



Professor Aswath Damodaran on Valuation

Professor Aswath Damodaran is currently a Professor of Finance at NYU's Stern School of Business. He has been called Wall Street's "Dean of Valuation", and is widely respected as one of the foremost experts on corporate valuation. Damodaran has published several books on equity valuation and corporate finance. His work has also been published in *The Journal of Finance*, The Journal of Financial Economics, and the Review of Financial Studies. Damodaran has been voted 'Professor of the Year' by Stern's graduating MBA class five times, and has been awarded NYU's Excellence in Teaching and Distinguished Teaching awards.

Kevin Harris from SumZero sat down with Damodaran to discuss valuation, corporate finance, and his advice on both for investment professionals.

Kevin Harris, SumZero: What is the most egregious valuation mistake you most routinely see being made by investment professionals?

Aswath Damodaran, NYU Stern: The most egregious valuation mistake that I see investment professionals make is mistaking pricing for valuation. Most investment professionals don't do valuation, they do pricing. What I mean by that is that you price a number to a stock based on what other people are paying for similar stocks. Any time you use a multiple comparable you're not valuing the company, you're pricing a company. Ninety percent of the time, when someone says "I've valued a company at X", I always have to stop and ask them, "What do you mean value the company?". Most of the time when I extract the answer, the answer is that they've really priced the company. There's nothing wrong with pricing. But it's not valuation. Valuation is about digging through a

business, understanding the business, understanding its cash flows, growth, and risk, and then trying to attach a number to a business based on its value as a business. Most people don't do that. It's not their job. They price companies. So the biggest mistake in valuation is mistaking pricing for valuation.

KH: How do you approach valuing companies whose price seem to be more based on narrative and hype than hard numbers?

AD: There's an advantage to realizing that there are two processes at work. There's a value process, and a pricing process. The pricing process can be driven by mood and momentum, which doesn't change the value of the company. But the price can then be a number very different than the value. The conundrum investors face is in valuing that company is that if the company has been priced, you can come up with a value very different from the price. Then the question is what do you do with that valuation. If the pricing process is strong enough, you can be right and go bankrupt being right on the company's value, because the pricing process can keep pushing the price away from the value for extended periods.

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KH: Tesla's core automobile production business almost seems secondary to the company's other focuses on battery, solar, trucks, and autonomous cars. How do you approach valuing Tesla in 2018?

AD: Well, it recently seems to have come back full circle to cars. One of the problems with Tesla is that its story seems to be like nailing jello to a wall. In a sense, this reflects the strengths and weaknesses of Flon Musk.

Tesla is not a company, it's a reflection of Elon Musk. So what you think about Tesla is very much a function of what you think about Elon Musk. He's a visionary, he's a genius, he's an out of the box thinker, but he has no focus and discipline. He keeps wandering off into these alleyways, and you follow him...

I'm not sure what kind of a company Tesla is. Ultimately, I think Tesla is an automobile company that has got technology in good ways and bad ways. As a business, it's shaken up the way that things are done, but is ultimately still an automobile business. Remember, Elon Musk has other fish in the fire, he has his spaceship business, his boring business, and so you have to keep your eye on the ball. You're not buying a piece of all of Elon Musk, you're buying a

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piece of Elon Musk's Tesla story, and that is ultimately an automobile focus.

KH: How do you value companies similar to Tesla or Amazon, whose founder's stories seem to be muddled with the companies'?

AD: It is dangerous, because people are unpredictable. It is better to have a company with a more balanced management team.

The difference between Tesla and Amazon, even though they both have strong founders, is that Jeff Bezos is not up front and center. How often do you see Bezos tweeting about an Amazon problem? He knows that for Amazon to be a successful company, he has to build a good management team. That's what Tesla needs, a management team that is strong and for Elon Musk to let go of some of the things that he's trying to do. I think that it's okay to be a founder driven company if you build in strong management. And while we talk about Buffett and Berkshire Hathaway, we forget that Charlie Munger was a counterweight to Warren Buffett. In a sense, Berkshire is a Warren Buffett company, but it isn't entirely Buffett, it's Munger, and it's Jain, and this demonstrates that the key is having a strong team. That's what I think separates founder run companies that survive and become great companies, and founder run companies that crash and burn with their founders.

KH: What made you describe Amazon as a 'pet obsession' in the past? Is it still? Why?

AD: It's because I've never seen a company as focused on a story and stay with that story through good times and bad times. How I describe Amazon is with patience built into its DNA. And it's always been that company. It's told the same story for 20



years, and it's delivered on that story very consistently. I believe that this is the way that you build a story stock. You have a story, you tell the same story, you act consistently on that story, and you deliver on that story. Very few companies have done that, and I've never seen a company do it in the way that Amazon has.

KH: What is the most contrarian valuation that you've published in your career? How did it turn out?

AD: When Apple was at the peak of its glory in 2012, I chose to sell. And I chose to sell even though I loved the company. It was actually very difficult valuation to do because I was so biased towards Apple. And at that time everyone thought that Apple would keep going up because it had an incredible decade. If I were to pick a company where my valuation most went against the grain, it would be Apple in 2012.

KH: When has a company's price most escaped your 'valuation'? What did you learn from it?

AD: I valued a Brazilian iron mining company in 2013, found it to be undervalued, and bought its stock. I bought it on the expectation that because iron ore prices had recently fallen, and that the price reflected that, it was going to recover. The lesson from the valuation, was that for iron ore mining companies, it takes about 2 or 3 years for shifting iron ore prices to shorten earnings. So I bought at the wrong time, lost some money, and I learnt that when I'm valuing commodity companies I can't just take the monthly numbers and work with them. I have to clean them up for whatever has happened to commodity pricing over that period and then come up with numbers that reflect the commodity prices current impact on the company.

KH: In your 'Going to Pieces: Valuing Users, Subscribers and Customers' article, you covered valuing user and subscriber based companies. What are the biggest valuation mistakes you think that VCs investing in these companies make?

AD: The biggest mistake is that VCs don't value users, they price them. What I mean by that is that if there's a line of VCs and you go up to a VC and say "I have a million users", the VC says "Amazing, I'll pay you \$1 Billion". Most VC's are still pricing users. with the assumption that all users have value, and that all their data is going to be useful. And I think that's a dangerous thing. The reason I wrote that paper is to illustrate that users can be valuable, but users can be useless. Moviepass users are useless - there are a lot of them, but I don't think the marginal Moviepass user adds any value. In fact, I think that they destroy value, because you're giving them a service for way below cost. Netflix users, are clearly much more valuable as a commodity. I think that we have to differentiate between users, and to do that we have to start asking serious questions about what separates good users from bad users, what separates valuable users from useless users.

KH: What are the most important innovations in valuation methodology during your career?

AD: Almost none. Valuation isn't about methodology, it's about adapting your valuation techniques to real world challenges. I think in my lifetime, I've seen the world go from being a domestic company driven world to a multinational world. We have to think globally, which is one shift, You have to think about not just



the risk premiums from the market you're in, but also the risk premiums of the rest of the world. That's one big difference. The second is, we've lived through a decade of low risk premiums. We've had to learn to be much more careful about risk premiums, currencies, and how we use them in valuations.

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And third, we live in a world where companies' life cycles have shortened. Yahoo went from being a startup to an incredibly successful company to no company at all in a period of 25 years. As lifecycles shorten our valuation approaches have to adapt to those.

KH: What are your thoughts on the astronomically high private market valuations achieved by companies like Uber?

AD: Pricing. It's a pricing issue. The reason people pay \$60 Billion for Uber is because they think that when it goes public it will be worth \$100 Billion. There doesn't need to be a fundamental rationale for value. All you need in the pricing game is someone else willing to pay a higher price for the company. As long as momentum is on their side, it'll keep pushing the pricing up. It's got very little to do with fundamentals, and everything to do with "is there somebody else out there who will pay me a higher price for this company".

KH: Bill Gurley criticized you in 2014 for a 'faster horses' mentality regarding your analysis of Uber. What metrics are best to use to value the spread and adoption of disruptive technologies?

AD: I think what I missed in 2014, which Bill was right on, is that Uber has attracted people into the car service business who otherwise would have taken mass transit or

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driven their own cars. That's hugely true, that I underestimated the size of the car services market when I valued Uber. Having said that, the rest of what I wrote about Uber is playing out. It's proving very difficult in the rideshare business to defend your business. This is a business with no entry barriers and no moat. It's going to be very difficult for Uber to make money.

The part of the story that I very obviously got wrong was the size of the market. The part of the story that is very much still up for grabs is whether Uber can make money as a car service business. And this is 5 years later. So I think that there's a lot about the ridesharing business that we're going to find out about in the next year or two. It will be very interesting to see how Uber and Lyft, and Didi, and Grab, navigate and change the business in the coming years.

KH: What is your view on the pricing impact of monopolistic investing by Softbank into competing rideshare companies?

AD: Well it's massively impacted prices. It's going to mean that there's going to be a lot more splitting up of the market, like with Uber and Didi in China, and with Uber and Grab's agreement in Southeast Asia. I think increasingly that the ridesharing companies think that the future lies in each of them carving out markets for themselves where they don't face competition. Softbank incentivizes that by being invested in all of these companies. Uber, Lyft, and Grab fares



will start to go up, and you can thank Softbank for that. They're the ones in the background impacting how this business is evolving.

KH: In 'The Dark Side of Valuation', you covered the risk of massively overvaluing young companies in young industries. Do you think that companies caught in the tech bubble have systematically been overvalued?

AD: It's a feature not a bug. It's the nature of young companies and young markets. that you will overvalue them, because you're looking at clusters of what I call overoptimism. Each cluster, be it the VCs and employees of a company think that they have the answers to the big questions. It's how markets evolve, and I think that it's a healthy process. I think that bubbles are not always bad, because they're what allow us to change and move on. So I think that you can look at bubbles as a bad thing and try to make them go away, but I think that they're a good feature of markets and allow us to shift from one business to another. from one technology to another.

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So are they collectively overvalued? Yes. So what? There will be a correction, some people will lose their money. But as long as we are informed in our decisions, make our own, and are willing to look at the losses,

things will be fine. This is not like the 2008 bubble. It is not existential. What made that bubble painful is that it happened with financial services, so dragged the rest of the world into it. This is a technology bubble, so I'm not going to wag fingers and tell people not to invest in it. It's your money, and you're entitled to invest it wherever you want.

KH: Do you have a strong view on the massive rise of goodwill impairments in US corporate finance? How should one approach goodwill when valuing a company?

AD: It makes work for accountants. Fair value accounting in general has given accounting a new business. It's actually the biggest growth business in accounting. I don't begrudge them, because they need the work. But from an investor perspective, it's completely useless. I think accounting balance sheets are the least useful financial statements. I'd much rather take a statement of cash flows over one of these fair value balance sheets.

So what do I think about goodwill impairments? It happens two years after the rest of us know it's happened. If you look at the market impact of them, it's almost zero. Nobody cares. Knowing that, think about how much money we spend counting and carrying goodwill.

KH: What books or investors have most impacted your investment and valuation philosophies?

AD: I'm going to say something that is going to sound strange. I think we spend too much time reading what other people think and do in investing. I think we spend too little time on introspection. I tell people that the person you have to understand



best to be a good investor is yourself. It's not enough to understand what Warren Buffett does and Peter Lynch does. It might surprise people, I spend very little time reading investment books.

I've read the classics, and I think that Random Walk Down Wall Street is a great book, I think that Security Analysis is a great book (if you can make it all the way through), but I think that what you're looking for is a philosophy rather than a technique. I think that we live in a Google Search world. People think that if they search long enough, they can answers to their questions, when what in fact what they need to do is to stop and think about the questions and think through their answers.

We need to own our own investment philosophies. We need to think through what we think about markets. Which means I spend a lot more time with the Wall Street Journal and reading the news of today and trying to figure out why companies are doing what they're doing rather than focusing on what other people think about companies. Or what other people think about investing.

KH: What is the biggest price to value dislocation that you see in the market today? Any specific names or sectors?

AD: I think that if you look at young tech companies, you're going to find the biggest divergence. But again, that's a feature and not a bug. That's always been true. Honestly, if I knew which sectors were massively undervalued, I'd be investing in those sectors. Sector valuation is a very dangerous game, because you're investing in a portfolio of companies. And it's very difficult to do an intrinsic valuation of a portfolio of companies. Collectively, young

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tech companies and startups will be overvalued, but there's no easy way for you to make money on that. So just look at it, and marvel and it, and move on. I think when people get angry and frustrated and become righteous about the way they think about investing is when you get into trouble.

KH: Do you have a strong view on the rise of passive investing vs. active and any dislocations that may be surfacing as a result?

AD: The shift has been a long time coming. This is the culmination of what started in the 1970s, when Vanguard started its first index fund. Active investing collectively has done a crappy job as long as it's been on the face of the earth, and now it's catching up with them. Active investors like to tell how many bad things come out of passive investing, and there are arguments you can make about how terrible passive investing is, but the reality is that active investing needs to get its act together, and collectively start thinking about what it brings to the table that is differentiated.

Active investors like to talk about how much collective value they bring to the table, but if you ask where is that value added coming from, they stutter and stammer, because they can't think of good reasons.



Until active investing comes up with a good rationale for why we should be paying people to manage our money and lose 1% relative to an index, all their arguments about how terrible passive investing is for stock prices goes out the window. It's true, that passive investing doesn't provide oversight for the price of companies. But let's face it, active investors are not doing much oversight anyway. I mean what kind of questions are equity research analysts asking that actually lead people to uncover new information? Active investors are not doing their job, so I'm not as cynical of passive investing translating into less information being generated, because there's very little information being generated in active investing right now.

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KH: Any cryptocurrency valuation insights to add to your October 'Musings' post?

AD: I have a very simple insight, you cannot value a currency, you can only price it. And you price it based on how good it is as a currency. So you can't value BTC, so you price it. And you price it based on how good it is as a currency. Right now, the problem is that BTC is a terrible currency.

It's a terrible currency in that you can't live your life with BTC in your pocket. Try buying lunch with BTC. How many stores today accept BTC? And this is 10 years after.

So, Bitcoin has been a great speculative investment, but it's not been a good currency. And until it becomes a good currency, you cannot justify the \$6,000, \$10,000, or \$15,000 that you pay. We've got it backwards, if we want to make Bitcoin a currency, we need to be working harder at making it a currency. And right now we're not.

KH: The definition of alpha seems to be ever changing with the addition of new risk factors, and new models (fundamental and accounting beta). Is there a particular definition that resonates with you for practical use in valuing stocks?

AD: No matter how you define it, active investors lose out, so the definition doesn't really matter to me. We see all kinds of game playing depending on the selective picking of whichever alpha measure makes them look good. We know this.

Collectively, the alpha for active investing, however you define the alpha, is negative. We can dance around it however much we want. We also know, collectively, there is no consistency in alpha.

Whichever measurement you use. So I'll give active investors their choice of alpha. You pick the alpha, and let's see if you can deliver a positive alpha using your own definition of alpha 5 years in a row. And I'll wager that most active investors would not take that wager.



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KH: The current long-lived bull market plus two crashes in recent memory seems to have left investors skittish about the future prospects of the market. What is your opinion of the overall valuation of US equities, especially through the lens of your work on the equity risk premium?

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AD: I think that right now, looking at the equity risk premium, I can justify prices. Collectively, the expected returns on stocks, based on the cash flows that we're seeing right now, is close to 8.3%, which is at a high in terms of what we've seen over the last 10 years. The big question is whether the big surge in buybacks that we've seen is trapped cash being returned or whether it's going to subside. That's the big question. As long as there's growth backing up those buybacks, we're going to be okay. I keep my eyes on economic growth. As long as it stays solid, the market has a base to go back to. If there are signs of economic growth staggering, or growing much weaker, then we have to start worrying. So right now, I'm not looking at the market, or CAPE or P/E, or other traditional measures, I'm looking at economic growth. As long as economic growth is solid, I'm okay with the market.

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About the Interview

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