IPO LESSONS FOR PUBLIC MARKET INVESTORS

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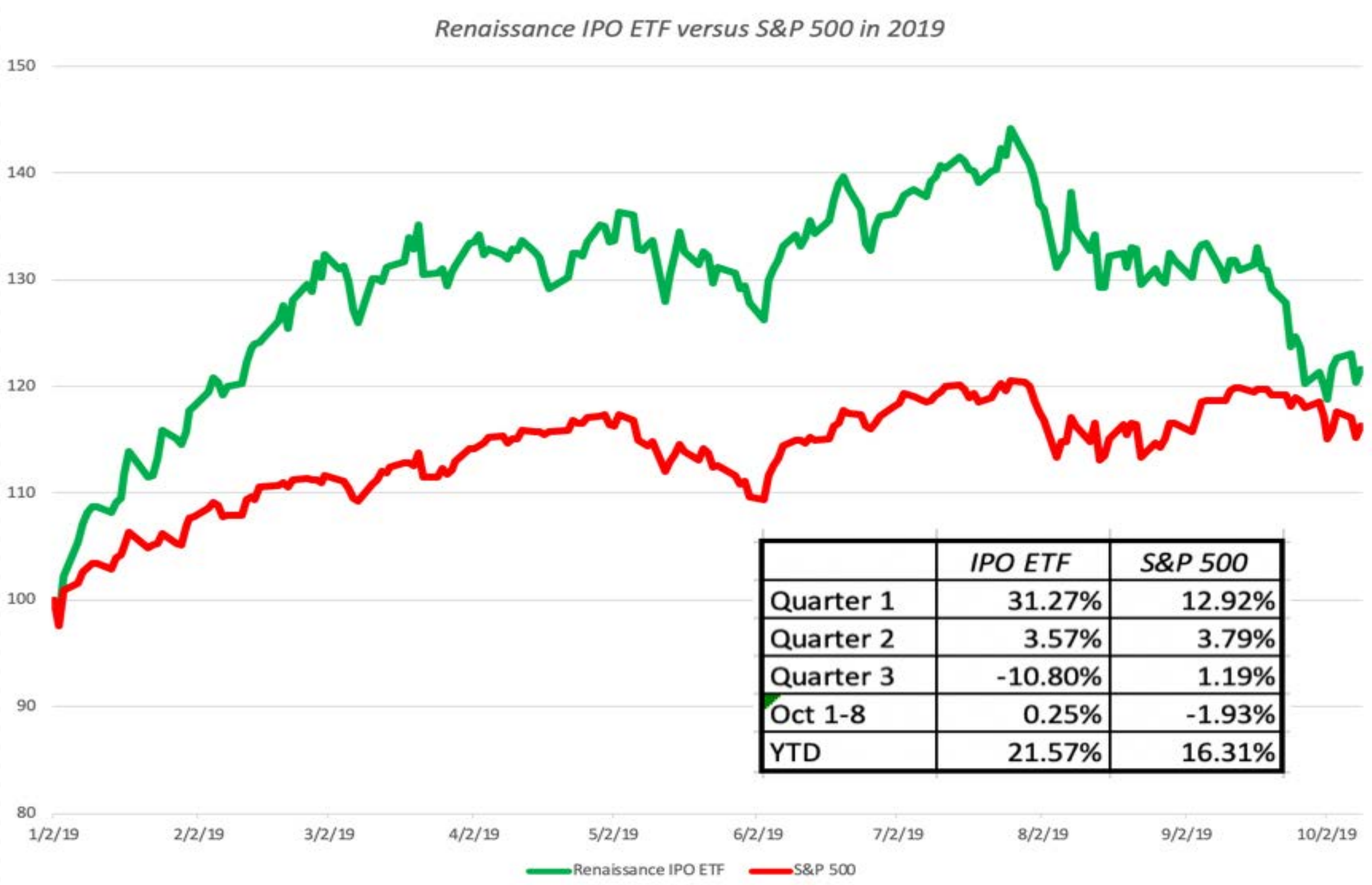
The year of the IPO

- I have found myself returning repeatedly to the IPO well, as high profile companies have chosen to go public, and like a moth to a flame, I have tried to value them.
- There was much enthusiasm at the start of the year that this would be a blockbuster year, not just for the companies going public, but also for public market investors who would now get a chance to own pieces of companies which had made venture capitalists and private market investors rich, at least on paper.
- As many of the new listings have disappointed in the after market, theeir failures have also created healthy discussions about
  - Whether public market investors should base their pricing of the latest VC rounds
  - Whether the IPO process itself is in need of a change
  - What share count that we should be using in computing market capitalization
  - Whether investors should venture into the IPO space

The IPO Market in 2019: A Snapshot

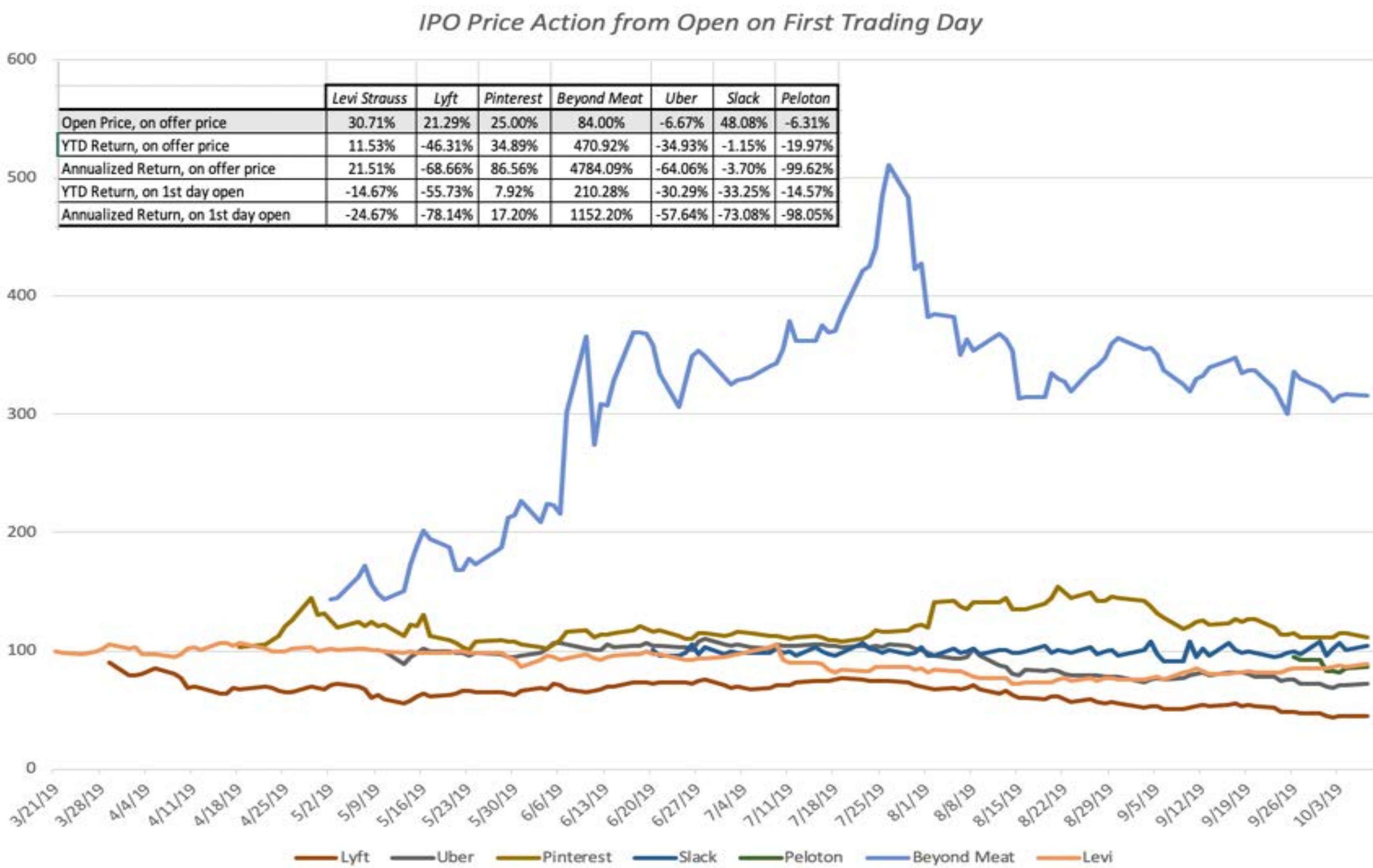


	IPO ETF	*S&P 500*
Quarter 1	31.27%	12.92%
Quarter 2	3.57%	3.79%
Quarter 3	-10.80%	1.19%
Oct 1-8	0.25%	-1.93%
YTD	21.57%	16.31%

A Subset of IPOs: Price Performance

	Levi Strauss	Lyft	Pinterest	Beyond Meat	Uber	Slack	Peloton
Listing Date	3/21/19	3/29/19	4/18/19	5/2/19	5/10/19	6/20/19	9/26/19
Number of trading days since listing	140	134	120	112	105	77	10
Offer Price	$ 17.00	$ 72.00	$ 19.00	$ 25.00	$ 45.00	$ 26.00	$ 29.00
Open: 1st Trading Day	$ 22.22	$ 87.33	$ 23.75	$ 46.00	$ 42.00	$ 38.50	$ 27.17
Close: 1st Trading Day	$ 22.24	$ 78.29	$ 24.40	$ 65.75	$ 41.57	$ 38.62	$ 25.76
Close: 10 days later	$ 21.61	$ 61.01	$ 29.74	$ 86.92	$ 40.47	$ 36.00	$ 23.51
Close: 50 days later	$ 19.27	$ 58.41	$ 26.68	$ 166.81	$ 43.69	$ 29.98	
Close: 10/8/19	$ 18.96	$ 38.66	$ 25.63	$ 142.73	$ 29.28	$ 25.70	$ 23.21

IPO Returns



	Levi Strauss	*Lyft*	*Pinterest*	*Beyond Meat*	*Uber*	*Slack*	*Peloton*
Open Price, on offer price	30.71%	21.29%	25.00%	84.00%	-6.67%	48.08%	-6.31%
YTD Return, on offer price	11.53%	-46.31%	34.89%	470.92%	-34.93%	-1.15%	-19.97%
Annualized Return, on offer price	21.51%	-68.66%	86.56%	4784.09%	-64.06%	-3.70%	-99.62%
YTD Return, on 1st day open	-14.67%	-55.73%	7.92%	210.28%	-30.29%	-33.25%	-14.57%
Annualized Return, on 1st day open	-24.67%	-78.14%	17.20%	1152.20%	-57.64%	-73.08%	-98.05%

IPO Lesson 1: It stays a pricing game

	Value Game	*Pricing Game*
Determinants of level	Cash flows, growth and risk	Demand & Supply
Causes for change	Shifts in expected cash flows, growth and risk.	Changes in mood & momentum
Players	**Investors**, estimating value, and betting on price convergence.	**Traders**, playing momentum, or shifts in momentum
Key skills	1. Assess risk and value businesses 2. Find pricing catalysts.	1. Gauge market mood/momentum 2. Detect shifts in that mood.
Personal characteristics	(a) Long time horizon, (b) Patience and (c) immunity from peer pressure	(a) Flexible time horizon, (b) Gambling instincts and (c) Crowd Reading
Tools	Intrinsic Valuation (DCF), Forensic Accounting	Peer group pricing, Charts and technical indicators

And here is why…

- The IPO process: The IPO process is one of gauging demand and supply and setting a price based on that assessment, not estimating the value of businesses. It is incontestable that the job of the bankers managing the process is to make this judgment, usually based upon the responses they get from their investor clientele. Thus, it should be not surprising that the bulk of the backing for an offering price comes from finding a pricing metric and relevant comparables (a subjectively judgment).
- Self Selection: The players who get drawn into the IPO game tend to be those with shorter time horizons who feel that their strength is in riding momentum, when it exists, and detecting shifts, before the rest of the market does. In short, the IPO market is built for traders, not investors.
- Type of companies: Most initial public offerings tend to be of firms that are younger and often less formed than their more seasoned public counterparts. Consequently, more of their value lies in the future and there is more uncertainty in assessing the numbers, allowing investors

So what?

- Don’t try to explain price movements: Trying to use value tools (like DCF) to explain why IPOs are priced the way they are, and what causes them to move on a day-to-day basis in the after market is a recipe for frustration. The nature of the pricing game is that mood and momentum can not only cause these companies to be priced at numbers very different from value but also cause price movements on trivial, perhaps even irrelevant, news stories.
- And be careful: Playing the momentum game is akin to riding on the back of a tiger, with the danger that you will be consumed, if the game shifts.

IPO Lesson 2: Pricing is on a shaky base

- Peer Group Framing: With most public companies, a combination of the company's operating history and market learning leads to a consensus on what its peer group should be, for pricing purposes. For many IPOs, especially built around new business mechanisms, there is much more for confusion about what grouping to put the company into. IPOs try to influence this choice by framing themselves as being in businesses that will deliver a higher pricing, explaining why almost every one of them likes to use the word "tech" in its description.
- Past Pricing History: Unlike publicly traded companies, where there is a market price history, the only price history that you have with IPOs is from prior VC rounds.

VC history for the subset of IPOs

	Levi Strauss	Lyft	Pinterest	Beyond Meat	Uber	Slack	Peloton
# Funding Rounds	-	19	17	7	22	11	8
Total Funding Raised (millions)	$ -	$ 4,900.00	$ 1,500.00	$ 122.00	$24,700.00	$ 1,400.00	$ 995.00
Last VC	-	Fidelity & 5 others	Sinai Ventures	Evolution, DNS	NA	Wellington & 7 others	TCV
Last VC Round (Date)	-	06/28/18	06/01/17	10/05/18	08/27/18	08/21/18	08/02/18
Last VC capital infusion		$ 600.00	$ 150.00	$ 50.00	$ 2,000.00	$ 427.00	$ 550.00
Last VC Pricing ($ millions)	-	$ 14,500.00	$ 12,200.00	$ 1,300.00	$71,500.00	$ 6,700.00	$ 3,500.00
	Levi Strauss	Lyft	Pinterest	Beyond Meat	Uber	Slack	Peloton
Listing Date	3/21/19	3/29/19	4/18/19	5/2/19	5/10/19	6/20/19	9/26/19
Money raised in IPO	$ 623.00	$ 2,300.00	$ 1,400.00	$ 240.00	$ 8,100.00	$ -	$ 1,200.00
Mkt Cap: Offer Pricing	$ 6,672.06	$ 21,083.56	$ 10,311.11	$ 1,504.50	$76,500.00	$ 5,046.34	$ 7,950.83
Mkt Cap: Open on 1st trading day	$ 8,720.78	$ 25,572.60	$ 12,888.89	$ 2,768.28	$71,400.00	$ 7,472.47	$ 7,449.11
Mkt Cap: Close on 1st trading day	$ 8,728.63	$ 22,925.44	$ 13,241.64	$ 3,956.84	$70,669.00	$ 7,495.76	$ 7,062.53
Mkt Cap: Open on 10th trading day	$ 8,481.37	$ 17,865.39	$ 16,139.60	$ 5,230.85	$68,799.00	$ 6,987.24	$ 6,445.66
Mkt Cap: Open on 50th trading day	$ 7,562.98	$ 17,104.04	$ 14,478.97	$ 10,038.63	$74,273.00	$ 5,818.82	$ -
Mkt Cap on October 8, 2019	$ 7,441.31	$ 11,320.70	$ 13,909.15	$ 8,589.49	$49,776.00	$ 4,988.11	$ 6,363.41

Reasons to be skeptical of VC prices

- Extrapolating from small investment: The pricing for the company is extrapolated from a small VC investment. With Lyft, for instance, the estimated pricing of $14.5 billion from the most recent round was extrapolated from an investment of $600 million for the company for a 4.1% share of the company.
- VC Protections: This problem is worsened by the fact that VC investors can and usually do negotiate for post-investment protections, when they invest. In effect, VCs are being provided with options, and the presence of these additional features makes simplistic extrapolation to pricing from a VC investment almost impossible to do.
- One VC effect? All you need is one over optimistic venture capitalist to push the pricing beyond reasonable bounds.

IPO Lesson 3: And an unstable share count

- For most publicly listed firms, multiply share count by share price should yield a market cap fairly close to the truth, but IPOs are different for two reasons.
  - First, an overwhelming number in recent years have had two classes of shares (sometimes three) with different voting rights and being sloppy and missing an entire share class will cause devastating errors in computation.
  - Second, most of these companies are young and cash-poor, and they have chosen to compensate employees with equity, either in the form of restricted shares and options. The way in which investors and analysts deal with these employee equity claims ranges from the abysmal to the barely acceptable, again with significant consequences.

Peloton: An illustration

- Peloton, in its final prospectus listed itself as having 41.8 million class A shares, with lower voting rights, and 235.9 million class B shares, with higher voting rights, after its IPO, yielding a total share count of 277.7 million shares. That is the share count that has been used by journalists in writing about the offering and by most of the data services since, in estimating the implied pricing.
- In the same prospectus, where Peloton states that 'the number of shares..... does not include:
  - 64,602,124 shares of our Class B common stock issuable upon the exercise of options to purchase shares of our Class B common stock outstanding as of June 30, 2019, with a weighted-average exercise price of $6.71 per share;
  - 883,550 shares of our Class B common stock issuable upon the exercise of options to purchase shares of our Class B common stock granted between June 30, 2019 and September 10, 2019 with a weighted-average exercise price of $23.40 per share;
  - 240,000 shares of our Class B common stock issuable upon the exercise of a warrant to purchase Class B common stock outstanding as of June 30, 2019, with an exercise price of $0.19 per share;

Adjusting for options

- Let's assume that the Peloton bankers came to the conclusion that $8.1 billion is a reasonable value to attach to its equity, based upon past VC rounds and peer group pricing.
- To get to an offer price, they cannot divide that number by just the shares outstanding (277.7 million), since that will treat the options as worthless.
- In my valuation of Peloton, I did what I think should always be done, which is to value the options as options, which allows me to include at-the-money and out-of-the-money options, as well as time value, net that option value from my equity value and then divide by the 277.7 million shares.

A Short Cut

- Here is a simpler way to get to value per share from the estimated equity value:

$$Value\ per\ share = \frac{Value\ of\ Equity + Exercise\ Proceeds\ from\ In - the - money\ Options}{(Shares\ Outstanding +\ Options\ Outstanding)}$$

- IF the bankers wanted to price Peloton at $8.1 billion, the estimated offer price per share, counting only the 64.6 million additional options would have been:

$$Peloton\ per\ share\ value = \frac{\$8{,}100\ + 64.6 * \$6.71}{(277.7 +\ 64.6)} = \$24.93$$

- It is possible that this was a journalistic error in extrapolation and that the bankers took options into account and meant to price it at $29/share, in which case the implied market capitalization for Peloton at the $29 offer price, using the exercise proceeds short cut, would have been:
  - Implied Market Cap at $29/share = 277.7 * $29 + 64.6* ($29 - 6.71) = $9.5 billion

IPO Lesson 4: A Bar Mitzvah Moment Awaits!

- If your intent is to trade IPOs, you should not care about value, but mine is different. I consider myself an investor, not a trader, not because it is a more noble calling but because I am a terrible trader.
- As an investor, it is my belief that these young companies that go public are adept at playing the pricing game, delivering more users, subscribers or revenues, if that is what the pricing gods want, and their stock prices often continue to rise, even though their fundamentals don't merit it. It is also my belief that each of these companies will face what I call a "Bar Mitzvah" moment, where the market, hitherto focused on magical metrics, asks the company about its pathway to profitability.
- As I look back over time, the very best of these companies, and I would include Facebook, Google and Amazon in this grouping, are ready for this moment, since they have been building viable business models, even as they delivered on market metrics. Many of these young companies, though, seem unready for this question, and the market punishes them, as was the case with Twitter in 2014.

Go where it is darkest!

- .If you subscribe to old time value investing, you are probably wondering why I would want to try to put my money at risk, investing in these young companies, when it is so much easier to value mature companies like Philip Morris and Coca Cola.
- I don't disagree with you on your premise that there is a great deal more uncertainty in valuing Uber than in valuing Coca Cola, but I believe that the payoff to imprecisely valuing Uber is greater than the payoff to precisely valuing Coca Cola. After all, what made Coca Cola easy for you to value also makes it easy for other investors to do as well, and the uncertainty that scares you with Uber is scaring most investors away from even trying.
- It is for that reason that I value companies at the time of their public offerings, and repeatedly thereafter, knowing that I will badly wrong each time, but hoping that I am able to get in at the right price.

And here are my numbers..

	On the IPO date						
	Levi Strauss	*Lyft*	*Pinterest*	*Beyond Meat*	*Uber*	*Slack*	*Peloton*
My Valuation at IPO	$ 24.23	$58.78	$ 25.08	$ 46.88	$32.91	$20.59	$ 19.35
Offer Price	$ 17.00	$72.00	$ 19.00	$ 25.00	$45.00	$26.00	$ 29.00
Open Price	$ 22.22	$87.33	$ 23.75	$ 46.00	$42.00	$38.50	$ 27.17
% under or over valued (open price)	-8.30%	48.57%	-5.30%	-1.88%	27.62%	86.98%	40.41%
	8-Oct-19						
Updated Valuation	$ 26.59	$54.38	$ 26.17	$ 47.41	$35.42	$24.34	$ 19.35
Price on October 8, 2019	$ 18.96	$38.66	$ 25.63	$ 142.73	$29.28	$25.70	$ 23.21
% Difference	-28.69%	-28.91%	-2.06%	201.05%	-17.33%	5.59%	19.95%

Act on value…

- Levi Strauss's most recent earnings report was not well received by the market, with the stock dropping 1.1% to $18.96. I see its fundamentals justifying a higher value and I *bought shares at $18.96*.
- I have gone back and forth on whether to buy Uber, Lyft or both. Lyft looks more under valued, but Uber offers more upside, given its global ambitions. In addition, I prefer Uber's single class of shares to Lyft's multiple voting right classes, and these factors tilted me *to buying the latter at $30/share.*
- Slack and Pinterest are getting close to fair value as their prices have drifted down and Peloton has become less over valued but still has room to fall. For the moment, *I will add these companies to my watch list,* and track their pricing.
- With my story for Beyond Meat, I find the price almost unreachable, and while this was the same conclusion that I drew a few months ago, *I tried shorting the stock at $142, but was unable to get my trade through*. I ended up buying put options with a 120 strike price, expiring in Decemberr, paying a mind-bending time premium, but beggars cannot be choosers.