

Desautels Capital Management

Honours in Investment Management

Fall 2023 Holdings and Industry Overview

TMT

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October 18th, 2023





TMT Sector Performance

- Sector over performance mainly driven by big tech
- Industry is currently driven by innovation in the AI / data front, as many companies are going through digital transformations



Artificial Intelligence

- **AI Models:** Too many uncertain variables and market excitement warrant caution here,
- **Power Supply:** We believe hardware provides unattractive risk/reward given current valuation, while hyperscalers are playing the toll road rather than the dealership
- **Data:** Unique Approach Could Reveal Companies With Underappreciated Monetization Potential



Media & Entertainment

- **DTC:** Companies will need to continue to burn cash in hopes of reaching DTC profitability, DTC operating profitability ~2027E-2029E vs street estimates of ~2027E
- **TV:** Revenue growth to realize in line with market expectations; however, margins are expected to suffer from downward pressure due to recent AAV sports programming step-ups
- **Theatrical:** DCM views in line with the market



Payment Processing

- The median digital payment stock is down significantly over the past year.
- Revenue and EPS growth Y/Y has come down significantly, but we think the long-term drivers are still intact and the future looks bright.
- Given attractive risk/reward profile, we believe this to be a very exciting time to deploy capital to payment companies.


Agenda

- I. TMT Overview**
- II. Artificial Intelligence (AI)**
 - I. Market View**
 - II. Interpretation**
- III. Media & Entertainments**
 - I. Market View**
 - II. Interpretation**
- IV. Payment**
 - I. Market View**
 - II. Interpretation**
- V. Holdings review**
- VI. Appendix**

TMT (Technology, Media, Telecommunications) Overview

What is TMT about?

TMT Make up




Technology

- Hardware
- Software
- Tech services



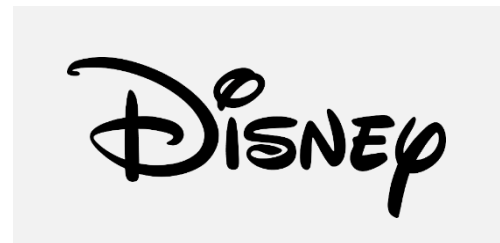
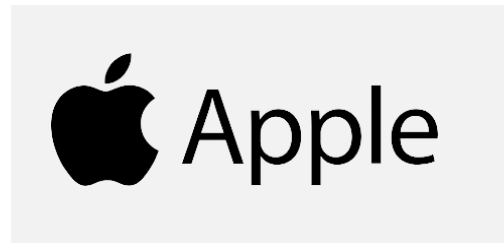
Media

- Entertainment
- Publishing
- Digital Media

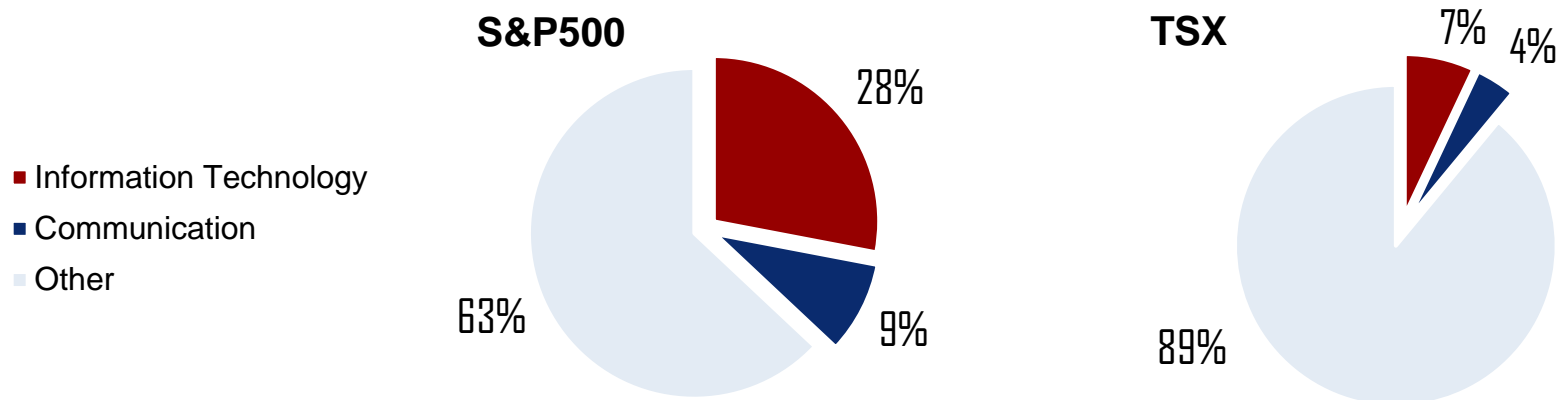


Telecom

- Internet
- Mobile
- Telecom equipment



TMT Weight in the S&P500 and TSX

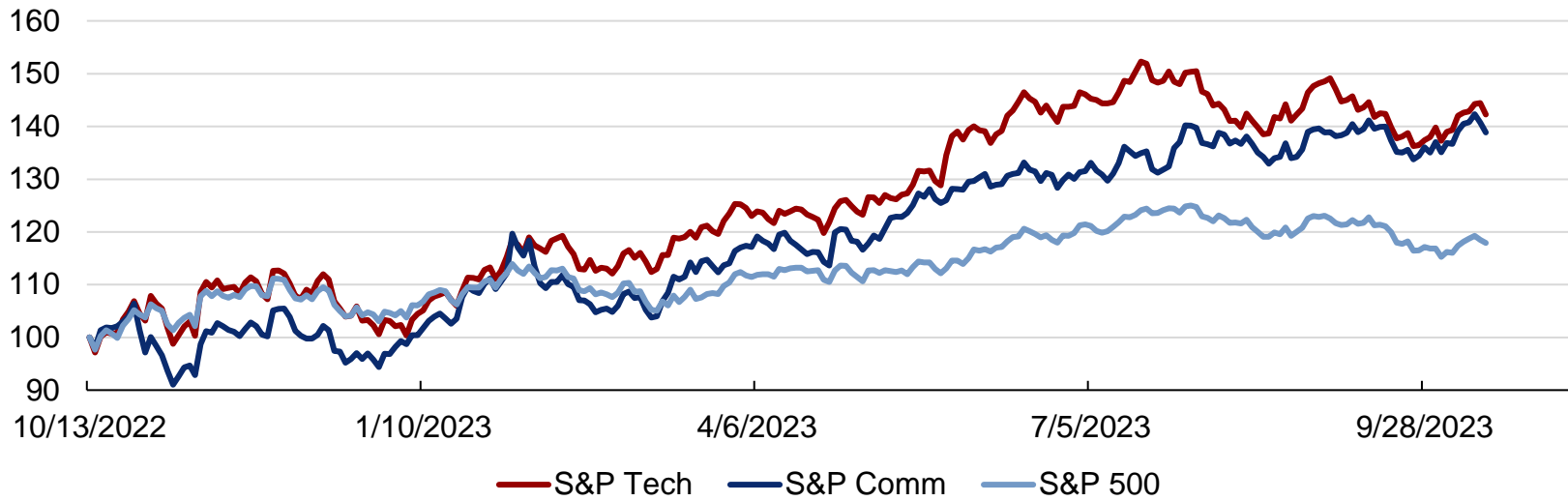


Source: Bloomberg

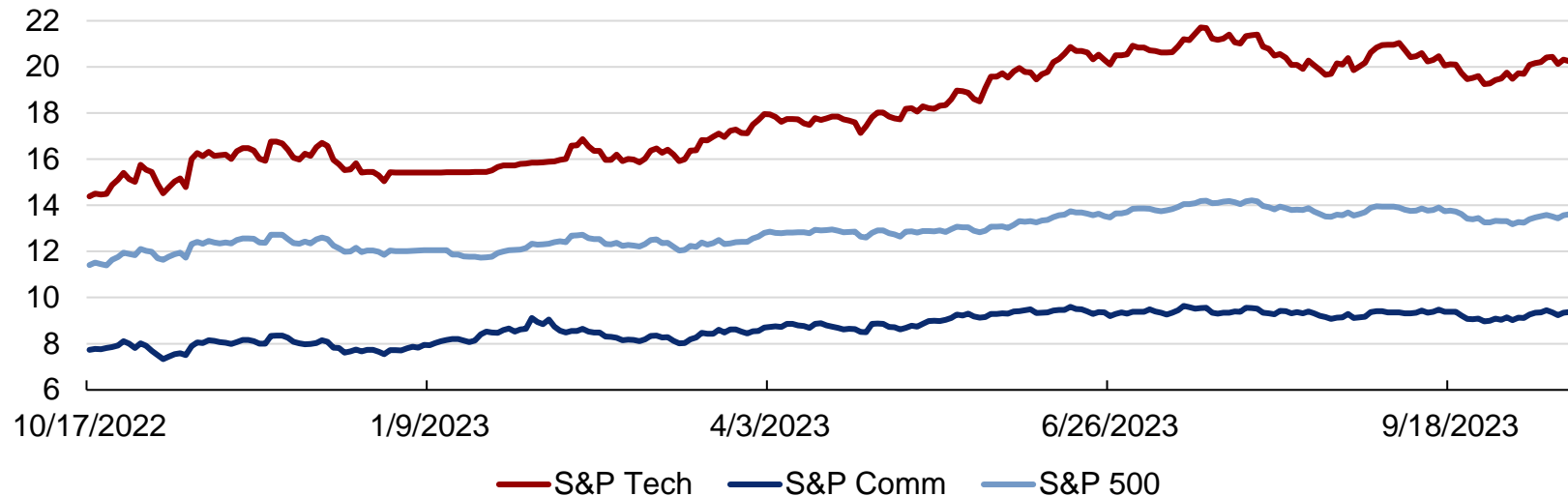
TMT Sector Performance (LTM)

As TMT sees a significant growth in price, EV/EBITDA multiples rise due to the anticipated growth of the industry

Price % change



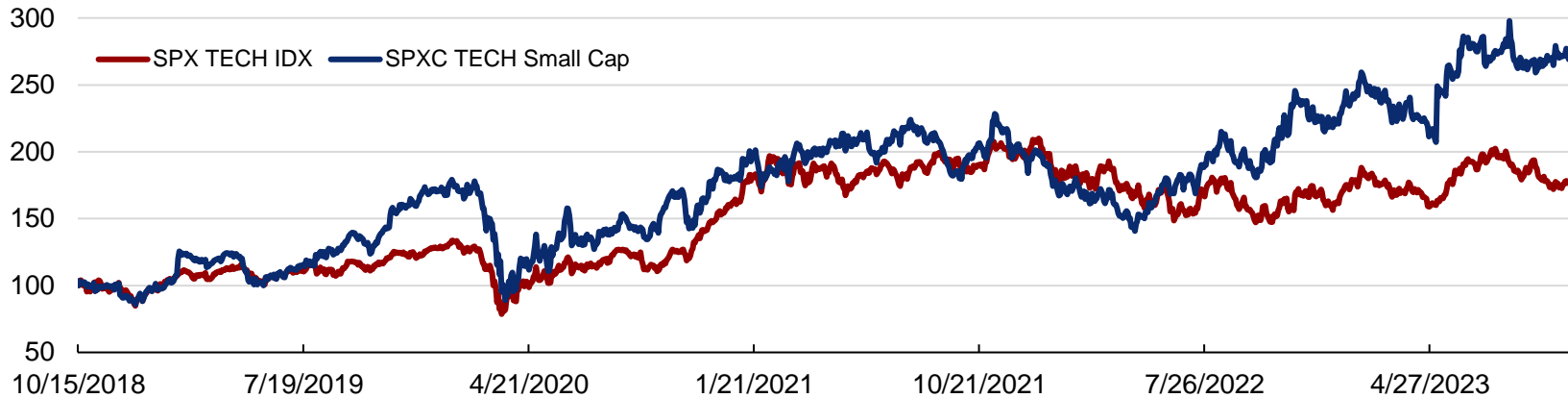
EV/EBITDA



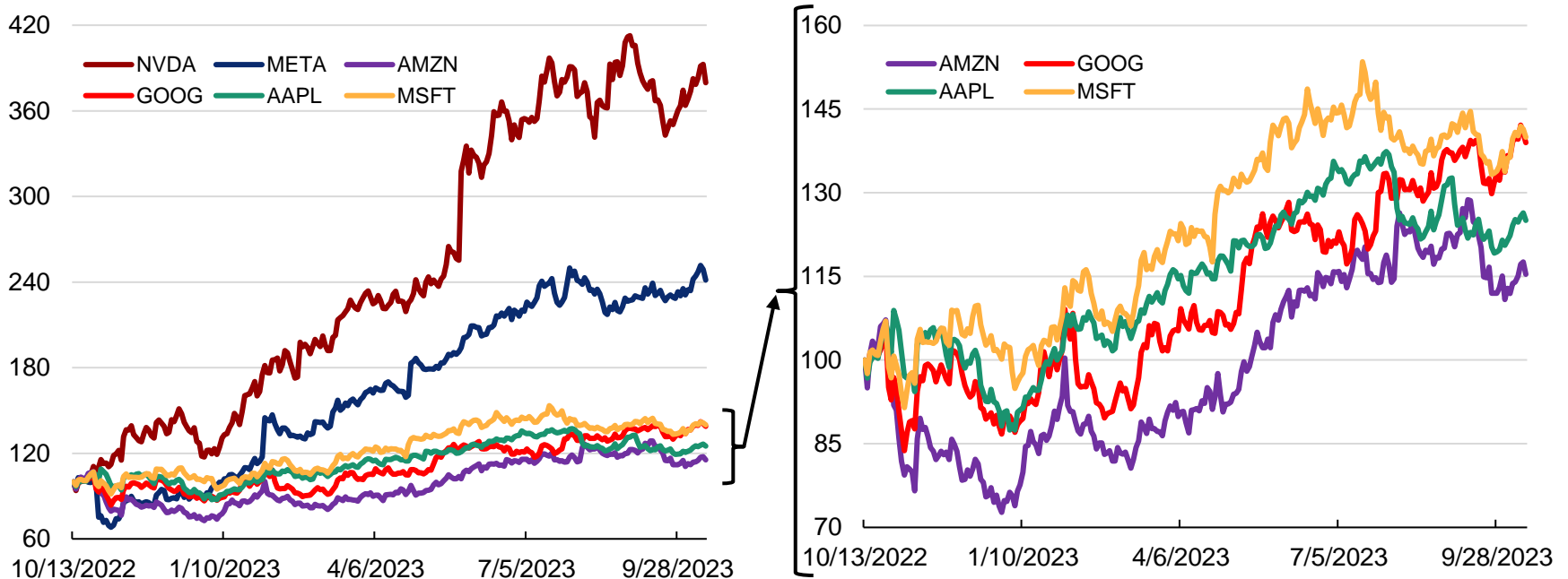
Source: Bloomberg

TMT's Big Players

TMT's growth is largely driven by TMT's big 6 players, this narrow breadth causes risk concerns



Big Player Make-Up



Source: Bloomberg

5 Key Revenue Drivers

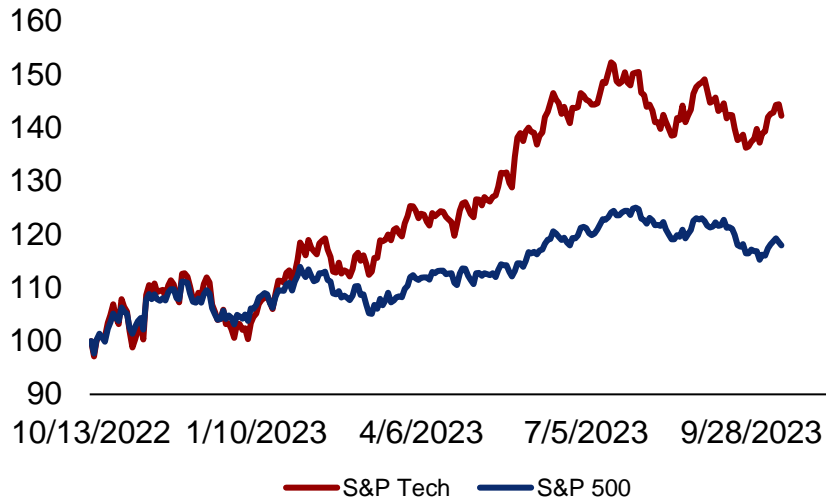
Software Licensing and SaaS

Cloud Services

Advertising and Digital Marketing

E-commerce and Online Marketplaces

Mobile Apps and In-App Purchases



Challenges

- Cyber security threats
- Talent acquisition/Skills gap
- Data protection and privacy

Key Trends



Digital Transformation

- Company shift toward digital transformation
 - Cloud computing
 - Big data analytics
 - Cybersecurity



Artificial Intelligence (AI)

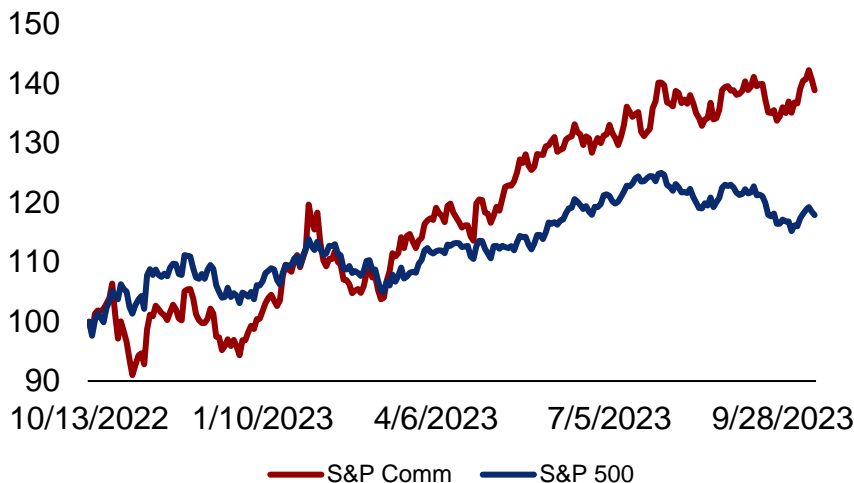
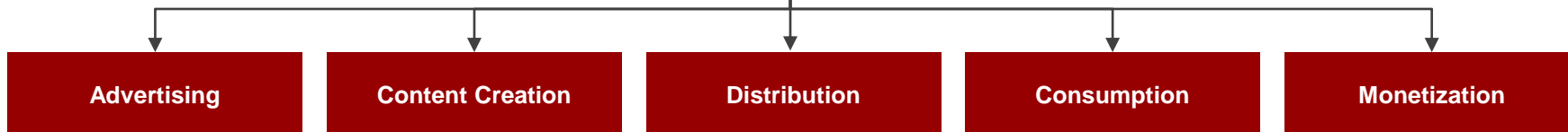
- Automation
- Virtual assistants
- Autonomous vehicles



Cyber security

- Firewalls
- Threat detection systems

5 Key Revenue Drivers



3 Key Trends to Consider

- Growing social media influence
- Increasing buying power of GenZ
- Analytics and AI
 - Content personalization/predictive analytics

Challenges



Increasing competition

- Increasing customer satisfaction is top priority
- 17% median churn rate for Media
 - Streaming services: 20%
 - Historically ~5.2%



Advertising remains largest source of revenue

- Not seeing strong growth

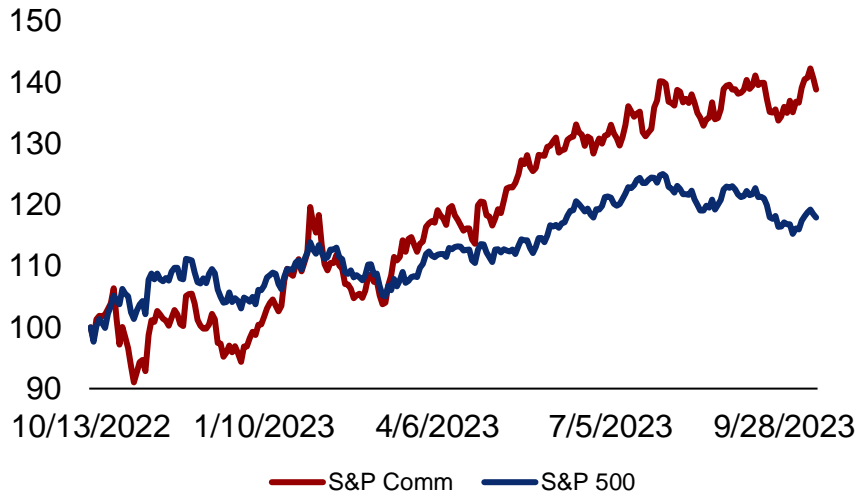


New forms of revenue streams

- 73% adding new revenue stream
- 65% of media companies in a survey reported contracts with influencers to promote products and services and draw in consumers to platform

Source: Bloomberg, Salesforce

5 Key Revenue Drivers



Key Trends

5G

Deployment of 5G

- Most transformative
 - Faster data speeds
 - Lower latency
 - Support many connected devices and applications



Network Virtualization

- Decoupling network services
- Virtual network instances
- Software-defined networking

1010 1010

Edge Computing

- Reduces latency
- Moves data processing closer to the source
- Saves bandwidth

Challenges

- 5G deployment and infrastructure
 - Massive investment in infra / regulatory approvals/ network architecture
- Network security/data privacy
 - Sensitive data = active target for cyber security attack
- Market competition and innovation
 - Technological advancements/ consumer demands

Source: Bloomberg

Desautels Capital Management

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Theme Review: Artificial Intelligence

Section 1



Just a Fancy Regression Model

Not Really a Sector

- Currently a theme with large breadth, reaching companies far beyond TMT

Artificial Intelligence

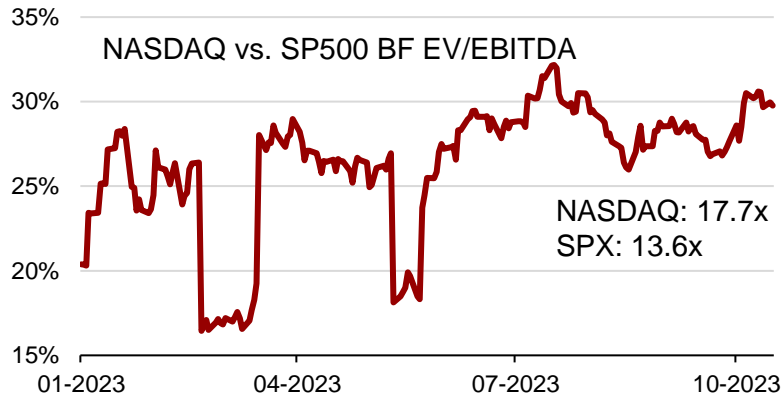
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Approximating Valuations

- Difficult to isolate AI's performance contribution
- Taking NASDAQ Contributors as proxy



Source: Bloomberg, Stanford

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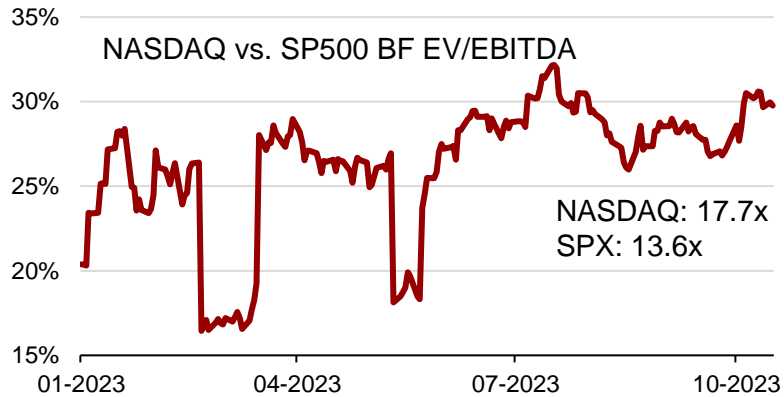
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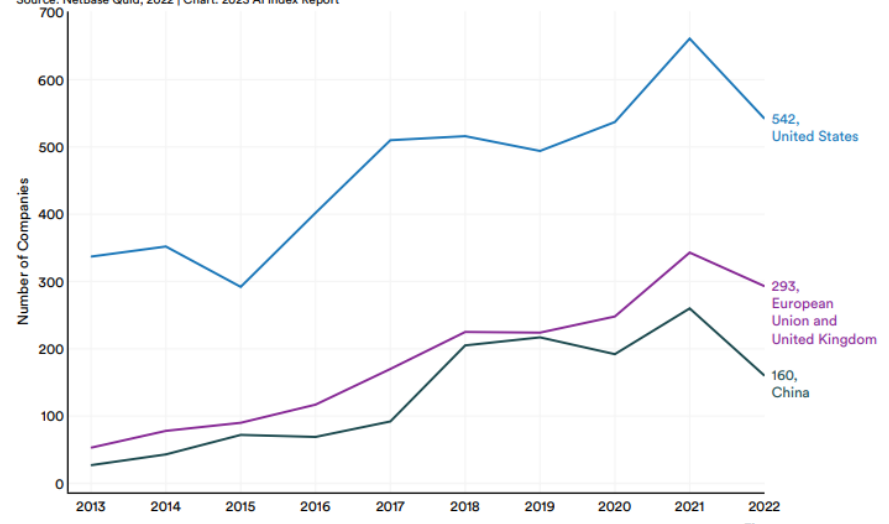


Source: Bloomberg, Stanford

Today's Winners Won't Be Tomorrow's

Number of Newly Funded AI Companies by Geographic Area, 2013-22

Source: NetBase Quid, 2022 | Chart: 2023 AI Index Report



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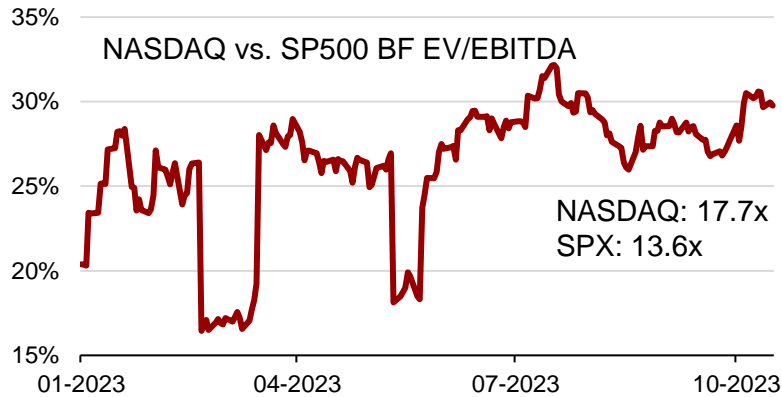
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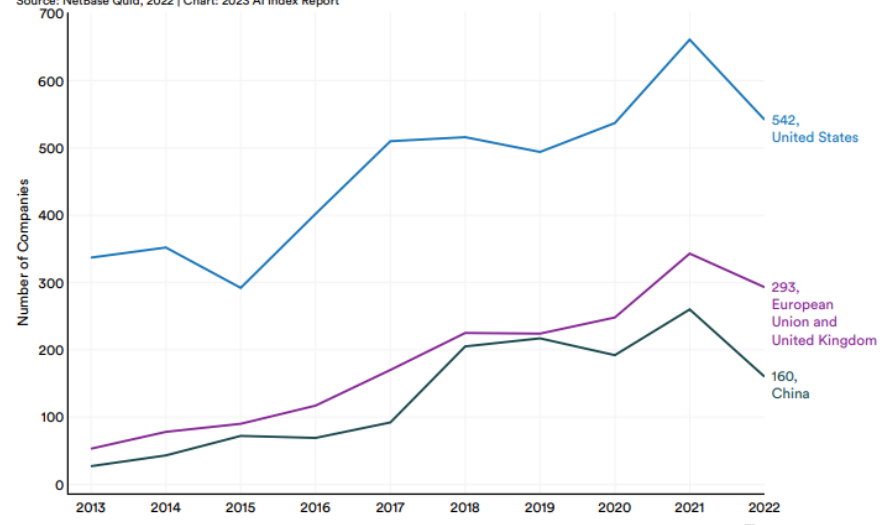


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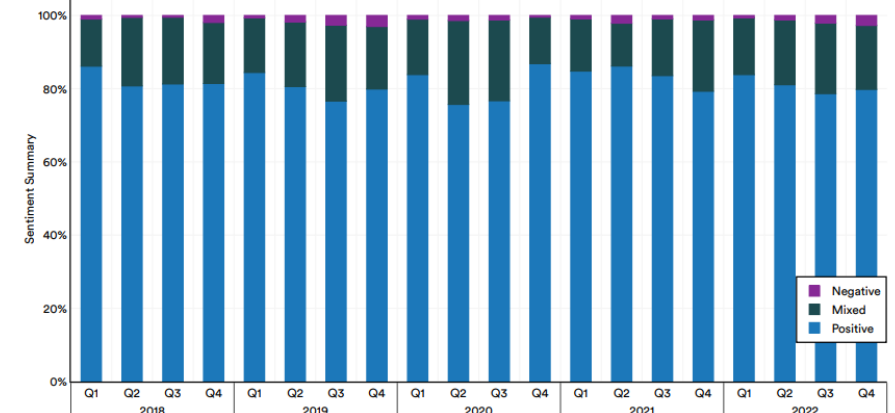
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Losers of AI Aren't In Focus

Sentiment Summary Distribution for AI Mentions in Fortune 500 Earnings Calls by Publication Date, 2018–22

Source: NetBase Quid, 2022 | Chart: 2023 AI Index Report



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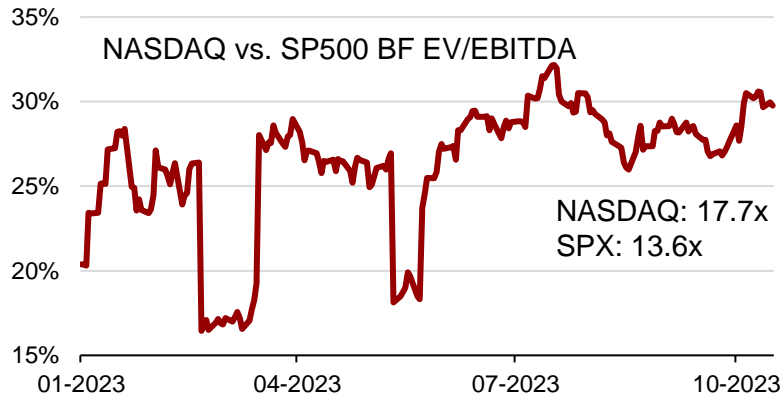
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Do We Want To Be Investors?

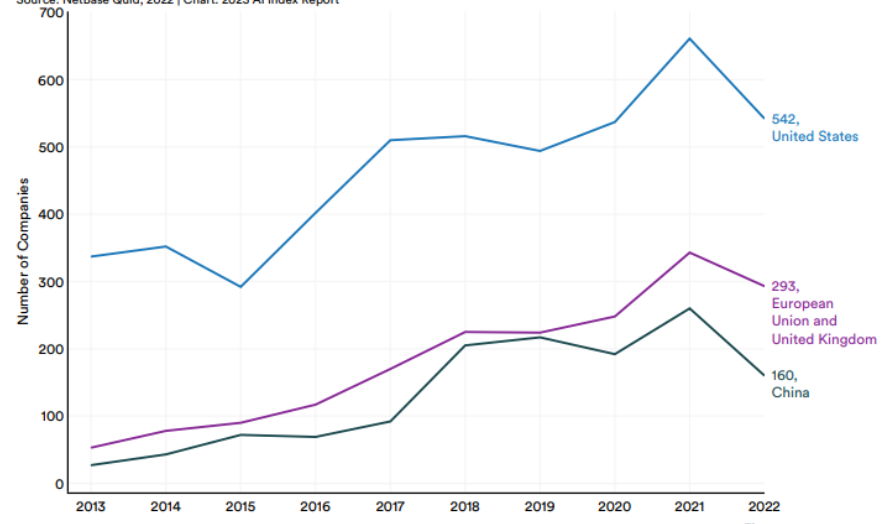
- Not unless ROIC is high(er) with AI in play
- Significant uncertainties could make AI products benefit consumers rather than Enterprises
- Great Tech \neq Great Investment
- Examples of Revolutionary Technologies Played Wrong
 - Airplanes Invention \rightarrow Airlines
 - Automobile Invention \rightarrow Car Manufacturers
 - SVOD \rightarrow Media Producers

Source: Bloomberg, Stanford

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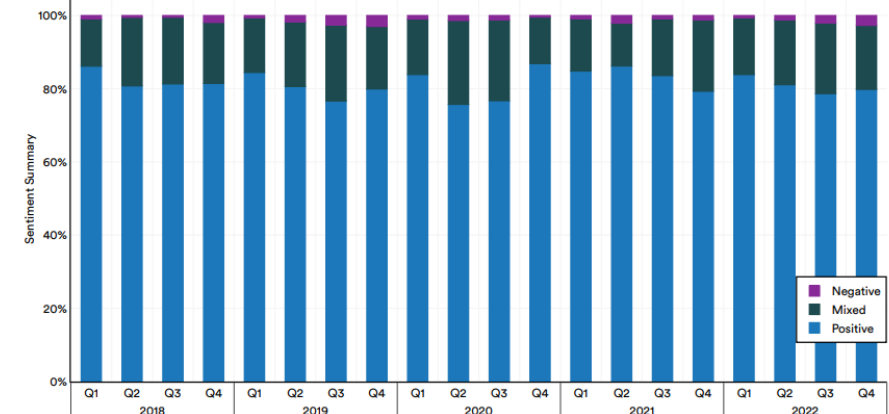
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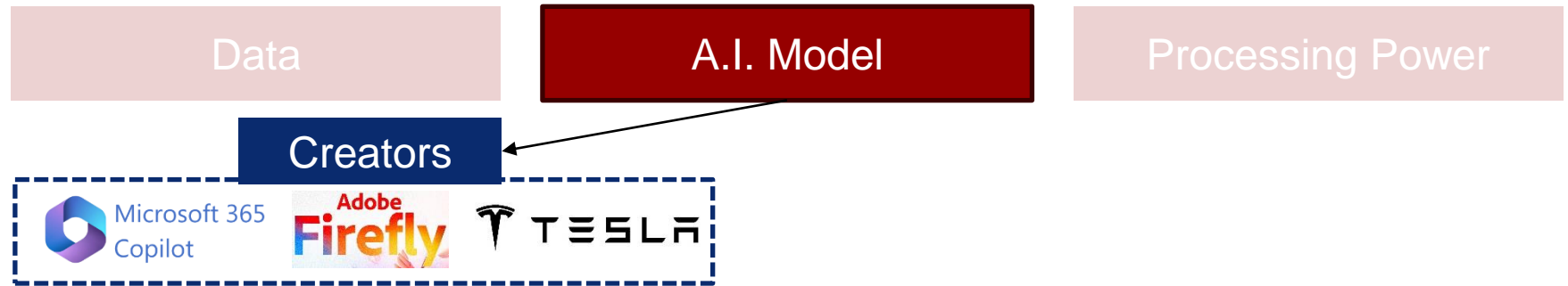
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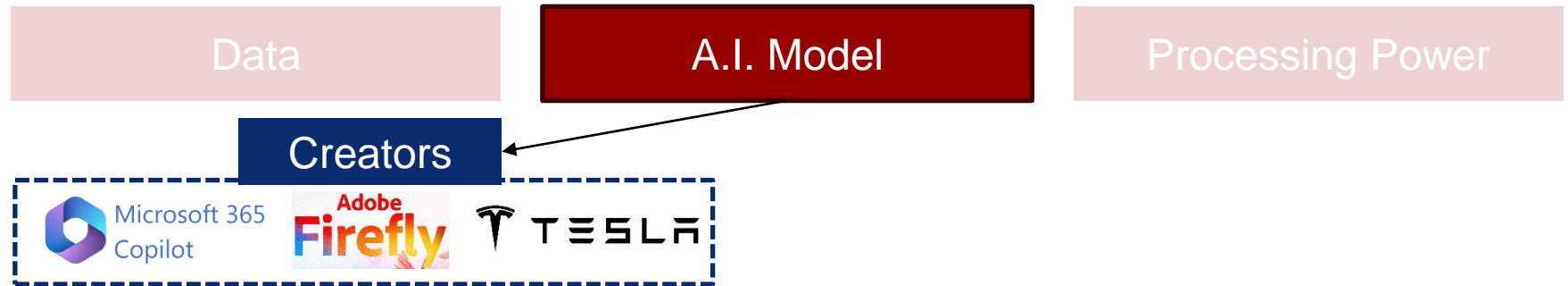


Bullish View

Our View

Artificial Intelligence

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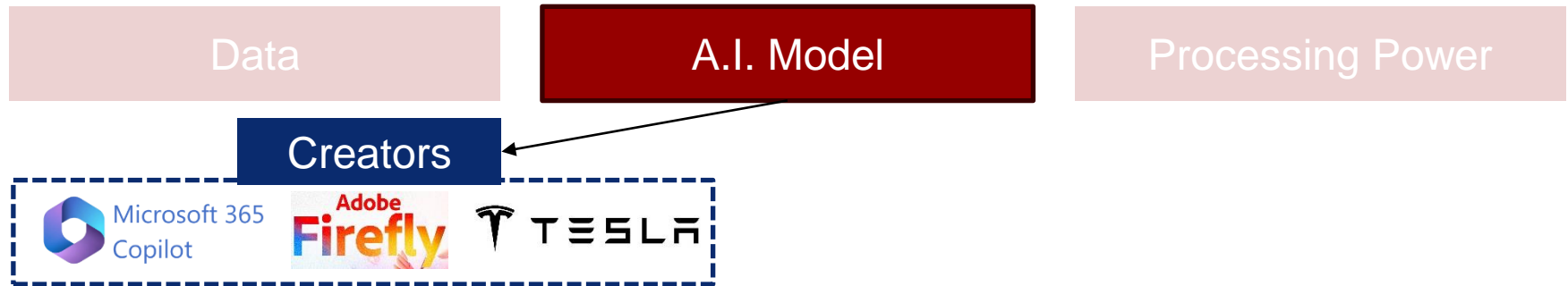
Bullish View

- Will Have Significant **Pricing Power**
- **Early** Innings of Terminal Potential
- **Disruptor** Potential is Huge
- Models Are Hardly Replicable, **Proprietary**

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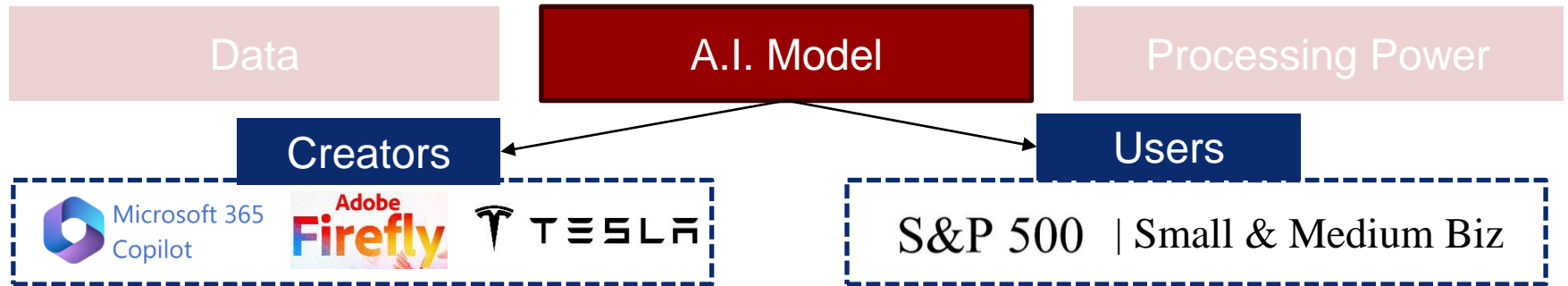
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Significant Uncertainty Includes:

- TAM
- ARPU & Payment Model
- Adoption Rate
- Regulatory Limitations
- Barriers to Replication (Customer/Competitor)
- Terminal Technology Potential

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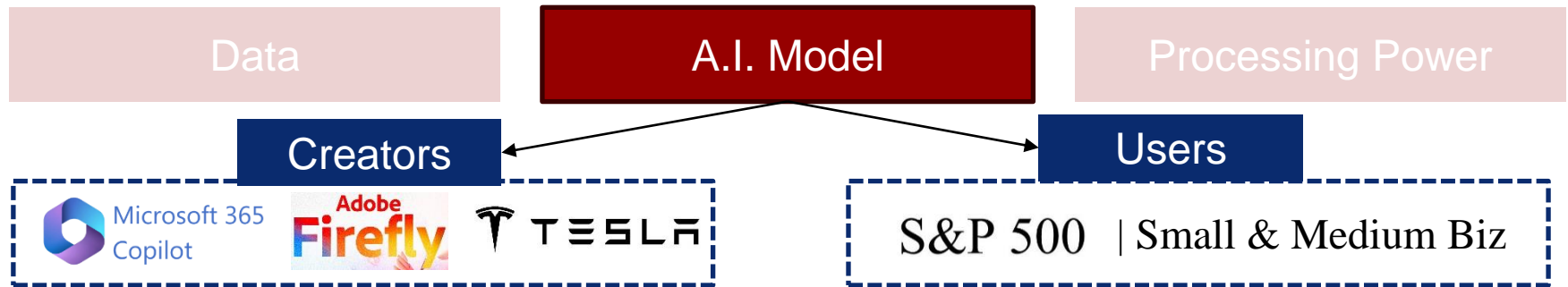
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- **Profitable** Tools (Significant Cost Savings)
- Increased **Efficiency**
- Relevant Across **All Industries**

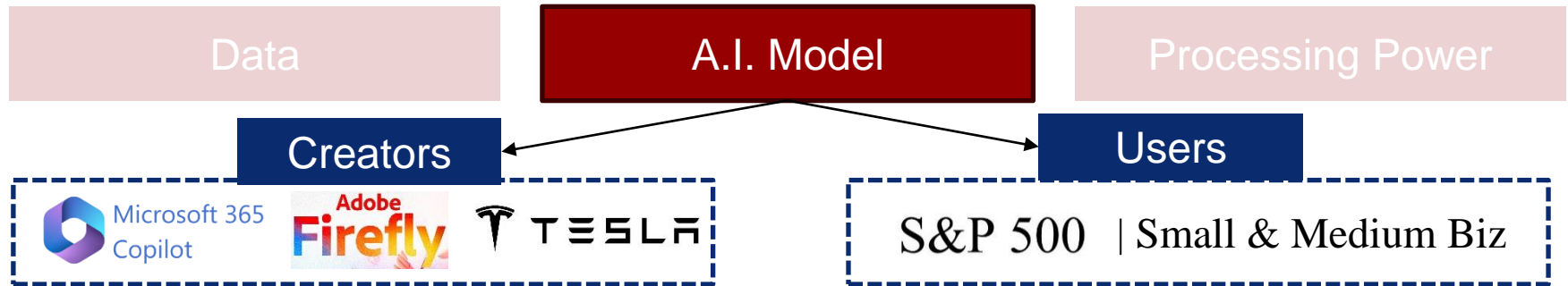
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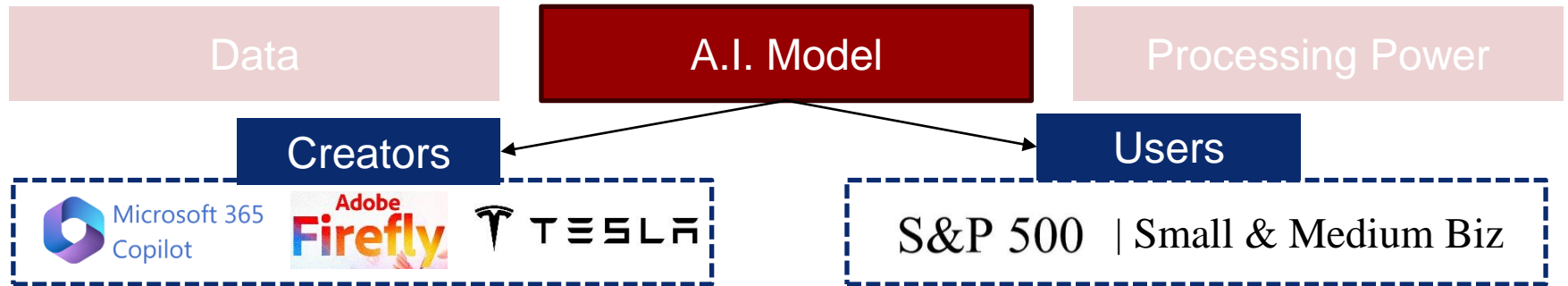
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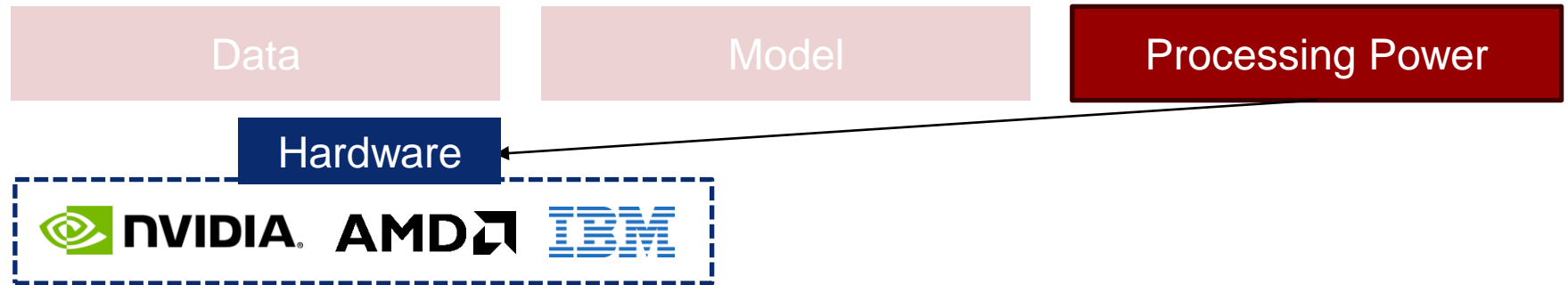
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Too many uncertain variables and market excitement warrant caution here, many unproven expectations warrant carefulness

Artificial Intelligence

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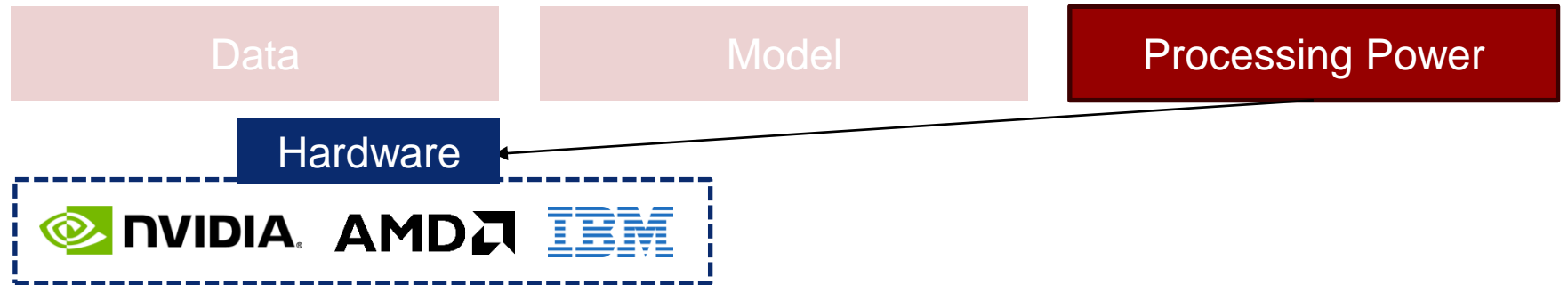


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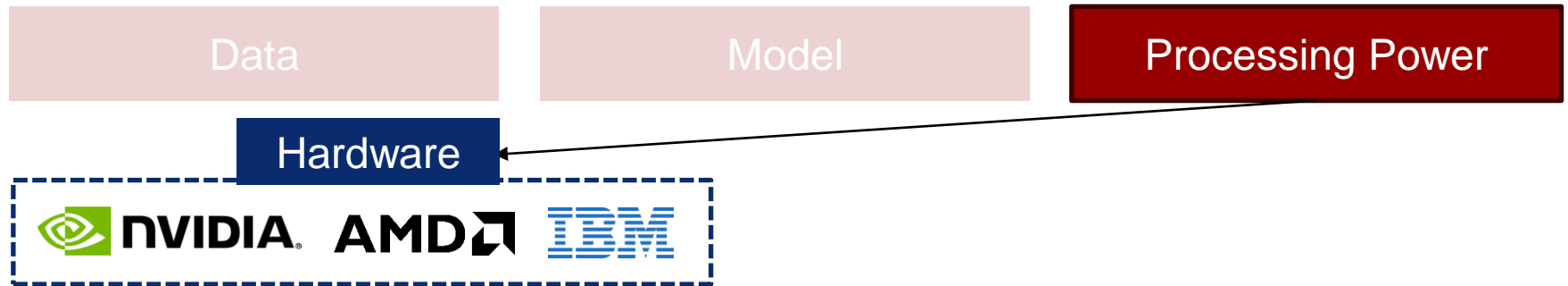
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- Gold Rush → **Sell Shovels**
- AI Usage Generates **Proportional HW Needs**
- NVDA Will Sustain **Near-Monopoly**

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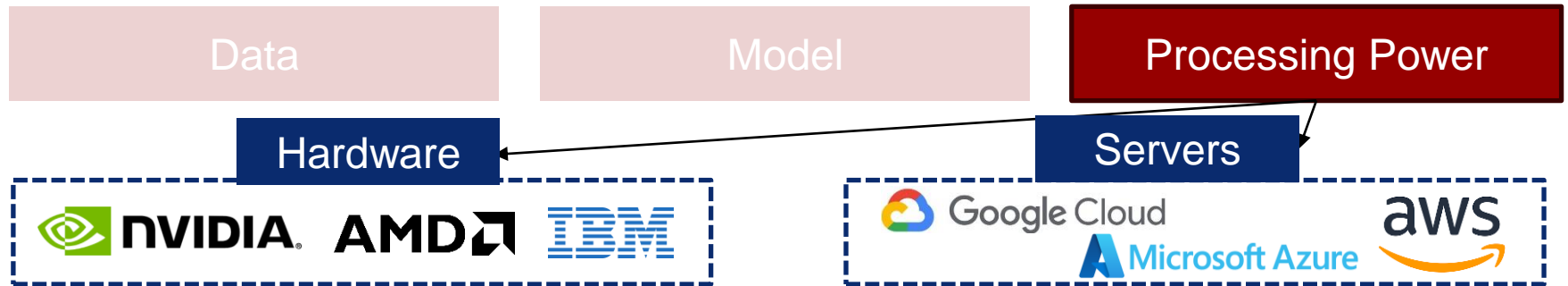
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Worst Risk/Reward

- Today's Shovel **≠** Tomorrow's
- Hyperscalers Already Developing **Prop. Chips**
- NVDA **Won't Hold** Monopoly
- Need Sustained **High Capex**
- Uncertain Long-Term **Replacement Cycle**

Artificial Intelligence

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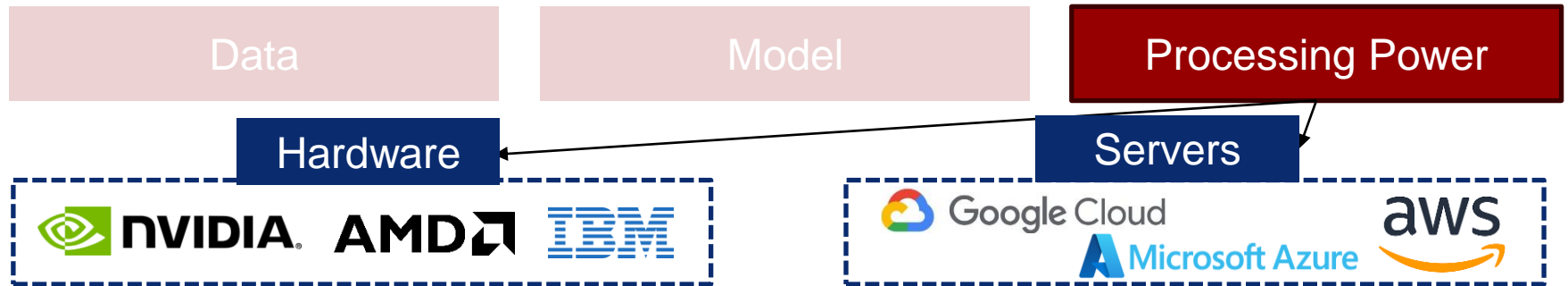
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- Gain As Long As Models Are **Used**
- Able to **Pass Through** Hardware Costs

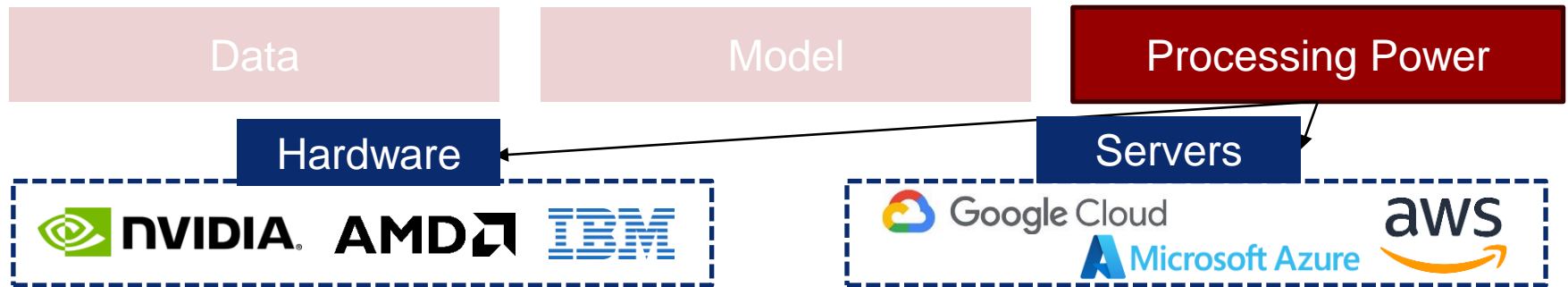
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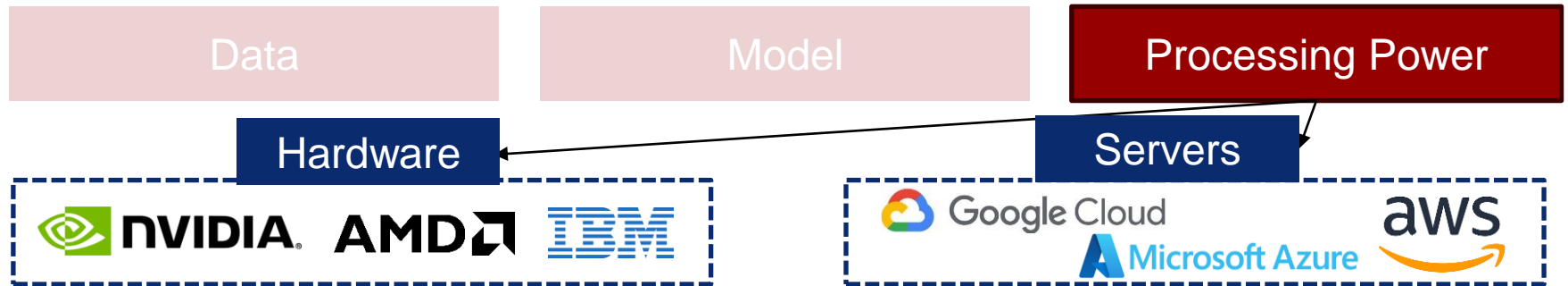
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Better Path

- **No matter** how/if customers can monetize AI
- Issue: No **Pure-Play** Hyperscaler
- Competitive Dynamics **Reduces Pricing Power Risk**
- Narrative Dependent On **TAM/Usage/Volume**

Artificial Intelligence

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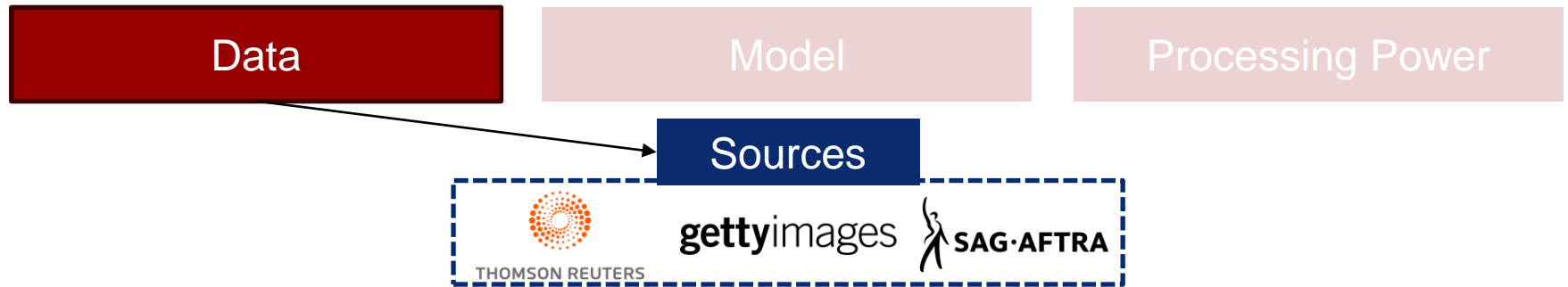
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Hyperscalers: Playing The Toll Road Rather Than the Dealership

Artificial Intelligence

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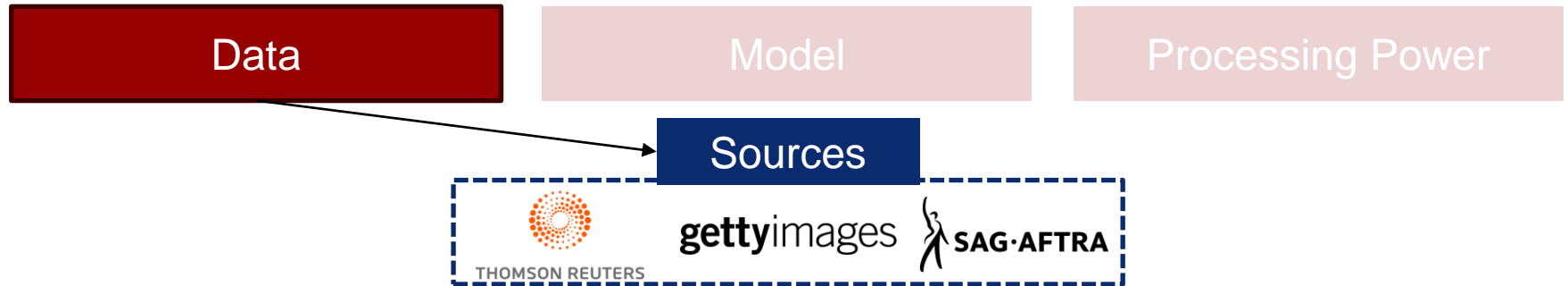
Market View

Our View

Source: AP News

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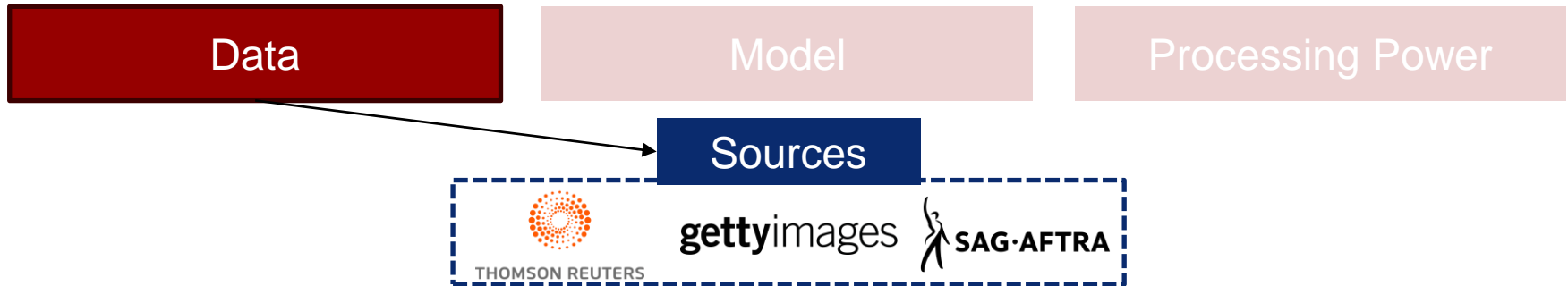
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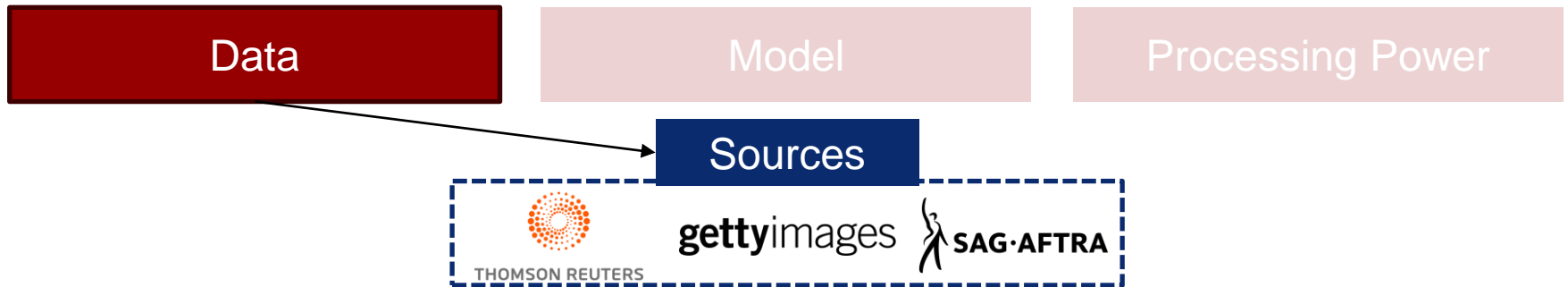
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- Data is **not a commodity**
- **Value** of Input Data > Model
- Expect Data **Regulation** for Commercial Use
- Existing Data Has **More Use & Value**
- **Monetization** Remains Highly Uncertain

Source: AP News

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*Trained on Adobe Stock images, openly licensed content, and public domain content, Firefly is designed to be **safe** for commercial use.*

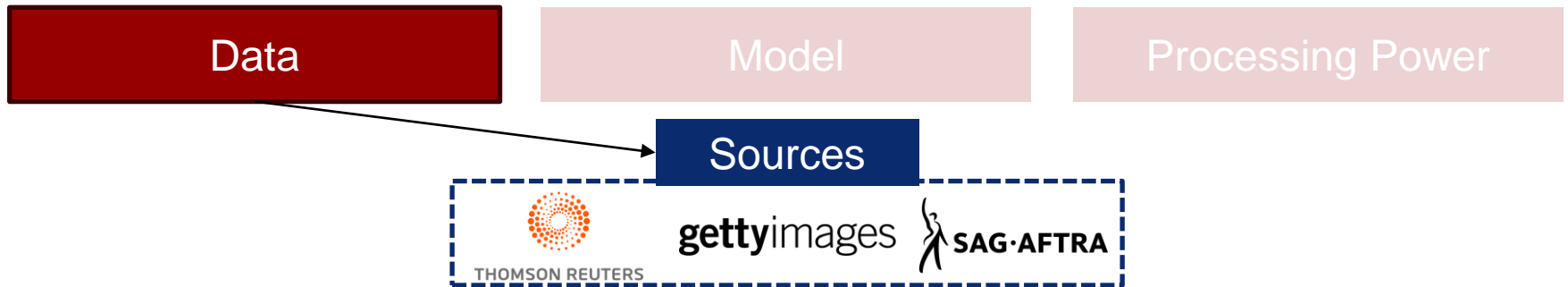
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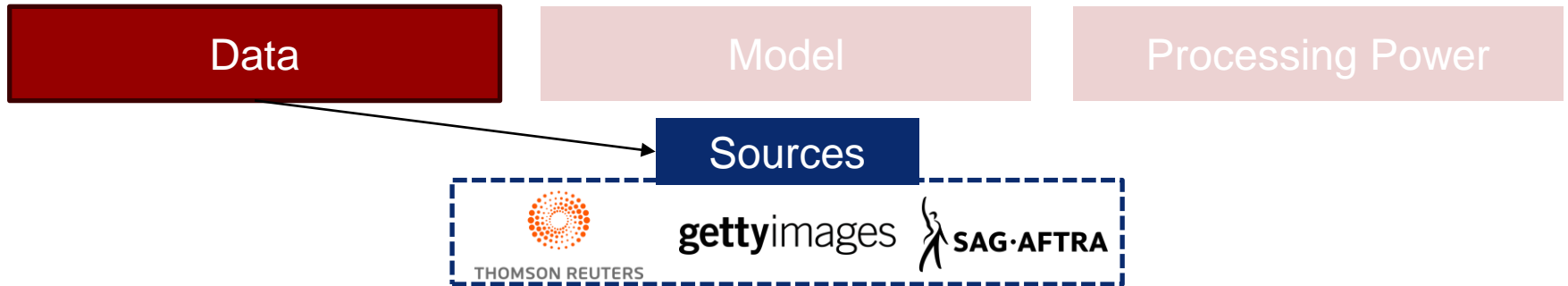
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Unique Approach Could Reveal Companies With Underappreciated Monetization Potential

Source: AP News

We don't need to be invested in the space

- Positive Narrative across AI value chain
- Market focus on handful names
- Regulatory/Pricing Risks Underappreciated;
Implies opportunities in key areas

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What TMT Pick Would Look Like

Hyperscalers

- **Toll Gate** of AI Volume Usage
- Lack of Pure-Play
- Need better pricing visibility
- Better Idea of Long-term Promise

Conclusion on Artificial Intelligence

Just a Fancy Regression Model

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- Regulatory/Pricing Risks Underappreciated;
Implies opportunities in key areas

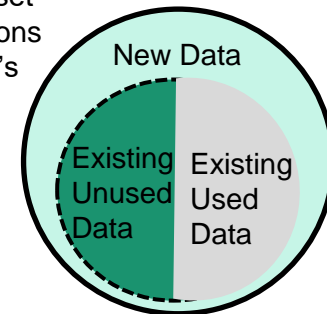
What TMT Pick Would Look Like

Hyperscalers

- **Toll Gate** of AI Volume Usage
- Lack of Pure-Play
- Need better pricing visibility
- Better Idea of Long-term Promise

Data

- Nearly "**Hidden**" Asset
- **Regulatory** Limitations
- Data Value > Model's
- Highly **defensible**



Examples



THOMSON REUTERS



Adobe



Wolters
Kluwer

Desautels Capital Management

Honours in Investment Management

Theme Review: Media & Entertainment

Section 2



Executive Summary

Apologies for the words, but I'm not here to speak

DTC

The Streaming Wars Continue: Key players continue to compete for subscribers in an already highly saturated market.

Market View: Content spend has rightsized, DTC operating profitability by 2025E (See DIS Case Study).

DCM View: Companies will need to continue to burn cash in hopes of reaching DTC profitability, DTC operating profitability ~2027E-2029E.

TV

Linear Networks: Being held by a thread: sports programming (quite literally the only value prop). If you think “news channels” remain a value prop, let me introduce you to vMVPDs (e.g., YoutubeTV) or just like social media.

Market View: Linear will suffer from low single digit declines in top line growth going forward, whereas margins are expected to remain constant.

DCM View: Revenue growth to realize in line with market expectations; however, margins are expected to suffer from downward pressure due to recent AAV sports programming step-ups.

What's AAV Annualized Average Value? Fancy word for \$amountofcontract/#ofyrsofthecontract

THIS IS NOT HOW ACCOUNTING FOR THESE RIGHTS WORK! Trust me I spent the whole summer looking at the 10-Ks of Diversified Media Conglomerates and their accounting policies.

Theatrical

Summer Box Office was super strong (yay Barbie! Barbie the biggest post-covid second Friday at the box office!). It appears as though theatrical has returned to pre-pandemic levels. However, the labour strikes may give rise to weak or delayed theatrical releases in the next window/cycle.

Market View: Theatrical has returned to pre-pandemic levels; albeit labour strikes are putting downward pressure on multiples due to uncertainty with regards to future growth, fueled by theatrical window strength.

DCM View: In line with market valuations. Some players may be undervalued (Jeremy take it away with Cineplex) but exclusively at the firm level because of some idiosyncratic factor and not vertical level.

Music

Nothing interesting going on here except if you're a Swifty. I wouldn't recommend buying her catalogs lol because she'll probably just rerecord her entire album... again. Music multiples are too high. Music royalty cash flow growth rates follow an exponentially decaying curve called the J-curve. Highly predictable CFs with low single digit growth in perpetuity after 3-5 years.

Market View: Unless you're in the business of securitization, stay away from music right now, especially publicly listed funds such as SONG, who have an avg. purchase multiple of +15x NPS. This is a big no no, especially for something that delivers low single digits. The market is basically anticipating the renewal of growth via a renewal of J-curve (because of increase in synch royalties). Come see me if you want more info.

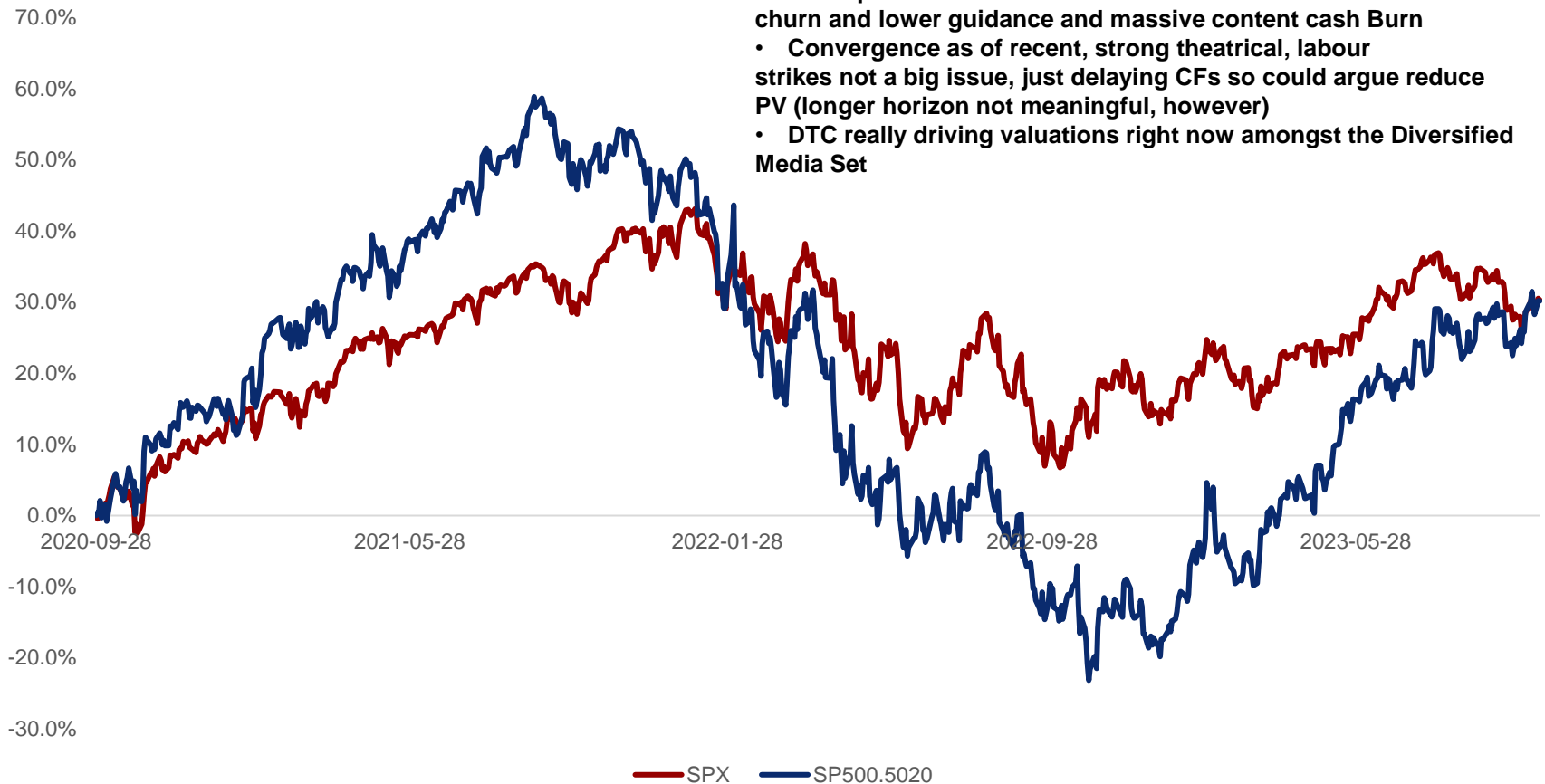
DCM View: Music is overvalued. They're kind of like trophy assets right now, akin to sports teams.

It's too bad we're long-only lol because I would be placing shorts right now. In all seriousness, I love talking about M&E so come see me if you want more info because there is so much more.

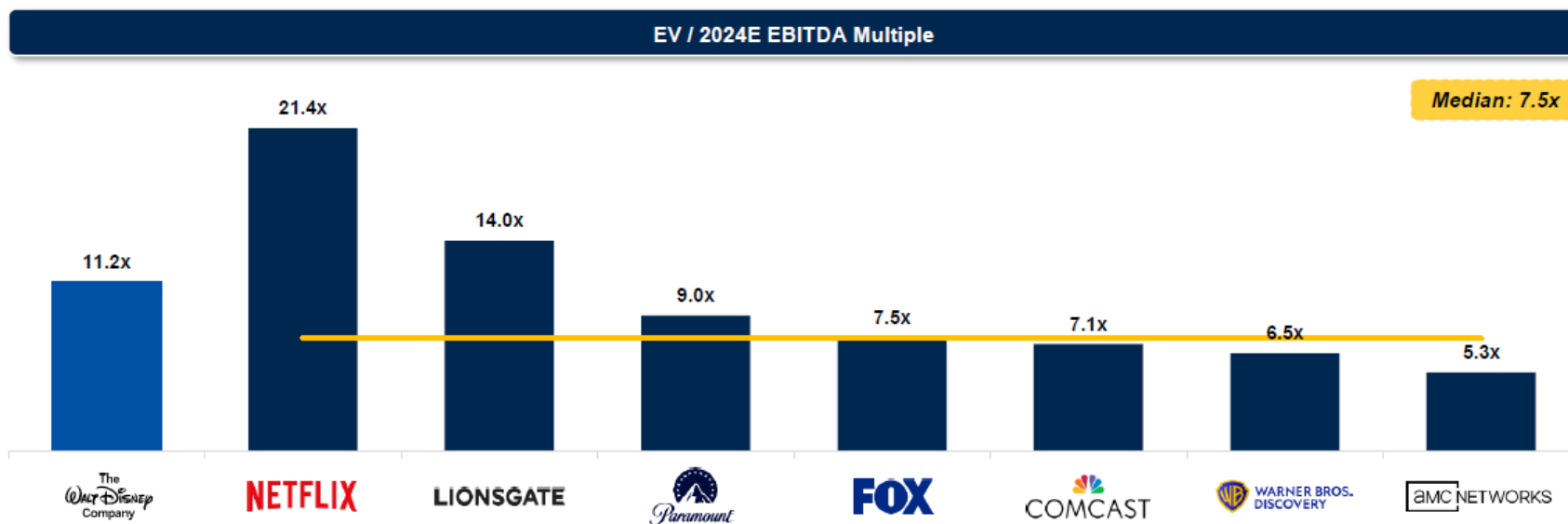
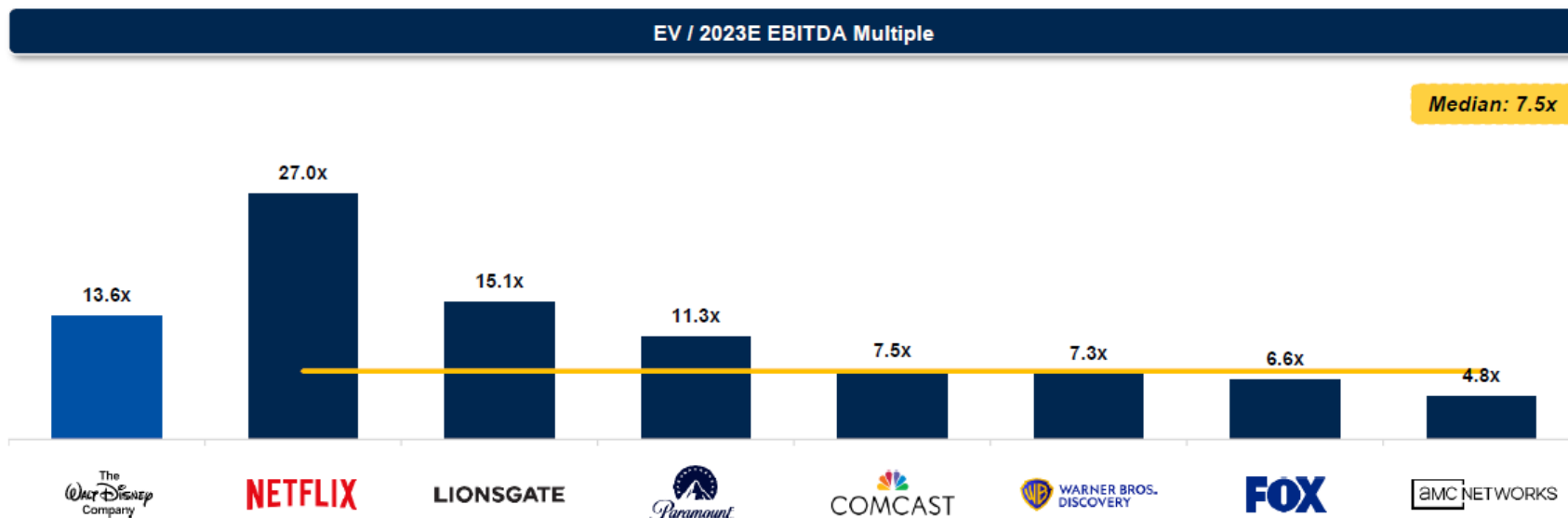
A Walk Through Time

SP500.5020 Beta = 0.72

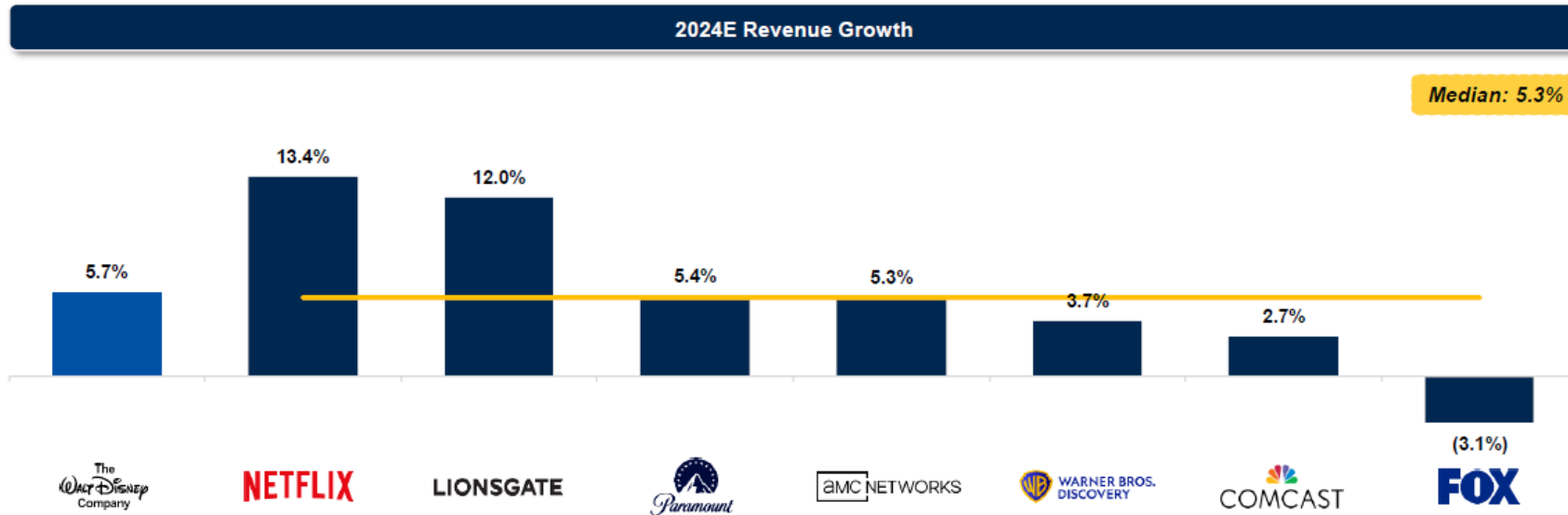
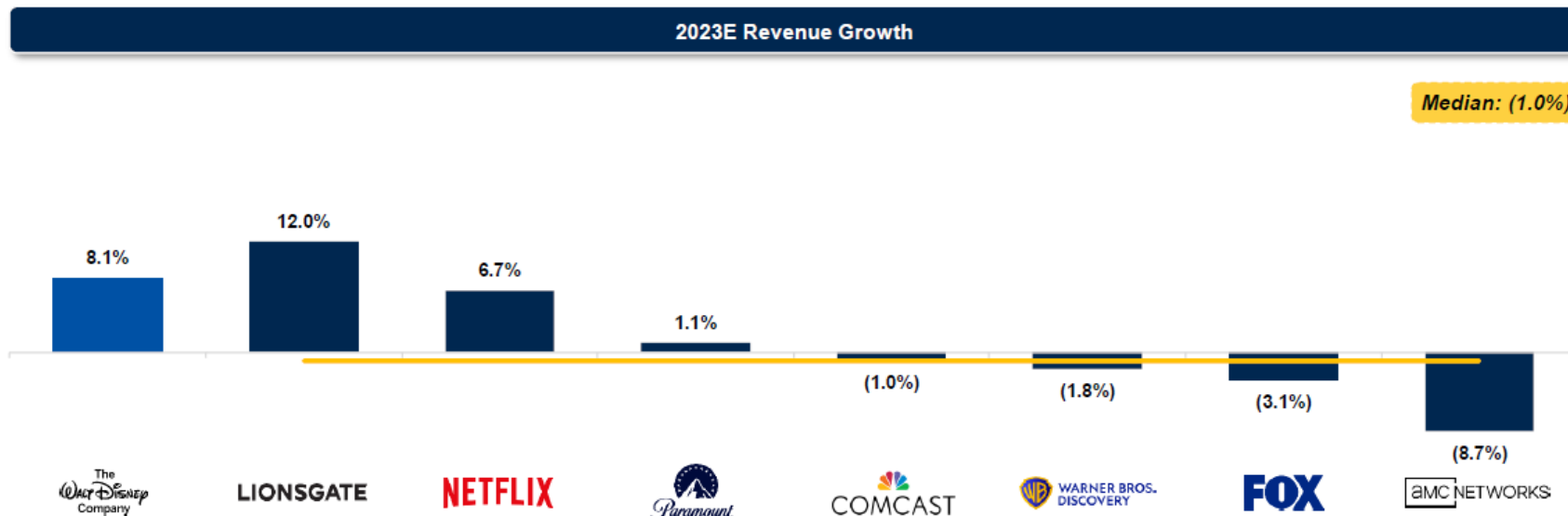
- Outperformance in 2020-2021 due to DTC hype and massive sub net adds
- Underperformance in 2022-2023 due to DTC sub churn and lower guidance and massive content cash Burn
- Convergence as of recent, strong theatrical, labour strikes not a big issue, just delaying CFs so could argue reduce PV (longer horizon not meaningful, however)
- DTC really driving valuations right now amongst the Diversified Media Set



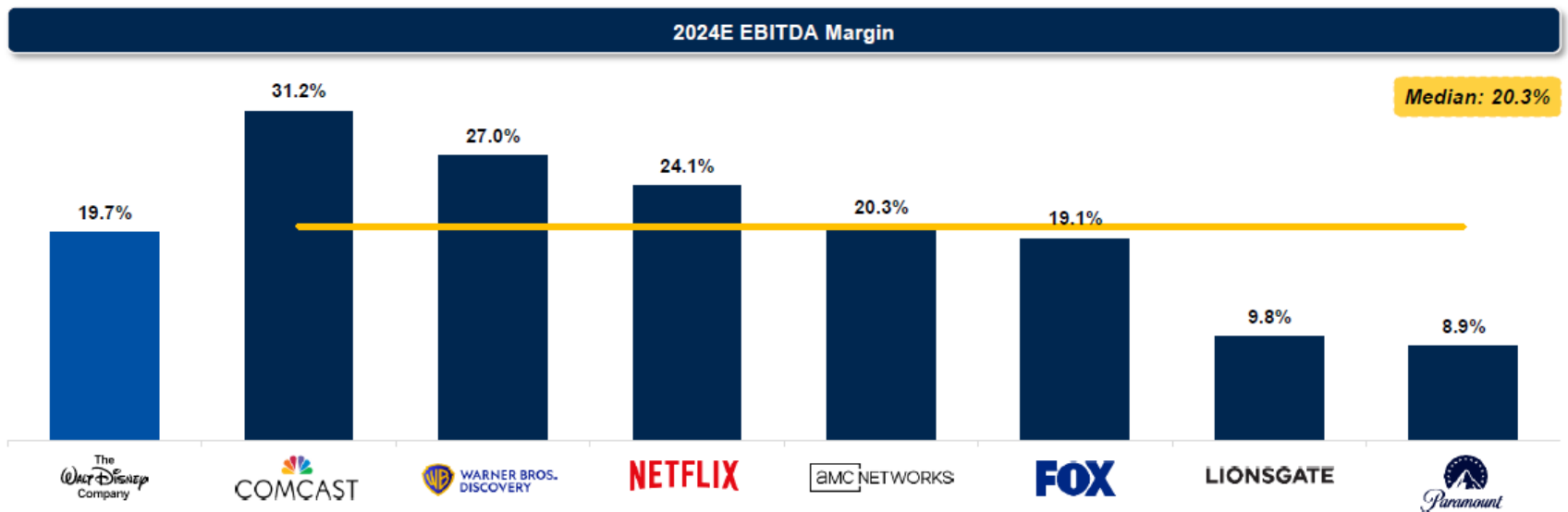
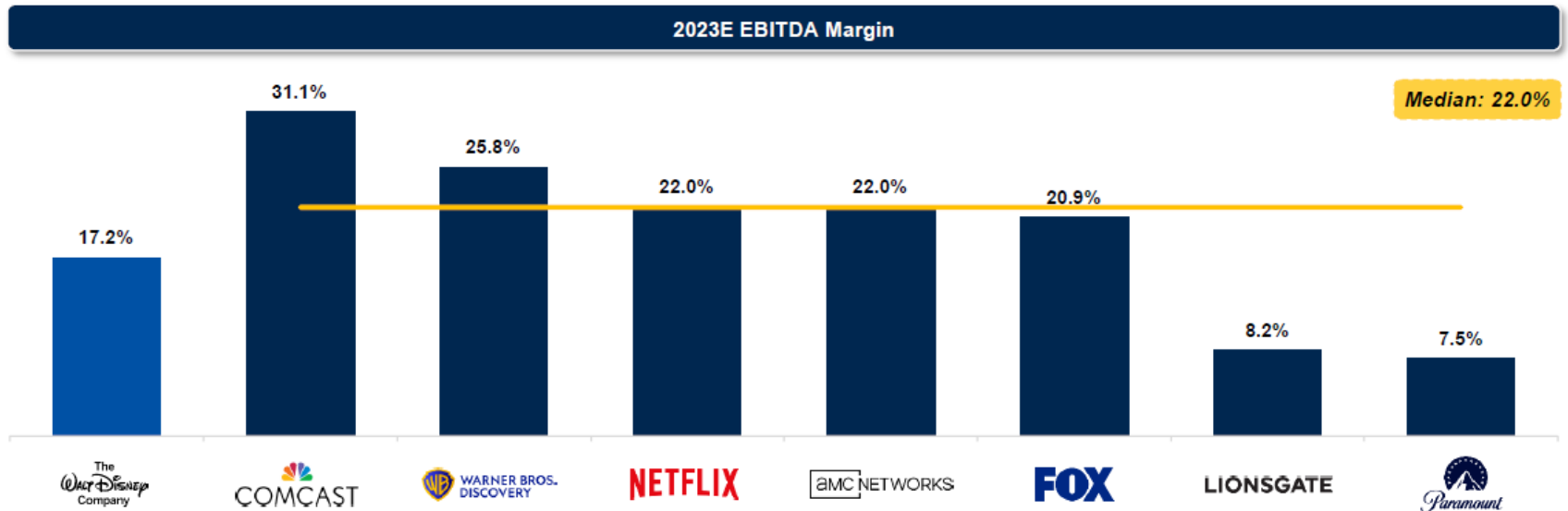
Public Comparables – Diversified Media Comp Set



Public Comparables – Diversified Media Comp Set



Public Comparables – Diversified Media Comp Set





Key Takeaways

– Benchmarking Analysis Cont.

LTM EBITDA Margin⁽¹⁾

Median: 18.6

1

Possible value dislocation amongst the Diversified Media comp set

- LGFA appears overvalued according to EBITDA expectations; however, its strong revenue growth expectations are pushing multiples upward
- CMCSA, FOX, and AMCX appear undervalued according to margin expectations; however, lower revenue growth expectations are more than enough to offset higher expected margins relative to peers, pushing multiples down

14.6%

30.6%

22.3%

21.5%

19.0%

13.6%

7.2%

2

Companies with significant linear network exposure are expected to maintain higher margins going forward but suffer from declines in top-line growth

2024E EBITDA Margin⁽¹⁾

31.7%

22.1%

Current State of the Film/TV Ecosystem

Shift in Strategy from "Subscribers at All Costs" to Profitability



- Public media companies claim to be rationalizing content spend and although are taking cost cutting measures on OpEx in the near term, have shown little inclination to scale back total spend between Film/TV projects and Sports content
 - In CY'Q4 earnings announcements, management teams have reported expected '23 content spend to fall in-line with 2022 totals

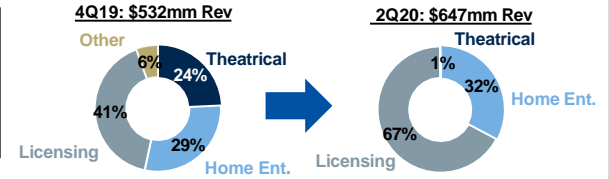
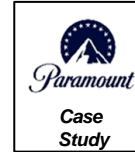
2022 Film and TV Content Spend Surpassed \$130bn+



IP is Still King



- Owned properties allow platforms to become arms dealers to streamers and distribution apparatuses
 - Library IP has created incremental value for studios, driving significant library cash flow
- The theatrical window will continue to rely on marquee IP for tentpole film releases



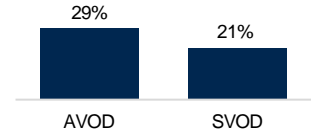
AVOD and FAST Platform Proliferation



- With paid subscription numbers flat lining, large streaming platforms have adopted an ad-supported strategy
 - US AVOD streaming viewership is forecasted to maintain CAGR growth of 15.7% from 2021 through 2027⁽¹⁾



% Increase in Viewership 2020-2022⁽²⁾



Convergence of Content and Commerce



- Production companies with established audiences and fan bases have built merchandise ecosystems around their content as a means of diversifying revenue streams for their brands
- This flywheel has gained further momentum in the sector, specifically with Canadian production houses



Private Equity Leans into Production



- A cost-plus financing model has de-risked production companies, limiting downside and performance risk and attracting large sponsors



Content Services Ride Production Tailwinds



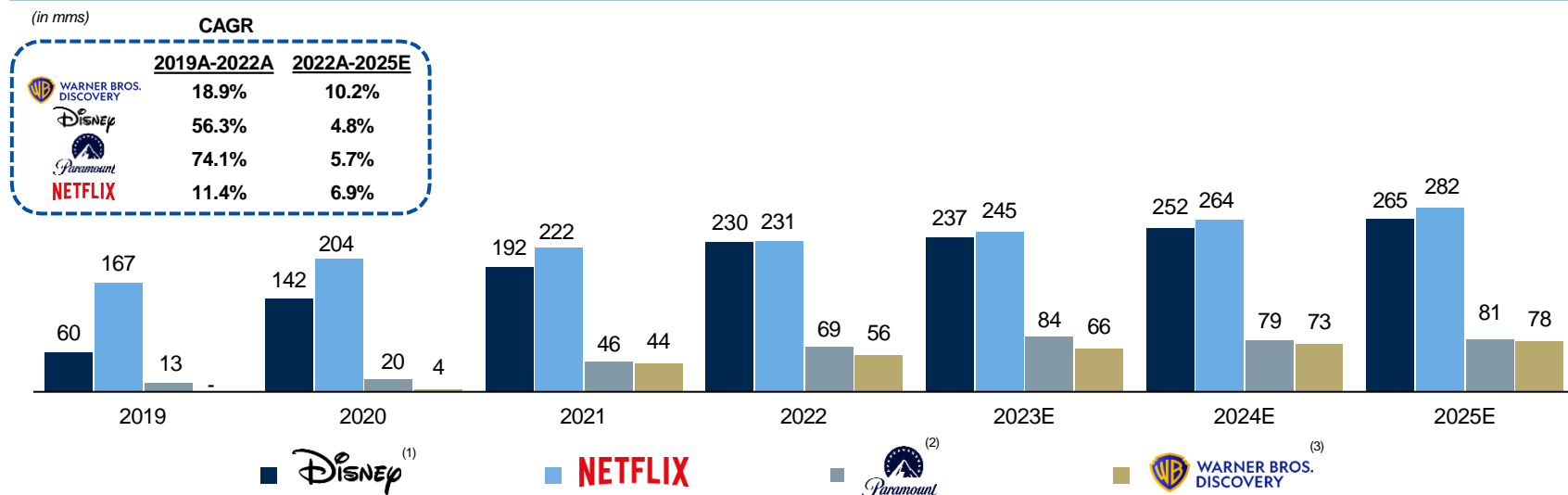
- As Film/TV companies expand their global footprint in both developed and emerging markets, the demand for localization and delivery has rapidly accelerated while technological advancements continue to help drive efficiency in the space
 - The sector has greatly benefited from record breaking content spend among the streamers
- Studios have shown interest in bringing VFX platforms in house to address industry-wide capacity constraints and mitigate risk of a third-party provider



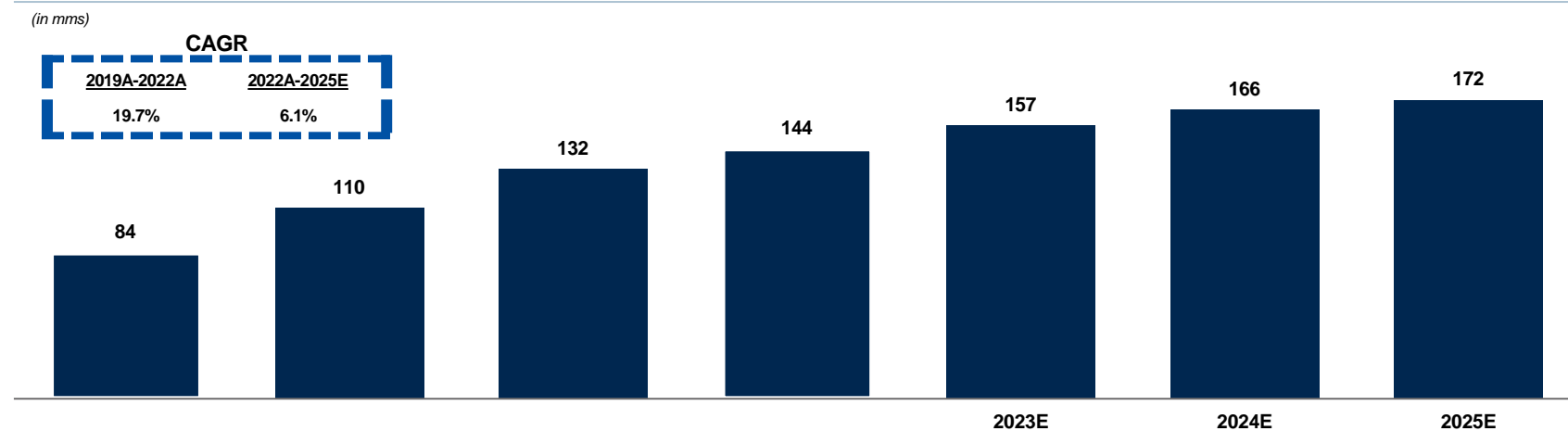
OTT Subscribers and Viewership Trends

Top OTT platforms are expected to see steady sub growth continue over the next several years as international expansion accelerates and AVOD viewership becomes more prevalent on these platforms – SVOD/AVOD growth will further drive Film/TV titles’ ultimate values

Forecasted OTT Subscriber Trends by Company

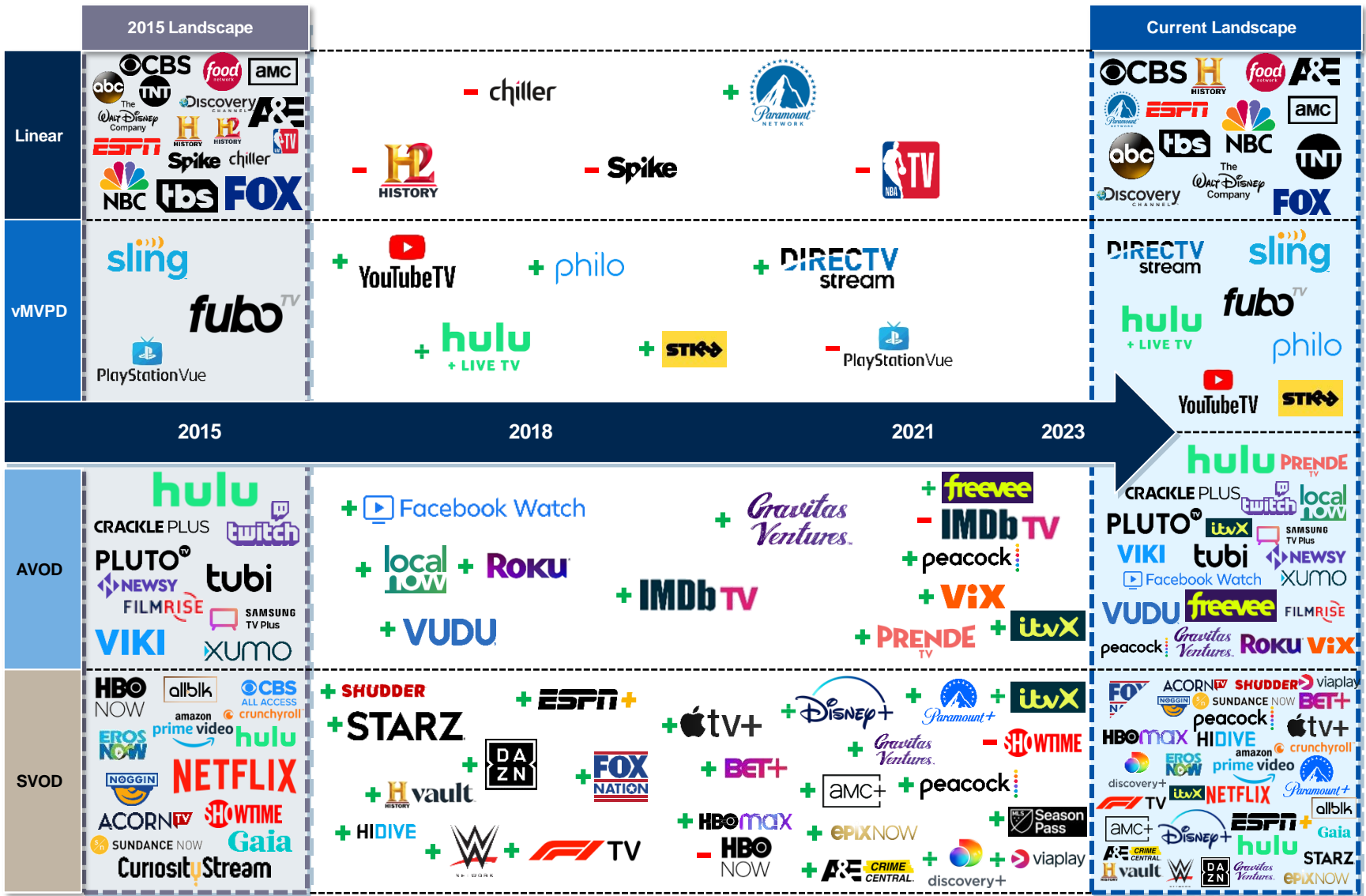


Forecasted Total US AVOD Viewers



Evolution of the OTT Landscape

The number of new OTT entrants has led to rapid declines in Linear Networks viewership and subsequent acceleration in cord-cutting

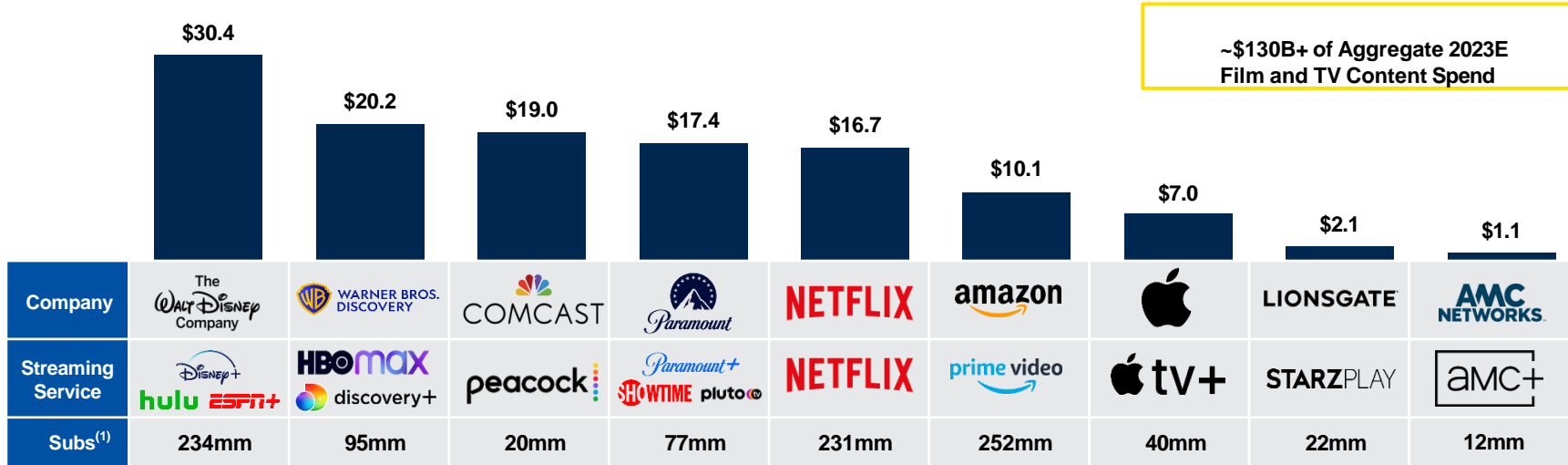


Source: Press releases, Company materials.

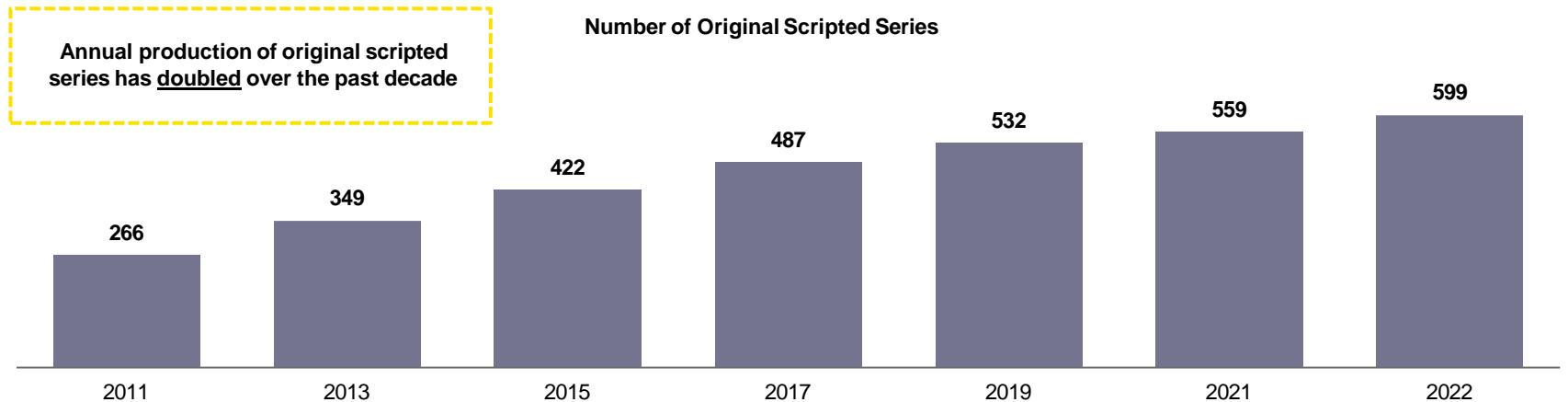
Despite Posturing of a Slowdown in Content Spend, Market Shows No Sign of Losing Momentum

2023E Global Film and TV Content Spend Hits All-Time Highs. . .

(in \$bn)



Supported by increasing numbers of original scripted series

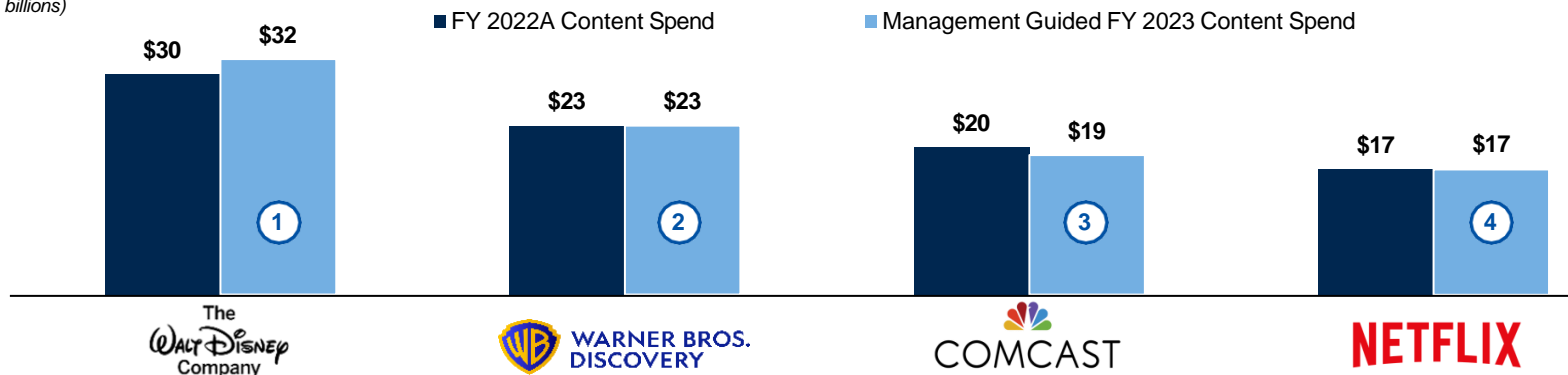


Media Content Spend Trends

Studios have indicated they will be better curators of content with the expectation that live sports investment will rise while Film/TV project allocation will decline

Total Content Spend⁽¹⁾ Levels Expected to Remain Relatively Steady through FY 2023

(\$ in billions)




Company Commentary

“Longer term, we also expect to realize additional efficiencies in our content spending with an **annualized savings target of approximately \$3 billion of future spending outside of sports.**”

– Christine McCarthy, CFO; FYQ1 '23 Earnings Call


“We still expect cash content spend company-wide [including sports content] to **remain in the low \$30 billion range for fiscal 2023.**”

– Christine McCarthy, CFO; FYQ1 '23 Earnings Call  (2/9/2023)

“So expect to just ease back off of the levels we saw in 2022. It's a hard number to predict, but I think **we are past peak there.**”

– Michael Cavanagh, President of Comcast; FYQ4 '22 Earnings Call

“**We will hit our peak spend...**this year and then **improve steadily from there.**”

– Jeffrey Shell, CEO of NBCUniversal; FYQ4 '22 Earnings Call  (1/26/2023)

“**We've rightsized the content spend.** I think we're going to get a lot better in allocating capital, and **we have every intention to continue spending.**”

– Gunnar Wiedenfels, CFO; Citi Conference

 (1/5/2023)

“We believe... [that] **managing at about the same level of cash content spend** that we'll have more than \$3 billion, at least \$3 billion of free cash flow in the year.”

– Spencer Neumann, CFO; FYQ4 '22 Earnings Call

(1/19/2023)

“**We will drive towards profitability by continuing to efficiently manage our content spend.** By far, our biggest lever to manage spending is to focus on franchises. The higher levels of consumer awareness and built-in fan bases

associated with this IP drive strong subscriber acquisition volume, lower acquisition costs, lower churn and extend LTVs.”

– Robert Bakish, CEO; FYQ4 '22 Earnings Call

 (2/16/2023)

TV Networks Viewership Trends

- The consumer shift to digital continued with streaming viewership audience share outpacing the cable and broadcast TV audience share for the first time in 2022
 - Streaming video represented 34.8% of total television consumption in July 2022, exceeding cable at 34.4% and broadcast at 21.6%⁽¹⁾
 - Broadcast viewing dropped 9.8% YoY and cable viewing dropped 8.9% YoY in July 2022, whereas streaming viewing increased 22.6% YoY⁽¹⁾
- Other Top 100 networks with a niche angle saw moderate YoY growth:
 - Paramount Network (*Yellowstone*) up 8%, Family Entertainment TV up 14%, and Great American Family (holidays) up 22%
- Adult animation saw a resurgence with FXX growing 23% YoY by bundling hit animation shows such as *Cleveland*, *Family Guy*, and *The Simpsons*

Winners in 2022

ESPN

- ESPN remains one of the few bright spots left in cable
- In 2022, ESPN primetime viewership continued its robust revival, growing another 14% YoY, while its sister network, ESPN 2, also increased viewership by 8% YoY
- This rise in viewership bucked the trend as other popular sports channels (Fox Sports 1, NFL Network, TUDN, and MLB Network) saw viewership declines in 2022

Crime TV

- True crime linear TV viewership showed a marked improvement
- NBCUniversal's Oxygen (rebranded as Oxygen True Crime) saw a 10% YoY increase in primetime viewership largely due to popular series such as the *Snapped* franchise
- Reelzchannel primetime viewership also climbed to ~252k (+107% YoY growth) largely due to the hit show *On Patrol: Live*

Digi-nets

- Low-budget digi-nets that run on local TV subchannels retained their recent dominance of ratings growth
- Digi-net mainstays Ion and Me TV continued to exhibit sustainable growth in 2022
- Other notable digi-nets experiencing YoY growth include Cleo TV (+44%), Dabl (+28%), and Family Entertainment TV (+14%)

Losers in 2022

Cable General Entertainment Networks

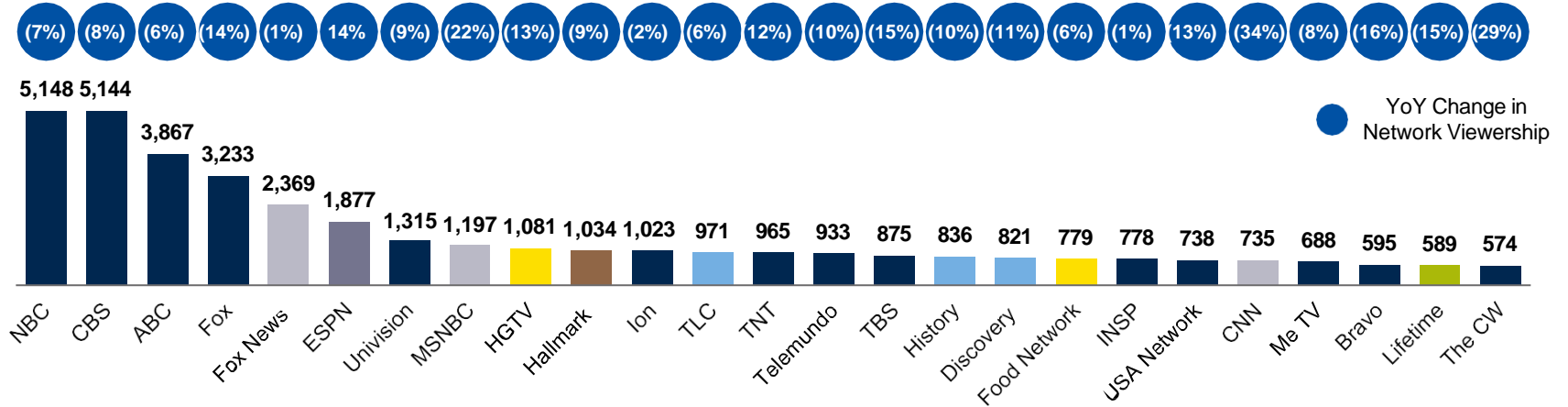
- The erosion of major general entertainment networks (FX, TNT, TBS, and USA) continued in 2022
- TNT and TBS both slipped below an average of 1mm primetime viewers while viewership for USA and FX also declined
- Paramount Network avoided this trend, largely due to the success of *Yellowstone* but still experienced declines in the key 18-49 adults demographic

Gaming

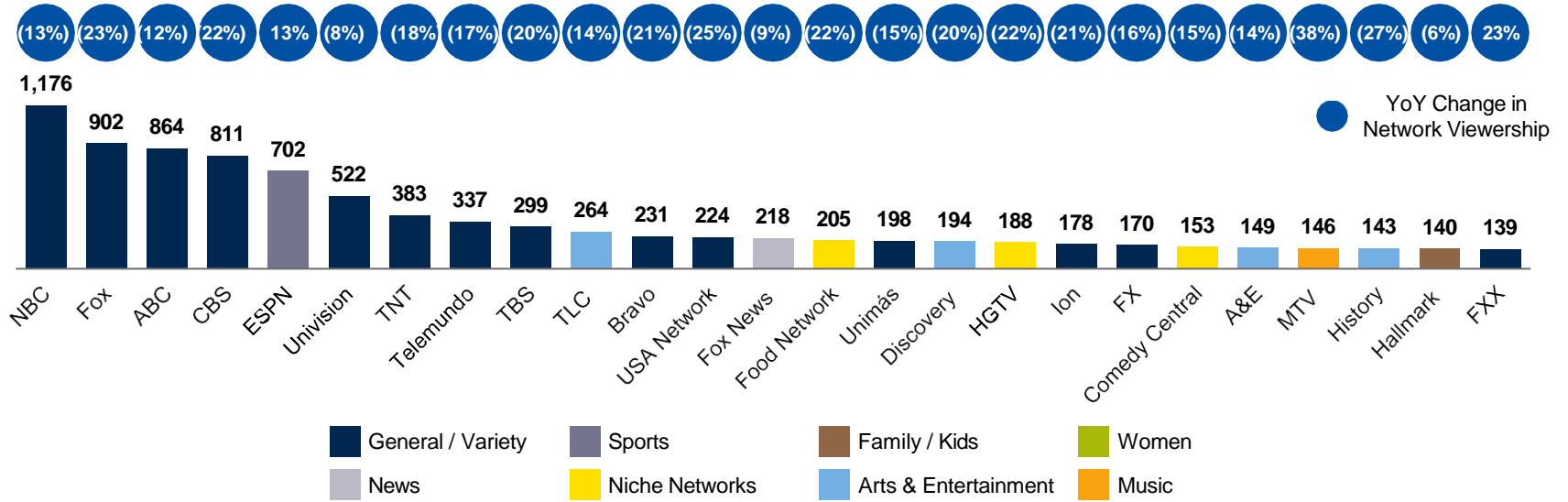
- Gamer-centric cable networks continue to struggle with primetime viewership
- G4, Comcast's sports and esports division, was the least watched network for every network that Nielsen measures
 - Scoring a zero rating in the key 18-49 adults demographic
 - Averaging a paltry 1,000 primetime viewers

Viewership of Most-Watched Television Networks in 2022

Top 25 Most-Watched Networks of 2022 by Total Viewership (in 000's)

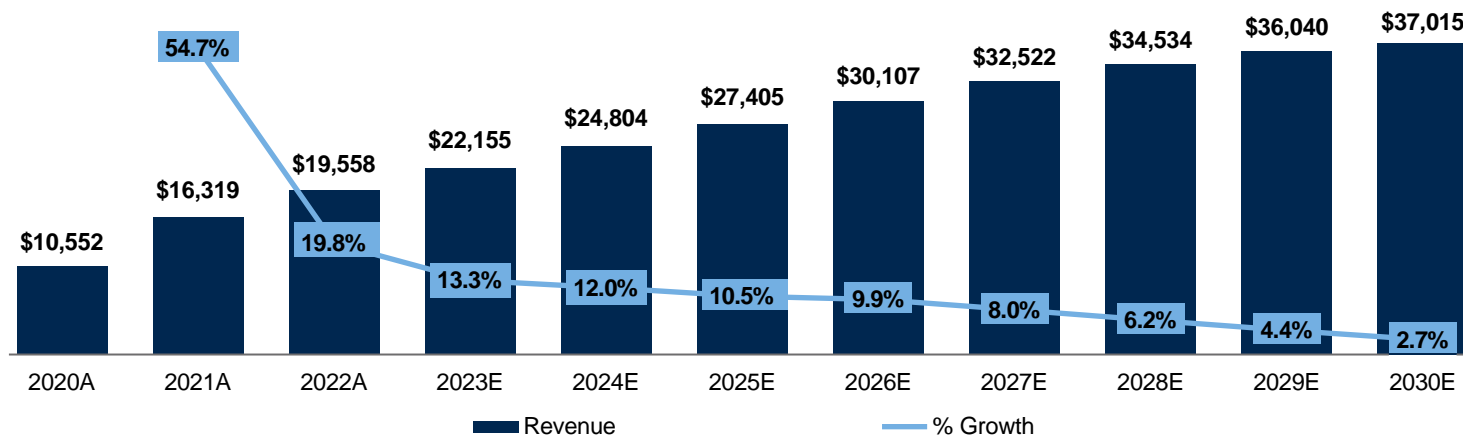


Top 25 Most-Watched Networks of 2022 by Adults 18-49 Viewership (in 000's)

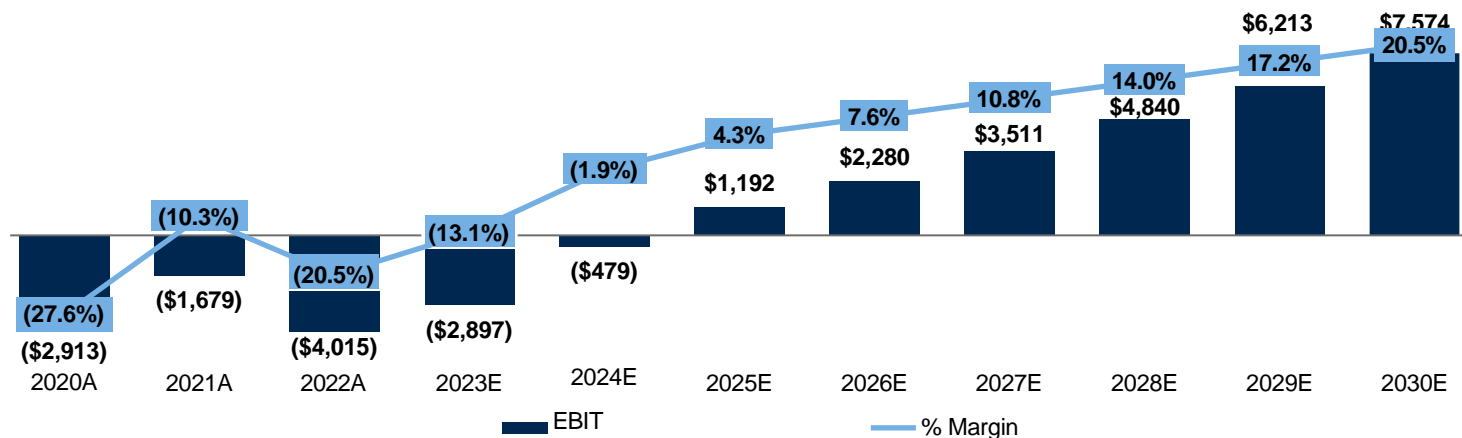


Discounted Cash Flow Analysis Assumptions – DTC Disney Case Study

Revenue Projections

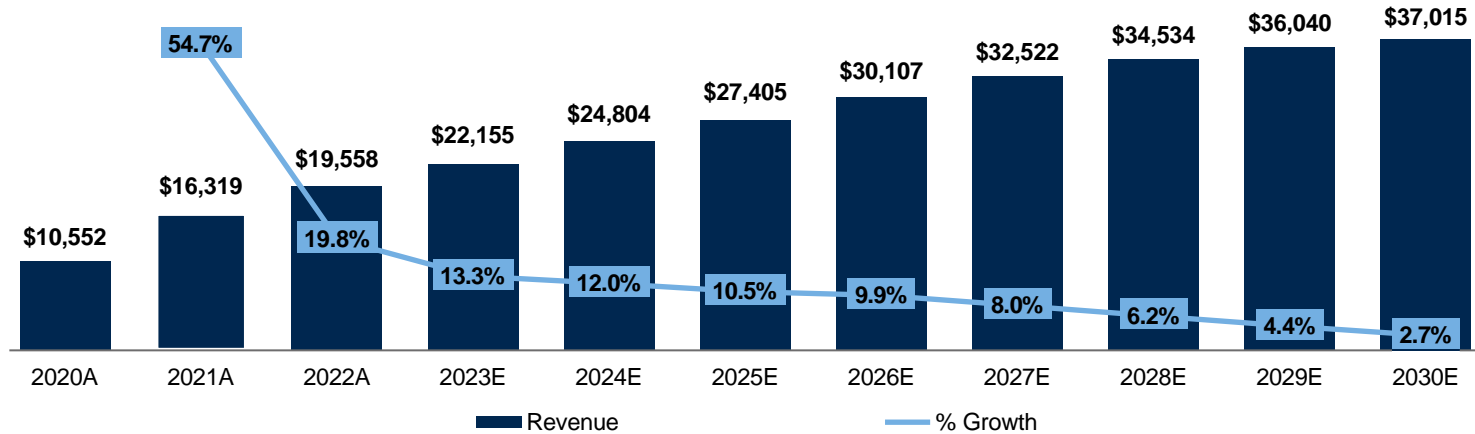


EBIT Projections

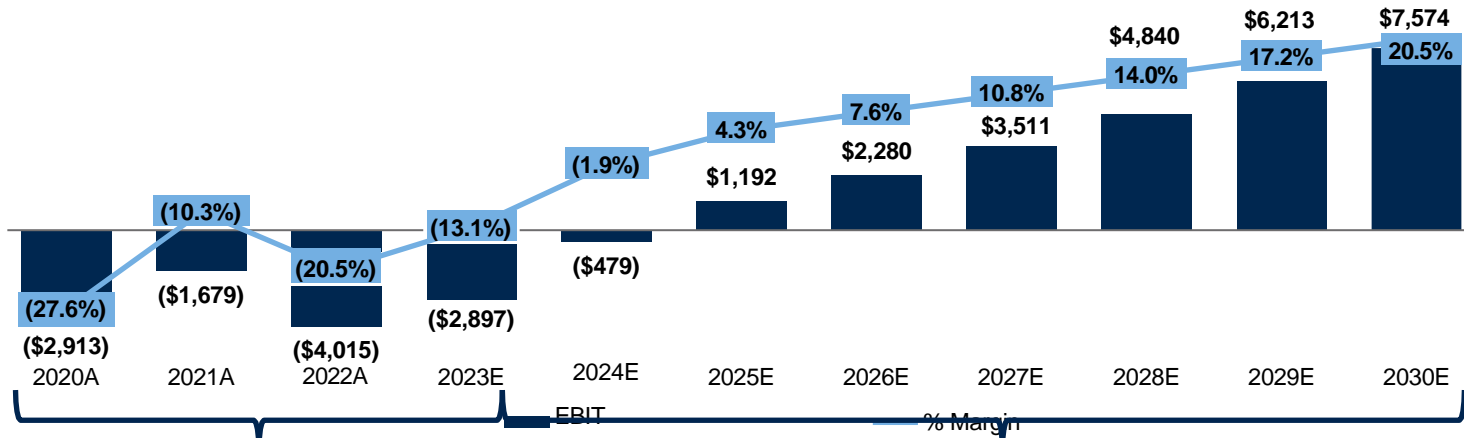


Discounted Cash Flow Analysis Assumptions – DTC Disney Case Study

Revenue Projections



EBIT Projections



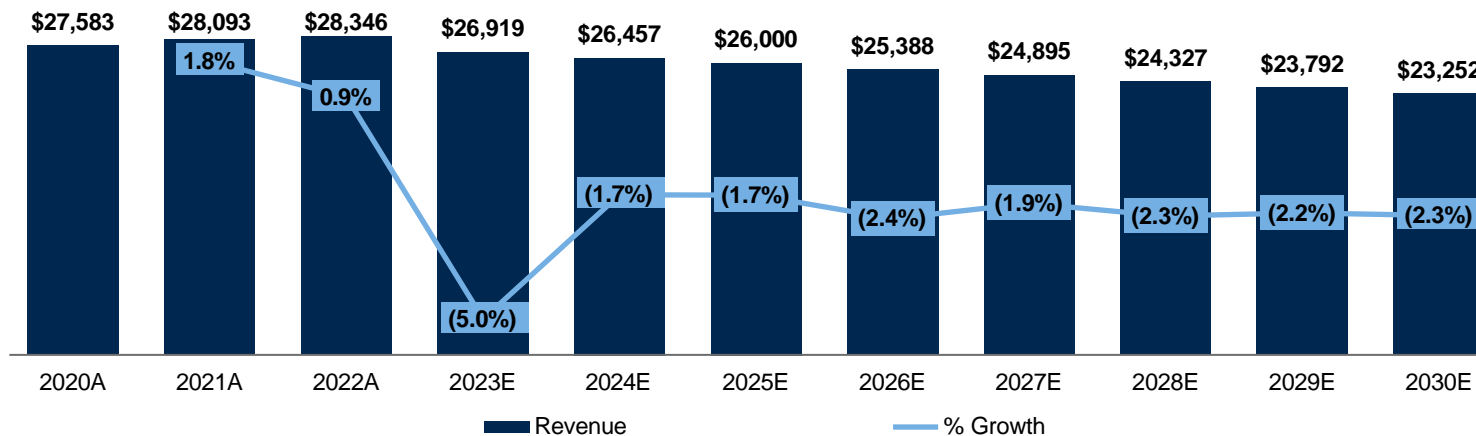
Decreasing EBIT amidst temporary cost headwinds and high churn rates

Recovery from tough entry

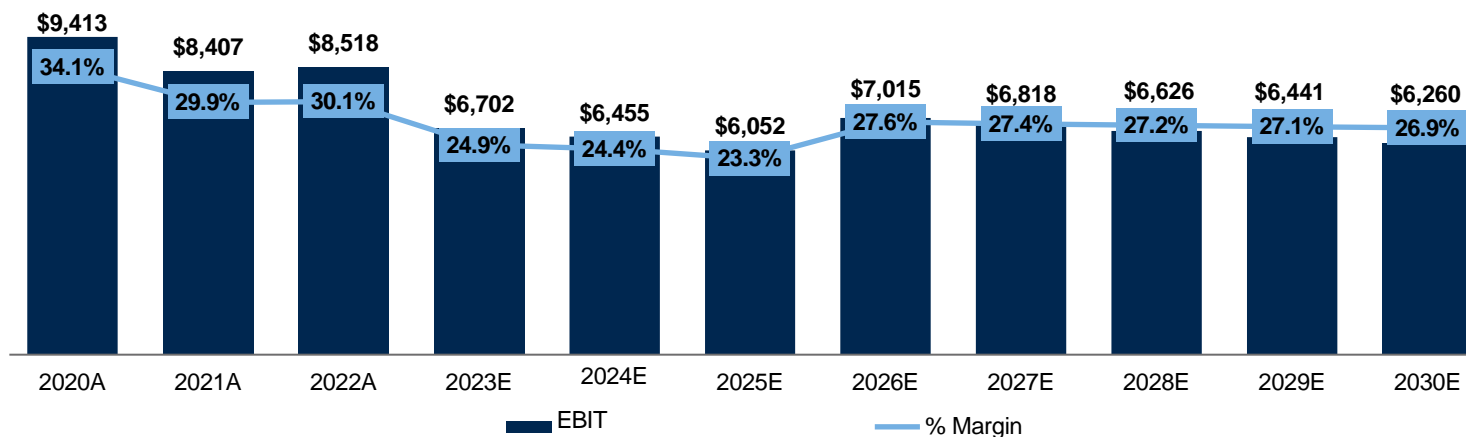
Profitability inflection point, expanding margins, and pathway to steady growth

Discounted Cash Flow Analysis Assumptions – Linear Networks Disney Case Study

Revenue Projections

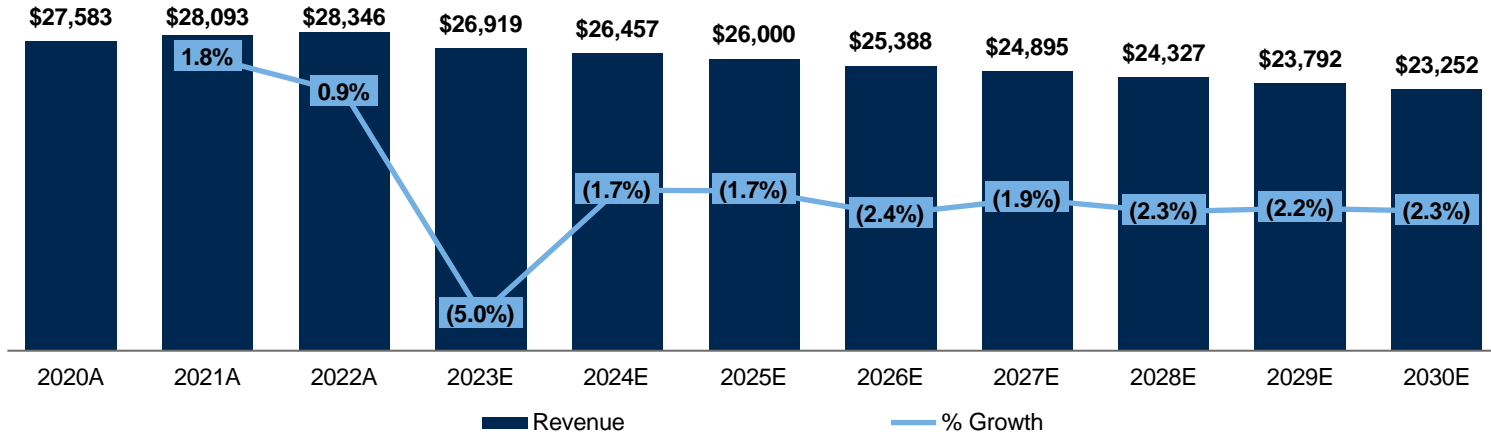


EBIT Projections

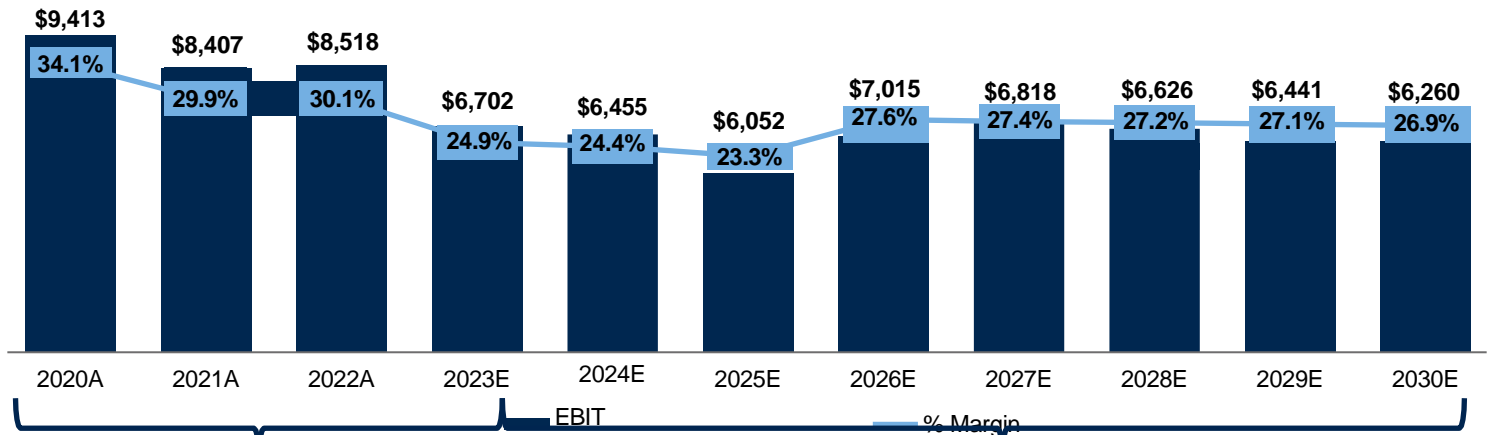


Discounted Cash Flow Analysis Assumptions – Linear Networks Disney Case Study

Revenue Projections



EBIT Projections



| | | |
|--|---|---|
| Decreasing EBIT amidst accelerated cord-cutting | Slight uptick and recovery from trough | Steady top and bottom-line declines; albeit, strong margins are expected to be maintained |
|--|---|---|

Desautels Capital Management

Honours in Investment Management

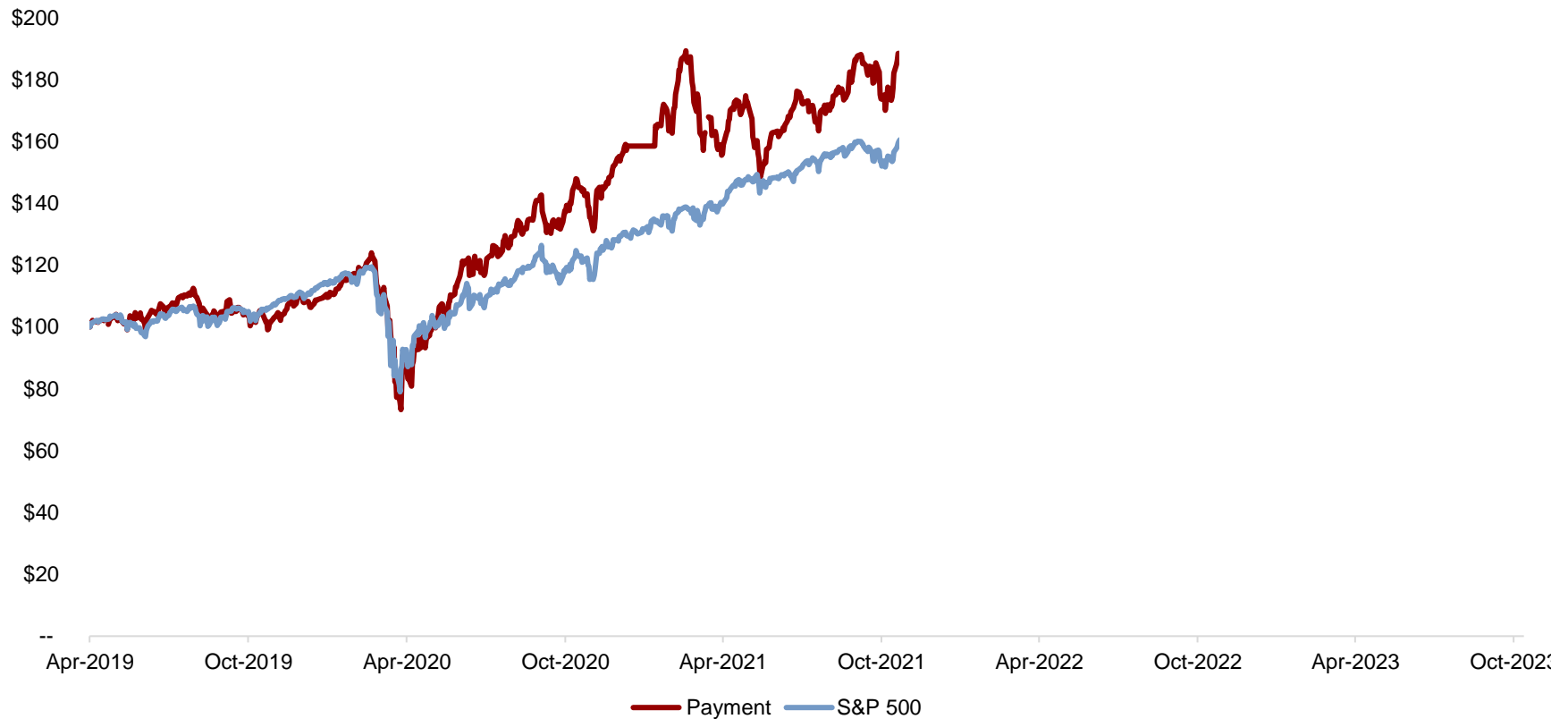
Payment Industry

Section III



Why Does This Opportunity Exist?

Extrapolation bias creates a psychological pitfall we can exploit for alpha

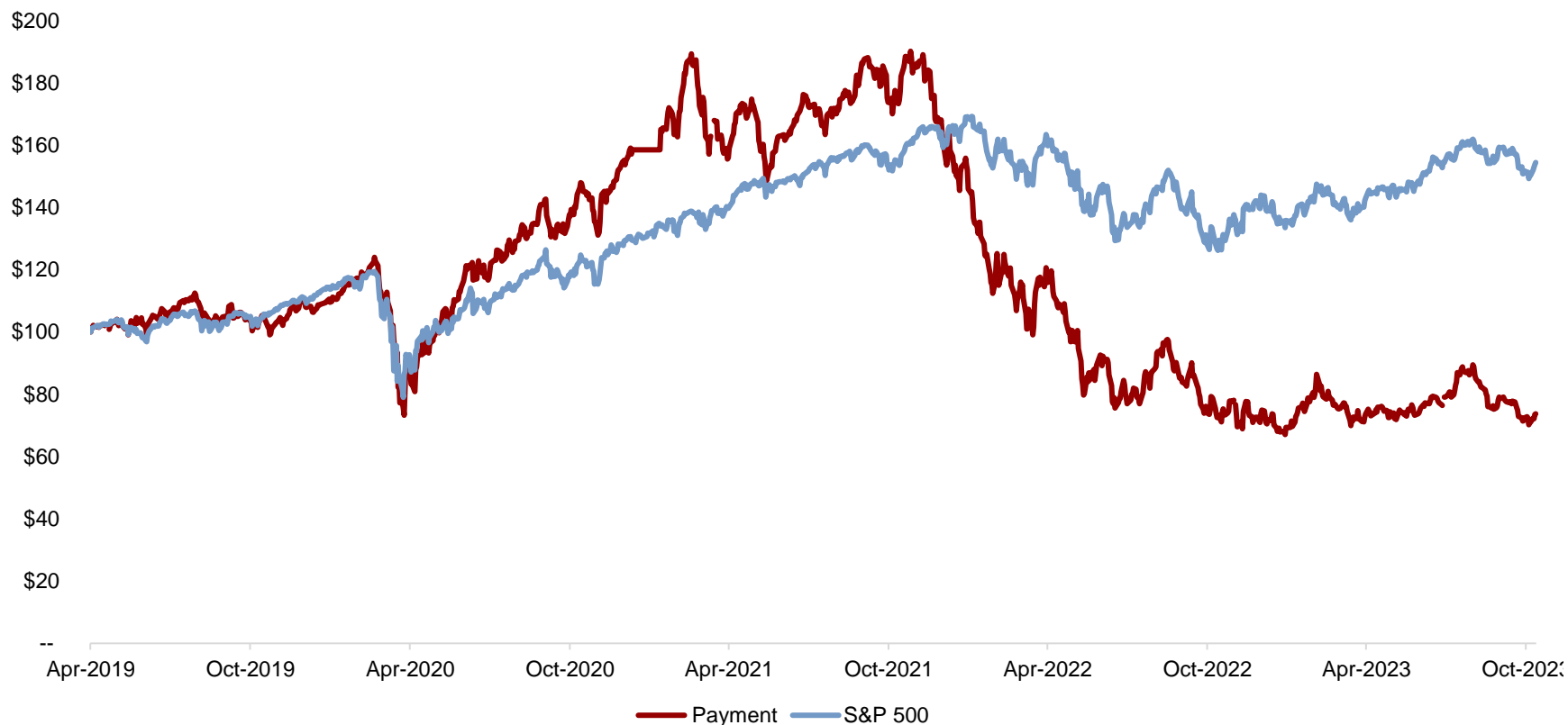


- When COVID hit, millions of consumers increased their online shopping. Payment companies are natural beneficiary.
- Many investors linearly extrapolated this growth far into the future, bidding their stock price up.

Source: Capital IQ, Internal Estimates

Why Does This Opportunity Exist?

Extrapolation bias creates a psychological pitfall we can exploit for alpha



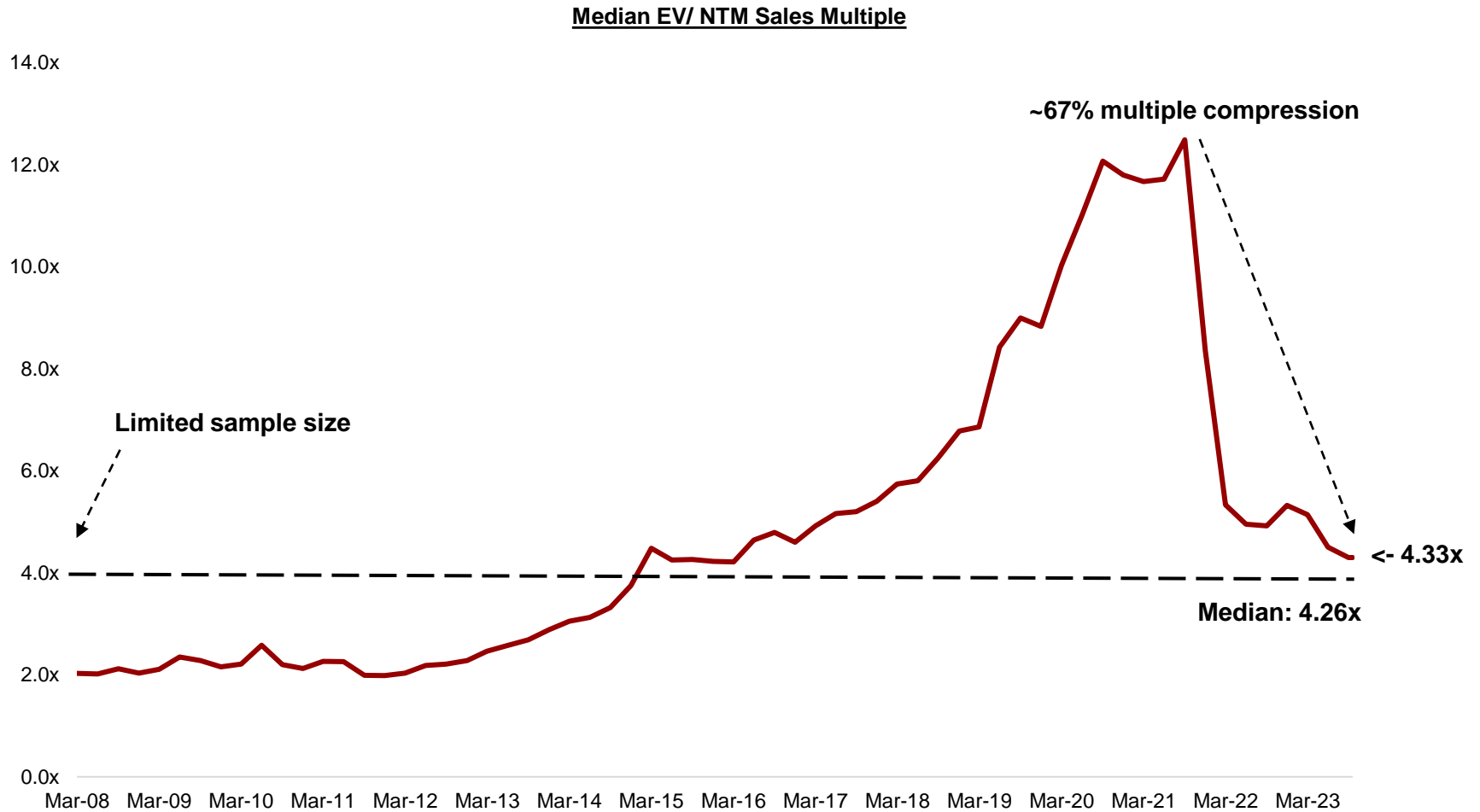
- Now as COVID wanes, many players suffer extrapolation bias from the opposite direction. We argue this current downturn caused by transitory issues is as misleading as the initial surge.

Source: Capital IQ, Internal Estimates

Valuation

EV/NTM Sales have compressed significantly

Median digital payments EV / NTM sales multiple has compressed significantly and is sitting near long-term average

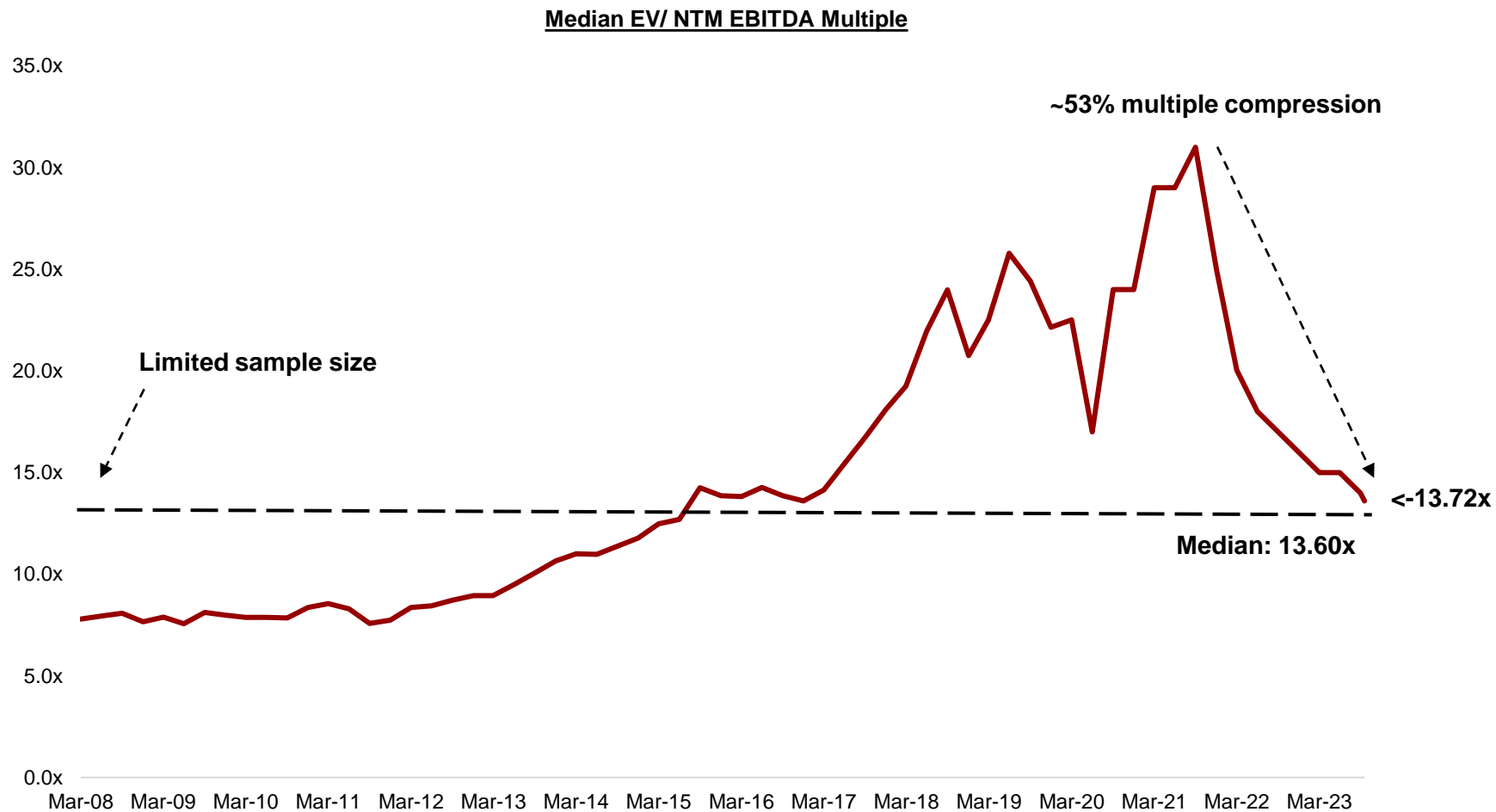


Source: Capital IQ, Internal Estimates

Valuation

EV/NTM EBITDA have compressed significantly

Median digital payments EV / NTM EBITDA multiple has compressed significantly and is sitting near long-term average

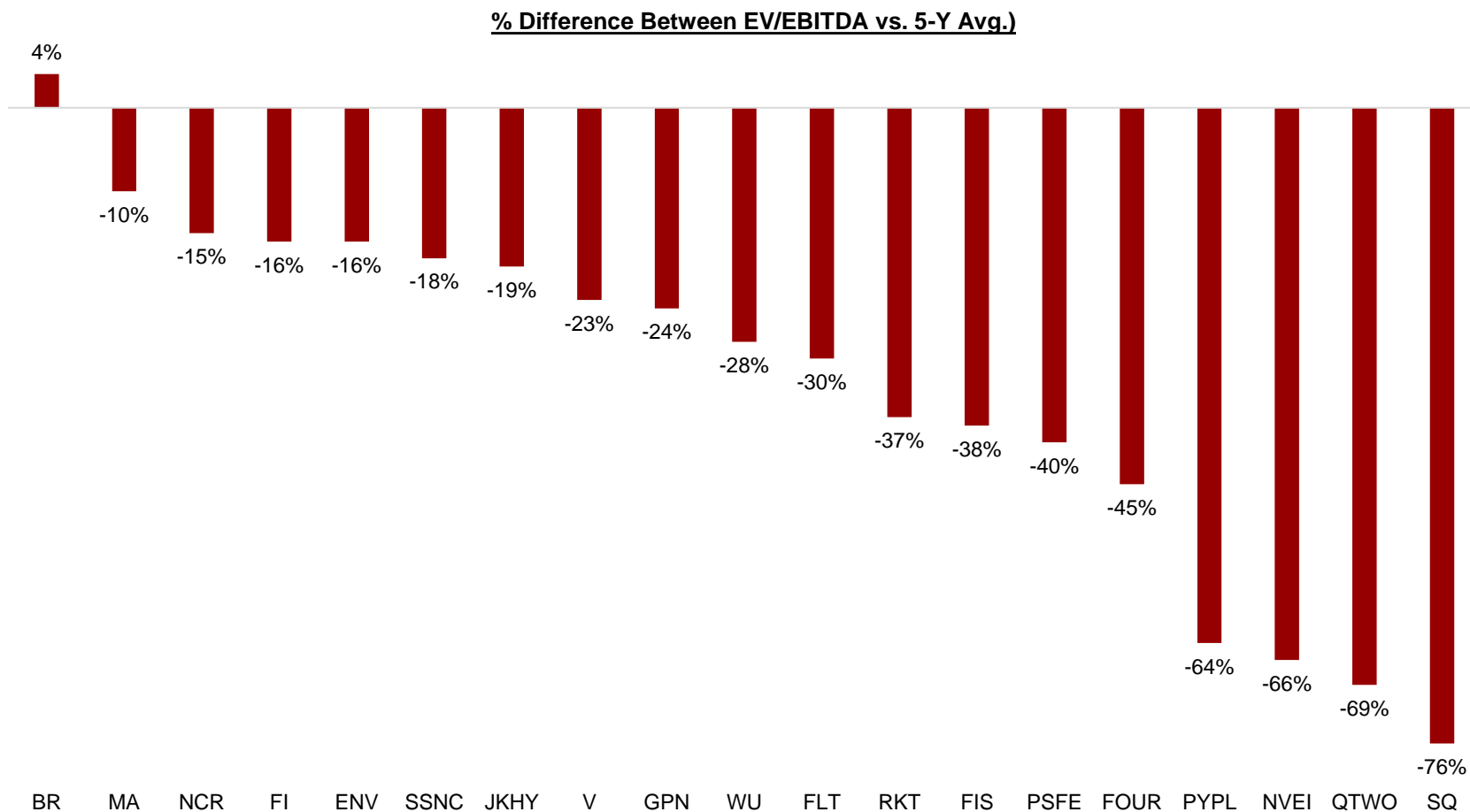


Source: Capital IQ, Internal Estimates

Valuation

Multiples have come down significantly compared to the 5-Y Avg.

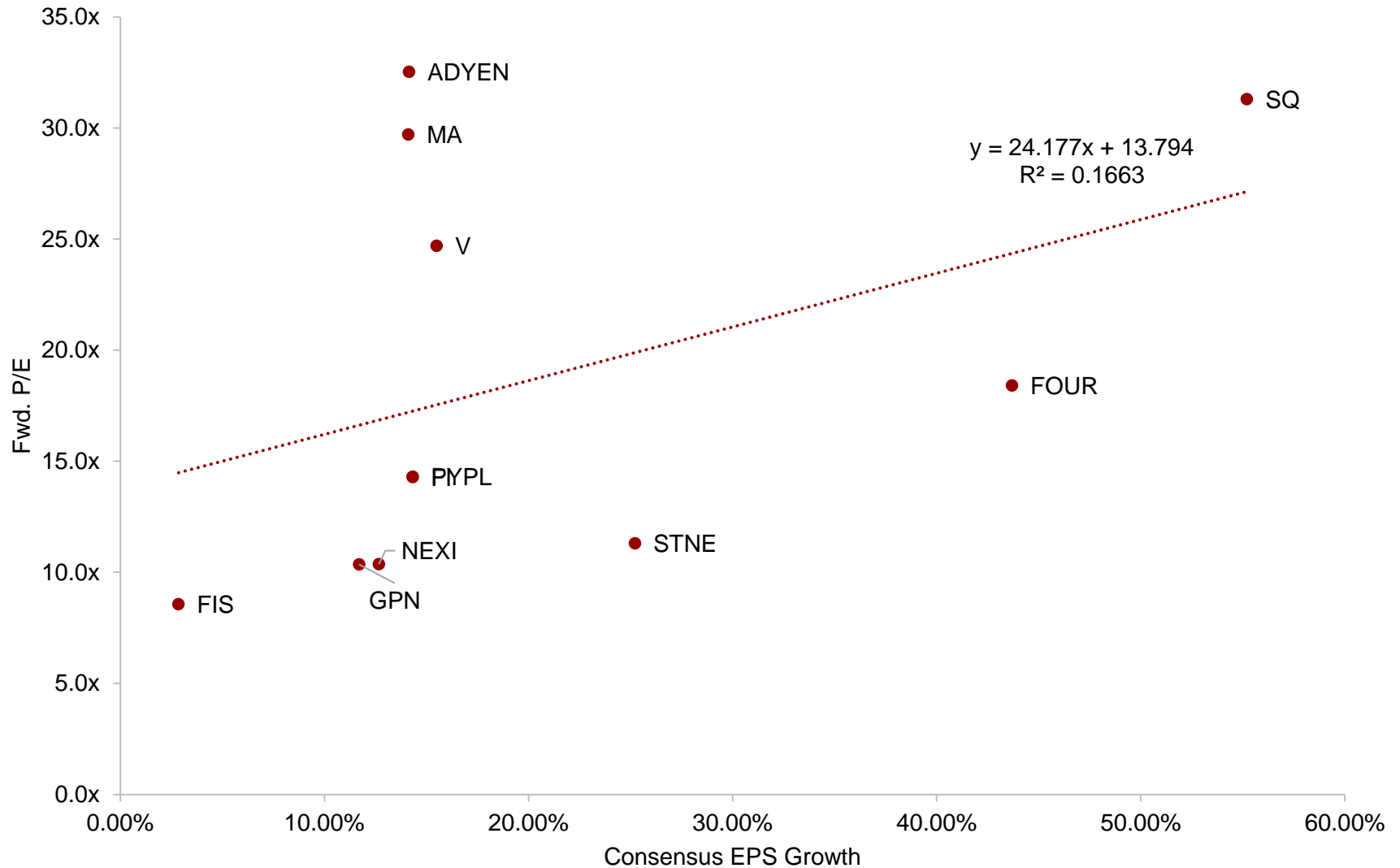
Many payment players are trading significantly below their 5-Y Avg



Source: Capital IQ, Internal Estimates

Valuation

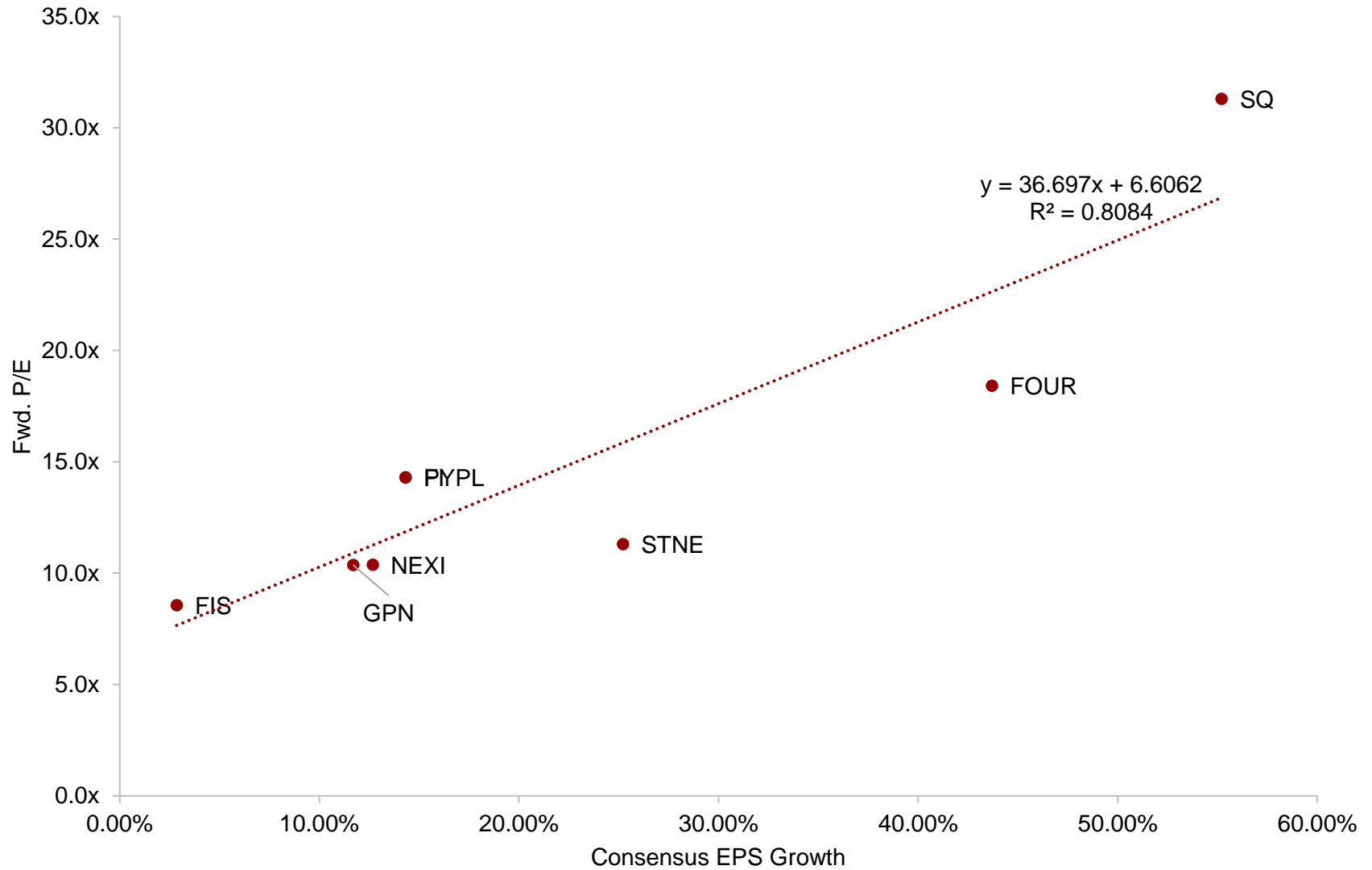
Relationship between 2-Y Fwd. consensus EPS growth and Fwd. P/E



Source: Capital IQ, Internal Estimates

Valuation

Relationship between 2-Y Fwd. consensus EPS growth and Fwd. P/E

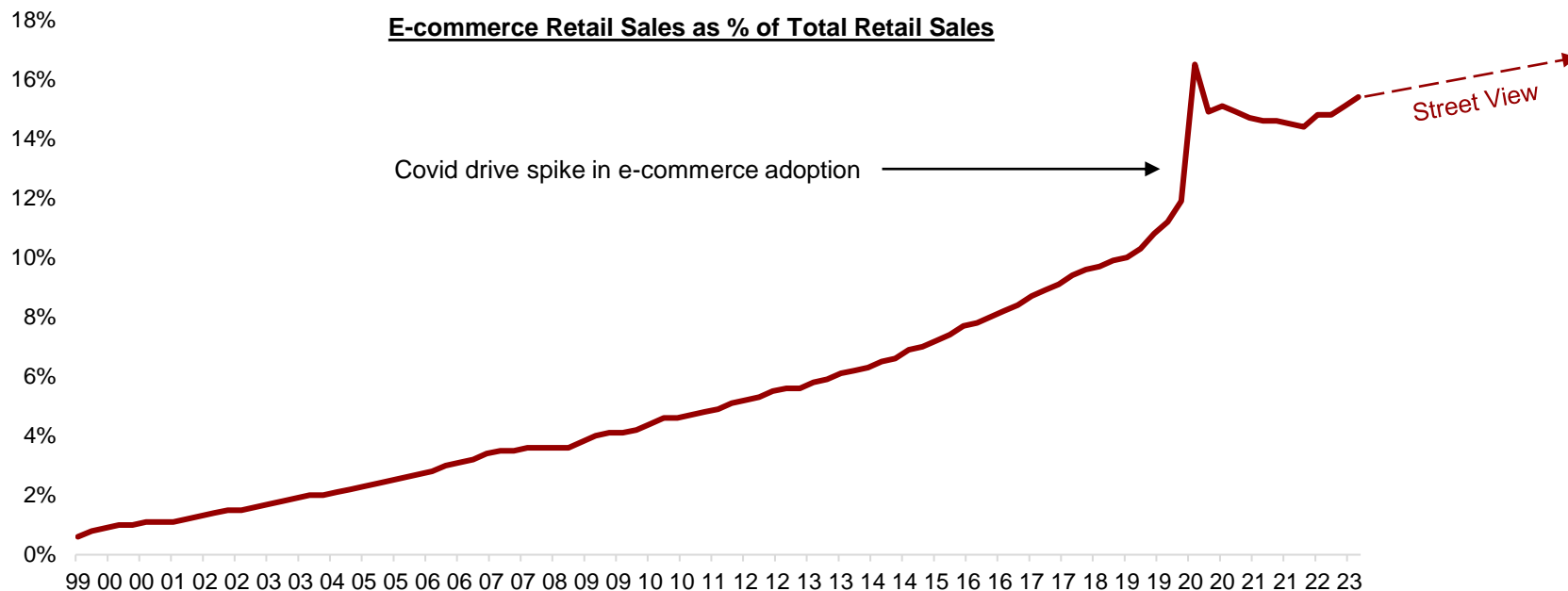


Source: Capital IQ, Internal Estimates

E-Commerce – Key EPS Growth Driver

Sudden upward and downward inflections in demand put many companies exposed to e-commerce at a disadvantage

E-commerce is in reset as we digest COVID gains



Consensus View

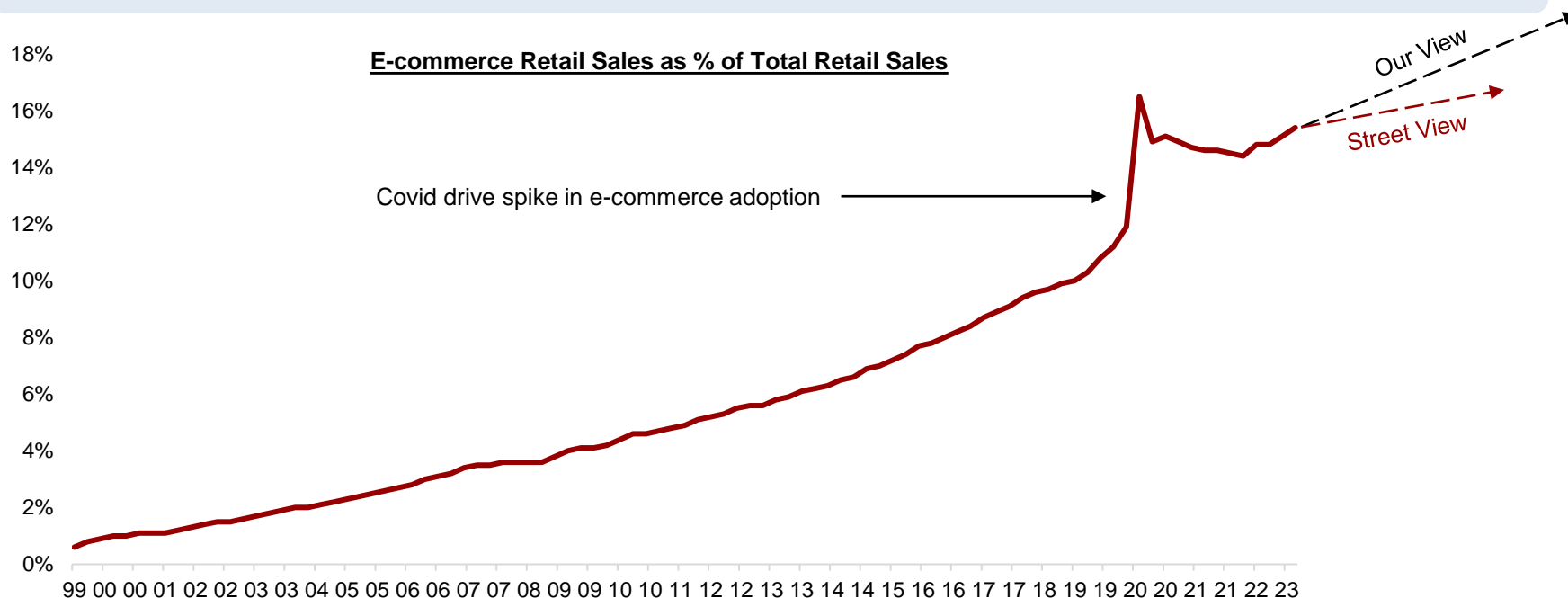
- The current sentiment is negative. Street points to high interest rates, inflation, low consumer confidence and other macro headwinds as key challenges for e-commerce.
- “The pull forward of digital spending from the **pandemic may have borrowed some growth from the future**. – HSBC
- E-commerce spending has been muted...following a choppy earnings season as **inflationary pressures and rising interest rates** weight on.” - Needham
- “...we expect **ongoing macro headwinds** to continue to pressure base growth. - CS
- Our outlook on [E-commerce] depends on the health of the consumer and **macro headwinds**. - TD Cowen

Source: Capital IQ, Internal Estimates

E-Commerce – Key EPS Growth Driver

Sudden upward and downward inflections in demand put many companies exposed to e-commerce at a disadvantage

E-commerce is in reset as we digest COVID gains



Our View

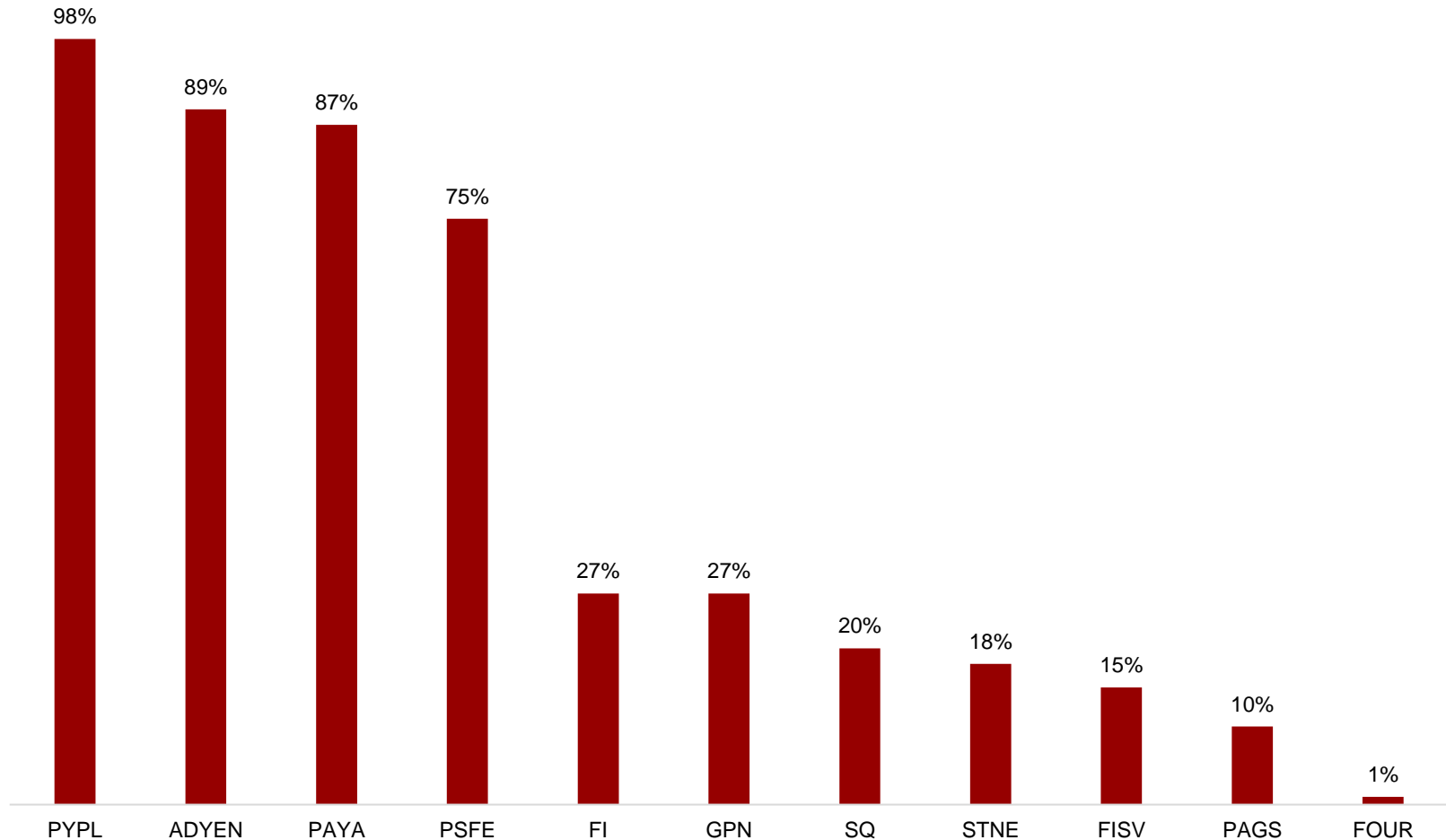
- Our contrarian view is rooted in **time horizon arbitrage**.
- We agree that macro issues are material risks, but they are short-term in nature. Looking 2-5 years out, e-commerce will return to 7-10% annual growth rate. We believe this is a great opportunity to take advantage market's short-term extrapolation.
- U.S. e-commerce is still under penetrated, only representing ~20% of the total retail sales.
- The e-commerce industry will continue to grow much faster than broad retail due to increasing internet penetration, rising smartphone adoption, and changing consumer preferences.

Source: Capital IQ, Internal Estimates

Company Exposure

Sudden upward and downward inflections in demand put many companies exposed to e-commerce at a disadvantage

Payment companies' estimated exposure to e-commerce

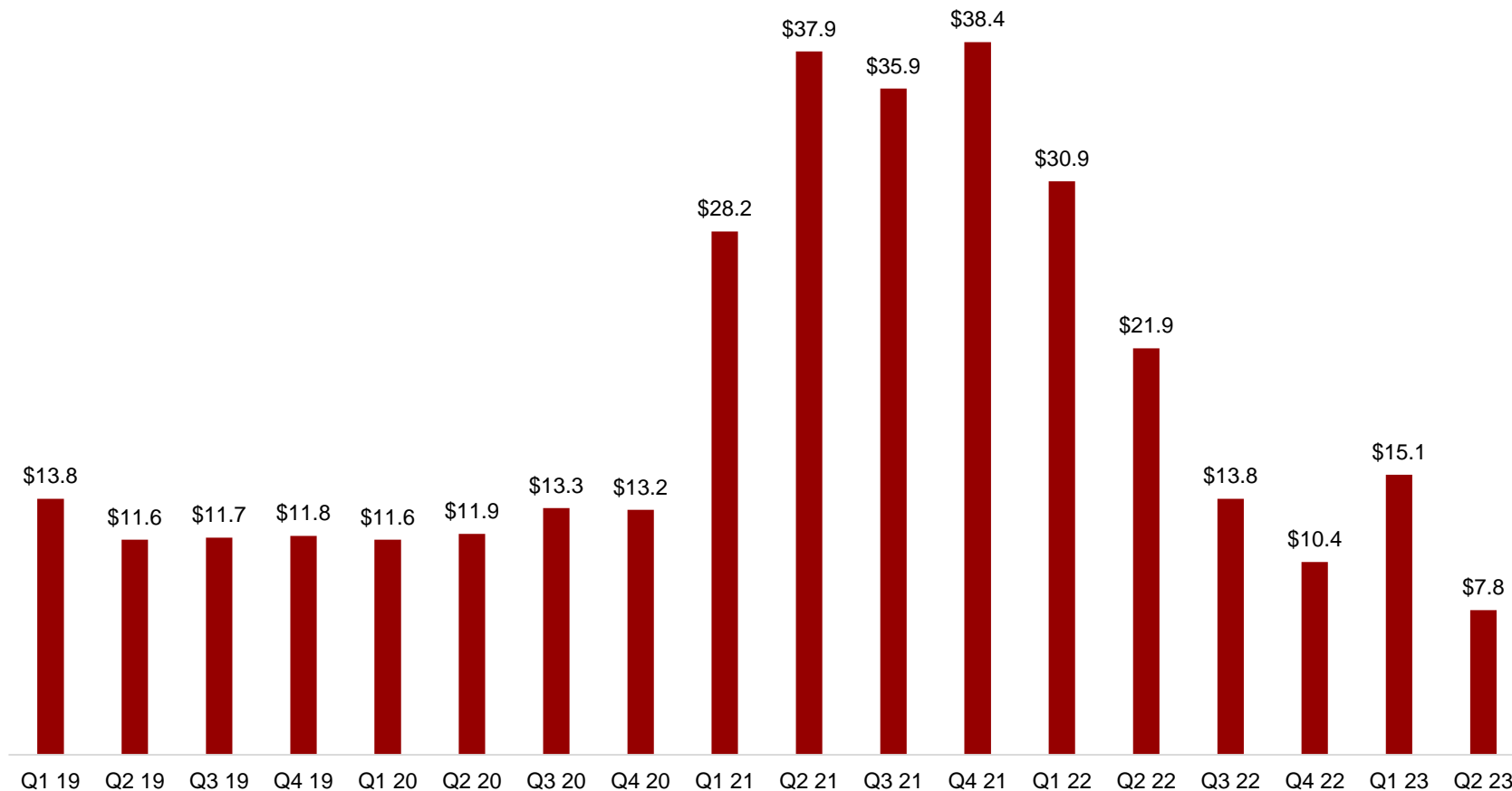


Source: Capital IQ, Internal Estimates

M&A – Key EPS Growth Driver

Industry consolidation will continue over the next several years

One of the largest fintech acquisition cycles occurred during COVID which has now come down materially



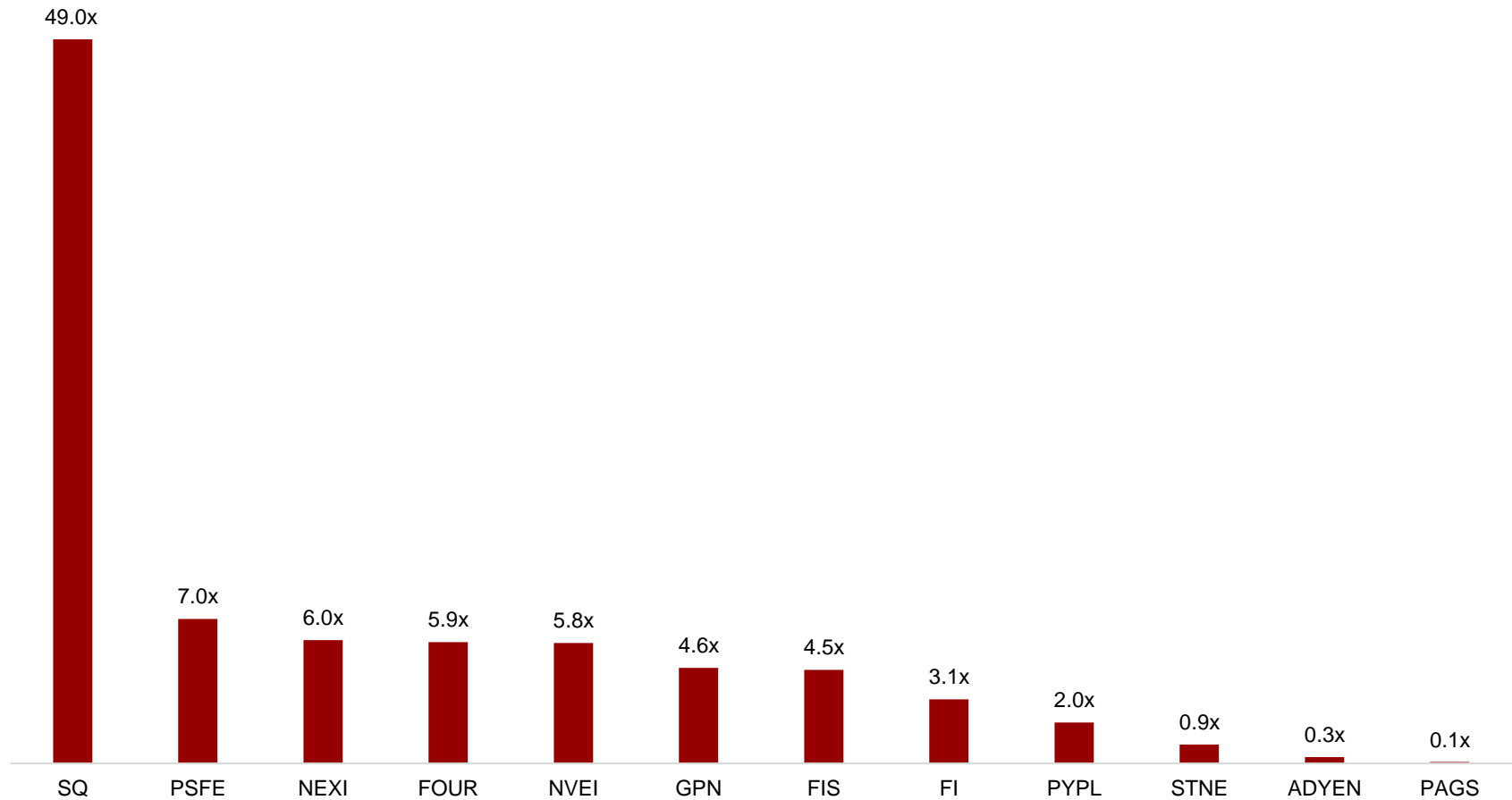
Source: Capital IQ, Internal Estimates

Who Is Best Positioned To Consolidate?

Industry consolidation will continue over the next several years

As 1) smaller firms face cash shortages and 2) valuation come down from COVID highs, we see greater interest in M&A from well-capitalized incumbents

Net Debt / EBITDA



Source: Capital IQ, Internal Estimates

AI – Key EPS Growth Driver

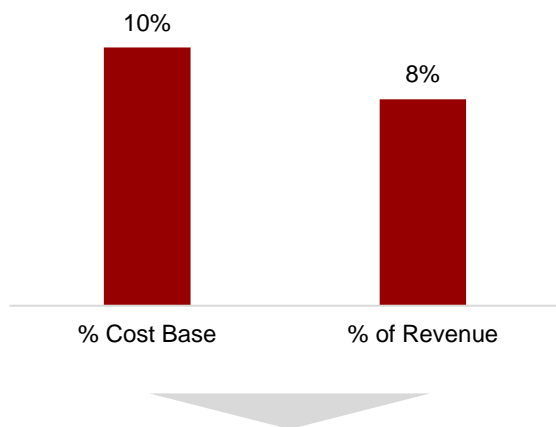
AI presents material cost-cutting optionality

So far, Street has mostly focused on the benefit of AI on the revenue front...

- By utilizing advanced analytics and AI/ML tools atop droves of transactional data, the **organizations can better target new customers and serve existing ones** via more seamless and personalized interactions – TD Cowen
- The use of artificial intelligence (AI) is an important component of efforts to **better secure data and promote cybersecurity**. - HSBC

...but we think AI can benefit payment companies on the cost front as well

PYPL's Customer Service & Support Expense



We believe the **cost-cutting optionality with AI** to reduce customer service & support expense over time will lead to **a step-change in EPS growth**.

Management & Street Commentary

- "We expect **AI will enable us to meaningfully lower our costs** for years to come" – PYPL Q1, FY23 Earnings
- Generative AI will serve to further these propositions and more, and **support companies in customer service/virtual assistant activities** – TD Cowen

- We think the **street recognizes the potential** EPS growth impact of AI but **don't know how to model it**.
- **Lack of formal forecast/target** as well as **timing uncertainty** cause this material optionality to be largely ignored.
- The right strategy for a patient investor is to **simply buy-and-hold** PYPL shares for a few years, but the sell-side is financially incentivized not to give that advice because such a strategy generates very little trade volume flow for their bank's trading desks.

Source: Capital IQ, Equity Research, Internal Estimates

The Dominance of the Payment Industry

Bigger than Google?

We agree with Paul that payment is bigger than advertising and that it stands to be the most attractive industry to be in



Paul Graham ✓

@paulg

I'm going to risk calling it. The feeling of deja vu is too strong. Stripe is the next Google.

11:19 AM · Oct 10, 2020

559 Reposts 195 Quotes 6,814 Likes 671 Bookmarks



Pye @pyewaw · Oct 10, 2020

Can they be bigger than Google?

3

1

47



Paul Graham ✓ @paulg · Oct 10, 2020

Probably. There is more money in money than search.

26

54

913



Conclusion

Just to sum up everything

1

- The median digital payment stock is down significantly over the past two year.

2

- The median EV / Sales multiple for digital payment stocks have compressed significantly below their 5-Y average and is back in line with their 15-Y average.

3

- Revenue and EPS growth Y/Y estimates have come down significantly, but we think the long-term drivers are still intact and the future looks bright.

4

- The payment industry is one of the most attractive industry to be in; the key is to identify the ultimate winner.

5

- Given attractive risk/reward profile, we believe this to be a very exciting time to deploy capital to payment companies.

6

- The large cap digital payment stocks are great businesses despite some short-term transitory issues. Their unique combination of global reach, scale, and strong free cash flow generation have resulted in best-in-class returns and may continue for many years into the future.

Source: Internal Estimates

Desautels Capital Management

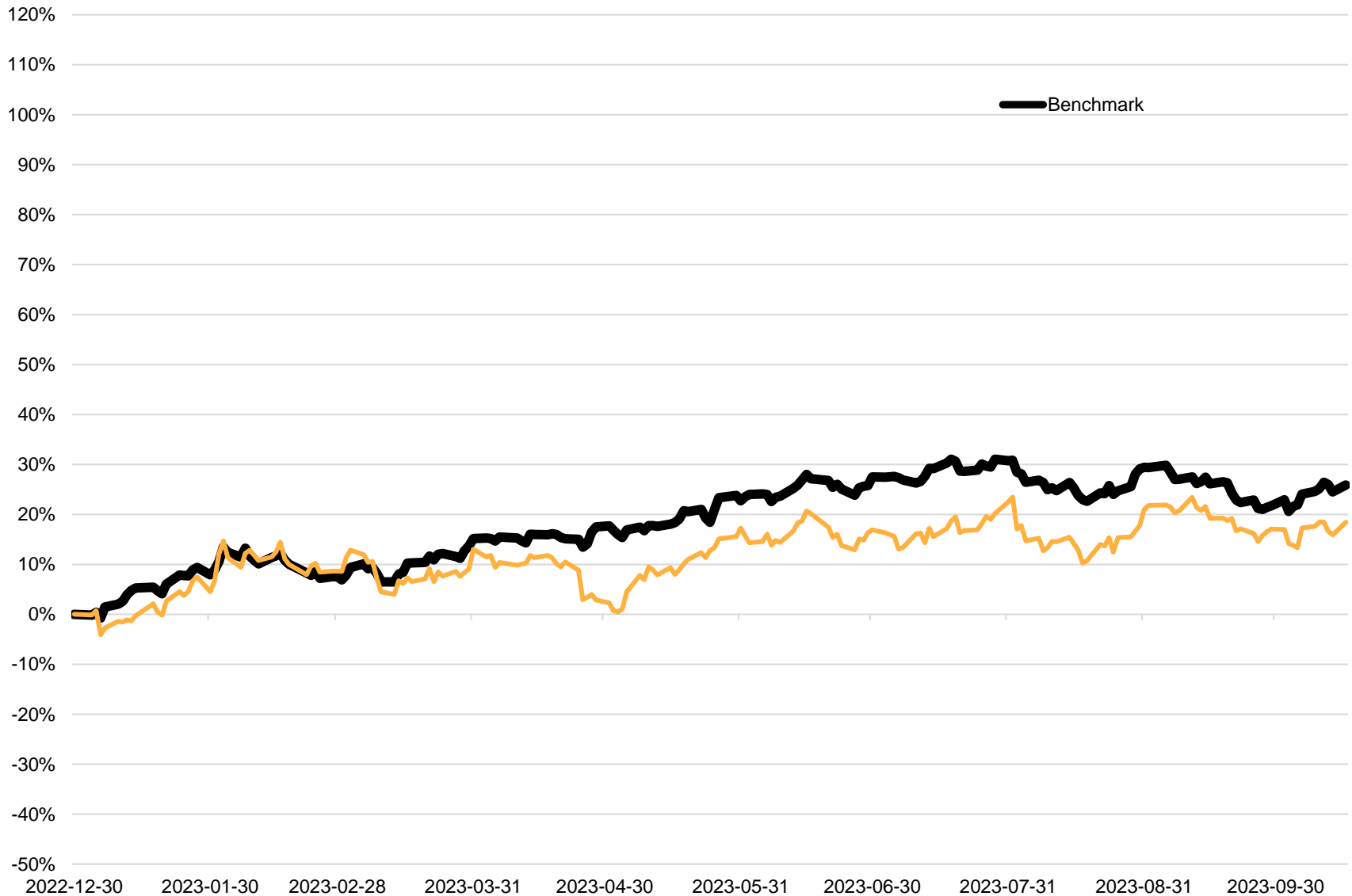
Honours in Investment Management

Holdings Review



Alpha Generation

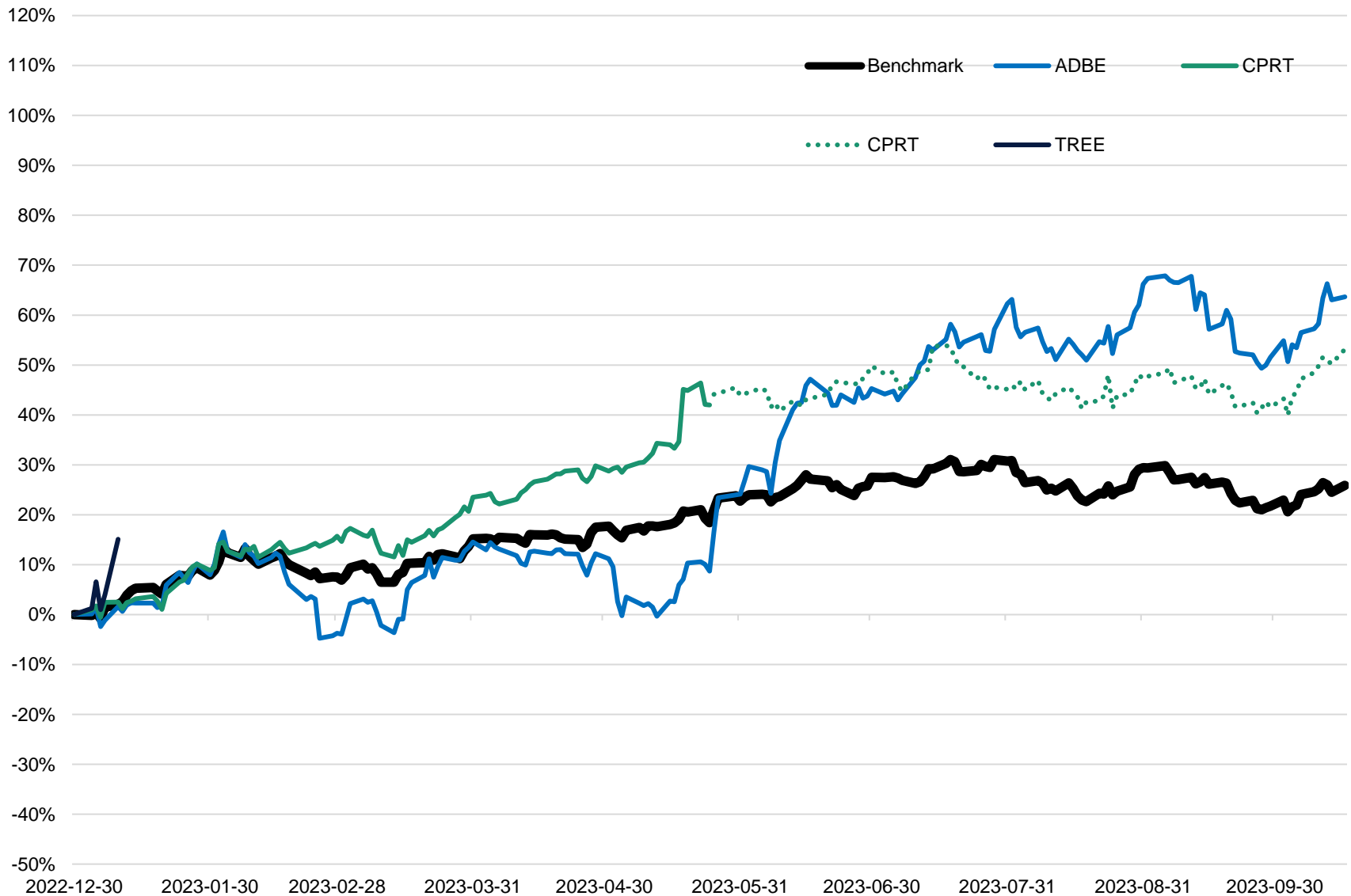
“They didn’t believe in us, but God did”



Source: Bloomberg

Alpha Generation

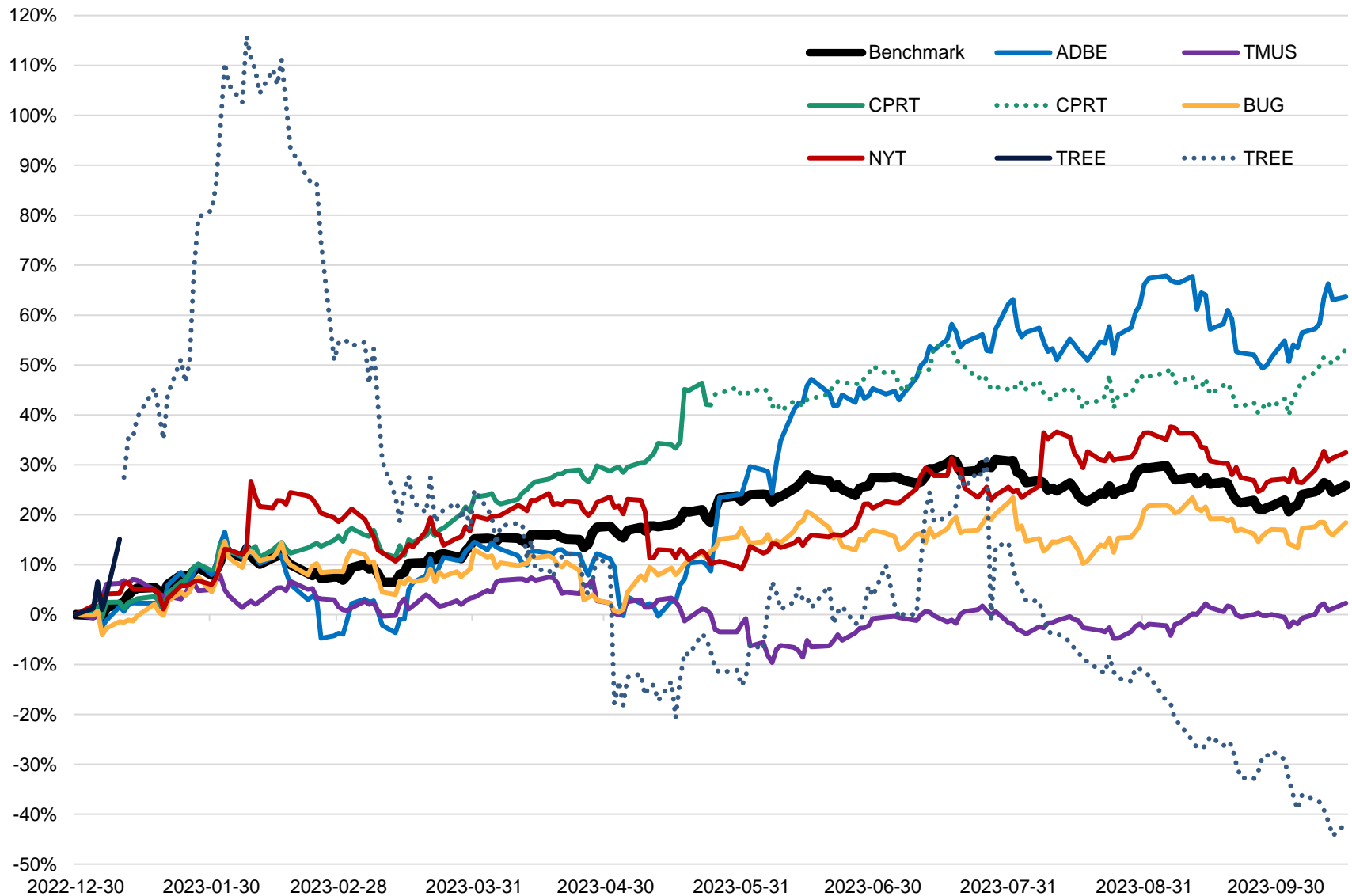
“They didn’t believe in us, but God did”



Source: Bloomberg

Alpha Generation

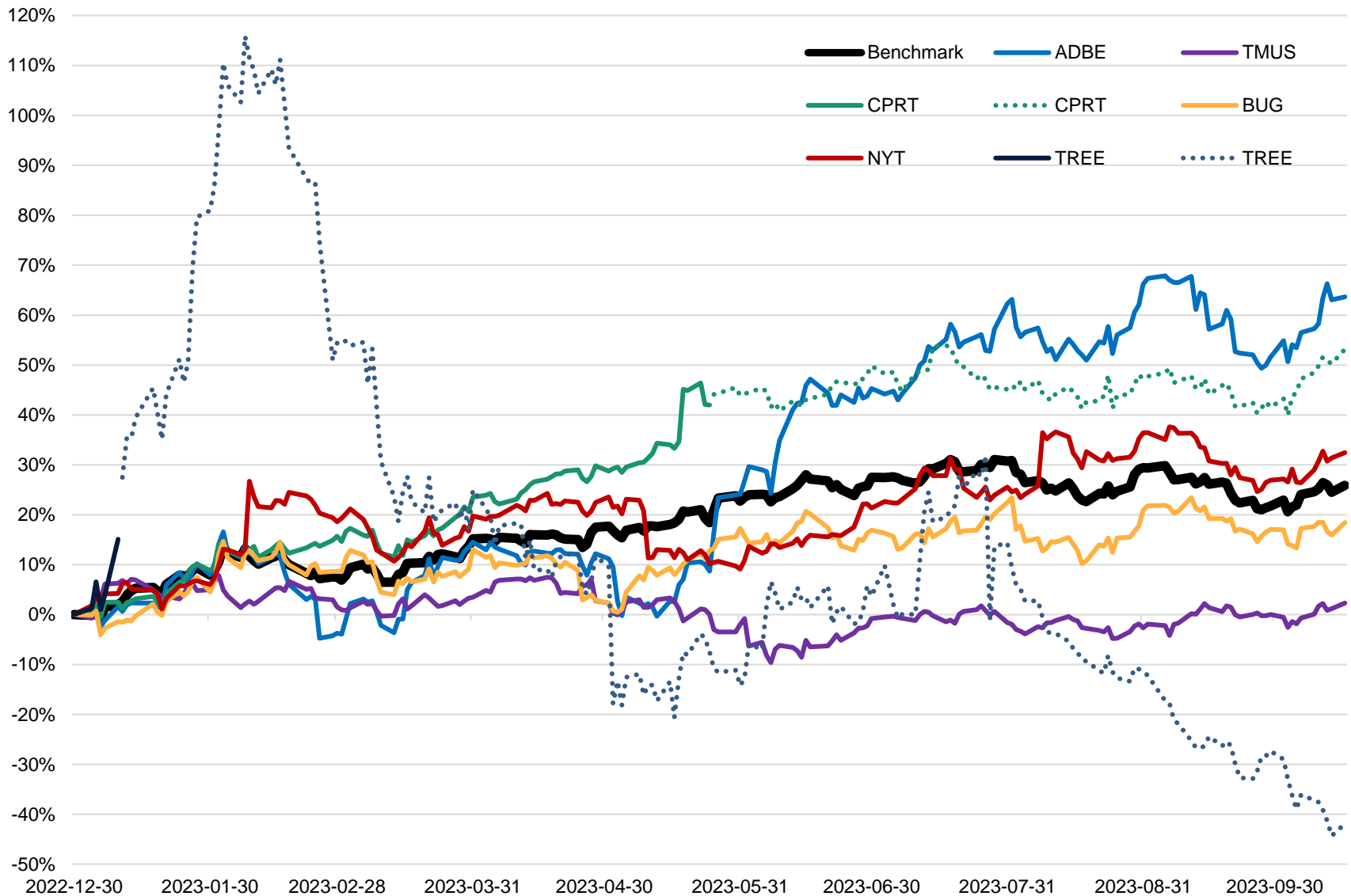
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Source: Bloomberg

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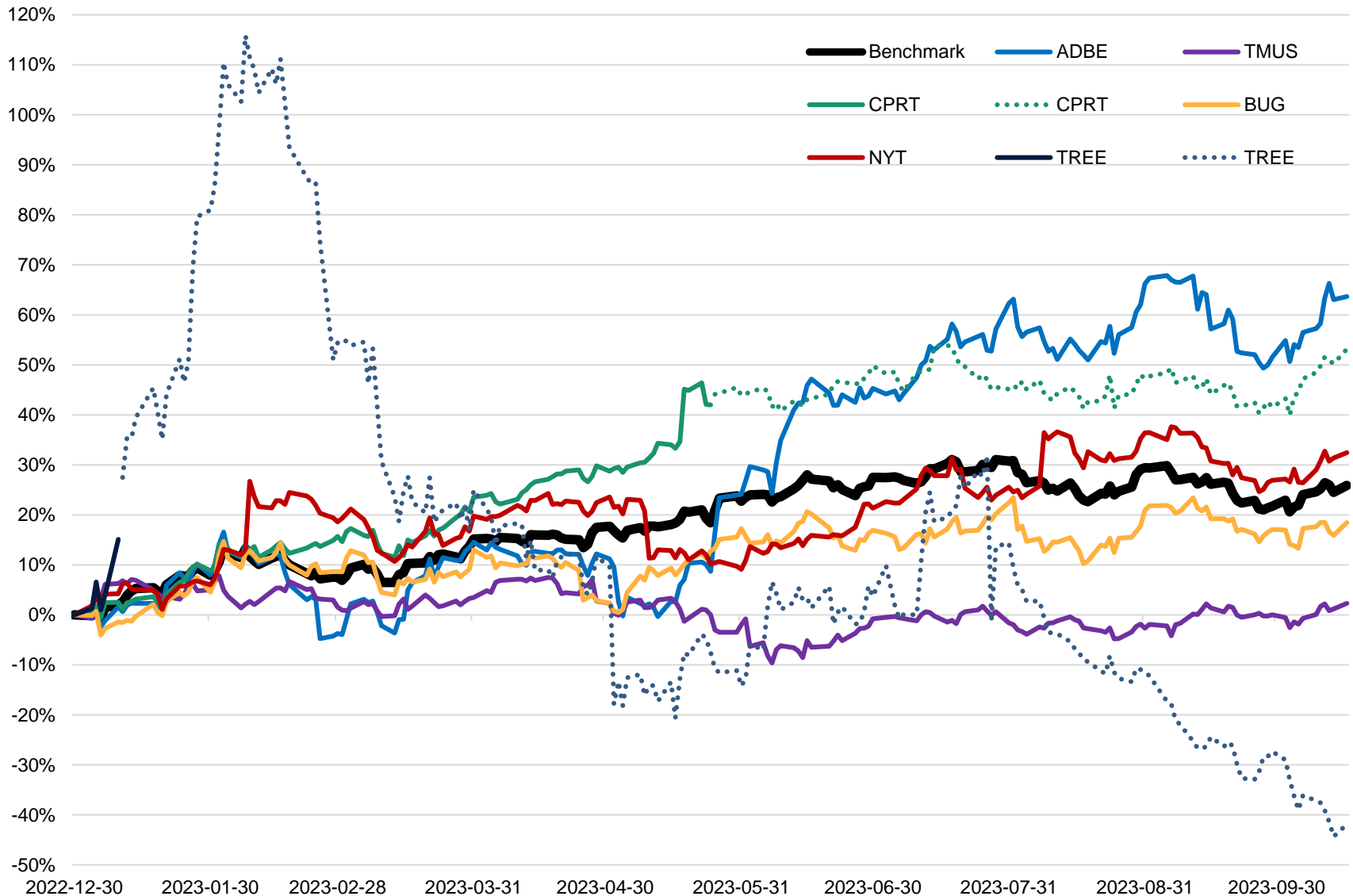
“They didn’t believe in us, but God did”



Source: Bloomberg

Alpha Generation

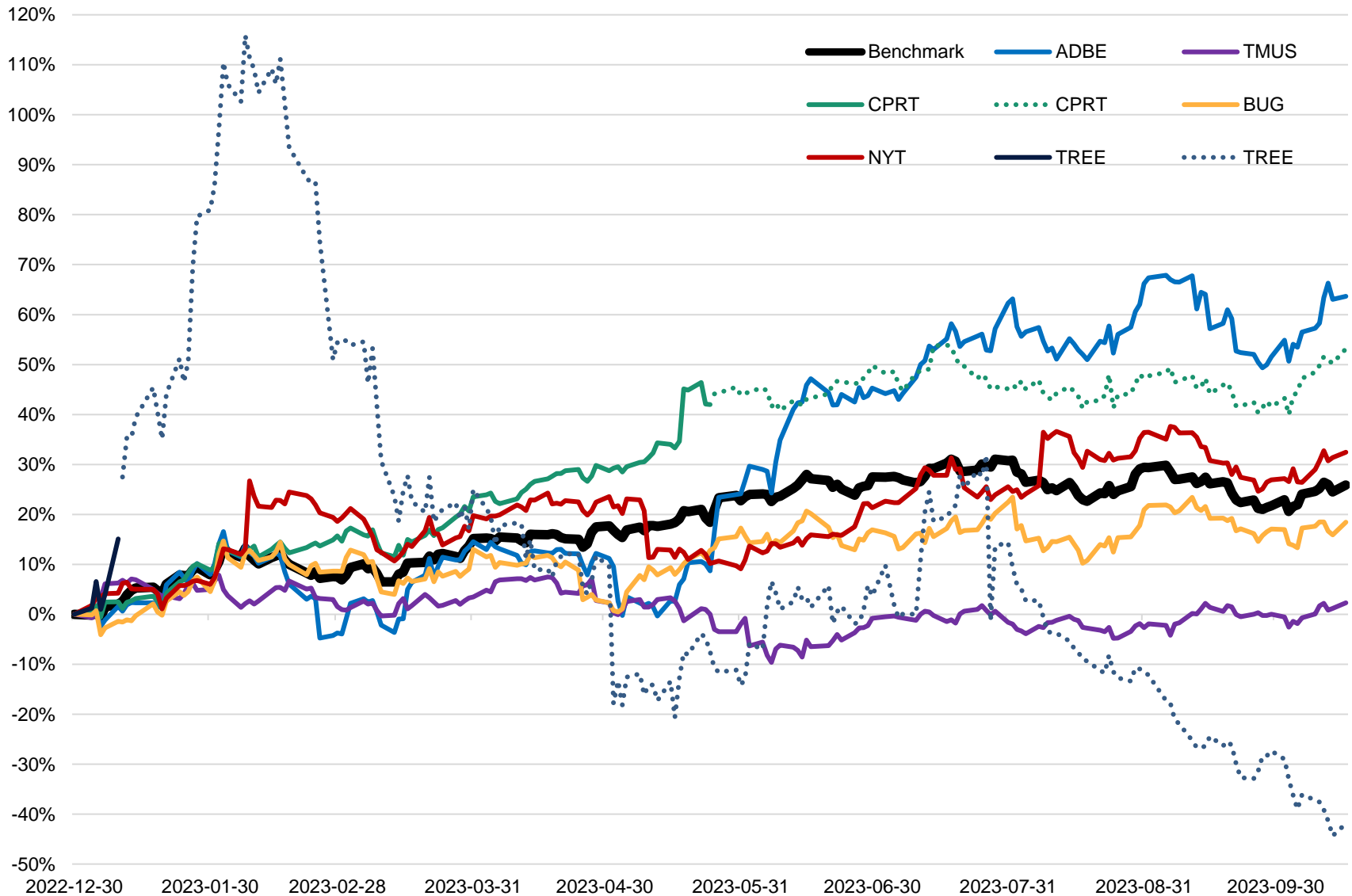
“They didn’t believe in us, but God did”



Source: Bloomberg

Alpha Generation

“They didn’t believe in us, but God did”

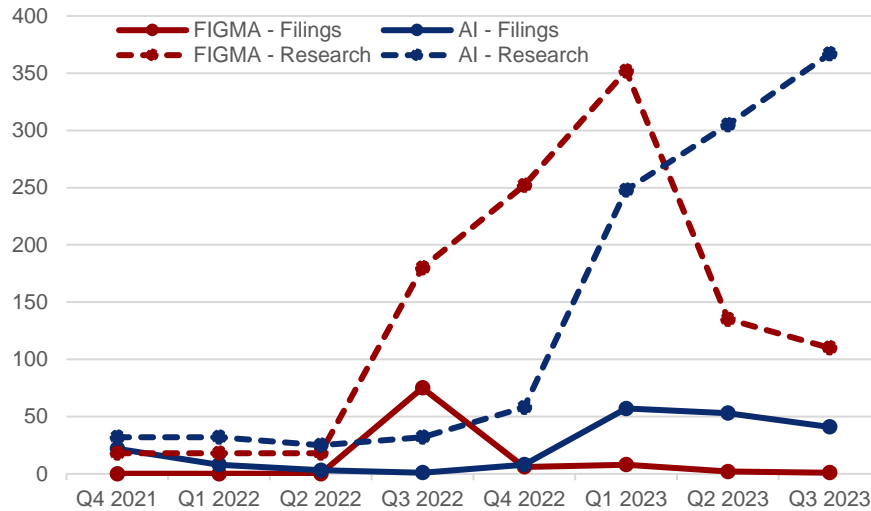


Source: Bloomberg

ADBE Review

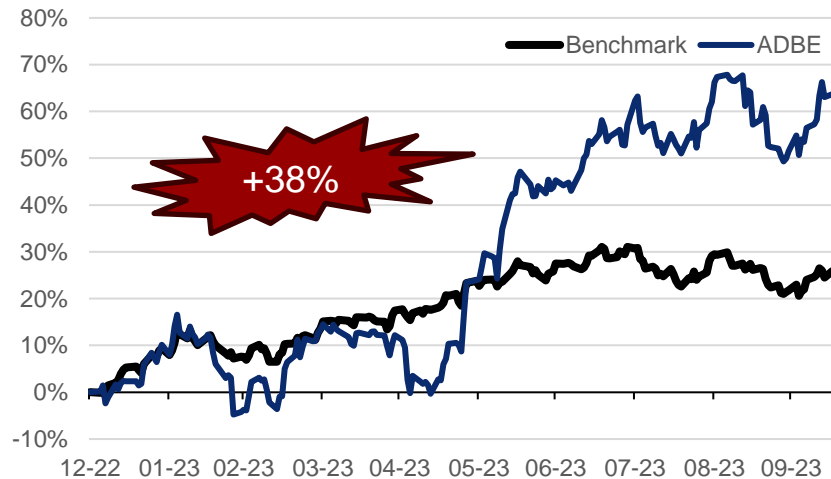
On-Brand TMT Outperformance

Number of Mentions in Research and Filings



Our Take On Market Narrative

YTD Outperformance Update

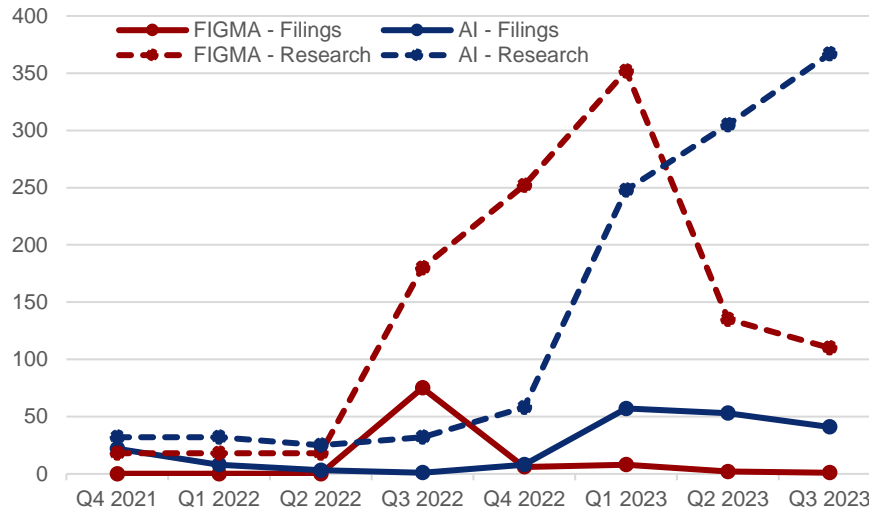


Source: Bloomberg

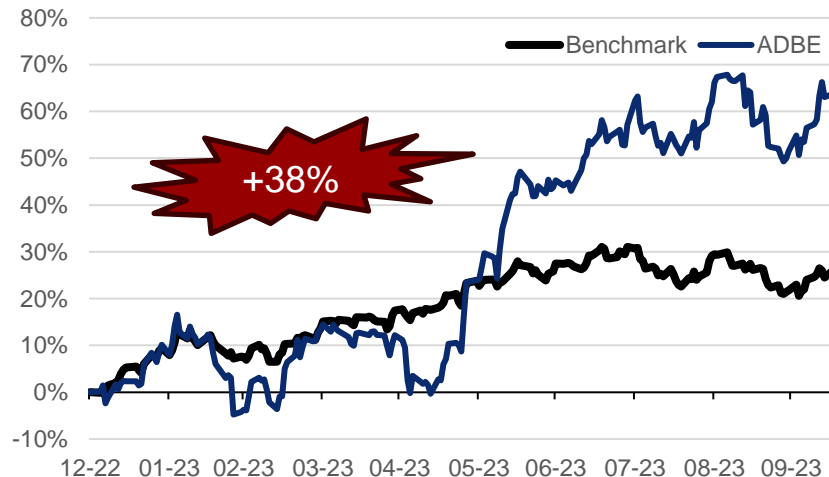
ADBE Review

On-Brand TMT Outperformance

Number of Mentions in Research and Filings



YTD Outperformance Update



Source: Bloomberg

Our Take On Market Narrative

What does the street think

- Street 2025+ EPS Estimates have only slightly budged after Sep. 2022 20%+ fall

Significant growth levers

- Owning Input Data
- Leveraging Existing Creative Momentum
- LTV/CAC Improved
- Winner in Creative Media Disruption

Much remains to be seen

- Pricing
- TAM Growth
- TAM
- Regulatory Hurdles

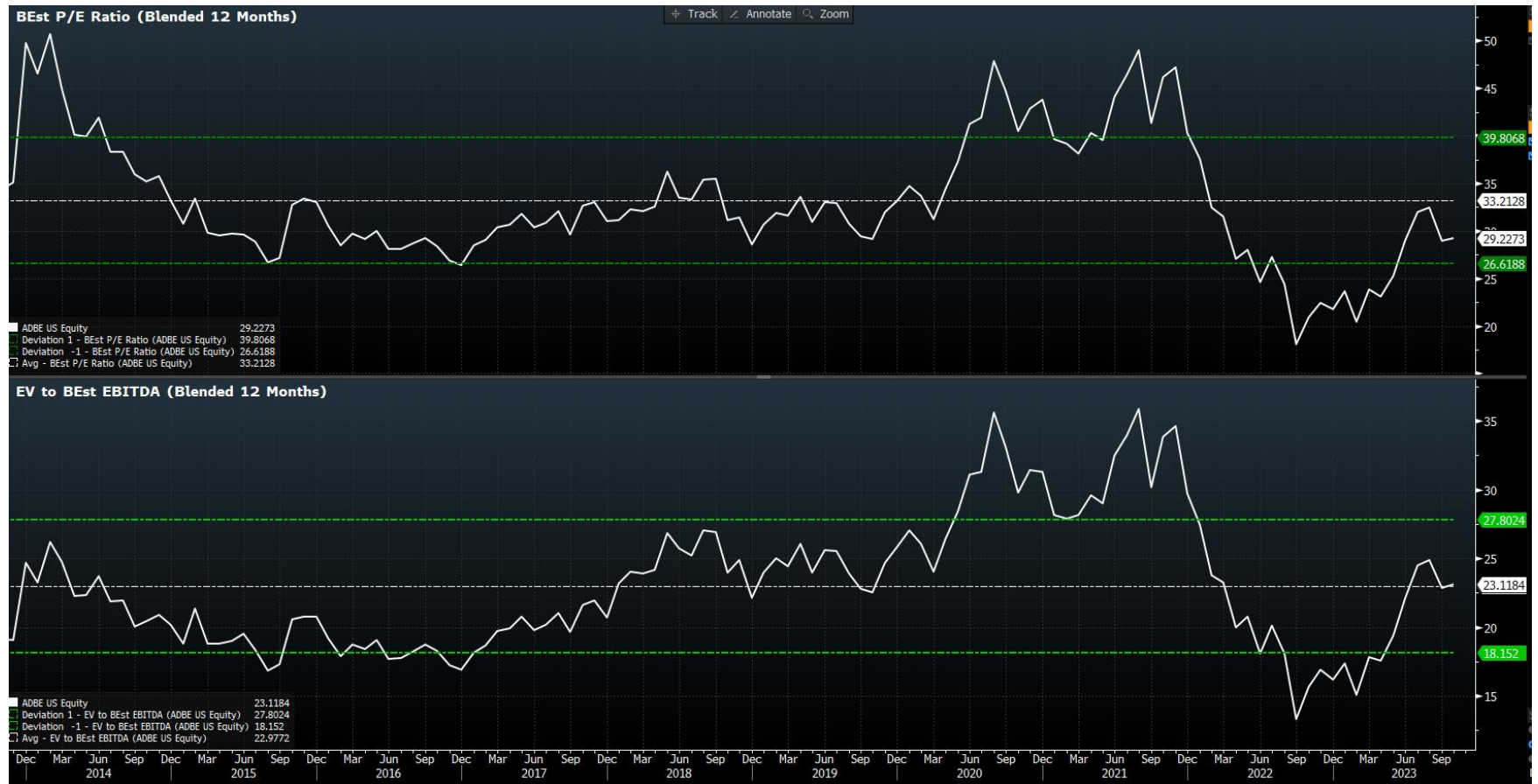
Quick Note on Figma deal

- Value Destruction Questions
- Bigger Picture



Figma

Green Line = +/-1 SD
White Line = Hist. Average



Source: Bloomberg

T-Mobile Remains Strongest Player in the Telecom Space

Key Insights From the Past Year

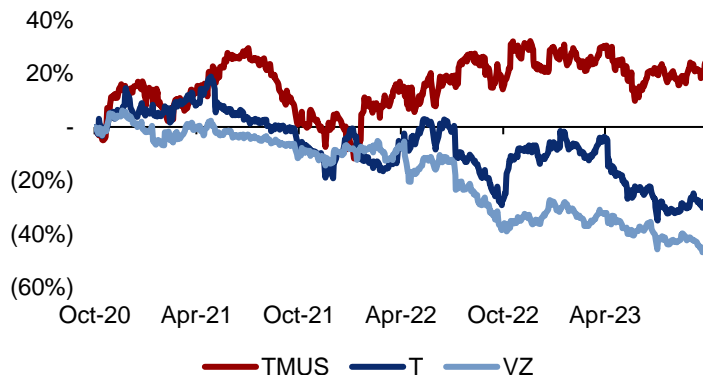
Competitive Landscape

- TMUS continues to gain market share from its peers
 - Strong Postpaid adds
 - Lowest in Industry Churn
- TMUS remains ~2 years ahead of competition in 5G race with >50% 5G share coverage

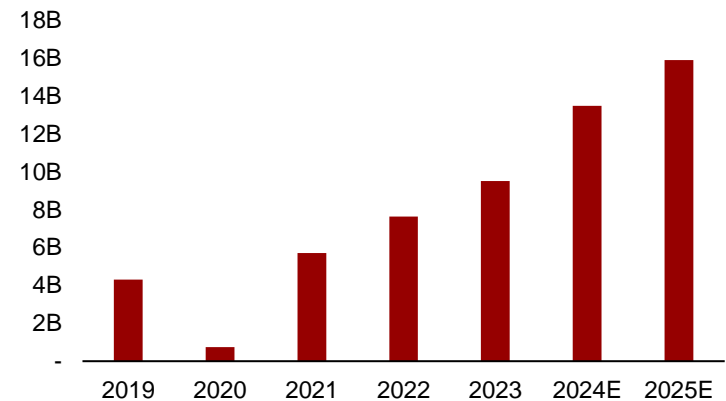
Returning Capital to SH

- TMUS announced a 19bn shareholder return program from 4Q23 to YE24
- Announcement of 3bn annualized dividend
- The company also reiterated their target of returning 60bn to shareholders by mid 2026

3-year Performance



Free Cash Flow



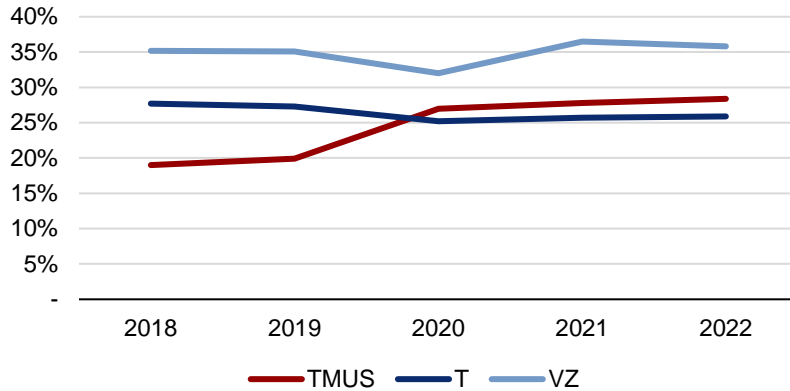
Leading position enables them to return capital to shareholders

Sources: Equity Research (RBCCM, WF, HSBC, DB, BNP), Bloomberg, CapIQ

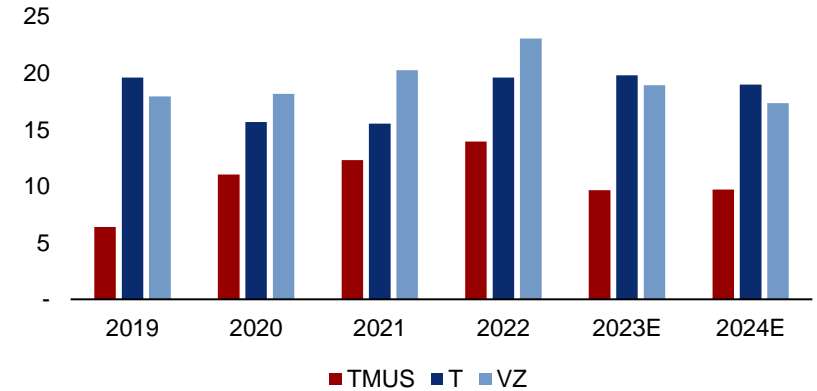
T-Mobile

Comparing the 3 Main Players

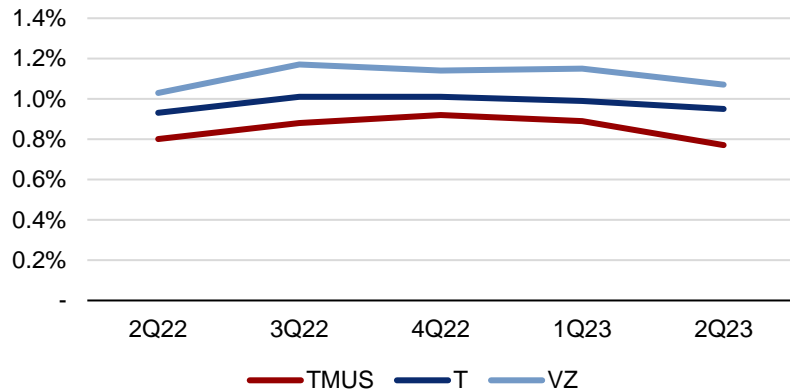
Wireless Subscribers Market Share



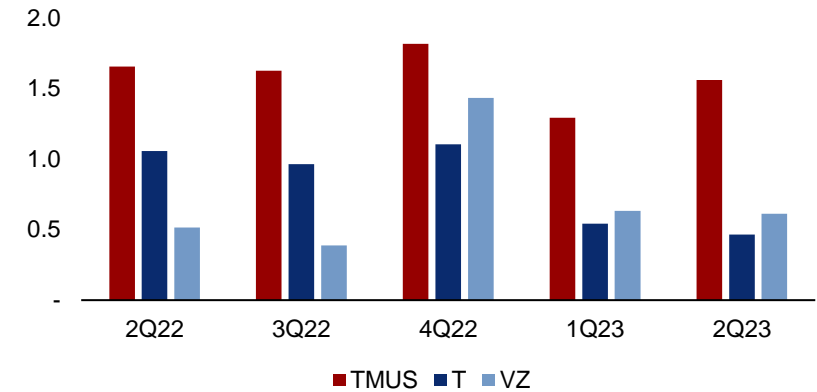
Capital Expenditures (USD Bn)



Postpaid Churn



Postpaid Subscribers Net Additions (Bn)



T-Mobile continues to outperform peers in key metrics

Sources: Bloomberg

Thesis Revisited

Old Theses Now Materialized



Thesis 1
T-Mobile's First-Mover Advantage is Undervalued



Thesis 2
Market underestimating the risks associated with new 5G rollout Category

Where we See New Opportunities

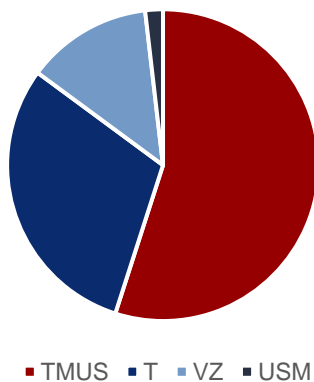
Opportunity for margin expansion

- TMUS plans generally are ~10-15% cheaper
- Overall quality higher than both T and VZ

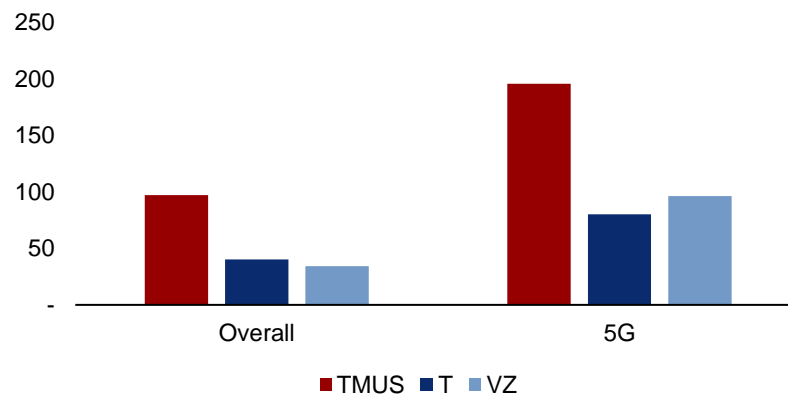
New growth avenues may not be priced in

- Enterprise and rural markets as near-term initiatives
- Potential to enter the fiber optic market

5G Coverage Share by carrier



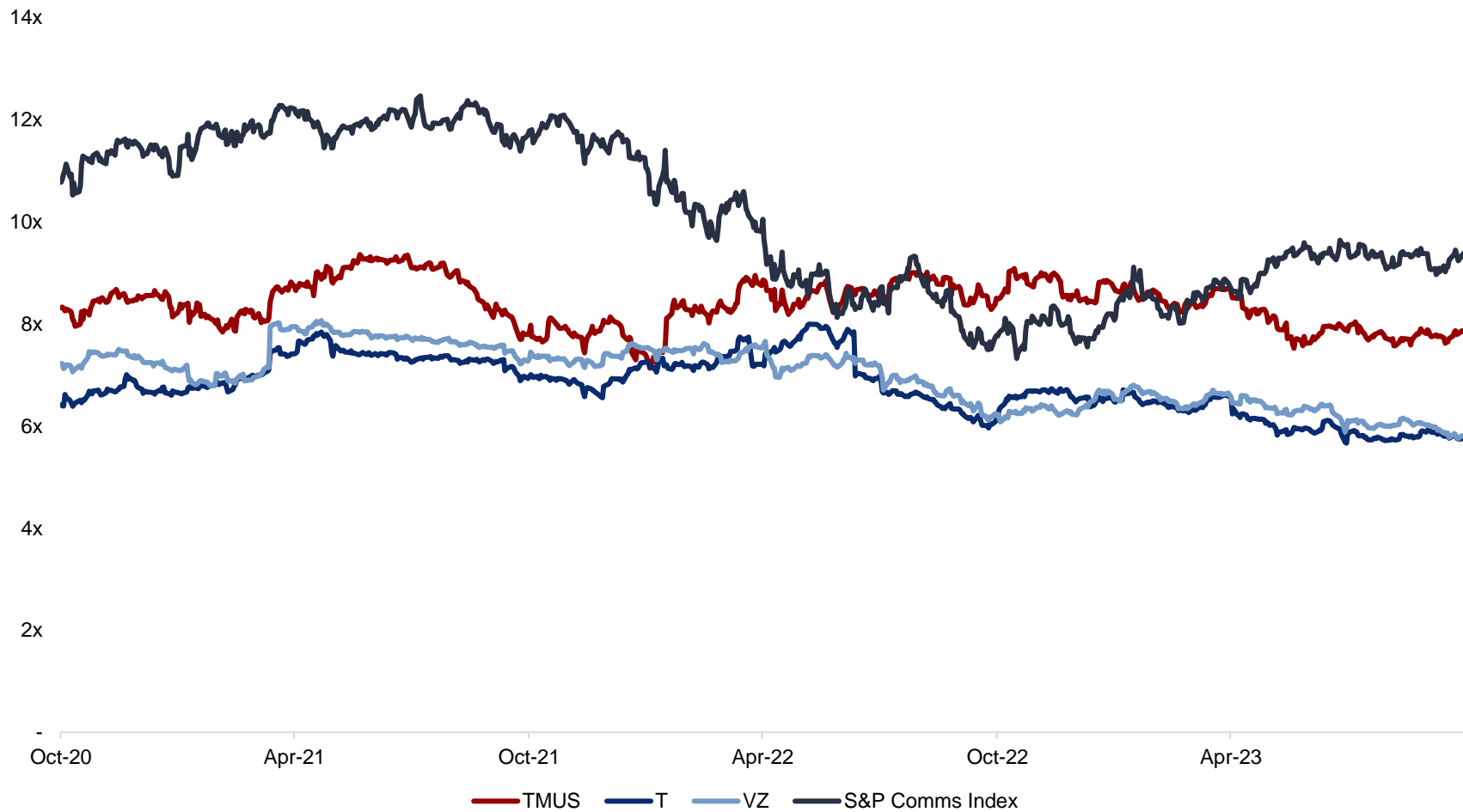
5G and Overall Mobile Download Speed



We believe we should HOLD T-Mobile further as the company maintains its leading position in the Telco space

Sources: Equity Research, Bloomberg, CapIQ

EV / EBITDA for Major Telecom Players



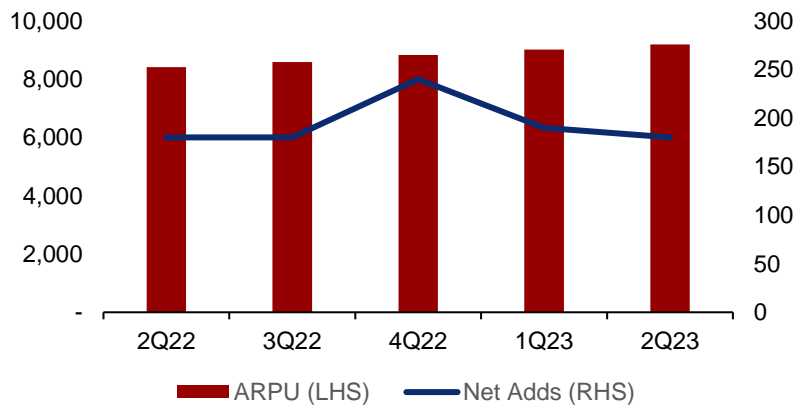
TMUS continues to trade at a premium which we believe is granted given recent performance

Story still makes sense

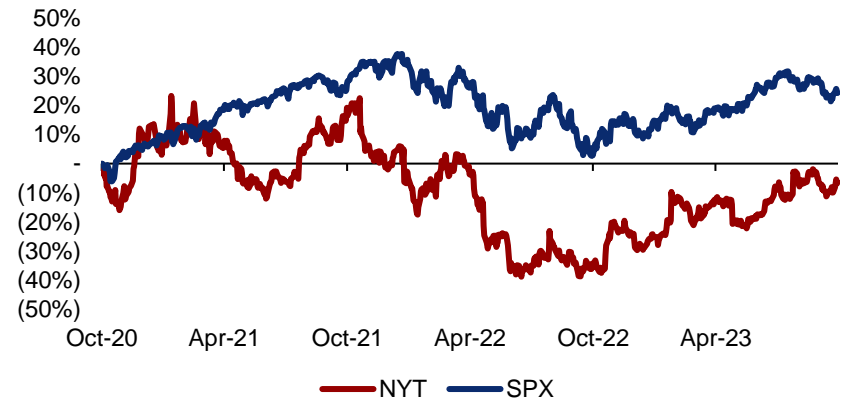
Thesis Still Holding

- 1 Brand Prestige Will Attract Customers
- 2 Low Churn Will Be Maintained
- 3 NYT May be Able to Capitalize on the Fringe

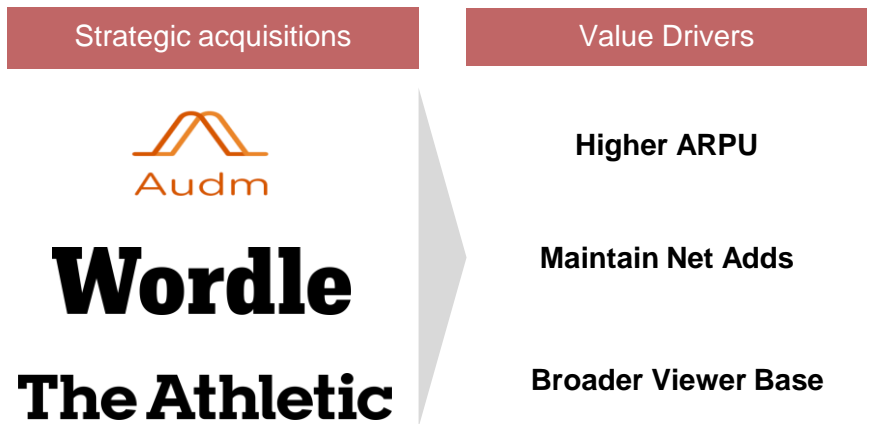
Digital-only ARPU and Net Adds ('000)



3-year Performance



Strategic Focus on Bundling

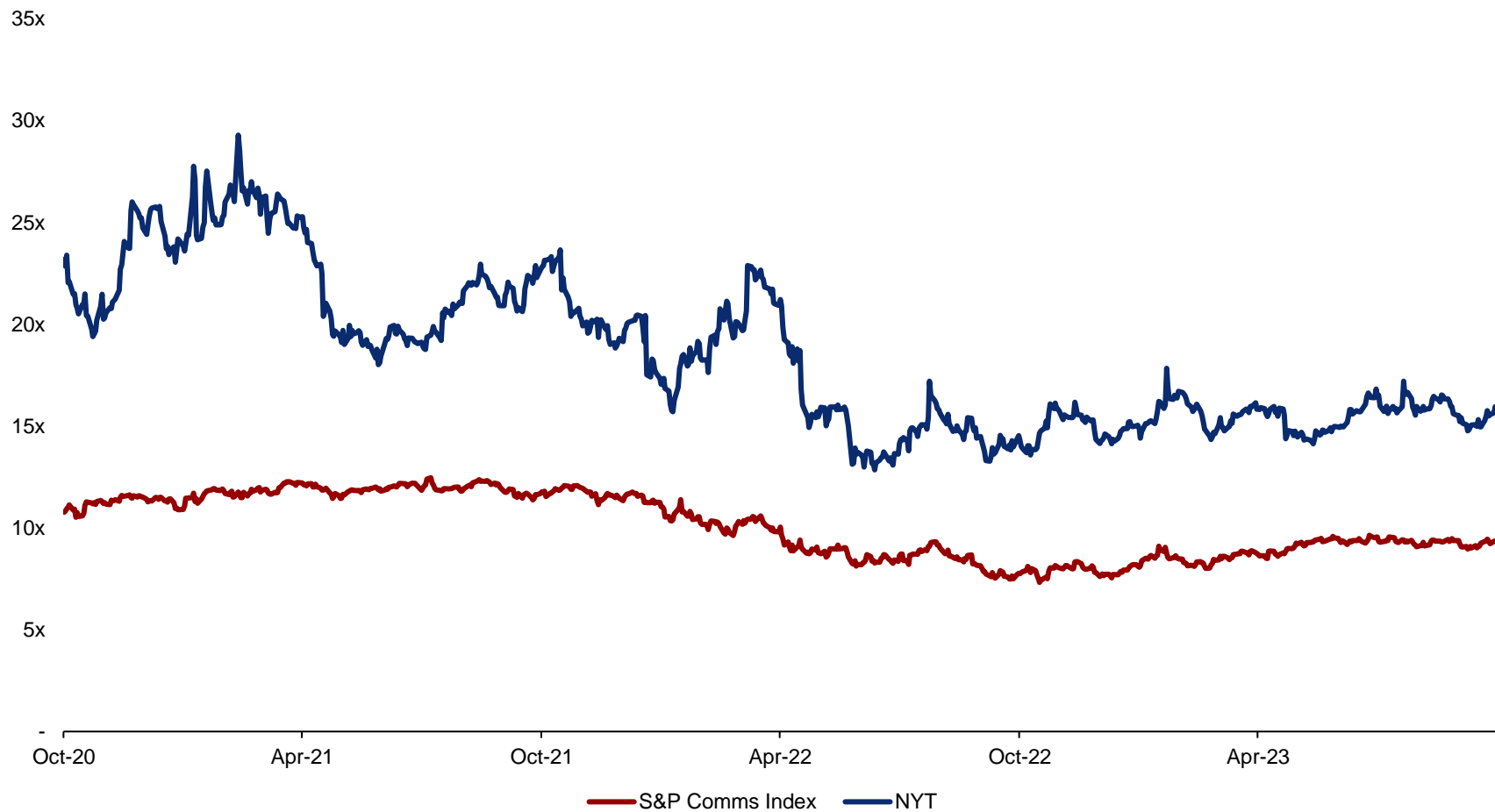


NYT subscriber growth story remains clear, so we recommend a **HOLD**

Sources: Company filings, Equity Research, Bloomberg, CapIQ

Valuation – NYT continues to trade at a premium to the communications index

NYT EV / EBITDA



NYT currently trades on par with its historical average of 21x EV / EBITDA

Desautels Capital Management

Honours in Investment Management

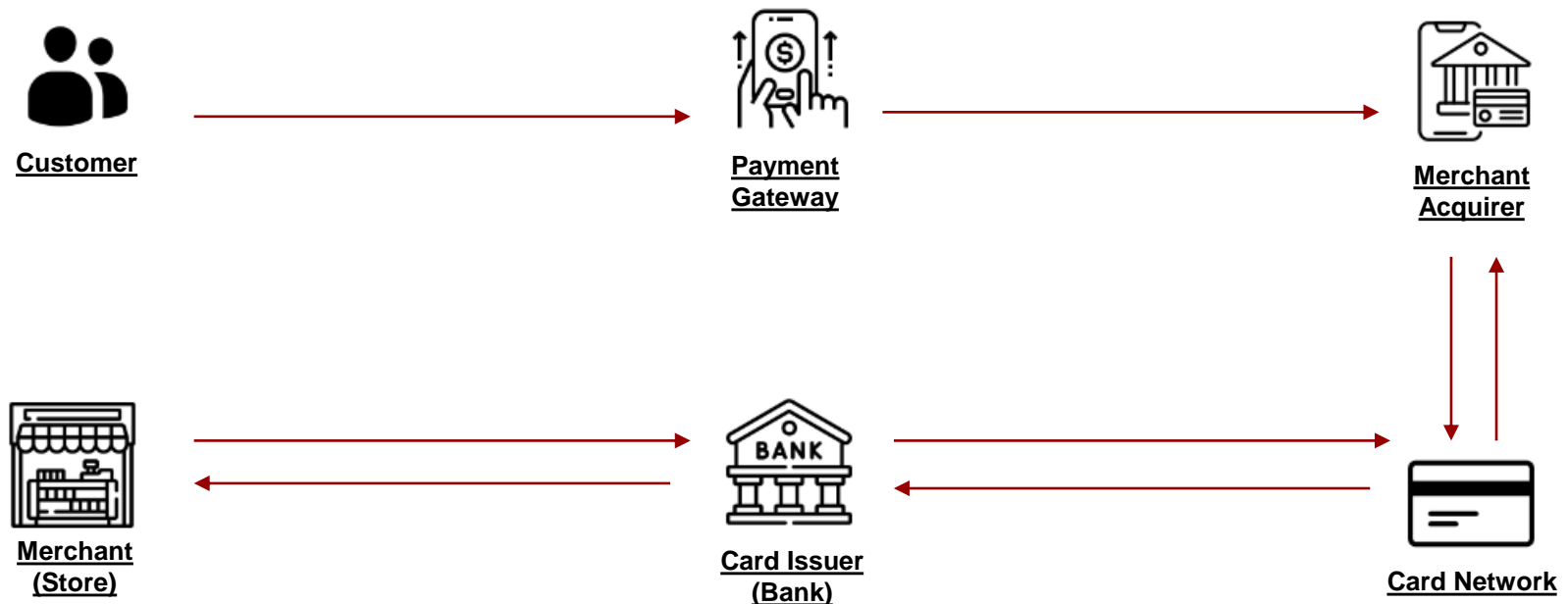
Appendix



How Online Payment Works

Payment 101

1. Customer picks item and goes to checkout.
2. Customer selects payment method.
3. The chosen payment gateway processes and forwards the transaction details to the merchant's acquirer.
4. The acquirer checks for fraud and ensuring the merchant adheres to necessary regulations.
5. The acquirer then communicates with the relevant card network who has ensures that payments align with banking standards.
6. The cardholder's issuing bank confirms the legitimacy of the cardholder and ensures adequate funds are present.
7. The issuing bank then communicates approval or denial back to the merchant through the same chain, finalizing the transaction.

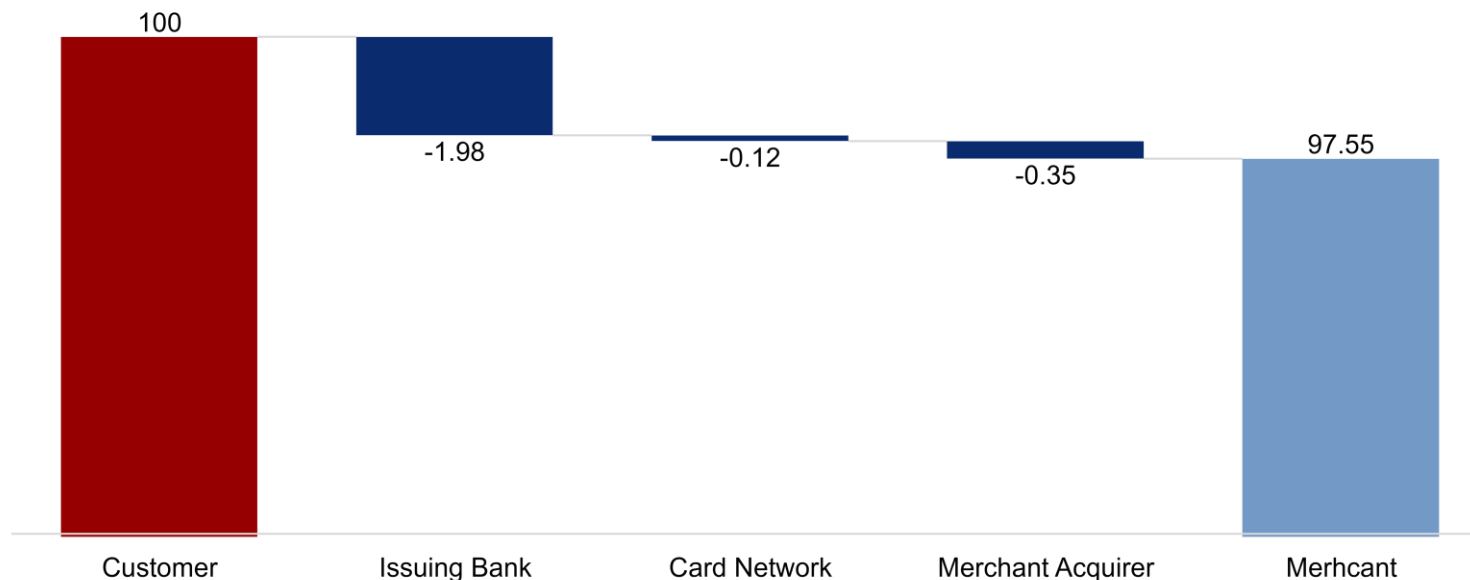


Source: Capital IQ, Equity Research, Internal Estimates

Example Of Fees That May Accrue To Each Party

How do each player make money on a simple transaction?

Payment Structure

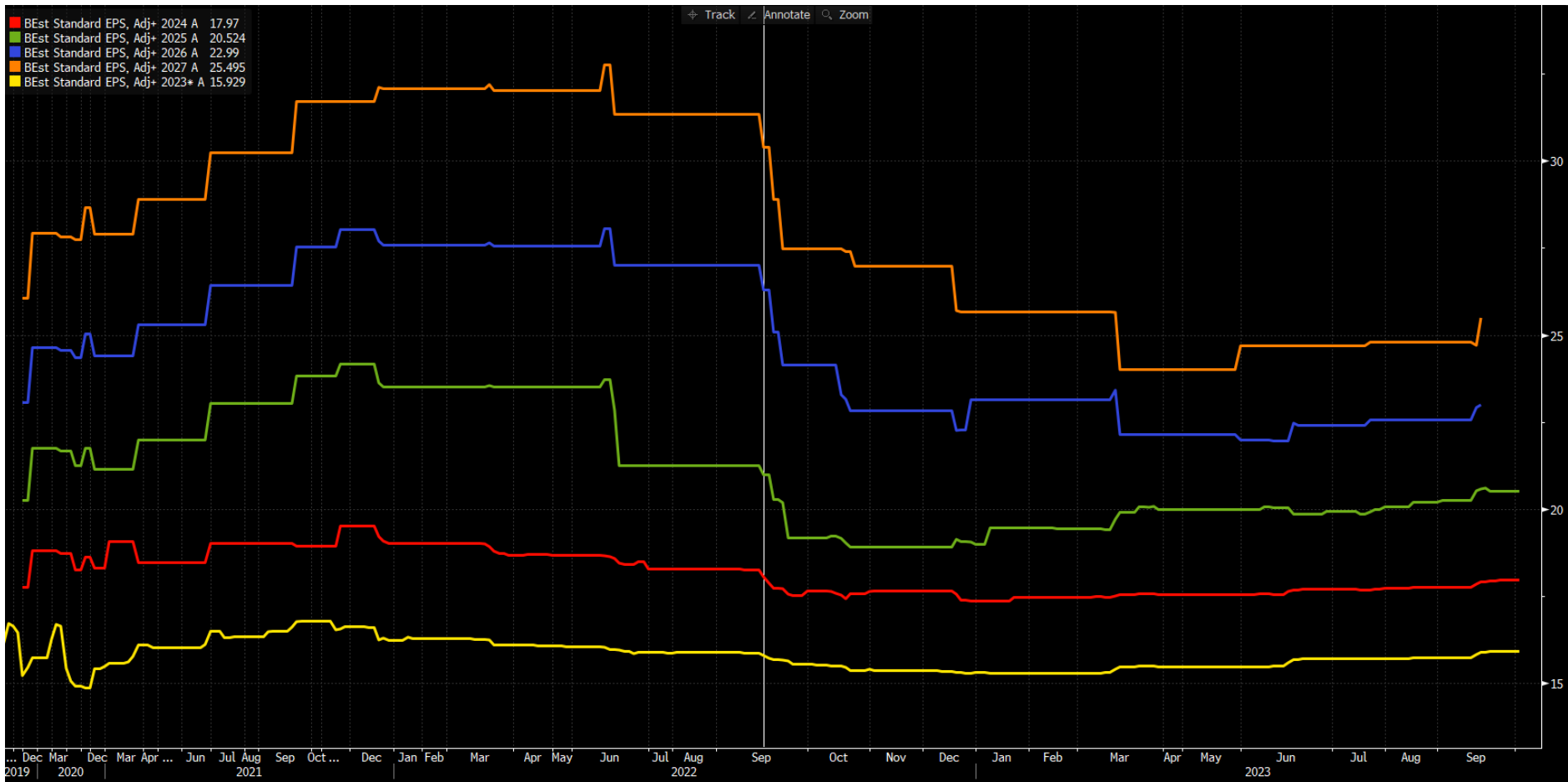


- **Interchange Fee:** It's paid to the issuing bank (the bank that provided the credit card to the customer). This fee compensates the issuing bank for the risk and cost of offering credit.
- **Assessment Fee:** It's paid to the card networks, such as Visa or Mastercard. It's a fee they charge for using their infrastructure and network.
- **Payment Processing Fee:** Charged by the merchant acquirer (the financial institution that processes credit or debit card payments on behalf of a merchant).

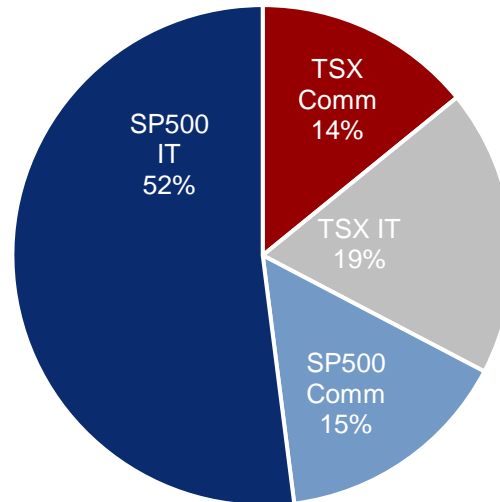
Source: Capital IQ, Equity Research, Internal Estimates

ADBE Street Estimates

How they've changed since last year



TMT Benchmark



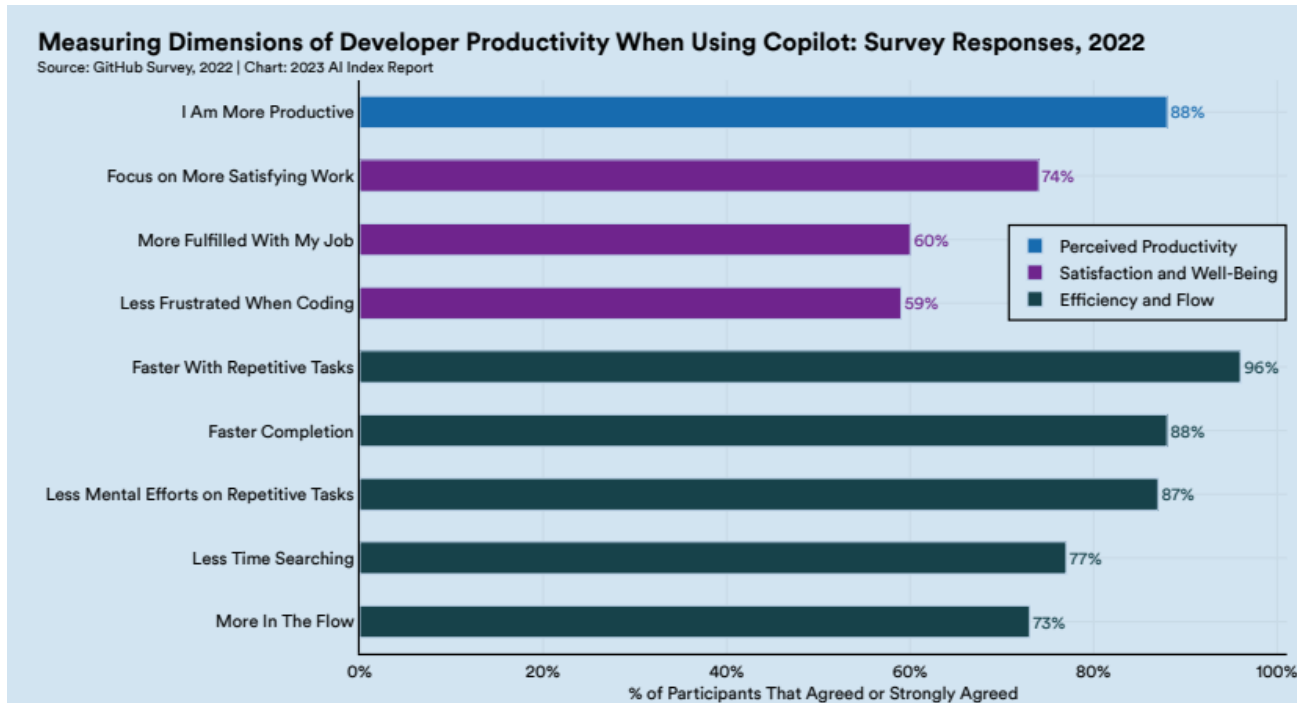


Figure 4.3.11

Summary of the Experiment Process and Results

Source: GitHub Survey, 2022 | Table: 2023 AI Index Report

| | Used GitHub Copilot | Did Not Use GitHub Copilot |
|---|---------------------|----------------------------|
| Number of Developers | 45 | 50 |
| Completion Rate (%) | 78 | 70 |
| Average Time Taken to Complete the Task (Minutes) | 71 | 161 |

Figure 4.3.12