

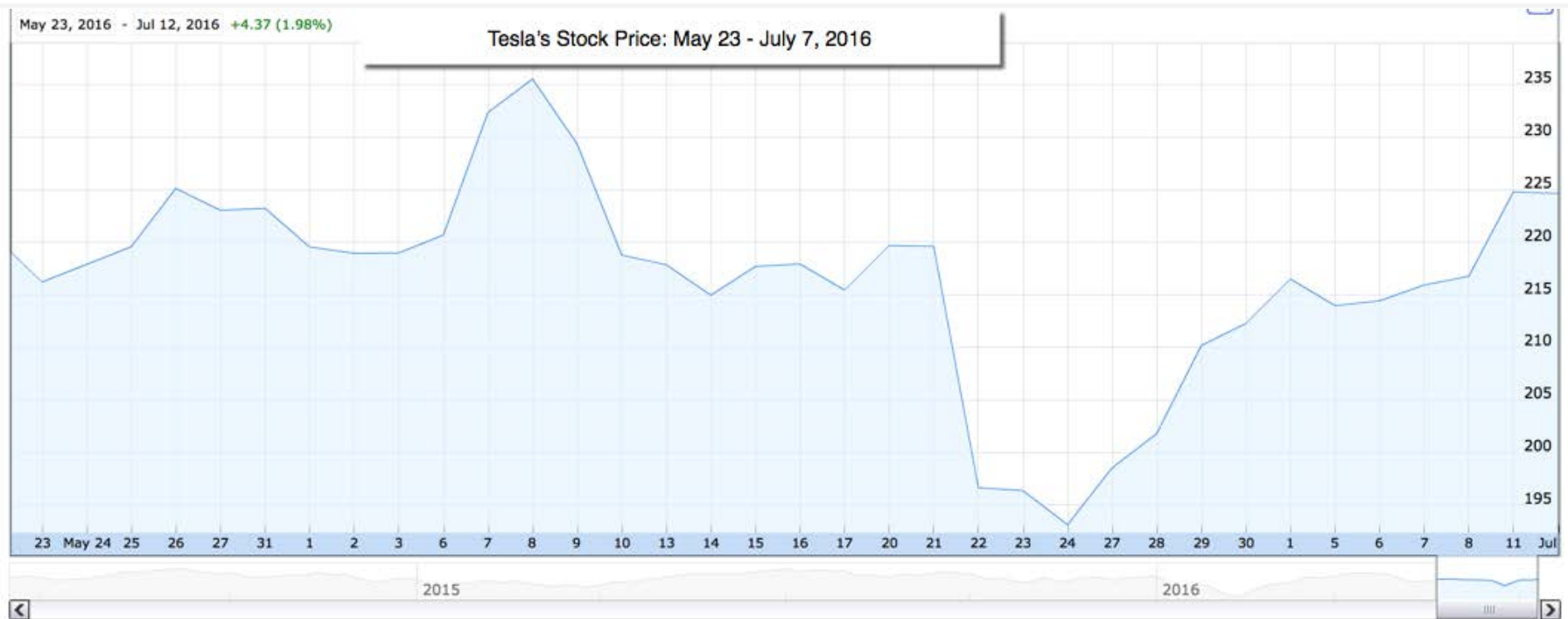


TESLA: IT'S A STORY STOCK, BUT
WHAT THE (YOUR) STORY?

The power of the story

The Resilient Stock

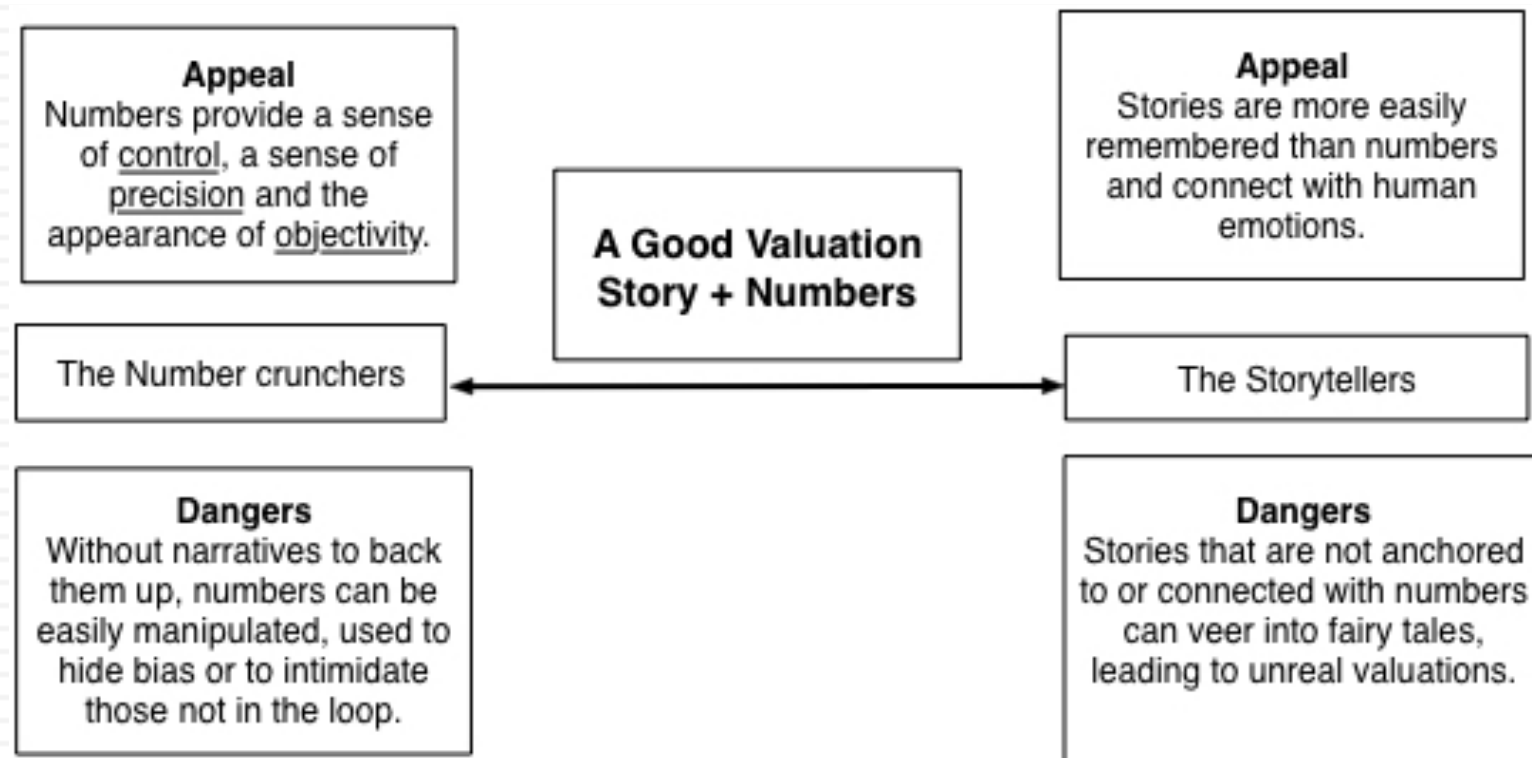
Bad news 1: Delivery shortfalls



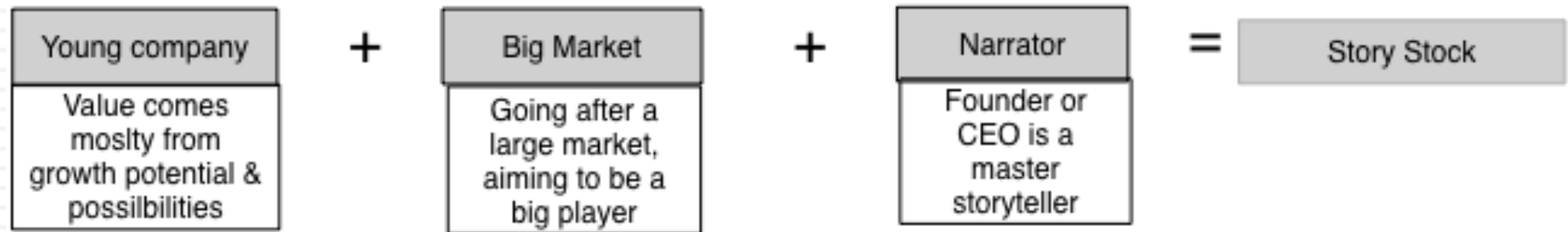
Bad news 2: Fatality of driver using Tesla Auto Pilot

Bad news 3: Tesla buys Solar City

Value: Story + Numbers



A Story Stock

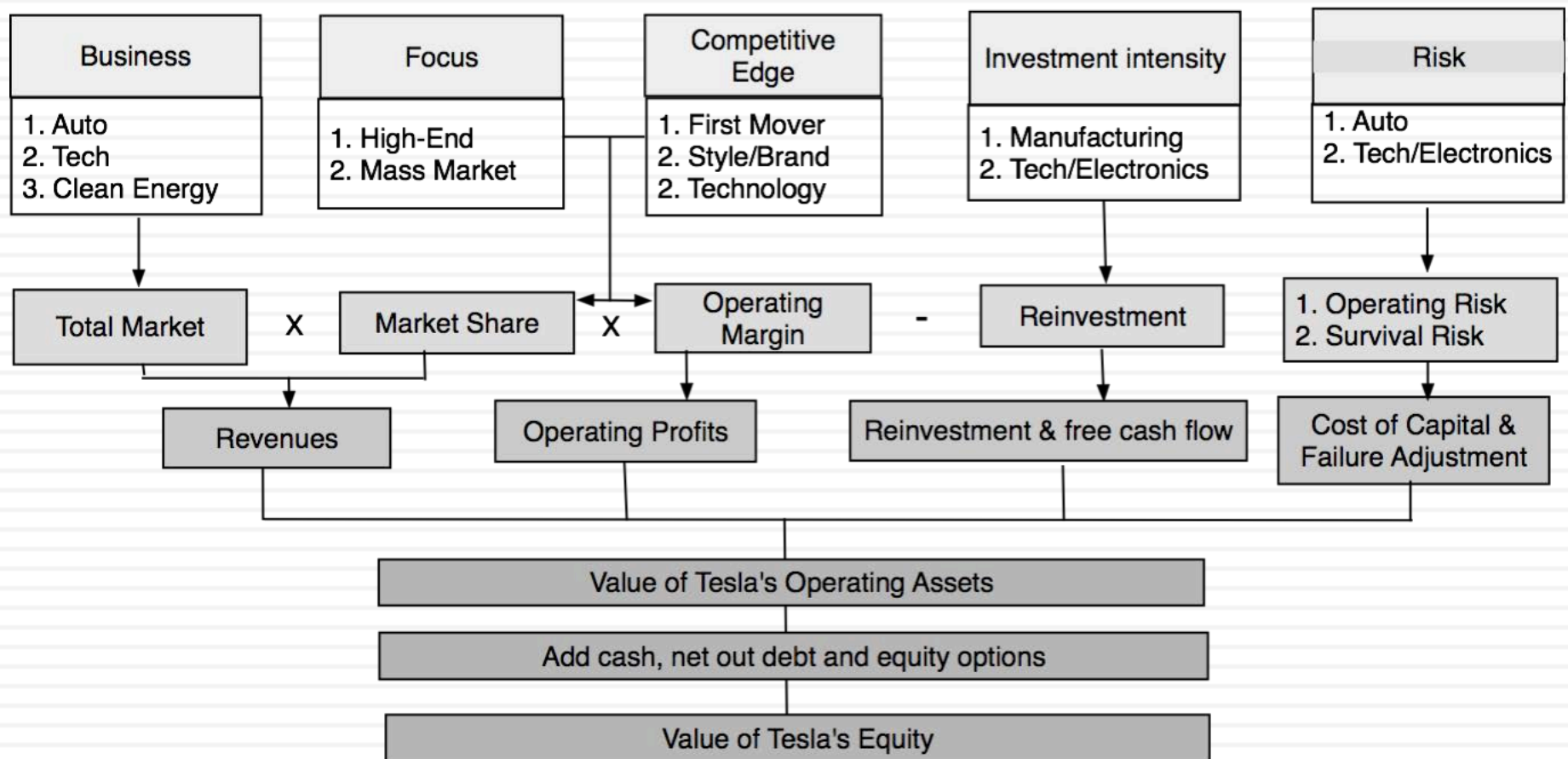


The Story Stock Effect

- Story changes and information: it is shifts in the story that cause price and value changes. An earnings report that beats expectations (in either direction) or a news story of significance (good or bad) may not have any effect on either (value or price) if it does not change the story.
- Wider disagreements: When a company's value is driven primarily by numbers, there is less room for disagreement. In contrast, with a story stock, investor stories can span a much wider spectrum, leading to a much bigger range in values, as illustrated with Uber in this post.

The Tesla Story: The Choices

The Tesla Story Choices



Tesla						
The Story						
Tesla is a high-end automobile company, with primary competitive edges coming from being a first mover in the electric car market, styling and brand power and a secondary advantage from its technology. Its investment and risk characteristics will resemble an auto company more than a tech company.						
The Assumptions						
	Base year	Years 1-5	Years 6-10		After year 10	Link to story
Revenues (a)	\$ 1,329	70.00%	25%→2.75%		2.75%	High-end auto: Revenues like Volvo
Operating margin (b)	-7.46%	-7.46%	→12.50%		12.50%	High-end auto operating margin
Tax rate	0.00%	0.00%	→30.00%		30.00%	Global marginal tax rate average
Reinvestment (c)		Sales to capital ratio = 1.41		RIR =	34.38%	Invest more like an auto than tech firm
Return on capital	-6.03%	Marginal ROIC =	18.21%		8.00%	In maturity,, no excess returns (like auto)
Cost of capital (d)		10.03%	→8.00%		8.00%	70% auto, 30% tech
The Cash Flows						
	Revenues	Operating Margin	EBIT	EBIT (1-t)	Reinvestment	FCFF
1	\$ 2,259	-5.47%	\$ (124)	\$ (124)	\$ 660	\$ (783)
2	\$ 3,840	-3.47%	\$ (133)	\$ (133)	\$ 1,121	\$ (1,255)
3	\$ 6,528	-1.48%	\$ (96)	\$ (96)	\$ 1,906	\$ (2,003)
4	\$ 11,097	0.52%	\$ 58	\$ 58	\$ 3,241	\$ (3,183)
5	\$ 18,866	2.52%	\$ 475	\$ 475	\$ 5,509	\$ (5,034)
6	\$ 29,534	4.51%	\$ 1,333	\$ 1,307	\$ 7,566	\$ (6,260)
7	\$ 42,263	6.51%	\$ 2,752	\$ 2,421	\$ 9,028	\$ (6,606)
8	\$ 54,794	8.51%	\$ 4,661	\$ 3,822	\$ 8,887	\$ (5,065)
9	\$ 63,671	10.50%	\$ 6,688	\$ 5,083	\$ 6,296	\$ (1,213)
10	\$ 65,422	12.50%	\$ 8,178	\$ 5,724	\$ 1,242	\$ 4,483
Terminal year	\$ 67,221	12.50%	\$ 8,403	\$ 5,882	\$ 2,022	\$ 3,860
The Value						
Terminal value	\$ 73,523					
PV(Terminal value)	\$ 29,889					
PV (CF over next 10 years)	\$ (16,628)					
Value of operating assets =	\$ 13,261					
Adjustment for distress	\$ 663			Probability of failure =	10.00%	
- Debt & Mnority Interests	\$ 655					
+ Cash & Other Non-operating assets	\$ 202					
Value of equity	\$ 12,146					
- Value of equity options	\$ 3,645					
Number of shares	121.45					
Value per share	\$ 69.99			Stock was trading at =	\$168.76	

Tesla (July 2015)

The Story

Tesla is an auto/tech company looking towards the mass market. Its primary competitive advantage lies in superior technology (electric batteries) with secondary advantages in styling and brand name. In terms of investment needs and risk, it is as much tech as auto company.

The Assumptions

	Base year	Years 1-5	Years 6-10		After year 10	Link to story
Revenues (a)	\$ 2,014	65.00%	25%→2.75%		2.75%	Mass market push= Revenues of \$80 bill
Operating margin (b)	8.51%	8.51%	→11.00%		11.00%	Mass market push lowers margin
Tax rate	30.00%	30.00%	→30.00%		30.00%	Global marginal tax rate average
Reinvestment (c)		Sales to capital ratio = 1.55		RIR =	34.38%	Invest like an auto/tech company
Return on capital	8.22%	Marginal ROIC =	17.15%		8.00%	In maturity,, no excess returns
Cost of capital (d)		8.74%	→8.00%		8.00%	50% auto, 50% technology

The Cash Flows

	Revenues	Operating Margin	EBIT	EBIT (1-t)	Reinvestment	FCFF
1	\$ 3,322	8.76%	\$ 291	\$ 291	\$ 844	\$ (553)
2	\$ 5,482	9.01%	\$ 494	\$ 361	\$ 1,393	\$ (1,032)
3	\$ 9,045	9.26%	\$ 837	\$ 586	\$ 2,299	\$ (1,713)
4	\$ 14,924	9.51%	\$ 1,419	\$ 993	\$ 3,793	\$ (2,800)
5	\$ 24,625	9.76%	\$ 2,402	\$ 1,682	\$ 6,258	\$ (4,577)
6	\$ 37,565	10.01%	\$ 3,758	\$ 2,631	\$ 8,349	\$ (5,718)
7	\$ 52,629	10.25%	\$ 5,396	\$ 3,778	\$ 9,718	\$ (5,941)
8	\$ 67,180	10.50%	\$ 7,056	\$ 4,939	\$ 9,388	\$ (4,449)
9	\$ 77,392	10.75%	\$ 8,321	\$ 5,824	\$ 6,588	\$ (764)
10	\$ 79,520	11.00%	\$ 8,747	\$ 6,123	\$ 1,373	\$ 4,750
Terminal year	\$ 81,707	11.00%	\$ 8,988	\$ 6,291	\$ 2,163	\$ 4,129

The Value

Terminal value	\$ 78,643		
PV(Terminal value)	\$ 34,726		
PV (CF over next 10 years)	\$ (15,070)		
Value of operating assets =	\$ 19,656		
Adjustment for distress	\$ -	Probability of failure =	0.00%
- Debt & Mnority Interests	\$ 927		
+ Cash & Other Non-operating assets	\$ 846		
Value of equity	\$ 19,575		
- Value of equity options	\$ 4,381		
Number of shares	123.19		
Value per share	\$ 123.34	Stock was trading at =	\$220.00

Tesla (July 2016)

The Story

Tesla is an auto/tech company looking towards the mass market. Its primary competitive advantages lies in superior technology & brand loyalty with a secondary advantage in styling. In terms of investment needs and risk, it is as much tech as auto company.

The Assumptions

	Base year	Years 1-5	Years 6-10		After year 10	Link to story
Revenues (a)	\$ 4,253	50.00%	25%→2.2%		1.47%	Mass market focus = \$80 billion in revenue
Operating margin (b)	-14.15%	-14.15%	→12.00%		12.00%	Tech superiority & brand = High margins
Tax rate	30.00%	30.00%	→30.00%		30.00%	Global marginal tax rate average
Reinvestment (c)		Sales to capital ratio : 2.24		RIR =	16.33%	Invest like an auto/tech company
Return on capital	-13.25%	Marginal ROIC = 30.14%			9.00%	In maturity,, has tech features
Cost of capital (d)		8.13%	→7.50%		7.50%	50% auto, 50% technology

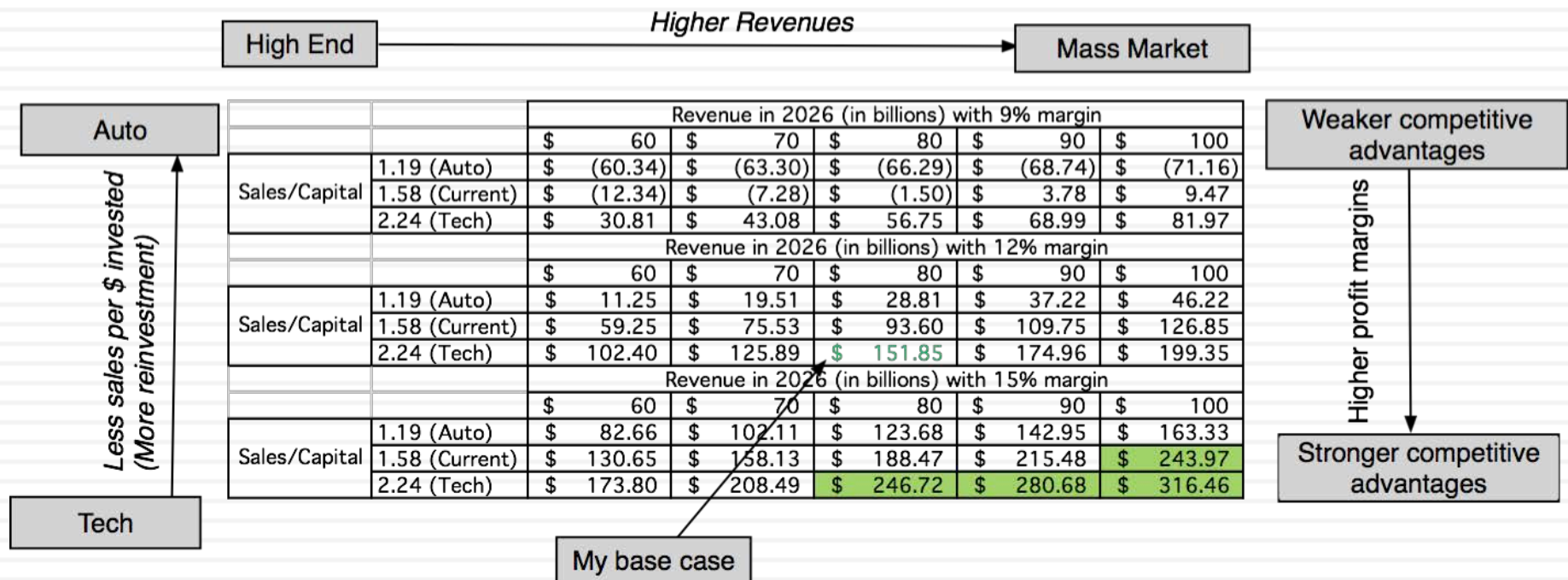
The Cash Flows

	Revenues	Operating Margin	EBIT	EBIT (1-t)	Reinvestment	FCFF
1	\$ 6,380	-11.54%	\$ (736)	\$ (736)	\$ 949	\$ (1,685)
2	\$ 9,570	-8.92%	\$ (854)	\$ (854)	\$ 1,424	\$ (2,278)
3	\$ 14,355	-6.31%	\$ (905)	\$ (905)	\$ 2,136	\$ (3,041)
4	\$ 21,532	-3.69%	\$ (795)	\$ (795)	\$ 3,204	\$ (3,999)
5	\$ 32,298	-1.08%	\$ (347)	\$ (347)	\$ 4,806	\$ (5,154)
6	\$ 45,312	1.54%	\$ 698	\$ 698	\$ 5,810	\$ (5,112)
7	\$ 59,172	4.15%	\$ 2,458	\$ 2,458	\$ 6,187	\$ (3,729)
8	\$ 71,528	6.77%	\$ 4,842	\$ 3,636	\$ 5,516	\$ (1,880)
9	\$ 79,522	9.38%	\$ 7,463	\$ 5,224	\$ 3,569	\$ 1,655
10	\$ 80,691	12.00%	\$ 9,683	\$ 6,778	\$ 522	\$ 6,256
Terminal year	\$ 81,877	12.00%	\$ 9,825	\$ 6,878	\$ 1,123	\$ 5,754

The Value

Terminal value	\$ 95,428		
PV(Terminal value)	\$ 44,454		
PV (CF over next 10 years)	\$ (14,963)		
Value of operating assets =	\$ 29,491		
Adjustment for distress	\$ 1,475	Probability of failure =	10.00%
- Debt & Mnority Interests	\$ 3,648		
+ Cash & Other Non-operating assets	\$ 1,442		
Value of equity	\$ 25,810		
- Value of equity options	\$ 3,446		
Number of shares	147.28		
Value per share	\$ 151.85	Stock was trading at =	\$221.00

Tesla: What if?



Elon Musk: The X Factor

- It is almost impossible to separate Tesla, the company, from Elon Musk, its founder. What you believe about one will drive what you believe about the other.
- If you believe that Musk is a visionary, capable of seeing the world as it will be rather than as it is, and a man who has the brilliance and drive to deliver on that vision, you will find Tesla to be a buy.
- If you believe instead that he is a showman who promises far more than he can deliver, Tesla is a sell.
- There is an intermediate position, where you believe that Musk is a flawed visionary, with the flaws being lack of focus, a thin skin and a disinterest in the nitty gritty of operations. Tesla can be a buy, but only at the right price, and if Musk can find an operating partner.

Tesla: Investment Plays

1. The Momentum Play: You can surf the stock, buying it as the story gets bigger and stronger and getting out as the story develops weakness.
2. The Short Bet: If you believe that Musk's flaws will overwhelm his strengths, you can sell short and wait for the market to come around to your point of view.
3. The Long Bet: If you believe that Musk's strengths are much greater than his weaknesses, you can buy and hold, on the assumption that he will deliver on his promise.