

APPLE AND AMAZON AT A TRILLION \$: LOOKING BACK & FORWARD!

The story behind the march to a trillion

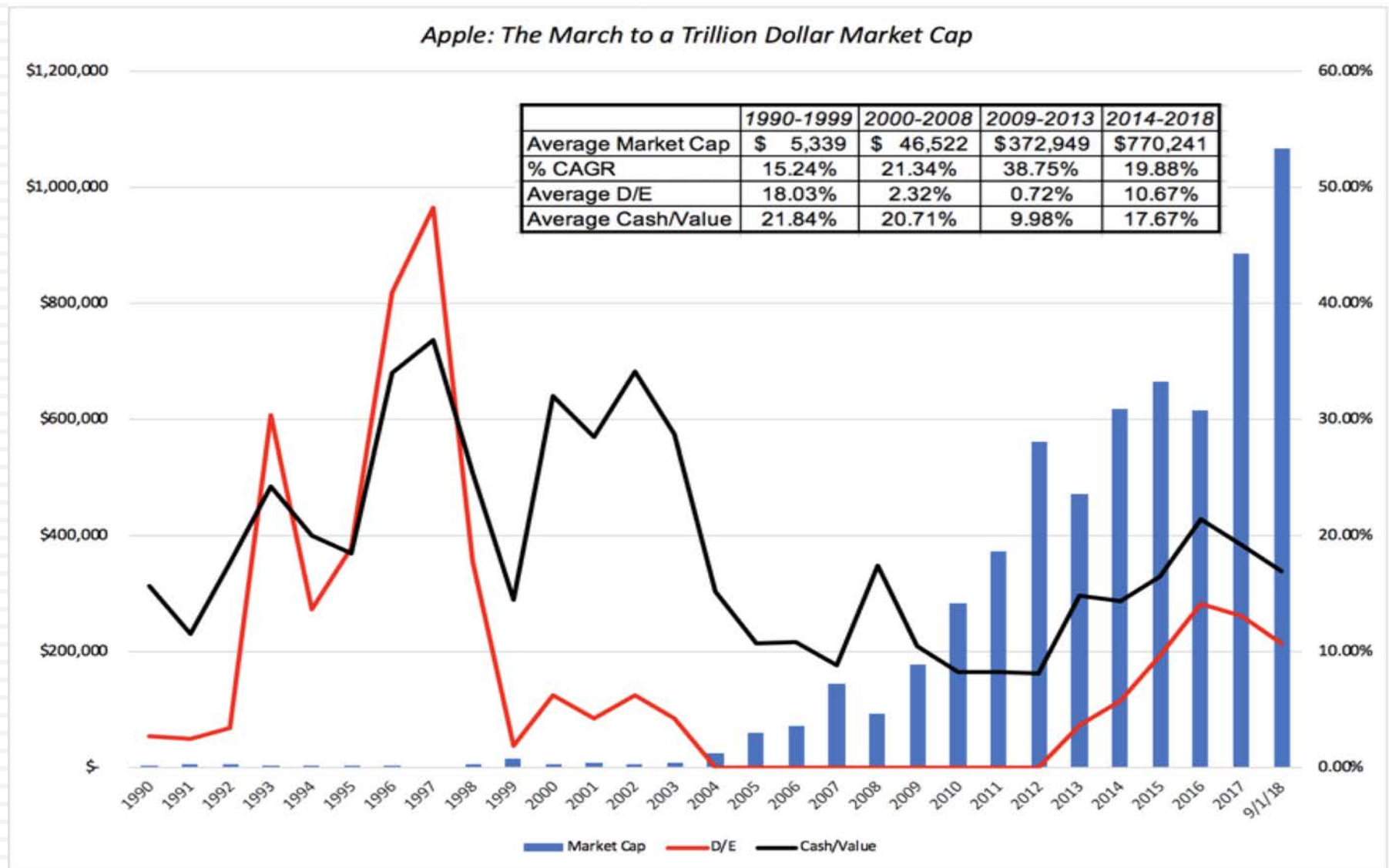
Apple and Amazon hit a trillion \$ market caps...

- Apple's market capitalization exceeded a trillion on August 2, 2018, and Amazon's market capitalization also exceeded a trillion just over a month later on September 4, 2018.
- I admire both companies, and have tracked and valued them repeatedly over the last twenty years. There is much that we can learn from both companies, and how these two companies got to where they are today, as well as their similarities and differences.
- I will also assess where Apple and Amazon stand today and update my valuations and investment judgments on both companies.

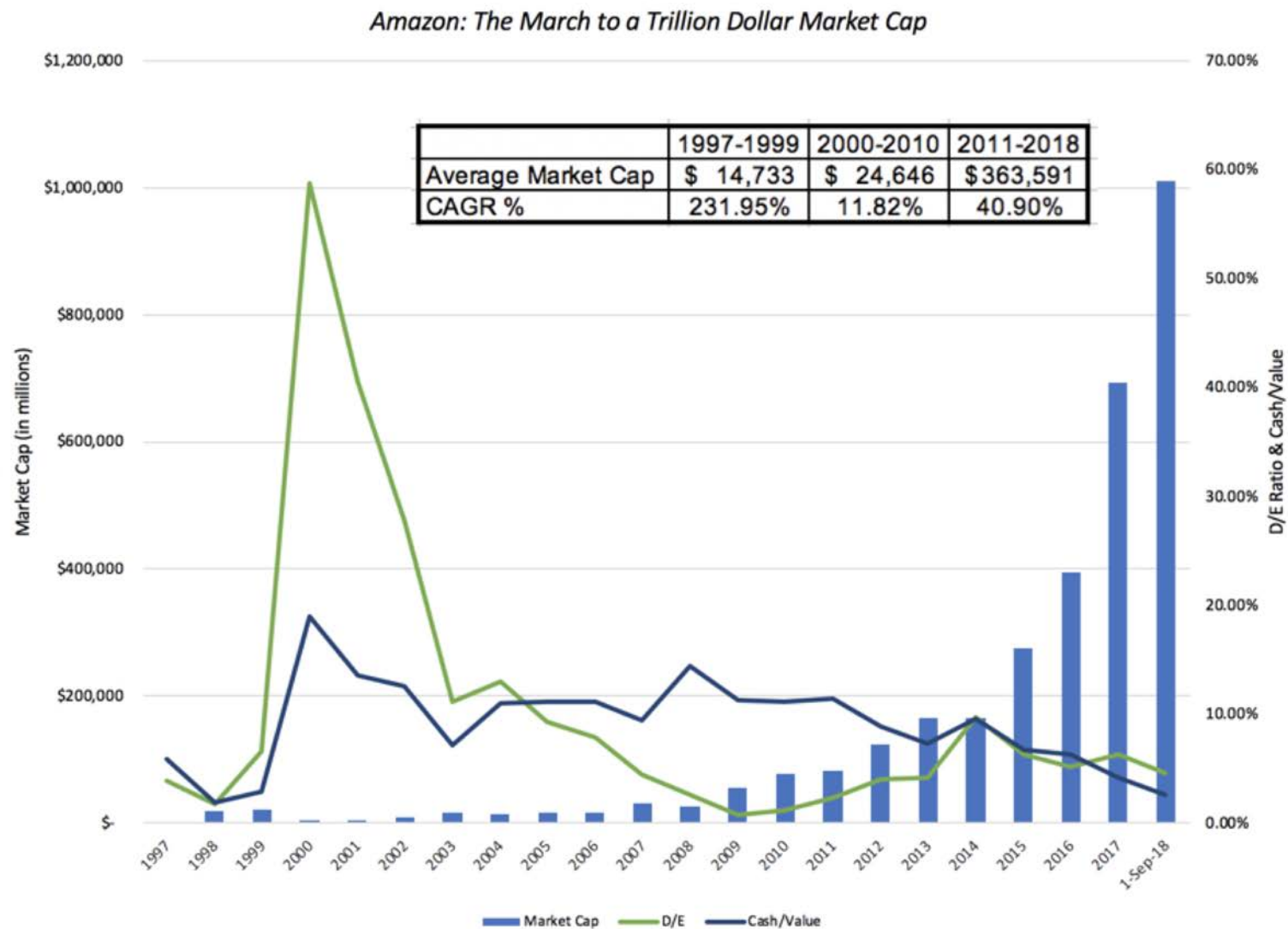
The Road to a Trillion

- ❑ Markets give and markets take away, and this is true not just for the laggards in the market, but even the most successful companies.
- ❑ Apple and Amazon have had amazing runs, but without taking anything away from their success, it is worth noting that during their march towards trillion dollar market capitalizations, each has had to endure periods in the wilderness.
- ❑ Both companies have reinvented themselves and adapted to a changing world, and the results are testimonial that they have succeeded (so far).

Apple's March...



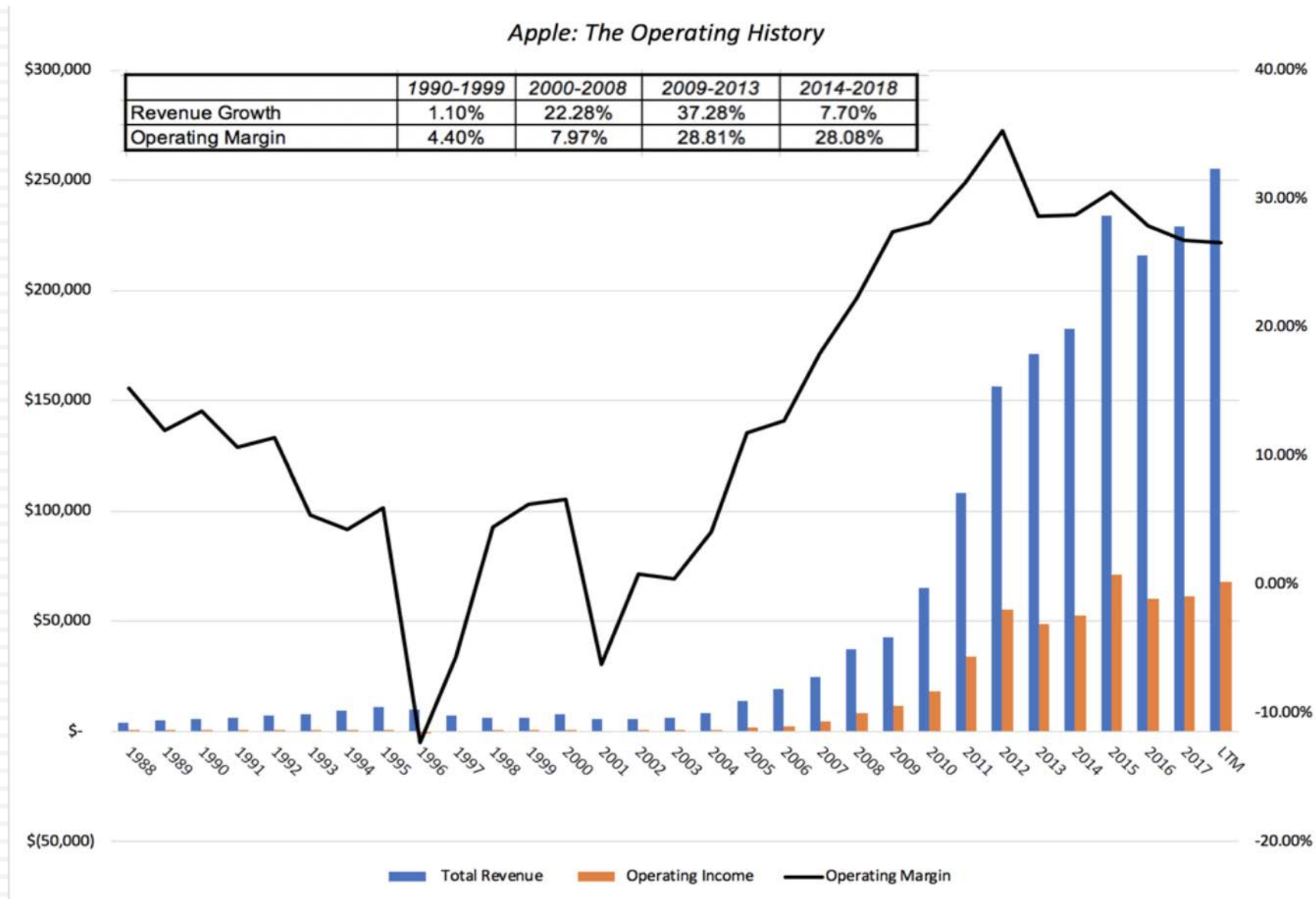
Amazon's March..



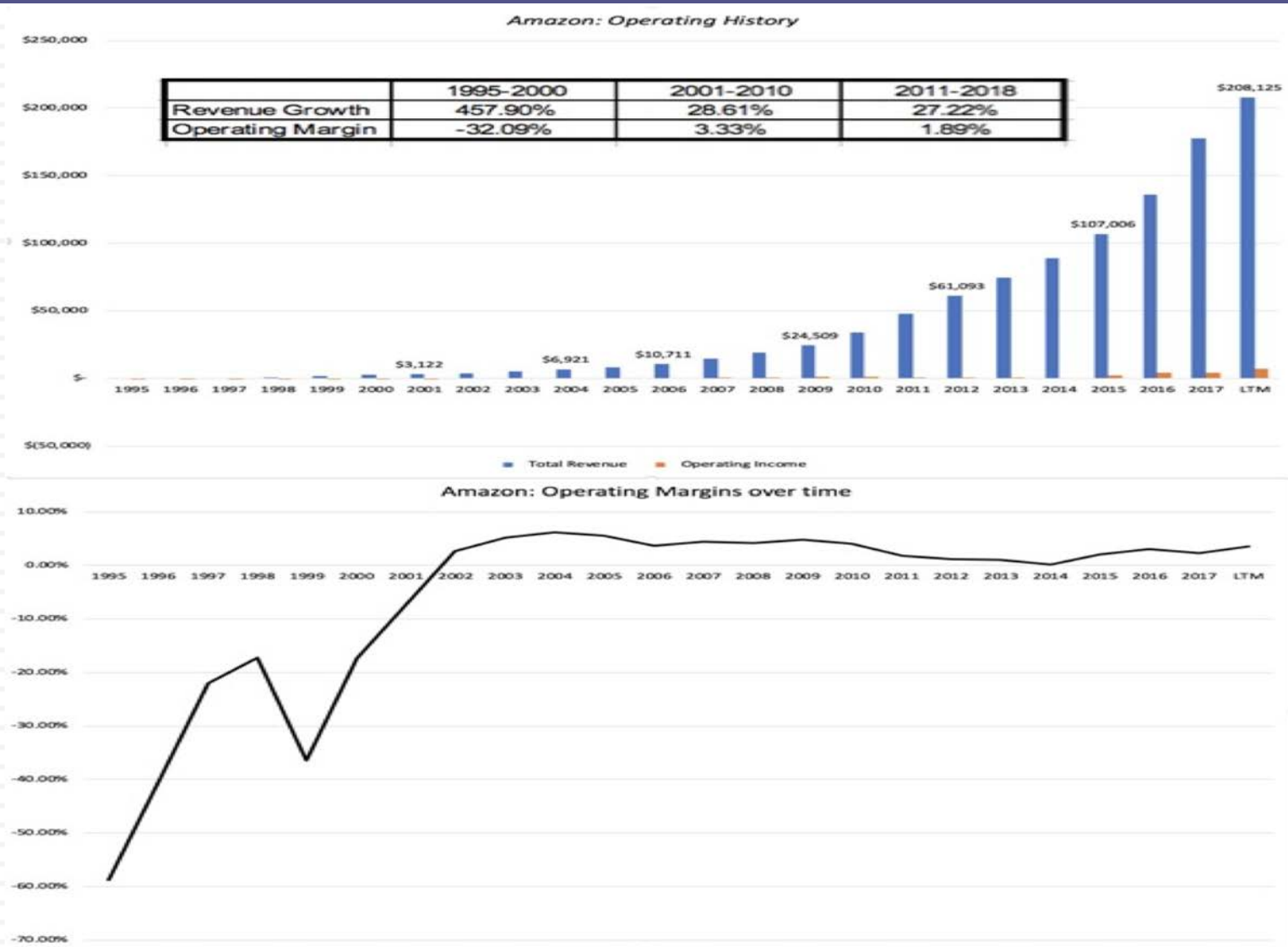
The Back Story

- We can debate whether Amazon and Apple are worth a trillion dollars, but there can be no denying that both companies have been successful in their businesses, and that it is these operating success that lie at the heart of their market values.
- However, the way these companies have evolved over time have been very different, and understanding the pathways they took to get to where they are will lay the foundations for valuing them today,.

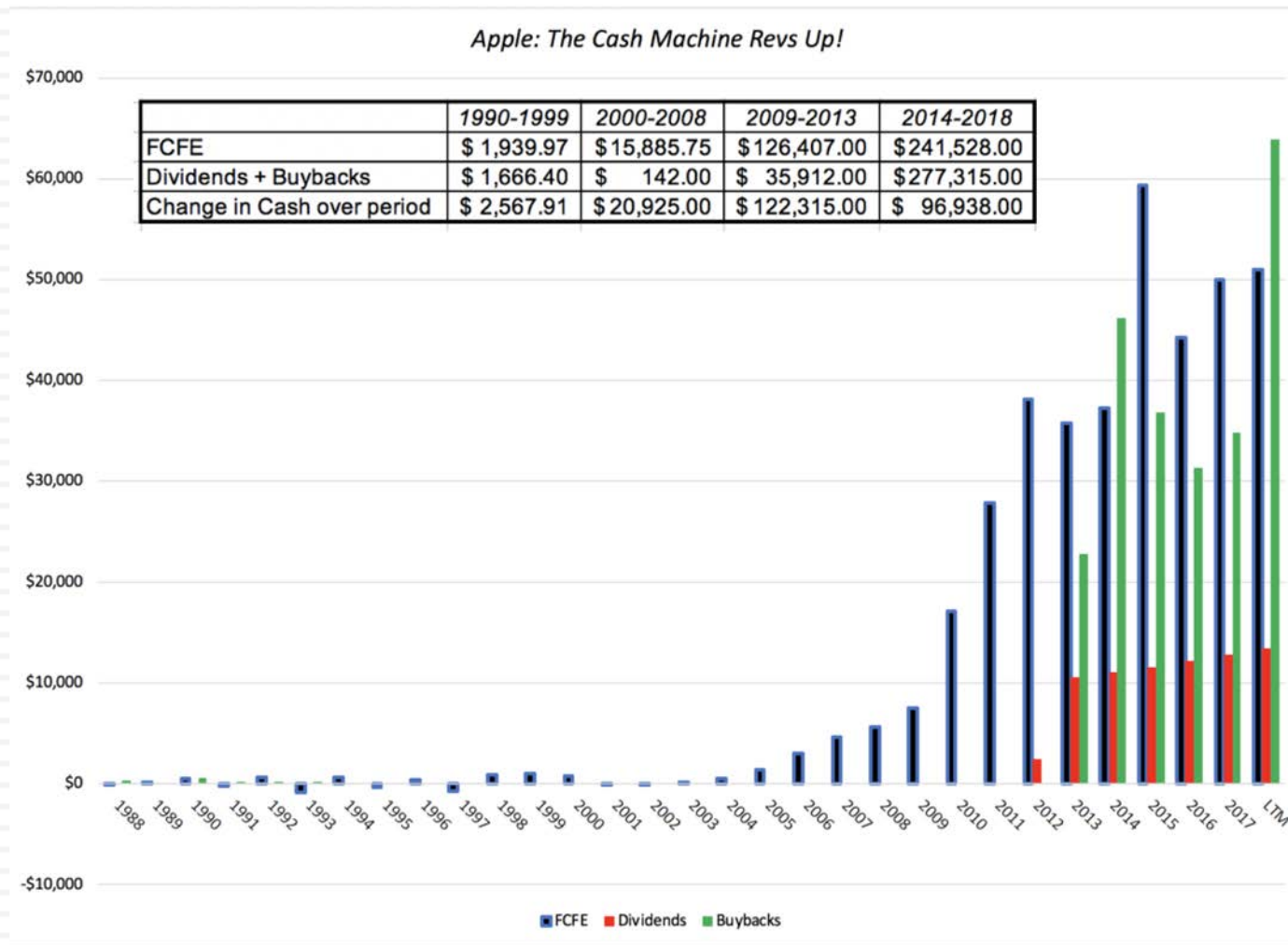
Apple's Operating History



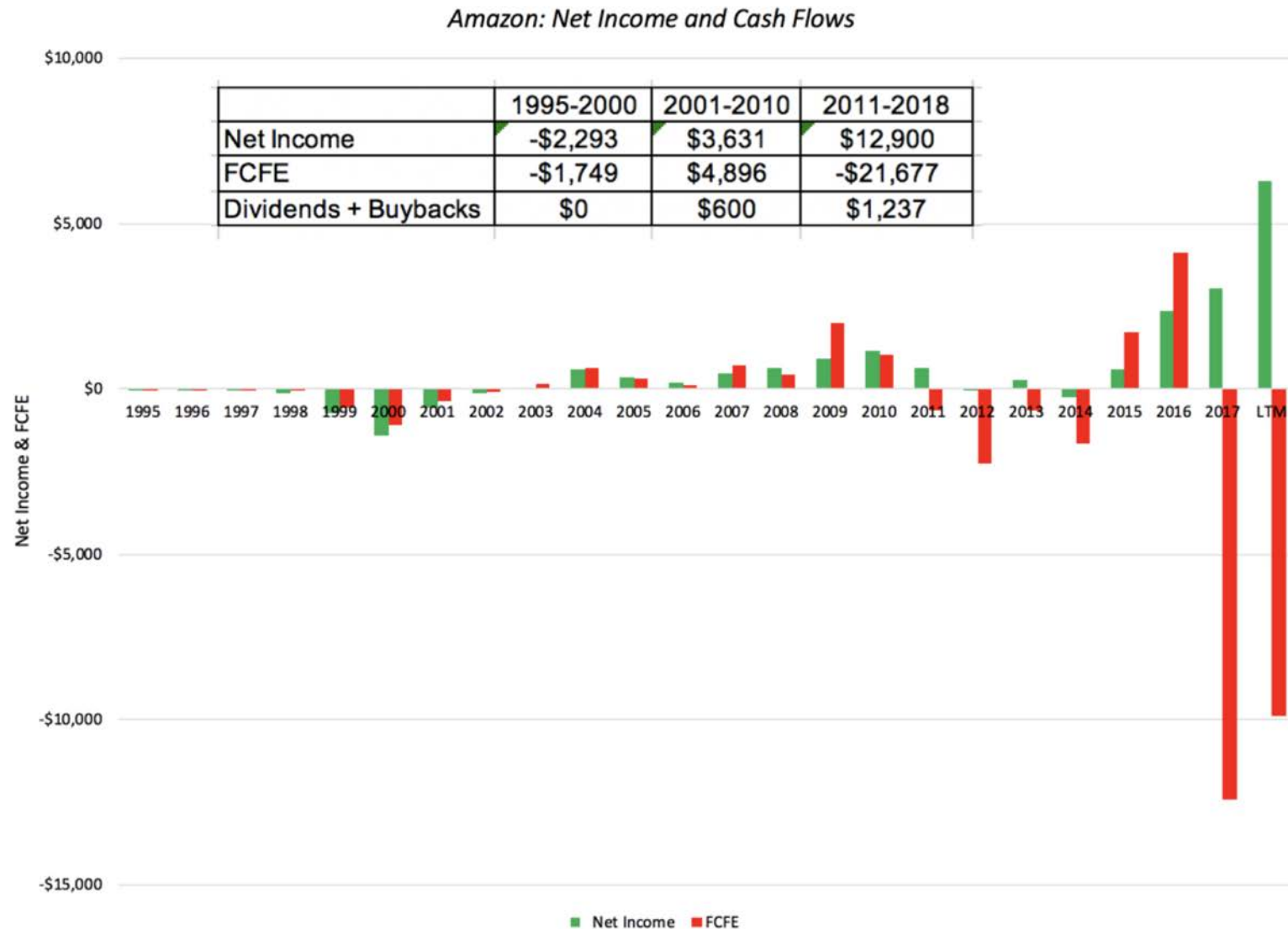
Amazon's Operating History



Apple's Cash Flow History



Amazon's Cashflow History



Story and Valuation

- The more interesting and relevant question is what to make of each company today, since they clearly are on different paths, with very different operating make ups.
- I will lay out my story and valuation for each company, with the emphasis on the word "my", since I am sure that you have your own story for each company.
- I will leave my valuation spreadsheet open for you to download, with the story levers easily changed to reflect different stories.

Apple

The Smart Phone Cash Machine

Apple is now a cash machine, albeit one with slowing growth in its primary market (smart phones), and while this market will continue to be profitable, competition will put downward pressure on profit margins. There remains an outside chance that Apple will find another market to disrupt, but given its size and profitability, that disruption has to be in a big and profitable market and the odds of success are low. Apple's brand name will continue to serve it well, keeping margins and returns on capital well above its competition.

The Assumptions

	Base year	Years 1-5	Years 6-10		After year 10	Link to story
Revenues (a)	\$ 255,274	3.00% → 3.00%			3.00%	Mature smart phone business
Operating margin (b)	29.97%	29.97% → 25.00%			25.00%	Intense competition + Need to reinvent itself every 2 years with new model
Tax rate	20.30%	20.30% → 25.00%			25.00%	Converging on a global tax rate of 25%
Reinvestment (c)		Sales to capital ratio 1.39		RIR =	25.00%	Low growth leads to low reinvestment. No big acquisitions to enter businesses.
Return on capital	172.23%	Marginal ROIC =	14.65%		12.00%	A brand name that is tough to match
Cost of capital (d)		8.20% → 7.50%			7.50%	Low debt & mixed technology businesses

The Cash Flows

	Revenues	Operating Margin	EBIT	EBIT (1-t)	Reinvestment	FCFF
1	\$ 262,932	28.98%	\$ 76,194	\$ 60,726	\$ 5,510	\$ 55,217
2	\$ 270,820	27.98%	\$ 75,786	\$ 60,401	\$ 5,675	\$ 54,727
3	\$ 278,945	26.99%	\$ 75,285	\$ 60,002	\$ 5,845	\$ 54,157
4	\$ 287,313	25.99%	\$ 74,686	\$ 59,525	\$ 6,020	\$ 53,504
5	\$ 295,933	25.00%	\$ 73,983	\$ 58,965	\$ 6,201	\$ 52,764
6	\$ 304,811	25.00%	\$ 76,203	\$ 60,017	\$ 6,387	\$ 53,630
7	\$ 313,955	25.00%	\$ 78,489	\$ 61,080	\$ 6,579	\$ 54,501
8	\$ 323,373	25.00%	\$ 80,843	\$ 62,152	\$ 6,776	\$ 55,376
9	\$ 333,075	25.00%	\$ 83,269	\$ 63,234	\$ 6,979	\$ 56,255
10	\$ 343,067	25.00%	\$ 85,767	\$ 64,325	\$ 7,189	\$ 57,136
Terminal year	\$ 353,359	25.00%	\$ 88,340	\$ 66,255	\$ 16,564	\$ 49,691

The Value

Terminal value	\$ 1,104,247		
PV(Terminal value)	\$ 511,968		
PV (CF over next 10 years)	\$ 364,366		
Value of operating assets =	\$ 876,334		
Adjustment for distress	\$ -	Probability of failure =	0.00%
- Debt & Minority Interests	\$ 133,539		
+ Cash & Other Non-operating assets	\$ 243,743		
Value of equity	\$ 986,538		
- Value of equity options	\$ -		
Number of shares	4,915.14		
Value per share	\$ 200.71	Stock was trading at =	\$223.00

Amazon

The Greatest (and most Feared) Disruptive Platform in History

Amazon will complete its metaphorsis from being a retail company to one that can take its competitive advantages - access to capital & willingness to lose money for long periods, while disrupting and changing the status quo - to any business that it targets, giving it the potential for high revenue growth on top of already-large revenues. It will be able to use the pricing power it accumulates in each business it is in, to increase profit margins, partly through economies of scale and partly through higher prices. Its low debt ratio and divergent business mix give it a low cost of capital.

The Assumptions

	Base year	Years 1-5	Years 6-10		After year 10	Link to story
Revenues (a)	\$ 208,125	15.00%	→ 3.00%		3.00%	Expanding into new businesses
Operating margin (b)	7.71%	7.71%	→ 12.50%		12.50%	Economies of scale and pricing power increase margins
Tax rate	20.20%	20.20%	→ 24.00%		24.00%	Converging on a global tax rate of 25%
Reinvestment (c)		Sales to capital ratio	5.95	RIR =	30.00%	Big payoffs from investing in technology and content
Return on capital	15.24%	Marginal ROIC =	89.16%		10.00%	The last man standing...
Cost of capital (d)		7.97%	→ 7.50%		7.50%	Low debt & diverse business mix

The Cash Flows

	Revenues	Operating Margin	EBIT	EBIT (1-t)	Reinvestment	FCFF
1	\$ 239,344	8.67%	\$ 20,753	\$ 16,560	\$ 5,249	\$ 11,311
2	\$ 275,245	9.63%	\$ 26,501	\$ 21,147	\$ 6,037	\$ 15,110
3	\$ 316,532	10.59%	\$ 33,506	\$ 26,736	\$ 6,942	\$ 19,794
4	\$ 364,012	11.54%	\$ 42,017	\$ 33,527	\$ 7,983	\$ 25,544
5	\$ 418,614	12.50%	\$ 52,327	\$ 41,754	\$ 9,181	\$ 32,573
6	\$ 471,359	12.50%	\$ 58,920	\$ 46,568	\$ 8,869	\$ 37,699
7	\$ 519,438	12.50%	\$ 64,930	\$ 50,825	\$ 8,084	\$ 42,741
8	\$ 559,954	12.50%	\$ 69,994	\$ 54,258	\$ 6,813	\$ 47,446
9	\$ 590,191	12.50%	\$ 73,774	\$ 56,628	\$ 5,084	\$ 51,544
10	\$ 607,897	12.50%	\$ 75,987	\$ 57,750	\$ 2,977	\$ 54,773
Terminal year	\$ 626,134	12.50%	\$ 78,267	\$ 59,483	\$ 17,845	\$ 41,638

The Value

Terminal value	\$ 925,287		
PV(Terminal value)	\$ 435,438		
PV (CF over next 10 years)	\$ 206,707		
Value of operating assets =	\$ 642,144		
Adjustment for distress	\$ -	Probability of failure =	0.00%
- Debt & Mnority Interests	\$ 45,435		
+ Cash & Other Non-operating assets	\$ 27,050		
Value of equity	\$ 623,759		
- Value of equity options	\$ -		
Number of shares	497.00		
Value per share	\$ 1,255.05	Stock was trading at =	\$1,970.19

The End Game

- I have always operated on the premise that if you value companies, you should be willing to act on those valuations.
- In the case of Apple and Amazon, that would suggest that the next step that I should be taking with each company is to sell.
 - With Apple, a stock that I have held for close to three years and which has served me well over the period, that would be accomplished by selling my holding.
 - With Amazon, a stock that I have not held for more than five years, that would imply joining the legions of short sellers.
- I am going to leave you in suspense until my next post, because I have two loose ends to tie up, before I can act.
 - The first is to grapple with the uncertainties that I have about my own stories for the two companies and the resulting effects on value.
 - The second is what I will mysteriously term "the catalyst effect", which I believe is indispensable, especially when you sell short.