PIVOTAL

Pivotal Research Group

U.S. Equity Research
Internet / Advertising

Amazon: Initiating With Buy Rating and $1920 YE2019 Price Target

Jan. 7, 2019

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Amazon (AMZN)

RATING: BUY
(Previous: N/R)

Target Price: $1920.00
(Previous: N/R)
Price (1/4/19): $1539.13

BOTTOM LINE: Initiating coverage on Amazon with a Buy rating and $1920 YE2019 price target. Amazon is one of the world's largest retailers (with a sideline in fast-growing and high-margin advertising activities) and also owns one of the world's largest software businesses. Despite its current massive size, we see Amazon's opportunities as mostly unconstrained based on a successful track record of capitalizing on consumer and IT department spending. In the remainder of this note we provide further details on how we think about the company's future revenue and profitability trends, looking at the retail business separately from AWS. We also assess other valuation considerations which lead us to our $1920 YE2019 price target. With a stock trading more than 15% below this level at the present time, we initiate coverage with a Buy recommendation.

VALUATION. Our DCF-based valuation includes is largely driven by a long-term discount rate of 11.4% and long-term growth of 7.0%.

RISKS. Key risks include threats related to regulation, competition and general economic trends.

MARKET DATA

52 Wk Hi – Low	$1232.03 – $2050.50
Market Cap. (MM)	770,317
Avg. Daily Vol (000)	7,620

EPS	2018E	Prior	2019E	Prior
1Q	$3.27		$4.28	
2Q	$5.07		$6.47	
3Q	$5.75		$8.11	
4Q	$6.87		$10.05	
FY	$20.98		$28.95	

Sales ($in bn)	2018E	Prior	2019E	Prior
1Q	$51.0		$61.2	
2Q	$52.9		$63.6	
3Q	$56.6		$68.2	
4Q	$72.4		$86.9	
FY	$232.9		$279.9	

Sales in Millions

BALANCE SHEET DATA (12/31/17)

Cash ($ in bn)	$30.1
Debt ($ in bn)	$24.7

Source: Pivotal Research Group and Company Documents

Amazon: Initiating With Buy Rating and $1920 YE2019 Price Target

INTRODUCTION

Initiating coverage on Amazon with a Buy rating and $1920 YE2019 price target. Amazon is one of the world's largest retailers (with a sideline in fast-growing and high-margin advertising activities) and also owns one of the world's largest software businesses. Despite its current massive size, we see Amazon's opportunities as mostly unconstrained based on a successful track record of capitalizing on consumer and IT department spending. In the remainder of this note we provide further details on how we think about the company's future revenue and profitability trends, looking at the retail business separately from AWS. We also assess other valuation considerations which lead us to our $1920 YE2019 price target. With a stock trading more than 15% below this level at the present time, we initiate coverage with a Buy recommendation.

REVENUE FORECAST

Amazon is massive, but small in context of the commercial opportunity the company is pursuing. With a focus on selling as many consumer goods as possible and much success in attempting to do so, we see Amazon's retail activities as a play on global consumer spending, which is much broader than pure retail or today's e-commerce business. In terms of thinking about the market opportunity, we would point to a recent Euromonitor estimate of global consumer spending as equalling $45 trillion in 2018. Given Amazon's ambitions and its demonstrated abilities, we think this is a reasonable TAM (total addressable market) to consider. To calculate Amazon's share of this TAM, we assume revenue from its marketplace is derived from a 15% take-rate, which leads to a global GMV for Amazon of around $405 billion during 2018. Including revenue from subscriptions (appropriate, given the inclusion of Prime in that line item) we can estimate that Amazon captured $420 billion of consumer-related activity. From this we calculate an approximate 1% share of its TAM potential.

Of course, a TAM defined so broadly is intended to convey that there is significant ongoing growth potential for the company. In lieu of meaningful new initiatives or acquisition-related activity, we would expect that growth can continue at incrementally diminished rates vs. the recent past. Acceleration is unlikely (if not implausible) given the difficulty any company would face in sustaining or meaningfully improving upon prior growth which build on Amazon's already-massive scale. With this philosophy underpinning our numbers, we have arrived at a growth rate for non-AWS-related businesses of around +22% in both 2017 and 2018 pro forma for 2017 transactions (which primarily means Whole Foods), declining towards +13% in 2023 and then on towards a ~+6% growth rate outside of recessionary periods by 2030.

While a model based upon diminishing growth is simplistic, we arrived at this approach after determining it was more appropriate than other methods of forecasting. Initially we attempted to assess the total addressable market for e-commerce at global and regional levels with an eye towards estimating Amazon's share of that market at any given time. However, we found limitations in data available and further limitations in applying that data to Amazon specifically for several reasons:

- E-commerce retail sales data (as produced by the US Commerce Department and Census Bureau, for example), while likely an accurate reflection of a fixed definition of e-commerce, won't reflect the increasingly omni-channel nature of retail. Platforms such as Amazon are likely to increasingly rely on physical locations as much as traditional retailers such as Walmart and Target will increasingly rely on their digital platforms to sell products and provide customers with related information. Amazon will be increasingly indifferent as to whether or not a sale is fulfulled in part or in whole online or at a store.

- Modelling Amazon's revenue share against broader retail sales data won't capture that Amazon will increasingly look to non-retail forms of consumer spending as a source of revenue growth, as with their efforts in entertainment services and healthcare.

- Using market share estimates for a global company is even more difficult because of the amount of cross-border buying activity that occurs. Our understanding is that any data tracking e-commerce sales for a given country will not capture spending which originated in a separate country. This distorts attempts to model market share at anything less than a global level.

We see several of the company's revenue streams as fluid for purposes of modelling. We first consider the company's retail, marketplace and subscription-related businesses to be a relatively fluid set of revenue streams with any one category of revenue as replacable by any one of the others. Our conversations with industry participants have left us with an understanding that Amazon may prioritize or deprioritize different activities, all with an eye towards optimizing their relationships with consumers.

- On first glance at Amazon, one might assume that marketplace / third-party sales are more desirable for Amazon vs. first-party sales given higher margins and greater scale potential. However, we understand that the company benefits in many ways from sustaining a robust first-party business, including the capacity to produce more high margin private label goods, a superior ability to manage their overall customer relationships and a better strategic read on the economics of other retailers and manufacturers who use the marketplace.

- As described above, we see Amazon as ultimately indifferent between online/delivery or physical store-based fulfulllment given the timeliness of picking up certain goods, the balance of consumer interests between online and in-person shoping for many catgeries and a competitive environment which is increasingly omnichannel.

- Subscriptions could theoretically serve as an incremental revenue stream, except that most of the company's subscription revenue is via Prime, which is likely best viewed as part of a given consumer's overall spending on products at Amazon. And even if we only look at future subscription services we can envision that Amazon will price services in context of those services' contributions to increased spending on retail products.

Advertising is related to the retail opportunity, but also somewhat independent. The company generated around $9bn of related revenue in 2018. Grouped under Other revenues (with probably 90% of those revenues accruing to advertising), Amazon's approach to advertising is centered around helping the company reduce prices consumers pay for products. For this reason, in some ways advertising is a means to an end rather than the end itself at Amazon. However, because of Amazon's scale and the desirability of its data and ad inventory, advertising should be able to provide an opportunity for incremental growth that is independent of consumer spending trends.

Amazon was on pace to generate well over $10bn in Other revenue during 2018, which we think includes around $9bn from advertising, the bulk of which ran in the US. Of the $9bn, around $3bn may have originated with co-op or trade-related promotion budgets, equivalent to 2-3% of the company's first-party sales. In general we think these budgets should grow at least as fast as Amazon's first-party sales, but they could grow faster as fast moving consumer goods (FMCGs) become increasingly important suppliers of goods to the company (our understanding is that companies in this sector can invest as much as 20% of their revenue in trade promotion programs with retailers, although we have also heard that the figure can be as low as 2% for some brands).

We assume the remainder, or around $6bn of ad revenue, is derived from conventional digital advertising budgets. This pool of spending represents a more significant opportunity for Amazon than trade promotion budgets. We estimate the company recognized $5bn in US advertising revenue from conventional ad budgets during 2018 (out of a digital ad market we estimate was worth $106bn), with a large percentage of those sales made possible with inventory outside of Amazon's owned and operated platforms. Although large brands are allocating growing shares of their budgets to Amazon inventory, the growing numbers of third-party merchants on Amazon's marketplace might be increasing their spending in a more aggressive manner, prioritizing Amazon's relatively scarce O&O advertising "real estate." If this occurs, the larger brands who pioneered the use of that inventory would probably respond by increasingly using Amazon's DSP / managed service to buy inventory off the platform.

The separation between trade and brand budgets is important for investors to consider, not least as it impacts how investors should think about the advertising revenue potential for Amazon and the opportunity (or lack of an opportunity) for new budgets to flow into the industry. Conversations with large advertisers have conveyed to us that there is no one-size fits all approach to budgeting for Amazon, with some integrating activities between brand and trade promotion budgets, but those examples appeared to be the exception rather than the rule. Beyond bureaucratic considerations (with trade sales and marketing teams typically reporting through very different lines in their companies, with very different business objectives and separate budgets) in some instances avoidance of co-ordination is intentional: several large marketers cited to us the US Robinson-Patman Act (a law which bars price discrimination – including compensation for advertising and other services – between manufacturers and similar types of retailers) as a factor limiting the degree to which brand and trade teams co-ordinate their efforts.

To the extent that budgets flow into Amazon from other sources, we have learned of a range of different approaches that different marketers take. We have heard from some marketers who will fund search on Amazon from Google budgets, but also heard from others who will leave search on Amazon to the trade team to fund in isolation from other budgets. Display budgets could flow from general display advertising or from Facebook or Google or anywhere else. And of course, as Amazon develops its connected TV offerings and ultimately makes more of its original programming available on an ad-supported basis, it will probably be able to compete for TV budgets. Amazon's Fire TV box is a key initiative in helping the company monetize other programmers' connected TV inventory, and conversations we have had with industry participants convey to us that Fire is well-positioned to compete with Roku or other sellers of connected TV ad inventory.

Separately, we think that smaller advertisers or those who primarily sell their goods on the web (especially through Amazon's marketplace) are more likely to allocate a generally fixed percentage of their sales to Amazon ad inventory. Those same advertisers are also likely to be willing to pay relatively higher prices given the relative ease with which they can connect ad impressions to sales (at least vs. larger brands, where making such assessments are much harder).

Accounting for these factors, we forecast $38bn in revenue by 2023, with advertising growing faster than any other revenue stream at Amazon. For 2018 we estimate advertising is growing by close to +70% on an underlying basis (excluding the accounting change that caused Amazon to recognize trade promotion ad spending as revenue rather than a reduction in costs of goods sold) and assume deceleration in subsequent years to arrive at an estimate of $33bn in conventional ad revenue (or $38bn including trade promotion budgets) by 2023. For reference, Interpublic's Magna estimates total digital advertising of $406bn at that time, or $339bn outside of China, where Amazon might be harder-pressed to compete for ad budgets vs. the rest of the world. At around 10% of the global total in 2023, Amazon will easily be the "third force" in digtial advertising after Google and Facebook, although it will still be substantially smaller than the $215bn in annual revenue we expect Google to generate or the $59bn we expect to see from Facebook.

We recognize that there are obstacles which need to be overcome for Amazon to sustain the growth that we expect: conversations with buyers convey that Amazon's ad products remain very limited in their features vs. pure-play ad tech competitors, and do not yet have comprehensive capabilities around brand safety, for example.

Improvements are likely to be made over time, helping the company secure a growing “share of wallet” among existing domestic customers. Further, the company will need to enhance its selling efforts and succeed in selling to non-endemic marketers (i.e. those with products in categories which don’t tend to sell on Amazon or via e-commerce), who today likely account for a small share of the Amazon’s ad revenues.

We see AWS as entirely separate from the retail business, and also see the division as capable of continously growing by sustaining its existing revenue streams and expanding with new products in the future. A remarkable growth story in its own right, AWS should end 2018 as a business with more than $25bn in revenue, by itself almost as large as the world’s fourth largest software company, SAP. With significant revenue streams from storage, computing, networking and other software, Amazon has firmly established itself as capable of deploying new products and servicing IT departments of companies large and small around the world.

To model revenue growth at AWS, we recognize that we might look at TAMs for AWS‘ core products and make estimates of AWS‘ share and the trajectory of its share. However, this would ignore that Amazon is undoubtedly going to continue expanding its product offerings as well, including an expansion beyond software to include more hardware, too. For reference, Gartner estimated in October that global enterprise software spending was to be $405bn during 2018. Enterprise-focused hardware would add to this figure as would other forms of IT spending, which was forecast to total $3.7 trillion in 2018, including devices, IT services and communications services.

With substantial upside potential for AWS and a strong track record, we think we can safely assume significant ongoing revenue growth for the foreseeable future. Reinforcing this point, as of the end of 3Q18, the company had a $17.8bn revenue backlog associated with AWS for contracts whose terms exceed one year and which were not otherwise reflected in its financial statements, with an average contract life of 3.5 years (implying ~$5bn of revenues to be generated each of the next 3.5 years from sales activities which were already performed). Notably, the $17.8bn figure was up from $16.0bn in 2Q18 and $12.4bn in 1Q18.

KEY ECONOMIC RISKS

Concerns about an economic downturn are worth considering in looking at Amazon, although not explicitly incorporated into our model at this time, which assumes ongoing economic growth for the foreseeable future. While AWS probably holds up well because of the secular growth trends it is driving and the long-term contracts it has with many of its customers, the retail business might face risks because of the relative maturity of e-commerce and likelihood that consumer spending trends would probably negatively impact the company in a way they didn’t during the last recession. As well, overall digital advertising budgets would probably be cut if the economy weakened materially.

To the extent that concerns around economic weakness in China play out, Amazon might be negatively impacted to the degree that many of the companies using its marketplace and advertising products are based there. One intelligence firm (Marketplace Pulse) published an estimate late last year indicating that 39% of the Amazon marketplace’s top sellers in the top five European markets were based in China, up from 15% two years earlier. They estimate that the share of US revenues from Chinese third-party sellers is likely higher than the 39% figure. Changes to postal regulations which could impact the cost of shipping both internationally and domestically could also factor into Amazon’s business over time.

PROFIT MARGIN FORECAST

We model Amazon’s margins in terms of a) AWS and b) everything else as two separate pools of profitability. We model taxes in a manner that is generally consistent with our outlook for other companies.

Our model incorporates an assumption that Amazon's non-AWS revenues will generate a 5.0% operating income margin in the long-run. In the United States, retailers earn a slightly-better-than 3% after-tax profit margin on average, according to data from the US Census Bureau. This should equate to a slightly-better-than 4% operating income margin. There are clearly advantages to scale: industry-leader Walmart has earned operating income margins of 5-6% over the past few years.

When assessing what 5.0% means, we think it's important to note that Amazon's accounting choices differ from its peers. Looking at regional data for North America – excluding AWS, but including third-party sales – Amazon produced a 5% margin over the last twelve months (3Q17 through 3Q18), up from 2% in the prior calendar year period and 3% in the year before that one. Importantly, it's worth noting that Amazon recognizes both stock-based compensation expense and depreciation on an accelerated basis (unique among stocks we cover).

Consider that depreciation alone (including amortization of property and equipment acquired under capital leases, but excluding other amortization related to internal software development and capitalized content costs) amounted to $3.0bn in Amazon's North America segment during 2017. For reference, Walmart had $3.7bn of combined depreciation and amortization for its US segment during the most similar period (ending Jan. 31, 2018). The impact of adding back whatever the depreciation is by itself is relatively pronounced on Amazon's margins considering that Walmart's revenue base was three times larger than Amazon's. While we don't have allocations of stock-based compensation expense to geographic territories post 1Q16, if we assumed that 2015 levels of stock-based compensation for North America as a percentage of revenue held up in 2017, Amazon would have recognized around $2.2bn in stock-based comp in the region. By contrast, across all of Walmart's divisions, only $626mm in stock-based compensation was recognized during the comparable period. Adding these non-cash costs back to operating income allows us to calculate a 7.0% figure for Wal-Mart's US region (vs. a 5.6% as-reported operating income margin) and 8.2% for Amazon's North America region (rather than a 2.7% as-reported operating income margin). We think similar trends are at play internationally, with reported margins depressed by the company's accounting choices.

More generally, we think that Amazon will want to cap its retail profit margins in order to sustain its competitive advantages and encourage more top-line growth. The company can theoretically squeeze its suppliers, but if Amazon is too aggressive, manufacturers may alter their preferred mixes of first-party and third-party online and offline retail channels and partners, and may more aggressively invest in business models which encourage direct-to-consumer initiatives along the way. Critically, prices need to remain relatively low in order for consumers to continue to prioritize buying from Amazon vs. competitors. Further, Amazon will want to continually invest in physical / retail stores and will either choose or be forced to increase spending on labor and other social goods given the company's size and de facto social responsibilities. Higher costs from these sources will be at least partially offset by growth in revenues from higher margin activities such as advertising (with very high margins for O&O ad sales and lower, if still relatively-high margins for advertising on its ad network), the third-party marketplace and an expanded focus on private label brands.

Put together, we would expect that Amazon's non-AWS revenues will be able to hold up with higher-than-industry average levels, with ongoing improvements as the aforementioned margin-enhancing activities (advertising, the third-party marketplace, private label goods, etc.) account for a growing share of the company's revenue base. Our model assumes long-term as-reported operating income margins of 5%, up vs. the nearly 3% level we expect the company to produce during calendar 2018.

From benchmarking AWS against its peers, we are comfortable assuming mid-30s operating income margins for this segment. As AWS competes in relative isolation from the rest of the company, we think that the business can be compared to margins we see in similar businesses within the software world. For reference, during the last three fiscal years Microsoft's Intelligent Cloud segment (which houses the Azure business which most directly competes with AWS) has had GAAP operating income margins ranging between 33% and 37%. As another example, Oracle's margins have held relatively steady at 34% during the same time-frame. Adobe's has ranged lower, but is on an upswing rising from 26% in 2016 to 31% last year and we forecast it to be on pace towards a high-30s range over the next few years. Salesforce.com is lower, sitting in the mid-single digits on a GAAP basis, but will inevitably trend to a substantially higher level as the company matures (specifically, the company anticipates an estimated 35% margin for its business at maturity). On this basis, we assume a mid-30s margin level at maturity for AWS, up from 2017's 25% level and the 28% we expect for 2018.

Taxes are low, but also likely face pressures over time. We assume a 25% rate in the long-run for Amazon as we do for most of the companies in our coverage universe, despite significantly lower levels at present. We expect taxes to generally rise for Amazon, as we do for all companies under our coverage over the very long-term. For the foreseeable future we expect taxes to be reduced in large part because of the current treatment of stock-based compensation (which probably reduces the company's tax bill by around $1.5bn in 2018). At the same time, as evidenced by the company's recent HQ2 contest, the company may very well be able to play off various governments against each other to realize further savings that extend into the far-off future. Nonetheless, we assume that over time taxes converge to a 25% level for Amazon.

VALUATION CONSIDERATIONS

The DCF we use to drive our valuation for Amazon attempts to calculate the company's long-term cash-producing capacity by beginning with unadjusted net income and adding back non-cash costs such as depreciation and amortization, stock-based compensation, and some near-term adjustments for working capital. We deduct capital for acquisitions and capital expenditures as reported, but also eliminate principal repayments of capital and finance leases (given the company's reliance on capital leases to fund a large share of its capex) in a manner which essentially offsets the D&A add-back.

Our approach to determining Amazon's cost of capital is identical to the approach we use for other companies under our coverage, with one cost of capital for the near-term (through 2023) and a separate higher cost for periods beyond 2023. We also use a variable to capture the relative desirability or lack of desirability of a given sector or company (implicitly reflecting amplified or depressed flows of funds into a given stock). We are currently using costs of capital of 11.4% for the long-run (8.3% in the short-term) that are identical to those we use for Google, Salesforce, Adobe and Twitter, but lower than what we use for Facebook. Our long-term revenue growth variable is +7.0%, which is similar to Adobe, slower than Salesforce and faster than Google and Facebook.

RISK FACTORS

We see the following among Amazon's key risks:

- **Regulation**: The size of Amazon's retail business has a meaningful impact on consumers, its competitors and the societies in which they operate. To the extent that governments determine that they must cause Amazon to behave differently, they could constrain the company's growth opportunities or cause it to incur additional costs.

- **Competition**: Competition is pervasive for Amazon, and so far in its history Amazon has navigated through that competition in an incredibly successful manner. However, there are limited barriers to entry in selling goods or otherwise replicating individual aspects of Amazon's business. Over time, efforts by manufacturers or other retailers to compete differently or otherwise alter the terms under which they work together could have a negative effect on Amazon.

- **General Economic Trends**: In comparison with its status during the last recession, e-commerce is now a much more mature business and Amazon a much large player. During the 2008-09 period, the company was a tenth of its present size and e-commerce a relative blip of total retail spending. Consequently, we could envision that a downturn in the overall economy might impact Amazon (and e-commerce more generally) in a more meaningful way if one occurred at this point in time.

Amazon Income Statement

Amazon Income Statement In $mm Except Per Share Data	FY15A	FY16A	FY17A	1Q18A	2Q18A	3Q18A	4Q18E	FY18E	1Q19E
Sales By Segment									
Online Stores	76,863.0	91,432.0	108,355.0	26,939.0	27,165.0	29,061.0	38,921.3	122,086.3	29,902.3
• Growth	------	------	18.5%	18.0%	14.4%	10.1%	10.0%	12.7%	11.0%
Physical Stores	0.0	0.0	5,798.0	4,263.0	4,312.0	4,248.0	4,748.1	17,571.1	4,476.2
• Growth	------	------	------	------	------	232.9%	5.0%	203.1%	5.0%
Third-Party Seller Services	16,086.0	22,992.0	31,880.0	9,265.0	9,702.0	10,395.0	13,153.8	42,515.8	12,044.5
• Growth	------	------	38.7%	43.9%	38.8%	31.1%	25.0%	33.4%	30.0%
Subscription Services	4,467.0	6,393.0	9,722.0	3,102.0	3,408.0	3,698.0	4,289.0	14,497.0	4,342.8
• Growth	------	------	52.1%	60.0%	57.4%	51.5%	35.0%	49.1%	40.0%
Retail and Subscription	97,416.0	120,817.0	155,755.0	43,569.0	44,587.0	47,402.0	61,112.1	196,670.1	50,765.7
• Growth	------	24.0%	28.9%	39.6%	35.5%	24.6%	14.0%	26.3%	16.5%
AWS	7,880.0	12,219.0	17,458.0	5,442.0	6,105.0	6,679.0	7,413.9	25,639.9	7,618.8
• Growth	69.7%	55.1%	42.9%	48.6%	48.9%	45.7%	45.0%	46.9%	40.0%
Other	1,710.0	2,951.0	4,653.0	2,031.0	2,194.0	2,495.0	3,827.6	10,547.6	2,789.2
• Growth	------	------	57.7%	138.9%	132.2%	122.2%	120.6%	126.7%	37.3%
Total Sales	**107,006.0**	**135,987.0**	**177,866.0**	**51,042.0**	**52,886.0**	**56,576.0**	**72,353.6**	**232,857.6**	**61,173.7**
• Growth	------	27.1%	30.8%	42.9%	39.3%	29.3%	19.7%	30.9%	19.8%
Total Operating Expenses	**(104,773.0)**	**(131,801.0)**	**(173,760.0)**	**(49,115.0)**	**(49,903.0)**	**(52,852.0)**	**(67,680.1)**	**(219,550.1)**	**(58,384.7)**
• Non-Stock-Based Expense	(102,654.0)	(128,826.0)	(169,545.0)	(47,932.0)	(48,435.0)	(51,502.0)	(66,205.1)	(214,074.1)	(56,965.1)
• Stock-Based Compensation	(2,119.0)	(2,975.0)	(4,215.0)	(1,183.0)	(1,468.0)	(1,350.0)	(1,475.0)	(5,476.0)	(1,419.6)
- Growth	41.5%	40.4%	41.7%	49.4%	26.8%	24.4%	25.0%	29.9%	20.0%
Operating Income									
Ex-AWS	725.0	1,077.0	(224.0)	527.0	1,341.0	1,647.0	2,597.6	6,112.6	752.8
• Operating Income Margin	0.7%	0.9%	-0.1%	1.2%	2.9%	3.3%	4.0%	2.9%	1.4%
AWS	1,508.0	3,109.0	4,331.0	1,400.0	1,642.0	2,077.0	2,075.9	7,194.9	2,036.2
• Operating Income Margin	19.1%	25.4%	24.8%	25.7%	26.9%	31.1%	28.0%	28.1%	26.7%
Total Operating Income	**2,233.0**	**4,186.0**	**4,107.0**	**1,927.0**	**2,983.0**	**3,724.0**	**4,673.5**	**13,307.5**	**2,789.0**
• Operating Income Margin	2.1%	3.1%	2.3%	3.8%	5.6%	6.6%	6.5%	5.7%	4.6%
• Operating Income Ex-Stock-Based Compensation	4,352.0	7,161.0	8,322.0	3,110.0	4,451.0	5,074.0	6,148.5	18,783.5	4,208.6
- Adjusted Operating Income Margin	4.1%	5.3%	4.7%	6.1%	8.4%	9.0%	8.5%	8.1%	6.9%
Non-Operating Income (Expense)									
Interest Income	50.0	100.0	202.0	80.0	94.0	117.0	100.0	391.0	100.0
Interest Expense	(459.0)	(484.0)	(848.0)	(330.0)	(343.0)	(358.0)	(350.0)	(1,381.0)	(350.0)
Other Income (Expense), net	(256.0)	90.0	346.0	239.0	(129.0)	(93.0)	0.0	17.0	0.0
Total Non-Operating Income (Expense)	**(665.0)**	**(294.0)**	**(300.0)**	**(11.0)**	**(378.0)**	**(334.0)**	**(250.0)**	**(973.0)**	**(250.0)**
Income Before Income Taxes	**1,568.0**	**3,892.0**	**3,807.0**	**1,916.0**	**2,605.0**	**3,390.0**	**4,423.5**	**12,334.5**	**2,539.0**
Provision for Income Taxes	**(950.0)**	**(1,425.0)**	**(769.0)**	**(287.0)**	**(74.0)**	**(508.0)**	**(973.2)**	**(1,842.2)**	**(380.9)**
• Effective Tax Rate	60.6%	36.6%	20.2%	15.0%	2.8%	15.0%	22.0%	14.9%	15.0%
Equity-Method Investment Activity, Net of Tax / Ch	**(22.0)**	**(96.0)**	**(4.0)**	**0.0**	**3.0**	**1.0**	**0.0**	**4.0**	**0.0**
Net Income	**596.0**	**2,371.0**	**3,034.0**	**1,629.0**	**2,534.0**	**2,883.0**	**3,450.3**	**10,496.3**	**2,158.2**
Basic Earnings Per Share	1.28	5.00	6.32	3.36	5.21	5.91	7.05	21.56	4.40
Diluted Earnings Per Share	1.25	4.90	6.15	3.27	5.07	5.75	6.87	20.98	4.28
Weighted Average Shares									
Basic	467.0	474.0	480.0	484.0	486.0	488.0	489.5	486.9	491.0
Diluted	477.0	484.0	493.0	498.0	500.0	501.0	502.5	500.4	504.0

Amazon Income Statement In $mm Except Per Share Data	2Q19E	3Q19E	4Q19E	FY19E	1Q20E	2Q20E	3Q20E	4Q20E	FY20E	FY21E	FY22E	FY23E
Sales By Segment												
Online Stores	30,153.2	32,257.7	43,202.6	135,515.8	32,892.5	33,168.5	35,483.5	47,522.9	149,067.4	162,483.4	175,482.1	187,765.9
• Growth	11.0%	11.0%	11.0%	11.0%	10.0%	10.0%	10.0%	10.0%	10.0%	9.0%	8.0%	7.0%
Physical Stores	4,527.6	4,460.4	4,985.5	18,449.7	4,655.2	4,708.7	4,638.8	5,184.9	19,187.6	19,763.3	20,257.4	20,763.8
• Growth	5.0%	5.0%	5.0%	5.0%	4.0%	4.0%	4.0%	4.0%	4.0%	3.0%	2.5%	2.5%
Third-Party Seller Services	12,612.6	13,513.5	17,099.9	55,270.5	15,356.7	16,081.1	17,229.7	21,802.3	70,469.9	88,087.3	107,907.0	129,488.4
• Growth	30.0%	30.0%	30.0%	30.0%	27.5%	27.5%	27.5%	27.5%	27.5%	25.0%	22.5%	20.0%
Subscription Services	4,771.2	5,177.2	6,004.5	20,295.7	5,862.8	6,441.1	6,989.2	8,106.1	27,399.2	35,619.0	44,523.8	53,428.5
• Growth	40.0%	40.0%	40.0%	40.0%	35.0%	35.0%	35.0%	35.0%	35.0%	30.0%	25.0%	20.0%
Retail and Subscription	52,064.6	55,408.8	71,292.6	229,531.7	58,767.2	60,399.4	64,341.2	82,616.3	266,124.1	305,953.0	348,170.2	391,446.5
• Growth	16.8%	16.9%	16.7%	16.7%	15.8%	16.0%	16.1%	15.9%	15.9%	15.0%	13.8%	12.4%
AWS	8,547.0	9,350.6	10,379.4	35,895.8	10,285.4	11,538.5	12,623.3	14,012.2	48,459.3	62,997.1	78,746.4	94,495.7
• Growth	40.0%	40.0%	40.0%	40.0%	35.0%	35.0%	35.0%	35.0%	35.0%	30.0%	25.0%	20.0%
Other	3,006.6	3,402.8	5,224.1	14,422.6	3,825.1	4,115.7	4,638.9	7,125.6	19,705.3	25,956.3	32,497.1	38,226.6
• Growth	37.0%	36.4%	36.5%	36.7%	37.1%	36.9%	36.3%	36.4%	36.6%	31.7%	25.2%	17.6%
Total Sales	**63,618.2**	**68,162.2**	**86,896.1**	**279,850.1**	**72,877.7**	**76,053.5**	**81,603.5**	**103,754.0**	**334,288.7**	**394,906.4**	**459,413.7**	**524,168.7**
• Growth	20.3%	20.5%	20.1%	20.2%	19.1%	19.5%	19.7%	19.4%	19.5%	18.1%	16.3%	14.1%
Total Operating Expenses	**(59,517.6)**	**(63,072.6)**	**(80,634.1)**	**(261,608.9)**	**(68,969.1)**	**(70,524.4)**	**(74,778.4)**	**(95,484.0)**	**(309,755.8)**	**(361,156.0)**	**(415,509.9)**	**(469,611.6)**
• Non-Stock-Based Expense	(57,756.0)	(61,452.6)	(78,864.1)	(255,037.7)	(67,336.5)	(68,498.5)	(72,915.4)	(93,448.5)	(302,199.0)	(352,654.5)	(406,158.3)	(459,324.8)
• Stock-Based Compensation	(1,761.6)	(1,620.0)	(1,770.0)	(6,571.2)	(1,632.5)	(2,025.8)	(1,863.0)	(2,035.5)	(7,556.9)	(8,501.5)	(9,351.6)	(10,286.8)
- Growth	20.0%	20.0%	20.0%	20.0%	15.0%	15.0%	15.0%	15.0%	15.0%	12.5%	10.0%	10.0%
Operating Income												
Ex-AWS	1,716.3	2,088.3	3,252.0	7,809.4	1,036.3	2,171.9	2,621.8	4,038.4	9,868.5	13,276.4	17,130.0	21,483.7
• Operating Income Margin	3.1%	3.6%	4.3%	3.2%	1.7%	3.4%	3.8%	4.5%	3.5%	4.0%	4.5%	5.0%
AWS	2,384.3	3,001.3	3,010.0	10,431.8	2,872.3	3,357.2	4,203.2	4,231.7	14,664.4	20,474.1	26,773.8	33,073.5
• Operating Income Margin	27.9%	32.1%	29.0%	29.1%	27.9%	29.1%	33.3%	30.2%	30.3%	32.5%	34.0%	35.0%
Total Operating Income	**4,100.6**	**5,089.6**	**6,262.0**	**18,241.2**	**3,908.6**	**5,529.2**	**6,825.0**	**8,270.1**	**24,532.9**	**33,750.4**	**43,903.8**	**54,557.1**
• Operating Income Margin	6.4%	7.5%	7.2%	6.5%	5.4%	7.3%	8.4%	8.0%	7.3%	8.5%	9.6%	10.4%
• Operating Income Ex-Stock-Based Compensation	5,862.2	6,709.6	8,032.0	24,812.4	5,541.2	7,555.0	8,688.0	10,305.6	32,089.8	42,251.9	53,255.4	64,843.9
- Adjusted Operating Income Margin	9.2%	9.8%	9.2%	8.9%	7.6%	9.9%	10.6%	9.9%	9.6%	10.7%	11.6%	12.4%
Non-Operating Income (Expense)												
Interest Income	100.0	100.0	100.0	400.0	100.0	100.0	100.0	100.0	400.0	400.0	400.0	400.0
Interest Expense	(350.0)	(350.0)	(350.0)	(1,400.0)	(350.0)	(350.0)	(350.0)	(350.0)	(1,400.0)	(1,400.0)	(1,400.0)	(1,400.0)
Other Income (Expense), net	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Non-Operating Income (Expense)	**(250.0)**	**(250.0)**	**(250.0)**	**(1,000.0)**	**(250.0)**	**(250.0)**	**(250.0)**	**(250.0)**	**(1,000.0)**	**(1,000.0)**	**(1,000.0)**	**(1,000.0)**
Income Before Income Taxes	**3,850.6**	**4,839.6**	**6,012.0**	**17,241.2**	**3,658.6**	**5,279.2**	**6,575.0**	**8,020.1**	**23,532.9**	**32,750.4**	**42,903.8**	**53,557.1**
Provision for Income Taxes	**(577.6)**	**(725.9)**	**(901.8)**	**(2,586.2)**	**(640.3)**	**(923.9)**	**(1,150.6)**	**(1,403.5)**	**(4,118.3)**	**(6,550.1)**	**(9,653.4)**	**(13,389.3)**
• Effective Tax Rate	15.0%	15.0%	15.0%	15.0%	17.5%	17.5%	17.5%	17.5%	17.5%	20.0%	22.5%	25.0%
Equity-Method Investment Activity, Net of Tax / Ch	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Net Income	**3,273.0**	**4,113.6**	**5,110.2**	**14,655.0**	**3,018.4**	**4,355.3**	**5,424.4**	**6,616.5**	**19,414.6**	**26,200.3**	**33,250.4**	**40,167.9**
Basic Earnings Per Share	6.65	8.33	10.31	29.71	6.09	8.76	10.88	13.23	39.00	52.40	66.50	80.34
Diluted Earnings Per Share	6.47	8.11	10.05	28.95	5.94	8.57	10.67	13.01	38.18	51.52	65.39	78.99
Weighted Average Shares												
Basic	492.5	494.0	495.5	493.3	495.5	497.0	498.5	500.0	497.8	500.0	500.0	500.0
Diluted	505.5	507.0	508.5	506.3	508.5	508.5	508.5	508.5	508.5	508.5	508.5	508.5

Source: Pivotal Research, Company Reports

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Amazon Discounted Cashflow Model

Amazon Discounted Cash Flow Model **In $mm Except Per Share Data**	**FY19E**	**FY20E**	**FY21E**	**FY22E**	**FY23E**
Net Income	14,655.0	19,414.6	26,200.3	33,250.4	40,167.9
D&A	19,533.0	23,927.9	28,713.5	33,738.4	38,799.1
Stock-Based Compensation	6,499.2	7,799.0	9,358.8	11,230.6	13,476.7
Changes in Working Capital (Operating Assets and Liabilities	500.0	750.0	1,000.0	1,250.0	1,500.0
Principal Repayments of Capital and Finance Leases	(9,855.2)	(11,333.5)	(12,750.2)	(14,025.2)	(15,427.8)
Capital Expenditures and Acquisitions	(15,079.8)	(17,366.7)	(19,143.4)	(21,087.7)	(23,216.5)
Changes in Debt, Capital or Finance Leases	0.0	0.0	0.0	0.0	0.0
Stock Issuance / Repurchases	0.0	0.0	0.0	0.0	0.0
Foreign Exchange Impact	0.0	0.0	0.0	0.0	0.0
Other Changes in Cash Balances	0.0	0.0	0.0	0.0	0.0
Changes In Cash Flows	16,252.2	23,191.3	33,379.1	44,356.5	55,299.5
Interest Expense		1,400.0	1,400.0	1,400.0	1,400.0
Less: Tax Adjustment		(245.0)	(280.0)	(315.0)	(350.0)
• Assumed Tax Rate		17.5%	20.0%	22.5%	25.0%
Unlevered Changes in Cash Flows		24,346.3	34,499.1	45,441.5	56,349.5
Sum of Future Cash Flows	128,629.7				
NPV of Terminal Value	809,429.2				
Value of Future Cash Flows	938,058.9				
Plus: Cash	62,216.6				
Less: Debt	(24,684.0)				
2019E Common Equity Value	975,591.5				
Shares Outstanding 2019E	508.5				
Equity Value	1,920.00				
Current Equity Value	1,539.13				
2019E Equity Value Premium Vs. Current Price	24.7%				

KEY ASSUMPTIONS	
Near-Term Discount Rate	*8.3%*
Long-Term Growth Rate	*7.0%*
Long-Term Discount Rate	*11.4%*

Source: Pivotal Research, Company Reports

Appendix: Important Disclosures

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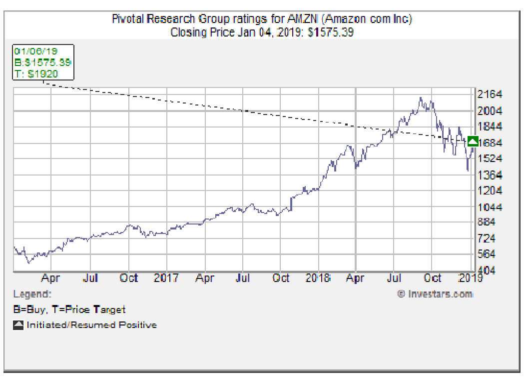
Price Chart and Target Price History



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