A Stronger Sony

June 13, 2019

SONY

THIRD POINT

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Agenda

Executive summary

- **Sony is a one-of-a-kind collection of market-leading assets benefitting from multi-year tailwinds:**
  - Gaming (43% of profits): World's largest video game platform, benefitting from an industry shift to recurring revenue streams such as online multi-player, in-game purchases, and subscription programs
  - Music (16% of profits): One of the world's three largest music labels and publishers, benefitting from the rapid rise in paid subscription streaming services and the reacceleration of industry revenues
  - Pictures (8% of profits): Fifth largest Hollywood film studio, benefitting from deep library of iconic IP and accelerating demand for video content from streaming distribution platforms (Netflix, Amazon, Disney)
  - Semiconductors (20% of profits): World's largest image sensor manufacturer, benefitting from growing importance of picture and video quality in smartphones (social media) and cars (autonomous driving)
- **Sony's current corporate structure obscures the company's underlying asset value, giving investors the opportunity to buy Sony at a ~50% discount to our estimate of intrinsic value**
  - At 8x EV/EBIT, Sony trades at a deep discount to publicly traded peers exposed to identical trends with valuations ranging from 12-22x
  - In addition, Sony has an enormous capital deployment opportunity, with a net cash balance sheet, strong free cash flow ($10bn from '18-'20, *after* growth capex), and $12bn (~20% of market cap) of listed stakes that could be monetized and reinvested in the core business
- **Third Point proposes a strategic plan for Sony to close this gap and unlock its full value, while creating a company better positioned to capture future growth opportunities**

Note: Profit contribution percentages based on share of FY18 total adjusted operating profit, excluding Sony Financial and excluding corporate overhead expenses

Sony: Perception vs. Reality

		Perception	Reality
1	**Gaming Cyclicality**	• Sony's gaming segment is highly cyclical, and earnings will decline as the cycle transitions • Gaming segment earnings can be subject to profit swings around cycle transitions, therefore the segment deserves a lower valuation multiple	• Over the past 5 years, the business has transformed into a recurring software and subscription model • Hardware transitions are far less disruptive to earnings than in the past, due to backward compatibility of hardware and consumers' shift to "live service" games like Fortnite
2	**Gaming Cloud Threat**	• Given Sony's reliance on physical gaming consoles, the company is poorly positioned for the future shift in the market from physical consoles toward cloud game streaming	• Sony currently operates the largest cloud game streaming service in the industry (PS Now) and is expanding / enhancing its cloud service faster than peers • Sony's partnership with Azure ensures PS Now will not be disadvantaged in terms of data center infrastructure
3	**Semis Smartphone Exposure**	• Sony Semiconductors is exposed to smartphones, an end market that is both in decline and where suppliers rarely generate sustainable profits	• Sony's image sensors are differentiated products, evidenced by Sony's rising ASPs, margins, and market share over time • Sony's image sensors are levered to growth in content per unit, not units. Sony agrees, given the 2019 IR Day implied guidance for 10-15% profit growth through FY25
4	**Electronics Losses**	• Sony's electronics businesses (smartphones, cameras, TVs) will continue losing money indefinitely • Management has made no effort to improve efficiency and margins for these businesses	• Since 2014, Sony's operating income from electronics segments has improved dramatically (from -$1.4bn in CY14 to +$0.3bn in CY18) • This margin improvement has been driven by cost reductions and more disciplined spending
5	**Capital Allocation**	• Sony's management team is unwilling to pursue shareholder-friendly capital allocation policies • Management will never exit any businesses, even the underperforming ones	• Management has shown it is willing to optimize Sony's capital structure and portfolio, as demonstrated by Sony's first-ever buyback earlier in '19. • Moreover, management has recently exited / downsized poor-performing segments (e.g. PCs, batteries, smartphones, camera modules)

Strong track record with further value to be created

- Sony is a well-managed company with high-quality assets, but is misunderstood by the market
  - Under Yoshida-san's leadership (first as CFO, now as CEO), Sony has significantly grown profits and capitalized on a number of favorable business trends
  - Despite this success, Sony does not get the credit it deserves; it trades at an enormous conglomerate discount

- **Third Point believes in Sony's long-term growth potential**. This presentation:
  1. Highlights the ***disconnect*** between valuation and business quality
  2. Offers a ***solution*** that will create meaningful, sustained value for management, employees, customers, and shareholders

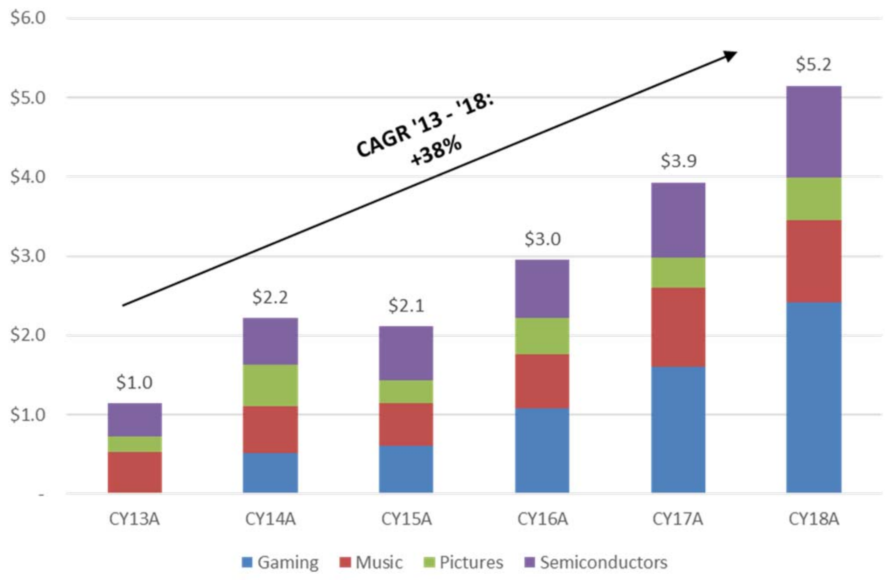
- With a thoughtful review of the portfolio, and measured capital allocation, Sony can position itself for further value creation and tremendous long-term growth

Management has turned Sony around operationally. As they shift their focus to portfolio, we think Sony is on the cusp of massive value creation

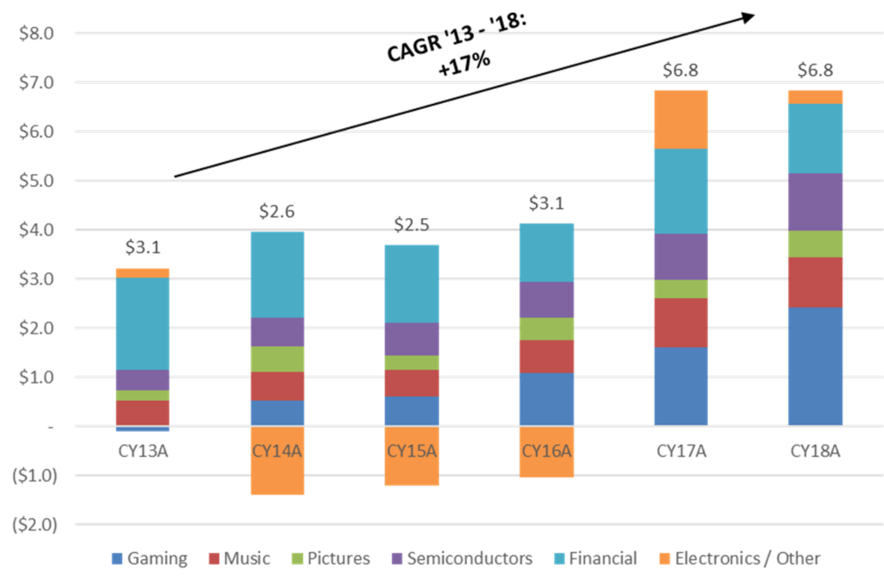
Sony management has delivered exceptional recent operating performance

- Over the past 5 years, the operational improvement at Sony has been dramatic
- In 2013, profitability was so depressed that Sony's partially owned insurance subsidiary (Sony Financial Holdings) accounted for 61% of the Company's profits
- Under the thoughtful leadership of Yoshida-san and team, Sony has grown EBIT at a 17% CAGR
- Even more impressive is that profitability in Sony's gaming, music, pictures and semiconductors segments (which we refer to as the "Crown Jewel" businesses) have grown profits 5x over the same period and now represent the majority of Sony's earnings and value

Adj. EBIT from Sony's four "Crown Jewel" segments ($bn)



Consolidated adj. EBIT ($bn)

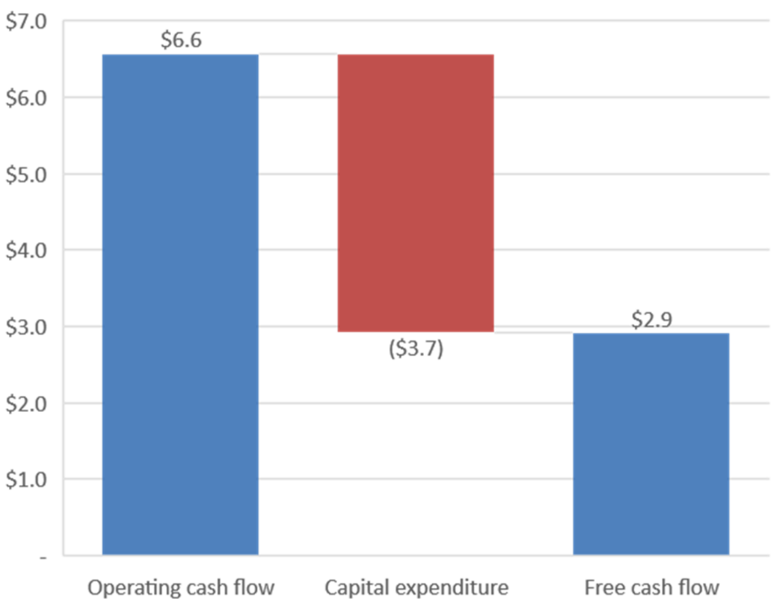


Source: Company reports

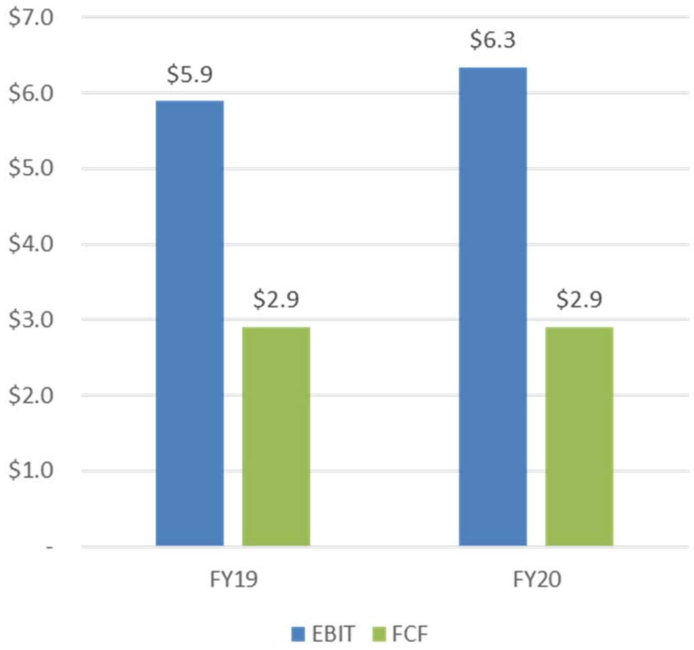
Sony benefits from strong FCF conversion

- Sony's rapid profit growth has not come at the expense of free cash flow
- Management has guided that Sony will generate *at least* ¥1.1tn ($10bn) in aggregate free cash flow during FY18, FY19 and FY20, despite significant investments (¥700bn) in new image sensor fabrications equipment
  - This guidance implies FCF of ~$3bn in each of FY19 and FY20, or over $4.5bn excluding semiconductor growth investments
  - Importantly, management's FCF guidance *excludes* the contribution from Sony Financial and other listed equity stakes
- At Sony's current share price the stock is trading at a 7% (12% normalized for semiconductor growth spending) unlevered free cash flow yield[1] , based on this FCF guidance
- Given low capital intensity of Sony's entertainment business, we expect FCF to grow in-line with operating profits

Implied annual FCF guidance for FY19 and FY20 ($bn)



Consensus EBIT and FCF outlook ($bn)



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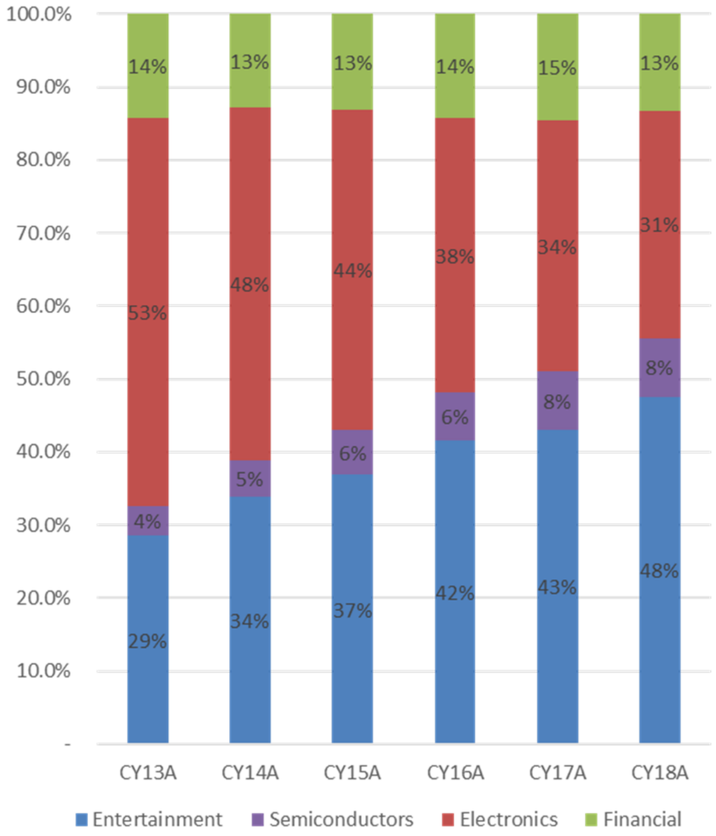
1. Unlevered FCF yield, on average 2018-2020 FCF, excluding Financial Services. Enterprise value excludes value of listed stakes. Semiconductor growth capex calculated as capex in excess of DD&A.

Investors may not appreciate the transformation that has taken place at Sony

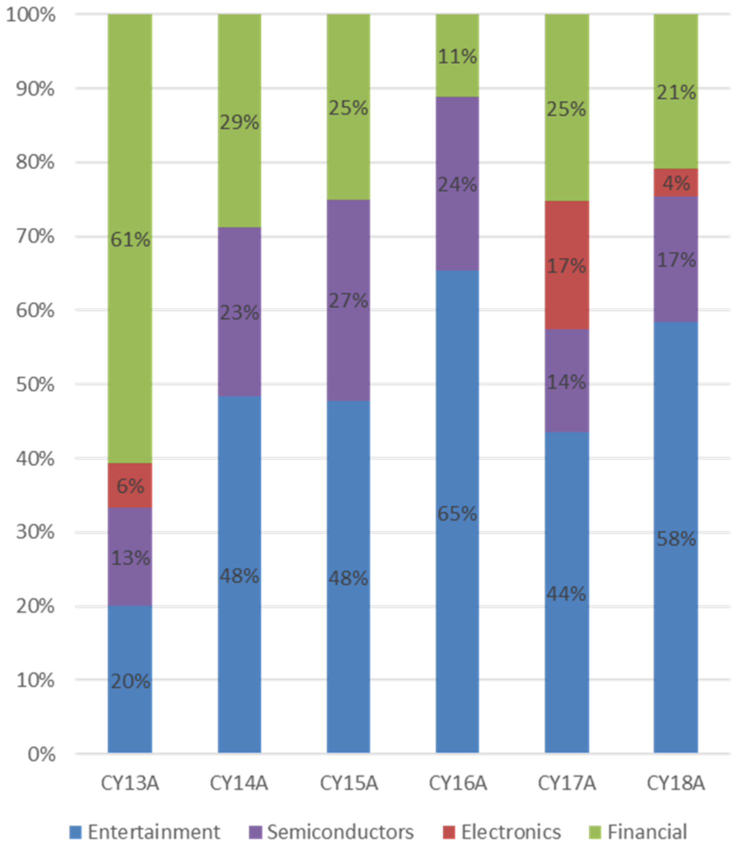
- The makeup of Sony's revenue and profit base has shifted significantly over the past 5 years
- Entertainment and Semiconductors together have increased from 33% to 56% of sales, and from 33% to 76% of operating profit
- As a result, the quality of Sony's earnings has improved significantly – higher growth, more recurring, and better secular positioning

% of Sony revenue



Entertainment = Gaming, Music, Pictures
Electronics = MC, IP&S, HE&S, Devices, All Other

% of Sony operating income



Note: Electronics segment excluded in lossmaking years (CY14-15-16)
Source: Company reports and Third Point estimates

Despite strong operating performance, Sony's stock trades at a depressed earnings multiple

- Today Sony trades at only 11x earnings and a 7% (12% normalized for semiconductor growth spending) unlevered FCF yield[1], making it one of the cheapest large cap stocks globally, in our view
- Sony's multiple compression is perplexing, particularly given the shift in profit mix towards higher-multiple businesses, such as gaming and music

Sony consensus P/E (1-year forward)

**Current P/E:
11x**

Source: Bloomberg; data as of 6/11/2019

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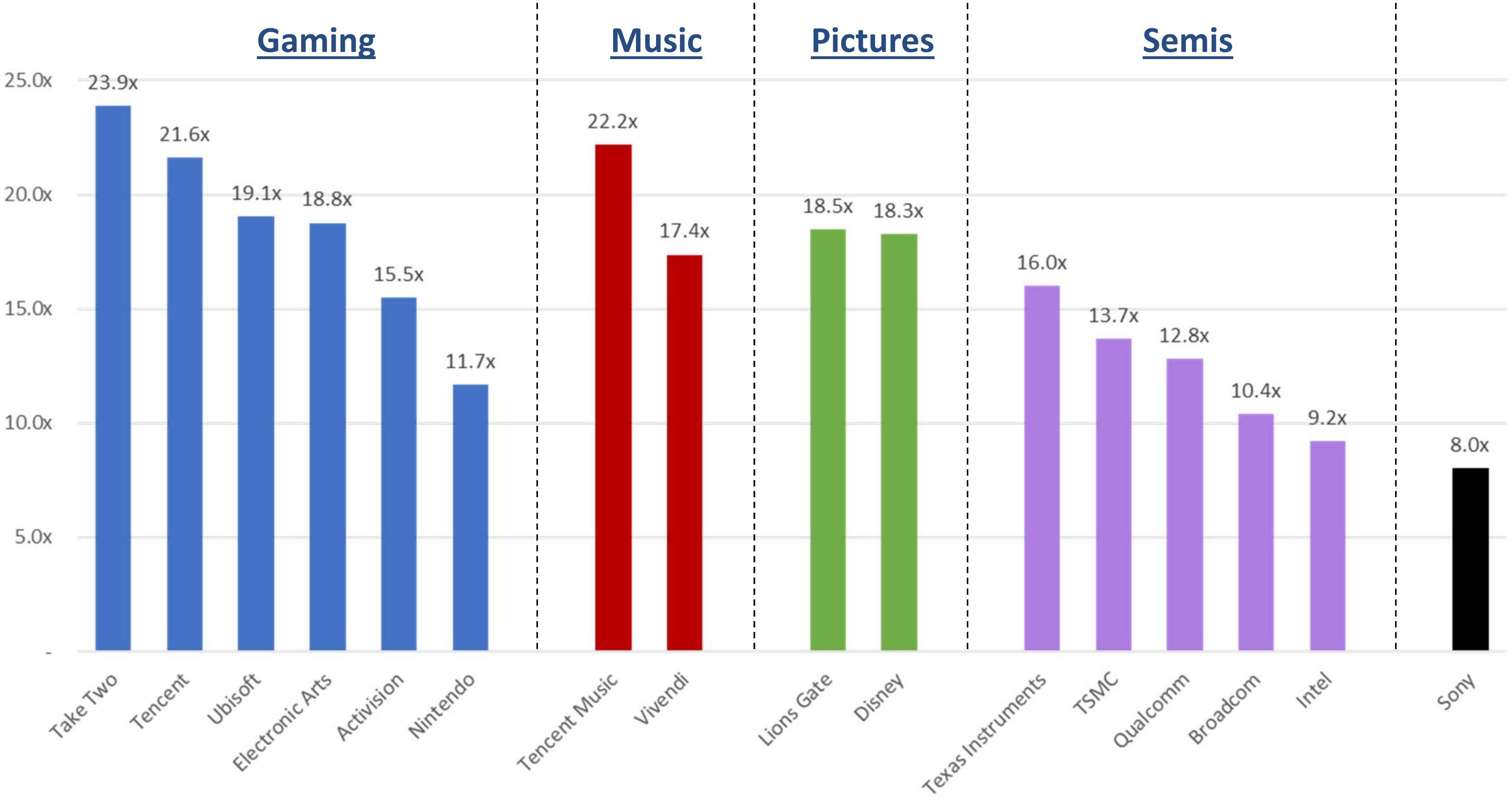
[1] Management guidance. Average unlevered FCF to EV, FY18-20. FCF excludes Financial Services. Enterprise value excludes value of listed stakes. Semiconductor growth capex calculated as capex in excess of DD&A.

Sony also trades at a meaningful discount to major peers in all of its core businesses

Valuation of peers to Sony's Crown Jewel businesses (EV / '20E EBIT)



Notes:

- Market data as of 6/11/2019
- All multiples based on consensus earnings metrics fully burdened for share-based compensation
- Valuation excluding Financial Services. EV/EBIT calculated as Sony EV less market value of Sony's stake in Sony Financial Holdings, over consensus CY20 EBIT ex-Financial Services

Why does Sony trade at a discount?

- We believe the primary cause for Sony's discounted valuation is **portfolio complexity**
  - Sony's complex structure and diverse business holdings lead to a conglomerate discount
  - Investors are reluctant to own Sony shares because of the difficulty in forecasting so many business segments
    - In particular, the Semiconductor and Financial segments have distinctly different business models and capital intensity relative to the entertainment assets
    - Sony also owns large stakes in four different publicly traded companies
  - Similarly, the majority of publishing analysts are Asia-focused electronics analysts. We sympathize with the challenge they face: maintaining an up-to-date, informed view on a diverse range of industries, most of which are outside their core expertise

Portfolio complexity: Great businesses – but little overlap outside of entertainment

- The wide range of business models within Sony makes it difficult for investors to appreciate the quality of Sony's portfolio

	Sony Interactive Entertainment	SONY MUSIC	SONY PICTURES	SONY Semiconductors	SONY Electronics	Sony Financial Holdings
Capital Intensity	Low	Low	Low	High	Med	High
Customers	Global B2C	Global B2B	Global B2B	Global B2B	Global B2C	Japan B2C
End Market	Entertainment	Entertainment	Entertainment	Electronics	Electronics	Financial Services
Growth	High	High	Med	High	Low	Low
Industry Structure	Consolidated	Consolidated	Consolidating	Oligopoly	Fragmented	Fragmented
Cyclicality	Medium	Low	Med	High	Med	Low

Portfolio complexity: Sony analysts mostly focus on electronics

- Of the 14 analysts listed below, only 2 are specialists in internet and entertainment; most of these analysts specialize in covering Asian electronics companies
- However Sony's entertainment businesses (Gaming, Music and Pictures) account for ~70% of Sony's value
- The lack of entertainment sector expertise among Sony's sell-side analysts may explain the wide skew in valuation methodologies, multiples, and target prices

	Target price methodology				Target price			Target multiples (EV/EBITDA)				
Broker	EV/EBITDA	P / E	P / B	SOTP	Price	% Upside	Framework	Gaming	Music	Pictures	Semis	Electronics
Citi	✓				8,400	57.7%	6.3x EBITDA					
J.P. Morgan		✓			5,800	8.9%	14x P/E					
UBS		✓			5,500	3.3%	15x P/E					
SMBC Nikko		✓			8,500	59.6%	19x P/E					
Macquarie			✓		5,800	8.9%	1.7x P/B					
Nomura				✓	7,500	40.8%	SOTP	11.0x	14.0x	9.0x		6.0x
BAML				✓	8,600	61.5%	SOTP	12.0x	20.0x	11.0x	6.0x	5.0x
Morgan Stanley				✓	6,200	16.4%	SOTP	10.0x	12.0x	7.0x	5.0x	3.3x
Credit Suisse				✓	8,300	55.9%	SOTP	11.0x	15.0x	8.0x	9.0x	5.0x
Mizuho				✓	8,500	59.6%	SOTP	9.0x	12.0x	9.0x	8.0x	6.0x
Mitsubishi UFG				✓	8,600	61.5%	SOTP	10.0x	10.0x	10.0x	10.0x	7.0x
Jefferies				✓	6,270	17.7%	SOTP	7.3x	15.9x	15.6x	6.0x	3.5x
Goldman				✓	8,400	57.7%	SOTP	14.0x	14.0x	14.0x	6.0x	6.0x
Deutsche Bank				✓	9,100	70.9%	SOTP	14.0x	17.3x	10.0x	5.0x	5.0x
Average					**7,534**	**41.5%**		**10.9x**	**14.5x**	**10.4x**	**6.9x**	**5.2x**
Low					**5,500**	**3.3%**		**7.3x**	**10.0x**	**7.0x**	**5.0x**	**3.3x**
High					**9,100**	**70.9%**		**14.0x**	**20.0x**	**15.6x**	**10.0x**	**7.0x**

Portfolio complexity: Investors are reluctant to own Sony given complexity

- Sony's current portfolio complexity causes analysts to discount valuation or avoid the stock altogether due to a lack of visibility on consolidated profitability given numerous, unrelated business drivers

> ***"The complexity of Sony's business structure, which ranges from video game platforms to cutting-edge semiconductors and life insurance…appears to have discouraged entry by a broad range of investors. If investors were to invest in Sony in order to profit from earnings growth driven by the shift to digital distribution in the game and network services business, the firm's largest business, they would also need to accept risks arising from competitive conditions in the semiconductor business and restructuring in the mobile communications business since games account for less than 40% of total earnings." –*** *Goldman Sachs, October 2018*

Reduction in portfolio complexity will improve Sony's valuation

Portfolio complexity: Ideas on closing conglomerate discounts

- While several Japanese companies continue to operate as conglomerates, many companies in the US and elsewhere have acknowledged the benefits of a focused portfolio

- Third Point has seen countless examples of large conglomerates that struggled until they streamlined their portfolios. We've observed that the best way to achieve long-term success and full value for a company is to:
  - Fully separate businesses with dissimilar capital intensity, cyclicality and customer bases
  - Properly incentivize leadership at each business (based on the performance of their business)
  - Articulate clear capital allocation priorities for each business

- In our experience, *full spin-offs to existing shareholders*[1] are the best way to close conglomerate discounts, while selling *minority stakes* to "spotlight" value has poor results:
  - While the IPO of a subsidiary can achieve some of the stated goals of a spin-off (increases accountability, improves performance and aligns incentives), the parent company may continue to trade at a substantial discount (may actually *increase* analytical complexity)
  - Selling a minority stake to a 3rd party achieves none of the above objectives, and also fails to solve the conglomerate discount problem. We would strongly recommend against pursuing minority stake sales to 3rd parties
- Finally, spin-offs are *not just for underperforming businesses*. The most successful spin-offs are those that are high-quality businesses, but are underappreciated within a conglomerate structure

1. To be clear, we are not endorsing a sale of a business. Rather we are proposing a spin-off, in which current Sony shareholders would become owners of Sony's existing assets in separate public entities

Recommendations to accelerate Sony's transformation to a "Creative Entertainment Company"

Semiconductors Spin-Off

- **Consider a spin-off of Semiconductors division into a standalone public stock ("Sony Technologies") listed in Japan**
  - Sony's semiconductor business is the global category leader in image sensors with >70% revenue market share of smartphone image sensors, but is underappreciated by the market as it is a relatively small piece of Sony (18% of earnings)
  - As a standalone public company, Sony Technologies would attract a new cohort of dedicated semiconductor investors with an appreciation of the growth profile and scarcity value of this asset
  - Company would have a dedicated management team, 100% focused on Sony Technologies' continued market leadership

Re-Focus New Sony on Entertainment

- **Position New Sony as a leading global entertainment company**
  - Formally classify the entertainment divisions (gaming, music and pictures) as Sony's core businesses
  - Allocate majority of capital investment and management focus toward these businesses
  - New Sony would be a capital-light, high-growth, cash-generative company

Right-size/ Refocus Electronics

- **Accelerate the right-sizing of Sony's electronics businesses**
  - Right-size and refocus loss-making mobile phone division
  - Prioritize cash generation over growth, use cash from electronics businesses to invest in higher growth areas like entertainment – articulate this priority publicly

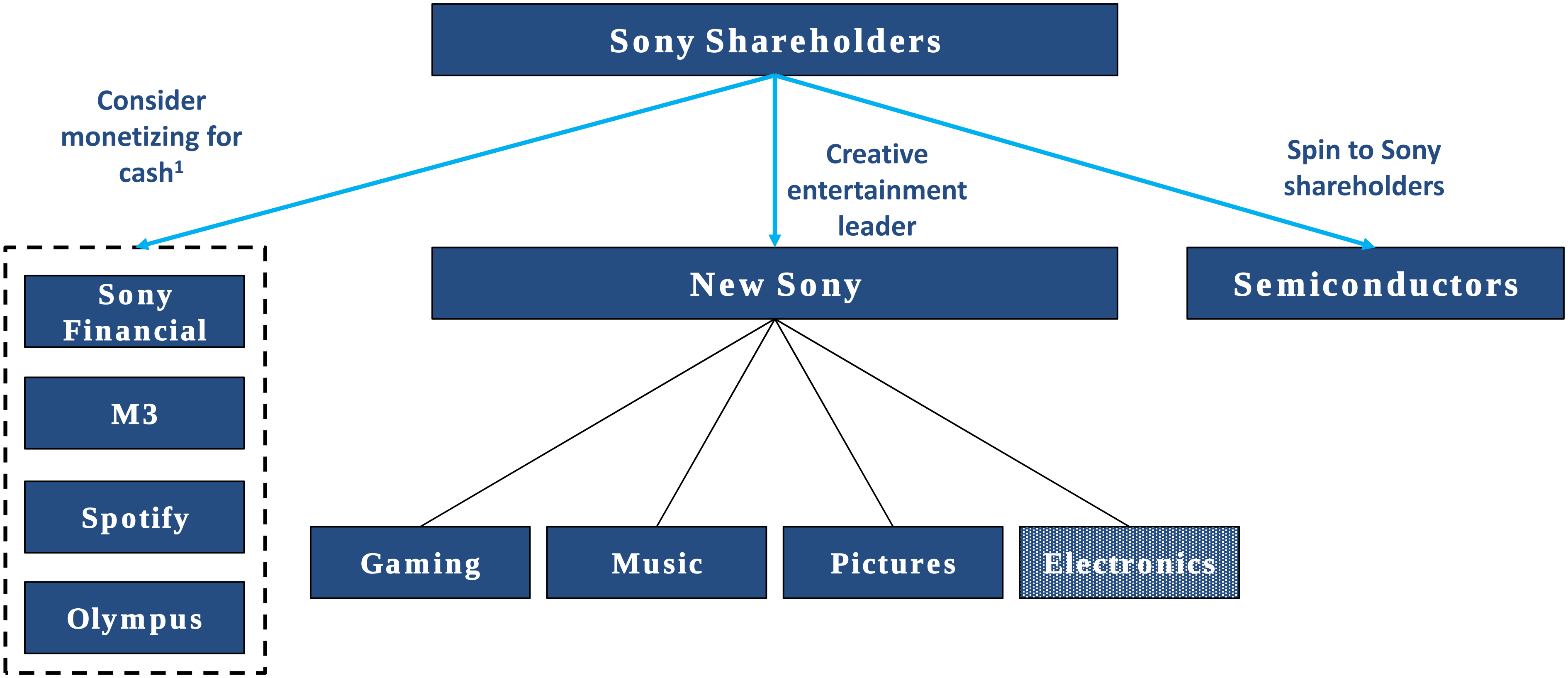
Review Listed Stakes

- **Consider the divestiture of Sony's listed public equity stakes in Sony Financial, M3 Inc., Olympus, and Spotify**
  - These four stakes are together worth nearly ¥1.3tn, or nearly 20% of Sony's market cap
  - The earnings contribution from the M3, Olympus and Spotify are negligible compared to their market value and the cash flow from Sony Financial is no longer critical to Sony's financial stability. The market is not assigning Sony proper valuation credit for owning these stakes
  - Sony should monetize these stakes and use the proceeds to invest in growth or for shareholder returns

Optimize Capital Structure

- **Modest increase in leverage to 1.0x net debt/EBITDA to increase ROE and improve balance sheet efficiency**
  - Bring leverage in-line with global media and entertainment peers in the 1-2x net leverage range

A strong, focused Sony



Sony Shareholders

Consider monetizing for cash[1]

Sony Financial

M3

Spotify

Olympus

Creative entertainment leader

New Sony

Gaming

Music

Pictures

Electronics

Spin to Sony shareholders

Semiconductors

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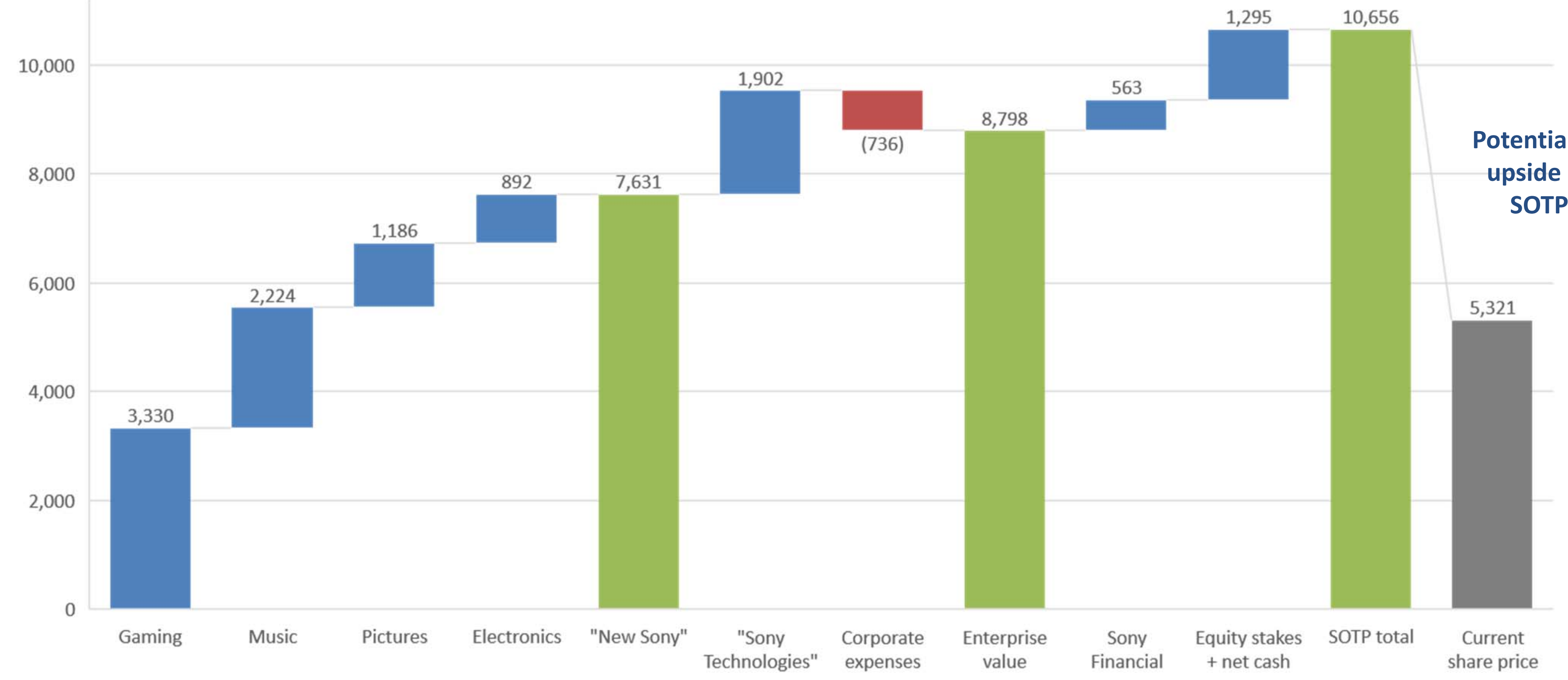
[1] Proceeds to be used for growth investments or returned to shareholders

Significant upside… if value is unlocked

- We see significant upside over the medium-term if Sony's value is unlocked
- Share price upside is even higher if Sony continues to buy its own shares at a discount to intrinsic value
- Importantly, under this plan Sony would be well-positioned to continue to grow over the long-term

SOTP value per share, YE21 (JPY)



Potential 2x upside to SOTP

Value in $bn:	$39.0	$26.1	$13.9	$10.5	$89.5	$22.3	($8.6)	$103.1	$6.6	$15.2	$124.9	$62.4

Source: Third Point valuation analysis; Company reports. Net cash as of YE21

Conclusion: Unique opportunity to create value

- Sony is a collection of high-quality businesses trading at a massive discount to intrinsic value
  - Exposure to favorable secular trends will allow the company to increase intrinsic value for years to come

- At the same time, Sony has a number of attractive options close this discount *while also* growing value
  - Simplifying the corporate structure will highlight the quality of Sony's portfolio and attract new investors
    - Third Point believes a spin-off of Semiconductors and sales of listed stakes is the best way to close the conglomerate discount
  - Increasing balance sheet efficiency will lead to dramatic earnings per share growth and higher ROE
    - Strong cash flow, proceeds from listed stakes and a net cash balance sheet provide an opportunity to repurchase shares (**an investment in Sony's existing assets at a discount**) <u>and</u> invest for growth organically or through targeted M&A

This is the right time and the right management team to unlock Sony's value

Sony Technologies: Creation of a Japanese Tech Champion

THIRD POINT

Why is a Semiconductors spin critical to value creation?

- Sony Semiconductors is a world class semiconductor asset with unique long-term growth prospects and the potential to garner a $35bn valuation within 5 years
  - The segment is an image sensor market leader enabling the proliferation and advancement of digital imaging
  - Long-term plan of 5-10% organic revenue growth and 10-15% profit growth, unrivaled by any other semiconductor company of scale in the world
- Despite the unique financial profile of Sony Semiconductors, we believe the business needs to stand alone for Sony and its management to achieve its potential and receive full value from the market
- As it stands today, Sony's corporate structure is sub-optimal for:
  - Investors: Capital intensity and cyclicality of Sony Semiconductors deters media and gaming investors from investing in Sony. Semiconductors' small profit contribution to Sony Corp fails to attract semis investors. In the current structure, no one wins
  - Management and employees: Semiconductors today competes for capital with lower growth business units like mobile. The conglomerate structure deprives employees the ability to achieve and participate in Semis' full growth potential
- **Creating a standalone Japanese technology champion and a standalone entertainment leader would solve these issues, and position each for sustainable, long-term growth to the benefit of all stakeholders**

Japan was a pioneer in semiconductors during the 20th century…

- By 1990 Japan held nearly 40% market share of the global semiconductor market

NEC

SONY

HITACHI

SHARP

TOSHIBA

1950s

1955: Sony (then Tokyo Tsushin Kogyo) developed and commercialized the first all-transistor radio TR-55, in Japan

1960s

1962: Sony (then called Tokyo Tsushin Kogyo) developed and commercialized the world first 8 inch transistor monochrome TV, TV8-301

1964: Sharp (then Hayakawa Denki Kogyo) succeeded to develop an all-transistor desktop calculator, CS-10A

1970s

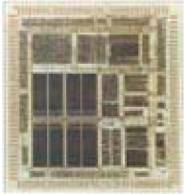
1971: NEC succeeded in applying NMOS technology to DRAM, realizing higher performance. Japanese semiconductor companies established leading position in the DRAM market from 16K gen

1980s

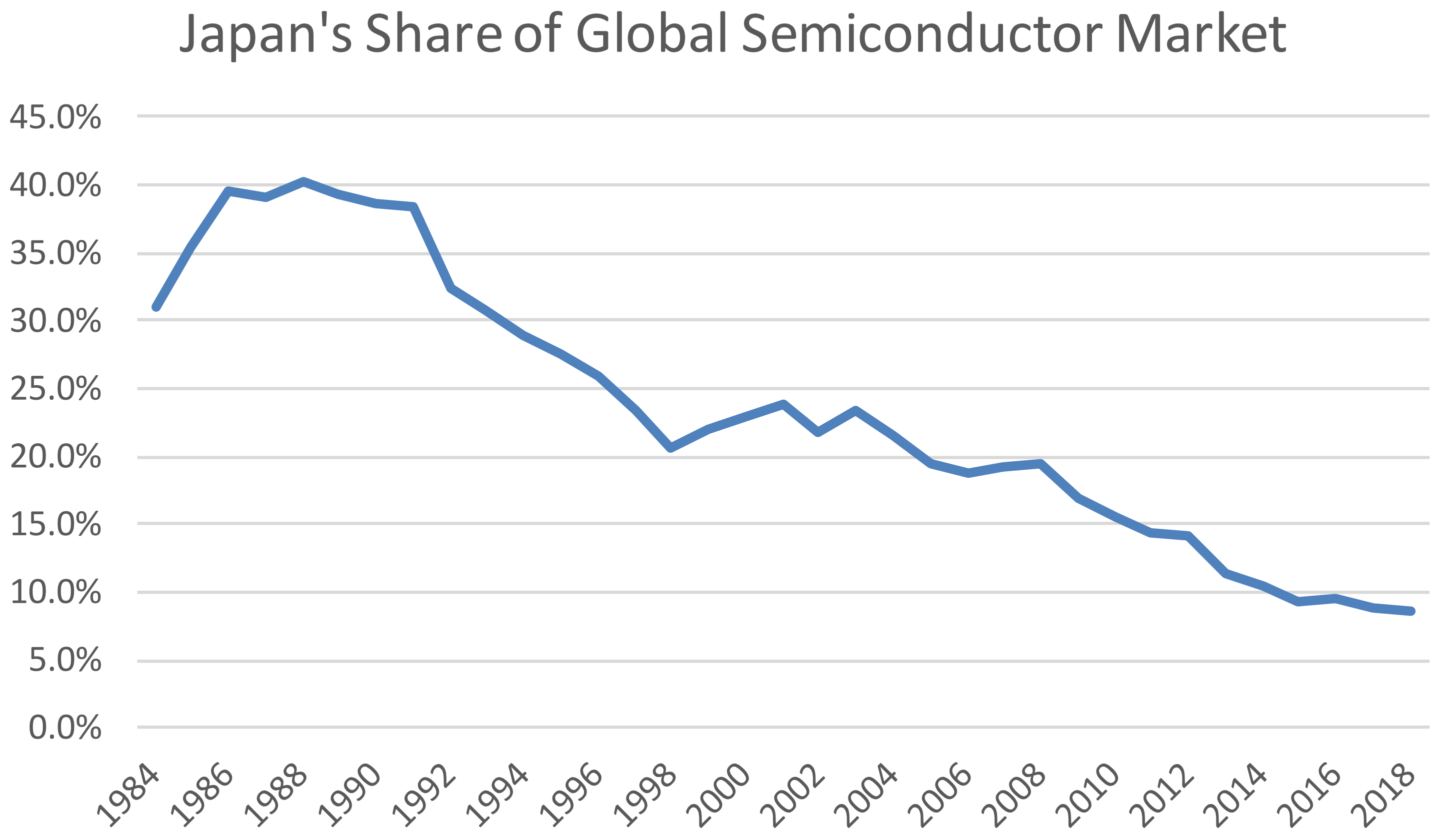
1984: Toshiba introduced the first one-time erasable flash memory concept, NOR, in 1984 and NAND type in 1987

1990s

1992: Hitachi released SuperH, the first 32-bit RISC architecture microprocessor suitable for embedded multimedia applications



….but since 1990 the Japanese industry has struggled to keep up with competitors

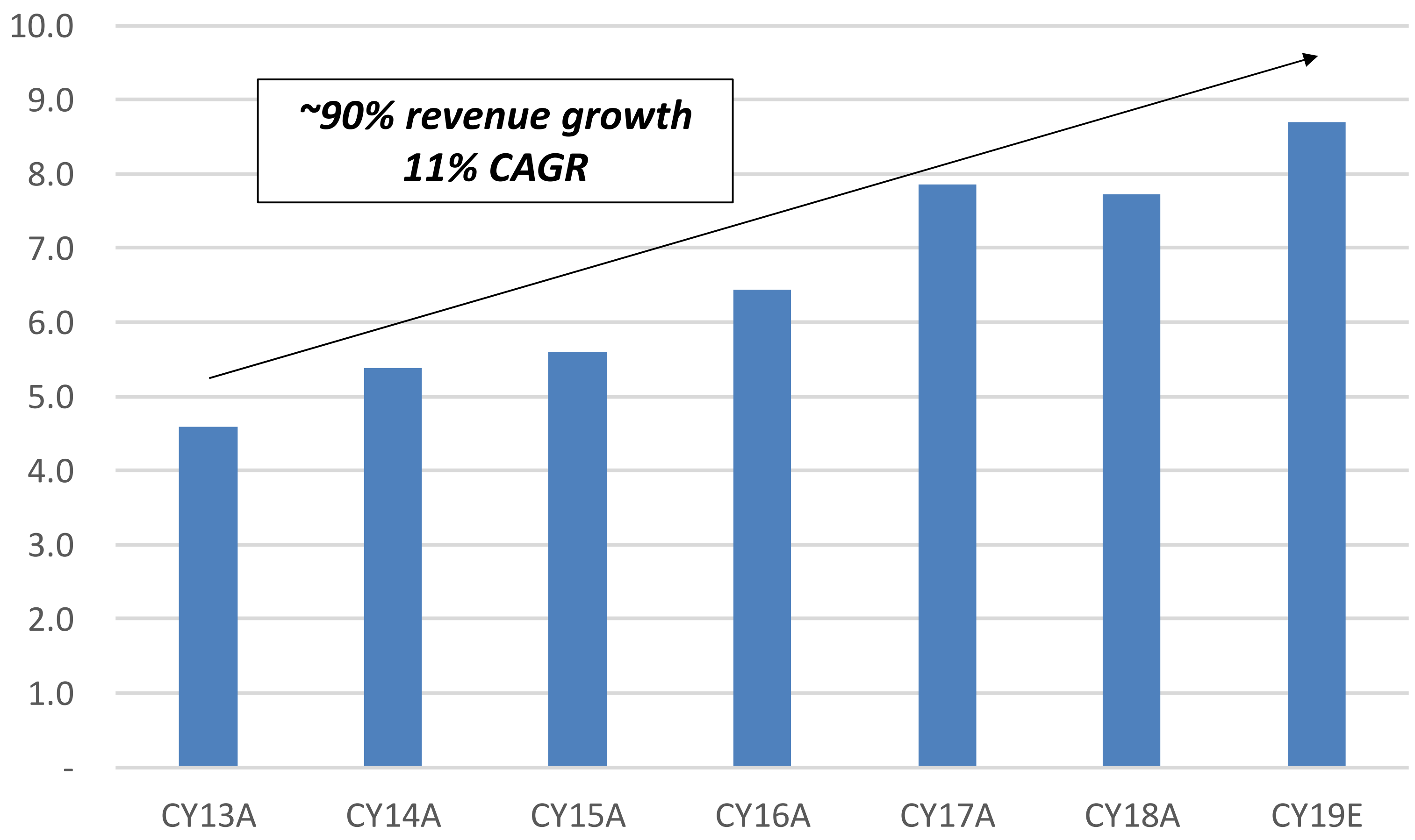


Source: World Semiconductor Trade Statistics

Nevertheless, Sony Semiconductors has grown and flourished…

- Despite the challenges faced by the Japanese semiconductor industry in recent years, Sony Semiconductors has shown robust growth

Sony Semiconductors revenue ($bn)



~90% revenue growth
11% CAGR

Source: Company reports

...while maintaining a strong Japanese manufacturing base

- Compared to the largest publicly traded Japanese semiconductor company, Renesas, Sony has kept meaningfully more of its manufacturing and design operations onshore
- Sony has also grown its employment of Japanese engineers
- Sony Semiconductors is a champion that continues to fuel Japan's innovation in the semiconductor industry

Sony Semiconductor facilities

Fab	**Location**	
Nagasaki	Japan	🇯🇵
Kunamoto	Japan	🇯🇵
Kagoshina	Japan	🇯🇵
Oita	Japan	🇯🇵
Tsuruoka	Japan	🇯🇵
Bangkadi	Malaysia	🇲🇾

Renesas facilities

Fab	**Location**	
Hitachinaka	Japan	🇯🇵
Takasaki	Japan	🇯🇵
Dusseldorf	Germany	🇩🇪
Beijing	China	🇨🇳
Suzhou	China	🇨🇳
Selangor	Malaysia	🇲🇾
Penang	Malaysia	🇲🇾
Ho Chi Minh	Vietnam	🇻🇳

Overview of Sony Semiconductors

Overview

- 80% of Sony's semiconductor business comes from image sensors sales, a $13bn market currently growing >10% p.a.
- The remainder consists of several small product lines like laser diodes, audio ICs, displays, and other technologies still in R&D phase
- Image sensors are the core money maker and 'crown jewel' asset for Sony Technologies
- An image sensor is an analog semiconductor with average price of $2 that processes light from the outside world and transforms those wavelengths into 1s and 0s
- This allows cameras to render an image digitally. Every lens in a digital camera needs an image sensor behind it

Sony Semiconductors: Revenue ($bn)

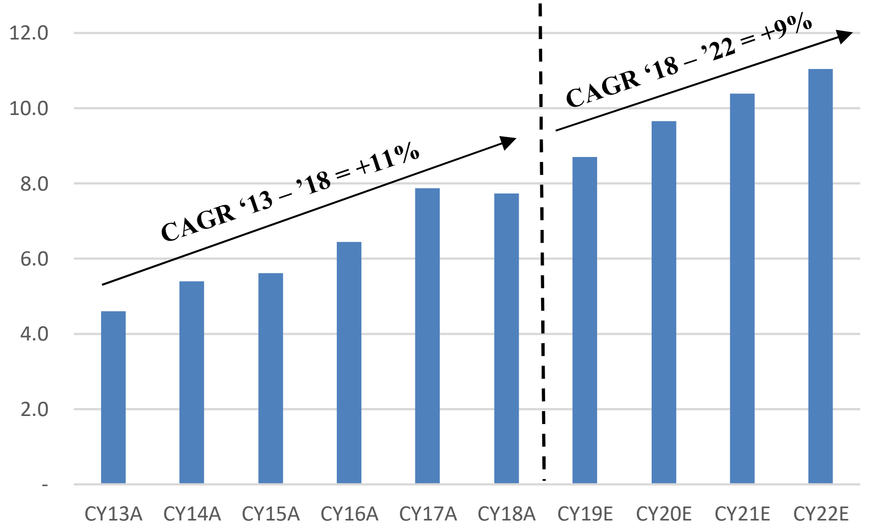
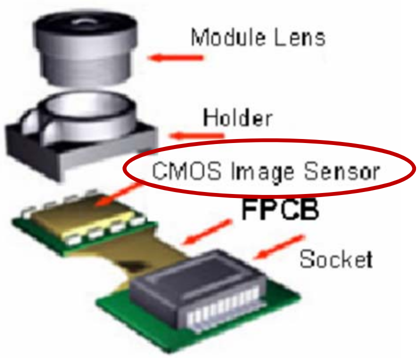
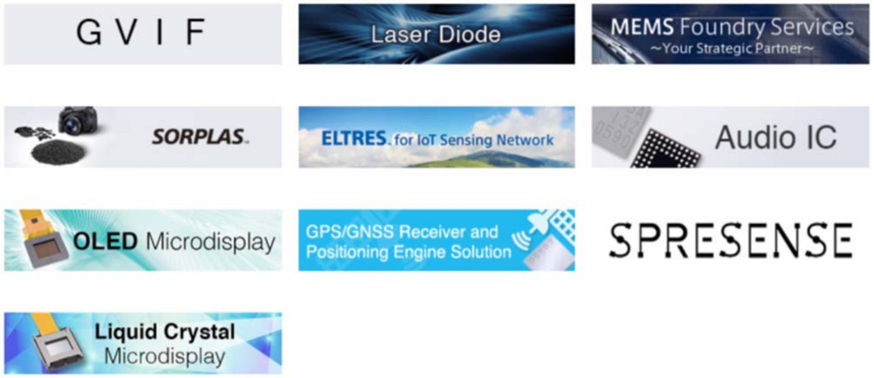


Image sensors (within a smartphone camera module)



'Other' products



Source: Company reports, Third Point estimates

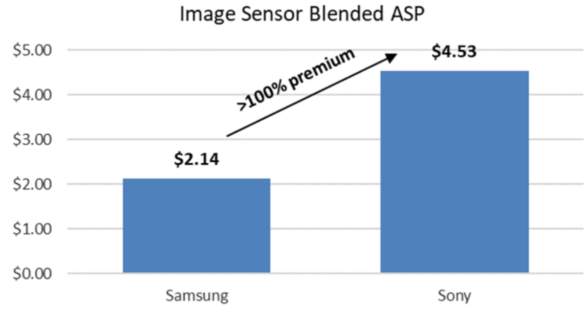
Sony image sensors has the key traits of a top tier semiconductor franchise

Commentary

Evidence

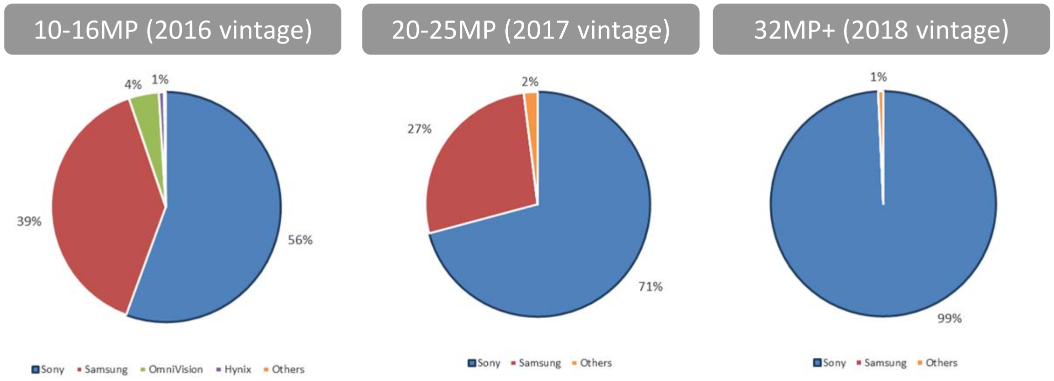
Premium, differentiated product

- Image sensors are the key enabler in improving digital picture quality. As the industry's best-in-class player, Sony's sensors carry a meaningful premium



Wide technological lead

- Sony is consistently first to market with the latest iteration of products (measured in megapixel count, "MP"). We can see their near monopoly position within the current year's latest and greatest

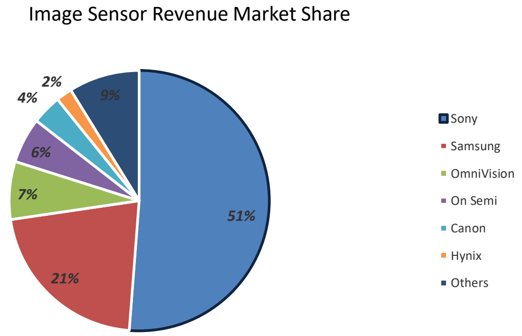

10-16MP (2016 vintage)

20-25MP (2017 vintage)

32MP+ (2018 vintage)

Dominant market share

- Best-in-class semiconductor companies dominate their markets. As the #1 company in the space and with >2x share of the industry's #2 player, Sony Semiconductors fits this description



Source: Techno Systems Research for all charts

Image sensor market overview

- The image sensor market today is a $13bn market growing double digits
- The single largest end market for image sensors is the smartphone ($9bn), where content (cameras / unit) is expected to drive double digit growth
- The next largest market, automotive ($1.2bn) is small but growing quickly (20-30% p.a.) as ADAS increases number of cameras in a car
- Sony currently is largely exposed to smartphones (>90% of revenue), but is gaining share in automotive

Image sensor TAM growth

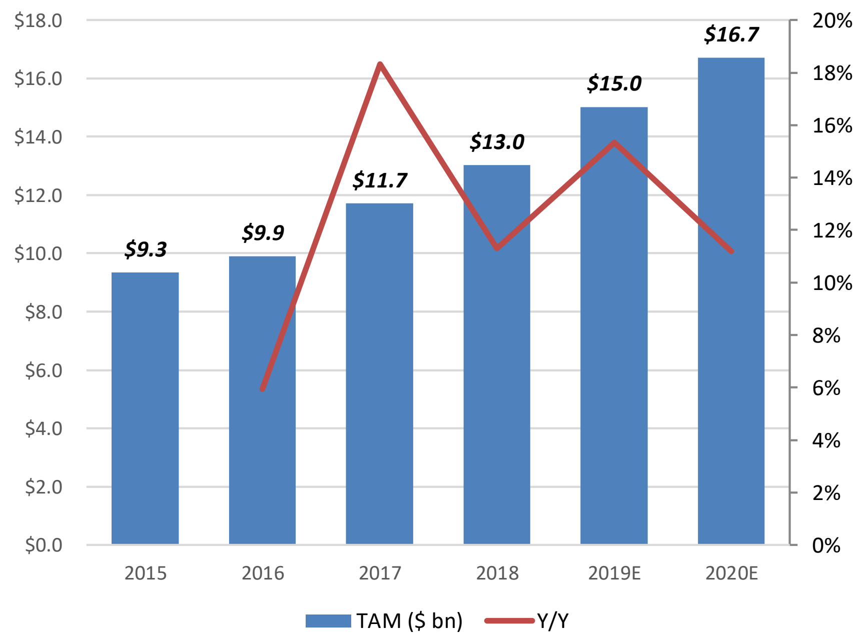
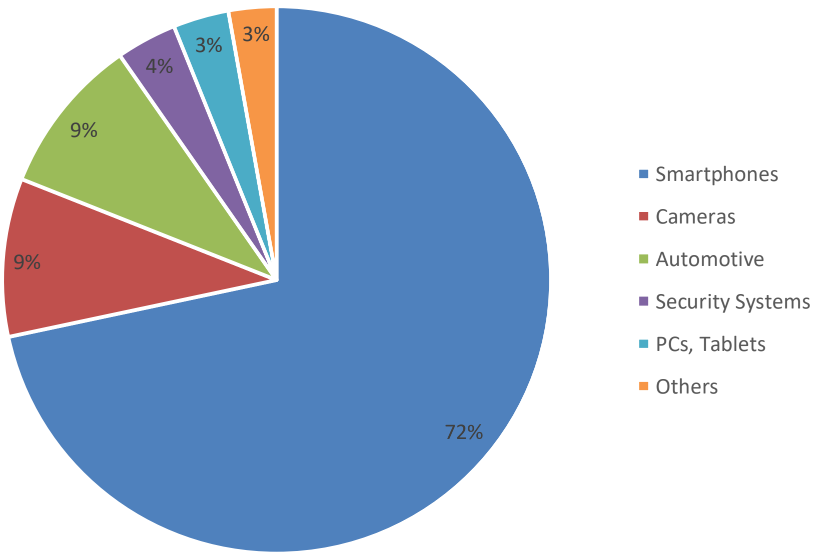


Image sensor TAM mix



Source: Techno Systems Research

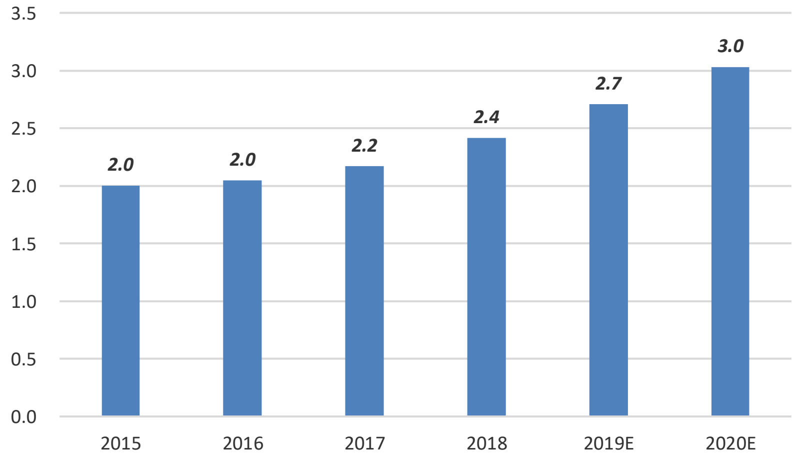
Current growth driver – Smartphones

- Smartphone OEMs see cameras as the main differentiator in a smartphone today. In today's social media generation, allowing consumers to take the perfect picture is a major selling point, and smartphone OEMs are desperate to have the best camera in the market
- As the next leg of improving camera quality and functionality, smartphone OEMs are moving from single rear camera designs to dual-, triple-, and even quad-camera designs. We believe multi-cam will become a standard feature for smartphones in 2-3 years
- In 2018, the average smartphone had 2.4 cameras. We see this number growing to 3.0 by 2020 (growth rate of 12%), and eventually to 3.5-4.0
- Sony dominates the smartphone image sensor space with 70% revenue share and will benefit from this multi-year product cycle

Smartphone image sensor TAM

		Smartphone Multi-Cam Scenarios		
	2018			
Smartphone Sales (mm)	1,406	1,400	1,400	1,400
CIS Units / Phone	2.4	3.0	3.5	4.0
Smartphone CIS Units (mm)	**3,393**	**4,200**	**4,900**	**5,600**
$ / Unit	2.6	2.5	2.5	2.5
Smartphone CIS TAM ($mm)	**8,930**	**10,500**	**12,250**	**14,000**

Smartphone image sensor units / smartphones sold



Source: Techno Systems Research

Benefits of dual & triple cam

- **Optical Zoom:** Whereas single cameras typically stop at 2x optical zoom, dual cam can reach 3x and triple cam 4-5x
- **Wide-Angle:** Dual camera phones have a lens solely dedicated to broadening imaging width
- **Depth Detection:** Some smartphones reserve the second camera for 'depth sensing', enabling '3-dimensional' imaging
- **Improved Low-Light Performance:** Increasing number of camera lenses increases light intake, improving image quality

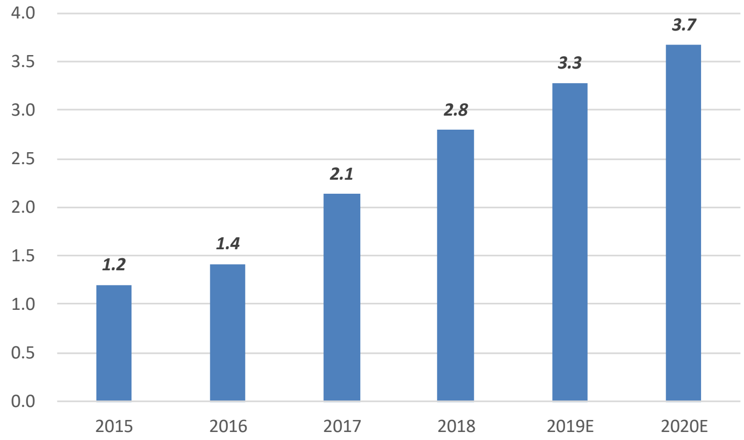
Future growth driver – Automotive

- Digital imaging is becoming a more important feature of automobile design. This is a trend that will only accelerate as autonomous driving grows
- Today there are an average of ~3 cameras per vehicle sold. Our research suggests that with fully autonomous automotive fleet, the average car will be equipped with at least 10-12 cameras (Tesla Model 3 already has 8 cameras)
- We believe ASPs for machine vision cameras necessary for autonomous driving command ASPs 50-100% higher than current auto image sensors
- **Given these trends, we believe the automotive image sensor market could grow to a $4-7bn market over time**
- While Sony has limited presence in automotive today, our diligence suggests that the company is gaining traction with customers and it is a matter of time before they replicate their success in smartphones within the automotive space

Automotive image sensor TAM

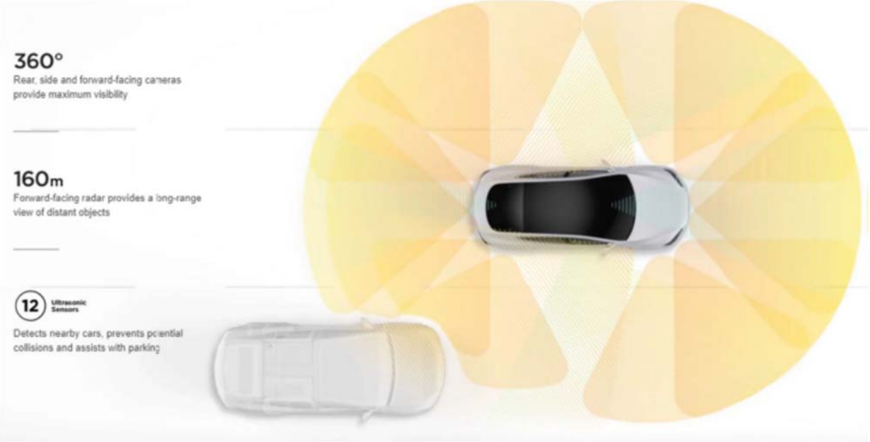
		World with		
	2018	Level 5 Autonomy		
Global Vehicle Sales (mm)	81	80	80	80
CIS Units / Vehicle	2.8	10.0	11.0	12.0
Automotive CIS Units (mm)	**226**	**800**	**880**	**960**
$ / Unit	5.4	5.0	6.0	7.0
Automotive CIS TAM ($mm)	**1,214**	**4,000**	**5,280**	**6,720**

Automotive image sensor units / vehicles sold



Source: Techno Systems Research

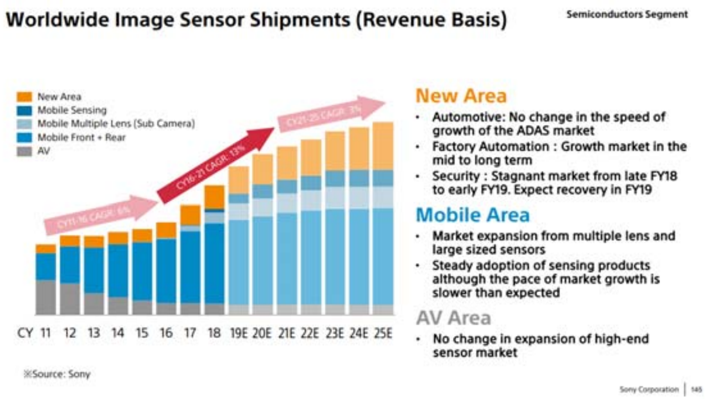
Tesla Model 3



- Our research suggests Tesla's Model 3, capable of Level 2 autonomy, is equipped with 12 sensors and 8 cameras
- To move from Level 2 to Level 5, we believe the camera count will move from 8 to at least 10-12 (maybe more)

Sony's FY25 Plan – Entering a pivotal time

- Sony seems to agree with our bullish outlook on image sensors, outlining ambitious FY25 targets at its 2019 IR Day
- If Sony executes on this plan, Sony Technologies would be able to grow profits at a 10-15% rate for the next 5+ years
- This growth rate would be unmatched by any other major global semiconductor company of scale today
- **The coming years will be critical execution years to unlock value at Sony Semiconductors, creating the need for oversight by a dedicated management team and Board of Directors**



Worldwide Image Sensor Shipments (Revenue Basis)

Semiconductors Segment

New Area

- Automotive: No change in the speed of growth of the ADAS market
- Factory Automation : Growth market in the mid to long term
- Security : Stagnant market from late FY18 to early FY19. Expect recovery in FY19

Mobile Area

- Market expansion from multiple lens and large sized sensors
- Steady adoption of sensing products although the pace of market growth is slower than expected

AV Area

- No change in expansion of high-end sensor market

※Source: Sony

Sony Corporation | 145

~7% market growth

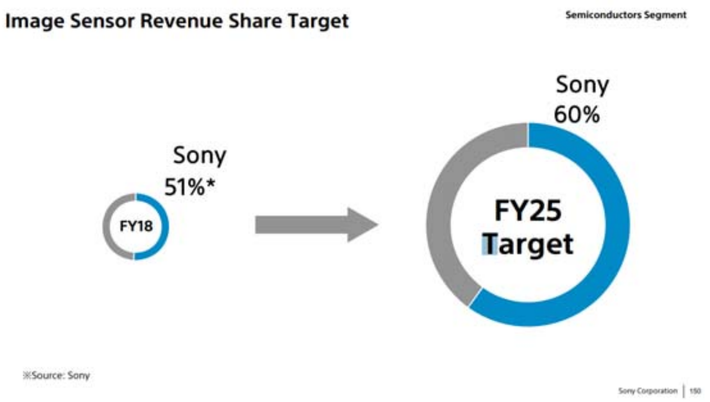


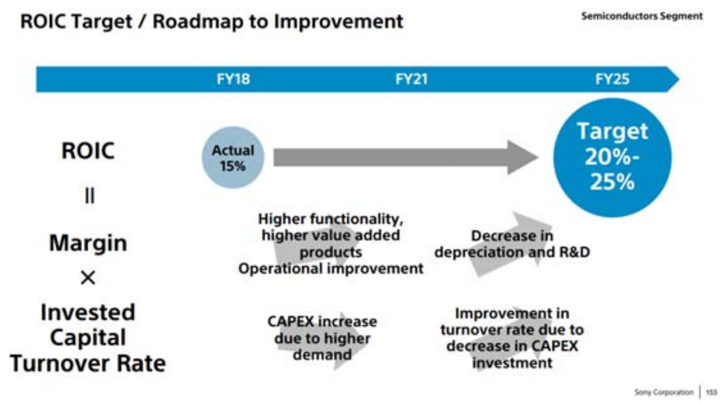
Image Sensor Revenue Share Target

Semiconductors Segment

※Source: Sony

Sony Corporation | 150

900bps share gain



ROIC Target / Roadmap to Improvement

Semiconductors Segment

Sony Corporation | 153

5-10% improvement in returns (and margins)

THIRD POINT

FY25 Plan – Building to a $35 billion valuation for Sony Technologies

- In our sum-of-the-parts, we value Sony Semiconductors at ~$22bn
- However, if Sony Technologies can execute on the growth trajectory laid out at Sony's 2019 IR Day, we see the potential for the company to:
  - Grow revenue by >50%
  - Grow operating profit by >100%
  - Compound value at ~15% annually, and achieve a $35bn valuation in 5 years

Sony Technologies – Implied long-term growth outlook from 2019 IR day

units in yen bn	**FY19E**	**FY20E**	**FY21E**	**FY22E**	**FY23E**	**FY24E**	**FY25E**	*CAGR*
Image Sensor Market	1,576.2	1,781.2	2,012.7	2,073.1	2,135.3	2,199.3	2,265.3	*7.2%*
y/y	*13.0%*	*13.0%*	*13.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	
Sony Image Sensor Revenue	840.0	971.5	1,122.9	1,182.5	1,244.7	1,309.5	1,359.2	*9.7%*
y/y	*18.1%*	*15.7%*	*15.6%*	*5.3%*	*5.3%*	*5.2%*	*3.8%*	
Sony market share	*53.3%*	*54.5%*	*55.8%*	*57.0%*	*58.3%*	*59.5%*	*60.0%*	
Other Semi Revenue	150.0	150.0	150.0	150.0	150.0	150.0	150.0	*(1.6%)*
Sony Tech. Revenue	**990.0**	**1,121.5**	**1,272.9**	**1,332.5**	**1,394.7**	**1,459.5**	**1,509.2**	***8.0%***
y/y	*12.6%*	*13.3%*	*13.5%*	*4.7%*	*4.7%*	*4.6%*	*3.4%*	
OP	**145.0**	**167.1**	**192.8**	**218.5**	**246.1**	**275.8**	**304.0**	***11.3%***
y/y	*0.8%*	*15.2%*	*15.4%*	*13.3%*	*12.6%*	*12.1%*	*10.2%*	
margins	*14.6%*	*14.9%*	*15.1%*	*16.4%*	*17.6%*	*18.9%*	*20.1%*	

Note: Above financials represent Third Point's interpretation of Sony management's FY25 Semiconductor business unit plan laid out in its 2019 IR Day, not Third Point's estimates. Third Point assumes Sony's goal of raising ROIC to 20-25% from 15% translates directly to operating profit margin improvement

Sony Technologies long term valuation

FY24 End			
FY25 OP (Yen bn)		304.0	
Forward Multiple	12.0x	-	14.0x
Valuation	3,648.6	-	4,256.7
FX rate		*110.0*	
Valuation (USD mm)	**33,168.9**	**-**	**38,697.0**

Sony 2019 IR Day slide 145: Sony market growth estimates

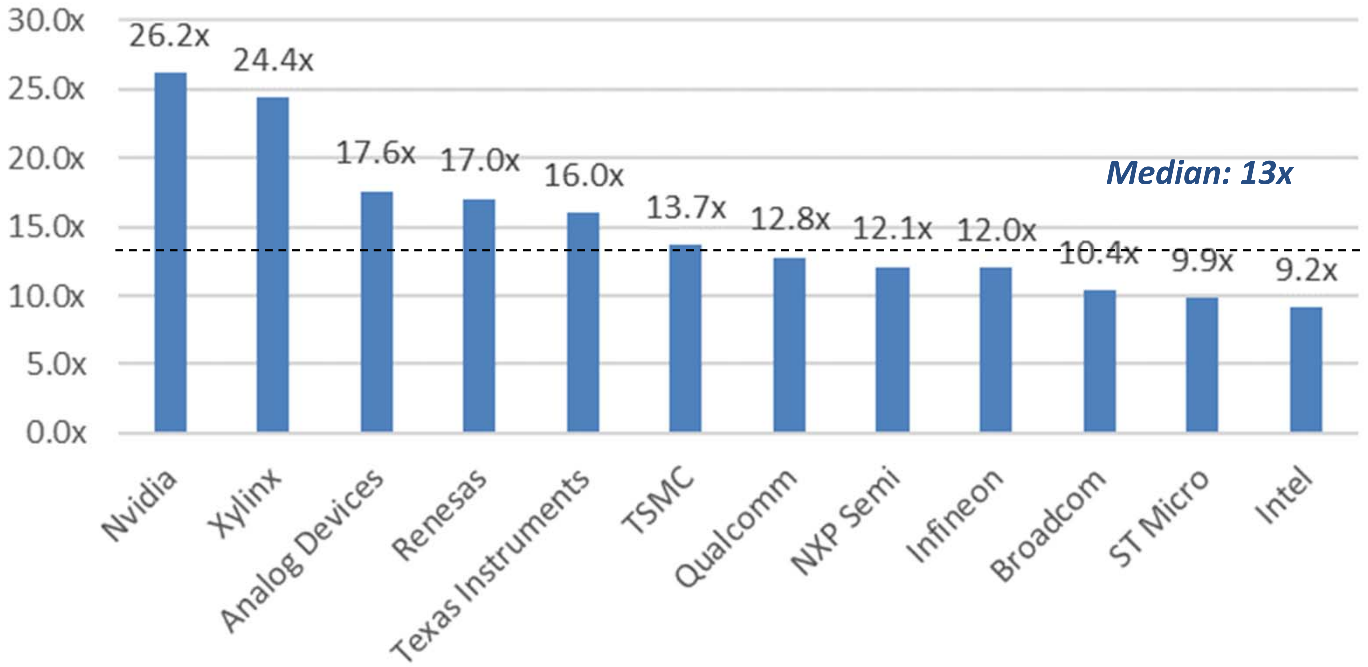
Sony 2019 IR Day slide 150: Sony FY25 market share target of 60%

Sony 2019 IR Day slide 153: Sony FY25 ROIC target of 20-25% from 15% in FY18. Third Point assumes ROIC benefit translates into margin benefit

Sony Technologies comparables

- Non-memory (memory is more commoditized) semiconductor bellwethers largely trade in a range of 10-16x forward year EBIT

Sony Technologies comparables (EV / '20E EBIT)



Market Data as of 6/11/2019

Are Sony Technologies and New Sony better off as stand-alone companies?

- Operating in a far more capital intensive, cyclical industry, Sony Technologies has a very different profile compared to Sony Corp
- We believe a spin-off of Sony Technologies brings inherent advantages that will unlock long-term value

Better Alignment of Management Incentives

- Better balance between short-term performance targets and long-term investments

Greater Management Accountability

- C-level strategic decision made by managers who are 100% dedicated
- Sony Technologies growth plan needs to be a C-level priority and visible to the Board and investors

More Tailored Capital Allocation

- Allows for more targeted growth investments
- Sony Technologies capital structure can be optimized

Dedicated Board of Directors

- Brings relevant industry experience
- Additional oversight

SONY

This is a crucial time for Sony Technologies to capitalize on growth opportunities. A dedicated management team and Board of Directors would increase likelihood of achieving targets laid out at 2019 Investor Day

"Sony Technologies" spin-off will create value for the long-term

- We see value in Sony spinning off Sony Semiconductors division into a standalone public stock ("Sony Technologies") to create a national champion listed in Japan
- As a separate stock, Sony Technologies would:

1. Report standalone financials each quarter and host separate and dedicated quarterly conference calls highlighting the strengths and accomplishments of Sony's Semiconductor business
2. Create one of Japan's largest and only pureplay semiconductor businesses owned by Sony shareholders as well as attract a new, semiconductor dedicated shareholder group
3. Elevate top tier Japanese semiconductor managers to the spotlight, highlighting Japan's management talent
4. Allow management and employees to receive incentives to drive growth, innovation and financial performance

Sony Technologies will shed light on the past accomplishments and future successes for Sony Semiconductors, to the benefit of all Sony stakeholders

Several operational benefits to a standalone Sony Technologies

1. Accelerate capital spend

- **Sony Technologies would attract investors who welcome accelerated investments**
  - Today, Sony investors react negatively to increases in the company's capital expenditure budget, usually driven by Semiconductor spend
  - Semiconductor investors understand (and often like) accelerated spending, as this is often synonymous with growth opportunities

2. Accelerate R&D

- **Sony Technologies would have a dedicated R&D budget that could be scaled as they best see fit**
  - Today, Sony Semiconductors competes for R&D budgets against various other businesses like Mobile Communications
  - With a dedicated budget, Sony Technologies could accelerate spend to capture future growth opportunities (automotive, IoT, etc.)

3. Dedicated capital structure

- **Sony Technologies would have greater financial flexibility**
  - Today Sony manages its balance sheet conservatively, maintaining a ratio of 40% book equity / total assets
  - Other semiconductor / technology hardware companies in Japan have more financial flexibility, allowing them to raise debt to invest in growth

4. Dedicated management team

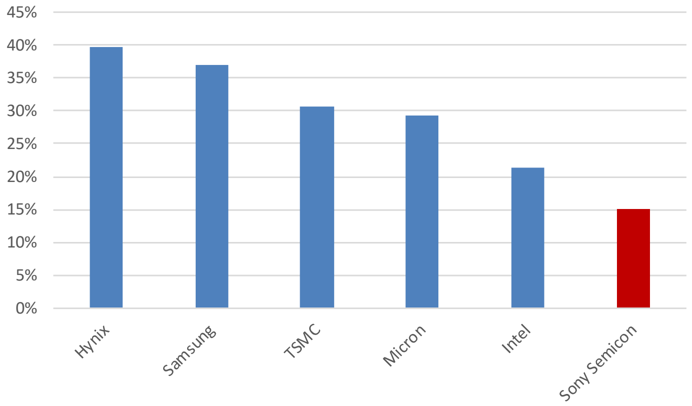
- **Sony Technologies would have a management solely dedicated to the success of Sony's Semiconductor franchise**
  - As a separate company, C-level strategic decisions at Sony Technologies would be made by managers who are 100% dedicated
  - Sony Technologies could pursue opportunities unhampered by restrictions and needs of its parent company

A spin-off would accelerate Sony Technologies' growth

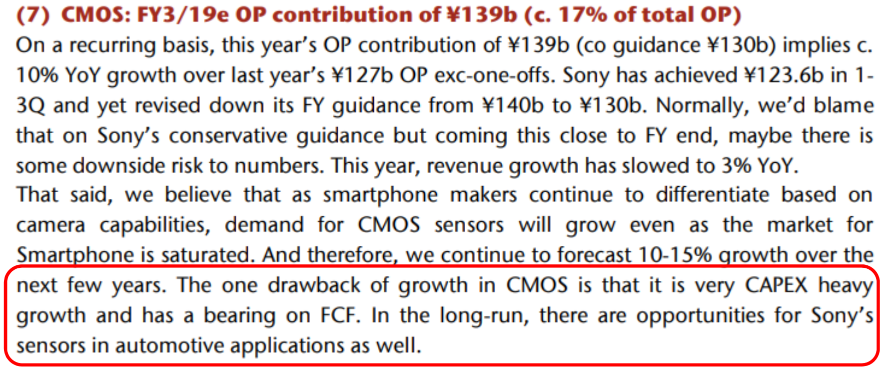
Sony Technologies would likely accelerate capital spend…

- While Sony invests substantially in its semiconductor business, we believe Sony has room to accelerate spend in order to capitalize on growth opportunities
- Sony analysts and investors are constantly concerned about Sony's level of semiconductor capex spend, worrying that it will hurt FCF generation
- Dedicated semiconductor analysts and investors understand that capex is tied to growth, and reward companies for investing heavily for the future

Capex / Sales – Major integrated semiconductor companies



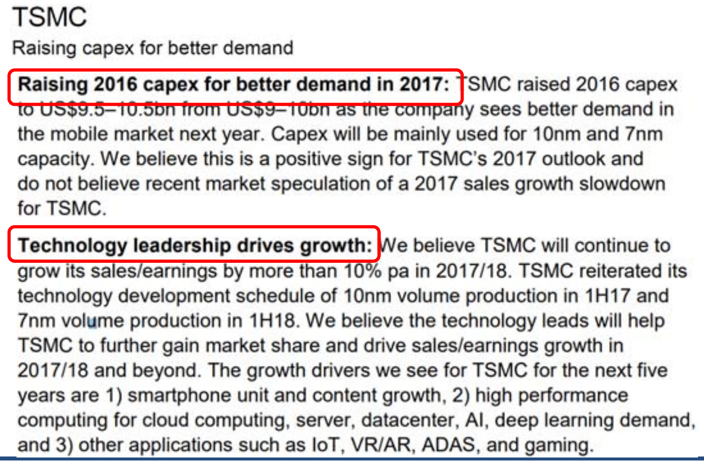
Sony – Jefferies commentary



(7) CMOS: FY3/19e OP contribution of ¥139b (c. 17% of total OP)

On a recurring basis, this year's OP contribution of ¥139b (co guidance ¥130b) implies c. 10% YoY growth over last year's ¥127b OP exc-one-offs. Sony has achieved ¥123.6b in 1-3Q and yet revised down its FY guidance from ¥140b to ¥130b. Normally, we'd blame that on Sony's conservative guidance but coming this close to FY end, maybe there is some downside risk to numbers. This year, revenue growth has slowed to 3% YoY.
That said, we believe that as smartphone makers continue to differentiate based on camera capabilities, demand for CMOS sensors will grow even as the market for Smartphone is saturated. And therefore, we continue to forecast 10-15% growth over the next few years. The one drawback of growth in CMOS is that it is very CAPEX heavy growth and has a bearing on FCF. In the long-run, there are opportunities for Sony's sensors in automotive applications as well.

TSMC – Macquarie commentary



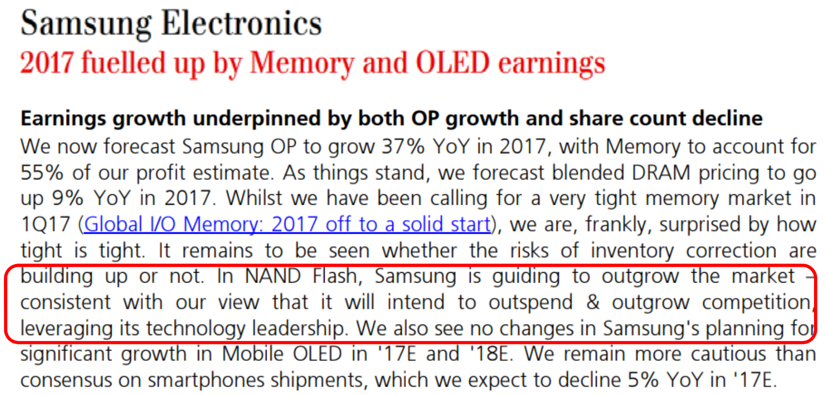
TSMC

Raising capex for better demand

Raising 2016 capex for better demand in 2017: TSMC raised 2016 capex to US$9.5–10.5bn from US$9–10bn as the company sees better demand in the mobile market next year. Capex will be mainly used for 10nm and 7nm capacity. We believe this is a positive sign for TSMC's 2017 outlook and do not believe recent market speculation of a 2017 sales growth slowdown for TSMC.

Technology leadership drives growth: We believe TSMC will continue to grow its sales/earnings by more than 10% pa in 2017/18. TSMC reiterated its technology development schedule of 10nm volume production in 1H17 and 7nm volume production in 1H18. We believe the technology leads will help TSMC to further gain market share and drive sales/earnings growth in 2017/18 and beyond. The growth drivers we see for TSMC for the next five years are 1) smartphone unit and content growth, 2) high performance computing for cloud computing, server, datacenter, AI, deep learning demand, and 3) other applications such as IoT, VR/AR, ADAS, and gaming.

Samsung – UBS commentary



Samsung Electronics

2017 fuelled up by Memory and OLED earnings

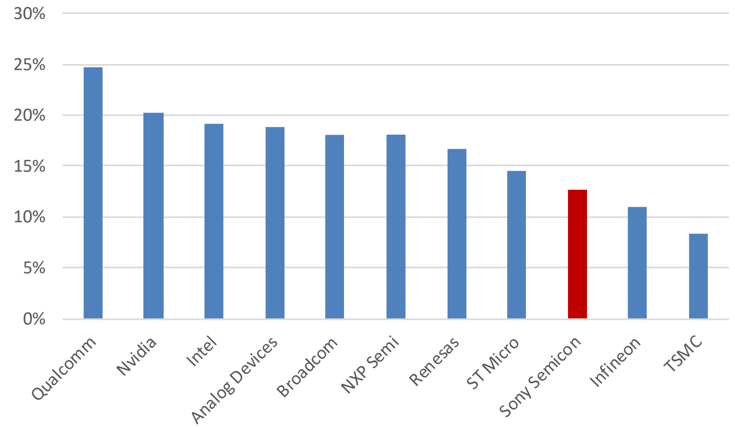
Earnings growth underpinned by both OP growth and share count decline

We now forecast Samsung OP to grow 37% YoY in 2017, with Memory to account for 55% of our profit estimate. As things stand, we forecast blended DRAM pricing to go up 9% YoY in 2017. Whilst we have been calling for a very tight memory market in 1Q17 (Global I/O Memory: 2017 off to a solid start), we are, frankly, surprised by how tight is tight. It remains to be seen whether the risks of inventory correction are building up or not. In NAND Flash, Samsung is guiding to outgrow the market – consistent with our view that it will intend to outspend & outgrow competition, leveraging its technology leadership. We also see no changes in Samsung's planning for significant growth in Mobile OLED in '17E and '18E. We remain more cautious than consensus on smartphones shipments, which we expect to decline 5% YoY in '17E.

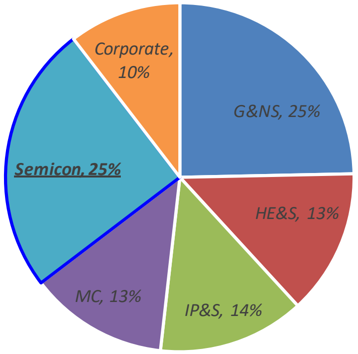
…and broaden scope of R&D

- Sony spends a healthy amount of R&D in Semiconductors, but compared to other semiconductor peers, that amount could be much higher
- We suspect part of the constraint is Sony Semiconductors must compete for share of a largely fixed corporate R&D budget
- As a separate entity, Sony Technologies could set its own R&D budget unconstrained by corporate needs
- Semiconductor dedicated analysts and investors welcome accelerated R&D spend, as they understand R&D creates sustainable advantages

R&D / Sales – Major international semiconductor Co's



Sony FY17 R&D budget allocation



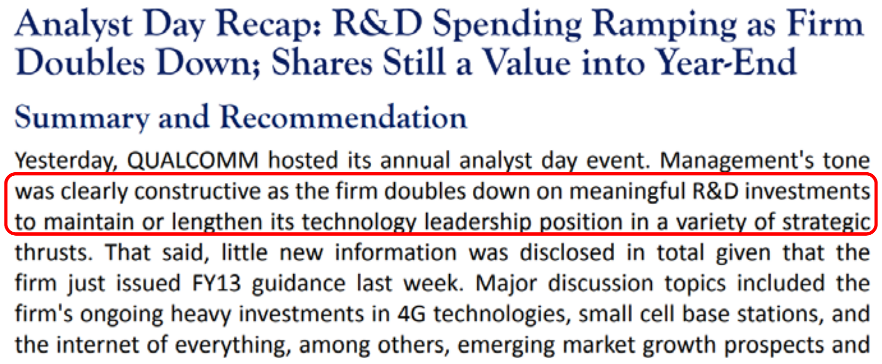
Broadcom – Barclays commentary

Broadcom Corp.

Top-line Outperformance To Continue, with R&D a Sustainable Advantage

All-in-all, we expect investors will view BRCM's Analyst Day as an incremental positive. We acknowledge ongoing concerns regarding lack of operating leverage near term as well as concerns regarding Samsung investing more aggressively in cellular, but do believe that BRCM's leadership in communication semis, in particular connectivity, will continue to deliver better than industry top-line growth. We view continued baseband traction with 3G/4G development, paired with room to grow in Networking and Broadband as additive to BRCM's core business. BRCM remains one of our top picks in semis, with continued relative topline outperformance, leverage to the right product

Qualcomm – Oppenheimer commentary



Analyst Day Recap: R&D Spending Ramping as Firm Doubles Down; Shares Still a Value into Year-End

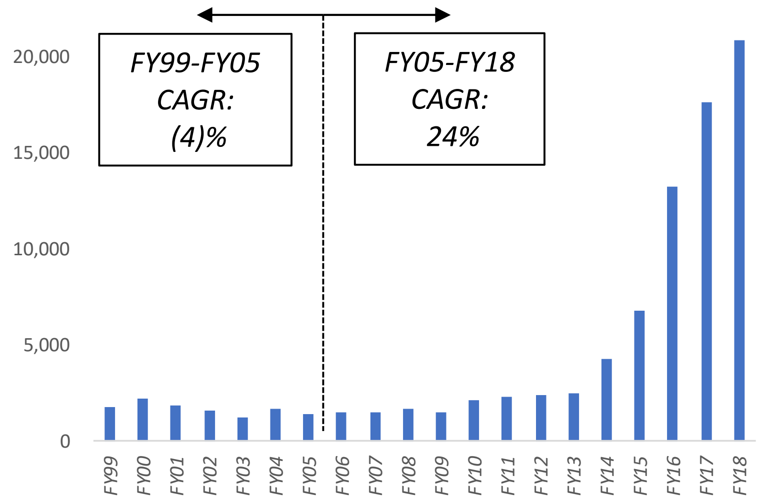
Summary and Recommendation

Yesterday, QUALCOMM hosted its annual analyst day event. Management's tone was clearly constructive as the firm doubles down on meaningful R&D investments to maintain or lengthen its technology leadership position in a variety of strategic thrusts. That said, little new information was disclosed in total given that the firm just issued FY13 guidance last week. Major discussion topics included the firm's ongoing heavy investments in 4G technologies, small cell base stations, and the internet of everything, among others, emerging market growth prospects and

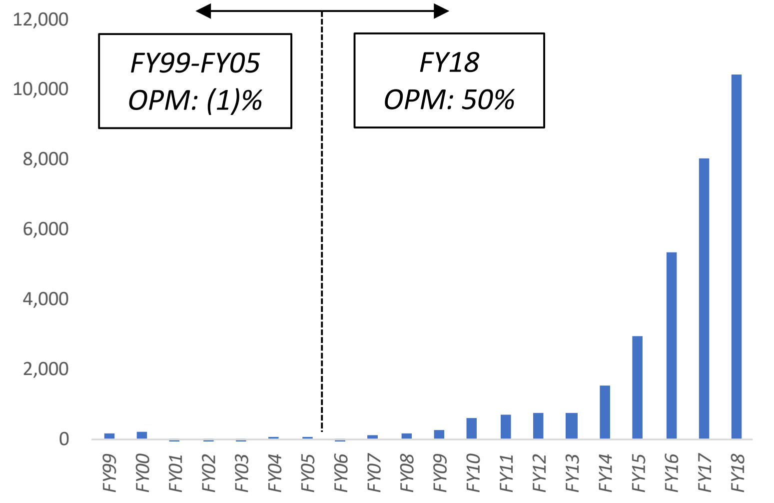
Avago highlights operational benefit of Sony Semis operating as a standalone entity

- Avago / Broadcom (Nasdaq: AVGO) originated as Agilent Technologies' (NYSE: A) semiconductors division
- In 2005 Avago was separated from Agilent and sold to KKR and Silver Lake for $2.7bn
  - Under Agilent, Avago did not grow revenue in 8 years prior to its sale and accumulated >$100mm in operating losses
  - In 2009, Avago IPO'd under the ticker AVGO at a $3.5bn valuation
- Operating as a separate entity for the 13 years post its original sale, Avago was able to:
  - Grow enterprise value from $2.7bn to $133bn
  - Grow revenue at a >20% CAGR from $1.4bn to $21bn
  - Expand operating margins from lossmaking to 50%
  - Leverage capital markets to execute 7 transactions totaling $70bn, expanding into >10 new product lines

Avago revenue ($bn)



Avago adjusted operating profit ($bn)



Source: Company reports and Third Point analysis

Tax considerations

- In 2017, the Japanese government passed tax reform that allowed companies to spin off divisions tax-free, a measure designed to encourage management to "act boldly with shareholders in mind"[1]
- Previously, spin-offs were treated as a sale in Japan, with corporate tax being due on the difference between fair value and book value of assets. This discouraged Japanese corporations from using a restructuring method popular among their Western peers[1]

- Our research indicates that Sony's semiconductor business can be spun off "tax-free" under the Companies Act of Japan
- Accomplished via: 1) "spin-off" scheme/corporate split[2] and 2) a tax-qualified share dividend
- **Key conditions:**
  - Sony's shareholders only receive shares issued by the newly established corporation proportionate to their shareholding ratio in Sony
  - No party owns more than 50% of Sony before the corporate split and it is expected that no party would own more than 50% of the newly established corporation after the corporate split
  - At least one of Sony's existing directors or important employees will become a senior director of the newly established corporation
  - The main assets/liabilities of the spin-off business are transferred to the newly established corporation
  - Approximately 80% or more of directors/employees engaged in the semiconductors business are expected to be engaged in businesses of the newly established corporation
  - The newly established corporation is expected to continue to operate the semiconductors business

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1. "Japan eyes tax break for spinoffs." *Nikkei Asian Review*, Nikkei. 19, November 2016. https://asia.nikkei.com/Politics/Japan-eyes-tax-break-for-spinoffs.
2. A spin-off scheme is the creation of a new corporation as Sony's wholly-owned subsidiary and simultaneous transfer of the Semiconductor business to the new corporation. A "corporate split other than spin-off" involves the creation of a new empty corporation and then a subsequent transfer of the Semiconductor business to the new corporation

New Sony – A Leading Creative Entertainment Company

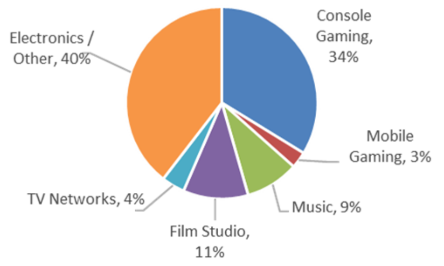
THIRD POINT

New Sony: A creative entertainment leader

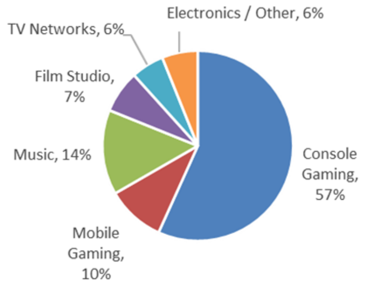
- Following a spin of Semiconductors, Sony will emerge as a **focused entertainment company** with leading global positions in Gaming, Music, and Film
  - **#1 video game company** globally (SIE) and top 10 mobile game studio globally (Aniplex)
  - **#1 music publisher** (Sony/ATV), #2 recorded music company (Sony Music)
  - **Top 5 film/TV studio** (Sony Pictures), Top 5 Indian pay-TV network group (SPN India)
- New Sony will benefit from **perceived "scarcity value"**: High growth, low capital intensity, and levered to the most important secular growth drivers across the media space:
  - **Accelerating growth** in console gaming engagement and revenue driven by online multiplayer, in-game purchases and new commercial models (e.g. free-to-play, subscription)
  - Shift in video and music consumption to subscription-based on-demand streaming services (e.g. Netflix, Amazon Video, Spotify, Apple Music) resulting in **margin expansion** for content owners
  - **Rising strategic value** of music rights and TV/film IP & libraries, given increasing competition among new distribution platforms (e.g. Netflix, Amazon, Apple, Warner, Hulu, Disney+, etc.)
- New Sony's financial profile (low leverage, high free cash flow conversion, and untapped balance sheet capacity from potential monetization of listed stakes) would allow Sony to aggressively capitalize on organic and inorganic growth opportunities
  - New Sony will have the enviable ability to both **grow aggressively AND return capital** to shareholders

New Sony will emerge as a focused growth story with double-digit earnings CAGR

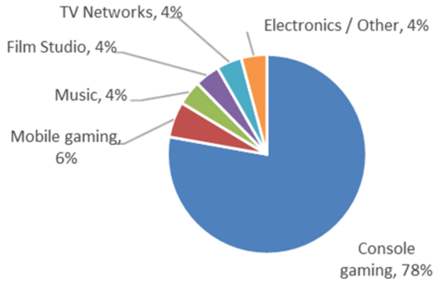
% of Total Rev. (CY18)



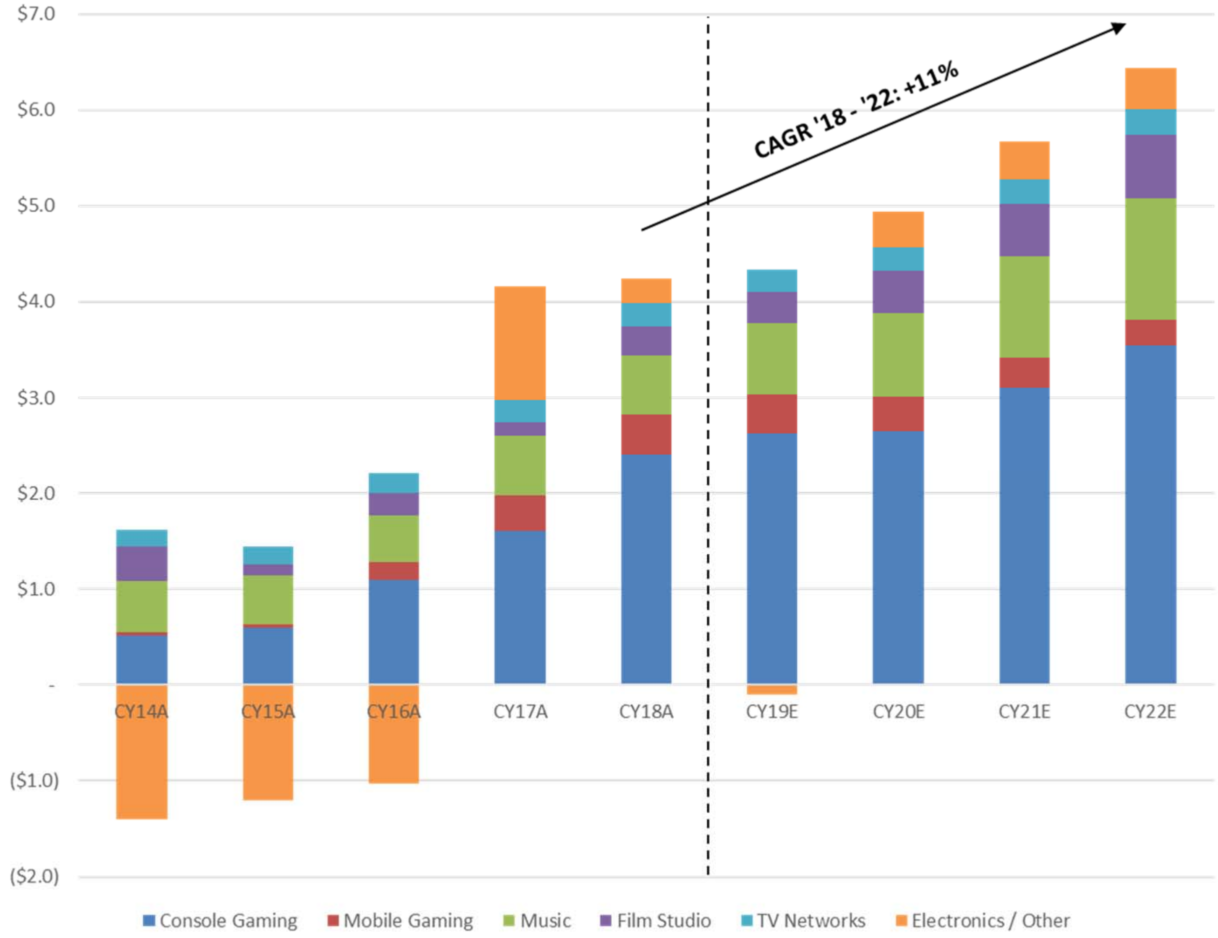
% of Total EBIT (CY18)



% of Total FCF (CY18)



EBIT by segment ($bn)



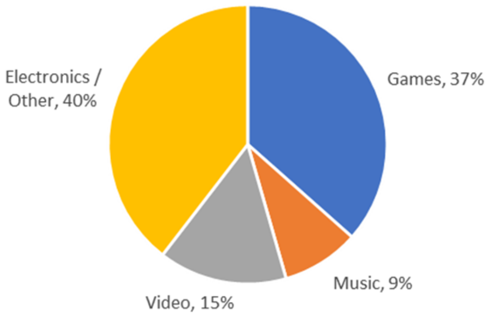
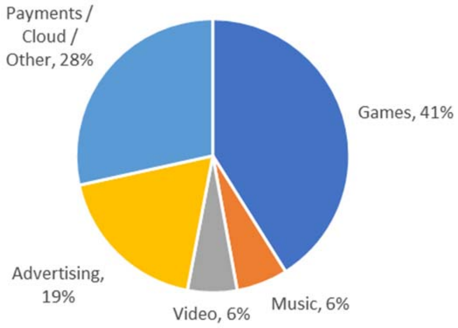
Source: Company reports, Third Point estimates

We see New Sony growing EBIT at +10% CAGR or better, driven primarily by secular tailwinds in gaming and music

Wide array of media brands with extensive owned IP

	Sony Gaming	Sony Music	Sony Pictures
Sony Brands	PlayStation Sony Interactive Entertainment PlayStation Store	COLUMBIA RCA Epic ARISTA NASHVILLE RCA RECORDS LABEL NASHVILLE COLUMBIA NASHVILLE Sony/ATV MUSIC PUBLISHING	SONY PICTURES SONY PICTURES TELEVISION SONY PICTURES NETWORKS
Sony Content and IP	THE LAST OF US GRAN TURISMO HORIZON ZERO DAWN UNCHARTED GOD OF WAR DEATH STRANDING	       	MARVEL SPIDER-MAN MIB MEN IN BLACK Breaking Bad NETFLIX THE CROWN JUMANJI GHOSTBUSTERS
Third-party ecosystem partners	ACTIVISION R EA UBISOFT FORTNITE Microsoft Azure	Spotify MUSIC amazon music YouTube TikTok Tencent	NETFLIX hulu amazon Prime Disney CBS NBC

How might investors conceptualize New Sony as a standalone company?

	SONY *New Sony*	Tencent 腾讯
Current enterprise value	\$36 billion [1]	\$365 billion [2]
EBIT (CY18)	\$4.2 billion [3]	\$11.4 billion
EV / '18 EBIT multiple	9x	32x
EBIT CAGR, 2013 - 2018	+39% [3]	+35%
Rev CAGR, 2013 - 2018	+10% [4]	+44%
Key market positions	• #1 in global video games • #2 in global music rights • #3 in global TV/film production	• #1 in China video games • #1 in China music distribution • #1 in China TV/film distribution
CY18 revenue mix		

1. New Sony valuation excludes Semiconductors at 12x CY2020 EBIT and listed stakes at 75% of market value (assumed tax leakage)
2. Tencent TEV calculation excludes \$56bn of net cash and investments based on 3/31/19 balance sheet carrying values
3. Includes Gaming, Music, Pictures, Electronics and Corporate
4. New Sony revenue CAGR shown excluding Electronics businesses, which have experienced declining revenue but improving profitability

New Sony will be comped against global peers in the gaming, music and film production sectors

Video game companies

	USD millions	Share price (USD)	Market cap	Net debt	TEV	TEV / EBIT CY19E	TEV / EBIT CY20E	TEV / EBIT CY21E	P / E CY19E	P / E CY20E	P / E CY21E
US	EA	$94.58	$29,320	($4,167)	$25,153	19.8x	18.8x	16.7x	25.8x	24.0x	23.2x
	Activision	46.70	36,193	(1,554)	34,639	18.5x	15.5x	14.1x	24.4x	20.3x	17.9x
	Take Two	110.29	12,683	(1,601)	11,083	40.4x	23.9x	17.1x	38.9x	30.6x	23.5x
	Ubisoft	80.53	9,705	384	10,089	22.3x	19.1x	21.5x	28.0x	23.2x	23.6x
China	Tencent	43.90	417,910	2,697	420,607	26.1x	21.6x	16.6x	33.2x	26.1x	20.9x
	NetEase	269.80	34,750	(5,419)	29,331	20.2x	17.2x	15.1x	27.7x	23.2x	20.1x
Japan	Nintendo	345.27	41,131	(7,678)	33,453	13.0x	11.7x	11.3x	18.9x	16.5x	17.6x
	Bandai Namco	48.91	10,749	(1,559)	9,190	11.2x	10.6x	9.6x	17.7x	17.3x	15.6x
	Konami	45.91	6,208	(1,027)	5,181	10.2x	9.6x	8.9x	18.6x	17.0x	16.0x
	Square Enix	34.27	4,084	(945)	3,139	10.8x	9.5x	8.6x	22.9x	18.0x	15.7x
	Nexon	15.34	13,801	(4,428)	9,373	10.2x	9.0x	8.8x	17.6x	16.9x	16.5x
	AVERAGE					**18.4x**	**15.1x**	**13.5x**	**24.9x**	**21.2x**	**19.1x**

Entertainment conglomerates (gaming + music + pictures)

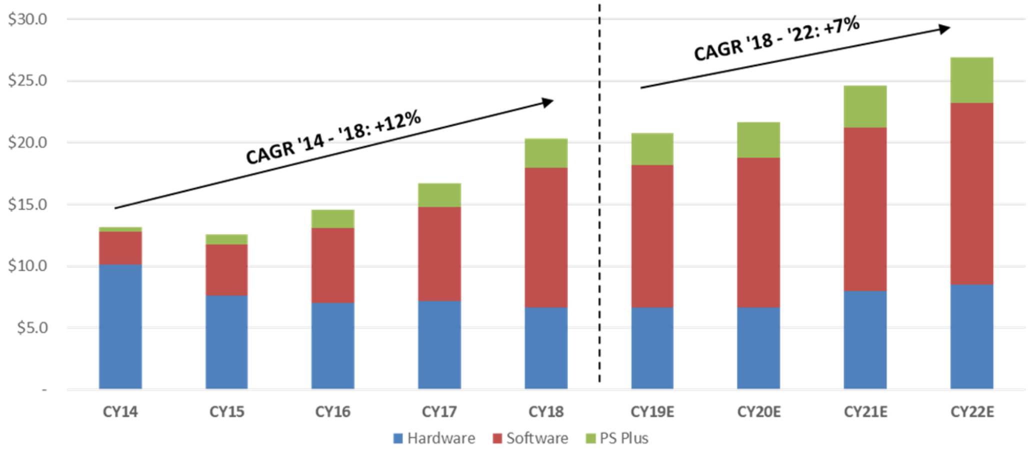
USD millions	Share price (USD)	Market cap	Net debt	TEV	TEV / EBIT CY19E	TEV / EBIT CY20E	TEV / EBIT CY21E	P / E CY19E	P / E CY20E	P / E CY21E
Tencent	$43.90	$417,910	$2,697	$420,607	26.1x	21.6x	16.6x	33.2x	26.1x	20.9x
Disney	135.08	244,838	38,674	283,512	18.6x	18.3x	17.4x	19.6x	19.2x	17.8x
Comcast	41.22	186,170	110,134	296,304	13.5x	12.7x	12.2x	13.9x	12.5x	11.6x
Vivendi	27.23	35,638	(372)	35,266	19.6x	17.4x	16.1x	23.9x	21.1x	19.2x
Lions Gate	13.40	2,833	3,446	6,279	20.9x	18.5x	14.3x	10.7x	10.3x	9.4x
AVERAGE					**19.7x**	**17.7x**	**15.3x**	**20.3x**	**17.9x**	**15.8x**

Pure-play gaming and entertainment comps suggest consolidated "New Sony" would trade between 12x - 15x EBIT

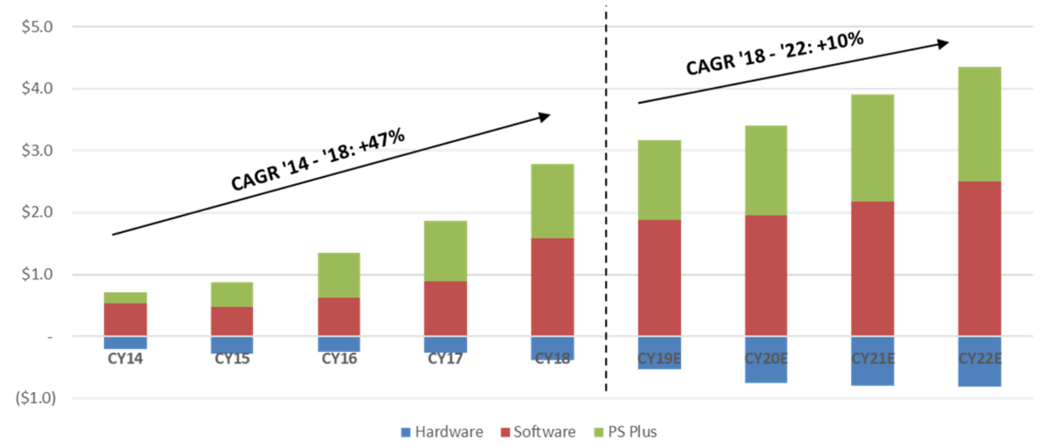
Market data as of 6/11/2019; all multiples based on earnings metrics fully burdened for share-based compensation

Game & Network Services – Segment Overview

Revenue ($bn)



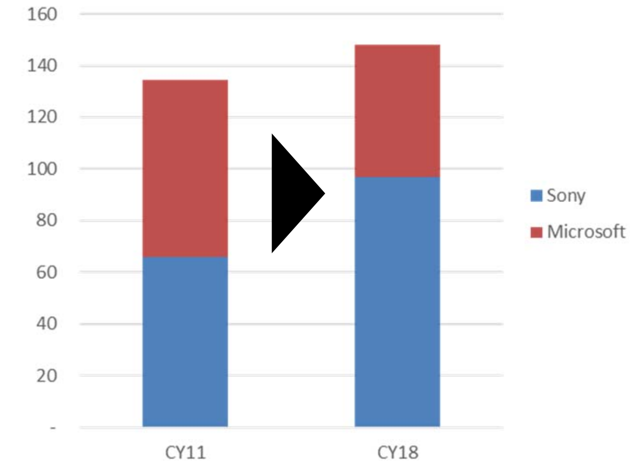
Operating profit (estimated) ($bn)



Overview

- Founded in 1993; headquartered in San Mateo, CA
- Segment consists of Sony Interactive Entertainment (SIE), which operates the PlayStation franchise
- Also includes SIE Worldwide Studios, a group of ~15 wholly owned studios developing exclusive games for PlayStation
- Current CEO: Jim Ryan (formerly head of Europe for SIE)
- Key 1P game franchises include The Last of Us, God of War, Uncharted, Gran Turismo, Spider-Man, Horizon Zero Dawn
- SIE generates revenue from:
  1. Hardware sales
  2. First-party (Sony) game software sales
  3. Royalty collected (~30%) on all third-party game sales and in-game purchases
  4. PS Now subscription service

Current-gen console installed base (mm): 2011 vs. 2018



Sony Interactive Entertainment

PS4

PlayStation.Store

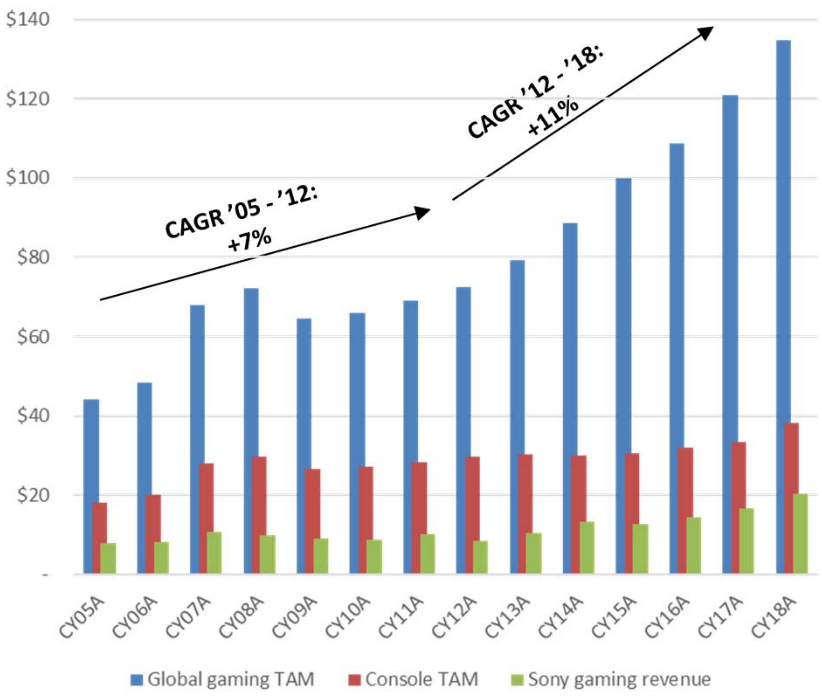
PlayStation.Plus

Source: Company reports and Third Point estimates

Growth in the global video game TAM is accelerating and Sony is the market leader

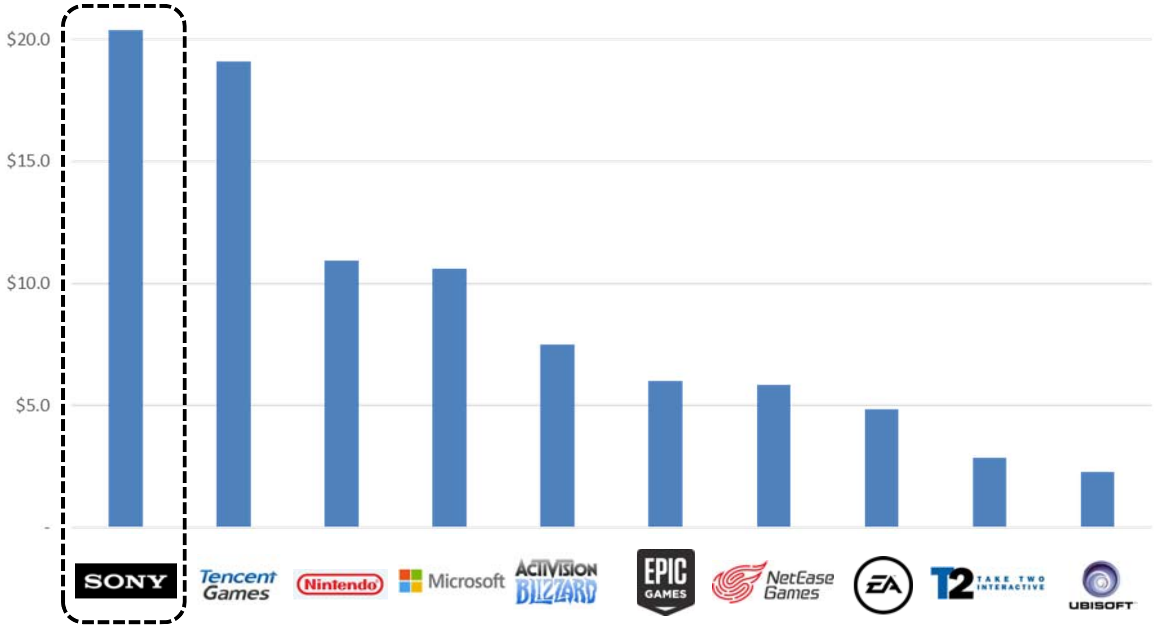
- The global video game market has grown >2x over the past 10 years, from $65bn in 2009 to $135bn in 2018
- Growth drivers include the rise of digital in-game purchases in console and PC games (a high-margin incremental revenue stream), as well as proliferation of mobile gaming over the last 5 years
- Sony is the largest gaming platform in the world by revenue (roughly 2x the size of closest console competitors Nintendo and Microsoft) and well-positioned to benefit from rapid growth in consumer engagement and spending going forward

Global video game TAM ($bn)



Source: NewZoo; PWC; company financials; Third Point estimates

Top 10 global video game companies by revenue (2018, $bn)



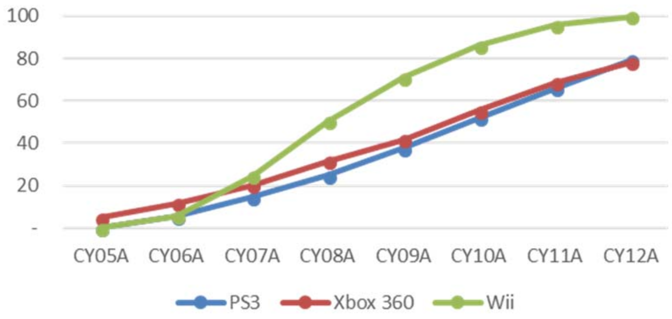
Source: Company reports; Third Point estimates

PlayStation has doubled its market share over the last 6 years and now dominates the industry

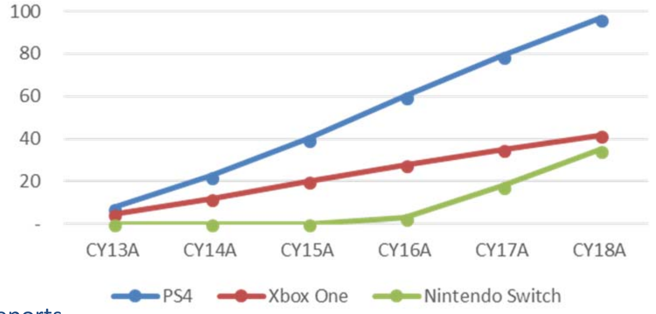
- The current console cycle generation has cemented Sony's dominant position as the #1 gaming console with >50% share of the market
- This is a sharp reversal from the prior console generation, when Sony was #3 behind Microsoft and Nintendo
- Sony's success in the PS4 cycle is attributable to a better launch strategy in 2013 (i.e. lower price, no bundled peripherals), better exclusive games since launch, and gamer perception that PS4 has superior graphics, interface and controllers relative to Xbox One

Installed base (mm units)

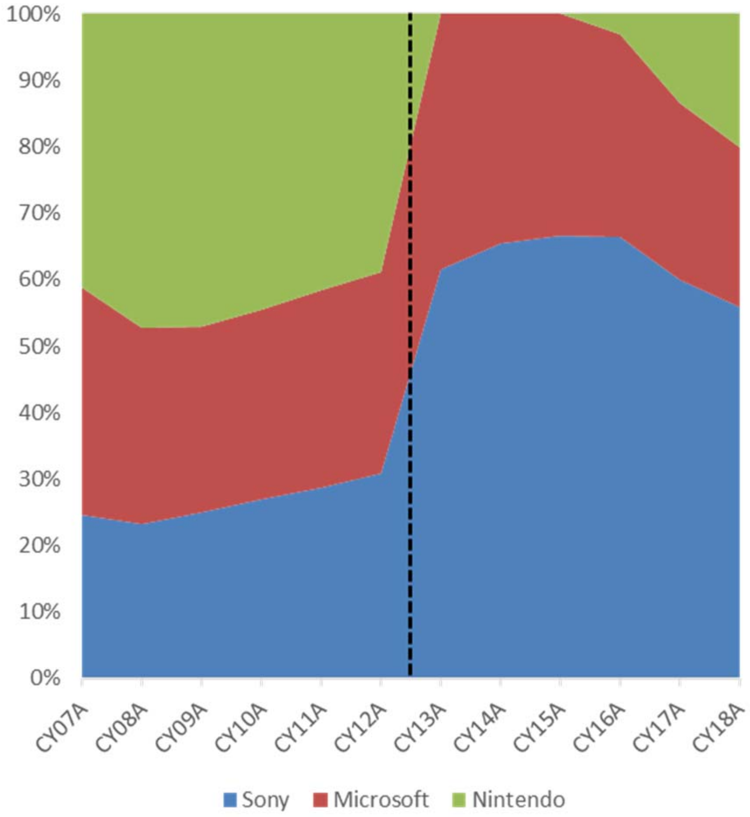
Previous Generation (2006 – 2012)



Current Generation (2013 – present)



% Market share of current-gen installed units

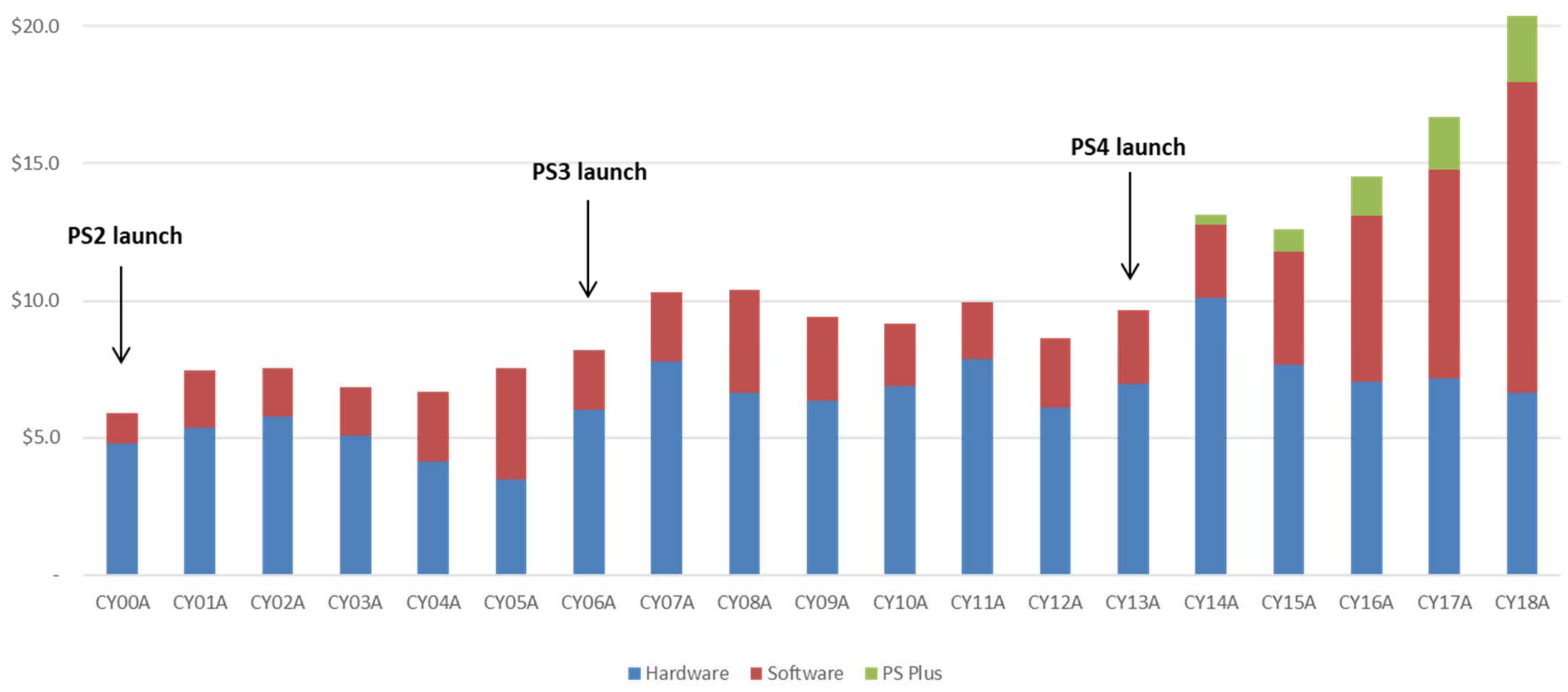


Source: Company reports

PlayStation has successfully transitioned from a cyclical hardware business to a recurring software/subscription model

- Since launch of PS4, Sony's gaming business has deviated from the historical cyclical pattern (i.e. revenue declines starting in years #4 and #5 of the cycle); in the PS4 cycle, Sony's revenue growth has actually accelerated in year #4 / #5
- Sony's revenue base has also undergone a dramatic shift away from hardware sales and toward software sales, due to:
  - (1) Rapid growth of in-game purchases over the past 5 years, which has boosted software revenue per game unit sold
  - (2) Expansion of Sony's 1P studios – Sony itself is now one of the largest PS4 game publishers, contributing incremental software revenue
  - (3) Introduction of PS Plus service, which generates growing stream of recurring subscription revenue (>$2bn in CY18)

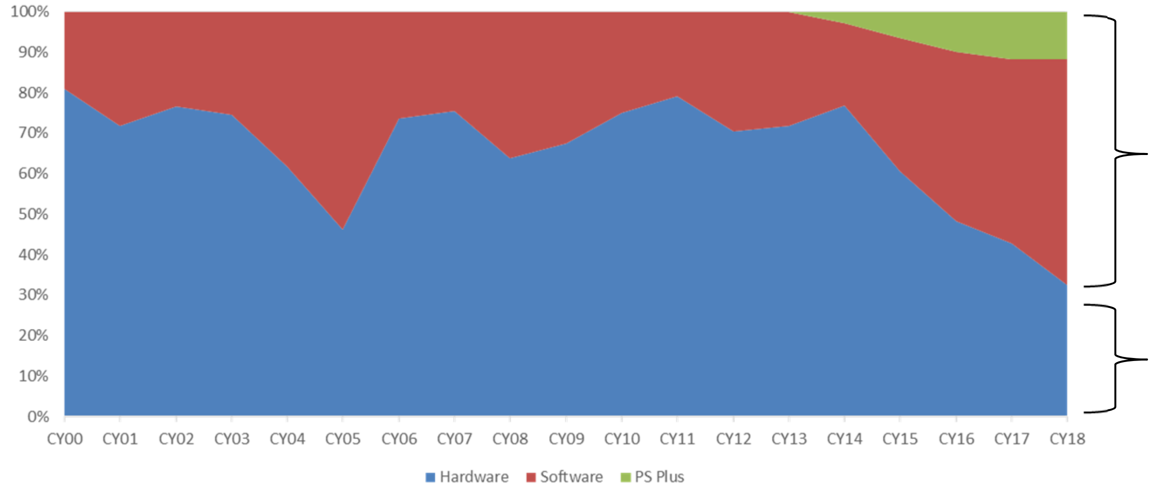
Sony G&NA segment revenue by type ($bn)



Source: Company reports

This revenue mix shift has resulted in significant margin expansion, with further upside ahead

G&NS segment revenue by type (% of total)

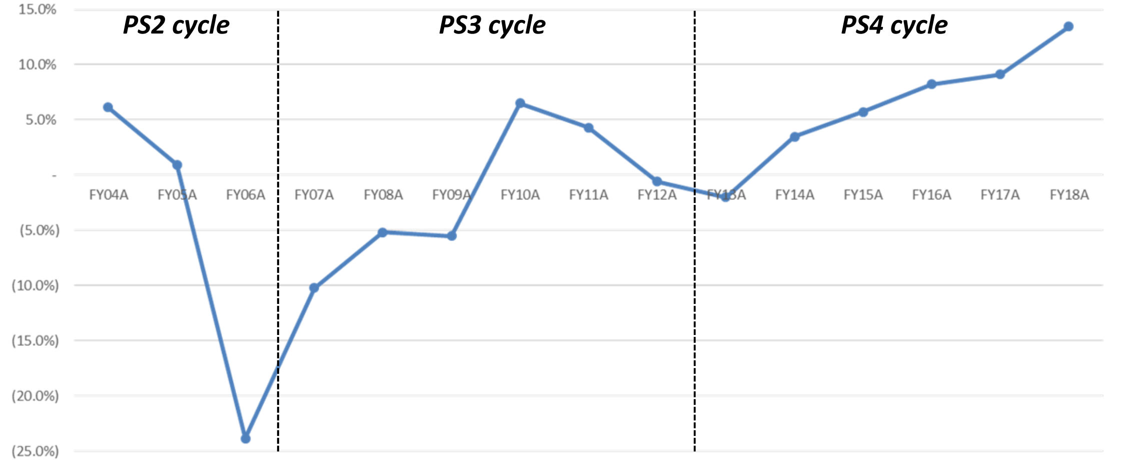


High-margin recurring software revenue

Driven by size of installed base, not current-period hardware unit sales

Diminishing contribution from low-margin hardware revenue

G&NS segment reported operating margin



Source: Company reports

Given the transformational shift in Sony's gaming segment from a cyclical hardware-driven business to a recurring software-driven business, we believe this business warrants a higher valuation multiple today

Sony's PS Plus subscription service has scaled rapidly and become a core profit driver

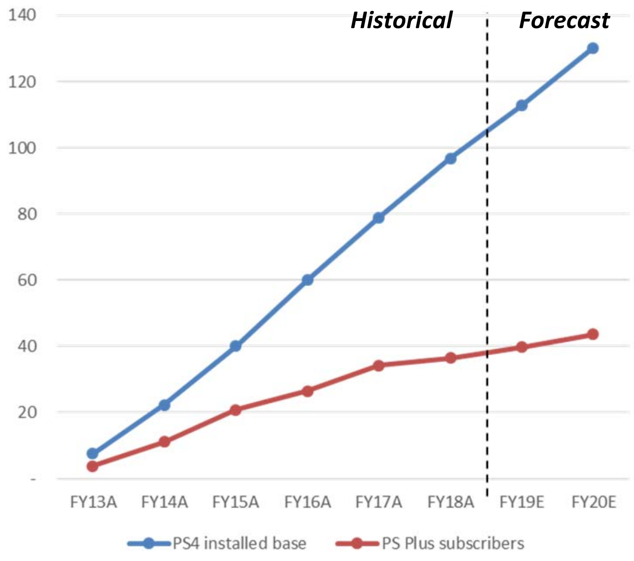
Overview of PS Plus

- SIE launched PS Plus in 2010 as an add-on subscription to PS3 providing subscribers early access to games and exclusive content
- In 2013, SIE announced the PS4 would require PS Plus membership to access online multiplayer
- Since 2013, PS Plus has grown from ~4mm subs to ~40mm currently. This equates to ~40% of PS4 owners
- SIE has raised prices on PS Plus only once: from $50/year to $60/year in Sept 2017
- The secular shift from single-player to multiplayer gaming represents a structural tailwind to PS Plus subscriber growth going forward

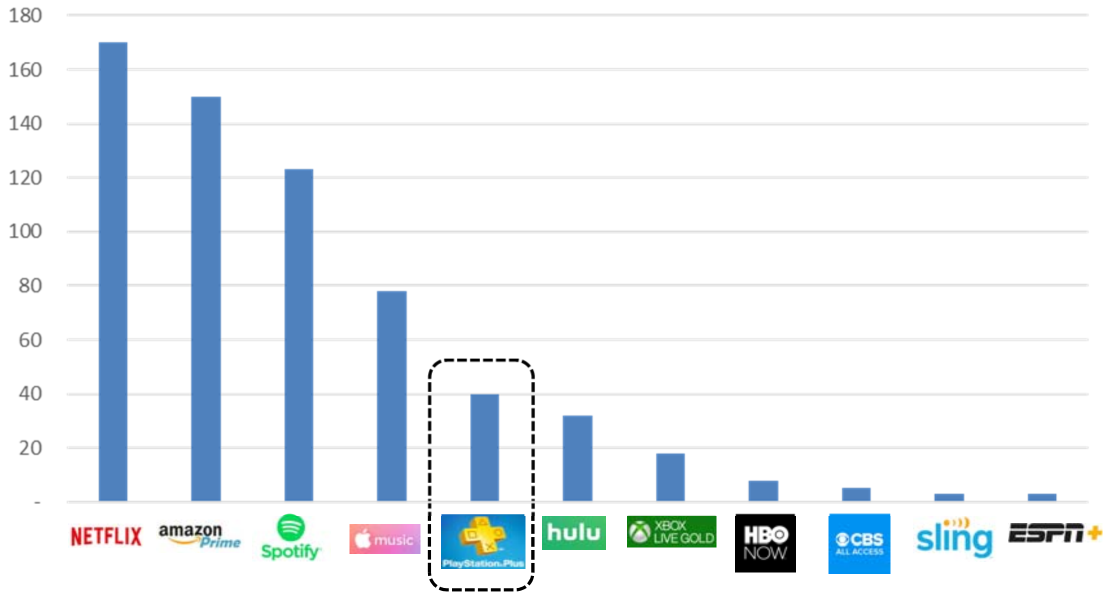
Largest global D2C subscription media businesses

	CY2019E				
	YE19 Subs (mm)	ARPU (est.)	Rev ($bn)	TEV ($bn)	TEV / '19 Rev
Netflix	170	$10.75	$20.2	$158.0	7.8x
Amazon Prime	150	$11.00	18.0		
Spotify	123	$4.66	6.7	25.3	3.8x
Apple Music	78	$5.00	4.0		
PS Plus	40	$5.75	2.6		
Hulu	32	$10.00	5.0	15.0	3.0x
Xbox Live Gold	18	$5.75			
HBO Now	8	$15.00			
CBS All Access	5	$6.00			
SlingTV	3	$25.00			
ESPN+	3	$5.00			

PS Plus subs vs. PS4 installed base (mm)



Paying subscribers at YE19 (mm)

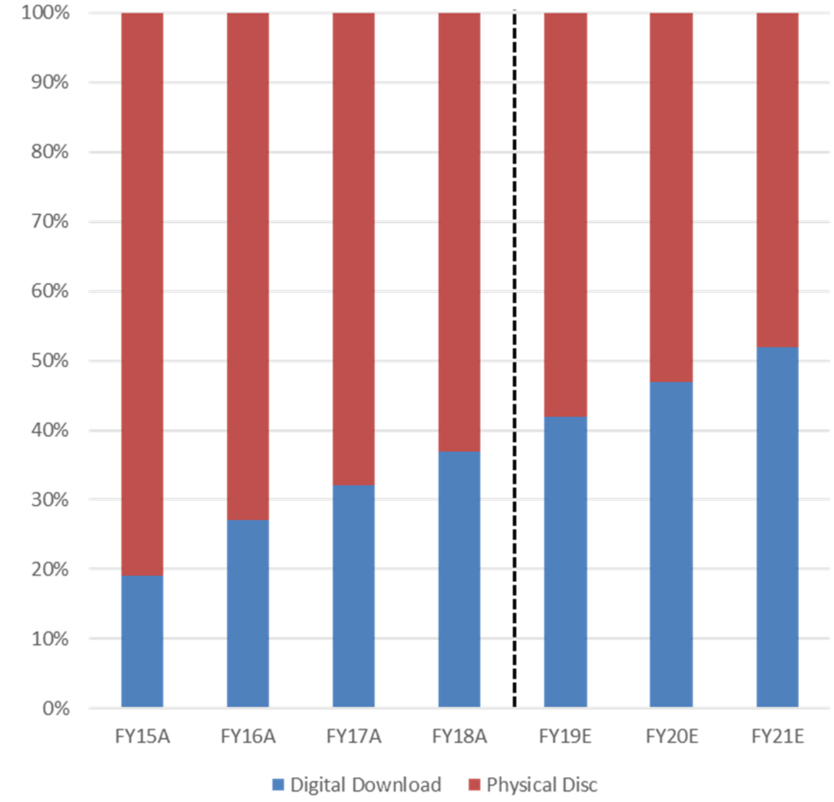


Source: Company reports

The ongoing shift from disc to download provides a tailwind to Sony's profit growth

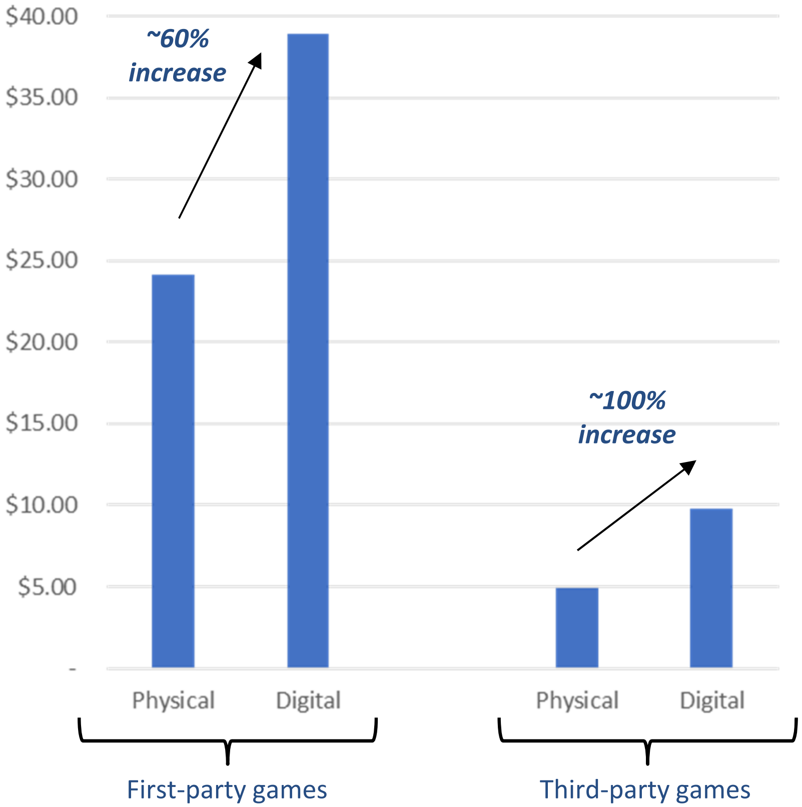
- Today the majority (~60%) of console games are still purchased in physical disc format; however consumers are rapidly shifting their game purchases toward digital download due to greater convenience and improving broadband speeds
- Each year the penetration of digital downloads rises by ~5-8 percentage points and we expect this trend to continue going forward
- This shift provides a powerful tailwind to Sony's profit growth, as Sony captures ~60-100% more gross profit dollars per unit in a download transaction
- Digital download transactions are more profitable because unlike in a physical disc sale, digital downloads do not require Sony to share any economics with a physical retailer or a disc manufacturer

PlayStation game sales, % of Total



Source: Company reports

Sony gross profit dollars per game unit sold



Source: Deutsche Bank

Sony's in-house game studios rival the largest standalone game publishers

Studio	**Key franchises**	**Estimated units sold (mm)**
NAUGHTY DOG	• The Last of Us • Uncharted	• The Last of Us (2013): 19mm • Uncharted 4 (2016): 15mm • Uncharted 3 (2011): 6mm
Santa Monica Studio	• God of War	• God of War (2018): 12mm
KOJIMA PRODUCTIONS	• Death Stranding	• To be released in Nov 2019
SUCKER PUNCH	• Infamous • Ghost of Tsushima	• Infamous Second Son (2014): 6mm • Ghost of Tsushima to be released in '19
GUERRILLA	• Horizon Zero Dawn	• Horizon Zero Dawn (2017): 10mm
POLYPHONY DIGITAL	• Gran Turismo	• Gran Turismo Sport (2017): 8mm • Gran Turismo 6 (2013): 5mm
bend STUDIO	• Days Gone	• Released in April 2019
SAN DIEGO STUDIO	• MLB: The Show	• ~1-2mm units per year
JAPANStudio	• The Last Guardian • Bloodborne • Everybody's Golf	• Bloodborne (2015): 3mm • The Last Guardian (2016): ~1-2mm • Everybody's Golf (2017): ~1-2mm

- We believe the value of Sony's studios is underappreciated by investors
- Sony's collection of wholly owned game studios in aggregate represent one of the largest video game publishers globally
- Games created by Sony's studios account for ~15-20% of PS4 game sales
- In aggregate Sony's studios generate >$2bn from new game sales

Benchmarking: Sony Worldwide Studios vs. "Big 4" publishers

Publisher	(mm) Est. units/yr	($bn) Revenue	Employees	($bn) Market cap
Activision	45	$6.4	9,900	$33.1
Electronic Arts	50	4.8	9,300	27.2
Take Two	30	2.9	4,492	12.0
Ubisoft	35	2.4	13,742	9.0
Sony WW Studios	40	2.4	2,500	

Top 15 selling PS4 games of all time (ranked by units sold)

Title	Year	Publisher
Grand Theft Auto V	2014	Take Two
Call of Duty: Black Ops 3	2015	Activision
Uncharted (PS4)	2016	Sony Interactive
Red Dead Redemption 2	2018	Take Two
Call of Duty: WWII	2017	Activision
FIFA 18	2017	Electronic Arts
The Last of Us	2014	Sony Interactive
FIFA 17	2016	Electronic Arts
God of War (PS4)	2018	Sony Interactive
Horizon: Zero Dawn	2017	Sony Interactive
Spider-Man (PS4)	2018	Sony Interactive
Call of Duty: Infinite Warfare	2016	Activision
Fallout 4	2015	Bethesda Softworks
FIFA 16	2015	Electronic Arts
Star Wars Battlefront (2015)	2015	Electronic Arts

Source: VGChartz; company disclosure

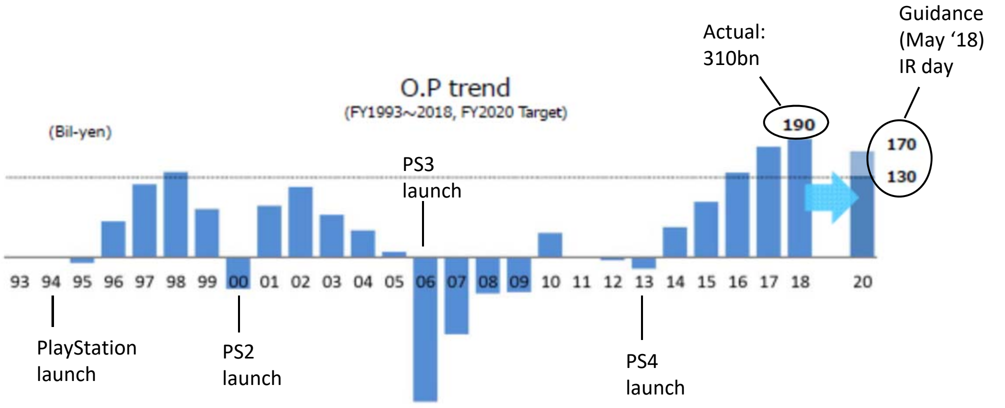
The market is concerned about two key bear cases on Sony’s gaming segment

1

Cyclical profit decline

- Over the past 3 decades, every console cycle transition has led to big drops in operating profit in the 2 years leading up to the new console launch (e.g. ‘99/’00, ‘05/’06, and ‘12/’13)
- Drivers of cyclical profit decline:
  - R&D investment into next-gen device
  - Consumers deferring console purchases
  - Developers pausing on new game releases
- Investors are concerned that Sony’s gaming earnings will decline in 2020 and 2021 as the PS4 cycle ends and Sony transitions to the PS5
- Last year, management issued guidance that 2020 gaming earnings will fall below the level achieved in 2017
- While this guidance is now stale and results have significantly outpaced management targets, investors are still worried that gaming earnings will fall precipitously in 2020

Slide from Sony May ‘18 investor deck



2

Disruption by cloud streaming services

- 2019 and 2020 will see high-profile launches of several cloud-based game streaming services from global tech giants
- Services coming to market include Google Stadia, Microsoft xCloud, and services from Amazon, Valve, EA, Wal-Mart, Nintendo, nVidia and others
- The risk to Sony is that a successful cloud streaming service can reduce the size of the physical console TAM by giving casual gamers a lower-cost option
- However major open questions re: streaming services remain (e.g. input latency, game availability, pricing model, bandwidth requirements)

Overview of game streaming services in development

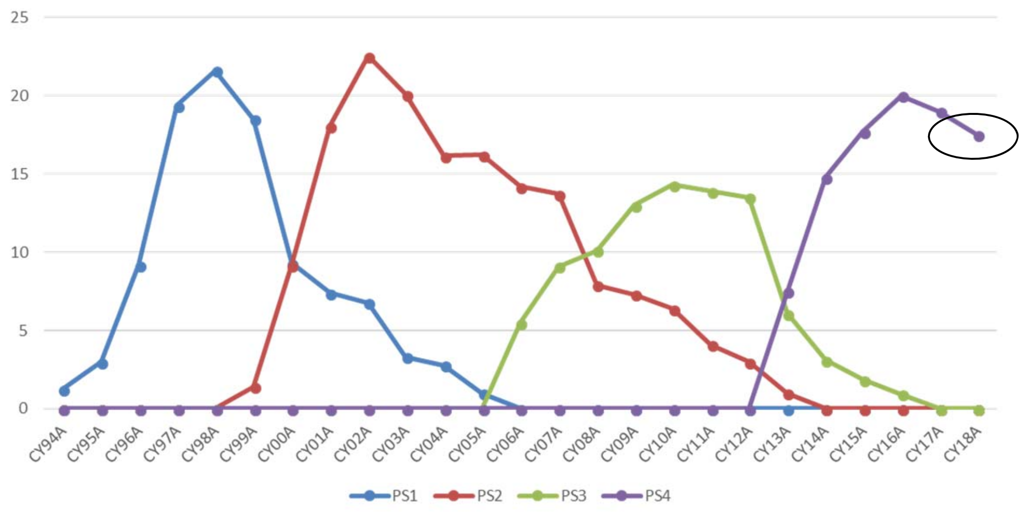
	Project Stream by Google	Steam Link	Nintendo Switch test	Project xCloud by Microsoft	Amazon game streaming	Project Atlas by EA
Launch date	October 2018 (beta)	November 2015	May 2018	Public trials in 2019	Reportedly 2020 (earliest)	TBA
Cost	Closed beta	Free	2,000 yen ($18)			
# of titles	Assassin's Creed only	Steam games only	Resident Evil 7			
Systems	Runs on Google Chrome	Android	Nintendo Switch	Mobile, phones, tablets		
Notes	Assassin's Creed only	Stream to mobile or TV Must connect to local CPU	180 days of play time Japan only	Xbox wireless controller Touch input	per The Information*	

* Amazon Developing Game Streaming Service, published January 10, 2019

Source: Company data, Goldman Sachs Global Investment Research

1 Historical console cycles peak in year 4 and decline thereafter…

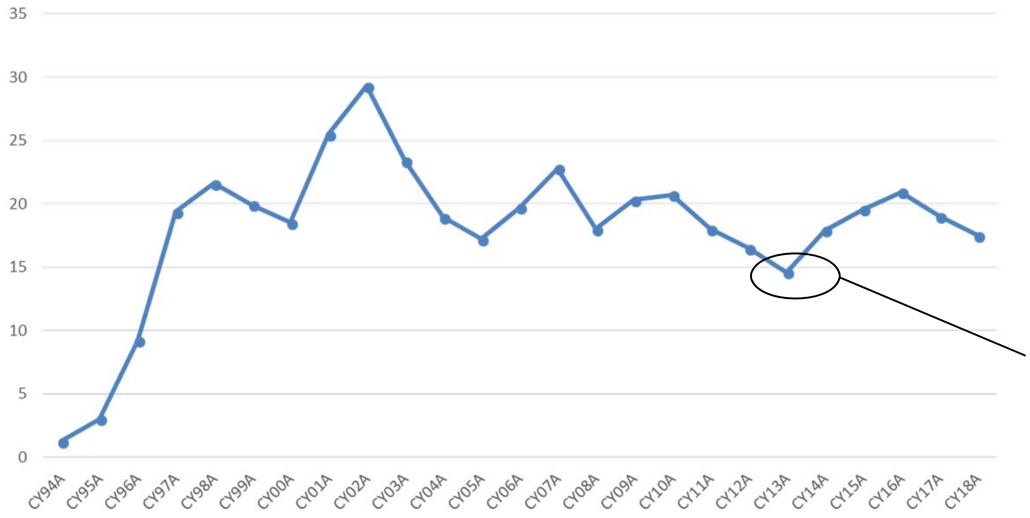
Sony gaming console unit sales by generation (mm)



Sony recently indicated the PS5 next-gen console will launch in CY20

Implies CY19 another down year in console unit sales

Sony gaming console unit sales, aggregate (mm)

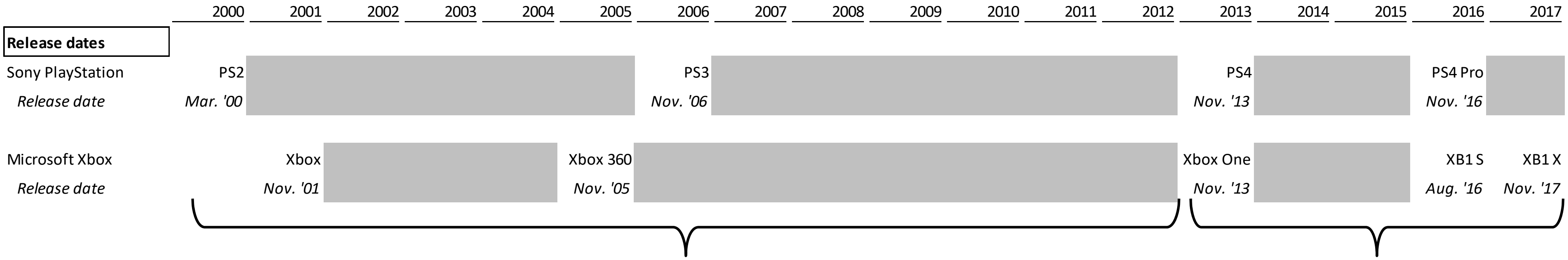


Intra-cycle trough unit sales = ~14 million

Source: Company reports

1 …but Sony and Microsoft have mitigated cyclicality by introducing backward-compatible hardware and transitioning to recurring revenue

Historical console release timeline



Release dates	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Sony PlayStation	PS2						PS3							PS4			PS4 Pro	
Release date	*Mar. '00*						*Nov. '06*							*Nov. '13*			*Nov. '16*	
Microsoft Xbox		Xbox				Xbox 360								Xbox One			XB1 S	XB1 X
Release date		*Nov. '01*				*Nov. '05*								*Nov. '13*			*Aug. '16*	*Nov. '17*

- Historically new console platforms were released every 7-8 years
- Software architecture of each new platform was completely different from the old platform
- As a result, new consoles were not backwards compatible with old games

- With the 2016/2017 generation of consoles (PS4 Pro / Xbox One X), Sony and Microsoft are moving toward an "incremental upgrade" model
- Every 2-3 years, a new version of the existing console is released with improved performance and full backward compatibility

Company commentary re: console cycle

EA CFO Blake Jorgensen, Nov 2017:

- Microsoft and Sony woke up to the fact that building highly customized console hardware creates compatibility issues with the previous console, which is negative for the consumer as well as developers
- The most recent generation of consoles (PS4 Pro and Xbox One X) are basically just PCs. This is great for software developers – lets us build compatibility much easier
- In the past, going from Xbox to Xbox 360, or PS2 to PS3, our game dev cost doubled. But in today's world, our costs remain flat cycle to cycle

Sony CFO Hiroki Totoki, Feb 2019:

- Although we need to be cautious of potential volatility in profitability due to the console cycle, we are working to mitigate the volatility by leveraging the more than 92 million units cumulative install base of PS4 to benefit from new business models created with Network Services and add-on content sales

Sony investor relations call, Feb 2019:

- Next-gen consoles will likely have backward compatibility, so publishers are less likely to scale back investment in new games ahead of the next-gen console launch

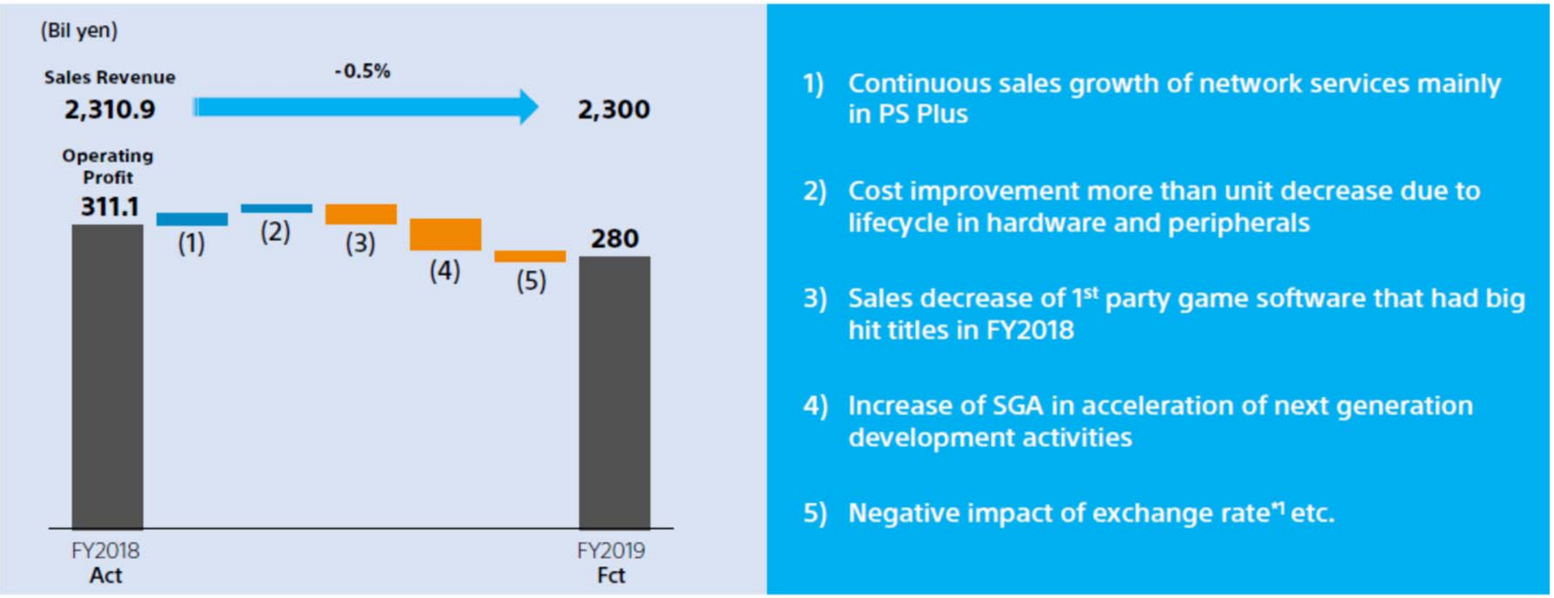
The console game market is becoming inherently less cyclical, because new consoles have:

(1) standardized PC-based architecture, (2) full backward compatibility, and (3) greater reliance on recurring revenue

1 Guidance indicates only modest decline in gaming profits in FY19, despite headwinds related to the console cycle transition

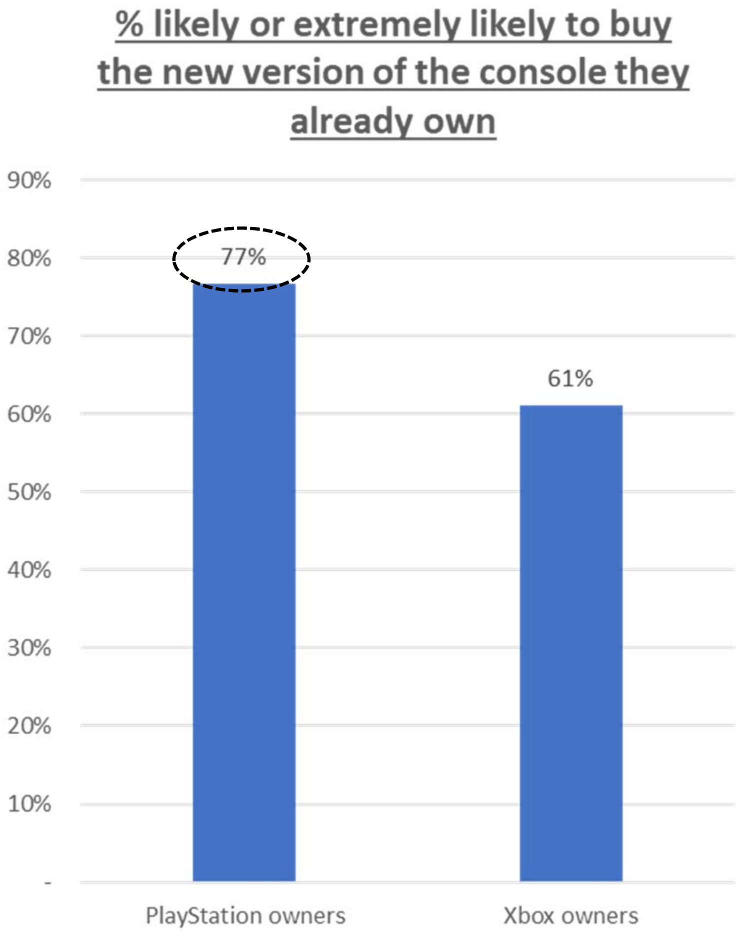
- While the market was concerned about a precipitous year-over-year drop in G&NS operating profit in FY19, Sony guided that FY19 OP would decline only 10% year-over-year
- The relatively benign profit decline in FY19 is a result of growth in PS Plus subscribers and hardware cost savings largely offsetting the "tough comp" on first-party game revenue
- We also believe Sony's first-party game slate for FY19 is stronger than many expect, with several potentially large hit games launching (e.g. Days Gone, Death Stranding, Ghost of Tsushima, Last of Us Part II)
- Relatively stable gaming OP in FY19 bodes well for FY20 and beyond, and supports the notion that the gaming segment is becoming less and less cyclical as the business continues to transition toward recurring revenue and live services, and away from cyclical hardware sales

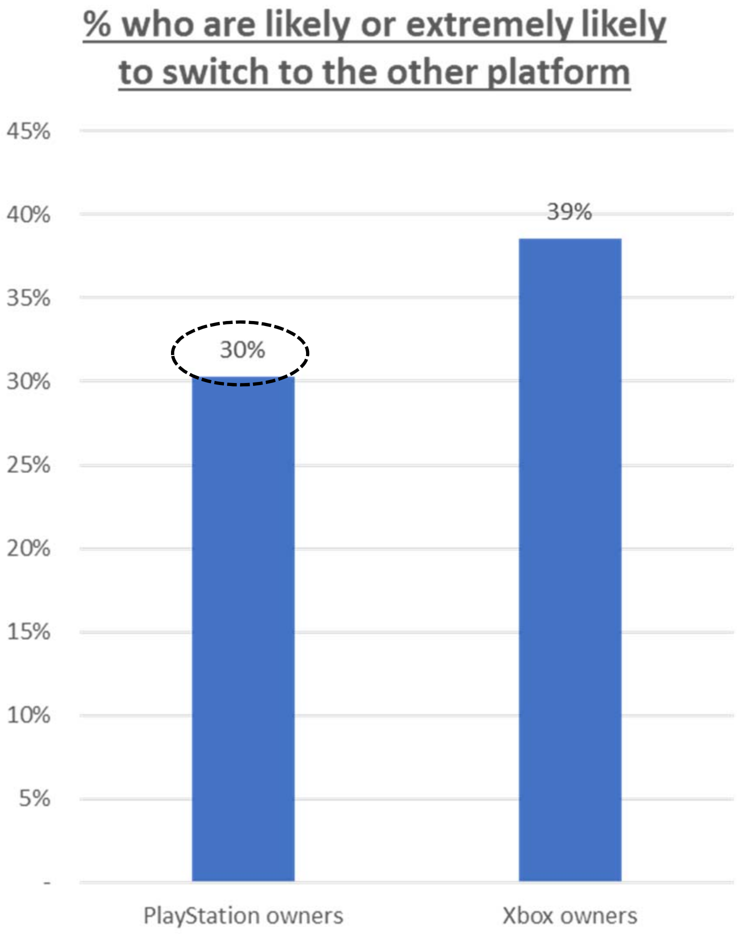
FY18 to FY19 profit bridge, Sony G&NS segment (from May 2019 analyst day)



1) Continuous sales growth of network services mainly in PS Plus
2) Cost improvement more than unit decrease due to lifecycle in hardware and peripherals
3) Sales decrease of 1st party game software that had big hit titles in FY2018
4) Increase of SGA in acceleration of next generation development activities
5) Negative impact of exchange rate*1 etc.

1 Importantly, we expect Sony to maintain its leading position in the next console cycle





Source: Third Point commissioned survey, March 2019

PlayStation owners are more loyal than Xbox owners, which bodes well for 2020 console cycle and post-2020 profits

2 Cloud gaming services will need to overcome major obstacles to achieve wide adoption…

- **Over the past decade, numerous game streaming services have been launched but none has successfully gained consumer adoption**
  - Examples of game streaming startups that have failed to live up to initial hype include OnLive (2003-2015), Gaikai (2008-2012), LiquidSky (2014-present), Nvidia Geforce Now (2015-present)
  - Gaikai was acquired in 2012 by Sony, and re-branded as PlayStation Now – this streaming service is now available on every PS4. However according to Sony management “with currently available internet facilities, many PS Now users aren’t satisfied with the user interface, particularly visible latency” (IR comments, March 2019)
- **Game streaming services will likely have noticeable input latency, lower framerates, and more variability relative to a local console device**
  - By definition, cloud-based game streaming services will have significantly higher input latency compared with a local device – most estimates indicate the latest generation of streaming services (e.g. Stadia) will have input latency of at least ~150-200 milliseconds, versus ~10-40 milliseconds playing on a local device
  - Given a significant percentage of PS4 / Xbox One gamers are considered “core gamers” (i.e. serious gamers playing >20 hours per week), this audience has little tolerance for a compromised experience resulting from input lag / image pixelation
  - While core gamers are unlikely to abandon physical consoles in favor of streaming services, it remains possible that casual PS4 / Xbox gamers will be willing to tolerate a lower-quality gaming experience
- **Google Stadia and other streaming services still have not answered important questions about their business model**
  - In order for any new gaming platform to gain consumer adoption and represent a real threat to the incumbent console platforms, it will need to have critical mass of existing tier-1 game developers supporting the platform
  - The second key question is what the service will cost. Operators will clearly incur some cost to build and operate game streaming servers and data centers, and then there will be incremental cost for the games themselves
  - Thus far Google Stadia has only announced that it will cost $10 / month plus $60 for new AAA games, with no detail on any AAA games that will be included “free” with the subscription; it appears Stadia’s price point will not be low enough to represent a disruptive consumer value proposition
  - Stadia has also failed to announce any meaningful exclusive titles, and at launch only supports 30 games (versus >1500 games available on PS4)
- **The most likely “winning” model in the upcoming generation of gaming platforms will be a physical console that also offers built-in streaming**
  - While Sony already offers this type of service today with the PS4 + PS Now, the next cycle of physical consoles (i.e. PS5 and next-gen Xbox) will both include a streaming feature and Sony will place a much greater emphasis on streaming in the PS5
  - In this scenario, Sony and Microsoft are the only two companies positioned well to provide a compelling “hybrid” console that is best-in-class in both local compute/storage and cloud streaming

2 …however, the global cloud leaders are all attempting to make inroads into cloud gaming

Google STADIA

Microsoft Project xCloud

Tencent 腾讯

amazon

The world's largest tech giants are sprinting at the cloud gaming opportunity, making them difficult to dismiss as threats to Sony

2 This isn’t the first time the mainstream media has predicted the “death of the console”

- Each time a major new gaming medium has emerged in the past, there have been predictions that it would ultimately disrupt the console gaming industry and render it obsolete
- The first wave of these predictions came in 2006-2007, when browser-based web games emerged as a major new category of games – at the time, many people were concerned that browser-based games would draw gamers away from TV-based consoles
- The second wave of these predictions came in 2012-2013, when the emergence of smartphone and tablet gaming caused investors and pundits to predict that the growth in mobile gaming would come at the expense of console gaming

July 2007:
CEO of WildTangent

St. John: Game consoles will be dead by 2020

By John Cook on July 23, 2008 at 10:52 PM

WildTangent Chief Executive Alex St. John never fails to amuse, entertain and stir the pot.

And that was certainly the case during his 45 minute talk at the Casual Connect game conference in Seattle today.

St. John, who has built WildTangent into the one of the bigger online gaming networks over the past 10 years, made the bold prediction that video game consoles will be "extinct" by 2020.

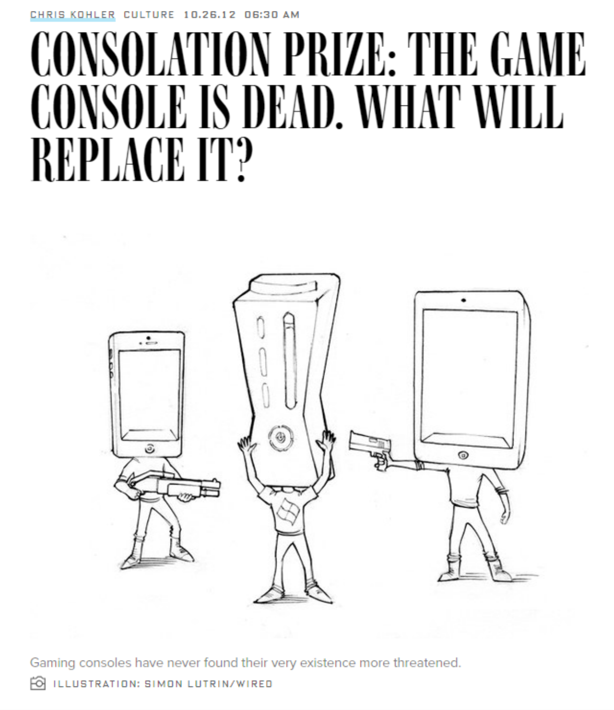
He started his talk with an image of Moses on the screen and this rapid-fire comment:

> I am going to make some outrageous claims today. And then I will attempt to substantiate them. Feel free to disagree with me. Just remember, that I am right.

St. John called the console business an "extremely fragile business" which has been subject to major collapses over the years:

> We are looking at the last generation of consoles right now. I am going to predict to you that the PS3, the Wii and the X-box are the last generation of consoles that you either see or that anybody regards as successful in the market.

Oct 2012:
Wired Magazine



CHRIS KOHLER CULTURE 10.26.12 06:30 AM

CONSOLATION PRIZE: THE GAME CONSOLE IS DEAD. WHAT WILL REPLACE IT?

Gaming consoles have never found their very existence more threatened.

ILLUSTRATION: SIMON LUTRIN/WIRED

Feb 2013:
Business Insider

The End Of The Game Console Is Coming

Kirsten Acuna Feb. 22, 2013, 10:09 AM

While rumors of the next generation Xbox continue to surface, and Sony fanboys and girls are eagerly anticipating the newly-announced PlayStation 4, we shouldn't get too excited.

David Becker / Getty Images

Sure, we can rejoice now about the impending IllumiRoom and the PS4's Dualshock controllers with touchpads; however, this may be the last time we get to celebrate.

It won't be long before we see the death of the game console.

2 What consumer problem are the cloud gaming platforms trying to solve? If the answer is “experience”, then latency needs to be lower

- The biggest hurdle to consumer adoption of cloud streaming services historically has been input latency – the time it takes for controller inputs to reach the cloud and return to affect the action onscreen
- With ~170 to 190 milliseconds of input lag, Google Stadia will have significantly higher input latency compared to playing on a local console device
- A recent academic study demonstrated that game players report significantly lower “enjoyability” and “responsiveness” when playing a game with higher input latency – and the negative impact is linear as the amount of latency increases (see below)

PCGamer article, March 2019

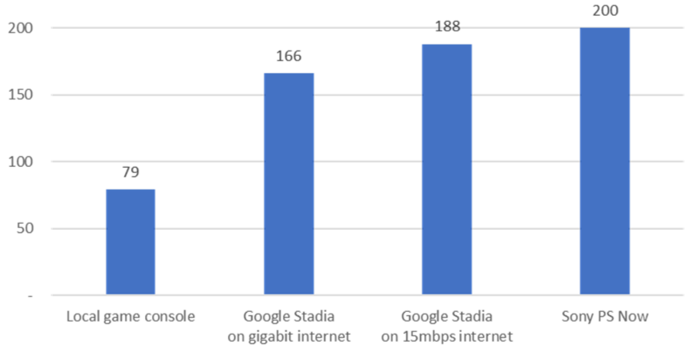
I tried Google's Stadia, and latency got me killed

By Jarred Walton 3 days ago

Stadia works, but I still have far more questions than answers.

COMMENTS

Observed input latency (milliseconds)



Source: Digital Foundry; Game Revolution

Game players’ reported experience quality at different latencies

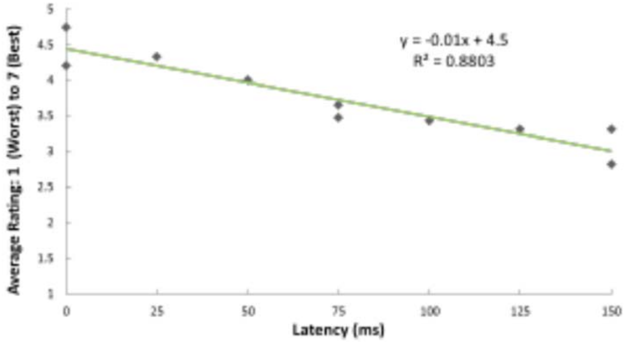


Figure 8: Average enjoyability rating.

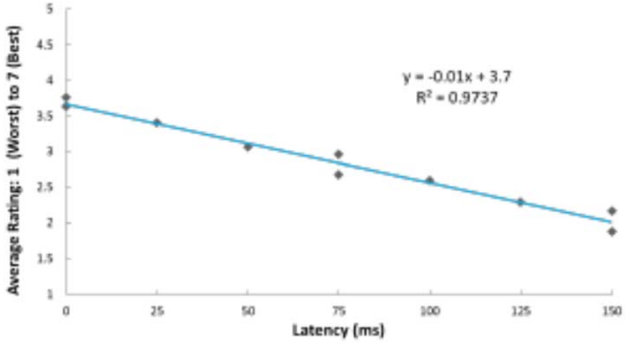


Figure 7: Average responsiveness rating.

Source: Dabrowski, Manuel, Smieja (2014); Worcester Polytechnic Institute

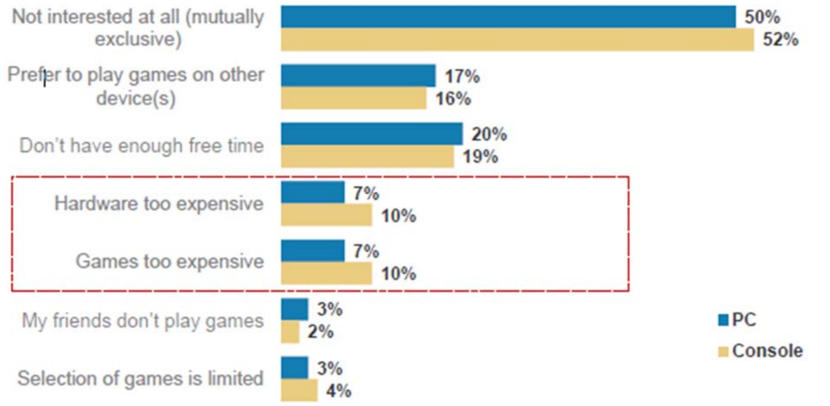
2

What consumer problem are the cloud gaming platforms trying to solve? If the answer is “cost”, then the service needs to be priced very cheap

Monthly “cost to game”: Hardware vs. Software

	PC	Console	Mobile
Total gamers	100 million	200 million	>2 billion
Annual software spend ($bn)	$35 billion	$28 billion	$70 billion
Software spend / gamer / month	*$29*	*$12*	*$3*
Hardware cost per unit	$1,000	$400	$0 incremental
Years to amortize	5	5	n/a
Hardware spend / gamer / month	*$17*	*$7*	*$0*
Hardware spend / software spend	*57%*	*57%*	*0%*

Consumer survey: Reasons for not playing (among non-gamers)



Source: AlphaWise, Morgan Stanley Research

- There are currently 100 million PC gamers, 200 million console gamers, and 2 billion mobile gamers globally
- Console and PC gamers currently spend more on software than hardware (though hardware cost is the only up-front barrier for a new gamer); which suggests hardware cost is not the primary hurdle to greater adoption
- If the new streaming platforms are trying to “expand the TAM” by lowering total costs, then the subscription services would need to be priced at a *discount* to the current hardware cost ($17 / month for PC, and $7 / month for console)
- In a recent consumer survey, only 10% of non-gamers indicated that hardware cost was a primary reason they do not play console or PC games

2

Comparisons between game streaming and Netflix are flawed

- The reason Netflix was so successful in disrupting the incumbent pay-TV industry was that it offered significantly more value than pay-TV, at 1/10th of the price. The value proposition was an order of magnitude more attractive for consumers versus their prior alternative
- Netflix also offered a superior product experience: viewable on demand, commercial-free, more varied and innovative original content, and accessible on any device
- While the newly launched cloud gaming platforms are frequently compared to Netflix, the analogy is a weak one:
  - Unlike Netflix, the experience quality on cloud gaming services will be inferior relative to existing console gaming
  - And while we don't yet know the price / value relationship of the new services, they are unlikely to offer an order-of-magnitude cost savings relative to console ownership
- Console gaming today is fairly affordable for consumers (hardware cost + multiplayer subscription = $140 per year or $12 per month) – while we don't yet know the price of the new cloud gaming services, it is unlikely to be dramatically cheaper

	Legacy pay TV	Netflix
Monthly price	$100.00	$10.00
Avg. viewing hours / day / person	4.5	2.0
Price per viewing hour	$0.74	$0.17
Commercials	Yes	No
Consumption model	Scheduled	On-demand

	Console gaming	Cloud gaming
Hardware + platform cost / month	$11.67	?
Price per AAA game	$60.00	?
Experience quality	Superior	Inferior
Input latency (ms)	70	200
Game selection	Comprehensive	?

The similarities between Netflix and cloud gaming are only superficial;

on closer examination, the dynamics that led to Netflix's success are not present in the console gaming market

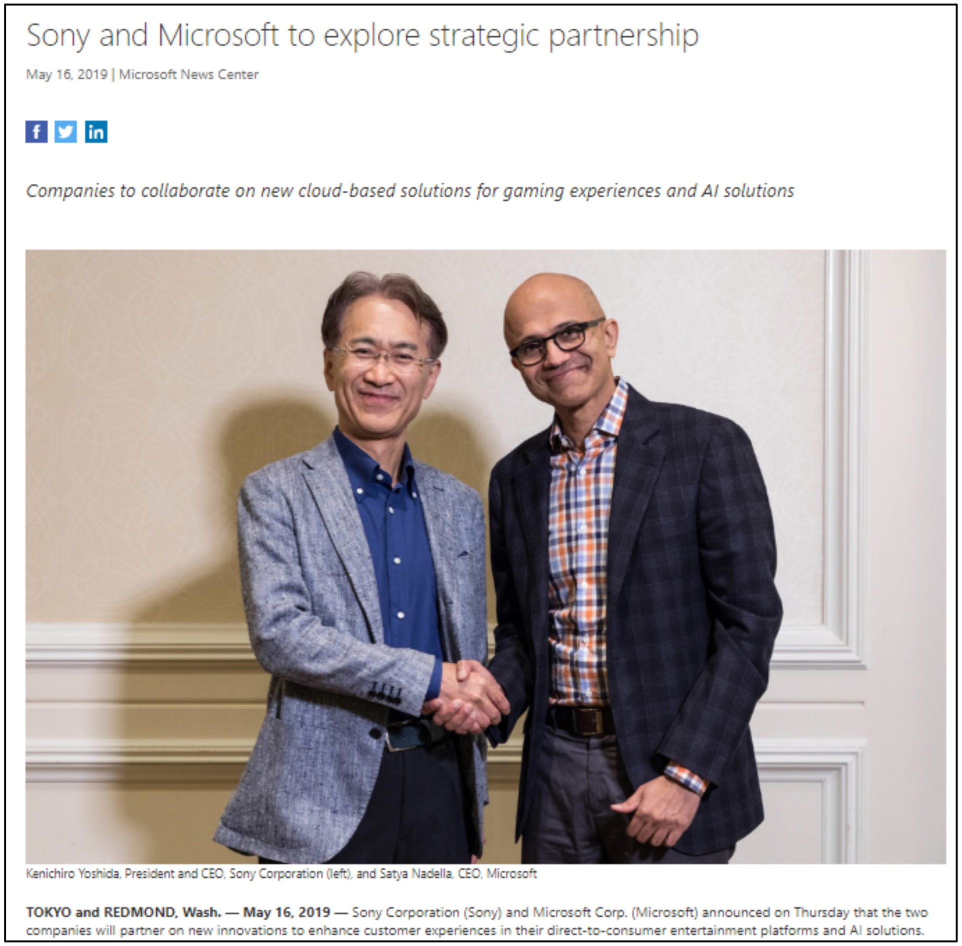
Source: Third Point estimates

2 We see six primary contenders to become the next dominant gaming platform

		Existing console installed base	Existing paid subscriber base	"Must-have" exclusive games	Existing 3rd party dev ecosystem	Gaming heritage / DNA	Global data center footprint
Sony Interactive Entertainment	PlayStation	94 million	36 million	✓	✓	✓	✗
Microsoft	XBOX	40 million	15 million	✗	✓	(✓)	✓
Nintendo®	NINTENDO SWITCH	32 million	8 million	✓	✗	✓	✗
Google	STADIA	✗	✗	✗	✗	✗	✓
Tencent 腾讯	Tencent Games	✗	✗	(✓)	(✓)	✓	(✓)
amazon	TBA	✗	>100 million	✗	✗	✗	✓

- In our view, the winning model will likely be a hybrid physical console + streaming service
- Sony is the clear leader on every competitive vector except data center footprint
- Microsoft is also well-positioned, given its #2/#3 position in the console market and global Azure data center footprint
- Google's position is challenged given lack of game developer relationships, lack of must-have games and no existing console installed base

2 The Sony/Microsoft MOU demonstrates a cloud streaming service can be scaled using rented (vs. owned) infrastructure



Sony and Microsoft to explore strategic partnership

May 16, 2019 | Microsoft News Center

Companies to collaborate on new cloud-based solutions for gaming experiences and AI solutions

Kenichiro Yoshida, President and CEO, Sony Corporation (left), and Satya Nadella, CEO, Microsoft

TOKYO and REDMOND, Wash. — May 16, 2019 — Sony Corporation (Sony) and Microsoft Corp. (Microsoft) announced on Thursday that the two companies will partner on new innovations to enhance customer experiences in their direct-to-consumer entertainment platforms and AI solutions.

- Recently, the market has begun to view Sony's gaming business as a "structural loser" in an industry that will shift from physical consoles to cloud streaming
- We see two flaws in this logic:
  - (1) Unlike the TV industry, it's not clear that streaming will replace the existing consumption model – in gaming, input latency is critical to the experience quality and playing a game remotely will always have higher latency
  - (2) Even in a scenario where cloud streaming does emerge as the dominant mode of game distribution, Sony is not necessarily at a major strategic disadvantage compared to the enterprise cloud giants (MSFT/AMZN/GOOG)
- Sony's announcement that it will explore a partnership with Microsoft Azure supports argument #2 above. Because cloud infrastructure can be rented from MSFT/AMZN/GOOG, we think having access to that infrastructure is not a critical differentiator for any streaming service
- The fact that PlayStation and Xbox will both run on the same Microsoft Azure infrastructure supports our argument that the infrastructure layer does not provide a competitive edge
- Instead, the key competitive differentiators will be (1) exclusive gaming content, (2) existing gamer installed base, and (3) streaming software technology – and Sony is better positioned in these 3 areas than any competitor

Sony's Gaming segment could be worth $35bn – $43bn on a standalone basis by 2021

- We use a conservative multiple range of 10-12x EBIT for Sony's gaming segment valuation
- 10-12x EBIT represents a modest premium to Japanese game company comps (which all trade in a range from 8-11x EBIT) but a discount to US and China publishers (which trade in a range of 14-25x EBIT)
- There is potential for further upside on the G&NS multiple beyond our assumed range; relative to other gaming companies, Sony's business is less hit-driven and more predictable / recurring in nature

Sony G&NS segment P&L

$ millions	CY16A	CY17A	CY18A	CY19E	CY20E	CY21E	CY22E
Revenue	$14,530	$16,710	$20,365	$20,772	$21,684	$24,634	$26,920
% Growth YoY		*15.0%*	*21.9%*	*2.0%*	*4.4%*	*13.6%*	*9.3%*
EBIT	$1,092	$1,604	$2,406	$2,634	$2,655	$3,107	$3,549
% Margin	*7.5%*	*9.6%*	*11.8%*	*12.7%*	*12.2%*	*12.6%*	*13.2%*
% Growth YoY		*46.9%*	*50.0%*	*9.5%*	*0.8%*	*17.0%*	*14.2%*
D&A	$228	$254	$264	$278	$291	$306	$321
EBITDA	$1,320	$1,858	$2,670	$2,911	$2,946	$3,413	$3,870
% Margin	*9.1%*	*11.1%*	*13.1%*	*14.0%*	*13.6%*	*13.9%*	*14.4%*
% Growth YoY		*40.7%*	*43.7%*	*9.0%*	*1.2%*	*15.8%*	*13.4%*
Implied net income	$924	$1,300	$1,869	$2,038	$2,063	$2,389	$2,709

Indicative YE 2021 valuation for Sony's Gaming segment

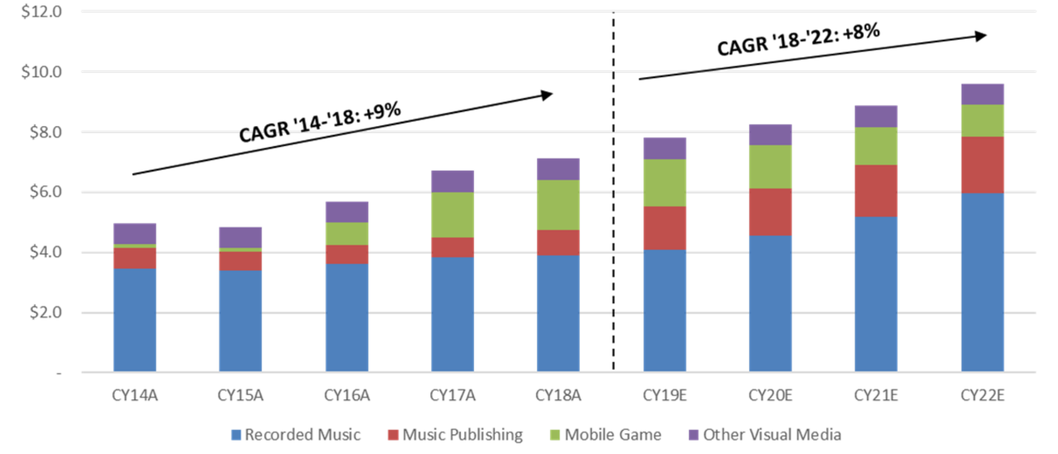
$ millions	Low	Mid	High
TEV / EBIT	10.0x	11.0x	12.0x
CY22E EBIT	$3,549	$3,549	$3,549
TEV	$35,491	$39,040	$42,589
Implied P/E	14.9x	16.3x	17.8x
Implied TEV/EBITDA	10.4x	11.4x	12.5x

Source: Company reports and Third Point estimates

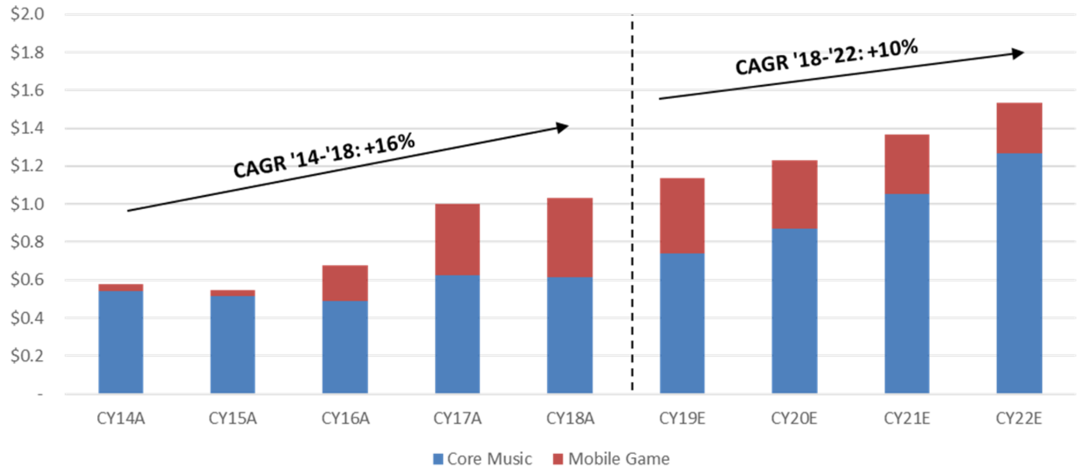
Sony Music – segment overview

Sony Music: P&L summary

Revenue ($bn)



Operating profit (estimated) ($bn)



Overview

- #2 global music label with 23% market share, and #1 global music publishing company with 26% market share
- Flagship recorded music labels: Columbia Records, RCA Records, Epic Records, Arista Nashville, Legacy Recordings, Sony Music Latin, Sony Classical
- Sony BMG JV was formed in 2004, merging music businesses of Sony and BMG
- Aug 2008: Sony acquired Bertelsmann’s 50% stake in Sony BMG JV for $1.2bn
- Nov 2018: Sony acquired 60% of EMI Music Publishing that it did not own from Mubadala (implied enterprise value $4.75bn)

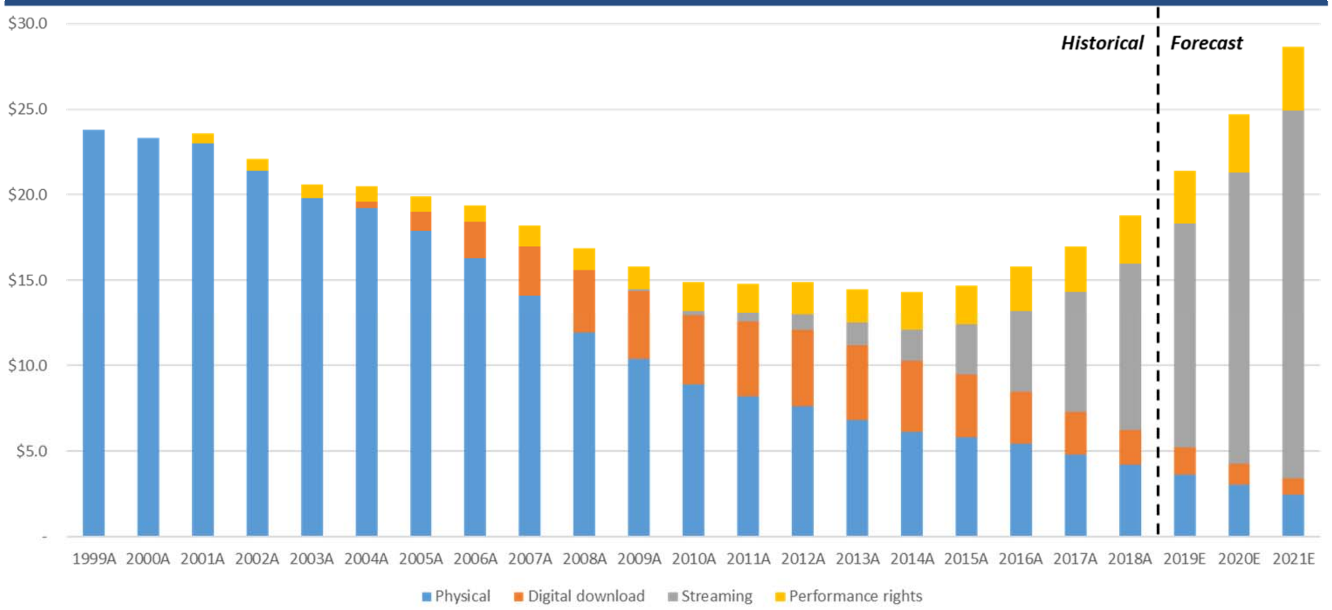
Portfolio of owned music labels

Source: Company reports and Third Point estimates

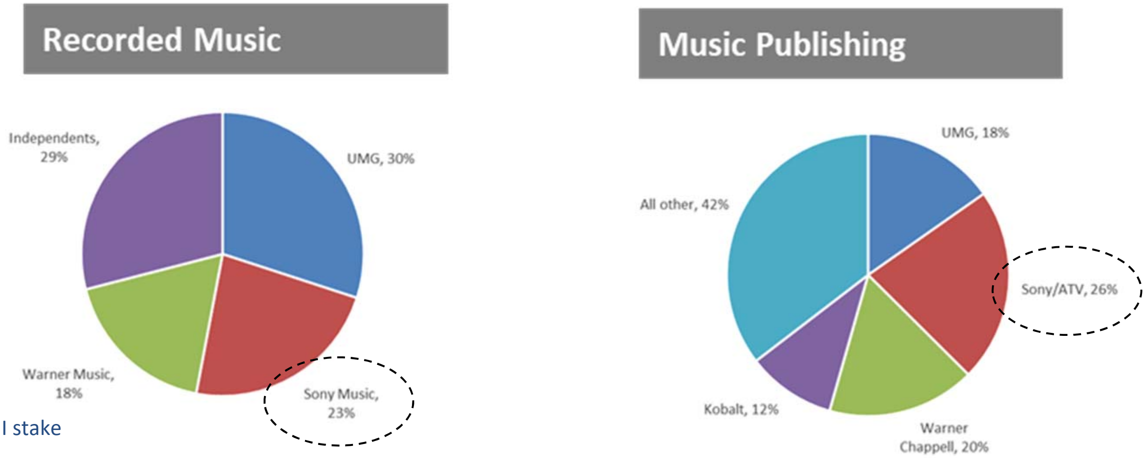
Sony Music will benefit from continuing acceleration in music industry growth, driven by streaming

Sony's acquisitions of stakes in Sony/ATV and EMI were well-timed to take advantage of future growth in music industry revenues

Global music industry revenue ($bn)



Music labels market share

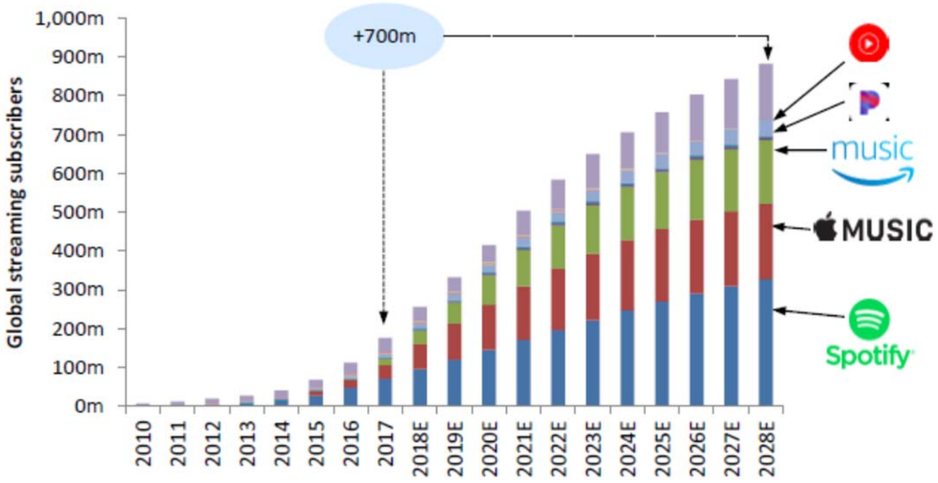


Market share data as of 2017. Sony/ATV publishing share includes acquired EMI stake
Source: IFPI Global Music report; Billboard; company reports; Morgan Stanley

The “Streaming Revolution” is still in early innings

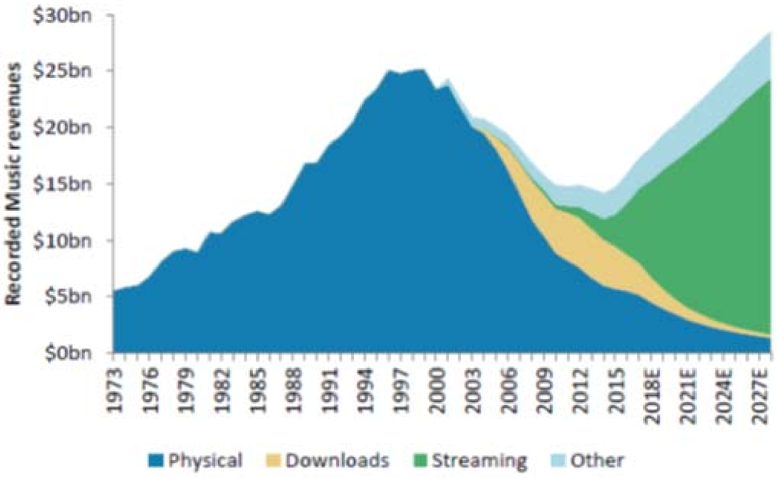
- Streaming platforms have achieved dramatic user growth over the past 5 years (from ~20mm paying subs in 2013 to >200mm in 2018)
- However there is still significant upside remaining for the aggregate user base to grow ~3-4x from its current level; the aggregate base of streaming subscribers in 2018 represents only ~7-8% of the addressable global smartphone user base of 3 billion
- As the streaming market continues to expand globally, the recorded music industry will see aggregate revenue growth accelerate and surpass the previous high-water mark of $25bn (last achieved in 1999)

Streaming platform paying subscribers (mm)



Source: Morgan Stanley; company reports

Aggregate recorded music revenues ($bn)



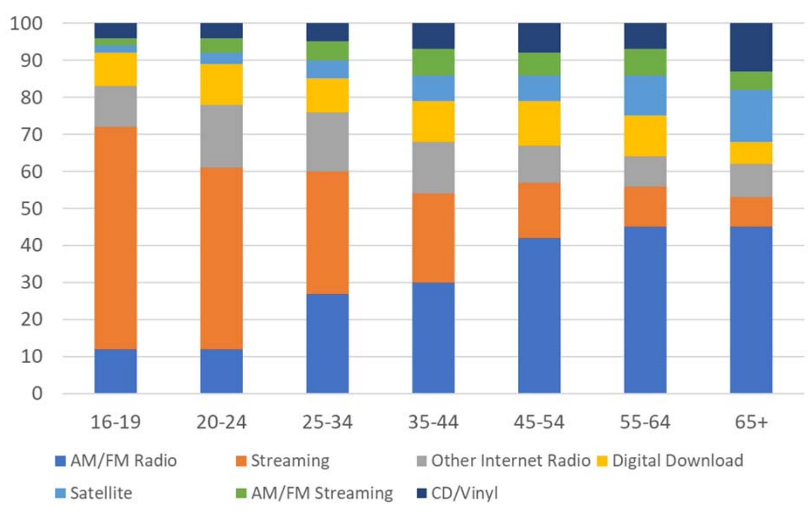
Source: Morgan Stanley; company reports

Opportunity remains for the global streaming market to grow ~3x from its current scale over the next 5 years

Demographics represent an enormous tailwind for streaming

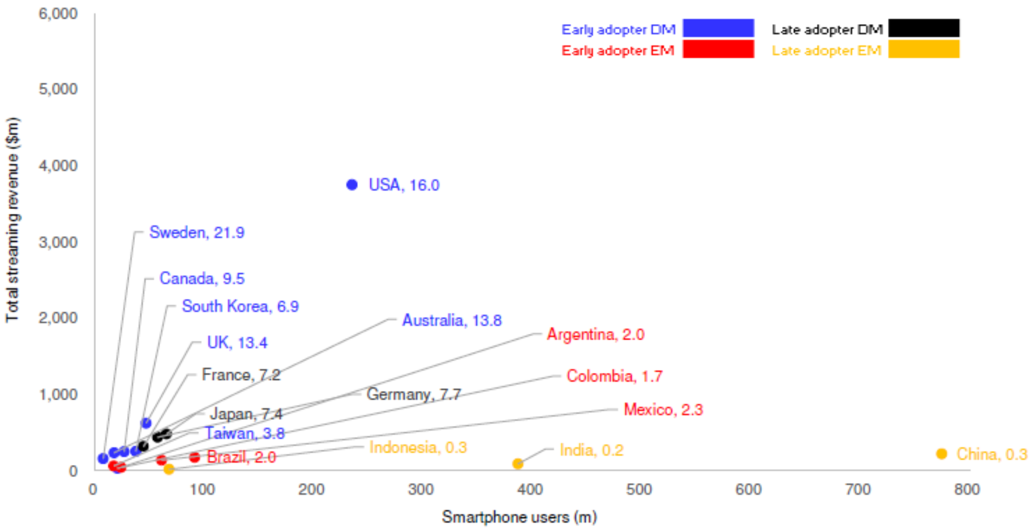
- Confidence in the growth of recorded music revenues driven by age preferences and low global penetration rates
  - In the US, consumers aged 16-24 listen to over 50% of their music via streaming vs. only ~10% for consumers over 45 years old
  - Streaming revenues in emerging markets (and some late-adopter developed markets) are small relative to developed markets like US, UK, Germany

Music listening by media, age-cohorts



Source: AudienceNet Music Landscape Study 2018. n=2,849

Streaming revenue per smartphone user 2018E



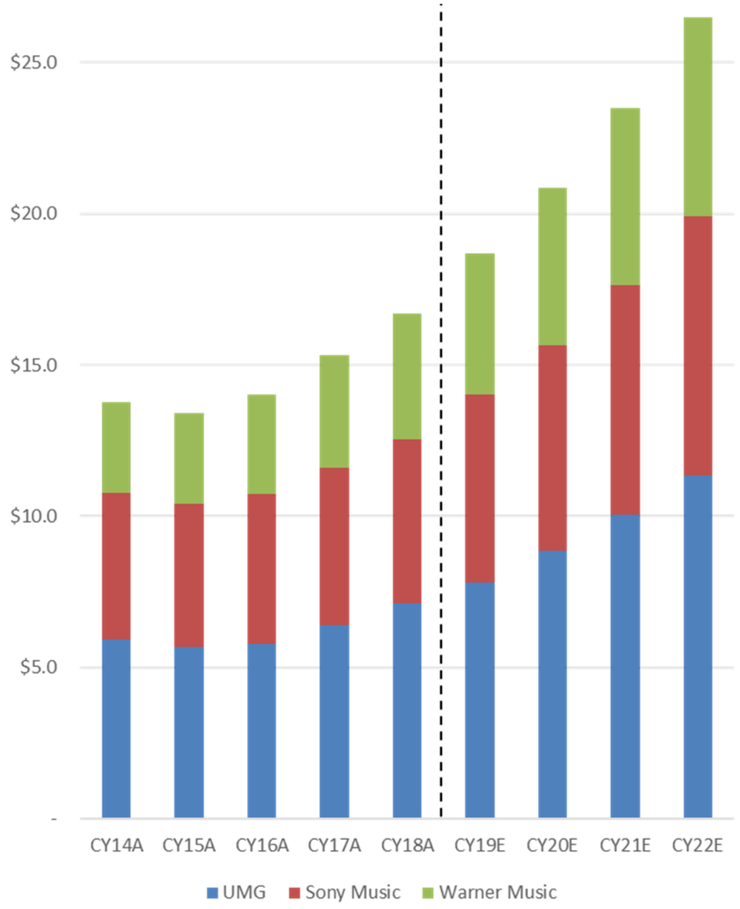
Source: Deutsche Bank; MIDIA, Newzoo

Music industry has significant growth runway driven by streaming penetration

Streaming will drive an acceleration of revenue growth to mid-teens

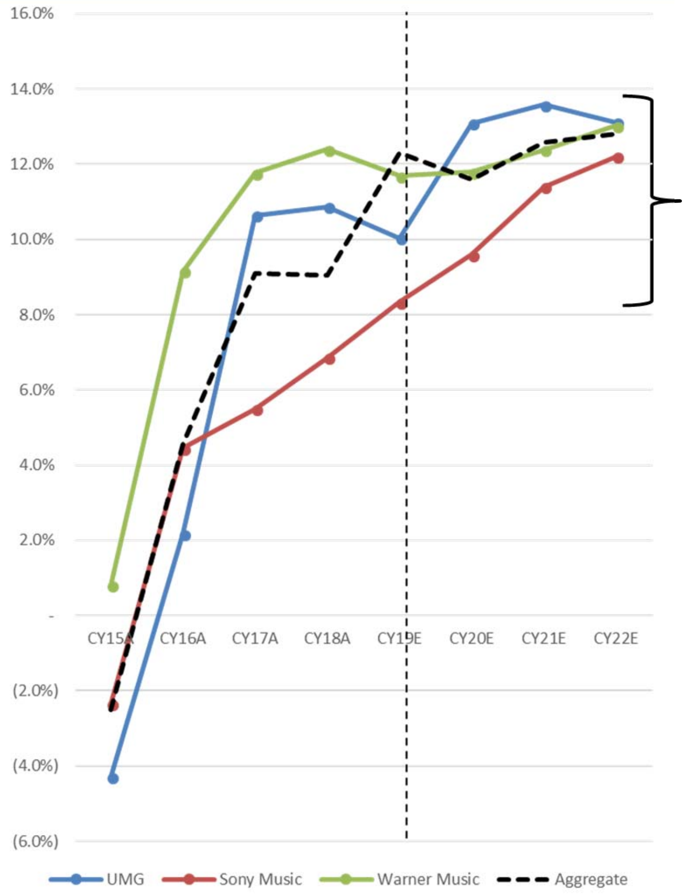
- Since 2015, the music labels have been major beneficiaries of industry-wide revenue growth acceleration, driven by streaming
- As streaming becomes a larger and larger percentage of total revenue, the music labels will continue to see further acceleration in consolidated revenue growth (i.e. streaming growth increasingly offsets declines in physical + download revenue)

Big 3 labels aggregate revenue ($bn)



Note: Company reports. Includes revenue generated from recorded music, publishing, and merchandising / other

Total revenue growth Y/Y



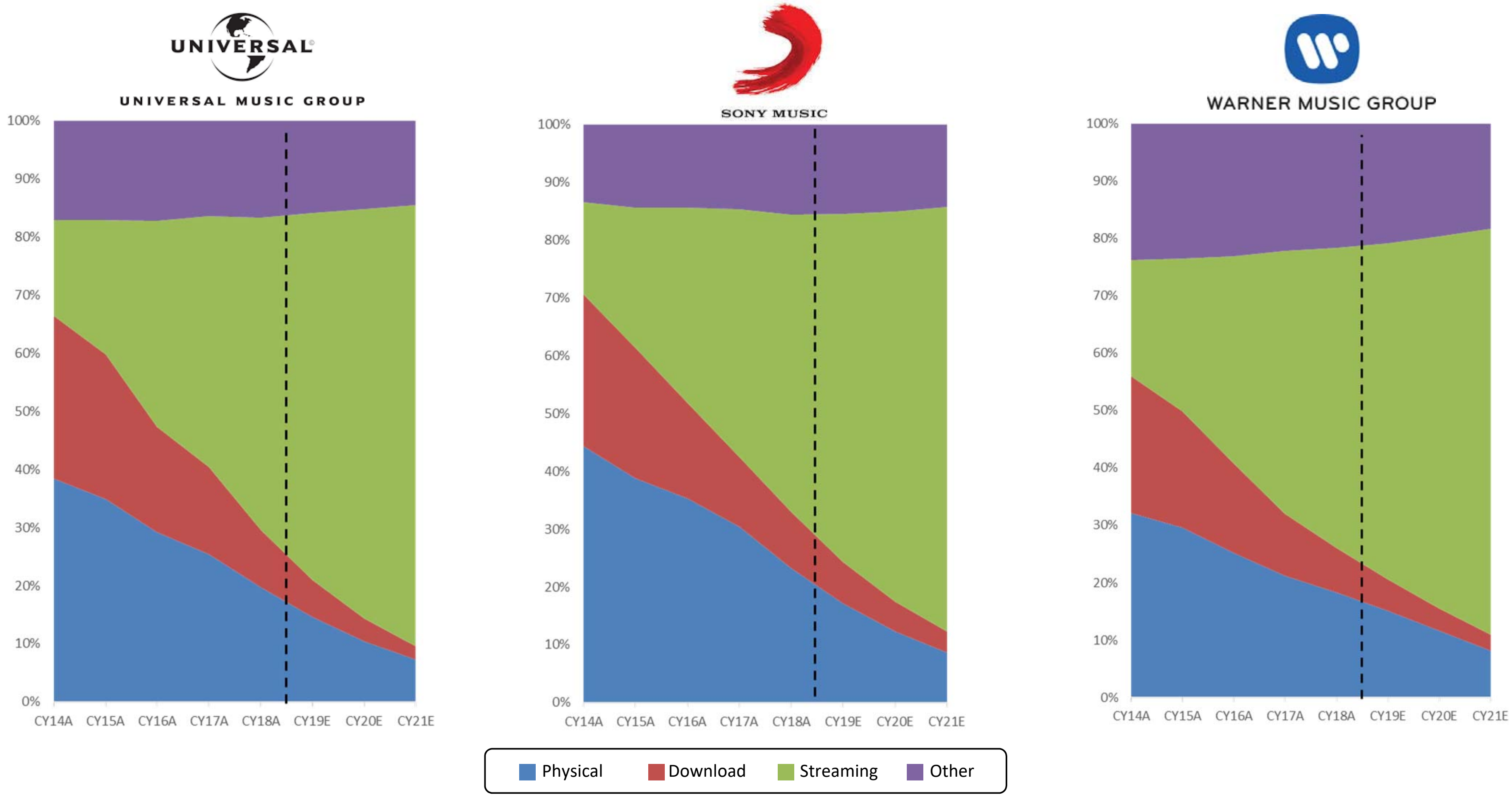
Streaming to drive continued acceleration in total revenue for each of the big 3 labels

Note: Sony Music shown excluding "Visual Media & Platform" segment

The big 3 labels (UMG, Sony, Warner) all have very similar revenue mix profiles

- For all 3 of the major labels, today streaming revenue accounts for ~45% of total recorded music revenue
- By 2021, streaming will account for ~60-65% of recorded music revenue for all 3 labels

Recorded music revenue by type (% of Total)



Source: Company reports and Third Point estimates

Two market concerns in music business

- While we expect aggregate music industry revenues to grow rapidly, the primary concern for labels is the share of that revenue they can retain
- **Concern 1: Pressure from recording artists / songwriter for higher payouts**
  - Technology has meaningfully reduced the barriers/costs to distribution, making it theoretically easier for artists to bypass the labels and self-publish (e.g. directly uploading music to Spotify)
    - But labels are indispensable to artists, as they provide financing, production, promotion, and most critically, distribution
  - We ultimately think that artists will have only marginal success in negotiating higher payouts from labels, and that leverage will only be available to a select few artists who have the fame and finances to pursue a legitimate "next best alternative". In addition, given the expected growth in revenue for the industry, we expect labels to be able to offer modestly higher payouts in a way that is value-neutral to them
    - Interestingly, while these technology trends have been in place for several years, there really is no empirical evidence of artists bypassing labels
- **Concern 2: Pressure from streaming/distribution platforms for higher payouts**
  - There is concern that platforms like Spotify and iTunes become increasingly powerful and demand a lower payout to labels
  - But while streaming currently accounts for about 45% of all revenues for the labels, the *largest player (Spotify) accounts for only ~20%*. The 3 major labels, on the other hand, account for *74% of listening time on Spotify*[1]
  - We think the 3% concession in 2017 was partially about competitive pressure, but also reflects the labels' desire for a healthy/ thriving streaming industry

> *"When I joined the business I think we had a 15% gross margin, but this just wasn't sustainable at that level of profit.* ***And so the last round of label negotiations was about elevating the margins to a point where, I think, the business would self-sustain****...* ***So what was good for Spotify was good for the labels and that's why the margin increased.***
>
> ***Now on a go-forward basis, is that going to happen again? No that's not going to happen again. It's not in their economic interest to allow it to happen again****. So how is it that the margin improves? The only way the margin improves is, we provide them with some value-added services that don't exist today that makes their business more profitable as a consequence and we benefit as well for doing it right now." – Spotify CFO Barry McCarthy, February 26, 2019, Bloomberg Transcript, Morgan Stanley Media Conference*

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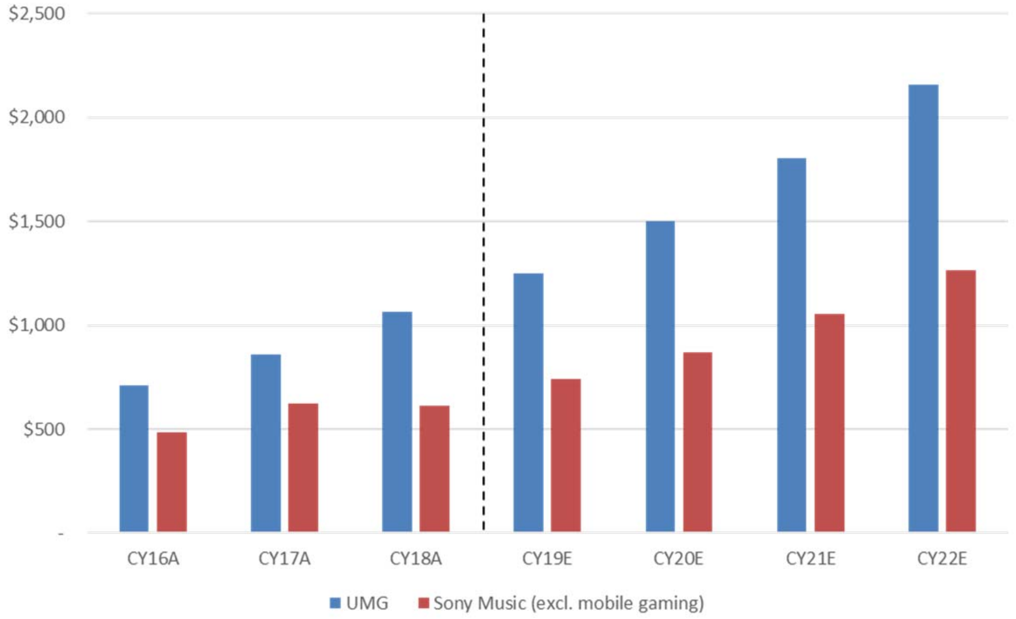
1. Deutsche Bank research

Vivendi sale of 50% of UMG will shine a spotlight on the value of Sony Music

- Within Vivendi's portfolio, UMG represents ~70%+ of the total asset value (other major assets include Canal+, Havas and Telecom Italia).
- In July 2018, the company announced it would pursue a sale process for "up to 50% of UMG to one or more strategic partners, in order to extract the highest value"
- The sale process was intended to narrow the discount between Vivendi's public market cap and the board's perceived value of its portfolio of assets
- Recent press reports (Feb '19) indicate both Tencent and KKR are exploring bids valued at $23bn for 50% of UMG (i.e. $46bn total value)

EBITDA comparison: UMG and Sony Music ($mm)



Valuation ranges and implied multiples

Indicated bids from Tencent and KKR at $45bn

UMG enterprise value ($bn)		$25.0	$30.0	$35.0	$40.0	$45.0	$50.0	$55.0
TEV / EBITDA	EBITDA							
2019E	$1.3	18.9x	22.6x	26.4x	30.2x	34.0x	37.7x	41.5x
2020E	1.6	15.8x	19.0x	22.2x	25.3x	28.5x	31.7x	34.8x
2021E	1.9	13.2x	15.9x	18.5x	21.2x	23.8x	26.5x	29.1x
TEV / Revenue	Revenue							
2019E	$7.8	3.2x	3.8x	4.5x	5.1x	5.8x	6.4x	7.0x
2020E	8.8	2.8x	3.4x	4.0x	4.5x	5.1x	5.7x	6.2x
2021E	10.0	2.5x	3.0x	3.5x	4.0x	4.5x	5.0x	5.5x

Source: Company reports, Third Point and consensus estimates

Sony Music segment could be worth $25bn – $28bn on a standalone basis by 2021

Sony Music is an under-appreciated asset

- For most of the past 20 years, music labels were viewed as structurally declining businesses as online piracy steadily eroded industry-wide revenue
- However, over the past 4 years, the rise of music streaming platforms like Spotify has returned the industry to growth
- The industry is likely to continue accelerating as fast-growing streaming revenue becomes a bigger share of the base
- The market's pessimistic view of music publishers and recorded music labels has started to shift, as evidenced by Vivendi's public market valuation (20x forward EBIT)
- As music industry fundamentals continue to improve over the next few years, we expect the market will come to view Sony Music as a scarce, high-quality "compounder" that should be valued at ~20x operating income or higher

Vivendi valuation comparison

- 70% of Vivendi's SOTP value comes from UMG, the world's largest recorded music business
- Vivendi currently trades at 20x forward EBIT on a consolidated basis
- Vivendi's valuation reflects a SOTP conglomerate discount; sell-side analyst estimates for the standalone value of UMG range from 20x to 30x EBIT
- Vivendi / UMG is the closest public market valuation comp for Sony Music, given that Warner Music (the third major music label) is privately held

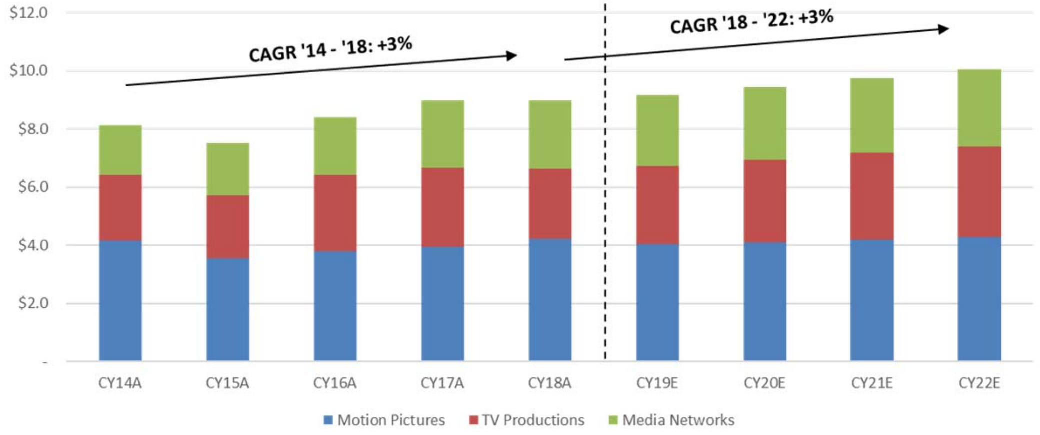
Indicative YE 2021 valuation range for Sony Music

	2022E	TEV / EBIT		TEV ($mm)	
	EBIT	Low	High	Low	High
Music	$1,265	19.0x	21.0x	$24,044	$26,575
Mobile gaming	268	3.0x	5.0x	804	1,340
Total	$1,534	16.2x	18.2x	$24,849	$27,916

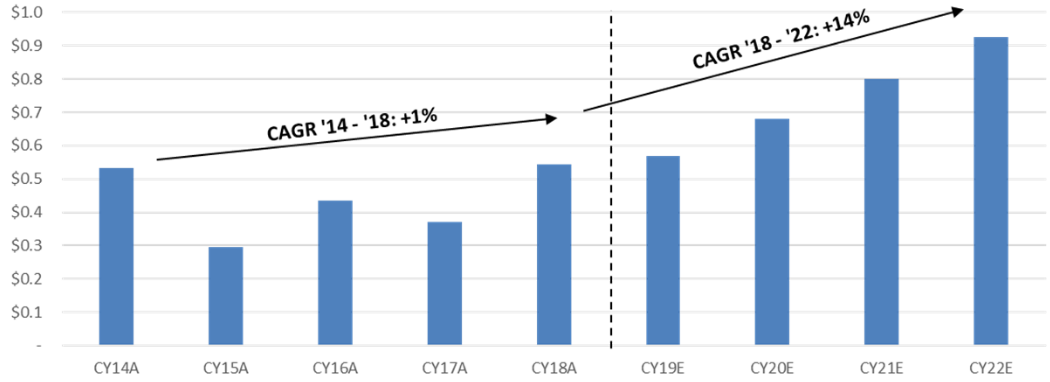
Source: Third Point estimates

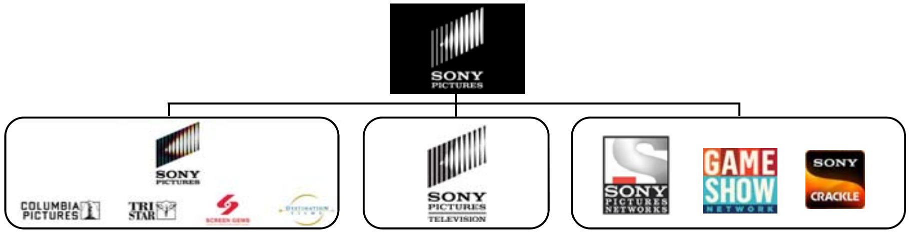
Sony Pictures – segment overview

Revenue ($bn)



Operating profit ($bn)





Motion Picture Group **Sony Pictures Television** **Media Networks**

Overview

- Led by CEO Tony Vinciquerra (2017 to present); succeeded Michael Lynton (2004-2017)
- History: In 1989 Sony bought out Coca Cola's 49% stake in Columbia Pictures and also bought in the 51% public stub (total cost $4.9bn)
- **Motion Pictures**
  - Film production business; legacy studios include Columbia Pictures, TriStar pictures, Triumph Films, Screen Gems, Sony Pictures Animation, Sony Pictures Classics
  - Headquartered in Culver City, CA; main studio lot with 45 acres and 22 sound stages
  - Library of 4,000 theatrical films; currently releasing average of ~15 films per year
- **TV Productions**
  - Consists of Sony Pictures Television (SPT), formerly Columbia TriStar Television
  - Production facility located on the Sony Pictures studio lot in Culver City
  - Library of >150,000 episodes from >500 TV series
- **Media Networks**
  - Sony Pictures Networks India is one of the 5 largest TV programming groups in India; operates ~20 TV networks ranging from entertainment to sports in India (e.g. SET, Sony Max, Sony Ten, Sony SAB)
  - Media Networks segment also includes Sony's 58% interest in the Game Show Network, a US cable network, and Sony Crackle, a digital video platform

Source: Company reports and Third Point estimates

Sony Pictures: Deep library of film and TV content, IP and licensed rights

- Sony Pictures' film franchises are concentrated in action / adventure genre as well as kids / animation
- In 1999 Sony purchased the film rights to Spider-Man, Venom and hundreds of minor Marvel characters – Sony is now working on a series of films involving these characters after the success of Spider-Man: Homecoming (2017) and Venom (2018)
- Sony Pictures Television produces a wide range of content for third-party networks (e.g. NBC, AMC) and streaming platforms (e.g. Netflix)

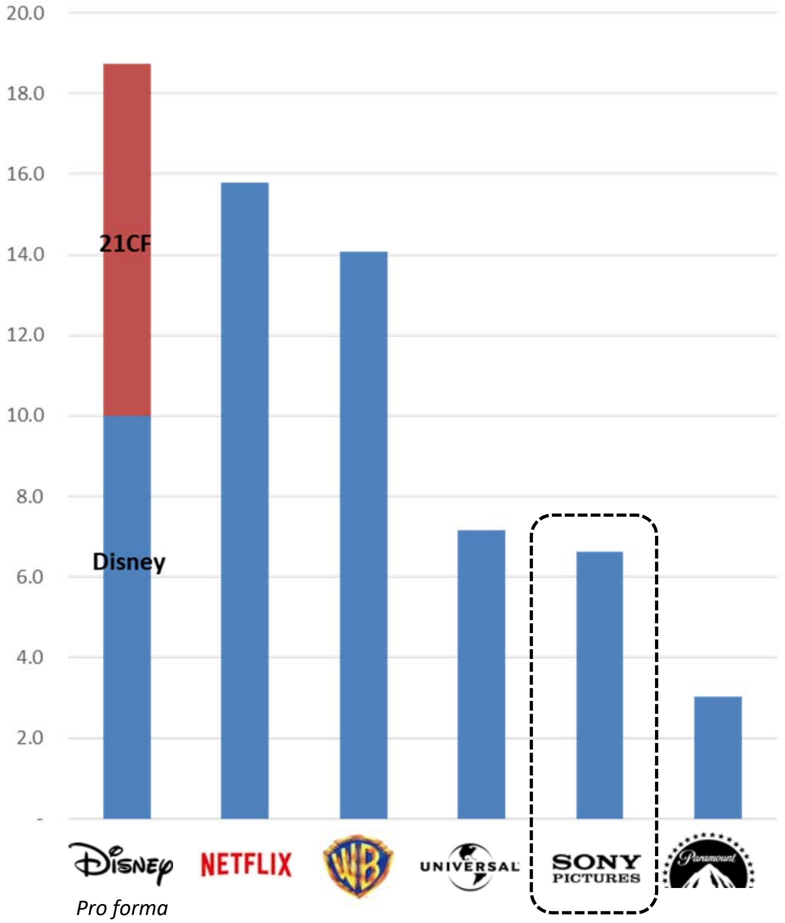
Film franchises

TV franchises

Sony Pictures has significant scale, with margin upside

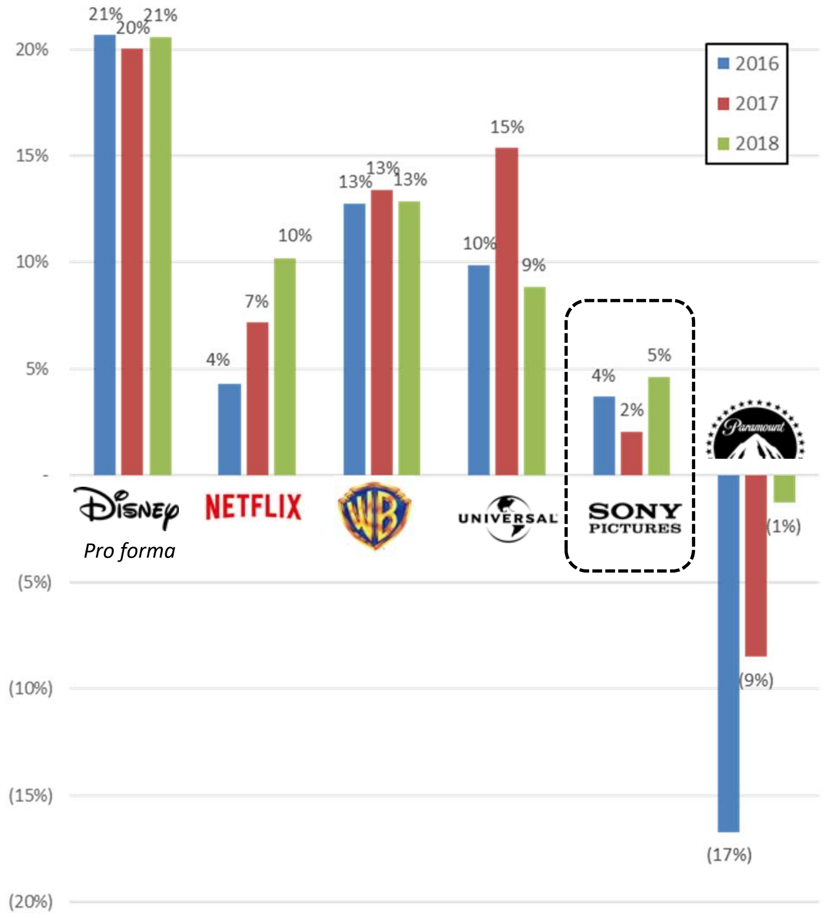
- Sony Pictures is among the largest film/TV content production studios globally, but has potential for operating margin improvement

2018 entertainment studio revenue (film + TV) ($bn)



Note: Netflix value represents total company revenue;
Sony Pictures value excludes Media Networks segment

Historical operating margin

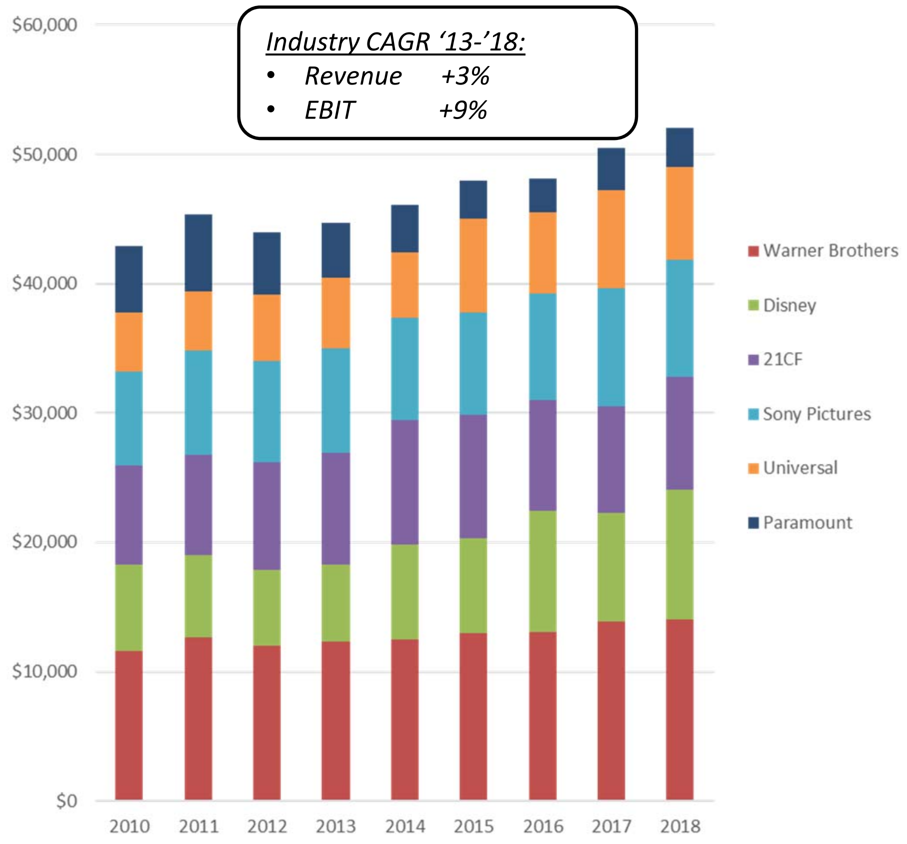


Note: Netflix value represents total company operating margin;
Sony Pictures value excludes Media Networks segment

Studio entertainment industry is benefiting from demand tailwinds and improving profitability

- Entertainment content production is a growth industry, with an increasing number of content purchasers with deep pockets
- Production studios can now sell content into traditional film exhibitors, pay-TV channels, streaming platforms (e.g. Netflix/Hulu) and tech platform companies looking to enter premium content distribution business (e.g. YouTube, Amazon, Apple, Facebook)
- Industry-wide margins have improved as the number of films has steadily declined and the studios have a higher rate on a concentrated number of bets (including increasing reliance on sequels / existing IP)

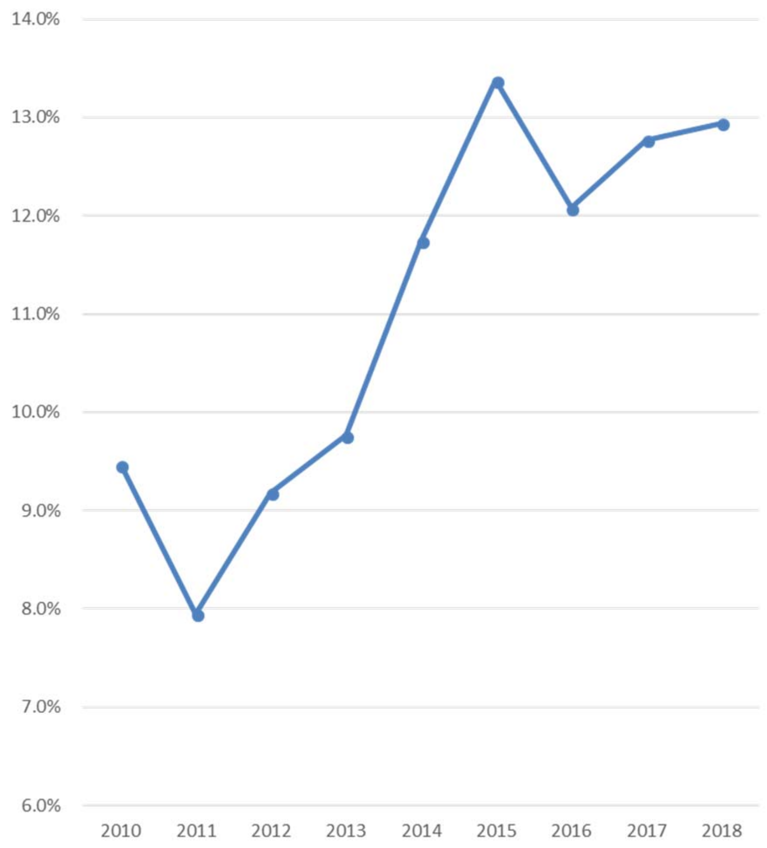
Studio entertainment revenue ($mm)



Industry CAGR '13-'18:
- *Revenue +3%*
- *EBIT +9%*

Source: Company reports

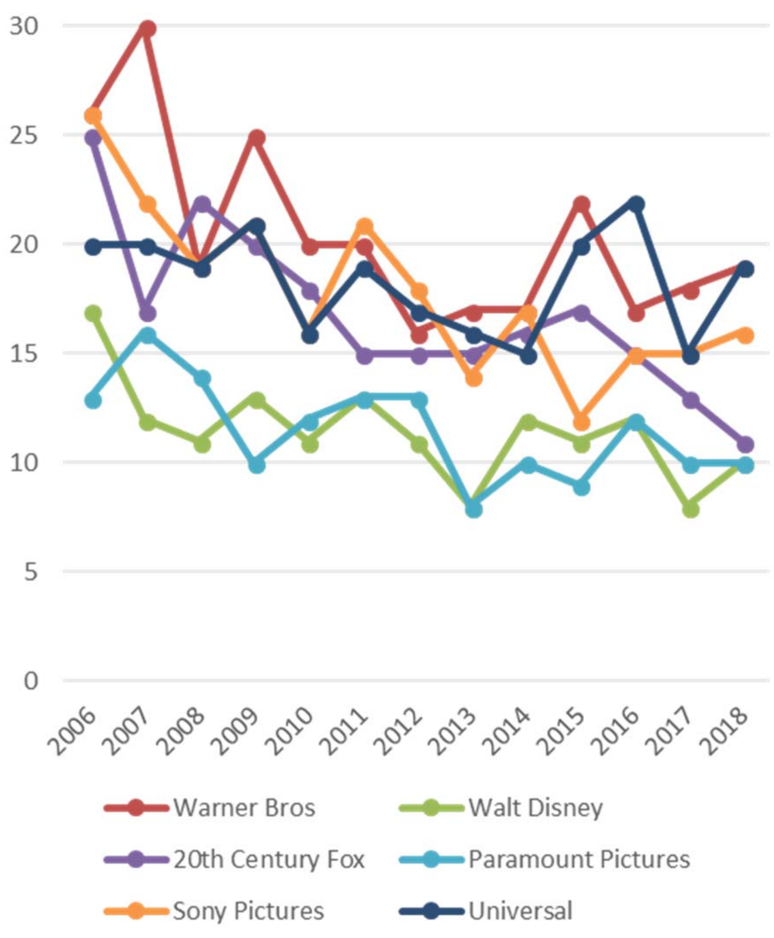
Aggregate operating margin (big 6 studios)



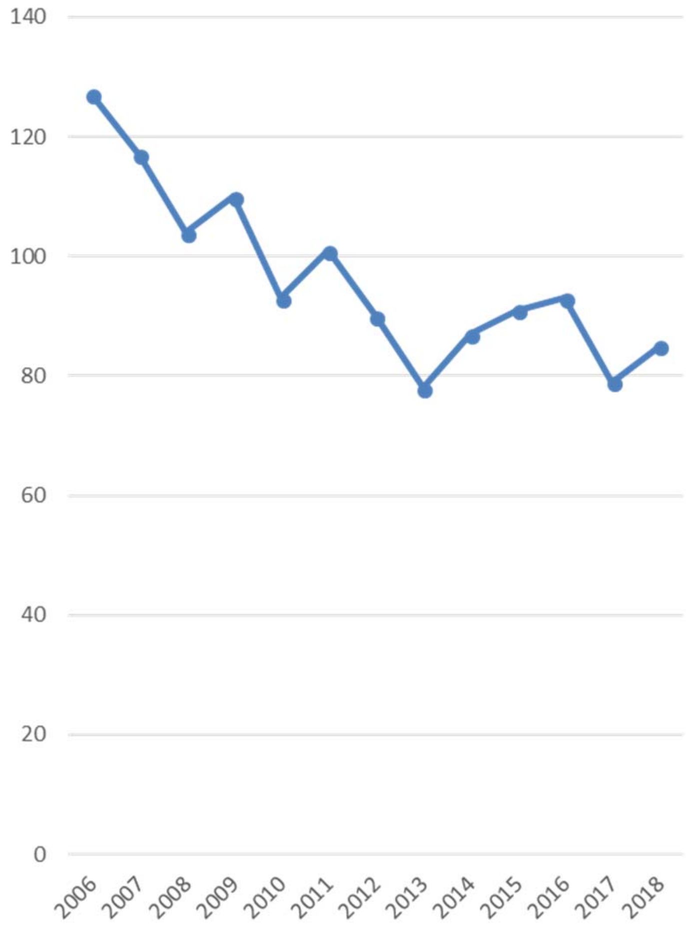
Among the big 6 studios, the number of films per studio has been steadily falling

- The US film production industry is clearly shifting to a new paradigm of fewer films, higher budget per film, and a greater focus on proven IP / sequels
- Average number of films per year per studio has steadily fallen over the last decade, from >20 in 2006 to 13 in 2018

Number of theatrical film releases per year



Film releases per year (big 6 studios in aggregate)



Source: Company reports and Third Point estimates

Sony Pictures could be worth between $13bn – $15bn on a standalone basis by 2021, with potential upside to $20bn based on transaction comps

Entertainment studio transaction comps overview

Announcement Date	Asset	Acquirer	Seller	Notes	$bn Deal value	Pre-syn. multiple (NTM) TEV / EBIT	TEV / revenue
Dec. 2017	Fox studio + entertainment nets	Disney	21st Century Fox	Value shown excluding 39% Sky stake	$71.5	16.8x	3.4x
Q4 2017	Lions Gate	Hasbro	Public market	Acquisition offer at $40/share; board rejected	11.4	22.8x	2.7x
Oct. 2016	Time Warner	AT&T	Public market	Warner Bros + HBO + Turner cable nets	108.7	13.4x	3.5x
Jul. 2016	Paramount	Dalian Wanda	Viacom	Rumored sale of 49% stake at $8-10bn value	9.0	n/m	3.0x
Mar. 2013	NBCU	Comcast	GE	Acquisition of GE's 49% stake in NBCU	39.4	11.7x	1.6x
AVERAGE						**16.2x**	**2.8x**

Sony Pictures summary P&L ($mm)

	CY18A	CY19E	CY20E	CY21E	CY22E
Revenue	$8,980	$9,149	$9,437	$9,736	$10,046
% Growth YoY		*1.9%*	*3.2%*	*3.2%*	*3.2%*
EBIT	$543	$569	$681	$800	$927
% Margin	*6.0%*	*6.2%*	*7.2%*	*8.2%*	*9.2%*
Δ YoY (bps)		*17*	*100*	*100*	*100*
% Growth YoY		*4.7%*	*19.8%*	*17.5%*	*15.8%*

Source: Company reports and Third Point estimates

Indicative YE 2021 valuation range for Sony Pictures

	Multiple range Low	High	TEV range ($mm) Low	High
TEV / '22E EBIT	13.0x	15.0x	$12,046	$13,899
TEV / '22E Revenue	1.5x	2.0x	$15,070	$20,093

NBCU / Comcast acquisition multiple (2013)

Based on current trading multiple for Lions Gate

Historical entertainment studio transaction comps indicate multiples for Sony Pictures ranging from ~12 - 22x EBIT and ~1.5 - 3.5x revenue

Electronics – CEO Yoshida-san is moving Sony in the right direction, streamlining the business

Steps taken by Sony to refocus portfolio

- **Feb 2014:** Sony divests VAIO PC business to Japan Industrial Partners for ~$400mm
- **July 2016:** Sony divests its battery division to Murata for ~$150mm
- **Sept 2016:** Sony acquires 50% in Sony/ATV music publishing business from Michael Jackson estate for $750mm
- **Nov 2016:** Sony divests its camera module business to O-film Tech for $234mm
- **November 2018:** Sony acquires 60% of EMI Music Publishing from Mubadala for $2.3bn
- **March 2019:** Sony completes internal merger of TV, camera and smartphone divisions to accelerate cost cutting
- **March 2019:** Sony plans workforce reduction for the smartphone segment from 4,000 to 2,000 by March 2020; plans to shut down one of two production facilities

Recent press coverage of Sony's strategy

Sony's Chief Plans to Make Entertainment Assets a Priority

Kenichiro Yoshida, Sony's chief executive, will speak at the Consumer Electronics Show in Las Vegas on

BUSINESS

New Sony CEO Kenichiro Yoshida Outlines Shift Towards Content

6:55 PM PDT 5/21/2018 by Gavin J. Blair

Kazuhiro Nogi/AFP/Getty Images

Kazuo Hirai (left) and Kenichiro Yoshida

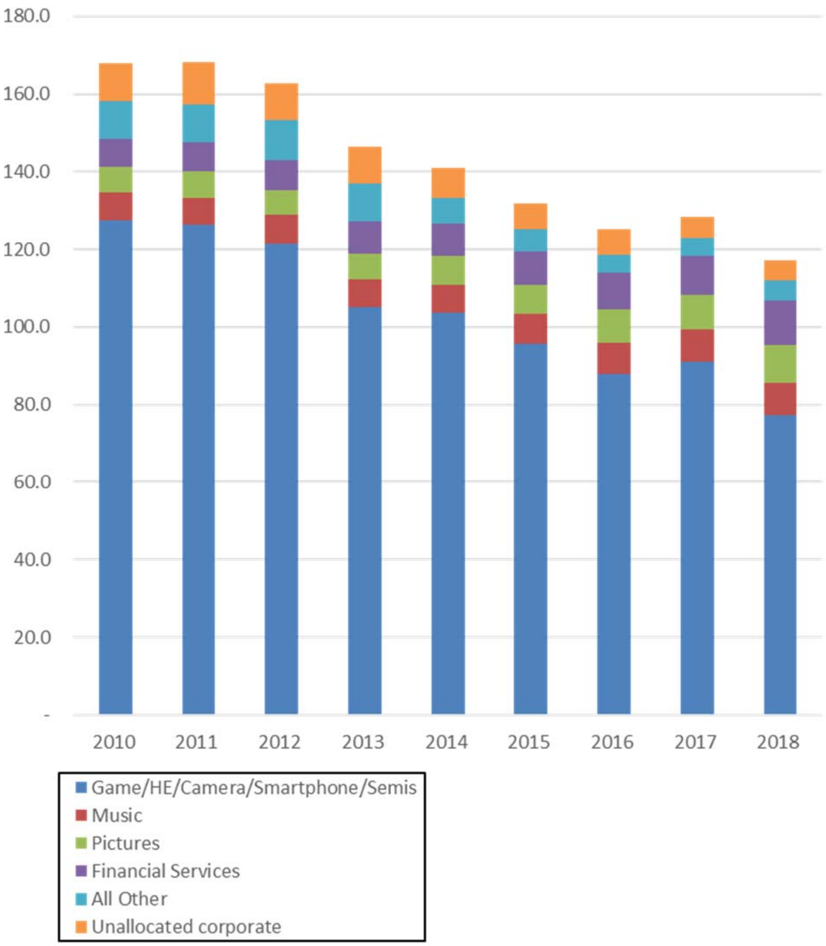
Sony Mobile set to halve workforce in profitability drive

By Steve McCaskill 3 days ago Mobile phones

Restructuring at Sony Mobile sees job cuts

(Image credit: Sony)

Sony headcount by year ('000)

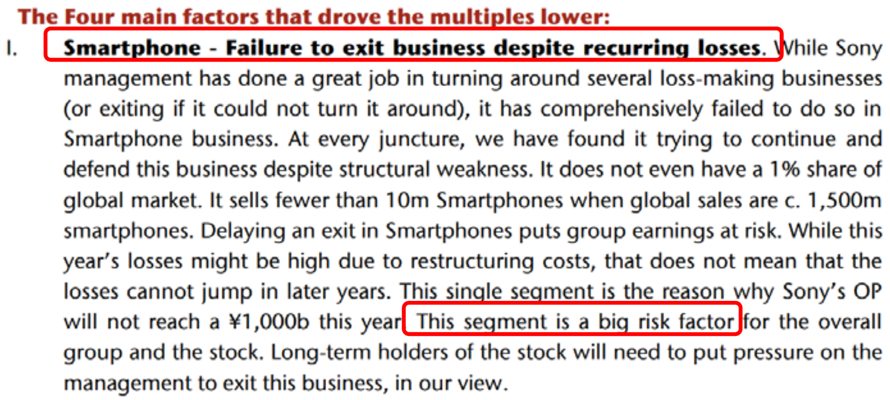


Source: Company reports

Mobile Losses are a key concern for analysts and investors

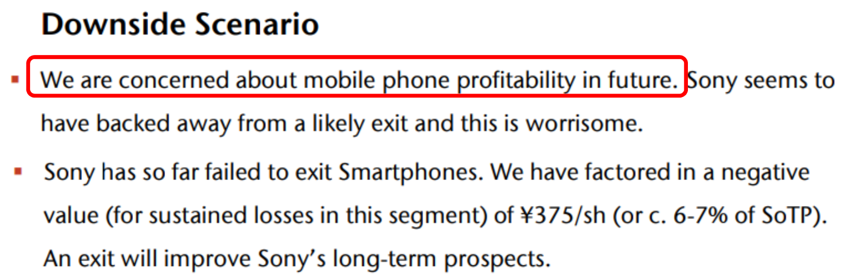
- Two of the major analyst downgrades to Sony stock over the last 12 months have cited the Mobile business as a source of downside risk

Jefferies commentary



The Four main factors that drove the multiples lower:

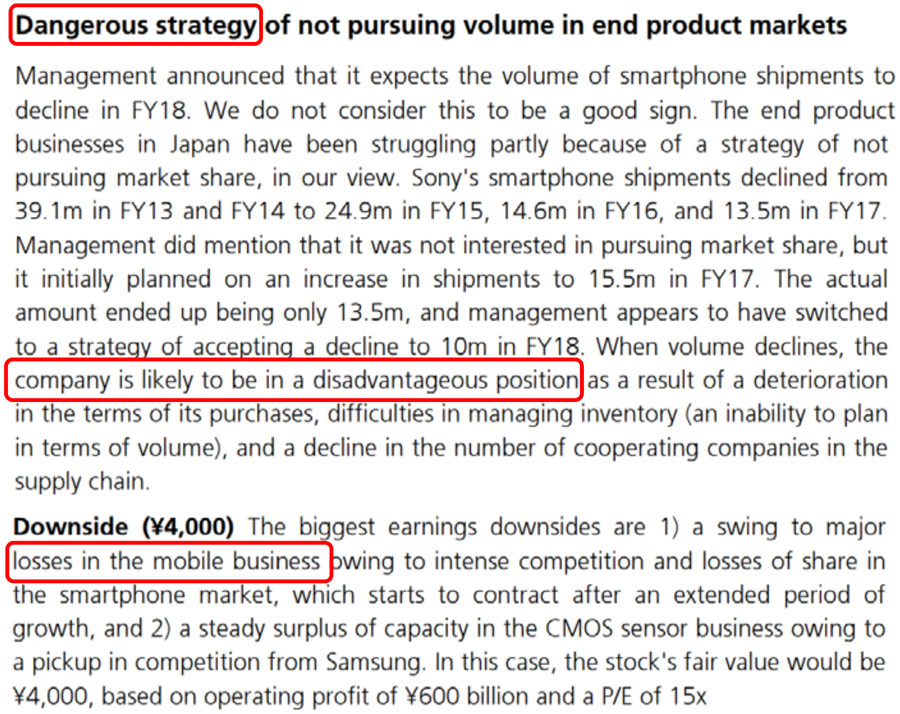
I. **Smartphone - Failure to exit business despite recurring losses.** While Sony management has done a great job in turning around several loss-making businesses (or exiting if it could not turn it around), it has comprehensively failed to do so in Smartphone business. At every juncture, we have found it trying to continue and defend this business despite structural weakness. It does not even have a 1% share of global market. It sells fewer than 10m Smartphones when global sales are c. 1,500m smartphones. Delaying an exit in Smartphones puts group earnings at risk. While this year's losses might be high due to restructuring costs, that does not mean that the losses cannot jump in later years. This single segment is the reason why Sony's OP will not reach a ¥1,000b this year. This segment is a big risk factor for the overall group and the stock. Long-term holders of the stock will need to put pressure on the management to exit this business, in our view.



Downside Scenario

- We are concerned about mobile phone profitability in future. Sony seems to have backed away from a likely exit and this is worrisome.
- Sony has so far failed to exit Smartphones. We have factored in a negative value (for sustained losses in this segment) of ¥375/sh (or c. 6-7% of SoTP). An exit will improve Sony's long-term prospects.

UBS commentary



Dangerous strategy of not pursuing volume in end product markets

Management announced that it expects the volume of smartphone shipments to decline in FY18. We do not consider this to be a good sign. The end product businesses in Japan have been struggling partly because of a strategy of not pursuing market share, in our view. Sony's smartphone shipments declined from 39.1m in FY13 and FY14 to 24.9m in FY15, 14.6m in FY16, and 13.5m in FY17. Management did mention that it was not interested in pursuing market share, but it initially planned on an increase in shipments to 15.5m in FY17. The actual amount ended up being only 13.5m, and management appears to have switched to a strategy of accepting a decline to 10m in FY18. When volume declines, the company is likely to be in a disadvantageous position as a result of a deterioration in the terms of its purchases, difficulties in managing inventory (an inability to plan in terms of volume), and a decline in the number of cooperating companies in the supply chain.

Downside (¥4,000) The biggest earnings downsides are 1) a swing to major losses in the mobile business owing to intense competition and losses of share in the smartphone market, which starts to contract after an extended period of growth, and 2) a steady surplus of capacity in the CMOS sensor business owing to a pickup in competition from Samsung. In this case, the stock's fair value would be ¥4,000, based on operating profit of ¥600 billion and a P/E of 15x

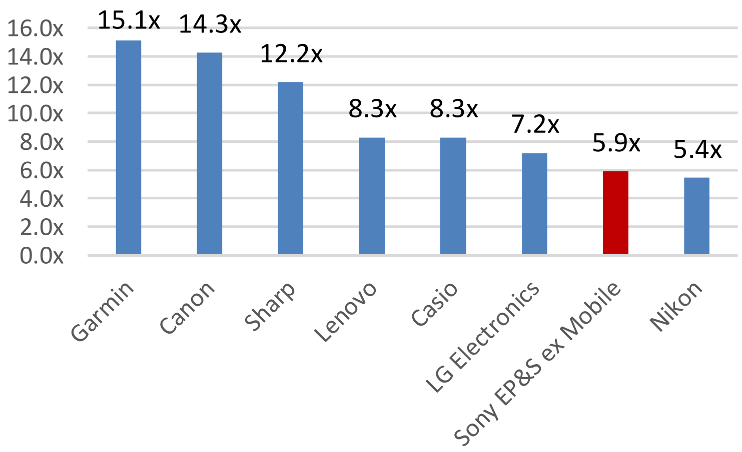
Sony does not get fair value for its electronics franchise due to Mobile

- Today, many Sony analysts value EP&S as a consolidated group in their sum-of-the-parts
- However, this implies a negative value for Sony’s Mobile business and a depressed multiple for Sony’s profit generating Home Entertainment and Imaging franchises
- This is especially notable given most analysts have price targets well above Sony’s current stock price – the market value of Sony implies an even more depressed valuation for Sony’s Electronics franchise
- Sony will only achieve full value for its Electronics franchise after bringing Mobile operations to profit breakeven

EP&S value in analyst Sum-of-the-Parts (¥bn)

	FY19E			Multiple			
Analyst	**Sales**	**EBITDA**	**OP**	**Sales**	**EBITDA**	**OP**	**Value**
BAML	2,242	198	128	0.4x	5.0x	7.7x	991
MS	2,135	186	115	0.2x	2.7x	4.4x	501
Mitsubishi	2,229	164	94	0.5x	7.0x	12.2x	1,149
Jefferies	2,202	197	127	0.3x	3.5x	5.4x	689
GS	2,302	182	112	0.5x	6.0x	9.7x	1,093
DB	2,367	193	123	0.4x	5.0x	7.8x	965
Median	**2,235**	**189**	**119**	**0.4x**	**5.0x**	**7.8x**	**978**
Mobile	410	(25)	(47)				
EP&S ex Mobile	**1,825**	**214**	**166**	**0.5x**	**4.6x**	**5.9x**	**978**

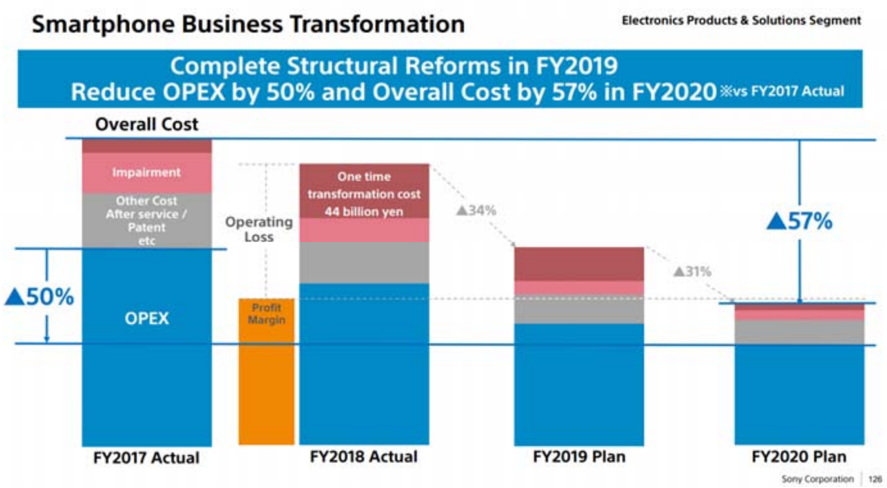
Sony EP&S comps (EV / ’20E EBIT)



Source: Third Point, market data and sell-side research
Market data as of 6/11/2019

Sony is taking steps to restructure its Mobile business

Sony has been reducing Mobile opex with plans to further cut



Smartphone Business Transformation

Electronics Products & Solutions Segment

Complete Structural Reforms in FY2019
Reduce OPEX by 50% and Overall Cost by 57% in FY2020 ※vs FY2017 Actual

Source: Sony 2019 IR Day presentation

Recent developments in Mobile restructuring

NIKKEI ASIAN REVIEW

Sony to slash smartphone workforce 50% by 2020

Fierce 5G competition and poor sales see company retreat from once booming sector

MARCH 29, 2019 11:29 JST

Sony's share of the global smartphone market stands at less than 1%. © Reuters

REUTERS®

Sony to close smartphone plant in China to cut costs

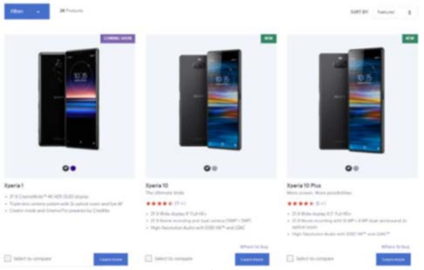
Source: Nikkei Asian Review (March 29th, 2019), Reuters (March 27th, 2019)

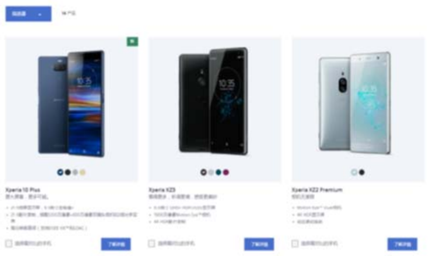
Flagship Xperia availability getting more limited over time

	Flagship Xperia Model					
	XZ1	XZ2	XZ3	10	10+	1
Release Date	Aug-17	Apr-18	Oct-18	Feb-19	Feb-19	Jun-19
Country Availability (from Sony website)	43	42	31	28	29	29
Available in…						
US	Y	Y	Y	Y	Y	Y
Europe	Y	Y	Y	Y	Y	Y
Japan	Y	Y	Y	Y	Y	Y
Hong Kong	Y	Y	Y	Y	Y	Y
Mainland China	Y	Y	Y	N	Y	Y
South Korea	Y	Y	Y	N	N	N
SE Asia	Y	Y	N	N	N	N
Middle East	Y	Y	Y	N	N	N

Source: Sony website

Key to continue withdrawal from Mainland China





US website: all three 2019 flagships listed (1, 10, 10+)

China website: Missing Xperia 10

Greater focus will reduce Sony Mobile's losses

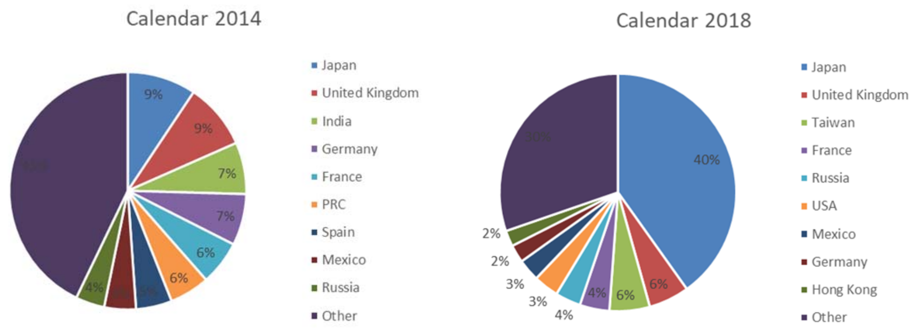
Benchmarking: more focused peers outperforming Sony

2018 Smartphone Stats	**Sony**	**Kyocera**	**Sharp**	**Fujitsu**
Units (mm)	8.1	3.1	4.8	2.0
ASP	523	347	403	334
Revenue (USD mm)	4,241	1,093	1,943	653
	3	2	5	2
Japan as % unit mix	*40.1%*	*74.1%*	*96.0%*	*100.0%*
Japan market rank	*#3*	*#5*	*#2*	*#6*
FYE 3/19 Mobile Financials (JPY bn)				
Revenue	490	160	200	166
Operating Profit	(95)	(10)	22	9
margin	*(19.4%)*	*(6.3%)*	*11.0%*	*5.4%*

Source: Company reports, analyst estimates

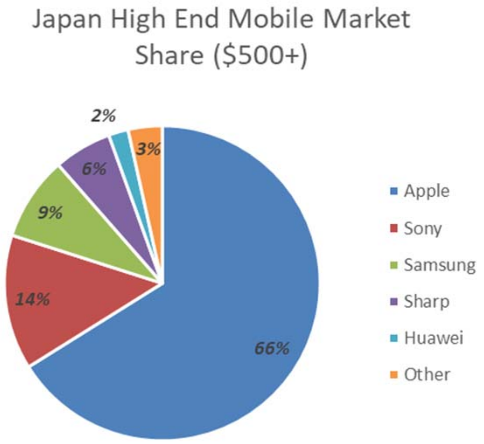
- Sony's Japanese peers show that, even if Sony were to remain in the mobile business, profitability is achievable
- We look to Sharp, a peer with half the unit volume of Sony and a lower average selling price, generating >10% margins
- The key difference is Sharp's singular focus on its domestic market, a trend already taking place in Sony's Mobile business. We suggest that Sony accelerate this transition to become more Japan focused

Smartphone unit market share: Sony becoming more Japan focused



Source: IDC

Largest high-end Android player in Japan by Units



Source: IDC

HE&S – Sony has outperformed Korean peers

- Over the past 3 years, Sony's HE&S division has outperformed peers in both sales growth and margin expansion, driven by Sony's focus on high end products and superior product lineup
- Sony's superior product quality is highlighted by its release of the Z9G Master Series model, one of just two 8K TVs in the market today

Sony Z9G Master Series 8K TV

Sony Z9G Master Series 8K TV review

Sony's Master Series Z9G 8K TVs are **leading entrants** in the new category, providing the **eye-popping** 7680 x 4320-pixel resolution that defines 8K, along with a host of features and performance tweaks unique to Sony TVs. The **result is staggering**, with giant screens, **unbeatable detail**, and fantastic clarity and realism

-Tom's Guide, April 2019

Sony HE&S revenue vs peers ($mm)

Revenue	**2015**	**2016**	**2017**	**2018**	***CAGR***
Sony HE&S	9,662	9,535	10,686	10,599	*3.1%*
y/y		*(1.3%)*	*12.1%*	*(0.8%)*	
LG H&E	14,854	14,419	17,424	14,516	*(0.8%)*
y/y		*(2.9%)*	*20.8%*	*(16.7%)*	
Samsung C&E	40,002	38,954	42,133	37,738	*(1.9%)*
y/y		*(2.6%)*	*8.2%*	*(10.4%)*	

Sony HE&S margins vs peers ($mm)

Operating Profit	**2015**	**2016**	**2017**	**2018**	***margin expans.***
Sony HE&S	314	518	782	742	
margin	*3.3%*	*5.4%*	*7.3%*	*7.0%*	*3.7%*
LG H&E	1,055	1,024	1,463	1,361	
margin	*7.1%*	*7.1%*	*8.4%*	*9.4%*	*2.3%*
Samsung C&E	1,066	2,177	1,541	1,819	
margin	*2.7%*	*5.6%*	*3.7%*	*4.8%*	*2.2%*

Source: Company reports

IP&S – Sony has outperformed Japanese peers

- Sony's IP&S division has kept pace with top peer growth rates by maintaining #1 position in mirrorless cameras while being the only company in Japan to see margin expansion in its imaging business

Key Sony imaging product lineup

Sony IP&S revenue vs peers ($mm)

Revenue	**2015**	**2016**	**2017**	**2018**	***CAGR***
Sony IP&S	5,831	5,306	5,762	6,142	*1.7%*
y/y		*(9.0%)*	*8.6%*	*6.6%*	
Nikon Imaging Products	6,714	6,360	6,929	7,252	*2.6%*
y/y		*(5.3%)*	*9.0%*	*4.7%*	
Canon Imaging Systems	9,662	9,535	10,686	10,599	*3.1%*
y/y		*(1.3%)*	*12.1%*	*(0.8%)*	
Olympus	14,854	14,419	17,424	14,516	*(0.8%)*
y/y		*(2.9%)*	*20.8%*	*(16.7%)*	

Sony IP&S margins vs peers ($mm)

Operating Profit	**2015**	**2016**	**2017**	**2018**	***margin expans.***
Sony IP&S	446	547	638	806	
margin	*7.7%*	*10.3%*	*11.1%*	*13.1%*	*5.5%*
Nikon Imaging Products	430	233	312	186	
margin	*6.4%*	*3.7%*	*4.5%*	*2.6%*	*(3.8%)*
Canon Imaging Systems	1,526	1,235	1,561	1,066	
margin	*10.3%*	*8.6%*	*9.0%*	*7.3%*	*(2.9%)*
Olympus	853	742	666	381	
margin	*5.7%*	*5.1%*	*3.8%*	*2.6%*	*(3.1%)*

Source: Company reports

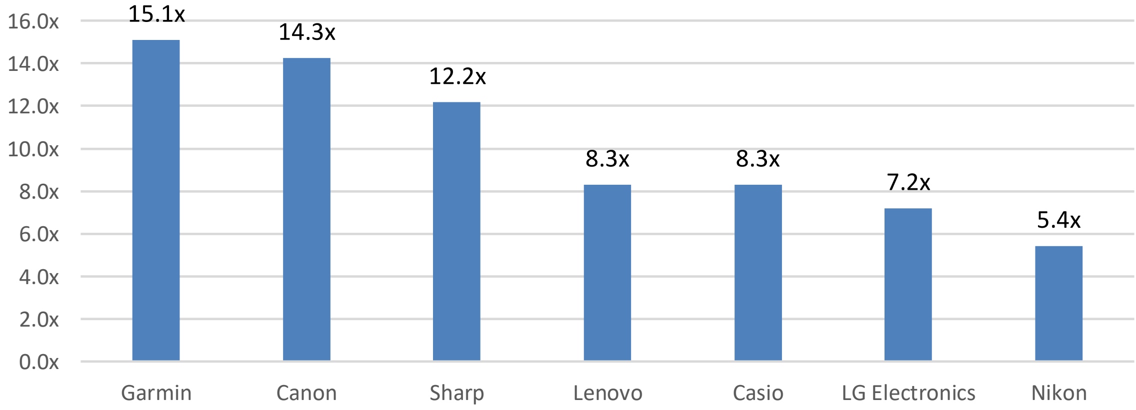
Sony's Electronics businesses could be worth $9bn – $12bn by 2021

- We use a mix of EBIT and sales multiples to value Sony's EP&S business. Sales multiples allow us to ascribe fair value to Sony's mobile business despite the current losses
- We use a conservative range of 5-7x EBIT for HE&S and IP&S. Peers imply a valuation range of 6-14x
- We see potential for Sony to fully realize the value of its EP&S portfolio only if the company is able to bring its mobile business to breakeven

Sony EP&S valuation ($bn)

Segments	CY22E Sales	CY22E EBIT	TEV / '22E EBIT Low	TEV / '22E EBIT High	Implied '22E P/S Low	Implied '22E P/S High	TEV ($bn) Low	TEV ($bn) High
IP&S	$5.9	$0.7	5.0x	7.0x	0.6x	0.8x	$3.6	$5.0
HE&S	9.9	0.6	5.0x	7.0x	0.3x	0.5x	3.2	4.5
Mobile	2.7	(0.1)	n/m	n/m	0.3x	0.5x	0.8	1.4
Other	3.1	(0.1)	n/m	n/m	0.3x	0.5x	0.9	1.5
Total	**$21.6**	**$1.1**	**7.7x**	**11.2x**	**0.4x**	**0.6x**	**$8.5**	**$12.4**

Sony EP&S comps (EV / '20E EBIT)



Source: Third Point and consensus estimates
Market data as of 6/11/2019

Publicly Listed Stakes and Capital Structure Discussion

THIRD POINT

Listed stakes and capital structure discussion

- We believe Sony's listed stakes and balance sheet provide significant optionality, which when combined with a compelling standalone growth outlook, could lead to a unique opportunity to create shareholder value
  - Sony's listed stakes, which total ~$12bn at market, should be reviewed for divestiture
    - Proceeds could be used to invest in growth, M&A or share repurchases
    - We think shareholders would applaud further investment in entertainment assets, solidifying Sony's position as a global entertainment leader
  - Given the strong cash generation of Sony's businesses, we think Sony could increase the efficiency of its balance sheet by adding a modest amount of debt
    - Sony would still retain strong investment grade credit metrics
    - ROE and earnings per share growth would increase dramatically

Listed stakes accounted for enormous value, but underappreciated by the market

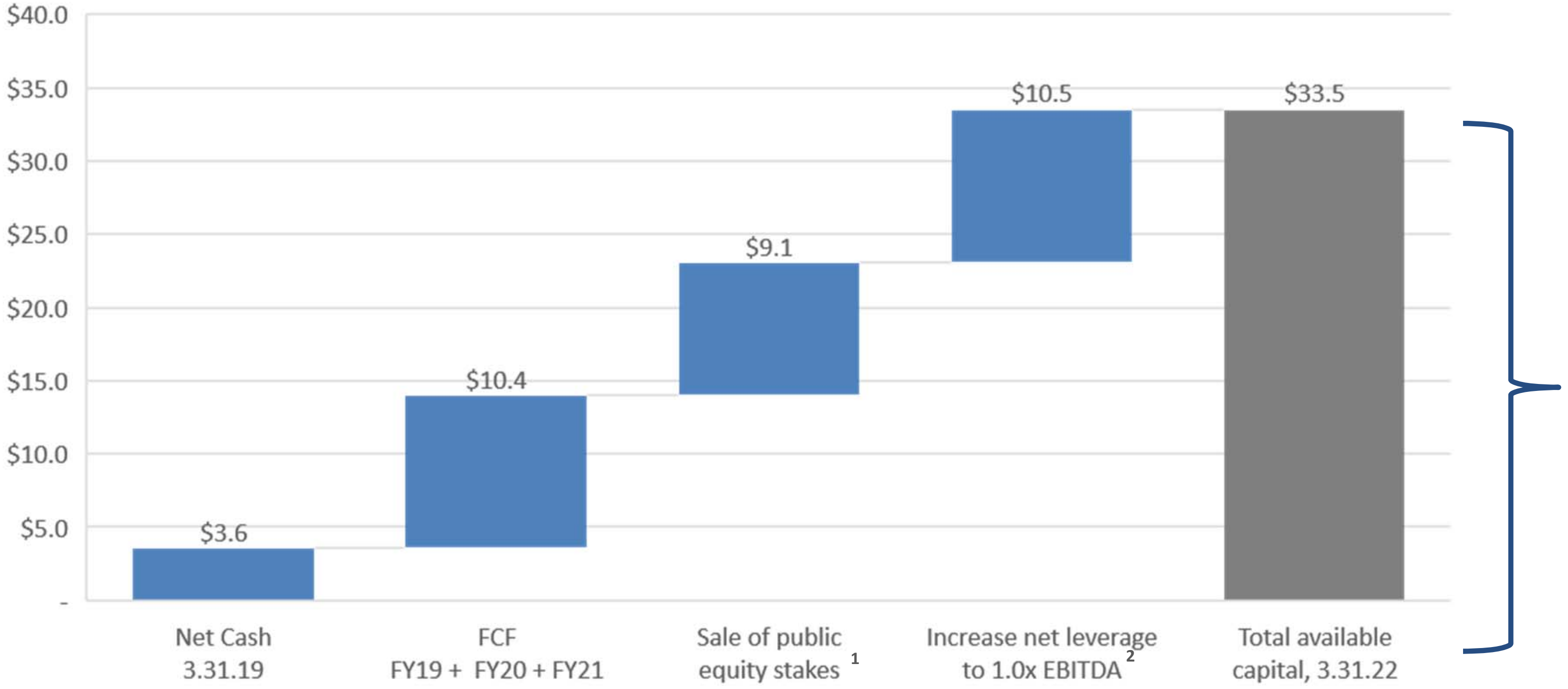
- One of the key tenets of Japan's third arrow "Governance Code" is a review of company's cross-shareholdings
  - It is common in Japan for corporations to hold sizeable equity stakes in other public companies
    - These stakes often have little strategic purpose and add significant complexity
  - While Sony's public investments have generated attractive returns, we don't believe the market appropriately values them within the current structure –**a sale would be viewed positively by investors**
    - Monetizing these stakes would provide significant capital for growth investments or purchasing Sony's own undervalued stock
    - Would also meaningfully reduce complexity (a major negative factor in Sony's valuation)
- Current stakes include:
  - Sony Financial Holdings (8729 JP): Sony owns a 65% stake in Sony Financial, a ~¥1.1tn ($10bn) market cap growth-oriented life insurance business. The value of this stake at current market prices is ~¥720bn ($6.6bn)
  - M3 Inc. (2413 JP): Sony owns a 34% stake in M3 Inc., a ~¥1.4tn ($13bn) market cap healthcare information supplier. The value of this stake at current market prices is ~¥460bn ($4.2bn)
  - Olympus (7733 JP): Sony owns a 5% stake in Olympus, a ~¥1.8tn ($16bn) market cap medical device company. The value of this stake at current market prices is ~¥90bn ($0.8bn)
  - Spotify Technology SA (SPOT): Sony owns a 3% stake in Spotify Technology SA, a ~$25bn market cap music streaming service. The value of this stake at current market prices is ~¥75bn ($0.7bn)

Monetization of non-core public equity stakes could provide $12bn of value that could be used for growth investments or return of capital to shareholders

Sony has significant untapped balance sheet capacity today

- At Sony’s current share price, buybacks constitute an investment in Sony’s existing assets at a significant discount to fair value
- We applaud Sony’s move to initiate two separate buyback programs thus far in 2019, together worth ~$3bn
- We estimate Sony could repurchase ~$34bn in stock (assuming no M&A) over the next 3 years, while holding net leverage < 1.0x
  - As of 3.31.19, Sony has ~$3.6bn of net cash
  - Monetization of public equity stakes and 2019-2021 FCF provide nearly ~$20bn
  - A conservative leverage target of 1.0x net debt to 2021E EBITDA adds another ~$10bn

Potential balance sheet optimization ($bn)



$34bn of available cash for strategic deployment to YE21 (>50% of current market cap)

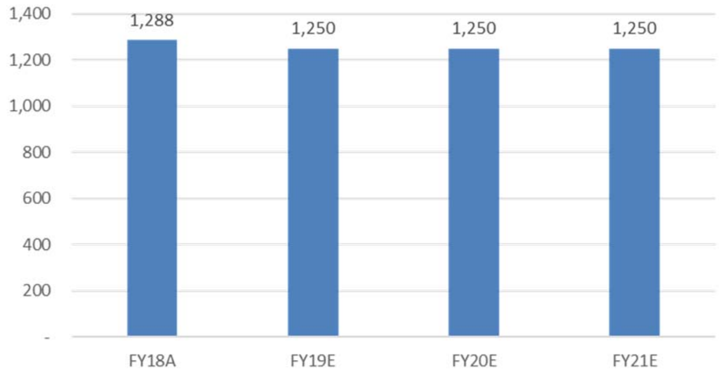
1. Free cash flow from non-financial businesses (incl. Semiconductors) consistent with management guidance provided in April 2019
2. Includes stakes in Sony Financial, M3, Spotify, Olympus at market prices, net of taxes. Assumes taxes are ~25% of sales price

Opportunity to accelerate EPS growth and ROE through capital return

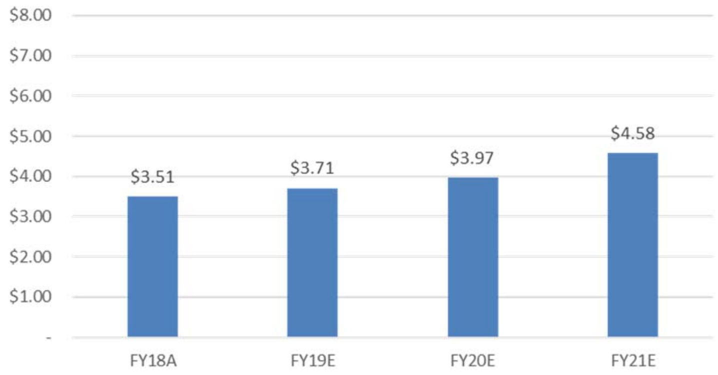
- While Sony will evaluate growth options as part of any capital allocation decision, this is purely an illustrative analysis that highlights Sony's financial strength
- If Sony monetizes its listed stakes, completes already-announced buybacks, and raises net debt / EBITDA to 1.0x, it could hypothetically repurchase ~$34bn of shares (i.e. more than half of Sony's total shares outstanding) over the next 3 years
- This scenario would increase EPS by ~60% by FY21 (increasing from ~$4.58 in status quo to ~$7.48 with buyback) and would lift book ROE from ~15% to ~80%

Status quo scenario

Share count (mm)

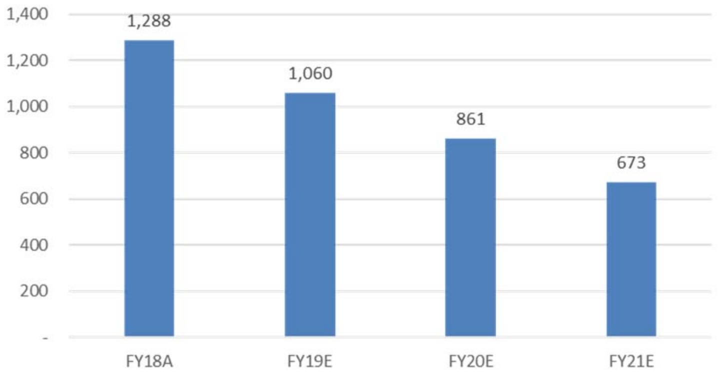


EPS

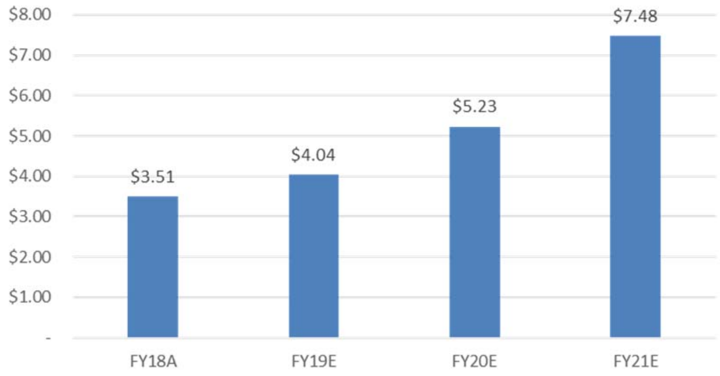


Buyback scenario, targeting 1.0x net leverage

Share count (mm)



EPS



Key assumptions: For simplicity stake, does not assume a Semi spin. All listed equity stakes are sold for cash and Sony incurs a 25% tax rate on gross proceeds (assumes low tax basis). 100% of cash proceeds from listed equity sales, debt issuance and generated free cash flow is used for share repurchases

Apple sets strong example of share buybacks for global technology companies

- In February 2018, after many years of maintaining a large amount of cash on its balance sheet, Apple's CFO announced an intention to take the company's balance sheet to a 'cash neutral' position over time by returning $163bn to investors
- In the following 15 months (Jan 2018 – March 2019), Apple returned $112bn to shareholders, ~160% of net income during the period
- Apple's actions created meaningful value for its shareholders as Apple's **share price appreciated 40%** in the next 6 months to an all-time high and its **multiple expanded 30%** to 14x EV / EBIT, a valuation the stock had not seen in the last 10 years
- Though Apple's stock has since come down from all-time highs, it still trades at >20% premium to where it traded prior to the buyback announcement Feb 2018

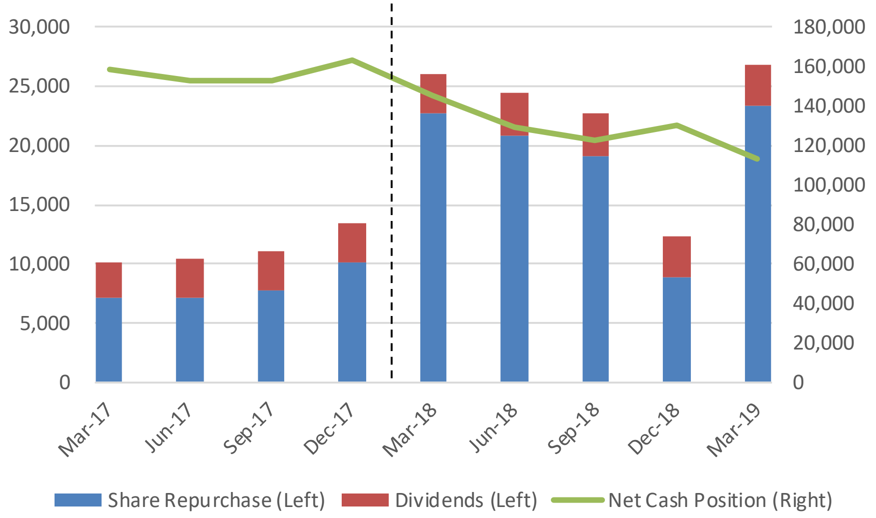
Apple fiscal 2Q 2018 commentary

The biggest priorities for our cash have not changed over the years. We want to maintain the cash we need to fund our day-to-day operations, to invest in our future, and to provide flexibility so that we can respond effectively to the strategic opportunities we encounter along the way.

As we said in February, our goal is to become approximately net cash neutral over time. Given our **strong confidence in Apple's future** and the **value that we see in our stock**, our board has authorized a new $100 billion share repurchase program which we will start executing during the June quarter

-Luca Maestri, Apple CFO

Apple cash return and net cash position ($mm)



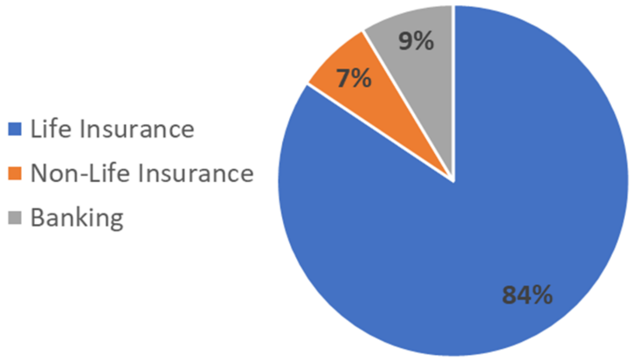
Source: Company reports

Appendix

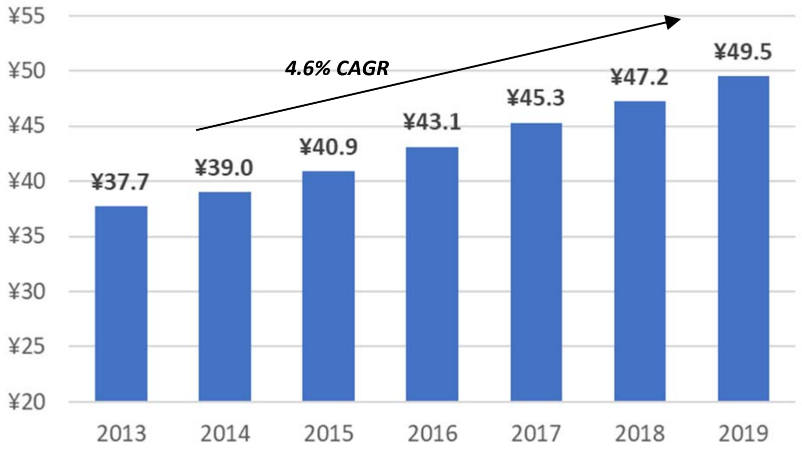
Listed stake: Sony Financial Holdings

- Sony Financial Holdings (SFH) is an ~$10bn market cap financial services company, offering life insurance, non-life products, and banking services in the Japan market
  - Sony is the largest shareholder with a 65% stake worth ~$6.6bn
- The life insurance segment is the primary source of operating profits and total assets, accounting for 81% of revenues and 77% of total assets, respectively
  - As of 3/31/19 SFH has approximately ¥49.5tn of policies in force, primarily consisting of term life, whole life and annuity products
  - Sony has grown policy amount in force at ~4-5% CAGR for the last 20 years vs. a flat market, and now represents about 5% of Japanese policy amount in force

2019E Operating profit by segment



Historical life policy amount in force (¥tn)



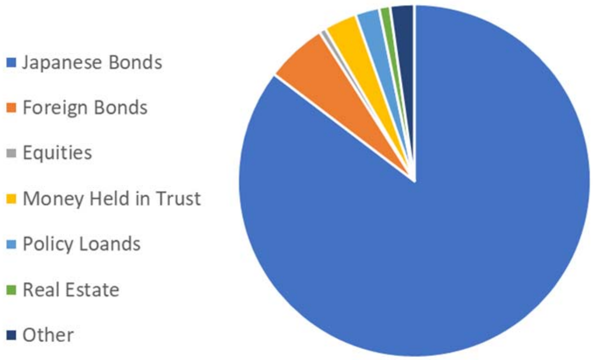
Source: Company reports

Sony Financial is distinguished from peers by its "growth culture" driven by unique "Life Planner" model

Listed stake: Sony Financial Holdings (cont'd)

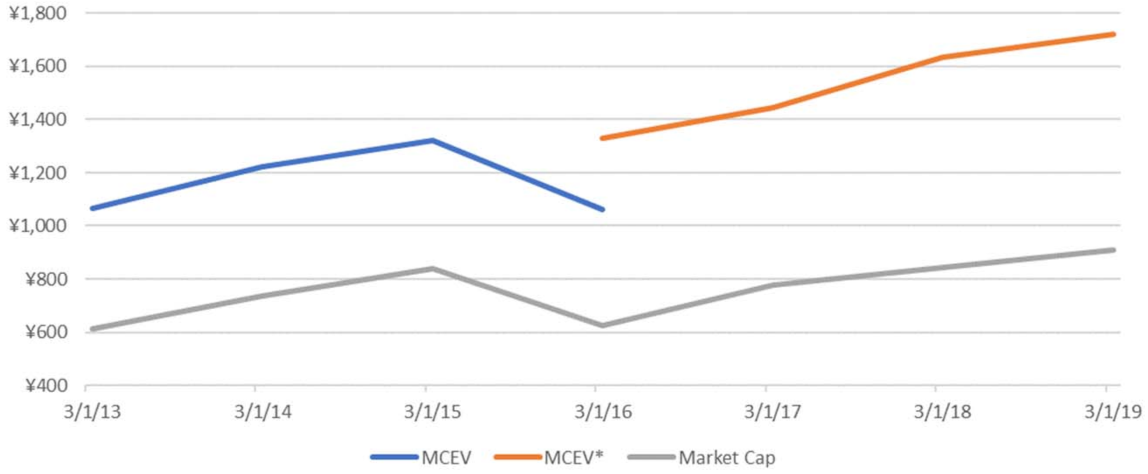
- General account assets of ~¥9tn are primarily invested in Japanese bonds (JGBs and corporates) and some foreign bonds with an average duration of 21 years
  - Potential opportunity for optimization of asset portfolio to increase yield
- Sony Financial has consistently grown embedded value over time, and Market Cap has generally tracked Embedded Value
  - Major step down in embedded value in 2016 due to steep decline in JGB yields

General account assets (¥tn)



Source: Company reports

Market consistent embedded value vs. market cap (¥tn)

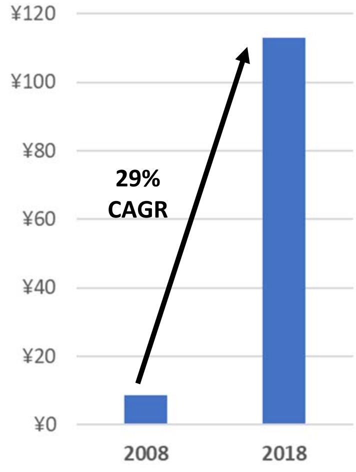


Note: Market Consisted Embedded Value (MCEV) is an actuarial insurance industry metric that provides a means of measuring the intrinsic value of the insurance business (value of assets at market, less discounted value of liabilities). *In 2016, Sony Financial restated MCEV using ultimate forward rates, which resulted in a one-time upward adjustment to MCEV

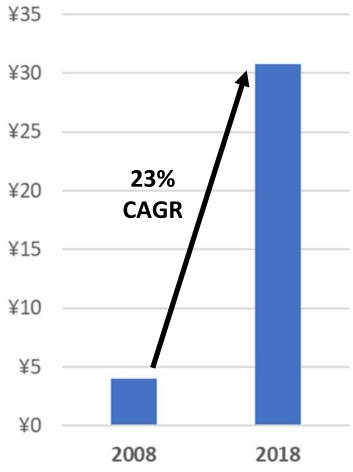
Listed stake: M3 Inc.

- M3 Inc. is an $13bn market cap healthcare information supplier that was founded in 2000
  - Sony is the largest shareholder with a 34% stake worth ~$4.2bn
- M3's primary business is a healthcare portal/website where physicians can get information aiding them in diagnosis/treatment, get up to date medical news, learn about new drugs, exchange opinions with other physicians and search for career change/recruitment information
- M3 is also has expanded into other services such as clinical trial support, and more recently, outright medical device and drug development/ownership which the company calls "M3 advanced medicine"
- Growth in the business has been robust, with sales and OP growing at a 23% and 29% CAGR over last 10 years

Sales (¥bn)



Operating Profit (¥bn)



Valuation

Share price	¥2,104
Shares	647.957
Market Cap (Bn ¥)	¥1,363
Net Cash	31
EV (Bn ¥)	¥1,333
FY 3/20 P/E	58.5x
FY 3/21 P/E	50.0x
FY 3/20 EV/EBITDA	35.6x
FY 3/21 EV/EBITDA	31.4x

Consensus Forecast (¥bn)

	FY 3/19	FY 3/20	FY 3/21
Sales	¥114	¥132	¥150
Growth %	20%	16%	14%
EBITDA	¥32	¥37	¥42
Margin %	*28%*	*28%*	*28%*
EPS	¥30.22	¥35.97	¥42.05
Growth %	9%	19%	17%

Source: Bloomberg, company reports. As of 6/10/2019