

State of the Video Marketplace

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Washington DC

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Estimates as of the close on 3/18/16 unless otherwise noted.

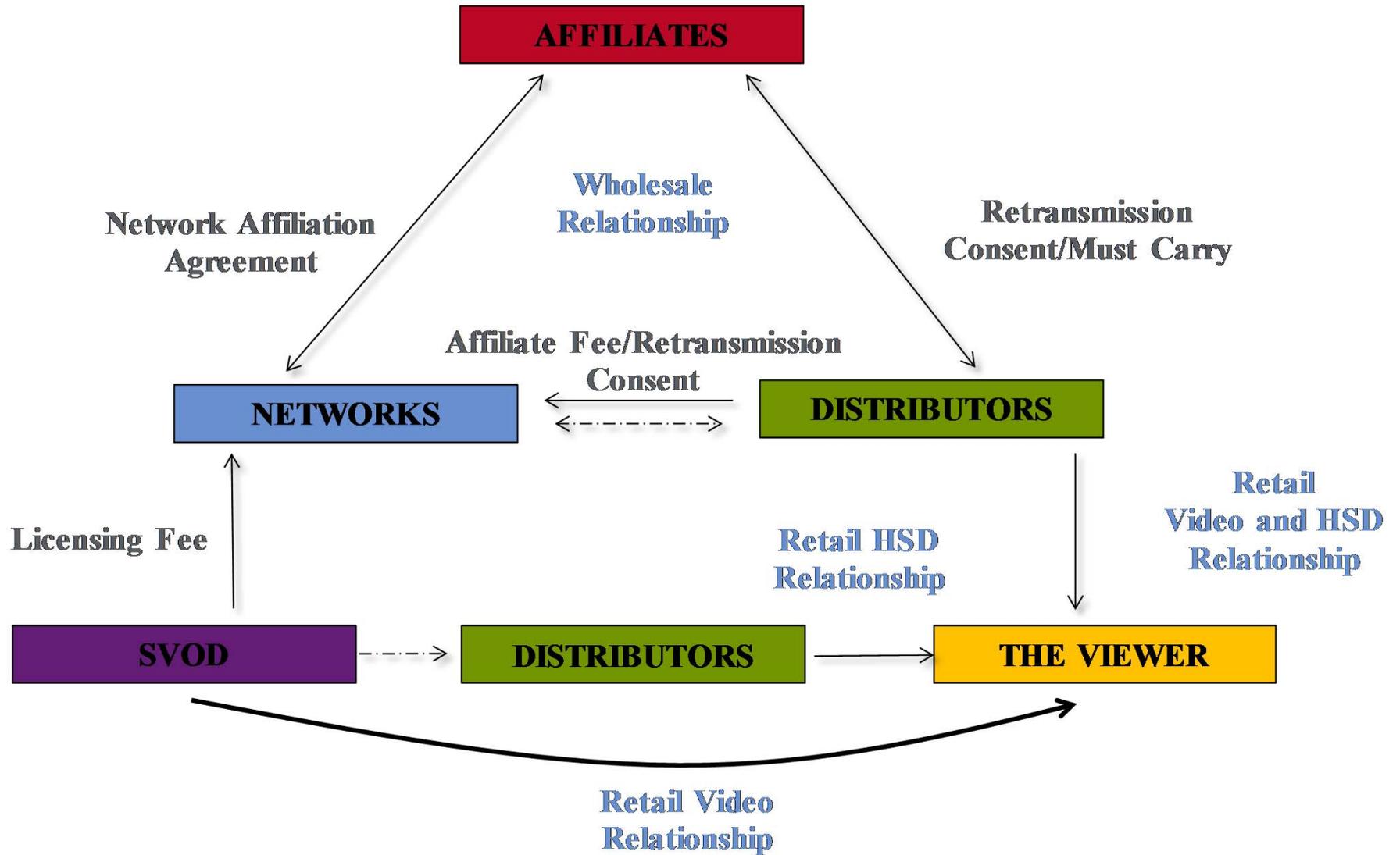
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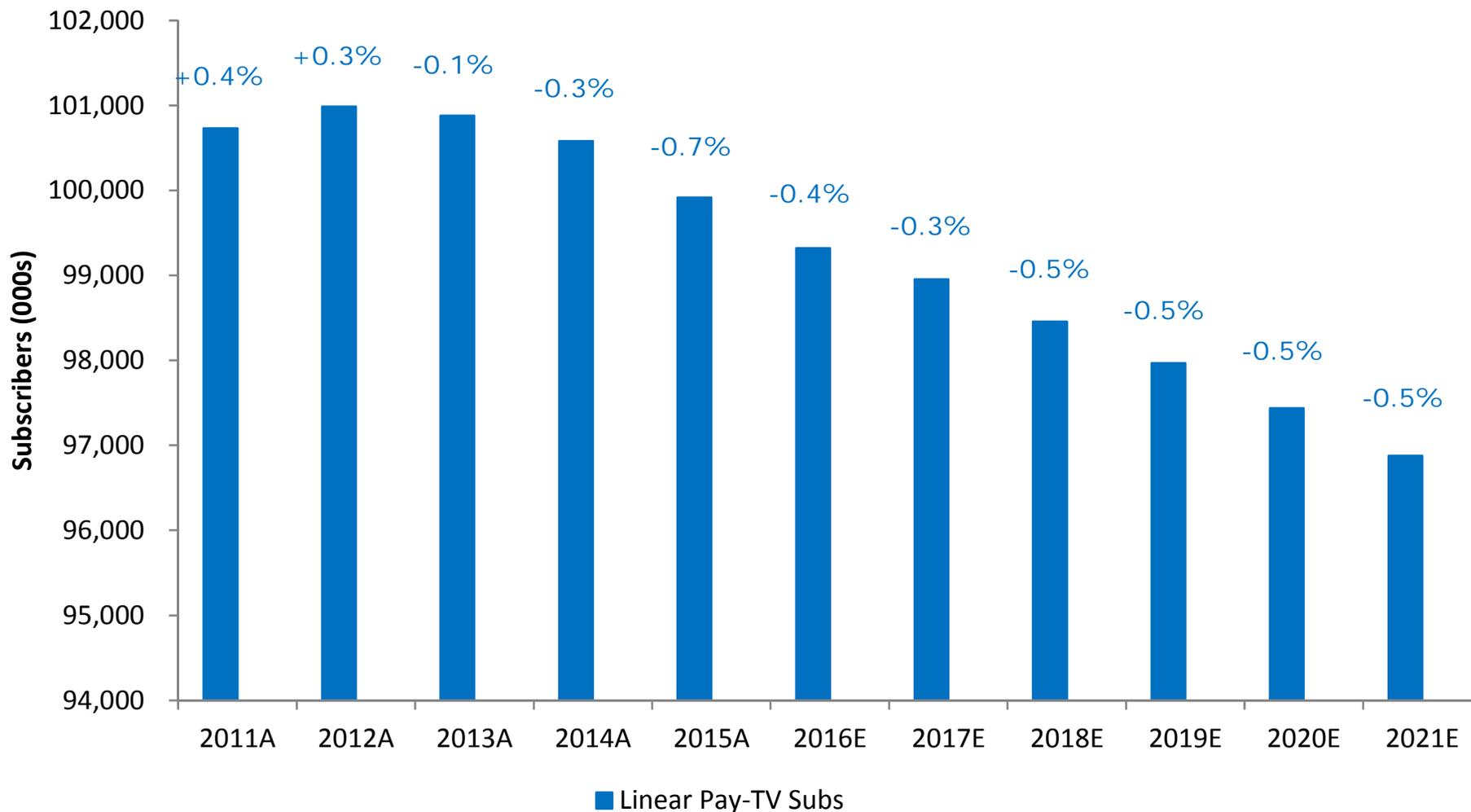


THE VIDEO ECOSYSTEM



Linear Pay-TV Subscriptions are Declining

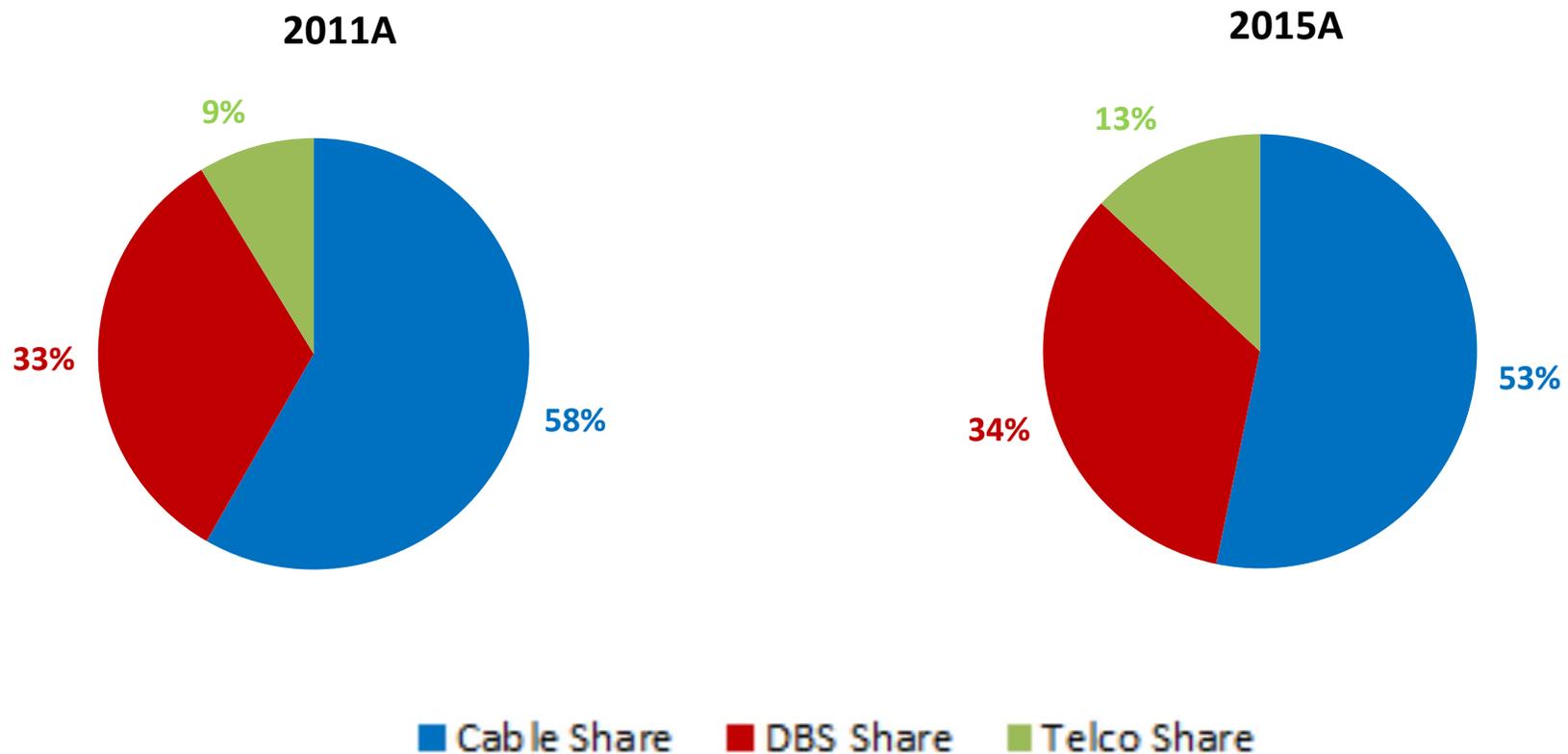
Linear Pay-TV Subscribers Are Declining
But Not at the Rate Investors Fear



Source: SNL Financial and Wells Fargo Securities, LLC estimates

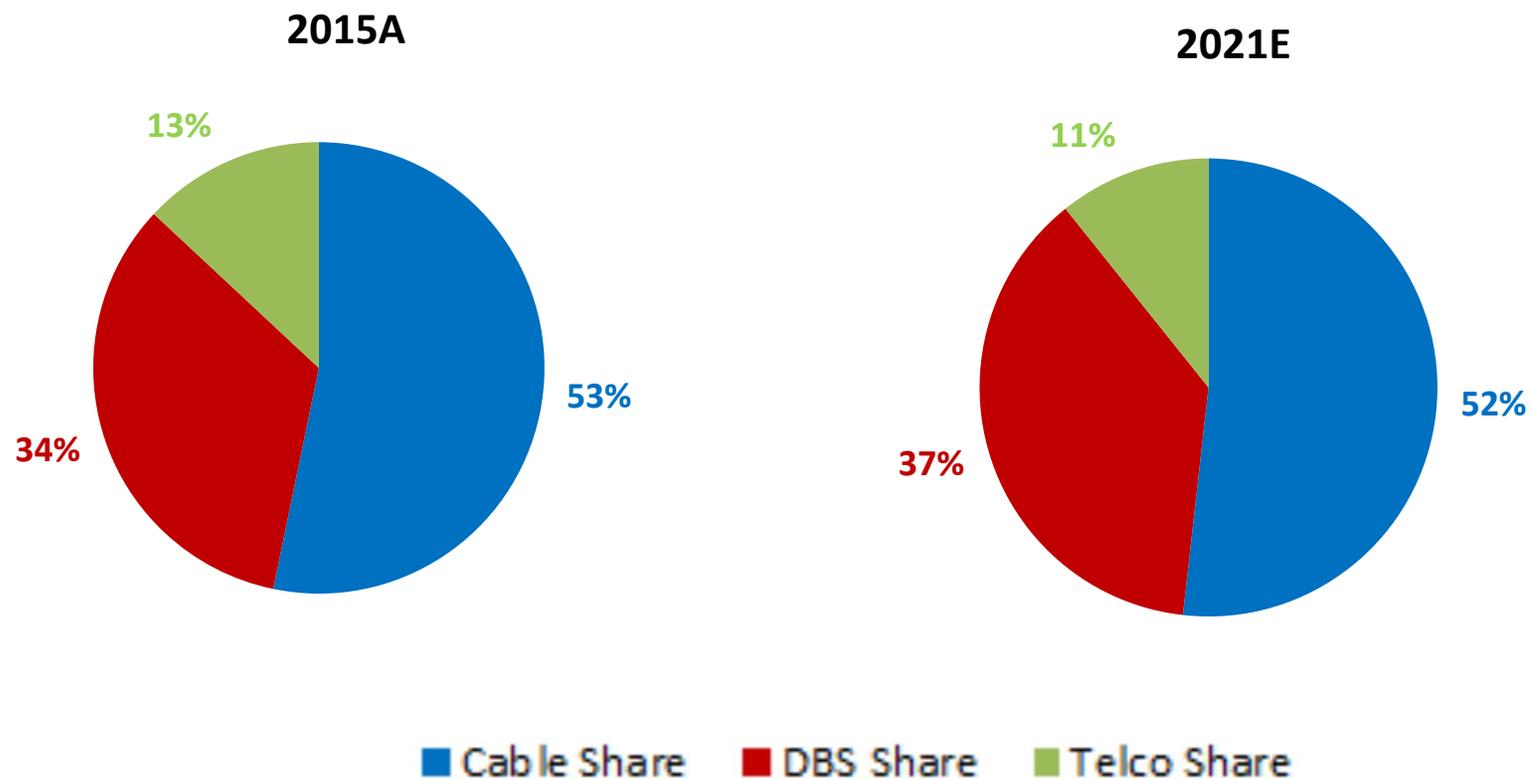
Linear Pay-TV Subscriptions are Declining

Between 2011 and 2015, Most Pay-TV Sub Losses Came from Cable



Linear Pay-TV Subscriptions are Declining

Cable Has Stymied Its Losses; And We See Most Declines at Telco Going Forward*

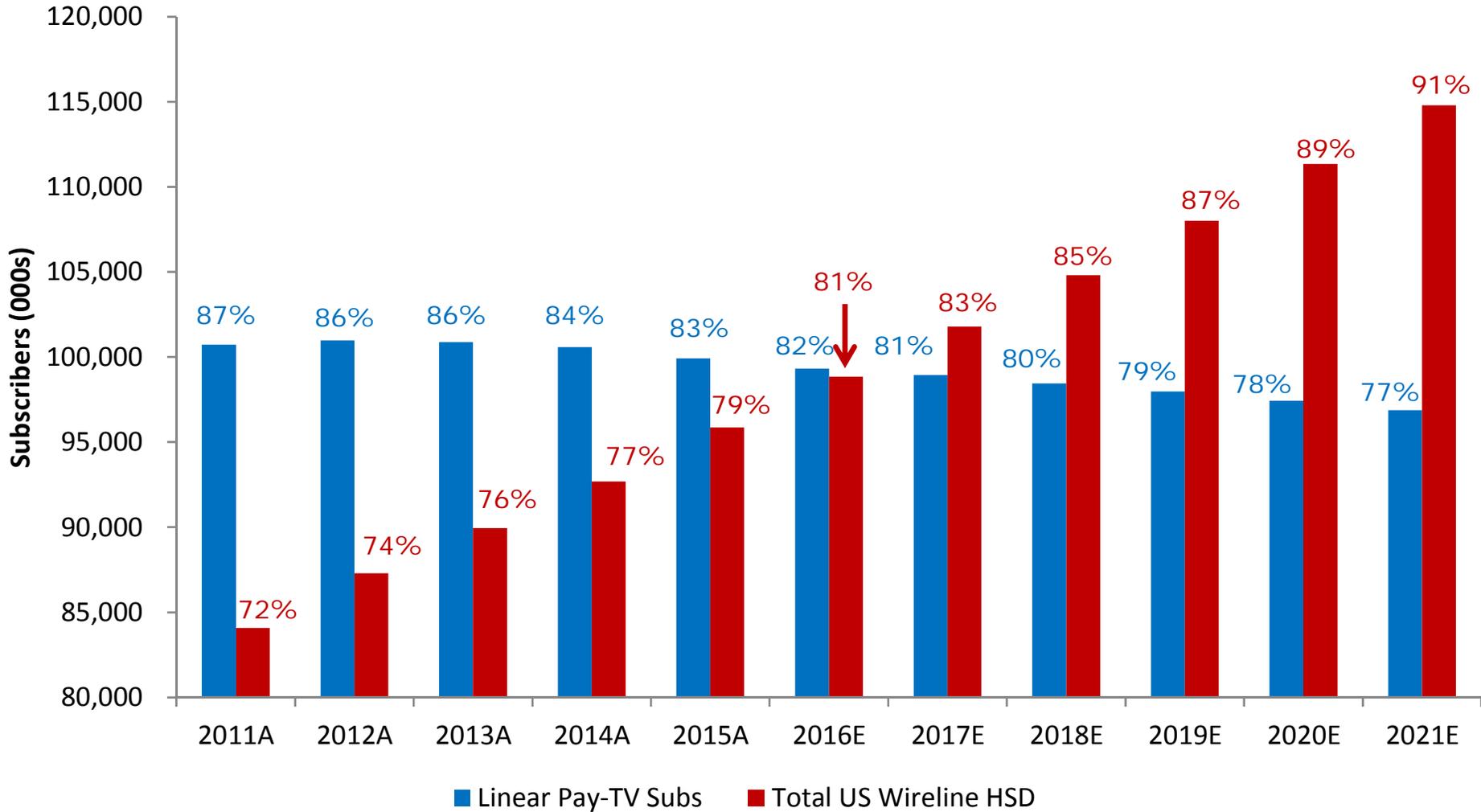


Note *: We assume AT&T continues to port subs from its U-Verse Platform to DTV

Source: SNL Financial and Wells Fargo Securities, LLC

Conversely, Broadband Adoption Is Increasing

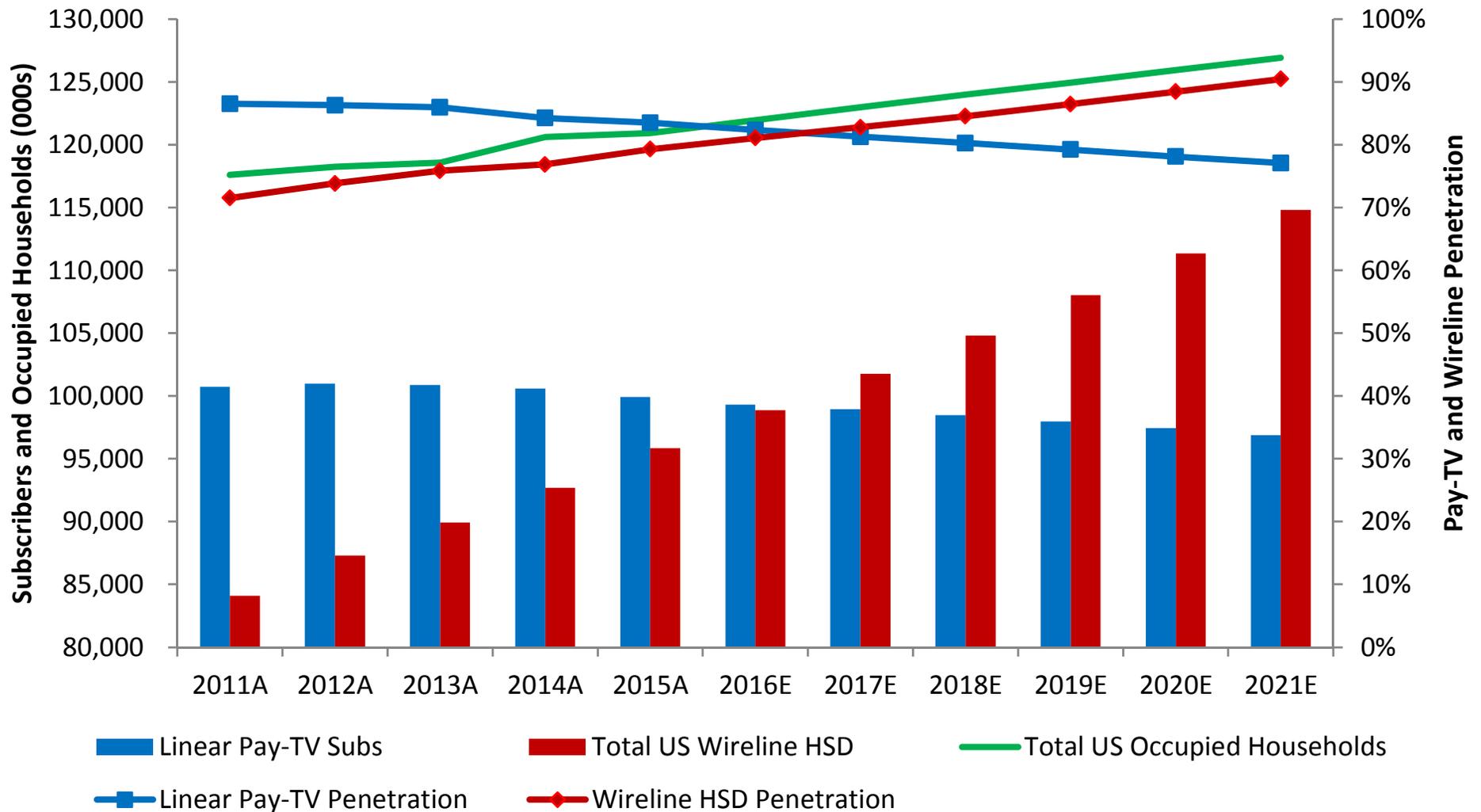
In 2017, We Estimate More Data Subs Than Video Subs



Source: SNL Financial and Wells Fargo Securities, LLC

Evidence Shows HSD is the More Popular Service

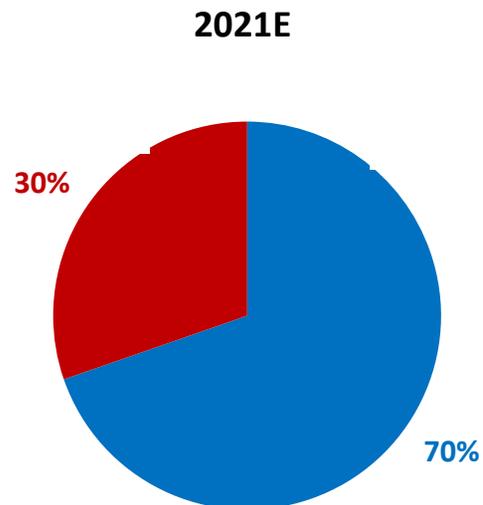
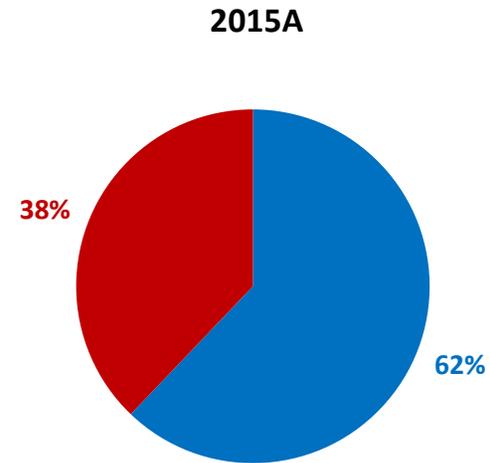
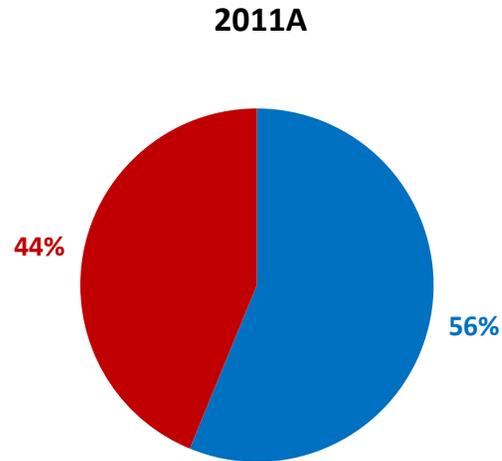
Occupied Housing is Growing Again; Leading to Additional HSD Gains



Source: SNL Financial and Wells Fargo Securities, LLC estimates

Cable Has Been Consistently Taking HSD Share

This is Most Attributable to Its Superior Speeds....
And We Expect Continued Cable Share Gains



Source: SNL Financial and Wells Fargo Securities, LLC estimates

What Is Over The Top? What is A La Carte?

➤ Over The Top (OTT)

- **The delivery of audio, video and other media over the internet without the involvement of a multichannel video programming distributor.**

➤ A La Carte

- **Traditionally, “A La Carte” service means items are separately offered and priced. In the case of video service, this typically refers to a customers ability to pick and choose and purchase individual video channels rather than bundles of channels.**

OTT Comes in MANY Forms

➤ SVOD

- ❖ Netflix
- ❖ Amazon Prime
- ❖ Hulu

➤ Direct to Consumer (DTC)

- ❖ HBO Now
- ❖ Showtime OTT
- ❖ CBS All Access

➤ Skinny Bundles

- ❖ DISH's SlingTV
- ❖ SONY's PlayStation Vue
- ❖ VERIZON Custom TV/ Go90
- ❖ Comcast Stream
- ❖ AT&T/DTV - ?

SVOD Examples

➤ Netflix

- ❖ Library of Syndicated Movies and TV Shows
- ❖ 11 Original Series
 - ❖ Basic (SD Only, 1 Stream) – \$7.99/mo.
 - ❖ Standard (SD & HD, 2 Stream) – \$9.99/mo.
 - ❖ Premium (SD, HD & UHD, 4 Streams) – \$11.99/mo.

➤ Amazon Prime

- ❖ Library of Syndicated Movies and TV Shows
- ❖ 15 Original Series
 - ❖ \$99.99/year (includes other Amazon benefits such as shipping)

➤ Hulu

- ❖ Library of Syndicated Movies and TV Shows
- ❖ Recent Episodes of Current Season ABC, FOX and NBC Shows
- ❖ 12 Original Series
 - ❖ Limited Commercials -- \$7.99/mo.
 - ❖ No Commercials -- \$11.99/mo.

Skinny Bundle Examples

➤ SlingTV

- ❖ 37 Channels for \$20/mo.
- ❖ Focused “Add-on” Packages for \$5/mo.
 - ❖ Sports Extra has 9 channels
 - ❖ Kids Extra has 5 channels
 - ❖ Hollywood Extra has 6 channels

➤ PlayStation Vue

- ❖ “Access Slim” 55 Channels for \$29.99/mo.
- ❖ “Core Slim” 70 Channels for \$34.99/mo.
- ❖ “Elite Slim” 100 Channels for \$44.99/mo.

➤ Linear Skinny Bundles

- ❖ Comcast’s “Internet Plus” Package
- ❖ DirecTV’s “Select” Package
- ❖ Verizon’s “Custom TV” Package

Source: Company Data, and Wells Fargo Securities, LLC estimates

Direct to Consumer Examples

➤ HBO Now

❖ \$14.99/mo. for Live and On Demand Viewing

➤ Showtime

❖ \$11.00/mo. for Live and On Demand Viewing

➤ CBS All Access

❖ Watch CBS Live (No NFL)

❖ New Episodes Available On The App Next Day

❖ Over 7,500 Episodes On Demand

❖ \$5.99/mo.

Programming Control is Highly Concentrated

- **Total programming universe is \$54.8B**
 - ❖ \$45.5B from basic cable and RSNs
 - ❖ \$7.2B in retrans
 - ❖ \$2.1B in reverse comp
- **Top 5 studios take 68% of the total**
 - ❖ Disney, Fox, NBC Universal, Time Warner Inc., Viacom
- **Top 9 studios take 78% of the total**
 - ❖ Top 5 + Discovery, CBS, AMC Networks, Scripps Networks

Source: SNL Financial and Wells Fargo Securities, LLC estimates

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Programmers Like/ Need The Bundle

~ 90MM Pay-Tv households

x \$Beautiful monthly payment

x 12 months

\$Beautiful & steady annual revenue stream

Source: SNL Financial and Wells Fargo Securities, LLC estimates

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Programmers Like/ Need The Bundle

Let's look at Disney as an example:

~ 90MM Pay-Tv households

x \$11/sub/month (all 10 cable nets)

x 12 months

= \$12B in annual affiliate fee revenue

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Programmers Like/ Need The Bundle

Assume ESPN/ ESPN2 go a la carte:

~ 30MM unique viewers

x \$**33**/mo.

x 12 months

= \$12B in annual affiliate fee revenue

Source: SNL Financial and Wells Fargo Securities, LLC estimates

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Creating the Synthetic Bundle

Our 2015 survey suggests there are 10 MUST-HAVE “channels”

- NBC - Antenna
- CBS - Antenna
- ESPN – Sling TV
- ABC - Antenna
- Netflix - Netflix
- FOX - Antenna
- HBO – HBO Now
- CNBC – Unavailable
- Showtime – Showtime OTT
- AMC – Sling TV

Creating the Synthetic Bundle

With Typical Services Like DVR and VOD... OTT is More Expensive Than the Bundle

Networks	OTT Price	Comments
ABC	Free	Watched over the air via antenna
AMC	\$20.00	Sling TV from DISH Network
CBS	Free	Watched over the air via antenna
CNBC	Unavailable	Not available via OTT
ESPN	See AMC	Sling TV from DISH Network
FOX	Free	Watched over the air via antenna
HBO	\$14.99	HBO Now
NBC	Free	Watched over the air via antenna
NFLX	\$9.99	Standard plan that includes HD streaming
Showtime	\$10.99	Showtime Now
OTT Video Total	\$55.97	
Performance Internet (25mbps)	\$34.99	Includes 12 month promotional price
Add: Wireless Gateway	\$10.00	
Basic Synthetic OTT Bundle Price	\$100.96	
Add: VOD Services		
Hulu (ABC, FOX, NBC)	\$7.99	Basic plan that includes advertisements
CBS All Access (CBS)	\$5.99	
Add: DVR Services		
TiVo Roamio	\$8.32	\$499 upfront fee divided by estimated 60 month useful life
TiVo Roamio DVR Subscription	\$14.99	Monthly service charge
Full Featured Synthetic OTT Bundle	\$138.25	

A La Carte Doesn't Make Sense for the Consumer

With Typical Services Like DVR and VOD... OTT is More Expensive Than the Bundle

Fully Featured Cable Bundle

	Price	Comments
Digital Starter & Performance Internet	\$79.99	Includes ABC, AMC, CBS, CNBC, ESPN, FOX, and NBC
Add: HBO	\$5.00	Also includes HBO On Demand/HBO Go
Add: Showtime	\$5.00	Also includes Showtime On Demand/Showtime Anytime
Add: HD DVR	\$9.95	Allows for digital recording of television shows
Add: HD Technology Fee	\$9.95	Fee to allow for HD signals
Add: Broadcast Fee	\$3.50	Additional fee not included in advertised price
Add: Sports Programming Surcharge	\$1.00	Additional fee not included in advertised price
Add: Wireless Gateway	\$10.00	Wireless Gateway (to provide WiFi) rental fee
Add: Netflix	\$9.99	Standard plan that includes HD streaming
MVPD Bundle	\$134.38	

OTT Live Streaming Has Had Its Hiccups.....

➤ SlingTV

❖ Multiple Service Disruptions

- ❖ Fear the Walking Dead Premier (8/23/15)
- ❖ NCAA Final Four (4/4/15)
- ❖ Game of Thrones Premier (4/12/15)
- ❖ Pretty Little Liars Mid-Season Finale (8/11/15)

➤ CBS All Access

❖ Grammy Awards (2/15/16)

- ❖ Live stream disruption and poor quality

❖ Superbowl (2/7/16)

- ❖ Service disruptions/disconnections

➤ DTV Sunday Ticket

❖ Couldn't air 3 of 8 games on one weekend.

The Dilemma

- Consumers need choice
- There is no one size fits all solution
- Consumers want to save money
- Programmers and distributors need to make money to be able to invest in content and technology

Regulatory Landscape... Help or Hindrance?

- **Communications Act of 1934**
- **Section 257 – the FCC has the authority to impose regulations aimed at improving programming diversity**
- **Section 616(a) – mandates the FCC to establish regulations governing program carriage agreements and related practices between cable operators or other MVPDs and video programming vendors.**

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