M.P.E.

Amazon Investment Thesis

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A little bit about Amazon

- Founded in 1994
- Over $100 billion in sales in FY2015
- Over 300 million active customer accounts
- Operates in 14 countries
- Nearly 2 billion products for sale throughout 14 countries
- Over 400 million products for sale in the U.S.
- Turned over inventory 8 times in FY2015
- In 2015, nearly $1 out of every $3 U.S. consumers spent online was on Amazon

Industry Statistics

- Total U.S. retail sales was about $5 trillion in 2015
- Online U.S. retail sales was about $350 billion in 2015
- About 6% of all retail sales occur online
- Considering the convenience and savings associated with online shopping, it’s only a matter of time until that number grows much larger

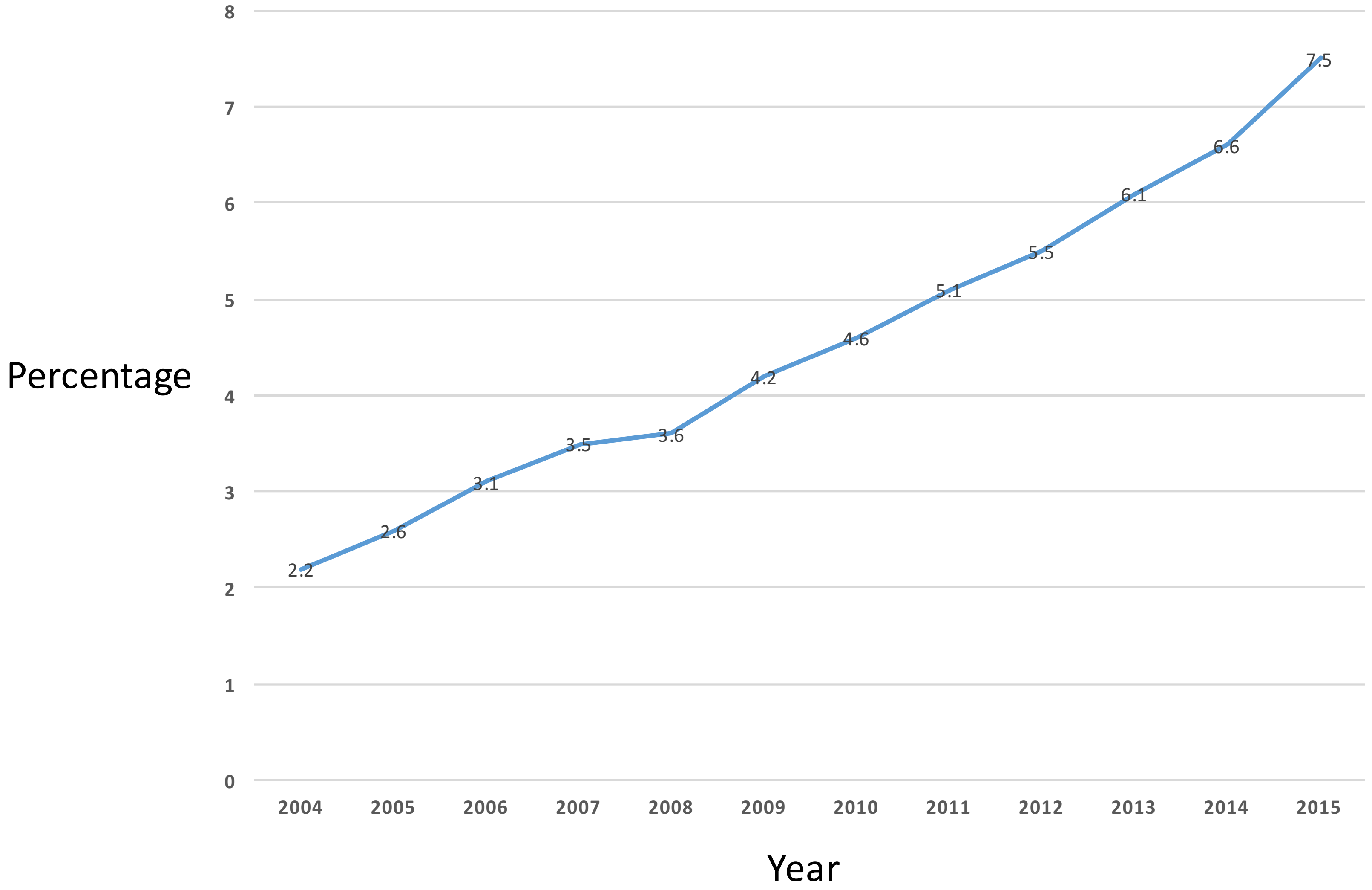
Amazon’s Market Penetration (U.S.)

	2010	2011	2012	2013	2014	2015
Total U.S. Retail Sales (billions)	$3,850	$4,110	$4,310	$4,470	$4,630	$4,785
Online U.S. Retail Sales (billions)	$165	$194	$225	$261	$298	$343
Amazon Net Sales (millions)	$34	$48	$61	$74	$89	$107
Amazon % of U.S. Online Retail Sales	21%	25%	27%	28%	30%	31%
Amazon % of Total U.S. Retail Sales	0.9%	1.2%	1.4%	1.7%	1.9%	2.2%

Amazon Market Penetration (breakdown)

- 50% growth in sales as a percentage of total U.S. online sales over the last 5 years
- Over 100% growth in sales as a percentage of total U.S. retail sales over the last 5 years
- Considering only about 2% market penetration of total retail sales in the U.S., I see huge potential for growth
- This data also excludes the other 13 countries they operate and I’m sure have plenty of room for growth as well
- As consumers inevitably begin spending more money online than with traditional brick and mortar businesses, Amazons market share will grow, and as a result so will their intrinsic value.

Online Retail Sales as a % of Total Retail Sales (U.S.)



Amazon vs. Brick and Mortar

Amazon is constantly improving the value adds for consumers to switch to Amazon from traditional brick and mortar businesses, some of those value adds include:

Cost savings: Amazon is constantly trying to reduce variable costs and leverage fixed costs so that they can offer the lowest prices to consumers.

Convenience: By offering Prime Now, some items can be had within 2 hours. Even if Prime Now is not available, most items can be had in one to two days, free of charge with a Prime membership.

Selection: With over 400 million products for sale in the U.S. alone, consumers have a wide selection of goods to choose from.

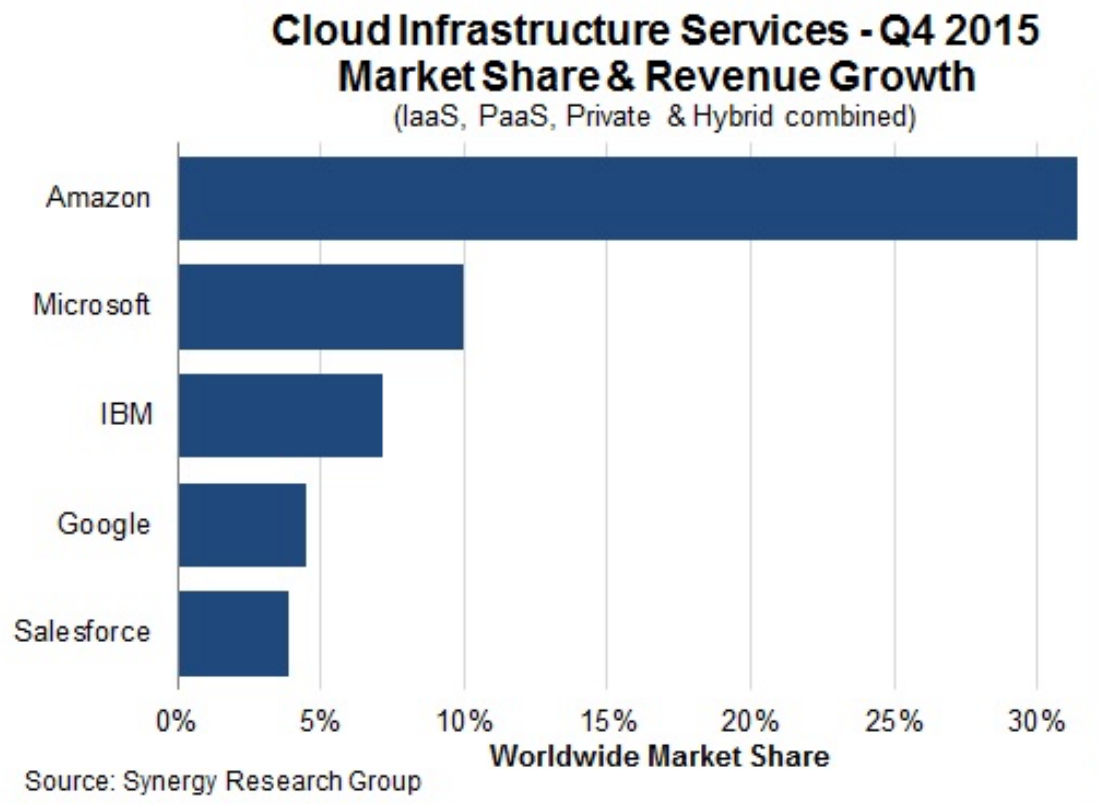
Other Benefits for Prime Users: Prime Video, Prime Music, Prime Photos, and more.

Top 10 U.S. Online Retail Websites by Sales

	Company	Online Retail Sales (millions)
1.	Amazon	$79,268
2.	Wal-Mart	$13,484
3.	Apple	$12,000
4.	Staples	$10,700
5.	Macy's	$4,829
6.	The Home Depot	$4,267
7.	Best Buy	$3,780
8.	QVC	$3,722
9.	Costco	$3,618
10.	Nordstrom	$2,699

As we can see, no competitor comes close to Amazon in terms of online retail sales. Amazon's sales exceed the cumulative sales of its nine closest competitors.

Cloud and IaaS Market Share by Company



As we can see, Amazon's AWS market share is larger than the combined market shares of Microsoft Azure, IBM Softlayer, Google Engine, and Salesforce.

Revenue Streams

- Revenues from the sale of consumer goods as well as Amazon Prime memberships
- Revenues from independent sellers, generally a fixed fee per sale or a percentage of each sale
- AWS cloud and IaaS revenues from startups, government agencies, academic institutions, and enterprises
- Revenues from content creators who publish books on the Kindle Store

Operating Expenses

Cost of sales: Cost to purchase goods, digital content costs, and shipping costs.

Fulfillment: Costs to operate and staff fulfillment centers, customer services centers, and payment processing costs.

Marketing: Online marketing costs, televisions marketing costs, and personnel costs related to marketing.

Technology and Content: Costs associated with research and development, technology personnel costs, and AWS infrastructure costs.

General and Administrative: Payroll, facilities and equipment, professional fees, and other general corporate costs.

Economic Moats

- One moat enjoyed by Amazon is economies of scale. Since they offer so many goods and turnover inventory so frequently, they enjoy low cost of goods, and in turn pass those savings onto its customers
- Another moat is their unique fulfillment process and constant investment upon improving it. They are investing in more fulfillment centers, leasing aircrafts, and even developing drone delivery so that Amazon customers can receive their products that much quicker
- They also enjoy high switching costs for Prime members. As Prime members begin to use more of the services offered by having a prime account, they will be less likely to switch to a competitor
- Finally they enjoy network effects with regards to third-party sellers. As more people shop on Amazon, more third-party sellers will sell on amazon, which in turn leads to more options for the consumer. This leads to a virtuous cycle of more revenue for the sellers and more selection for consumers

Management

Jeff Bezos founded Amazon in 1994. He is still running the day to day operations of the business as the CEO. He owns about 17% of the shares outstanding worth over $60 billion dollars.

He has been a terrific manager and has always focused on long term results and shareholder value creation. He is willing to sustain lower short-term earnings to enhance long-term value. He has constantly invested a large percentage of operating cash flow into growth capex by building more fulfilment centers and enhancing the value adds of being an Amazon customer.

Out of all the c-level executives, his annual salary is the lowest, showing his commitment to keeping costs low and re-investing as much as he can into the business. Considering his owner mindset and substantial equity stake, his interests are unquestionably aligned with shareholders.

Potential Downside

- Other retailers begin growing their e-commerce platforms and drive more revenue from online sales
- A competitor begins rapidly accumulating market share. This can be due to offering lower prices or more value adds for the consumer
- A large percentage of their products are from third party sellers. If they treat these sellers poorly, they could lose market share to other third party marketplace websites

Some Financials

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	TTM
Net Sales	8,490	10,711	14,835	19,166	24,509	34,204	48,077	61,093	74,452	88,988	107,006	120,637
OPEX	8,058	10,322	14,180	18,324	23,380	32,798	47,215	60,417	73,707	88,810	104,773	116,767
EBIT	432	389	655	842	1,129	1,406	862	676	745	178	2,233	3,870
EBIT Margins	5.1%	3.6%	4.4%	4.4%	4.6%	4.1%	1.8%	1.1%	1.0%	0.2%	2.1%	3.2%

Sales have grown at an over 25% CAGR over the last 10 years. Considering how much more room there is to grow until full market saturation, this CAGR can continue for a long time.

EBIT margins are very low, however a lot of operating expenses are related to growth initiatives. On average, Ebay is doing about a 20% EBIT margin and Alibaba is doing about a 30% EBIT Margin. I think a normalized EBIT margin of 10-20% is very reasonable.

Free cash flow

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	TTM
Operating Cash Flow (OCF)	733	702	1,405	1,697	3,293	3,495	3,903	4,180	5,475	6,842	11,920	12,726
Capex	204	216	224	333	373	979	1,811	3,785	3,444	4,893	4,589	5,395
FCF	$529	$486	$1,181	$1,364	$2,920	$2,516	$2,092	$395	$2,031	$1,949	$7,331	$7,331

About 30% annualized growth of FCF over the last 10 years. FCF numbers are also depressed due to high growth capex. Once that slows down as a percentage of operating cash flow, FCF numbers should be much higher

Enterprise Value

Share Price	$762
Diluted Shares Outstanding (millions)	483
Market Capitalization	368,046
Plus: Debt	8,212
Less: Cash	12,521
Enterprise Value (millions)	**$363,737**

Valuation (DCF)

DCF Assumptions

- TTM FCF of $7,331
- Discount rate of 10%
- Growth Rate (short-term) 25%
- Growth Rate (terminal) 2%
- Subtract net debt

Intrinsic Value of about $1000 per share, about 30% upside from current prices.

Valuation (Relative)

Enterprise Value	$363,737
FCF	$7,331
EBIT	$3,870
EBIT (15% Margin)	$18,096
EV/FCF	50
EV/EBIT	94
EV/EBIT (15%)	20

I couldn’t find a direct comparable to Amazon. Most of the e-commerce competitors don’t break out that segment of their business. I think you could probably compare parts of it to other e-commerce websites, parts of it to Ebay and other marketplace websites, and parts of it to its AWS competitors.

If we use a normalized 15% EBIT margin, a 20 times multiple is a great price. Amazon is growing at a tremendous pace and has lots of room to grow. Looking at the FCF and regular EBIT multiples, it is still very expensive. I think a 20 to 30 times FCF multiple would be a fantastic entry point for this high growth business.

In Conclusion

I believe Amazon is a great business that has a combination of high barriers to entry, great management, and plenty of growth potential. Considering only a small percentage of total retail sales occur online and how that will inevitably grow over the next 10 to 20 years, Amazon’s net sales will only continue growing. I believe the current prices don’t leave enough room for a margin of safety, however if we see a small drop, you can be sure I will become a part owner in this wonderful business.