it is viewed by some as an 'honorary not-for-profit publisher'.'

Although the largest, Blackwell is not the only 'commercial' society publisher. Wiley, T&F, Sage and Elsevier all publish on behalf of societies. The commercial publisher reaps economies of scale and market share, societies benefit in terms of professional service, wider distribution, lower costs and the same economies of scale. Both sides have to be flexible in balancing readership and influence against income. Normally the commercial publisher is required to consult and report back constantly to the society on everything it does, from production standards to pricing.

Every commercial publisher has its own profit targets. Blackwell aims for a profit of 15% of revenue. A high proportion of its revenues goes back to societies to pay for the editorial operation, including peer review, and to support the other things those societies do.

So how do societies as publishers behave differently from purely commercial houses?

There are some important differences. First, quality: society and other non-profit titles account for 85% of the top 20, three quarters of the top 200 and two thirds of the top 500 ISI ranked titles.

Studies of comparative pricing, of which there have been a number, generally show that commercial journals are 2–5 times more expensive per page. The price-per-citation comparison is even more favourable to non-commercial publishers.

This price differential appears to hold up even when the society title is published by a commercial organization. An economist, Ted Bergstrom, conducted a comparison of prices for journals in the subject of economics.[10] In that study he put Blackwell, which has a large number of society-owned journals in economics, in a special category because its prices were closer to those of the non-profits than to those of other commercial publishers.

Are societies different in terms of their publishing policies?

The ALPSP study in 2003, 'Scholarly Publishing Practice',[11] covered 149 journal publishers including all the leading players and most of the middle-sized ones, as well as a good sampling of smaller players. In general, it actually found remarkably little difference between commercial and not-for-profit publishers on aspects other than pricing. As a result of that study ALPSP has published its Principles of Scholarship-friendly Journal Publishing Practice, which its members and others are invited to endorse.[12]

What is different, of course, is what happens to any surplus (polite word for profit) earned by a non-profit organization. Whereas commercial publishers pay dividends and taxes, non-profits, which are by definition charities, have neither. This is not to say that they don't make surpluses – many do (two thirds in the recent ALPSP/ Blackwell survey). These do not equal the profits of the largest commercial houses, but they are nevertheless essential to the survival of the organization.

How do societies spend their publishing surpluses?

ALPSP and Blackwell recently carried out a small-scale survey of learned societies to find out what actually happens to their publishing surpluses.[13] The figures below show the areas where the 69 respondents apply their publishing surpluses:

- subsidizing members' copies (96% of respondents)
- supporting general expenses of society (82%)
- reinvestment in publishing business (42%)
- subsidy of conference fees (33%)
- subsidy of membership subscriptions (32%)
- public education (26%)
- bursaries (26%)
- reserves and endowments (25%)
- research grants (21%)
- other (21%).

It was notable that one third of respondents made no surplus at all from their publishing – it either broke even, or was subsidized by the society's other activities; those who did made, on average, a quite modest surplus of around 15%. Half contracted out some or all of their publishing (though this figure may be atypically high, as somewhat under half of the societies surveyed were Blackwell's client publishers).

Thus it is clear that, while the society's own members are the major beneficiaries of some of the applications of journal publishing surplus (free or cheap copies of journals, reduced membership subscriptions, support of the society's running expenses), in other respects the scientific community as a whole benefits (reduced conference fees, travel and other bursaries, research grants), or even the community as a whole (public education). Anything which reduced the amounts available for all these purposes would be damaging to the worthwhile activities of learned and professional societies.

Conclusions

1. The STM food chain is a paradox. Big fish grow by eating other big fish; the minnows swim free or in shoals.
2. UK legislative action is likely to be ineffective given the relatively small size of the UK market and the relatively large size of the UK publishing industry.
3. The majority of publishers are tiny, non-profit organizations.
4. Many non-profit organizations publish through commercial organizations, but continue to exercise considerable control over publishing decisions.
5. As a rule, society journals are very good value for money – high quality at reasonable prices – and feed their surpluses back into the academic and scientific community.

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