Aswath Damodaran – Laws of Valuation Transcript

iancassel Co-Founder 7d

Don’t let the title fool you. This is one the most engaging presentations I’ve heard on valuation. I’ve had this presentation transcribed below:

Damodaran: **The two things that terrify me right now. The first is that robot behind me, I’m not sure what it’s going to do. The other is 25 minutes on the dial simply because I’m so used to spending all day talking. The 25 minutes to me is about how long it takes me to get warmed up. So I’m going to compress what I planned to say today, right at the start so if I don’t get to it you kind of believe with the message. The first thing I want to talk about is what I call a corporate life cycle that every company just like human beings is born, it grows, it matures and like every human being it declines. And just as human beings don’t like to age companies don’t like to get old. So the first message I want to talk about is this notion of a corporate life cycle and how trying to fight it is the most dangerous thing a business can do.**

The second message I want to deliver is the focus of a company needs to change as it moves through the life cycle. From start-up to growth, to maturity, to declining companies. And more value is destroyed around the world by companies not acting their age. Young companies that try to act old and old companies trying to be young again. And there’s an entire ecosystem that feeds these companies, consultants, bankers. Essentially I call them the plastic surgeons of business. Essentially saying, “I’ll give you a face lift. You can be young again.” And companies keep buying into this notion over and over again. The third message I want to talk about is very specifically connected to the topic I teach, which is valuation. Now, when I say valuation, for most of you what comes to your mind is spreadsheets and models and numbers, right? That’s what we’re trained

to think about valuation as.

In 32 years of teaching valuation I've learned a very important lesson. It took me awhile to get there. Valuation can never just be about the numbers. A good valuation always has a story embedded in it. And one of the things I want to talk about is how the balance between story and numbers changes as a company goes from being a young company to an older company. And the final message I want to deliver is we often talk about great CEOs, and I'm going to argue that what makes for a great CEO is going to change as you move through the life cycle. That what makes for a great CEO at a young company is very different than what makes for a great CEO in a mature company, which is a very different from what makes for a great CEO in a declining company.

So I've got a lot on the menu, so I want to get started. When I teach finance I use a couple of structures to kind of bring through some of the broad lessons in finance. And one of the things that I find useful is the notion of a balance sheet. Not an accounting balance sheet. I'm not an accountant and thank God for that. A financial balance sheet. Let me explain how a financial balance sheet is very different from an accounting balance sheet. At one level it looks very similar. It has assets and liabilities, but in the asset side of the balance sheet, instead of breaking things down the way accountants do to fixed assets and current assets and financial assets and intangible assets, I divide the assets of a business into assets in place. Investments it's already made as a company and growth assets.

So look at a company like Microsoft, the assets in place will include office and windows and what they already have in place, but growth assets is the value that I'm attaching to what I expect you to do next year, two years out, five years out, 10 years out, forever. Assets in place and growth assets. And the other side of the balance sheet, there are only two ways you can fund a business. You can borrow the money or use your own money. Borrowed money we can call debt and using your own money is equity. We can dance around these two words as much as we want, but you have debt and equity. And here is how that structure is going to help me think through the stages in the lifecycle. So here's my corporate life cycle, which I promised you at the start.

So as I go through each stage in the life cycle, I'll throw a few examples at to you. And I'd like you to think about your company and where it falls in

the lifecycle because in a sense for some of you, this is going to be depressing when you put your company in the life cycle, but it is what it is. So the start of the process, the birth of a company is of course a start-up, and you can think about start-ups in different sectors. Right now, for instance, its artificial intelligence might be the sector we'll see start-ups. Last week we had quite a commotion in markets because of a company called Tilray go public. For those of you not familiar with Tilray, it's a cannabis producing company and right now that's a hard business to be in. The company quadrupled in its first three days and lost 50% in the next two days, but start-ups are young companies just coming up.

There's a huge mortality rate. Most start-ups don't make it. If you do make it from the start-up you become a young growth company. Young growth companies are like teenagers. And you know what teenagers do, right? Incredibly stupid things. So when you see a company like Tesla or Uber, when people jump on them saying, "How come you behave so immaturely? You got to behave." Remember that they're teenage companies. Teenage companies don't always think through the consequences, but the future is full of potential. Then you've got young growth companies. This is when you're at the peak of your glory. This is when you can go to sleep at 3:00 in the morning, wake up at 6.00 and still function. You're kind of peaking. Then you become a young growth, then you become a mature growth company. These are the Facebook's and the Google's of the world. You get amazing earnings, cash flows, and it still to continue to grow, but you're still enjoying life.

Then come what I call the Middle Ages. Middle Age is something none of us want to get to, but there are worse things waiting for you if you think about it. You become a mature company and then comes that final phase that nobody wants to be in, which is you're in decline. Companies are born, they mature, they decline. It's the nature of the process, and if you think about where a company falls in this process, you can already start thinking about not just how this company should be run and what it should be doing, but how to value the company. So if you think about what causes this process to evolve, here's the way to think about it. Some businesses are easy to enter and scale up. They don't require a huge amount of infrastructure investment. They don't require decades of building up. You can grow quickly.

Some businesses take much longer to build up on. That determines how quickly you go from being a start-up to a mature company. Once you

become a mature company, you get to reap the benefits of having built up a business before you go into decline. So what allows companies to grow quickly are ease of scaling up, how quickly you can enter businesses and how little capital you need to grow, but what causes companies to decline are exactly those same factors. So I'm going to start off with what I believe is happening across the world, that's changing the way we should be doing not just valuation, but how we run businesses. I think life cycles for companies are getting compressed. The way I described this in one of my posts on my blog was I said tech companies age in dog years. You know what I mean by that?

A 100 year manufacturing company is an old company. A 20 year tech company is a really old company. Tech companies age in dog years in the sense that they grow from nothing to something really quickly. They don't stay mature for a very long before they go into decline. Let me give you two contrasts. A few weeks ago I got a call from a reporter about GE. GE has had a glorious history, but it's history is mostly behind it. Watching GE today … He said, "How would you describe what GE's future looks like?" I said, "It looks like the Bataan Death March." There's nothing hopeful that you can see here, but before you grieve for its end, remember it has had 125 glorious years of existence. GE was founded in the last part of the 19th century. It grew too much of the 20th century, changed the way Americans used appliances, became one of the biggest, greatest conglomerates in history before it went into decline. 125 years.

In contrast, take Yahoo. A company that was founded in the early 1990s, very quickly went to becoming a 100 billion dollar company in the face of seven to eight years. What took GE 50 years to do, Yahoo did in seven years. It stayed as a mature company for about seven years before it went into decline and now all you have when you look at Yahoo is a walking dead company. There is nothing left at the … I mean, what can you … And I remember about four years ago valuing Yahoo. And I initially valued its basic business, which is a search engine that nobody searches on, a mail program that nobody sends mail on and essentially even in its best days, you can say it's worth about three to 4 billion. The company of course was trading at about 40 billion. You know why, right?

There're two big holdings, a 21% share of Alibaba, which is worth about 30 billion and a 35% share of Yahoo Japan. For some reason the Japanese still seem to search for things on Yahoo. Don't ask me why. But this is a company that went from being a start-up to a large company to

nothing in a phase of 25 years. I could say the same story about Nokia. A company that had said, “Oh, blackberry.” If you look at the great companies that started in the '70s and the '80s, especially in the technology space, the life cycle for these companies essentially has compressed. And I think we need to adapt the way we think about business to reflect these compressed life cycles. So let me start on the first of the three things I wanted to talk about related to the lifecycle.

I teach two classes as my introduction specified. I teach a corporate finance class, and I teach a valuation class. If you ask me to describe the difference between these two classes, here’s the way I describe the differences. In valuation, I look at companies from the outside in. I look at a company as an investor asking how much would I pay for this company given the way it’s run? That’s valuation. In corporate finance, I look at the same companies from the inside out. Essentially as a manager saying, “If I were running these companies, how would I run them differently?” And people are always surprised by this because they think I write a lot about valuation. So that’s what I must prefer. I prefer teaching the corporate finance class because I get more degrees of freedom, more levers that I can move around to change the value of a company.

And if you ask me to summarize my corporate finance class, I actually do it on one page. This is all the corporate finance you need to know if you’ve never taken a corporate finance class. There are three basic principles or decisions driving businesses. There’s the investment decision where you decide what projects to take, what assets to invest in. And the principle that governs how you invest is a very simple one. Go out and take investments that earn more than your minimum acceptable hurdle rate. That’s basically the rule. How you measure the hurdle rate and how you measure returns is full of details, but that’s the basic principle. See investment principle, take good projects. Fund them well. Remember I said there were two ways to run a business or fund a business. One is to borrow money, and the other is to use equity.

Find the mix of debt and equity that minimizes your hurdle rate. It’s better to have an 8% hurdle rate than a 10% hurdle rate. And there’s a third principle. It’s called the dividend principle, and here’s what it says, “If you cannot find investments that make your hurdle rate, give the cash back to the owners of the business.” Let them find a better place for the investment. The investment principle, the financing principle, the dividend principle. Every business has to make investment decisions, financing

decisions and dividend decisions. Now, let's think about how the focus of a business changes depending on where you are in the lifecycle. When you're a start-up, the only decision you really should be spending your time on is investment decision, and here's why. How much money can a young start-up afford to borrow? The answer is none. You should not be borrowing money, and here's why.

When you borrow money you got to make interest payments. Those interest payments you can't make with potential. You can try. You can go to the bank and say, "I've lots of potential. Can I pay with potential?" It doesn't work. And if you ask me, "How much can I afford to pay in dividends?" What dividends? You're a young start-up. You have no cash available to pay in dividends. Everything you do as a start-up is built around making good investments. You got to build up those growth assets. As companies mature they can start thinking about the financing principle. Let say what [inaudible 00:14:25] of debt and equity is right for me as a company. So as companies mature you're going to see the finance part of the business take a bigger role, and then you going to be declining businesses. Your job is to give cash back to the owners. The focus shifts to the dividend principle.

The investment principle, the financing principle, the dividend principle. Young companies should be focusing on investments. Mature companies can think about financing mix. Declining companies should be thinking about dividends. Remember at the start of the session, I said that one of my biggest problems with companies is companies that refuse to act their age. I describe them as the equivalent of 50 year olds wearing hip-huggers. It is not appropriate, but many companies try to act ages that are not right for them. Let me give you an example. A young company that goes out and borrows money. I don't get it. Why if you're a young company would you put your entire future at risk by going out and borrowing money. Two years ago, I mean, Tesla is one of these companies that I've been tracking for a while simply because it fascinates me as a company.

It's nice to have a CEO who's constantly throwing fuel on flames, making it go up more, but it's a company I've tracked for a while. But two years ago Tesla went out and borrowed 5 billion dollars, and I never understood it. Why would a company like Tesla, that's a money losing company that should be focused on building up the business, go out and borrow money. Young companies that borrow money, I don't get. Mature companies that

try to go back to being young companies, I don't get. Declining companies that try to reinvent themselves as mature companies, I don't get. And in the process they'd destroy value because they're trying to be something that they cannot be. So the next time you see a company doing something big, doing an acquisition, "Why?" "Because we want to be young again."

The analogy I give is you're trying to be something you really cannot try to be and Walmart. But Flipkart, Flipkart is an Indian online retail company. A company that is a money losing machine, that's been burning through cash for the last 10 years with no end in sight. Walmart paid 21 billion dollars. I call it the most expensive facelift in history, because that's what it was, a 21 billion dollar expenditure, why? Because Walmart wants to be young again and like all facelifts, gravity works its wonders and three years from now Walmart will be asking, "What can we do next?" But here's where the ecosystem kicks in. And that ecosystem includes a great deal of what we hear about in management, "Restructure yourself, reinvent yourself, innovate." "Hey, that's all good." But if you're a consultant or a banker, you want companies that want to look younger, because you can tell them, "If you do this, you'll be younger again."

So, when companies refuse to act their age the investors pay a price. Which brings me to the cash flow side of this equation. If you're a young company remember you're building up the business, you're investing a great deal, you're often losing money because you're building up businesses. You will tend to have negative cash flows. There is this notion called cash burn. Investors sometimes say, "Hey, that company is burning through cash." By itself there's nothing wrong with the cash burn if you're a young company. Cash burn is a feature, not a burn for young companies because they have to burn through cash to build themselves up. So you got to live through that cash burn. But if you're a good business at some point in time that cash burn has to stop. You have to start to generate positive cash flows, and I'm not being just old fashioned here.

That's been at the basis for business for as long as businesses have been around. It's not that you need to make money right from the start, but eventually you have to make money. So when you look at a business, one of the ways to identify where businesses in the life cycle is to look at its cash flows. Last week I valued Amazon and this is a company that to

me is the most difficult company in the world to value. And the reason is I'm not sure what business it's in any more. I used to think Amazon was a retail company. I've given up on that notion. Here is what I think it is. In fact, I used to call Amazon my field of dreams company. If you ever seen the movie Field of Dreams, remember the line in that movie that everybody walks out of the movie and still remembering. "If we build it they will come." That was the Amazon theme song, right? "If we build it they will come. If we build what revenues they will come what's the profits."

For 20 years Amazon has been run as a company saying, "We will build it then they will come." I used to think Amazon was a retail company. I no longer think it is. I think it's a disruption platform that can effectively go after any business on the face of the earth. And here's one thing we can guarantee with Amazon, whatever business it goes into, I don't know whether Amazon will ever make money, but here's one thing I will guarantee you. Any other company in that business, I will guarantee you will now lose money. So if you are in any business Amazon targets, no bad things are going to happen to you. Do you know that the day Amazon enters any business, collectively in that business everybody else loses tens of billion … The day they entered the grocery business, collectively other grocery companies lost 40 billion dollars in market capitalization on that one day.

So whatever business you're in, every night get down on your knees and say, "Please God, don't let Amazon come into my business." Because they will destroy your business and leave nothing there. So then now a disruption platform with an army. You know what that army is called? It's called Amazon Prime. 110 million absolutely loyal members that they can turn loose on any business they want. So last week when I valued Amazon I was trying to put in the life cycle. I'm not sure where it is right now. It's not definitely not behaving like a mature company. It's actually behaving like a young growth company with a trillion dollars in market cap behind it. It's never been seen before in history, and I'm not sure what's going to happen next, but it's going to be fun watching. But it's not going to be fun playing against it.

So the reality checks that companies need to think about is first for young companies, you have to remember cash burn is going to happen. You can't fight it. For mature companies you have to recognize things will start to slow down. You can't fight the slowing down of growth. And once you

start declining, you have to start thinking about how do we give cash back to the owners? There's this big debate in the US about buy-backs, about how buy-backs are a terrible thing, and you've heard the story, right? When companies buy back stock, that cash is not being invested back in the company to which my response is, "What's wrong with that?" Do you really want GM investing your money back into their business? If you look at the hundred of our largest business in the US, I would say 60 to 70% of these businesses they're investing back in the business is almost a guarantee that, that money is going to get burned through.

There's nothing wrong with a company saying, "Hey, you know what? There's nothing to invest in. Take the cash back." That cash doesn't leave the market. It just goes back into other businesses, which brings me to my third phase, which is this notion of connecting stories and numbers. As I said, when I first started teaching valuation, I used to think it was all about the numbers. It's really not about the numbers. To me, a good valuation is a bridge between stories and numbers. You know what I mean by bridge between stories and numbers? When you show me a valuation you point to a number and said, "Why is that number what it is?" My answer is never going to be because I used a 25% growth rate for the first five years and 5% thereafter. It's always going to be a story. Every number in my valuation has to have a story behind it and every story that I tell about a company has to have a number attached to it.

I will need about two minutes. I'm going to compress what I say about stories and valuations. With young companies, it's all about the story. When I valued Uber in June of 2014, this was a start-up still, a young company losing a lot of money. My entire valuation was built around my story about Uber being an urban car service company. That drove my entire valuation. And when I finished my valuation one of the Uber's lead investors, Bill Gurley, venture capitalist, a leading investor in Uber said, "You got the story all wrong. Uber is not a car service company, it's a logistics company." Notice how words have consequences. By using the word logistics what's he done? He's tripled the size of his business. We could be in delivery and moving. He said, "We're not just urban. We're going to be everywhere." And he said, "We're not just going to have local networking benefits. We're going to have global networking benefits."

In fact, when [inaudible 00:24:04] told that story, I valued the story for him. My value for Uber was 6 billion. His value was 53 billion. What separated us was the story we told. With young companies, your story will define

your valuation. So if you're a founder, the words you use to describe your business can mean the difference between a 6 billion dollar valuation and a 53 billion dollar valuation. With mature companies, it's the numbers that drive your valuation because your … It's like being in chapter 34 of a 35 chapter book, I can't re-invent the characters. So if I'm valuing Coca Cola, I can't make you a young tech company and give you all these neat things. The older a company gets the more the numbers drive the valuation. Which brings me to my final theme because I've only 24 seconds. Do you know the right CEO for a companies? If you're a young start-up who do you want is your CEO. It's all about the story. You want Steve the visionary.

I gave the name Steve for obvious reasons. You want the storyteller. As you become a young growth company you want Bob the Builder, right? Because you got to start building a business. As you become a mature company you need Don the Defender. Then you become a declining company. You need who? You know who you need as you CEO? You need Larry the Liquidator. If you've never seen the movie, Other People's Money, I'd strongly recommended it. Danny DeVito plays the role of Larry the liquidator. The right CEO of a company is different at different stages in years where the compressed lifecycle kicks in. If you look at a company like GE, it took you 125 years to get from young to really old. Your CEO has passed on, mortality kicked in. But if you are a CEO of a young tech company you could very well find yourself riding a mature, or a declining tech company, and the same CEO might no longer be the right CEO for you.

I'll make a prediction. You're going to see a lot more disruption in management ranks because life cycles have become compressed. You're already seeing this play out with Tesla, right? Was Elon Musk the right CEO to build up? Absolutely. The guy has visions coming out of his nose, his eyes, his every conceivable orifice. But is he the right CEO to build an automobile company? I'm not so sure. And this is something we're going to face in a lot of companies. Great founders certainly being inappropriate CEOs for the kinds of companies these companies [inaudible 00:26:37]. So get used to a lot more excitement in the ranks if you're watching from the outside. But if you're a CEO of one of these companies, get used to a lot more excitement from the inside, and it's not going to be as much fun. So, that's pretty much what I wanted to say. So I want to open up to any

	questions. So I'm going to let … I think the questions are going to come out. I'm pretty sure they are.
Question:	Talking about right CEO's for different company ages, do you think Elon Musk is still the right CEO for Tesla?
Damodaran:	Okay. I'm going to give you a long winded answer because I'm incapable of short answers-
Damodaran:	… When we talked about Steve Jobs, do you remember Steve Jobs, the great CEO. I've been an Apple investor since 1981. I remember Steve Jobs who almost destroyed Apple as a company. He built the Lisa. I bought the Lisa, horrible computer. So the frustration of Steve Jobs, he was not the right CEO for Apple, right? Second iteration somehow became this magical success story. You know what was different? He had a Chief Operating Officer named Tim Cook who doesn't have a visionary bone in his body, but he can make the trains run on time. That was the difference. So my answer for Elon Musk is Tesla needs Elon Musk, but he needs a Chief Operating Officer who is willing to trust and give power to not tweet about every 15 seconds on, and if he does that, I think he can pull it off. So it's doable. I don't know whether he's willing to put his ego to the side, but that's I think the answer to that question.
Speaker 2:	Ladies and gentlemen, Aswath Damodaran. Thank you.
Damodaran:	Thank you.