

U.S. Producer Price Index for Broadcasting

NAICS 515111, 515112, 515120, and 515210

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Agenda

- Definition of the service
- Pricing unit of measure
- Market size
- National accounts concepts
- Pricing methods
- Quality adjustment
- Evaluation of comparability with turnover/output measures
- Historical data

Definition of the Service

Primary output is the transmission of a broadcast signal

- However, this signal is delivered free of charge to the viewers and listeners and, therefore, does not qualify as output according to the PPI definition
- What is bought and sold in these industries is access to an audience through the broadcast signal
- Access is sold to advertisers through the sale of airtime
- Output is also measured through the sale of programming

Programming Services

Radio and broadcast television networks and radio syndicators transmit signals that carry programming to local affiliated radio and television stations, who in turn, broadcast these signals to an audience.

Programming Services

Cable networks broadcast programming to:

- Multichannel video program distributors (MVPDs)
 - ▶ Cable television systems
 - ▶ Direct-to-home satellite systems
 - ▶ Large telephone companies
- Online video distributors (OVDs)
- Hotels
- Other non-residential institutions

Programming Services

Local television stations also grant consent to local MVPDs to rebroadcast the station's programming in exchange for per subscriber fees each month

Advertising Services

- Most television and radio programming in the U.S. includes advertising
 - ▶ Local spots
 - ▶ Regional spots
 - ▶ National spots
- Spots are typically sold in increments of 15, 30, or 60 seconds

Spot Advertising

- Local spots are usually purchased by advertisers within, or close to, the broadcast coverage area
- Regional and national spots are purchased by advertisers who do business in the broadcast area as well as regionally or nationally

Other Advertising

- Program sponsorships

Advertisements that are tied to a particular program, such as a sports event or other special programming

- Product placements

Integration of advertiser's product or service into the programming

- Infomercials

30 – 60 minute block purchased by advertisers to display their products

Pricing Unit of Measure

Advertising

Price of advertising is measured as a monthly average spot rate for a specified type of advertisement aired at a specific time

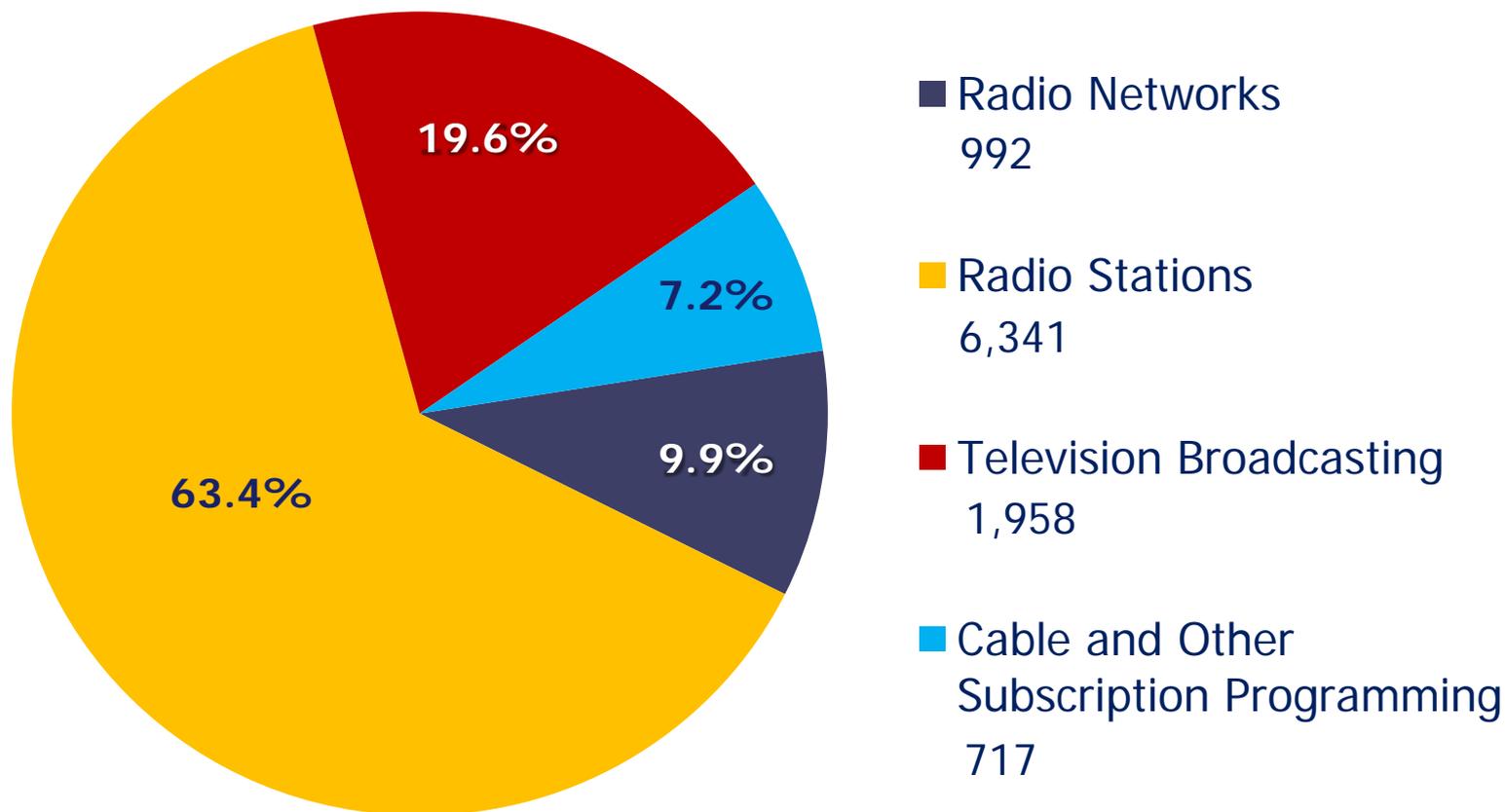
Pricing Unit of Measure

Programming

Price of programming is measured as a:

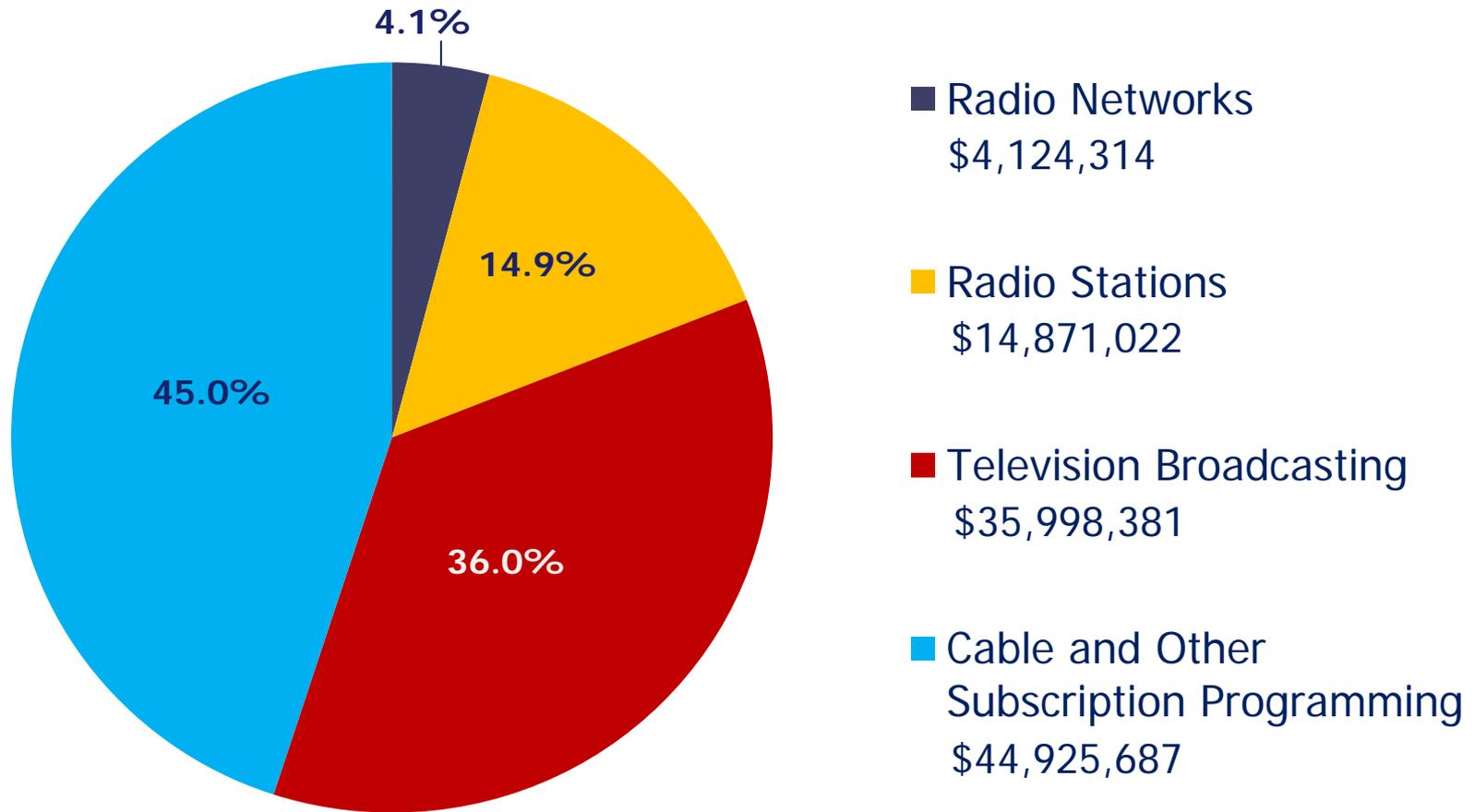
- ▶ Monthly fee per subscriber for cable networks and television stations that sell programming to MVPDs and other related types of buyers
- ▶ Flat fee per year for agreements between radio and TV networks or radio syndicators and their affiliated local stations

Size of Industry - Establishments



Source: 2007 Economic Census

Size of Industry - Revenue



Source: 2007 Economic Census

National Accounts Concepts

- System of National Accounts does not provide specific guidance on measuring the output of the broadcasting industries
- Bureau of Economic Analysis (BEA) includes both programming and advertising services in the U.S. industry accounts for broadcasting
- To determine real output in the industry accounts, the BEA uses detailed PPIs as deflators at separate commodity levels for programming and advertising

Pricing Methods - Advertising

Preferred price for all advertising services is an average spot rate, or unit value price, for the current month (or some portion of the current month)

Example of price calculation:

$$\text{Average spot rate} = \frac{\text{Revenue for local 30-second spots aired weekdays 6-10 AM}}{\text{Number of local 30-second spots aired weekdays 6-10 AM}}$$

Pricing Methods - Programming

Currently, establishments report contract prices that reflect actual transactions

- ▶ Compensation agreement between a radio/TV network or radio syndicator and a local radio/TV station is priced as flat fee per year
- ▶ Cable networks and TV stations receive a monthly fee per subscriber from their affiliated distributors

Pricing Methods - Programming

The preferred pricing methodology for programming services has recently changed - establishments are asked to report an average rate per subscriber.

Example of price calculation:

$$\text{Average rate per subscriber} = \frac{\text{Revenue for cable programming transmitted to all buyers}}{\text{Number of cable network subscribers for all buyers}}$$

The average rate will reflect all negotiated rates between cable networks and all buyers for the provision of the same programming services

Quality Adjustment

- Primary concern for pricing advertising sales is the inconsistency in the size of viewing audiences over time
- Most advertisements are purchased based on projected audience size, which can vary due to changes in viewing preferences

Note: If the projected audience is not delivered, the advertiser may receive air time at a zero price. The number of “free” advertisements is included in the denominator when calculating the average spot rate.

Quality Adjustment

- Currently, the U.S. does not quality adjust for changes in audience size
 - ▶ No consistent relationship between audience size and the cost of providing the programming in which the advertisements are aired
 - ▶ Programs that are expensive to purchase/produce may not draw a large audience, while popular programming may cost little
 - ▶ Changes in audience size may not be tied to changes in inputs

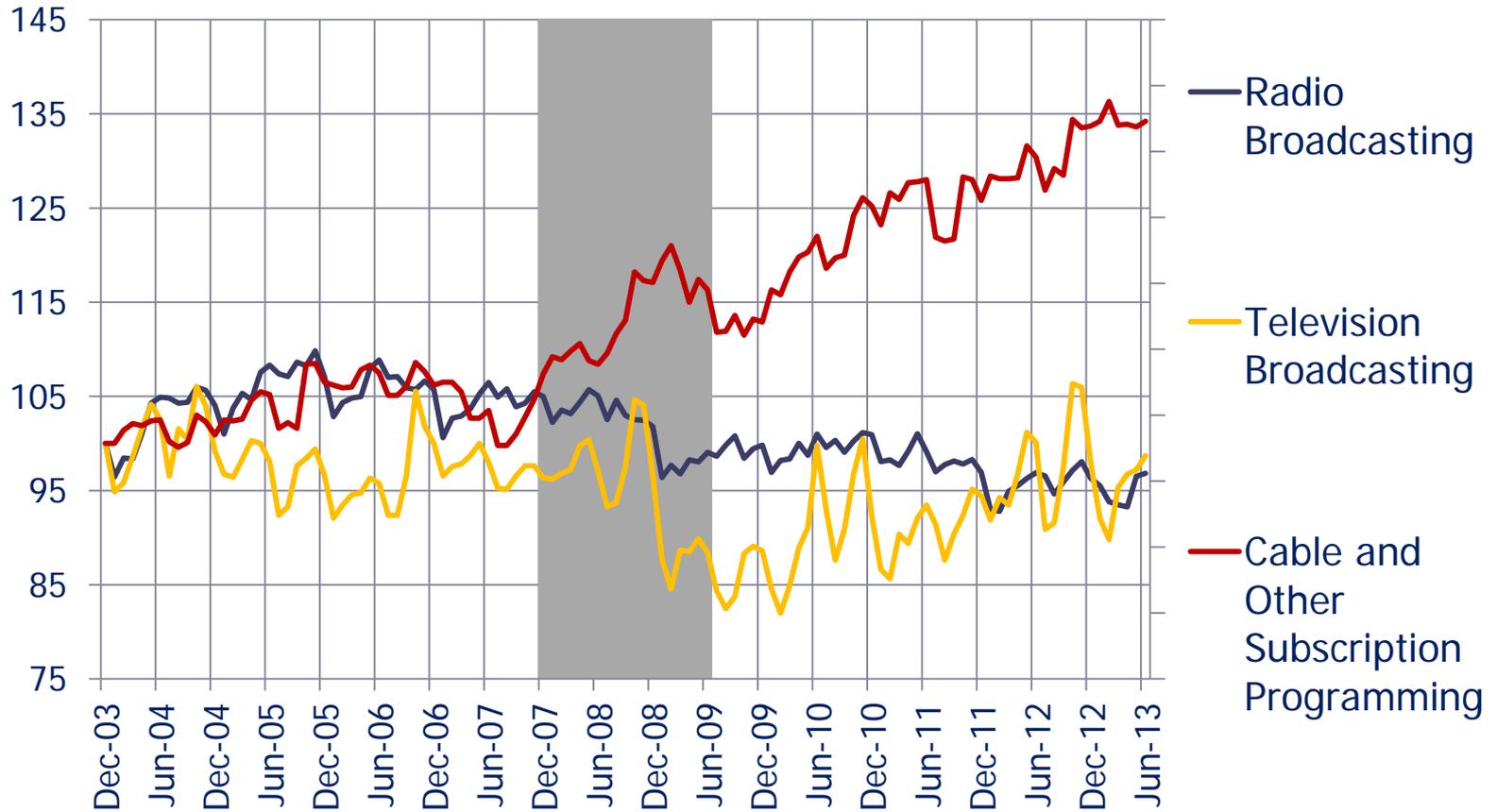
Quality Adjustment

- In recent years, television audience size for many stations and networks has been falling as the number of competing cable networks and Internet content providers has increased
- If quality adjustment methods were to be applied to reflect broadcaster's decreasing audience share, the rate of real price increases for the broadcasting PPIs would be significantly higher.

Comparability with Turnover/Output Measures

- Turnover data that corresponds to the lowest level service line detail of the PPI for broadcasting is available every five years from the U.S. Census Bureau
- Census also publishes quarterly and annual data at the four-digit NAICS 5151 and 5152 levels only

Historical data



Index, 2003:Dec = 100
Shaded area indicates US recession,
Sources: Bureau of Labor Statistics, National Bureau of Economic Research

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