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# Competing Media Platforms

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# Part I: Media and advertising

# Media markets

## Media (and other content) markets

- Newspapers and magazines (in print or online)
- Scientific journals
- Radio channels
- TV-stations
- Internet portals such as Yahoo, MSN, and AOL
- Search engines
- Digital music platforms (iTunes music store,...)
- Movie theaters
- Yellow pages, classified (online and offline)

# Media markets: traditional model

## free commercial media

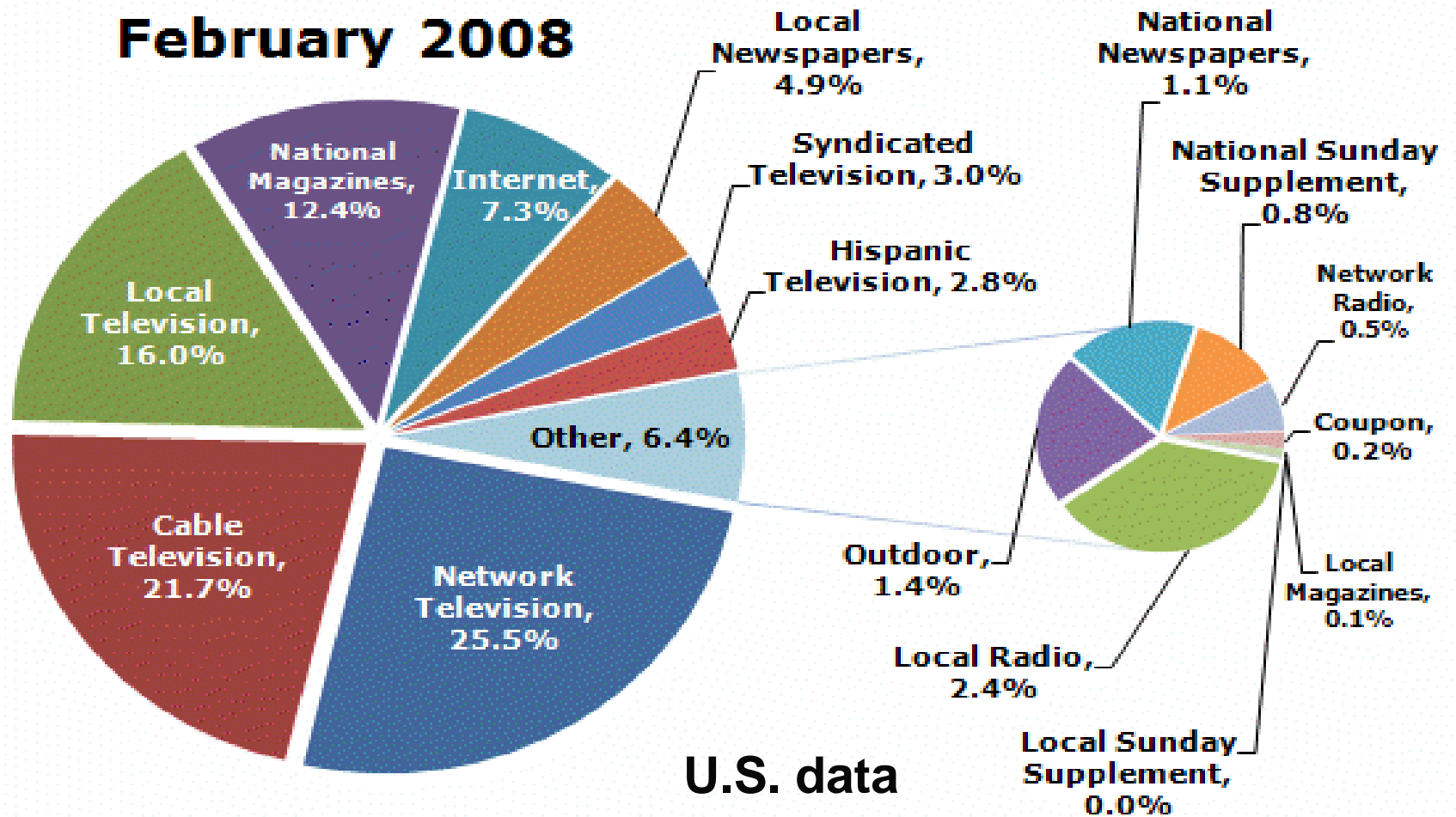
quoting from Anderson and Gabszewicz, 2006, in:  
Handbook of Cultural Economics

- *The key to the basic market model is that advertisers want to reach viewers, but viewers dislike ads.*
- *The platform, or intermediary, is the broadcast company (or companies) that renders the ads palatable by bundling them with programs that are the viewers' ultimate objective.*
- *That is, entertainment is provided free of a direct price, and this sugar-coats the consumption of ads the prospective consumer would otherwise not choose to watch.*

# Media and advertising

## Share of Ad Spending by Medium

February 2008



U.S. data

MC MARKETINGCHARTS.COM

Source: Nielsen Online, AdAcross

# Advertising trends

Predictions by screen digest in 2008:

- *By 2012, advertising will be a three-tier market, with online at the top, TV in the middle and other traditional media bringing up the rear.*
- *Online advertising, when both search and display are combined, will have enjoyed double-digit growth every year to 2012.*
- *TV advertising will have retained its 2007 market share, but the traditional broadcast channels will have seen their share of the ad budgets slipping; the research contrasts the growth rate of the European traditional channels of up to 2% per year, with the digital channels that are expected to experience advertising growth rates of 20% per annum.*
- *Rather than increasing overall spending, companies will cut into their traditional media advertising budgets to divert the money to online and digital TV.*
- *As a result, traditional media will suffer a decline in budgets - particularly print and radio, as well as cinema campaigns.*

# Online advertising

## US Online Advertising Spending, 2001-2011 (billions)



*Note: eMarketer benchmarks its US online advertising spending projections against the Interactive Advertising Bureau (IAB)/PricewaterhouseCoopers (PwC) data, for which the last full year measured was 2006; online ad data includes categories as defined by IAB/PwC benchmark—display ads (such as banners), paid search ads (including contextual text links), rich media (including video), classified ads, sponsorships, referrals (lead generation) and e-mail (embedded ads only); excludes mobile ad spending*

*Source: eMarketer, October 2007*

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[www.eMarketer.com](http://www.eMarketer.com)

# Television revenues

## Television revenues in million €, 2003

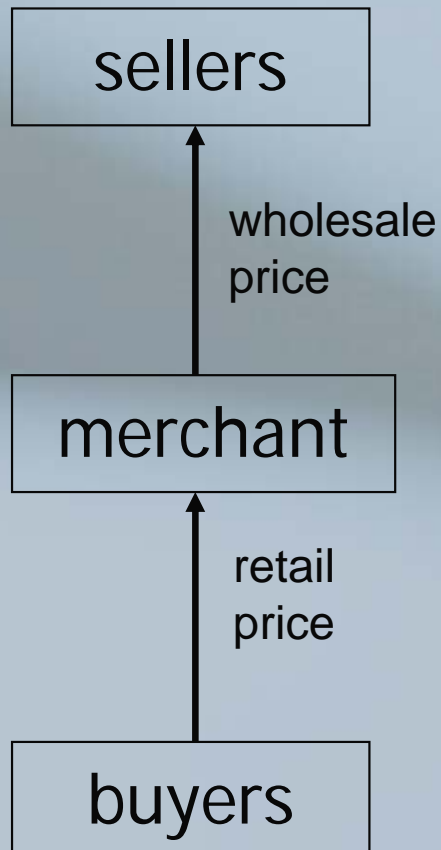
	Italy	France	Germany	UK	Spain
Licence fee + other subsidies	1,400	1,519	3,962	2,734	1,803
Advertising	4,732	4,282	5,439	5,790	2,356
Subscription fees	1,500	4,117	1,335	5,902	1,550
Total	7,632	9,918	10,736	14,427	5,709

various sources

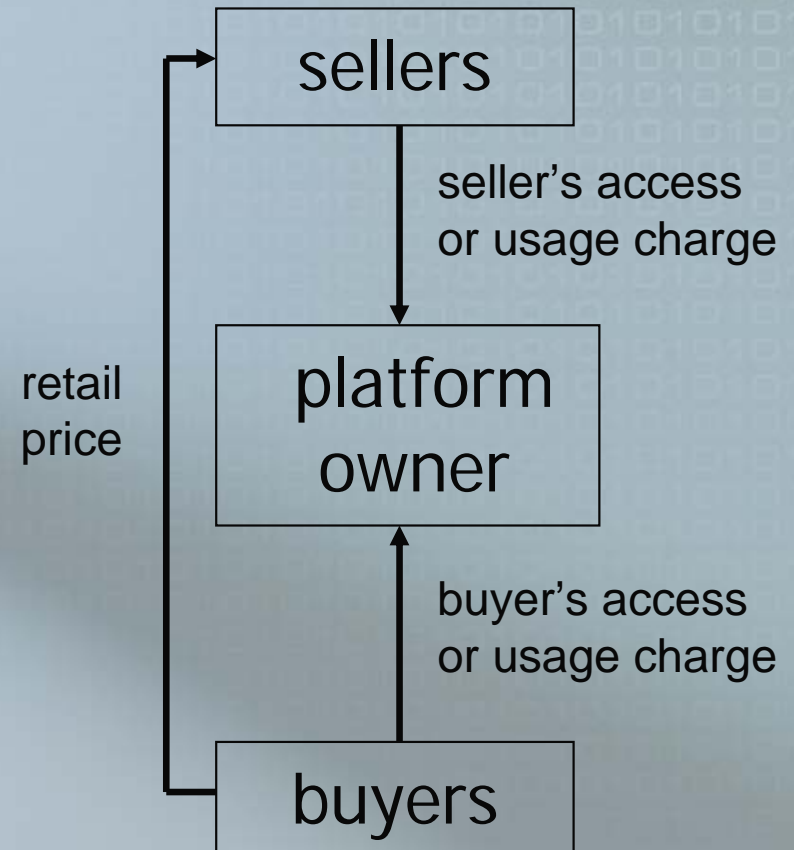


# Part II: Media platforms

# General business models



"merchant model"  
OR monopsony



"platform model"

# Multi-sided platforms

Sellers / **Advertisers** (often multi-homing side)

- Derive a higher surplus from more users

**Content providers**

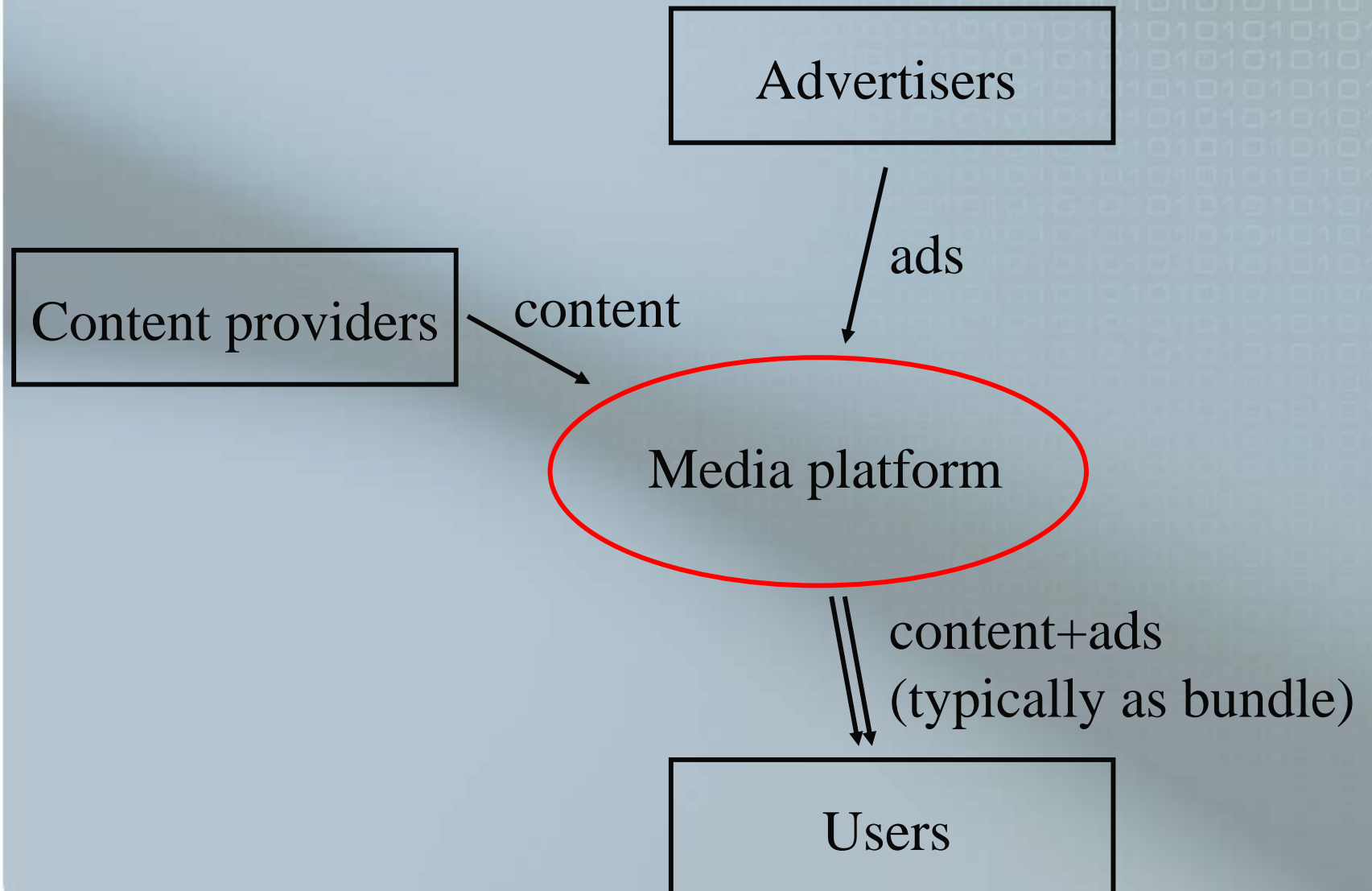
**Users** / Readers / Listeners / Viewers (simplified view: single-homing side) )

- Derive often a lower (sometimes higher) utility from more advertising (often negative indirect effect) [some people enjoy certain types of advertising on tv or in the movies]
- Derive a higher utility from more and better content

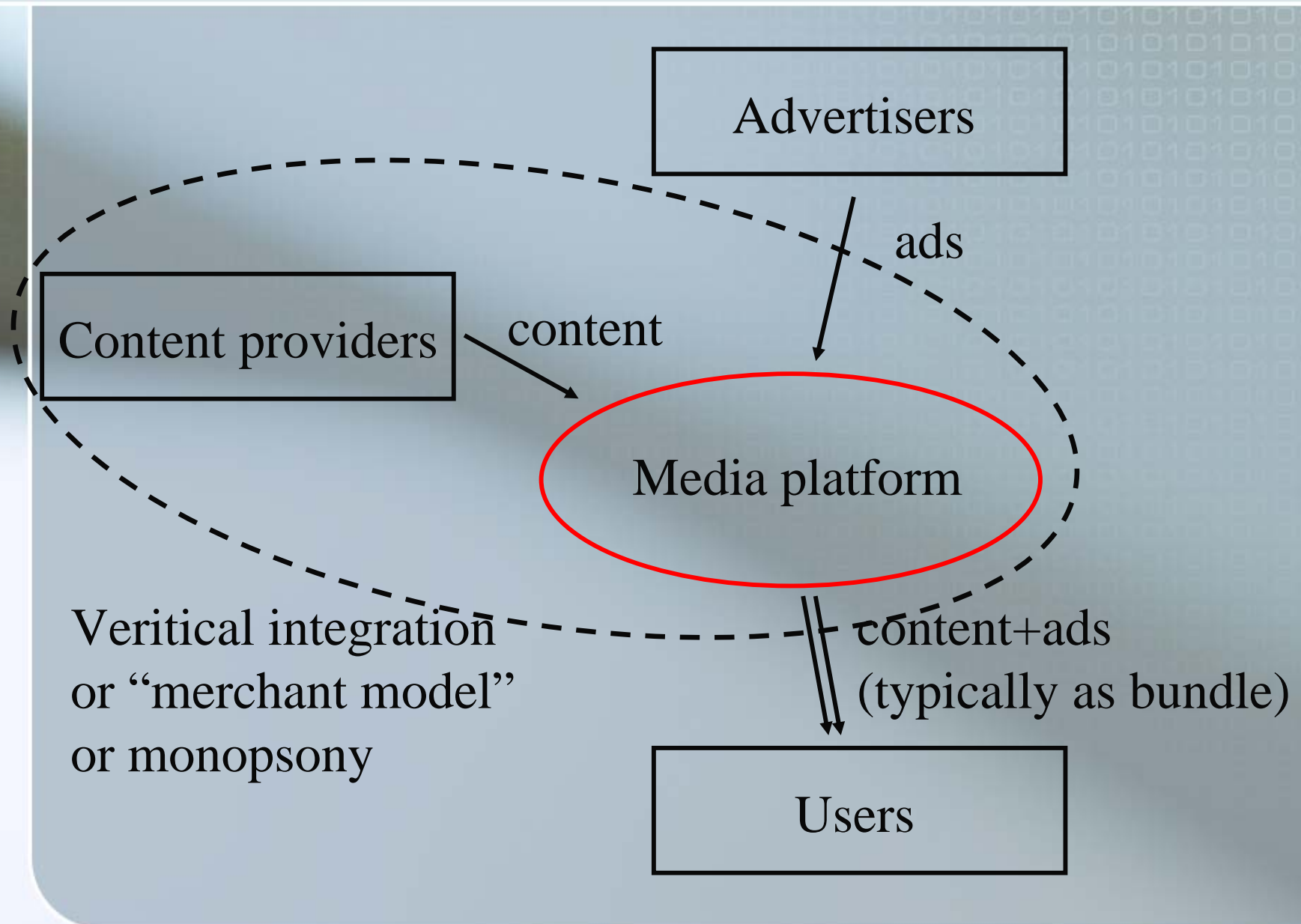
**Media platform**

- may pay for content (or produce its own content)
- charge users for access or usage
- charge advertisers for access or usage

# Media platform



# Media platform: typical model



# Media as 2sided platforms

## Pricing structure

- How can we explain the (co-)existence of free-to-air and pay-tv?
- What are the merits of the two business models?
- How does the pricing structure depend on the market environment?
- How does the market environment depend on technological innovations?

# Pricing structures

- If users dislike advertising, advertisers must pay a positive price for ads.
- Users may pay only indirectly through the consumption of advertising
  - Free newspapers and magazines
  - Free (private) radio broadcasting
  - Free-to-air (commercial) tv
- Users may pay directly (and, possibly, indirectly)
  - National newspapers
  - Subscription-based pay-tv (e.g. Canal+) and radio
  - Pay-per-view television
- Users (and non-users) may pay through taxes, e.g. the license fee in the UK (and subsidized access to scarce spectrum)
  - Public broadcasting (radio and television)

# Pricing structure: example

- German magazine market (Kaiser and Wright, IJIO 2006)
  - 8 submarkets in which only two (roughly symmetric) magazines exist
  - in particular: “do-it-yourself” and “photography”
  - two competing 2sided platforms, in which both sides single-home (formal model due to Armstrong, Rand 2006)
  - single homing assumption among advertisers questionable but to some extent supported by the data
  - under symmetry, estimation on price structure does not require cost data
  - (estimated price effects not significant)
  - *“Our results are consistent with the conventional wisdom that advertisers value readers more than readers value advertisers, and that as a result, magazines “subsidize” subscription, and make most of their profit (if not all of their profits) from advertisers.”* (Kaiser and Wright)

# Pricing structures: explanations

- Why are in some cases users not charged or charged very little?
  - 2SIDED MARKET
    - because of positive network effect it is often privately (and socially) optimal to subsidize users to obtain higher revenues on the advertising side
    - in particular, if advertisers multi-home on competing media platforms
    - negative price often not feasible, then zero price
    - even with positive price on the user side that maximizes profits, zero price may be set because of transaction costs (e.g. free weekly)
    - Caveat: low user charge (possibly below cost) may be problematic if user charge serves as a selection device
  - Technological reasons
    - Decoder etc.

# Pricing structures

Is access or usage charged?

- Charges may be imposed for access or may depend on the intensity of use
- Access and usage based charges
  - Access charges for advertisers: spot per second or ad depending on space and location in newspaper.
  - Usage charge for advertisers: charge depending on number of times an ad has been viewed (measured by the number of people that watched the show); charge depending on the number of clicks on an ad or even number of purchases generated
  - Access charge for users: subscription based television (e.g. canal+), online subscription to a magazine (e.g. the Economist)
  - Usage charge for users: pay-per-view (e.g. individual articles in the Economist)

# Pricing structures

## When to apply access or usage charges?

- General insights from 2sided market theory (Rochet and Tirole, 2006: heterogeneity in fixed versus variable benefits on the two sides of the market)
- Usage charges on the user side may be costly to implement or require certain technological developments
  - Subscription model for newspapers; home delivery on a per copy base difficult to implement
  - Pay-tv subscription model easier to implement than pay-per-view
- Usage charges on the advertiser side requires reliable measurement of usage
  - Advertising on yahoo or AOL (number an advertisement is clicked can be counted; possibly even the number of clicks that lead to a purchase)
- Alternative offers of usage and access prices on the user side may serve as a selection device (heavy vs. light users)



# Part III: Media and public policy

# Media – public policy issues

## Issues:

- Public good (if exclusion possible should it be allowed?)
- Merit good

## Debate:

- private versus public provision
  - Should “basic” programming be offered by public channels?
- “exclusion” of users
  - E.g. Should soccer games by the German team be shown on free-to-air television in Germany (i.e. not only on pay-tv)?
- advertising regulation
  - If consumers cannot be charged directly, is there excessive advertising by private channels so that channels should be subject to restrictions on the amount of advertising?
- content regulation
  - Minimum provision for certain types of programming (e.g. information or EU produced)
  - E.g.: Should there be quota for French movies on French television?

# Competing media platforms: analysis

- **Peitz and Valletti (2008):** only commercial TV. Advertising and subscription fees as revenue sources.
- **Purpose:** compare free-to-air and pay-TV in terms of:
  - Advertising provision
  - Content provision
- **Claim to be assessed:** with pay-TV customers can be charged directly -> market failures (and role for intervention) should be diminished. True?
- **Results:** answer is yes if:
  - competition is very intense,
  - disutility from ads is either very small or very high.

# Competing media platforms: analysis (2)

## ■ Features

- Advertisers multi-home, viewers single-home.
- “Nuisance”  $\delta \geq 0$  from advertising.
- Program content  $d_i \in [0,1]$ .
- Utility for a viewer at  $b$  when buying from  $i$   
$$v - \delta a_i - \tau(\beta - d_i)^2 - s_i$$
- Viewer type  $b \sim U[0,1]$ .
- Viewers view only one channel (same demand if they can “mix”).

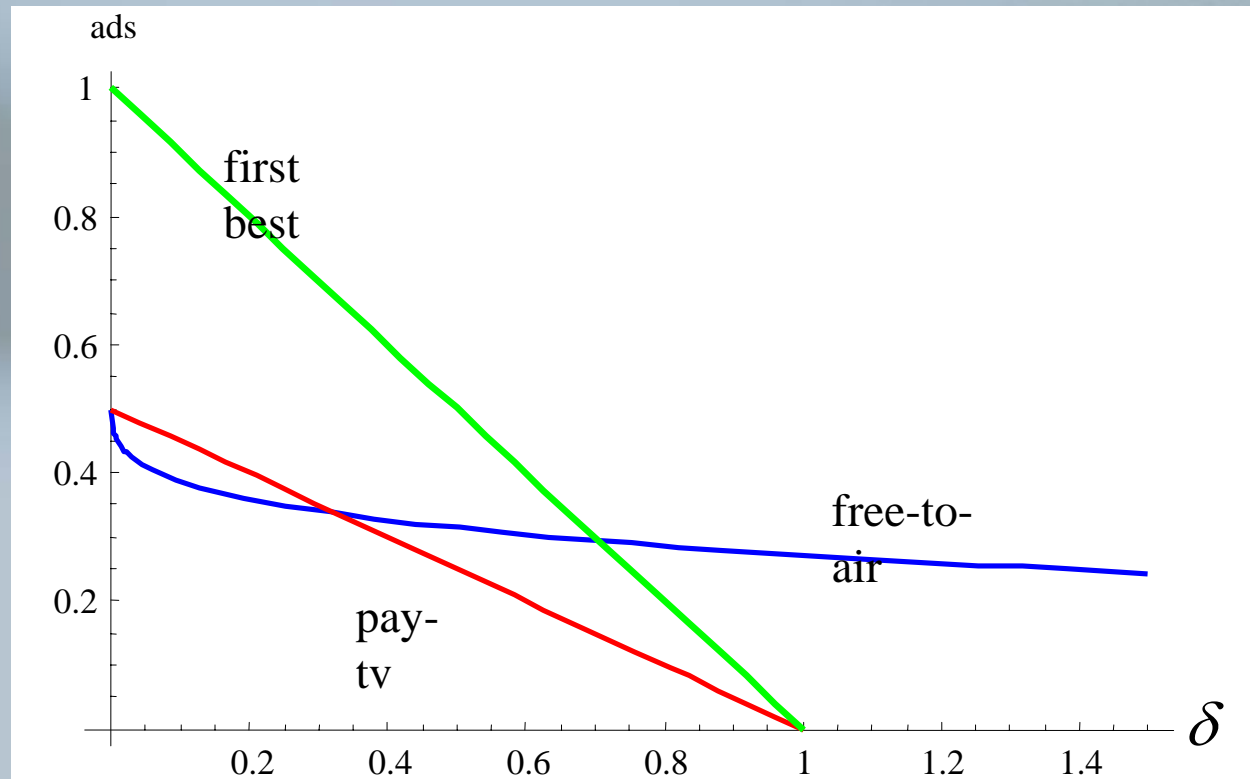
# Competing media platforms: analysis (3)

## ■ Timing

- Stage 1: Media platforms simultaneously decide on content  $d_i \in [0, 1]$ .
- Stage 2: Media platforms simultaneously decide on advertising space  $a_i \in \mathfrak{R}$  and pay-per-view price  $s_i \geq 0$  ( $s_i = 0$  under free-to-air).
- Stage 3: Advertisers and viewers simultaneously take their decisions: advertisers place their ads in none, one, or both programs and viewers view either program 1 or program 2.

# Advertising on competing media platforms

- Advertising with endogenous content



- Note: advertising bans make sense only in traditional free-to-air world

# Antitrust issues

- General issue: how to measure market power? Should the antitrust authority be concerned with distortions of the price structure?
  - if yes, e.g. monopolization of the market in a multi-homing context may be socially desirable
- Collusion; on one side (subscription or advertising) or on both sides
- Mergers (e.g. in newspaper or television markets)
  - Mergers of media platforms may lead to lower prices absent efficiency gains (Chandra and Collard-Wexler, mimeo 2008)
- Predatory pricing
- Vertical integration (content production by platform)
- Exclusionary practices (exclusive content on one platform)
- Bundling (advertising for a set of media, bundled offers to users)

# Digital media and antitrust

- Antitrust measures have to be applied with great caution
  - Many players
  - Dynamic industry structure
  - Few established results in the theory of two-sided industries
  - Empirical methods have to be adapted to two-sided industries

# Regulatory issues

- Advertising restrictions
  - Number of minutes per hour
  - Programs that cannot be interrupted by advertising
  - Restrictions may depend on time of the day
- Content requirements
  - Certain program types required
  - National / local content requirements
- Public broadcasting

# Digital media and regulation

- Any content can be delivered (no or little restriction on number of channels or programs)
- Use of content can be metered
- Advertising can often be more easily skipped
- Digitalization and disintegration: platform operator separate from content provider
  
- more variety
- lower entry costs
- advertising only one source of revenue
  
- ADVERTISING restrictions still needed?
- any rationale for CONTENT regulation (except for decency and the like)?
  
- any rationale for PSB?

# Further reading

- Anderson and Coate, Market Provision of Broadcasting: A Welfare Analysis, Review of Economic Studies 2005.
- Anderson and Gabszewicz, The Media and Advertising: A Tale of Two-Sided Market, in: Ginsburgh and Throsby (eds.), Handbook of the Economics of Art and Culture, Elsevier 2006.
- Peitz and Valletti, Content and Advertising in the Media: Pay-TV versus Free-to-Air, International Journal of Industrial Organization 2008.
- Curien, Haritchabalet and Jullien, Advertising, Competition and Entry in Media Industries, forthcoming in Journal of Industrial Economics.
- Armstrong and Weeds, Public Service Broadcasting in the Digital World, published 2007.