



# THE COLLAPSE OF INTELLECTUAL PROPERTY

Robert M. Almeida  
Investment Officer / Institutional Portfolio Manager  
MFS® Investment Management

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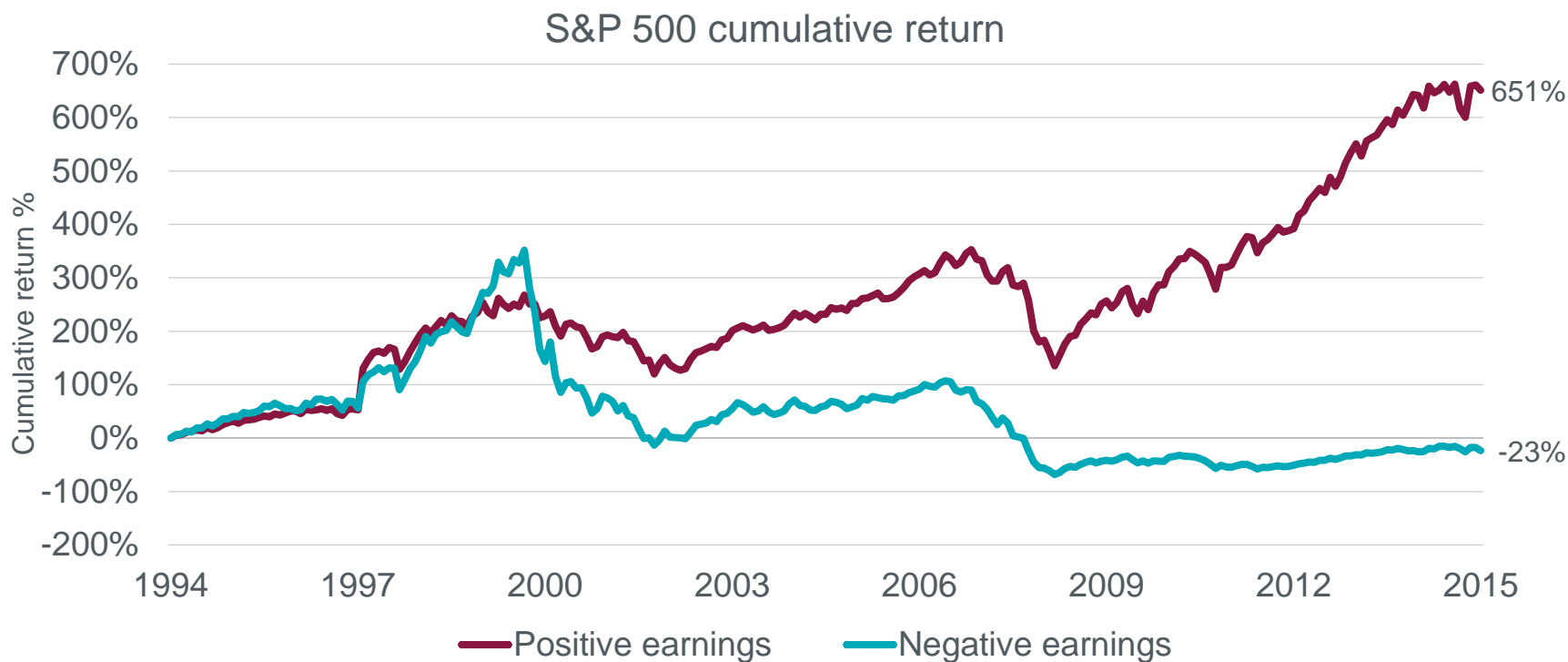
# AGENDA



- ▶ What drives stock prices?
  
- ▶ Collapse of Intellectual Property (IP) in major profit pools
  - Smartphones
  - Brick n' mortar retailing
  - The IT stack: compute, storage, service
  - Media / Advertising
  - Wireless
  - Pharmaceuticals
  - Auto Insurance
  - Autos
  
- ▶ Conclusions

# WHAT DRIVES STOCK PRICES?

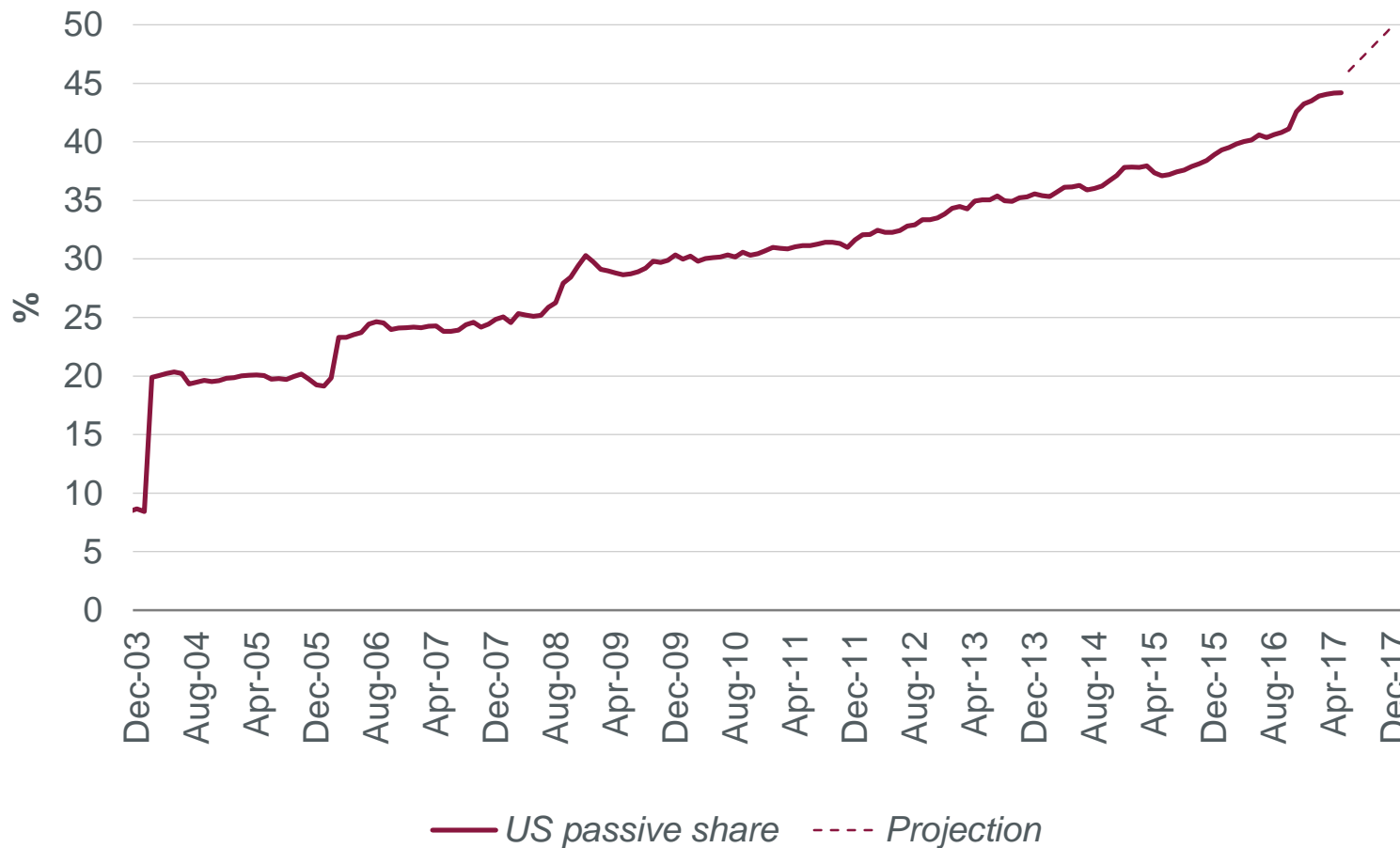
Profits



Source: Compustat earnings per share (S&P 500 EPS) data, as of 12/31/15. Each portfolio of positive and negative earnings companies is rebalanced monthly and market cap weighted.  
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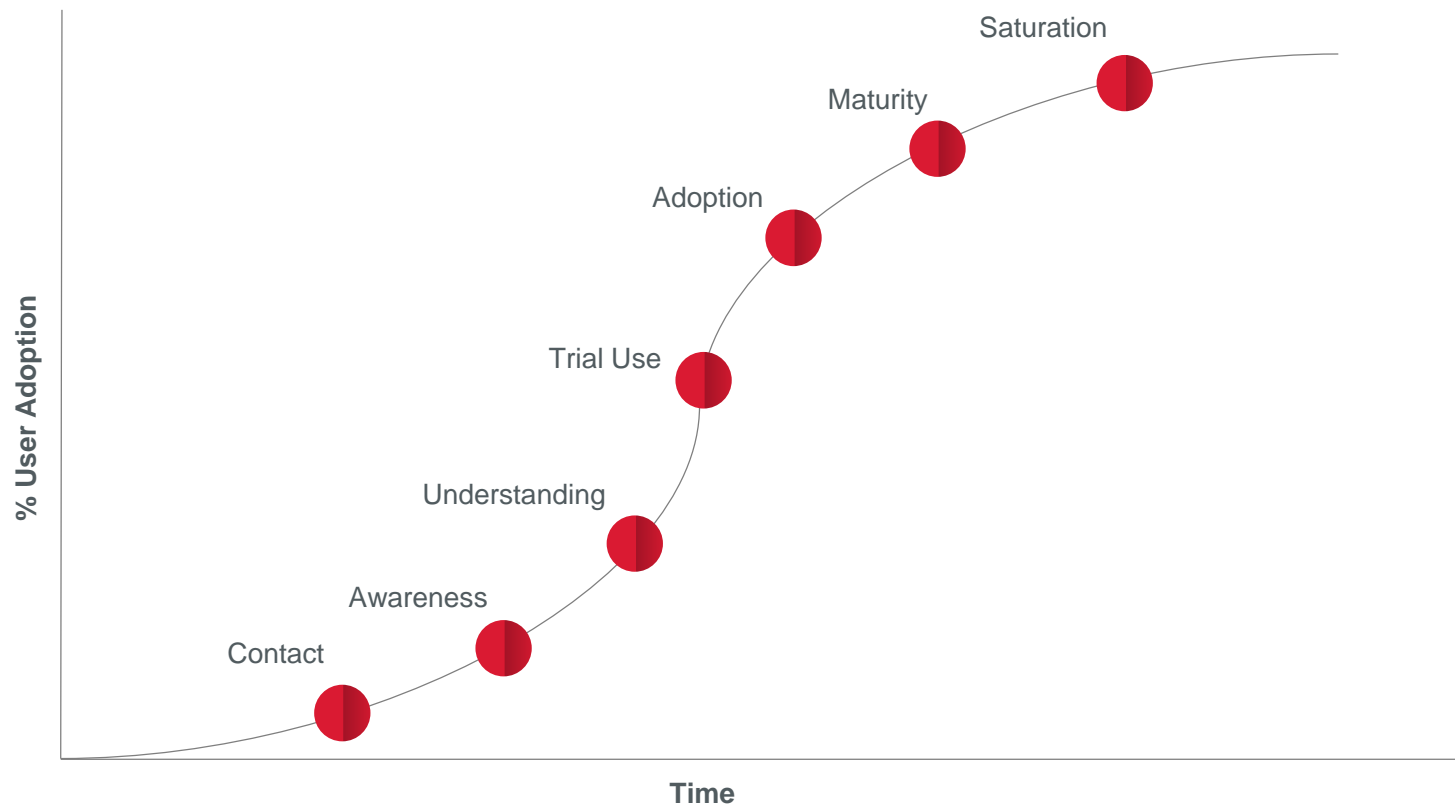
# WHAT DRIVES STOCK PRICES?

U.S. passive share and growth projection



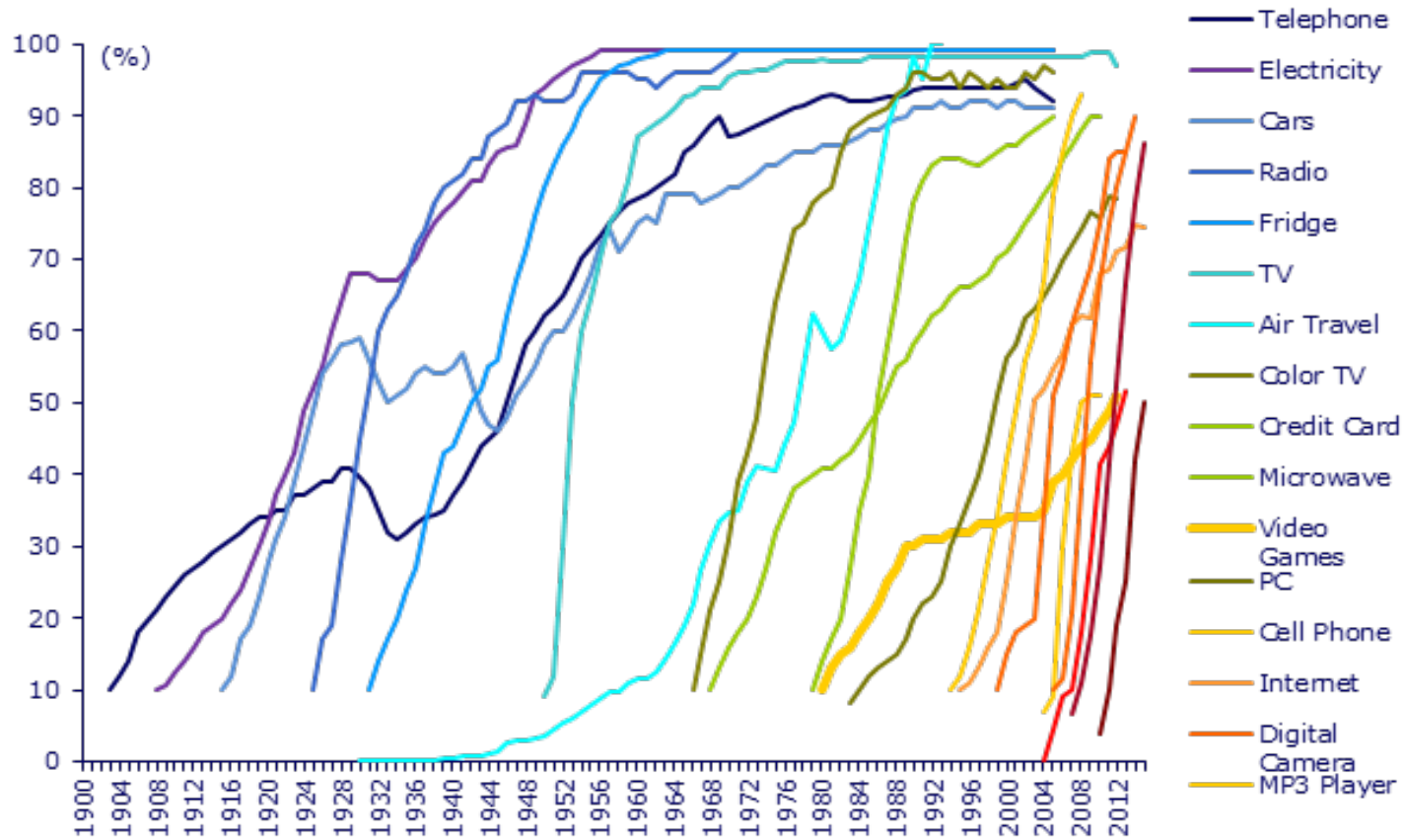
# WHAT DRIVES STOCK PRICES?

## "S Curve"



# WHAT DRIVES STOCK PRICES?

## "S Curve"



Source: CLSA, as of 12/28/15.

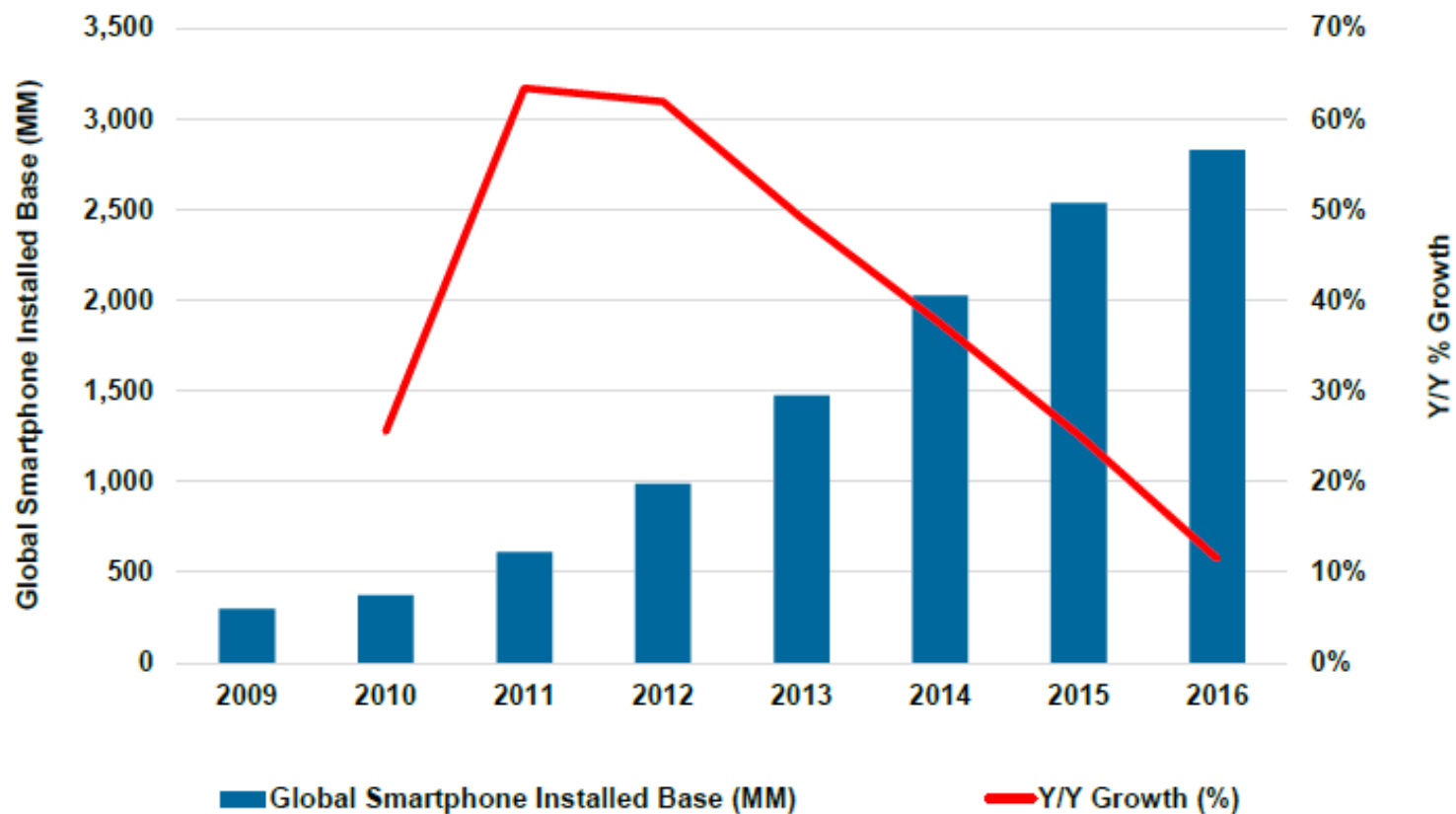
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# COLLAPSE OF IP IN MAJOR PROFIT POOLS

Smartphones

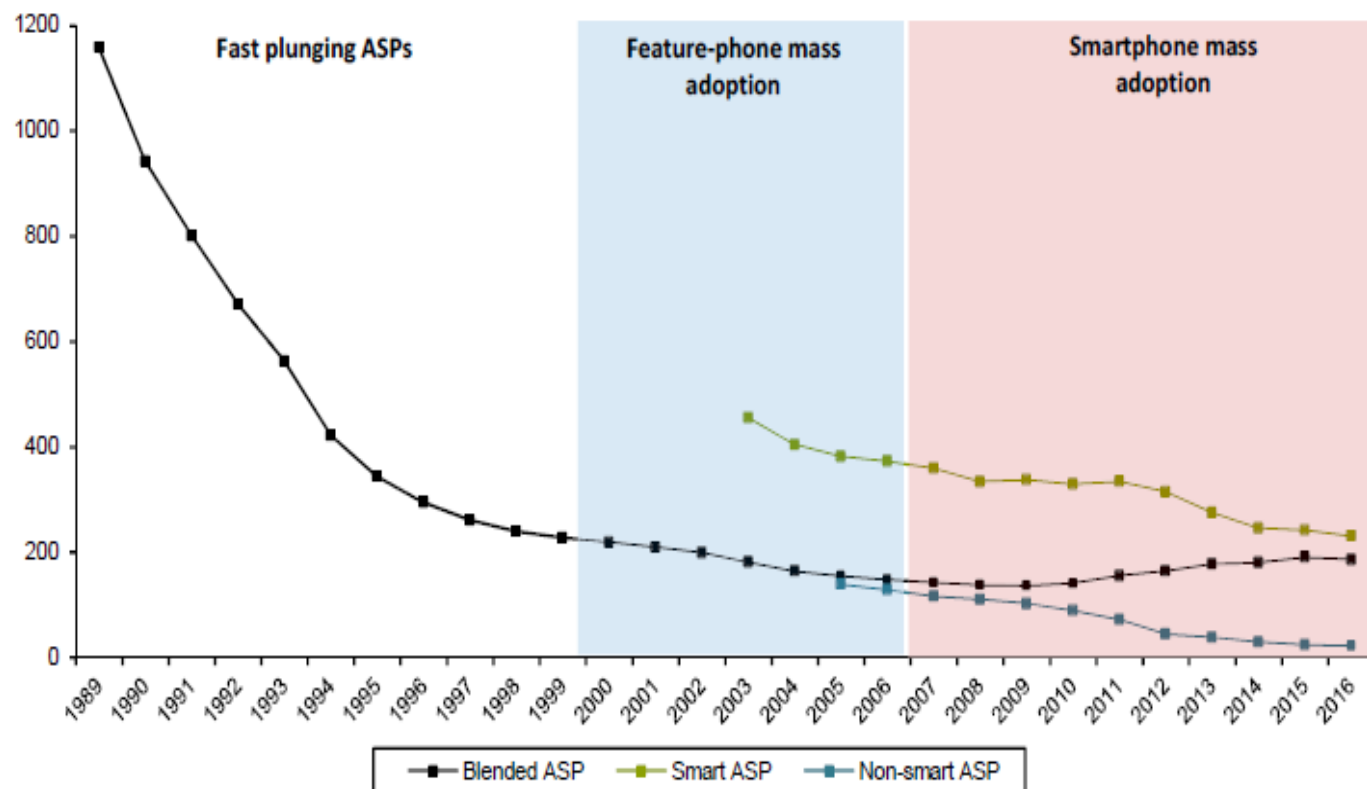


## Global Smartphone Installed Base (MM), 2009 – 2016



# COLLAPSE OF IP IN MAJOR PROFIT POOLS

## Smartphones





# COLLAPSE OF IP IN MAJOR PROFIT POOLS

Brick n' mortar retailing



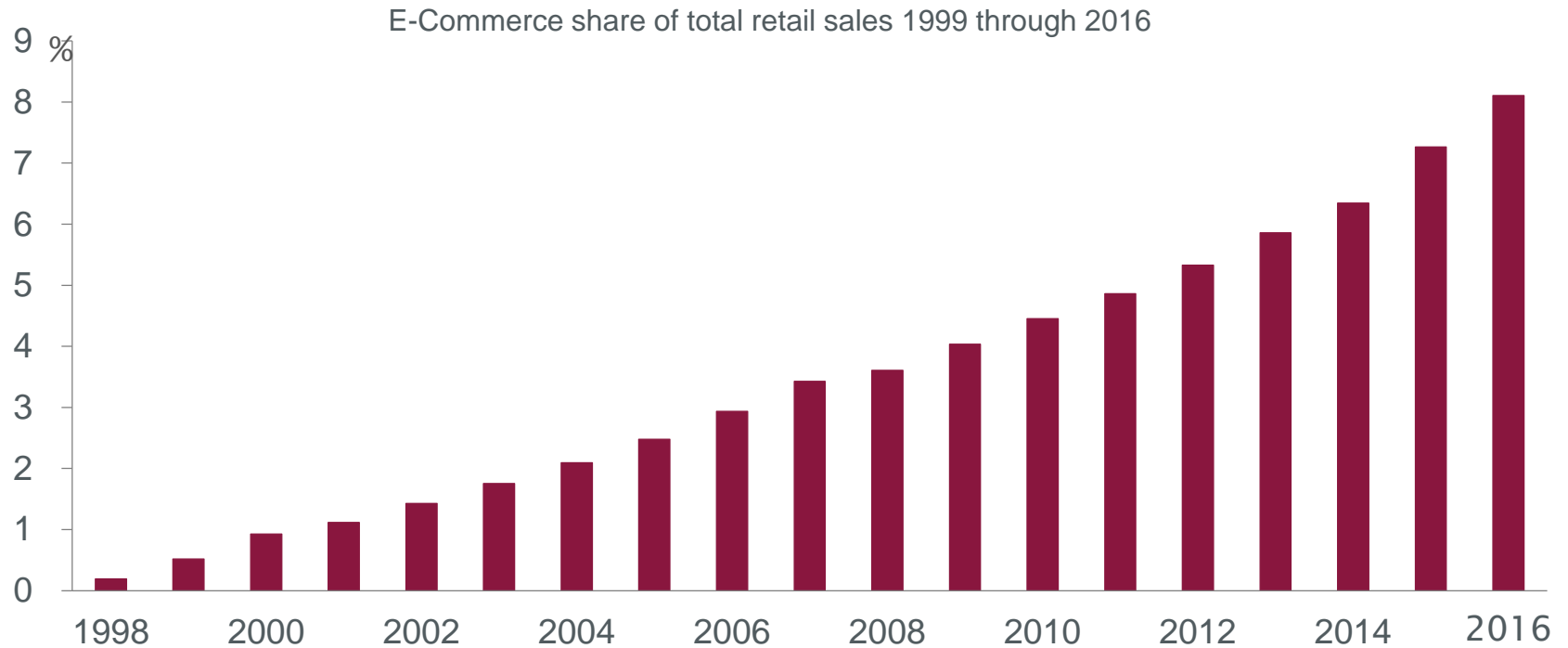
Country	Shopping center GLA (sq ft in millions)	Population (millions)	GLA per Capita
United States	7,527	319	24
Canada	542	36	15
U.K.	318	64	5
France	264	64	4
Italy	171	60	3
Spain	142	46	3
Germany	195	80	2

Source: ICSC September 2015.

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# COLLAPSE OF IP IN MAJOR PROFIT POOLS

Brick n' mortar retailing

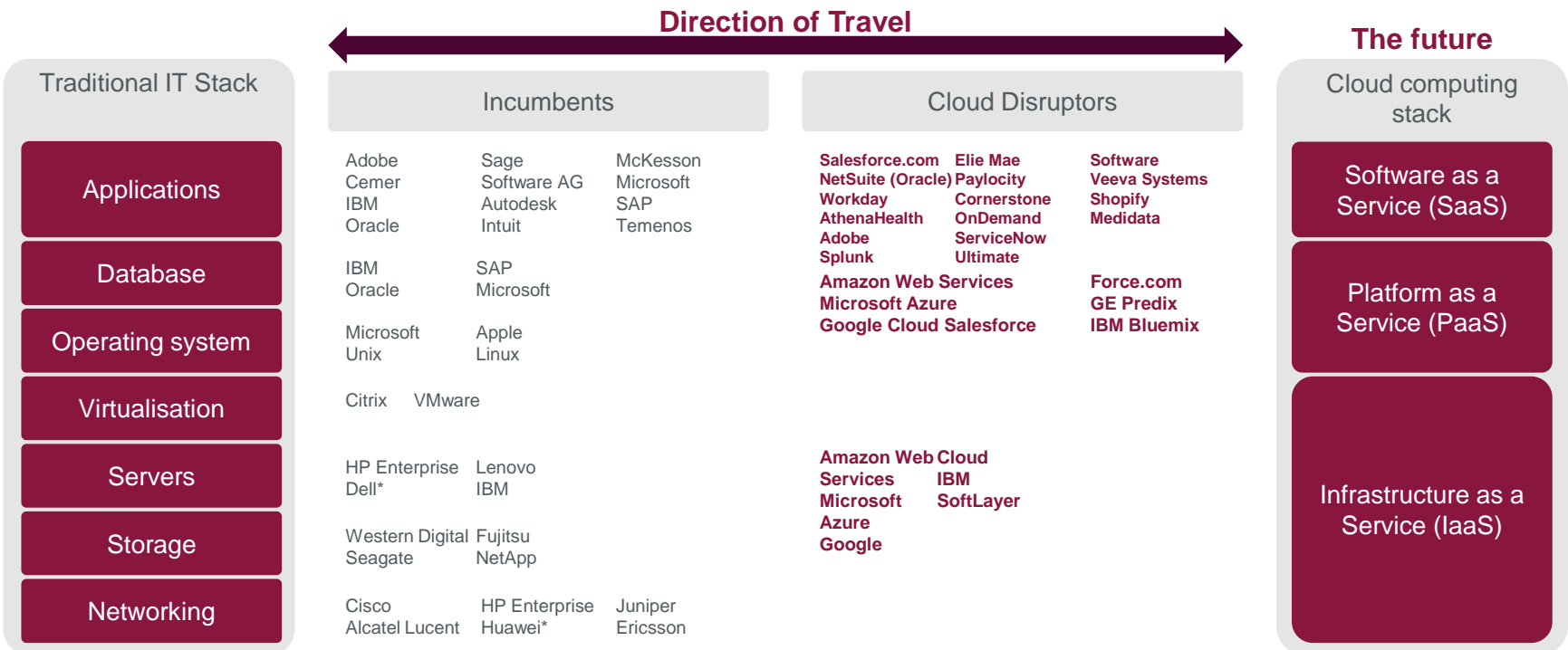


# COLLAPSE OF IP IN MAJOR PROFIT POOLS

The IT Stack: compute, storage, service

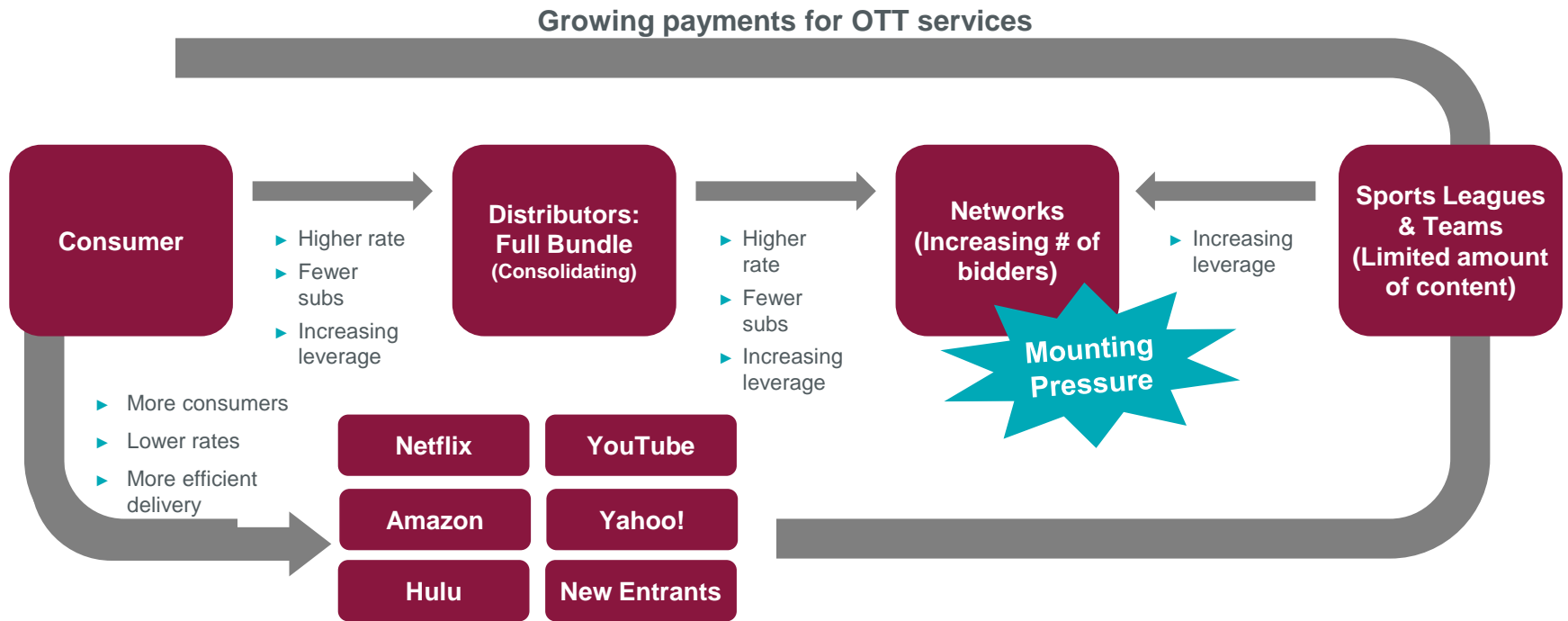


The traditional IT stack is shifting towards the Cloud computing stack.



# COLLAPSE OF IP IN MAJOR PROFIT POOLS

## Media / Advertising

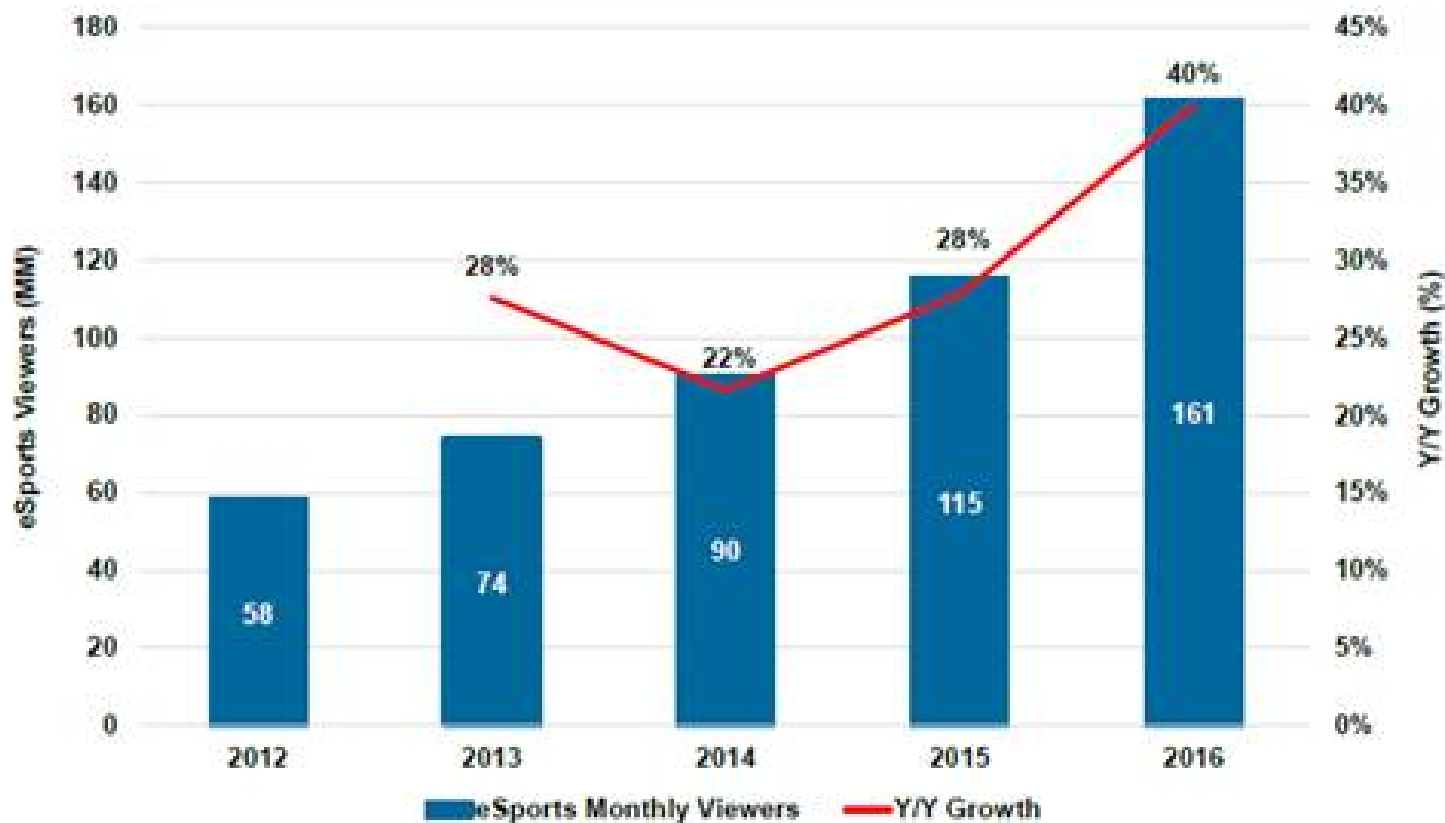


# COLLAPSE OF IP IN MAJOR PROFIT POOLS

Media / Advertising



## eSports Monthly Viewers, Global, 2012-2016



Sources: Kleiner Perkins May 2017 /bNewzoo Global eSports Market Report (2/17), Newzoo press release (1/16), Newzoo Casual Connect Europe Presentation (2/15)

\*eSports Enthusiasts watch eSports once a month and/or participate in tournaments.

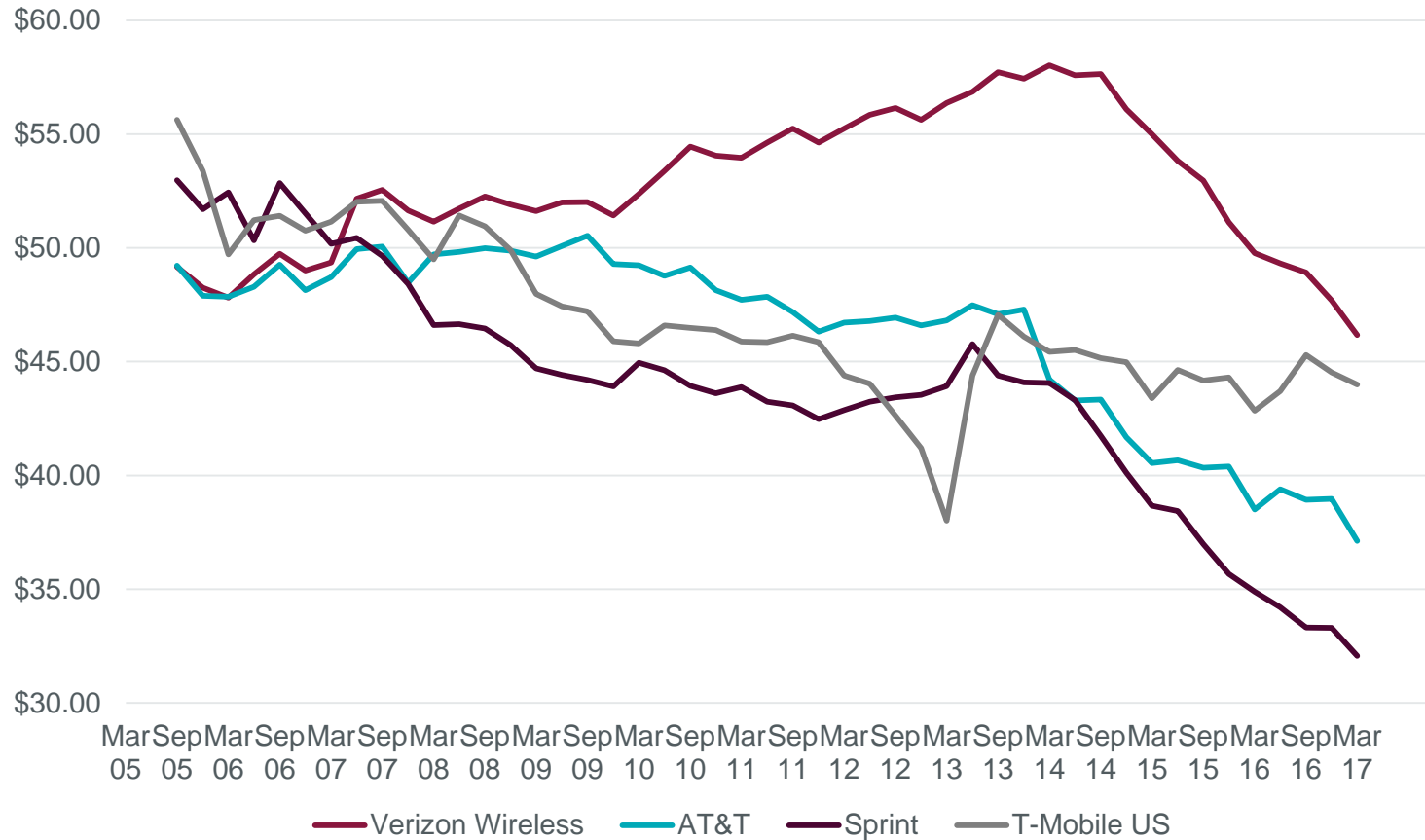
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# COLLAPSE OF IP IN MAJOR PROFIT POOLS

## Wireless



US Wireless Blended ARPU (ave rate per user)



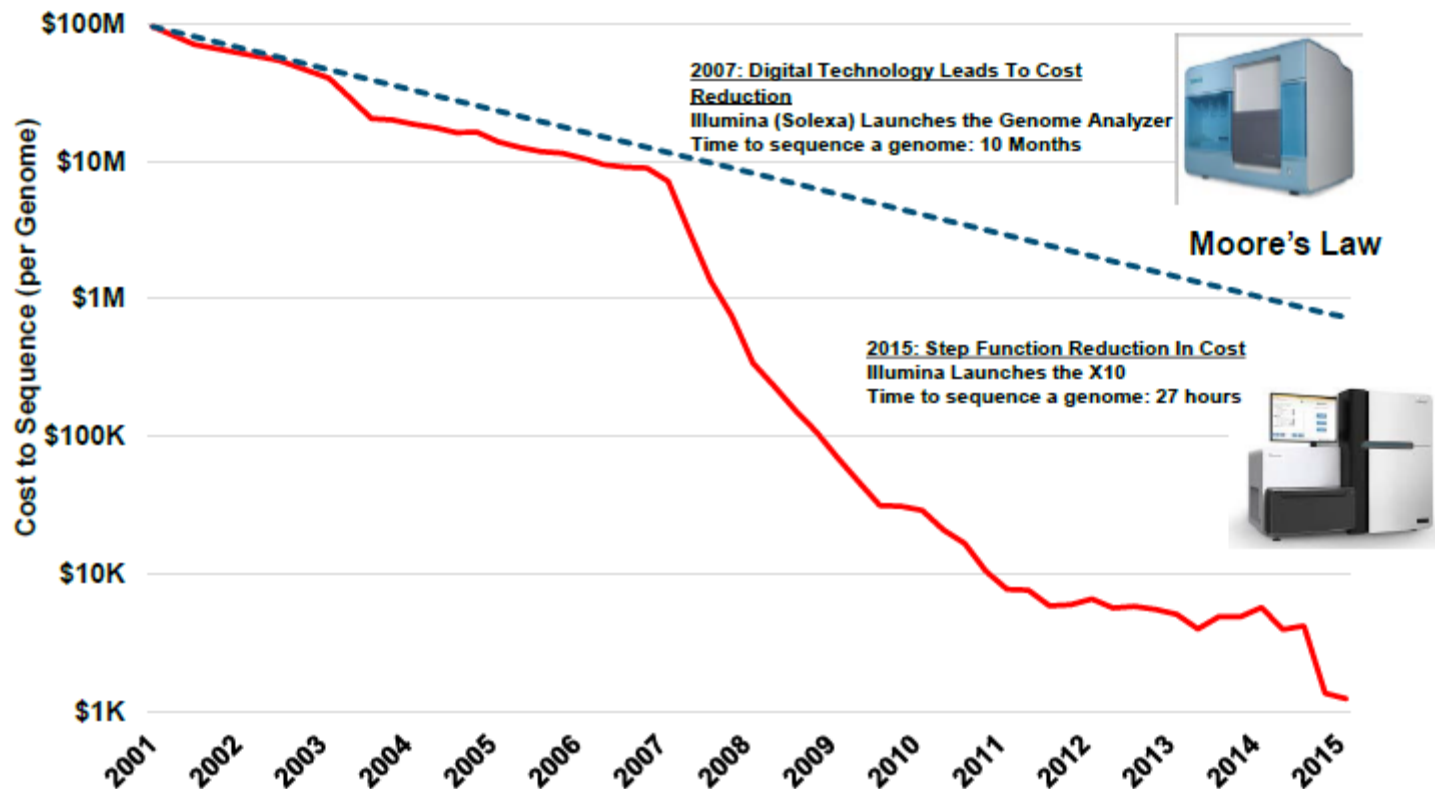
Source: MFS Research; Verizon 10Q 3/31/17; AT&T 10Q 3/31/17; Sprint 10Q 3/31/17; T-Mobile US 10Q 3/31/17

# COLLAPSE OF IP IN MAJOR PROFIT POOLS

Pharmaceuticals

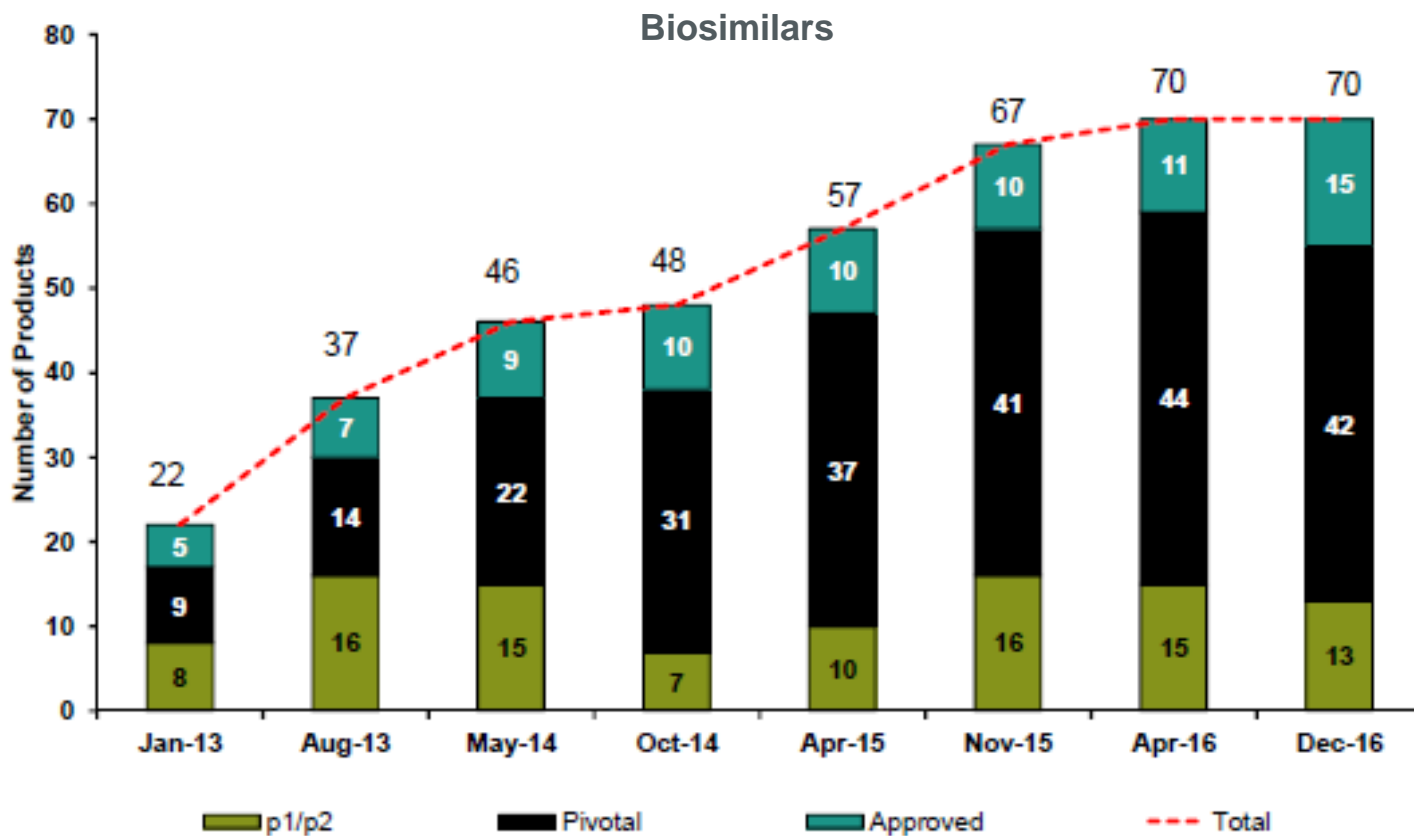


## Introduction of Digital Technology Accelerates Cost Reduction Faster Than Moore's Law



# COLLAPSE OF IP IN MAJOR PROFIT POOLS

Pharmaceuticals

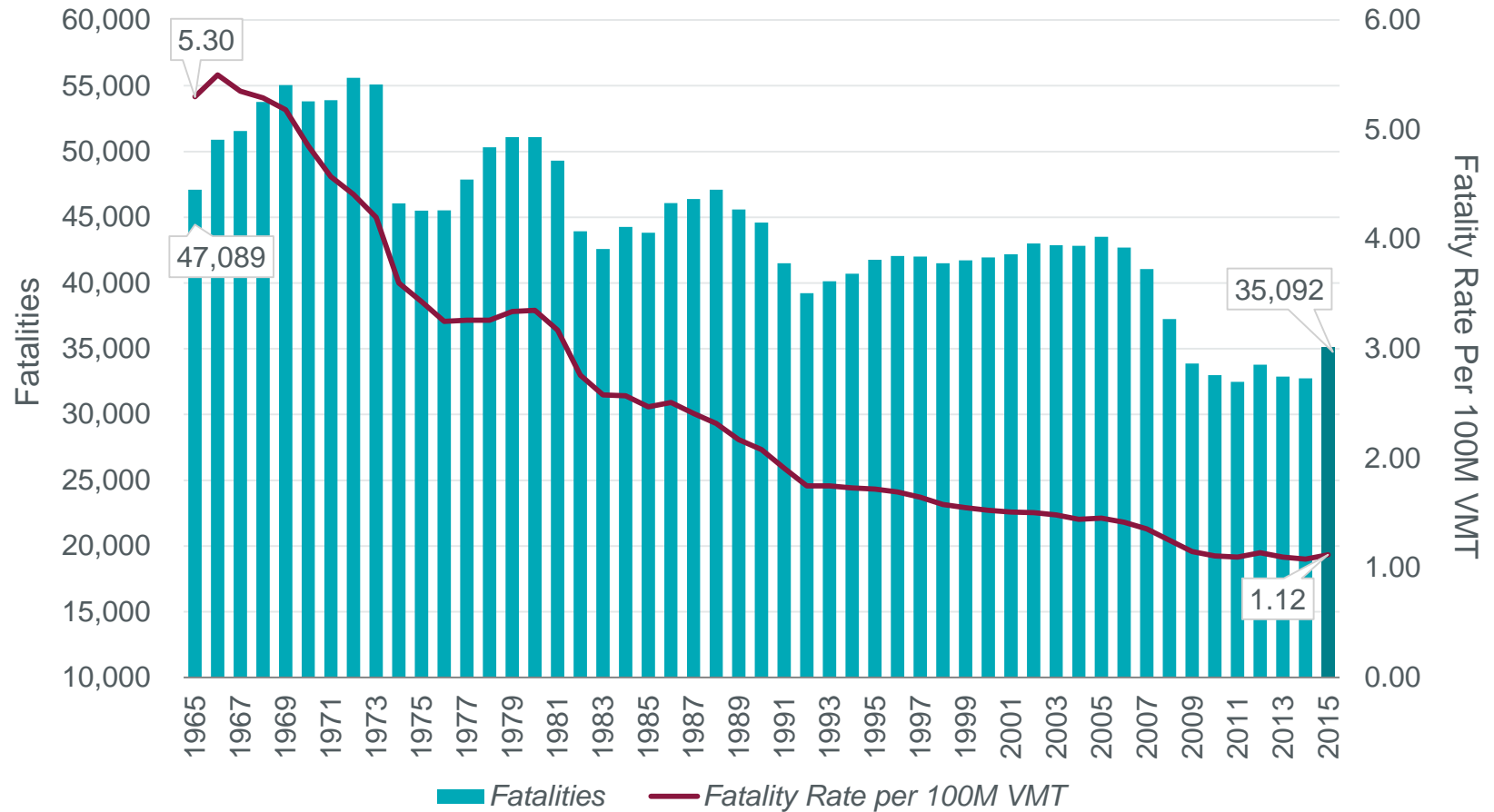


Sources: Bernstein, "Biosimilars: Who is doing what? December 2016 – Snapshot of the biosimilar industry pipeline." December 19, 2016  
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# COLLAPSE OF IP IN MAJOR PROFIT POOLS

## Auto Insurance



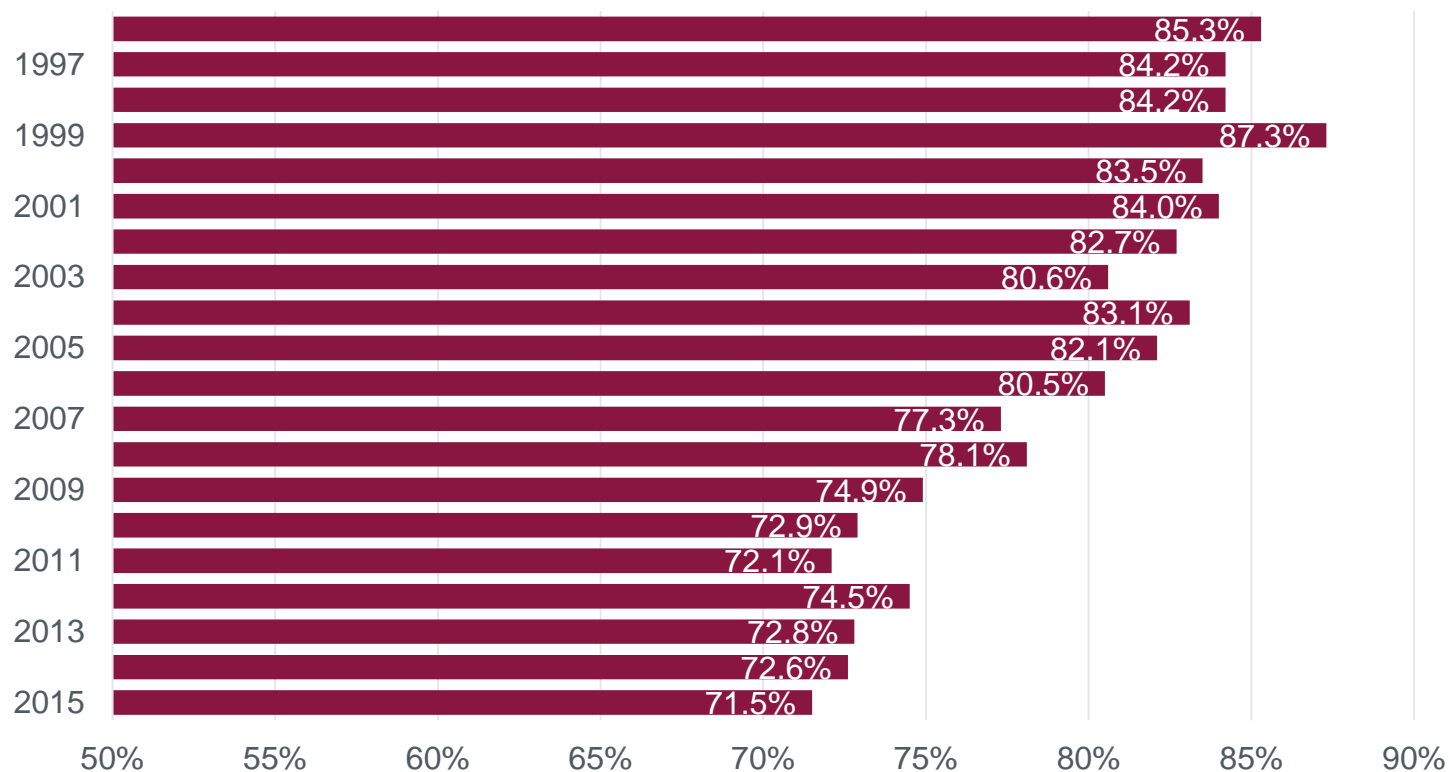
Sources: 1965-1974: National Center for Health Statistics, HEW, and State Accident Summaries (Adjusted to 30-Day Traffic Deaths by NHTSA); FARS 1975-2014 Final File, 2015 Annual Report File (ARF); Vehicle Miles Traveled (VMT): FHWA. Published August 2016.

# COLLAPSE OF IP IN MAJOR PROFIT POOLS

Auto Insurance



Share of high school seniors with driver's licenses

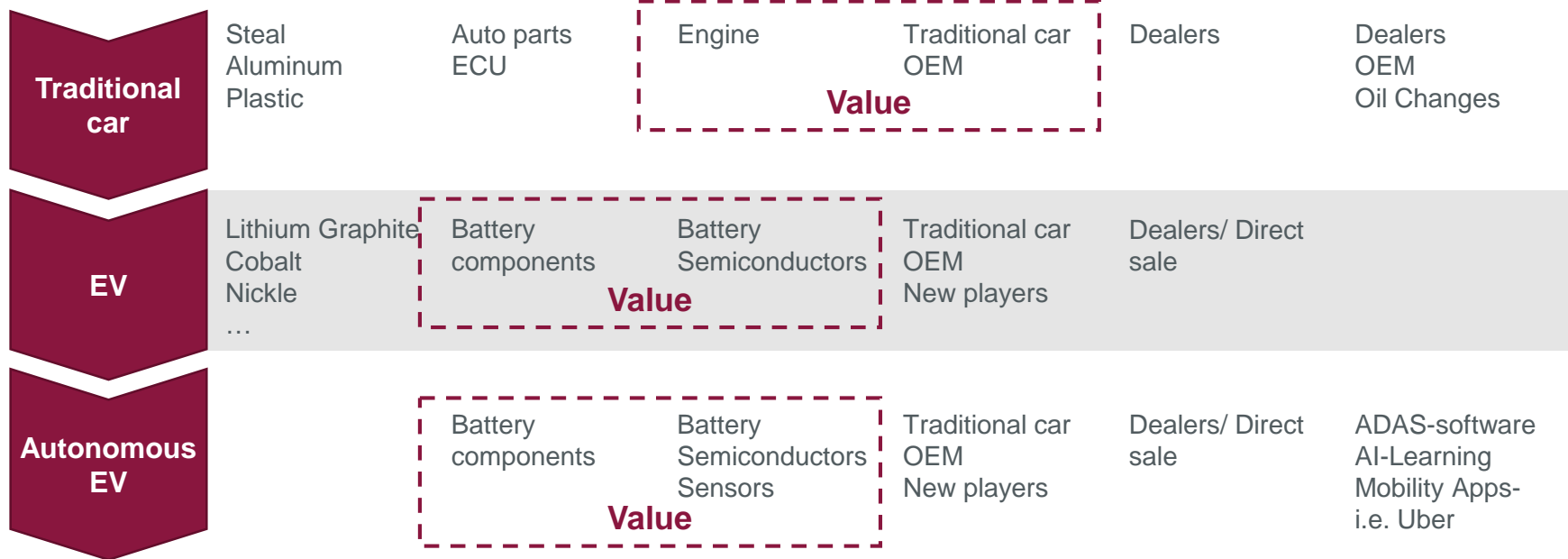


Source: Monitoring the Future survey, University of Michigan.

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# COLLAPSE OF IP IN MAJOR PROFIT POOLS

Autos



# CONCLUSIONS



- ▶ Investors anchor to the wrong data points
- ▶ Technology destroying intellectual property across industries
- ▶ Fragmented profit pools are being aggregated
- ▶ ETFs are rear-view mirror linear approximations of cash flows...but cash flows aren't linear



# THANK YOU

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