Pricing and Paying for Scientific Information during a Period of Transition

Madeleine McPherson mcpherso@usq.edu.au

Scientific journals exist to serve

- Authors
- The public good

The Purpose of Journals

- Registration
- Validation
- Distribution
- Preservation

Pricing

- A much studied topic
- Status of publisher significant
- Little relation to value measures
- Highly imperfect market

Average Journal Price etc

Commercial publishers	\$487	\$4.10 per article	\$0.27 per page
Society publishers	\$229	\$1.10 per article	\$0.10 per page
Educational publishers	\$ 81	\$1.20 per article	\$0.05 per page
Other publishers	\$119	\$1.40 per article	\$0.13 per page

Tenopir, Carol and King, Donald W 2000 *Towards Electronic Journals: realities for scientists, librarians and publishers* SLA Publishing p 242

	Cost per page (\$US)		Cost per citation (\$US)	
	For-profit	Non-profit	For-profit	Non-profit
Ecology	1.01	0.19	0.73	0.05
Economics	0.83	0.17	2.33	0.15
Atmosph. Sci.	0.95	0.15	0.88	0.07
Mathematics	0.70	0.27	1.32	0.28
Neuroscience	0.89	0.10	0.23	0.04
Physics	0.63	0.19	0.38	0.05

Bergstrom, Carl T and Bergstrom, Theodore C 2001 *Do electronic site licences for Academic Journals benefit the Scientific Community?*

http://www.econ.ucsb.edu/~tedb/Journals/nature2.pdf

Shares of Costs, Pages and Cites – Economics

Publisher Type	Total Cost	Total Pages	Total Cites
Nonprofit	9%	33%	62%
Blackwell	10%	12%	5%
Commercial	81%	56%	33%

Bergstrom, Theodore C 2001 *Free Labor for Costly Journals?* Journal of Economic Perspectives 15 (3) 183-198

Paying

- Single title subscriptions
- Bundled subscriptions
- Single article options
- Author fees
- Free or free??

Transition to what?

- History is useful
- History doesn't just happen

Signs of transition

- Free e-journals DOAJ
- SPARC journals
- OAI
- Repositories and eprints
- Rhetoric, commitment, momentum

Other developments

- Policy frameworks
- Copyright incentives
- Grid computing
- DRM

OAI etc - Paying for the potential

- The costs of archiving
- The power of harvesting and linking
- Not just articles
- Possible players
- Probable costs, possible payers

Barriers

- Quality perceptions
- Promotion and tenure practices
- Visibility
- Financing models
- Maintenance of parallel systems
- Discipline differences
- Student use and libraries

Barriers

- Building communities to champion the new
- National infrastructures bandwidth, standards, access, funding
- Rights assignment & management
- Preservation

"Who speaks of victory? — survival is the essence"

- Rilke