Comments for Workshop on the State of the Video Marketplace

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Background

- Massive growth in television content diversity and quality
- Improvements on both content and distribution sides (and hardware)

- New business models, old questions.

1990:

2016:

CLOSED CAPTION AREA
TWO LINES OF TEXT

Topic Areas

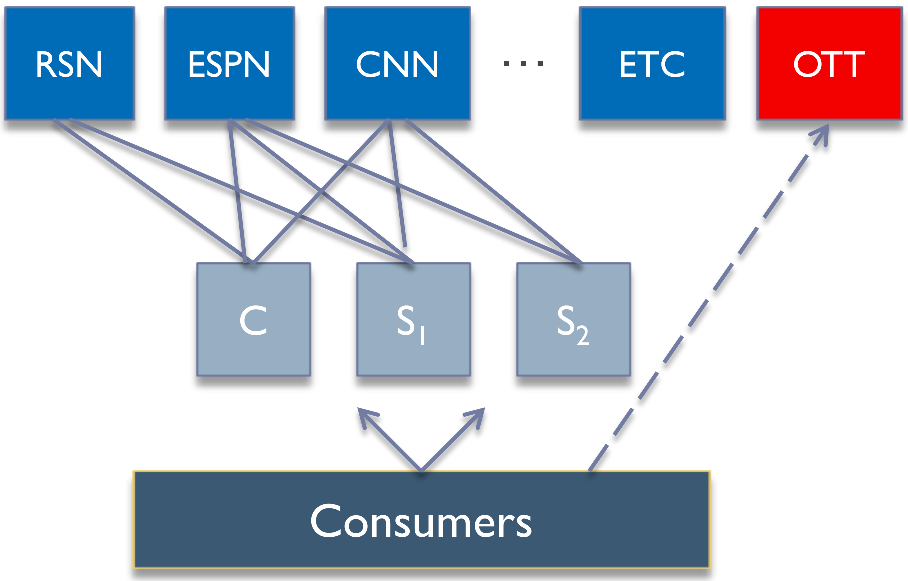
- Bundling
  - Retail
  - Wholesale

- Programming Costs
  - Size differences
    - Implications for merger policy
    - Effects on entrants

- Vertical Integration
  - Content
  - Hardware

- Program Diversity
  - The special role of media and entertainment

U.S. Multichannel Television Markets



- Consumers choose a bundle of channels provided by a cable or satellite or OTT distributor.
- Content providers paid linear per-subscriber-per-month fees, or directly by consumers.
- Content providers invest in content quality and diversity.
- Distributors invest in network quality, assemble content for sale to consumers.

Bundling versus Unbundling

- Retail vs Wholesale

- Focus on retail:
  - Limited direct evidence. Will be interesting to see what happens in Canada.

- Our approach (AER 2012): Estimate a model of the industry and simulate unbundling.

- Model features:
  - Consumer choosing what channels to watch
  - Consumers choosing which package to subscribe to
  - Distributors choosing prices and packages
  - Distributors and channel conglomerates negotiating over carriage fees.

What we predict about retail unbundling:

- Once you take into account how carriage fees would re-equilibrate to such a policy, the average consumer ends up being about indifferent between bundling and a la carte.

- Some consumers are way better off: those who watch few channels, especially if they don't include sports.

- Consumers who watch many channels are worse off: either they pay more, or they don't receive some channels they would watch.

- On balance, about equal.
- Some new subscribers enter the market ("cord-nevers").

CLOSED CAPTION AREA
TWO LINES OF TEXT

TABLE 8—BASELINE COUNTERFACTUAL RESULTS: FULL À LA CARTE

	Bundling	ALC No Reneg	Percent Change	ALC With Reneg	Percent Change
Non-welfare outcomes					
Cable & sat oenetration	0.880	0.998	13.3%	0.993	12.8%
Total affiliate fees	$18.22	$18.22	0.0%	$36.98	103.0%
Mean consumer expn	$27.63	$21.07	-23.8%	$28.24	2.2%
Number channels received	42.8	22.0	-48.5%	19.3	-54.9%
Number channels watched	22.2	22.0	-0.5%	19.3	-12.8%
Welfare outcomes					
Channel profits					
Total license fee rev	$16.03	$7.95	-50.4%	$15.44	-3.7%
Total advertising rev	$13.38	$14.71	10.0%	$14.73	10.1%
Total channel revenue	$29.41	$22.67	-22.9%	$30.16	2.6%
Distributor profits	$11.59	$13.11	13.1%	$12.81	10.4%
Total industry profits	$41.00	$35.78	-12.7%	$42.97	4.8%
Mean consumers surplus	$45.82	$54.59	19.2%	$45.91	0.2%
Total surplus	$86.82	$90.37	4.1%	$88.88	2.4%

Bundling

- Competition has existed in video markets for quite some time.
- It is not an extremely competitive industry, but two satellite competitors have been around for almost twenty years.
- Competition hadn’t driven firms to unbundle.
- Suggests that there are efficiency reasons for bundling- at least not obvious gains.
- Netflix, Amazon Prime, Youtube, Sling TV, Playstation Vue: these are all bundles.
- As a thought experiment, imagine Comcast didn’t exist and the only video was over-the-top (with all of its buffering issues and scattered content).
  - If a start up came along, say it was called Viber, which provided hundreds of HD channels of content to TV sets over a digital network, with no issues of buffering and an easy to navigate guide system, this would be the hottest start up in the world.

What we don’t know about (un-)bundling

- With net-neutrality, channels can unbundle themselves. We don’t know what the equilibrium of this will look like (though evidence so far suggests bundle will persist).

- All of this analysis was **holding the set of channels and their quality fixed.**

- If unbundling puts some channels out of business or encourages new entrants, then answers might change.

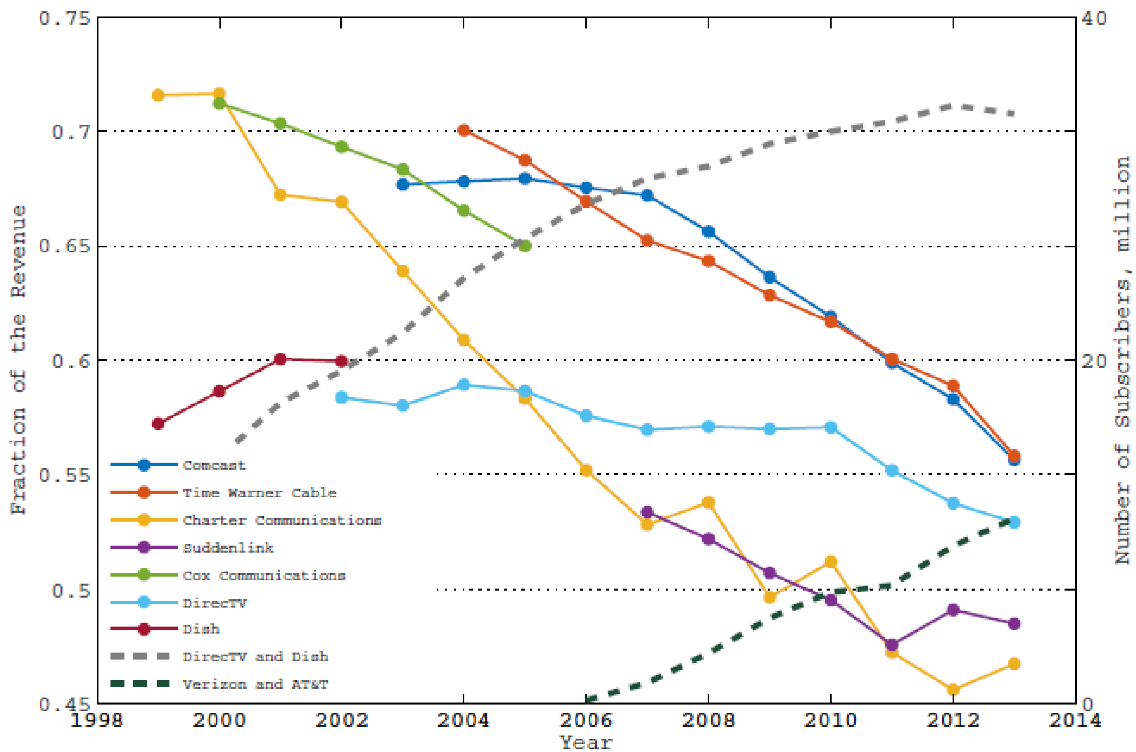
- If unbundling changes the decision to invest in quality programming, then answers might change.
  - Externality in investment suggests programming quality should increase with unbundling.

Wholesale Bundling

- Hasn't been explored empirically in this industry as far as I know.
- The economic theory is fairly subtle to generate welfare reducing behavior.
- Has potential to be pro-competitive.
  - NBC Sports Network is a budding rival to ESPN. Easier to get NBC Sports Network going when it is bundled with NBC, Bravo, etc.
- On the other hand, if NBC Sports Network is crowding out an even better potential rival to ESPN, then the bundling is a problem.
- This is a really hard problem to work out empirically because it involves evaluating the efficiency of unknown potential entrants.

Programming Costs

Figure 2: Downstream Markups



- Retail price increases mostly flowing to content.
- Large downstream firms pay less for content.

Programming Costs

- Suggests some benefits to downstream mergers (a la TWC-Charter).
- Bad for new entrants which don't have scale.

> *"We [Google Fiber] operate at a very significant difference than incumbents we compete against. [...] We may be paying in some markets double what incumbents are paying for the same programming."*
>
> Milo Medin
> Head of Google Fiber

- Current work-in-progress simulates downstream mergers and effect of eliminating size based effects.
- We find (preliminary) benefits of TWC-Charter merger to consumers, and increases in profits of new entrants from banning size effects.

Vertical Integration

- Vertical integration can reduce the double marginalization problem and improve investment incentives.
- However, it can also lead to raising rivals' costs and foreclosure incentives.
- We study integration between content and distribution, in particular Regional Sports Networks (RSN's).
  - Reduction of double marginalization is significant.
  - Policies such as program access rules help welfare.
  - Again, did not study long term effects on investment.
- Hardware
  - Set top box rule
  - Can foresee future issues regarding television sets, tablets, and similar devices.

Vertical Integration (RSN's)

	(i) VI, no PARs			(ii) VI, PARs			(iii) No VI
	Level	$\%\Delta_{lvl}$	$\%\Delta_{WTP}$	Level	$\%\Delta_{lvl}$	$\%\Delta_{WTP}$	Level
ALL RSNS (27)							
Avg Cable Mkt Share	0.63	2.6%		0.63	2.6%		0.61
Avg Sat Mkt Share	0.19	-2.8%		0.19	-2.4%		0.19
Avg Cable Carriage	0.81	15.3%		0.82	18.2%		0.72
Avg Cable Prices	54.49	-1.4%		54.43	-1.5%		55.26
Aff Fees to Rivals	1.96	36.2%		1.55	1.0%		1.53
Cable Surplus	24.35	-2.1%	-14.6%	24.27	-2.5%	-16.0%	24.85
Satellite Surplus	5.16	-3.9%	-6.1%	5.24	-2.6%	-3.9%	5.36
RSN Surplus	2.35	50.1%	21.3%	2.37	49.4%	21.1%	1.60
Consumer Welfare	33.68	1.7%	17.6%	33.77	2.0%	18.5%	33.11
Total Welfare	65.55	0.9%	18.2%	65.64	1.1%	19.7%	64.93
# Foreclosed to Sat	3.5/24						

Program Diversity

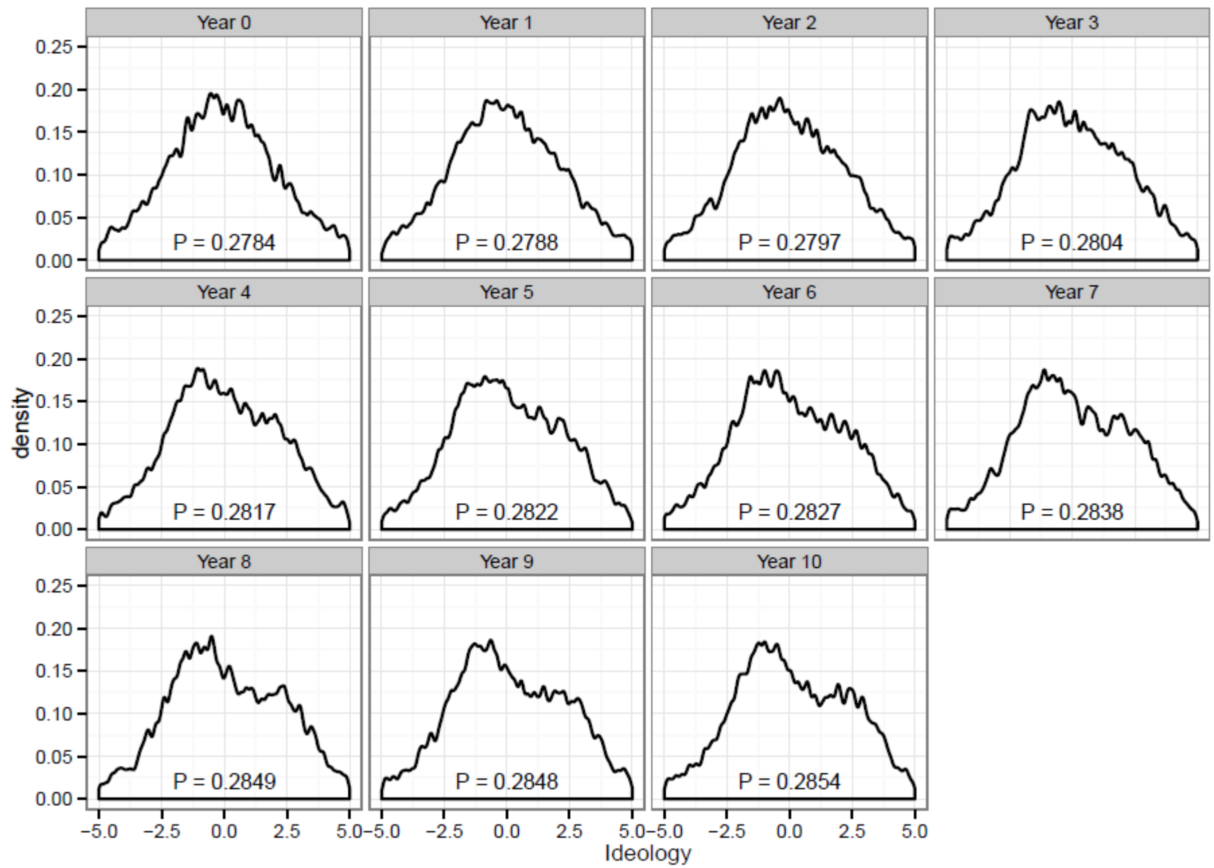
- Effects on culture and socioeconomic outcomes

- Research suggests watching certain programs can shape views on issues from gender roles to teen pregnancy.

- Effects on news and polarization.
- Research suggests Fox News has non-negligible effects on partisan voting.
- Potential for increased polarization.

Program Diversity

- Cable News and Polarization (from Martin and Yurukoglu)



Concluding Remarks

- New technologies, classic problems

- More competition in data delivery would help sort much of this out
  - Over-builders and wireless

- We can make coherent predictions about the short term effects of most policies.

- The **long term effects on programming quality and diversity** are more difficult, but likely more consequential than short term pricing effects.

- Answers are important: for classic competition policy reasons and because of special externalities associated with this industry.