Measuring changes in output prices of the television broadcasting industry – the challenges

Paper by Qinghuan Luo

Presented by Michael Morgan

Australian Bureau of Statistics

Introduction

- Classification
- The Australian Industry
- Pricing and Quality Adjustment
- Conclusion

Classifications

International Standard Industrial Classification (ISIC) vs.
Australian and New Zealand Standard Industrial Classification (ANZSIC06)

ANZSIC - more detailed breakdown of services

ANZSIC 06 and ISIC v4 classifications of broadcasting

	ISIC v4 Subdiv 60 Programming and broadcasting	ANZSIC 06 Subdiv 56 Broadcasting (except internet)
Free-to-air TV	6020	5621
Pay TV (including other subscription broadcasting)	6020	5622
Radio	6010	5610
Internet broadcasting	6010, 6020	ANZSIC 06 Subdiv 57 internet publishing and broadcasting, Class 5700

Classifications (cont'd)

- Telcos engaging in pay TV services in scope?
  - Bundling and business relationships
- Internet broadcasting
  - It is excluded in ANZSIC06 56 but included in ANZSIC 57
- Increasing integration of TV broadcasting and internet

Australian TV broadcasting industry

- Three segments:
  - commercial free-to-air, public & community, and pay TV
- Free-to-air TV is a major component
  - Key players: 4 commercial and 2 public – for 59% and 17% of industry's revenue (IBISWorld 2013).
- Two dominant players in pay TV, with 97% market share (IBISWorld 2013)
- Revenue data sources:
  - FreeTV (commercial), ABS's AIC, GFS (public)

Australian TV broadcasting industry (cont'd)

Revenue distribution in the broadcasting industry

	2006-07	2007-08	2008-09
Free-to-air TV	0.55	0.55	0.43
Pay TV	0.32	0.33	0.46
Radio	0.13	0.12	0.12
Total	1.00	1.00	1.00

Data source: ABS's published Input-Output Tables.

Pricing outputs of TV broadcasting

- **What can be priced?**
  - Commercial free-to-air TV broadcasting – TV commercials
  - Public and community TV broadcasting – Input costs or market proxies
  - Pay TV broadcasting – Subscription fees

- **Major challenges**
  - Pricing TV advertising – does audience size matter in quality adjustment?
  - How to price nonmarket outputs of public TV?
  - How to price pay TV in bundles with other services?

Quality adjustment in pricing TV advertising

- Expected audience size is an important determinant factor for TV commercial price
- Expected vs actual audience size
- Should audience size be included in quality specification?
- Conceptually, TV ratings are outcomes, not outputs
- However, broadcasters do consider ratings in their production

Australian Bureau of Statistics

Output vs. outcome

A. Input

- Resources
- Labour
- Intermediate inputs

B. Output

- Broadcast scheduled TV programs
- Sales of programs to other stations
- Sales of TV commercial spots
- Sales of pay TV packages

C. Outcome

- Ratings of TV programs

An example

- Without adjustment for audience size, an increase in cost per spot regarded as purely a price movement
- With adjustment for audience size, an increase in cost per spot regarded as mostly volume increase
- Use actual audience size – data available from OzTAM

A hypothetic example for quality adjustment

	Period 1	Period 2
Cost per 30 sec spot ($K)	10	21
Audience reach (,000)	1,000	2,000
Cost per 1000 impacts (CPM)	10	10.5
Price index without adjustment	100	210
Price index with adjustment	100	105

Pricing nonmarket outputs of public TV

- Input cost factor method
- Unit cost method
- Use of commercial TV as proxies

Pricing pay TV

- ABS currently compiles pay TV packages for CPI
- Pricing pay TV in bundles with internet and telephone services – a challenge
- Use of wholesale prices as proxies?

Conclusions

- Several challenges in pricing outputs of TV broadcasting
- Audience size needed in quality adjustment on the basis that TV ratings have a role in the production process.
- However, a conceptual issue – should audience size be regarded as part of the characteristics of the production function?

Conclusions (cont'd)

- In pricing public TV, commercial TV as market proxies is preferred

- However, in practice difficult to find comparable commercial broadcasters. Some programs of public TV not intended for attracting large audience

- Unit cost method may be used

Conclusions (cont'd)

- Pay TV can be priced based on monthly subscription fees, but difficult to price packages bundled with other services
- The future of broadcasting industry – TV vs internet, shifts away from viewing scheduled programs on TV and toward viewing programs via internet. How will this impact on pricing outputs of broadcasting?