

AMAZON

RETAIL – APPAREL & SPECIALTY

STUDENT: PIETRO SEMPRINI

COMPANY REPORT

JANUARY 2017

24799@novasbe.pt

Profit margin expansion

Growing AWS, International and Prime Membership sales

- **Amazon is reaching a level of scale, efficiency, and gross profit dollars that it can continue to invest aggressively** in the business while also delivering material profits. Gross margin estimate is 36%. The margin expansion is primarily driven by strong Amazon Web Services (AWS) growth, as well as international sales.
- **AWS services will continue to exhibit strong growth in 2017**, increasing 42% y/y to reach revenue of \$ 20 Billion. Customer reach remains very broad with a large number of private companies such as Airbnb and enterprises like GE all using AWS. We believe public cloud adoption among is still in its early stages and will continue to be a top-of-mind choice for start-ups, enterprises and the Public Sector.
- **Amazon Media, Electronics and Other General Merchandise revenue will grow 22%**, led by International segment at 32% and total unit volume growth at 20%.
- Target price is **\$ 950.00** and the recommendation is to **Buy**.

Company description

Amazon is the highest-grossing online retailers in the world, in 2015 it had \$107 billion in net sales and \$205 billion in gross merchandise volume. The 21 percent of the sales were represented by media products, while the 71 percent corresponded to electronics and other general merchandise. Amazon Web Services (advertising and cobranded credit cards) amount was 7.9 billion in 2015 which represented the 8 percent of net sales. Amazon operates in the United States, Canada, United Kingdom, Italy, France, Germany, Japan, China, Spain, Mexico, Brazil, India, Australia and the Netherlands. The 33 percent of Net Sales corresponded to the international segment.

Recommendation:	BUY
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Price Target FY17:	950.00 \$
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Price (as of 4-Jan-17)	757.18 \$
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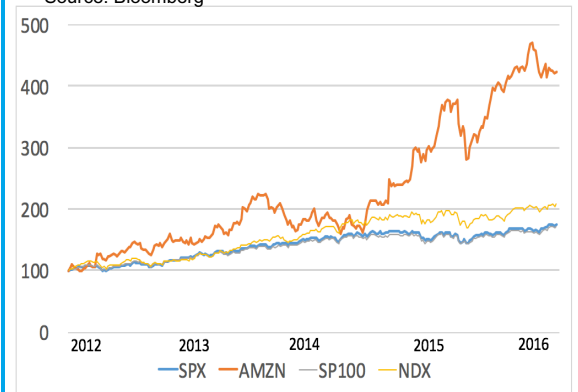
Reuters: AMZN.OQ, Bloomberg: AMZN US Equity

52-week range (€)	474.00-847.21
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Market Cap (€m)	359.787
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Outstanding Shares (m)	475.167
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Source: Bloomberg



Source: Bloomberg

(Values in € millions)	2015	2016E	2017E
Revenues	107,007	137,464	167,882
Rev. growth	20.2%	28.4%	22.1%
EBITDA	8,514	12,244	15,507
Net Income	596	2854	4,995
EPS	1.25	6.01	10.52
P/E	540.7	125.4	91.54
FCFF/Sales	4.4%	5.7%	5.4%
EV/EBITDA	36.7	36.9	29.1
Gross margin	33.0%	35.0%	36.0%
Operating margin	2.1%	4.0%	5.0%

Source: Company Data, Analyst Estimates

THIS REPORT WAS PREPARED BY PIETRO SEMPRINI, A MASTERS IN FINANCE STUDENT OF THE NOVA SCHOOL OF BUSINESS AND ECONOMICS, EXCLUSIVELY FOR ACADEMIC PURPOSES. THIS REPORT WAS SUPERVISED BY ROSÁRIO ANDRÉ WHO REVIEWED THE VALUATION METHODOLOGY AND THE FINANCIAL MODEL. (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

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Company overview

Amazon.com, or simply called Amazon, is an American electronic commerce and cloud computing company, headquartered in Seattle, Washington founded by Jeff Bezos in July 5, 1994. The company is traded in the Nasdaq Global Select Market under the symbol "AMZN" since May 1997 and is member of the NASDAQ-100, S&P 100 and S&P 500.

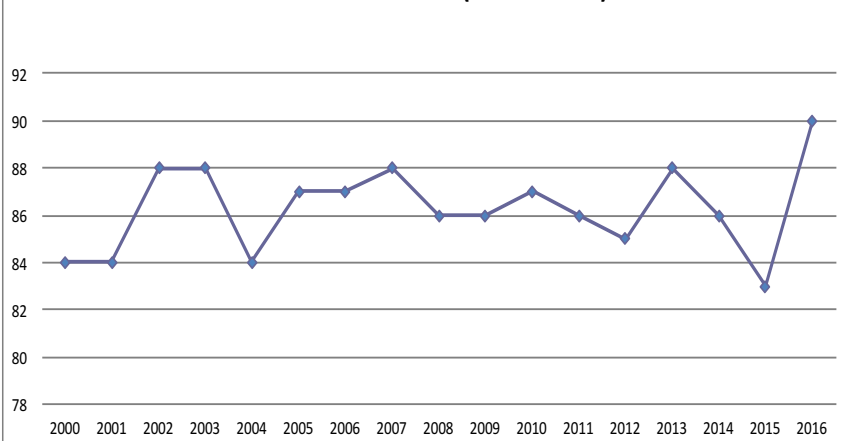
Starting as virtual bookstore in 1995, Amazon has from then expanded into a wide range of product categories including consumer media, electronics, shoes and apparel, digital downloads, home and garden, health and beauty kids and baby, in addition to auto and industrial. As well as enlarge its online retail business in relation to additional categories, Amazon also extended its range of products and services to serve, in addition to consumers, sellers, content creators and enterprises.

Concerning consumer products, Amazon manufactures electronic devices as the Fire tablets, TVs, Echo, Fire phones and the so called Kindle e-readers. Moreover, Amazon offers an annual membership program, called Amazon Prime, which includes free 1-2 days shipping, streaming of TV episodes and movies, as well as borrowing e-books for Kindle devices.

The company focuses on a wide selection, lowest prices, customer reviews, detailed product information, personalized recommendations, secure payment mechanisms, customer wish lists, content preview of many books, user friendly functionality, fast and trustworthy fulfillment (as 1-2 day delivery), and punctual customer

service (as free returns). Through the offer of an outstanding consumer experience, Amazon was ranked #1 in Customer Satisfaction for the 10th consecutive year, as shown in Exhibit 1 it scored 90 ACSI (American Customer Satisfaction Index) points out of 100 while the average score in the sector had a score of 80 (EBay 82, Best Buy 80, Walmart 72).

Exhibit 1 – U.S. customer satisfaction with Amazon.com from 2000 to 2016 (index score)



Source: Statista.com

On top of that, the company through its merchant and market place programs allows third-party sellers to offer their products on the Amazon's retail websites or on their own websites, and to fulfill orders through company's fulfillment service. Furthermore, Amazon works for enterprises through Amazon Web Services (AWS), which offers a variety of database, cloud computing and analytics services tailored for any type of business.

Finally, Amazon offers its services to independent authors, publishers, filmmakers, musicians or app developers through programs that allow them to publish and sell content.

Amazon is one of the main responsible of the structural shift away from physical retail, and it will probably attract many other retailers in the years to come.

Amazon does not have costs that continuously affect physical stores, in fact it benefits from that, and as a result it has higher gross margin as shown in Exhibit 2.

Exhibit 2 – Online distribution vs Physical distribution (in millions)

		2012	2013	2014	2015	Average per company	average per distribution type	
online distribution	Amazon	Sales	61 093	77 561	88 988	107 007	22% 27%	Average revenue growth 30%
		Growth	27,1%	27,0%	14,7%	20,2%		
		Gross margin	24,8%	27,2%	29,5%	33,0%		
	Ebay	Sales	7 371	8 257	8 790	8 592	7% 67%	Average gross margin 56%
		Growth	11,5%	12,0%	6,5%	-2,3%		
		Gross margin	69,4%	35,7%	81,0%	78,8%		
	Alibaba	Sales	2 902	5 002	7 609	11 044	59% 73%	Average revenue growth 3%
		Growth	68,2%	72,4%	52,1%	45,1%		
		Gross margin		77,8%	71,3%	68,7%		
physical distribution	Walmart	Sales	443 420	465 600	473 008	482 230	4% 25%	Average revenue growth 3%
		Growth	6,0%	5,0%	1,6%	1,9%		
		Gross margin	24,6%	24,6%	24,6%	24,8%		
	Tesco	Sales	86 442	86 836	76 268	74 741	-2% 5%	Average gross margin 14%
		Growth	7,0%	0,5%	-12,2%	-2,0%		
		Gross margin	21,7%	19,5%	14,6%	-35,8%		
	Costco	Sales	99 140	105 016	112 640	116 200	8% 13%	
		Growth	13,9%	5,9%	7,3%	3,2%		
		Gross margin	12,6%	12,8%	13,0%	13,2%		

Sources: Companies data, ycharts.com, Analyst estimates.

Despite Amazon is facing more and more competition from other online retailers such as JD.com, Alibaba, Walmart, Ebay and Best Buy, I think that it will keep its customer value proposition and will continue to be the leader in online sales (Exhibit 3).



Amazon, with its 300 million global active users, owns one of the most relevant economic moats in the consumer sector.

Furthermore, with its recent fulfillment infrastructure, technology and content investments, Amazon is destined to represent one of the main global player in retail, enterprise software and digital media.

Exhibit 4 – Amazon’s Profitability

	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20	Dec-21	Average 2017-2021
Gross margin	35,04%	36,04%	37,04%	38,04%	39,04%	40,04%	38,04%
Operating margin	4,05%	5,05%	6,05%	7,05%	8,05%	9,05%	7,05%

Sources: Company data and analyst estimates

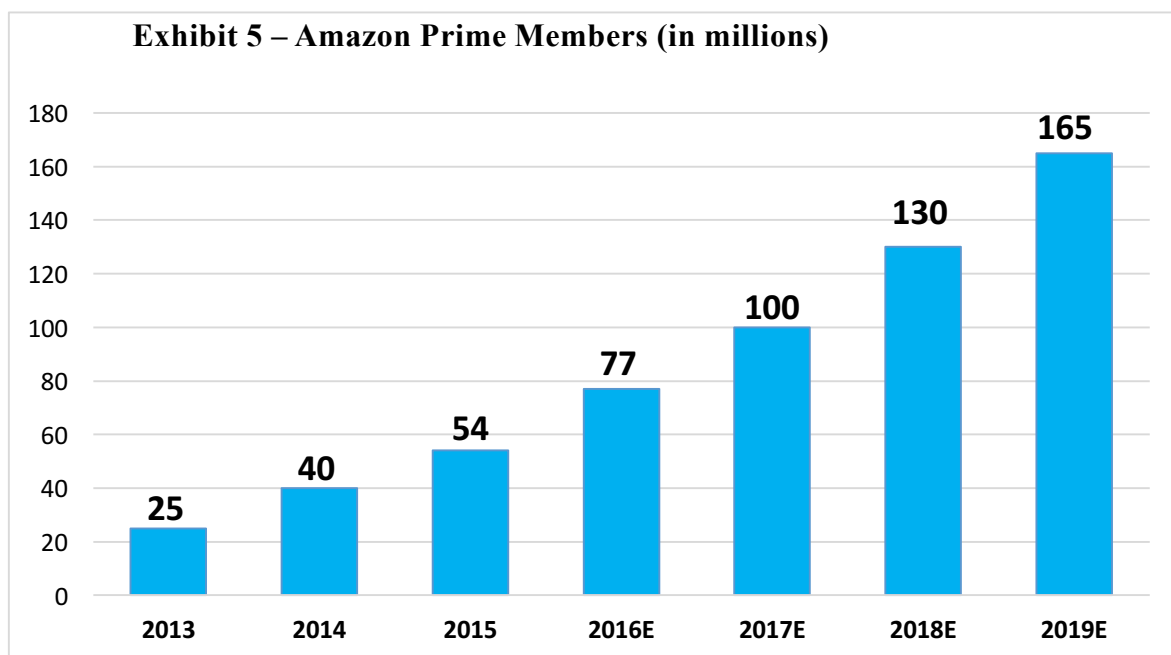
Total physical and digital units sold, and third-party units sold represent the line metrics of

Amazon’s profitability and will be able to generate 38% average gross margin¹ in the next five years (Exhibit 4). The operating margin² of Amazon (2.1% in 2015) is more difficult to predict than its growth since it is starting a new investment cycle, such as Amazon Fresh, international fulfillment infrastructure and content deals, tablets and other hardware and with the new technologies new delivery ability.

¹ Gross margin is the difference between revenue and cost of goods sold, divided by revenue, expressed as a percentage.

² Operating margin is the ratio of operating income divided by net sales, usually presented in percent.

I think that Amazon it will be able to obtain within 2021 an operating margin of 9% (Exhibit 4) that will be founded on the increases of prime memberships (Exhibit 5) which will generate approximately a revenue of \$16.5 billion (\$100 per user) and the pushing sales of Amazon Web Services that will amount to \$44.605 billion (Exhibit 6), improvement of fulfilment center, third-party sales, and the starting of incremental growth in profit generated by the international segment.



Source: Statista.com

Exhibit 6 – AWS Sales (in millions)

	2015	E 2016	E 2017	E 2018	E 2019	E 2020	E 2021
Total Sales	107 007	137 444	167 882	198 319	228 757	259 195	289 632
AWS Sales	8 901	14 158	20 079	26 745	33 995	41 345	49 379
AWS as % of Sales	8%	10%	12%	14%	14%	15%	15%
AWS Sales Growth	13%	59%	42%	33%	27%	22%	19%

Sources: Company data and Analyst estimates

Comparable Company Analysis (Exhibit 7)

Amazon has the highest valuation among its competitors in the online retail sector, company's EV/EBITDA ratio is more than double compare to the average competitor firm which is explained by the expectations regarding its revenue growth.

Amazon's profitability is not directly comparable to that of Alibaba and eBay; in fact the two companies operate as marketplaces, differently from Amazon which owns part of the items that sells on its websites, they do not own any inventory and only act as an intermediary between buyers and third-party sellers.

Although Amazon is also operating as marketplace its varied business model displays lower profitability, given the degree to which Amazon competes on price. In addition, the company is undertaking various investments in several growth strategies (such as Prime, content and cloud services), and hence its margins cannot be directly compared to those of eBay and Alibaba.

Exhibit 7 – Comparable Company Analysis

Growth Analysis				Valuation Analysis			
Company/Ticker	Revenue Growth %			Company/Ticker	EV/EBITDA		
	2015	2016(E)	2017(E)		2015	2016(E)	2017(E)
Alibaba Group Holding Ltd / BABA USA	45.1	32.7	54.3	Alibaba Group Holding Ltd / BABA USA	30.0	22.9	22.8
Wall-Mart Stores Inc / WMT USA	2.0	-0,7	-0,1	Wall-Mart Stores Inc / WMT USA	8.9	7.6	8.4
JD.com / JD USA	57,6	38,6	35,6	JD.com / JD USA	NM	NM	101.2
eBay Inc / EBAY USA	-2,3	3.3	4.1	eBay Inc / EBAY USA	10.3	11.6	11.0
Best Buy Co Inc / BBY USA	-0,7	-2	-0,7	Best Buy Co Inc / BBY USA	5.0	3.3	5.1
Average	20.3	14.4	18.6	Average	13.6	11.4	29.7
Amazon.com Inc/ AMZN US	20.2	28.4	22.1	Amazon.com Inc/ AMZN US	36.7	36.9	29.1

Profitability Analysis									
Company/Ticker	Gross margin %			Operating margin %			Net margin %		
	2015	2016(E)	2017(E)	2015	2016(E)	2017(E)	2015	2016(E)	2017(E)
Alibaba Group Holding Ltd / BABA USA	68.7	66.0	64.0	30.6	29.2	28.1	45.8	42.4	33.3
Wall-Mart Stores Inc / WMT USA	24.8	25.1	25.0	5.6	5.0	4.6	3.4	3.1	2.7
JD.com / JD USA	13.4	15.4	16.1	-2,1	-1	-0,3	-1,9	-0,7	-0,2
eBay Inc / EBAY USA	79.4	77.9	78.1	25.6	26.7	27.4	26.0	24.4	26.0
Best Buy Co Inc / BBY USA	22.4	23.3	23.9	3.6	4.0	4.2	2.3	2.5	2.4
Average	41.7	41.5	41.4	12.7	12.8	12.8	15.1	14.3	12.8
Amazon.com Inc/ AMZN US	33.0	35.0	36.0	2.1	4.0	5.0	0.6	2.1	3.0

Sources: Companies data, ycharts.com, Analyst estimates.

Shareholder structure

Amazon Market Capitalization amounts to 353,358 (Mil USD) and its ownership is divided into Institutions, Individual/Insiders Public and Other (Exhibit 8).

Exhibit 8

Ownership Summary			
Type	Common Stock Equivalent Held	% of Total Shares Outstanding	Market Value (USD in mm)
Institutions	313,044,712	65.88	232,795.7
Individuals/Insiders	81,344,758	17.12	60,492.0
Public and Other	80,777,057	17.00	60,069.9
Total	475,166,527	100.00	353,357.6

Source: S&P Capital IQ

The overall institution ownership accounts for 65.88 per cent of total shares outstanding and the top 5 Institutions owners are: Capital Research and Management Company, The Vanguard Group, BlackRock, T. Rowe Price Group, Capital World Investors. The overall individual/insiders ownership accounts for 17.12 per cent and the top 5 holders are: Bezos, Jeffrey P. (Founder, Chairman, Chief Executive Officer and President), Piacentini, Diego (Senior Vice President of International Consumer Business), Wilke, Jeffrey A. (Chief Executive Officer of Worldwide Consumer, Jassy, Andrew R (Chief Executive Officer of Amazon Web Services), Blackburn, Jeffrey M. (Senior Vice President of Business Development).

The overall Public and Other ownership accounts for 17 percent.

Even so, Jeff Bezos still holds the majority of both voting rights and shares (Exhibit 9), giving a long-term orientation that traditional public firms often lack, causing Amazon to pursuit long-term over short-term gains.

Exhibit 9

Overall Top Holders			
Holder	Common Stock Equivalent Held	% of Total Shares Outstanding	Market Value (USD in mm)
Bezos, Jeffrey P.	80,902,734	17.03	60,163.3
Capital Research and Management Company	31,152,597	6.56	23,166.6
The Vanguard Group, Inc.	24,585,355	5.17	18,282.9
BlackRock, Inc.	22,156,175	4.66	16,476.4
T. Rowe Price Group, Inc.	21,606,036	4.55	16,067.3

Source: S&P Capital IQ

Management

Amazon’s small board is elected every year; it does not receive cash compensation, avoids insider relationships and has not implemented effect anti-takeover acts.

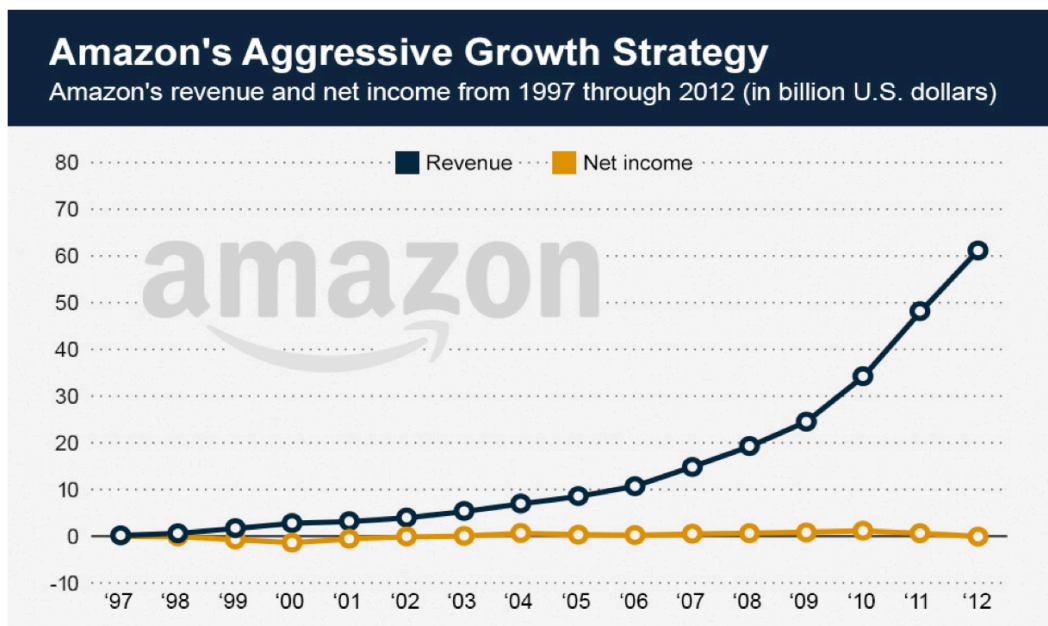
The company invested in developing a valid business model, including an efficient fulfilment infrastructure in North America, an Amazon Web Services capacity and a vast content portfolio.

Chairman and CEO Jeff Bezos owns 17% of the company’s shares, he does not equity compensation or bonus payments, and receives a paltry salary.

Jeff Bezos has always been willing to plough the money back into the company and take risks and make new investments rather than worrying about the current stock price. Adopting this strategy he has created one of the most successful companies in the world, in fact from 1997 until 2012 Amazon’s stock price jumped 234 percent, giving the company a valuation of around \$120 billion.

As shown in Exhibit 10 during those years, Amazon’s sales have tripled to more than \$60 billion a year, while its profits stayed flat as a result of founder’s notorious commitment to long term growth.

Exhibit 10



Source: Amazon.com

Business Model

Revenue

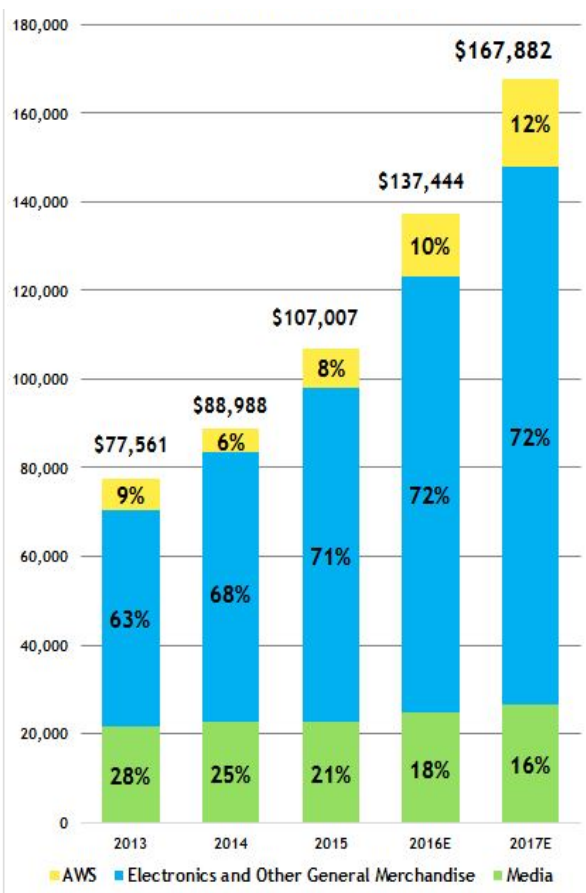
Through Amazon website and mobile application, the company generates revenues supplying its services to four main customers: consumers, sellers, content developers, and enterprises.

Amazon has a complex revenue model since it generates revenues in many different ways:

The company buys items from suppliers and sells them directly through its website with a markup.

Profits are also generated from other retailers, which through Amazon’s platform sell products to buyers. In this case, the company retains a portion of the sales price as commission only when items are sold.

Exhibit 11 – Revenue US \$ (millions)



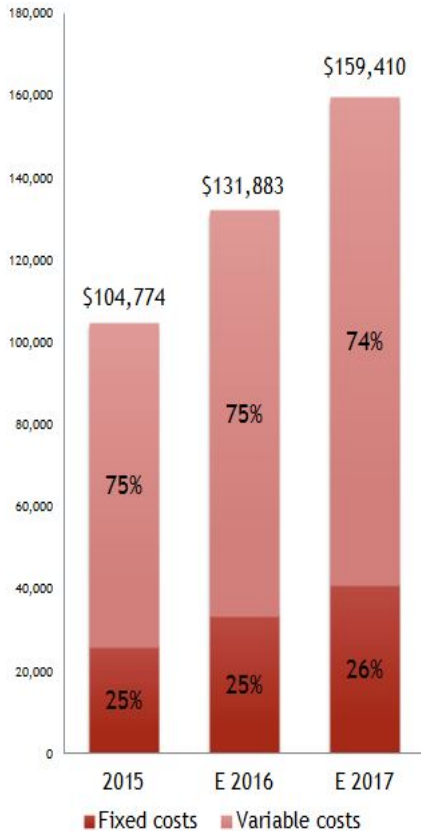
The company also offers a subscription (Amazon Prime). Prime members pay an annual fee of \$100 in order to have one or two-day shipping and have unlimited access to streaming media such as digital movies, music or eBooks. Additionally, Amazon generates its revenue producing and selling electronic merchandise as e-readers, phones, tablets and speakers. Finally, the company offers web services to developers and enterprises with the aim to provide its consumers with an Information technology (IT) department that works for them on demand after an up-front payment. Amazon Web Services (AWS) include 70 different services such as database, storage, artificial intelligence, developer tools, game development, messaging, advertising, business productivity.

As it is shown in Exhibit 11 AWS and Electronics and Other General Merchandise segments will gain weight in Amazon’s revenue, thanks to the increasing reputation of Amazon Web Services and the development of new product categories.

Sources: Company data and analyst estimates

Costs

Exhibit 12 – Costs US \$ (millions)



Sources: Company data and analyst estimates

Fixed costs

Fixed costs usually depend on category and geographic expansion. The main ones are the following:

Technology costs consist mainly in research and development activities. We can include in this kind of fixed costs the payroll (and the related expenses for employees), production, maintenance, operation and platform development for products and services (new or already existing), as well as AWS and other technology infrastructure expenses.

Fulfilment costs can be identified as costs related to international fulfilment centres and tracking system, to pick, packaging and shipment of orders from several platforms depending on the chosen method, customer service and return management.

Content costs are related to payrolls and the related expenses for employees who are involved in category expansion, editorial content and merchandising selection.

In order to minimize the mentioned costs, Amazon should improve process efficiencies.

Variable costs

Variable costs change directly with the volume of sales. Two important variable costs are: Cost of Sales and Marketing Costs.

Cost of sales concerns the purchasing price of consumer products, digital media content (including Prime Video and Prime Music), packaging supplies, shipping costs (including the case when Amazon is also the transportation service provider) and delivery centres with related equipment costs.

Marketing costs are related to several targeted online marketing channels, such as the Amazon Associates Program, the sponsored search, the advertising portal and email marketing campaigns.

In order to reduce these costs Amazon needs to minimize defects in the process and obtain discounts from suppliers.

As it is shown in Exhibit 12 Fixed costs increase more than the variable costs, as the sales grow, because it is expected a geographic expansion

in the near future, which has been also confirmed during December 2016 through the expansion of AWS to Canada and United Kingdom.

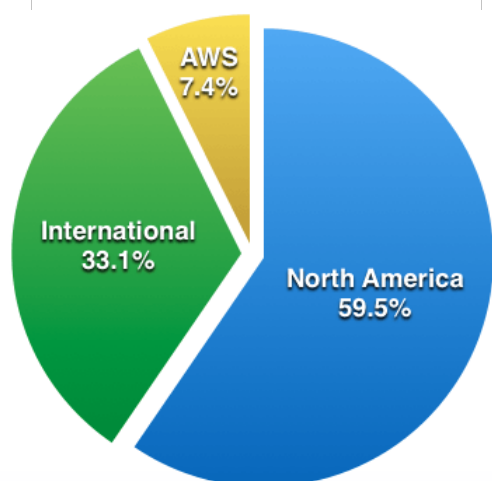
Segments

Amazon business is divided in 3 macro categories (Exhibit 13): North America, International and Amazon Web Services.

The company use a segment approach in order to manage its operations and evaluate its business performances.

Depending on usage, Amazon allocates for each segment the operating expenses incurred. Moreover, there are no internal revenue transactions between the segments.

Exhibit 13 – Amazon Segments Revenue Share 2015



Source: Statista.com

- North America includes: United States and Canada. The North America segment consists mainly of amounts earned by retail sales of consumer products and subscriptions through North America websites. Furthermore, this segment includes export sales from its websites.
- International includes: United Kingdom, Italy, France, Germany, Japan, China, Spain, Mexico, Brazil, India, Australia and Netherlands.

The international segment consists mainly of amounts earned by retail sales of consumer products, and subscriptions from its International websites. Furthermore, this segment includes export sales from its websites.
- Amazon Web Services segment is treated as a “virtual world” and it includes all amounts earned by global on-demand sales.

Valuation

The core of my valuation system is a detailed projection of the company's future cash flows resulting from my research, which has taken into account the company's overall historical average growth and revenue's of each business category weighted for each market segment. Through those calculations I have then applied a different growth rate for each business line, considering previous trends.

I have created custom industry and company assumptions to feed income statement, balance sheet, and capital investment assumptions. Discount Cash flow model is then applied, where the Free Cash Flow (FCF) is discounted at the Weighted Average Cost of Capital (WACC), which represents a measure that captures Amazon business' risk.

To assess the robustness of the target price and how it is affected by changes, I have finally run a sensitivity analysis to the cost of capital and terminal value growth rate.

I believe that the company guarantees a premium valuation based on its broad economic moat, significant line of growth (Exhibit 14), and the potential long-term margin expansion.

Exhibit 14 – Growth rate per category Sales

	2016	2017	2018	2019	2020	2021	Average 2016-2021
Media	9,43%	7,33%	7,12%	6,00%	5,56%	5,00%	6,74%
Electronics and Other General Merchandise	30,50%	23,02%	18,04%	15,00%	13,00%	11,18%	18,46%
AWS	59,06%	41,82%	33,20%	27,11%	21,62%	19,43%	33,71%
Total Consolidated	28,44%	22,15%	18,13%	15,35%	13,31%	11,74%	18,19%

Source: Analyst estimates

The model assumes 16% average annual revenue growth for the next five years; this will be due to secular shift to online shopping, digital content sales, expansion in the international segment (Exhibit 15), and new growing channels as Amazon Web Services.

Exhibit 15 – Growth rate international segment sales

	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20	Dec-21	Average 2017-2021
Growth	26,23%	20,39%	16,92%	13,21%	11,52%	9,14%	16%

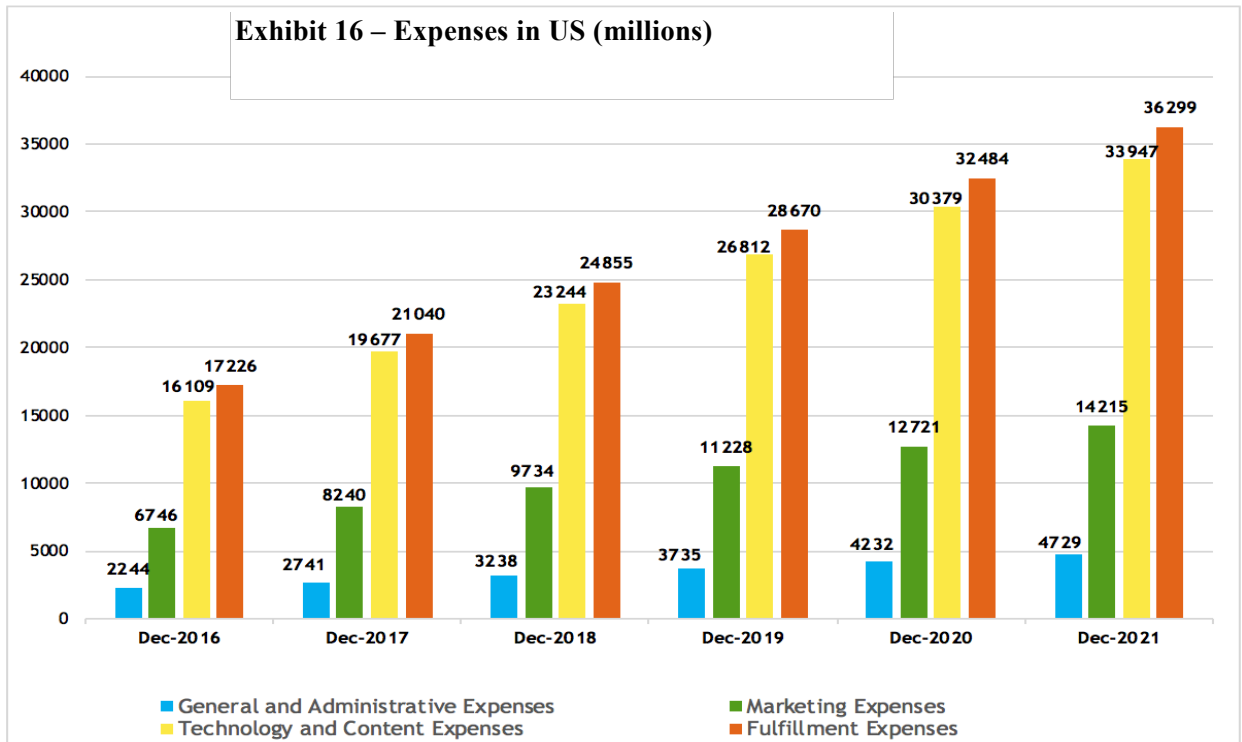
Source: Analyst estimates

I expect an average annual revenue growth around 18% in electronics and other general merchandise categories, driven by increased involvement of Prime members and by new product categories.

I expect a slower but stable growth in media products - since Amazon already owns a remarkable market share in this category - and the shift to digital formats, as eBooks, which is grows steadily. Company's growing influence with suppliers, Amazon Web Services extension and higher proportion of third party sales should generate higher gross margins (33% in 2015) and in my opinion exceed 37% in the next five years.

The operating margin expansion is forecast through an increase in expense leverage by fulfillment, general and administrative expense and marketing, acceleration in third party unit sales and improvement of Amazon Web Services (Exhibit 16).

Due to Amazon’s strong competitive positions in North America’s e-commerce and AWS, in addition to the first signals of success in international market, the model output 9% GAAP operating margins over the next five years.



Source: Analyst estimates

WACC assumptions

I have used the Weighted Average Cost of Capital (WACC) to discount each segment cash flows.

The WACC was calculated using different inputs (Exhibit 17) as follow:

Exhibit 17 – WACC assumptions

Risk free Rate	2.57%	
Market Risk Premium	6.60%	
Cost of Equity	10.29%	
Beta	1.17	
Confidence int. (95%)	1.14	1.20
Cost of Debt	3.44%	
Yield	3.45%	
Default Rate	0.02%	
Recovery Rate	75%	
D/E	86%	
WACC	6.57%	

Sources: Analyst estimates, Bloomberg

- **Risk-free** equal to 2.57%, it represents a measure of the alternative asset with the highest return available for investors in the absence of default and reinvestment risk. I used the 10Y U.S. Treasury rate.
- **Market risk premium**, it represents a measure of the return offered by risky investment over risk-free rate return. I obtained it calculating first of all the daily return difference between the 10y U.S. Treasury bond (USGG10YR) and the S&P 500 (SPX), then I annualized the average annual return difference and finally obtained a market risk premium of 6.60%.
- **Beta** equals 1.17, it is calculated by taking into account Beta weekly observations of the last two years.

Cost of Equity was then estimated through the Capital Asset Pricing Model (CAPM).

For the **cost of debt** I calculated the expected return for debt holders using the following inputs: spot yield rate of the listed debt instrument, Amazon's default probability as determined by Bloomberg, assumed recovery rate of 75%.

Then, with 86% Debt-to-Equity I have obtained a WACC of 6.57%.

Finally, I have obtained 3% perpetuity growth rate computing the average between the historical inflation rate of 2% and the historical GDP growth rate of 4%.

Considering the enterprise value obtained through the Discount Cash Flow analysis, the **target price** I estimate is 950 which imply a total expected return of 25%. Exhibit 18 summarizes the results.

Exhibit 18 – Valuation Summary

	EV (USD m)
Amazon Enterprise Value	451,516.2
Net Debt (16E)	-8,066.0

	Per Share (USD)
Target Price	950.0

#Shares (m)	475.167
Last Share Price (USD)	757.18
Total Expected Return	25.4%
Recommendation	Buy

Sources: Analyst estimates, Bloomberg

WACC and g sensitivity analysis

Since the enterprise value that the terminal value represents is a large portion, I have conducted a sensitivity analysis of the changes in the growth rates and cost of capital for my target price (Exhibit 19).

Exhibit 19 – WACC and g Sensitivity Analysis

		WACC%				
		5.50%	6.00%	6.57%	7.00%	7.50%
g%	2.00%	1000.9	876.7	768.2	702.6	639.2
	2.50%	1155.3	991.4	853.6	772.7	695.9
	3.00%	1371.5	1144.4	952.4	860.2	765.4
	3.50%	1695.8	1358.5	1108.1	972.8	852.1
	4.00%	2236.2	1679.7	1309.5	1122.9	963.7

Source: Analyst estimates

The sensitivity analysis with WACC ranging from 6% to 7% and the growth rate from 2.5% to 3.5% reported a variation for our target price between USD 772.7 and 1358.5, implying nevertheless a positive total expected return between 2.5% and 80.3%.

Market analysis

I believe Amazon has become the most recognizable force to emerge in retail during last decades.

Low cost operations, network effect, and high standard customer service gives Amazon the upper hand over traditional retailers, which could mean additional market share gains in the next years.

I think that Amazon's biggest advantage is represented by low-cost operations.

The costs generated from its fulfilment and distribution network, in fact, is lower than those involved in having a physical retail force, this allows the company to price below its physical retail competitors while at the same time it continues to generate excess economic returns. For these reasons the company generates powerful cash flow, which can be subsequently

reinvested in customer service, advertising, and website improvement maintaining its business solid and customer loyalty strong.

In fact, I believe that Amazon's brand represents a mix of low prices, convenience, high standard customer services and wide offer; these factors usually are really difficult to find among retailers.

The company also benefits from a network effect, a wide range of products, and a user-friendly interface that attracts millions of customers and subsequently merchants, third-party sellers and wholesalers selling directly to Amazon.

Moreover, wish lists, product recommendations and customer reviews, increase in importance as more consumers and products are part of the Amazon platform, improving its network effect.

Amazon also has good chances to compete in digital media, given its market size customer base, with Kindle, Fire TV, Dash, Echo products, and Amazon Alexa (voice recognition technologies).

Even though I do not believe that Amazon will replace Apple in digital media, it could become an important player, since it features a vast content offer and has the important ability to sell hardware as a leader.

Amazon Web Services have created cost advantage, intangible assets and network effect moat sources, helping corporations to reduce information technology expenses, since firms do not need anymore a physical IT department, and can have the same service online on-demand.

Financial Health

Amazon, as of December 2016, is a healthy company in terms of finances, with a debt amount of \$13.945 billion compared with cash and marketable securities of \$22.011 billion.

Exhibit 20 – Free Cash Flow

(USD Mil)

	2017E	2018E	2019E	2020E	2021E
Cash From Operations	19,661	22,951	26,766	31,222	35,651
Capital Expenditures	8,211	9,832	11,031	12,845	14,211
Free Cash Flow	11,450	13,119	15,735	18,377	21,440

Average 5Y FCF	16,024
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Source: Analyst estimates

Furthermore, Amazon's forecasted free cash flow (cash from operations less capital expenditures) will average \$16.0 billion annually (Exhibit 20) over the next five years (\$11.450 billion in 2017, growing to about \$21.440 billion in 2021) which should be adequate for investing in new technology and fulfillment capacity, funding operations and making acquisitions.

Enterprise Risk

Despite being leader in the e-commerce industry, a position it will probably maintain in the future, Amazon should be concerned about several potential risks.

The company should continue improving its logistic efficiency and high standard consumer experience in order to drive traffic on its site, while at the same time it should defend its position from other online retail sellers, warehouse clubs, mass merchants, and special retailers for market share.

This includes sustaining the Amazon Prime's value proposition with potential higher price in the future, even if I think that the convenience of Amazon fulfillment capabilities, expansion of digital content offerings, Subscribe & Save platforms, and the addition of month-to-month and video-only subscriptions will continue to attract new Prime members.

It is possible that Amazon will face regulatory risks, because a federal standard to collect online sales tax will probably be introduced, in the next several years, in order to make traditional retailers more competitive.

Despite the new tax collection laws I believe that Amazon could preserve its value proposition and attraction capacity among customers, by shipping faster and thanks to the new features introduced by Amazon Prime.

As for the growth of the international segment, Amazon will likely have to keep at pace with new regulations that could benefit local retailers, as e-commerce laws, are constantly amended.

Other risks are represented by variable discretionary spending guidelines and by the expansion into marginal business lines, which could lead to unsatisfactory capital allocation decisions and distract the management.

Appendix

Financial Statements

Income Statement	2014	2015	2016E	2017E	2018E	2019E
<i>(USD Mil)</i>						
Revenue	88,988	107,007	137,444	167,882	198,319	228,757
Cost of Goods Sold	65,752	71,651	89,283	107,376	124,860	141,736
Gross Profit	26,236	35,356	48,162	60,506	73,459	87,021
Selling, General, and Admin. Expenses	25,925	32,952	42,325	51,698	61,071	70,444
Other Operating Expense (Income)	133	171	275	336	397	458
Operating Income	178	2,233	5,562	8,472	11,992	16,120
Interest Expense (subtracted)	210	460	484	476	492	495
Interest Income (added)	-80	-205	-234	-312	-407	-515
Pre-Tax Income	-112	1,568	4,843	7,684	11,092	15,110
Income Tax Expense (Minority Interest)	167 38	951 -21	1,989 0	2,690 0	3,882 0	5,288 0
Net Income	-241	596	2,854	4,995	7,210	9,821
Weighted Average Diluted Shares Outstanding	466	475	475	475	475	475
Diluted Earnings Per Share	-0.52	1.25	6.01	10.52	15.18	20.68
Adjusted Net Income	-241	596	2,854	4,995	7,210	9,821
Diluted Earnings Per Share (Adjusted)	-0.52	1.25	6.01	10.52	15.18	20.68
Dividends Per Common Share	-	-	-	-	-	-
EBITDA	4,924	8,514	12,244	15,507	19,672	24,573

Balance Sheet	2014	2015	2016E	2017E	2018E	2019E
<i>(USD Mil)</i>						
Cash and Equivalents	14,557	15,890	22,011	29,195	38,889	48,477
Investments	2,859	3,918	5,032	6,147	7,261	8,376
Accounts Receivable	5,612	6,423	8,288	10,169	12,067	13,982
Inventory	8,299	10,243	12,231	14,709	17,104	19,416
Current Assets	31,327	36,474	47,561	60,220	75,322	90,250
Net Property, Plant, and Equipment	16,967	21,838	22,272	23,449	25,601	28,179
Goodwill	3,319	3,759	3,799	3,799	3,799	3,799
Other Intangibles	0	0	25	25	25	25
Other Long-Term Operating Assets	2,892	3,373	4,332	5,292	6,251	7,211
Total Assets	54,505	65,444	77,990	92,785	110,998	129,463
Accounts Payable	16,459	20,397	25,355	30,420	35,288	39,960
Other Short-Term Liabilities	11,630	13,502	17,343	21,183	25,024	28,864
Current Liabilities	28,089	33,899	42,698	51,603	60,311	68,824
Long-Term Debt	12,489	14,183	13,945	13,708	14,871	13,871
Other Long-Term Operating Liabilities	3,186	3,978	5,110	6,241	7,373	8,504
Total Liabilities	43,764	52,060	61,752	71,552	82,555	91,199
Preferred Stock	0	0	0	0	0	0
Common Stock	5	5	5	5	5	5
Additional Paid-In Capital	11,135	13,394	13,394	13,394	13,394	13,394
Retained Earnings (Deficit)	1,949	2,545	5,399	10,394	17,604	27,425
(Treasury Stock)	-1,837	-1,837	-1,837	-1,837	-1,837	-1,837
Other Equity	-511	-723	-723	-723	-723	-723
Shareholder's Equity	10,741	13,384	16,238	21,233	28,443	38,264
Total Equity	10,741	13,384	16,238	21,464	28,777	38,691

Cash Flow	2014	2015	2016E	2017E	2018E	2019E
<i>(USD Mil)</i>						
Net Income	-241	596	2,854	4,995	7,210	9,821
Depreciation	4,746	6,281	6,682	7,035	7,680	8,454
Stock-Based Compensation	1,497	2,119	2,526	3,086	3,645	4,205
Deferred Taxes	-316	81	0	0	0	0
Other Non-Cash Adjustments	182	286	0	0	0	0
(Increase) Decrease in Accounts Receivable	-1,039	-1,755	-1,865	-1,881	-1,898	-1,915
(Increase) Decrease in Inventory	-1,193	-2,187	-1,988	-2,479	-2,395	-2,312
Increase (Decrease) in Accounts Payable	1,759	4,294	4,958	5,065	4,868	4,672
Change in Other Short-Term Liabilities	1,447	2,205	3,841	3,841	3,841	3,841
Cash From Operations	6,842	11,920	17,009	19,661	22,951	26,766
(Capital Expenditures) Net (Acquisitions), Asset Sales, and Disposals	-4,893	-4,589	-7,081	-8,211	-9,832	-11,031
Net (Purchases) Sales of Investments	-979	-795	-100	0	0	0
Other Investing Cash Flow	807	-1,066	-1,114	-1,114	-1,114	-1,114
Cash From Investing	-5,065	-6,450	-8,124	-9,154	-10,774	-11,974
Long-Term Debt Issuance (Retirement)	0	0	0	0	0	0
Other Financing Cash Flows	4,426	-3,882	-238	-237	1,163	-1,000
Cash From Financing	4,432	-3,763	-2,764	-3,323	-2,482	-5,205
Exchange Rates, Discontinued Ops, etc. (net)	6	119	-2,526	-3,086	-3,645	-4,205
Net Change in Cash	5,899	1,333	6,121	7,184	9,694	9,588
Free Cash Flow For the Firm – FCFF	195	4,679	7,896	9,048	10,230	12,358

Disclosures and Disclaimer

Research Recommendations

Buy	Expected total return (including dividends) of more than 15% over a 12-month period.
Hold	Expected total return (including dividends) between 0% and 15% over a 12-month period.
Sell	Expected negative total return (including dividends) over a 12-month period.

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