Why Do Companies Die? Value Creation in Public Equity Markets - With Michael Mauboussin, Head of Consilient Research at Counterpoint Global (Morgan Stanley Investment Management)

Michael Mauboussin
So, in 1976, there were just under 4,800 public companies in the United States. In 1996, using our reckoning, it peaked at north of 7,300, and 2022, we're down to a little over 4,200. So not only do we have 40% fewer companies than we did at the peak in 1996, we actually have fewer companies than we had in 1976.

Simon Brewer
Welcome to the Money Maze Podcast. I'm Simon Brewer, and Will Campion and I have created this show to explore and unravel some of the mysteries surrounding the investment business. You can keep up to date by visiting moneymazepodcast.com, and please sign up to our newsletter to ensure you won't miss a release. If you enjoy this show, please subscribe and we'd love you to tell a friend or colleague about it. Thank you for listening. This episode is kindly brought to you by our sponsors Schroders, LiveTrade by Bordeaux Index, IFM Investors and Bremont Watches. You should need no introduction but author of some absolutely fabulous work. You do great work at the Santa Fe Institute. You obviously read your consilient research here at Morgan Stanley, and there's a particular document that everybody has seen and which we'll be referring to in a minute, which is a fascinating eye-opening piece of work. So, welcome again. I think it's a real treat for everybody to have the chance to listen to you.

Michael Mauboussin
Thank you very much. Really great to be with you again, Simon. Always fun to talk to you.

Simon Brewer
Okay. Now, very seriously, according to your book 'The Success Equation', untangling skill and luck in business, sports and investing, you write, 'Ice hockey has the most luck involved of the five major professional sports.' How did you figure that out?

Michael Mauboussin
First of all, I should tell you that I'm a lifelong ice hockey player myself. I actually played on Tuesday night. I got a lot of grief in the locker room with my beer league buddies when that came out. Let me say there might be a more technical way to say that. When you make a statement like that, it comes across as suggesting the players themselves are not skilful, which of course is not true. And I think, as you know, you look at any sport, you look at football, you look at basketball, you look at ice hockey, it doesn't matter, the skills of the players today have never been better. They're bigger, they're stronger, they're faster, they're better trained, and so forth. So Simon, the actual technique we do there, the question that was answering was how close or far from randomness do the outcomes appear to be. So for instance, if every football match, the two Premier League teams would just line up and then someone would flip a coin and whoever calls it right would win and everybody would shower and go home, that would be a completely random sport and that would be what we would consider to be all luck. And by contrast, obviously, if the better team wins every single time, there's a lot of persistence in their performance. So the actual technique is called True Score theory. We don't have to get into the details of it. But essentially, what you do is you figure out what variance you would expect if it were all luck, what the actual variance is based on the actual results, and the difference between those two is going to be a component of skill and you can see the relative contributions of each. So again, ice hockey, it's not that the players themselves are

not skilful. It's that the players are very equally matched. As a consequence, and also the nature of the game, it appears to be closest to a random process.

Simon Brewer
Well, skill and luck and tailwinds are all part of the investment management business. And you have thrown some new light on your report 'Birth, Death and Wealth Creation: Why Investors Need to Understand Corporate Demographics.' So let's start at the highest level. My question related to that is, why do you think corporations are surviving longer and winning more?

Michael Mauboussin
It's a really interesting question and it's a very rich question. As a broad generalisation by the way, this is not the popular perception. In fact, I'm not sure I expected this going into this. The broader perception is creative destruction is not only blowing as much as it did before, it's probably blowing harder than it ever has before. The gales of creative destruction we had seen steadily. By the way, we show in the report the data for the '70s, '80s and ‘90s where corporate longevity was shrinking, in other words, a number of public companies that are around years later after going public. But we have the data back to the 1940s. The trend is even a longer trend. The 2000s, this 21st century, things seem to have reversed. So let's just think about out loud some of the potential factors. Number one, and I think Simon we might get into this a little bit, is the number of companies going public is just much lower. We could talk about why that is, but that probably means that those companies that are coming to market are a little older, a little more mature, a little more robust than those in the past and hence they're going to be more steady. The second thing we see broadly speaking is larger companies seem to be distancing themselves from smaller companies in terms of a sustainable advantage. We see this in returns on invested capital and even in the growth rates to some degree. So the older companies are just entrenching themselves and are less likely to die. It might be a combination of those two factors I think that would explain this to some degree. This is a very difficult thing to square with the notion that it feels like things are speeding up. We know the diffusion of innovations are happening faster than they did before, yet we see that the rate of change has actually slowed in terms of companies persisting.

Simon Brewer
I know The Economist ran that thing of ‘Goliath’s Triumph’, and it is in some ways intellectually surprising that with all of this disruption, the strong seem to be getting stronger. But let's just go back to one of your points. There’s a reduction in listed public companies, some of it can be explained by companies staying longer in private equity. But what do you think really is going on behind this?

Michael Mauboussin
I think there are two or three factors. Maybe I'll share the numbers just to make sure that we're all on the same page, and these I find to be fascinating. I originally wrote about this in 2016, so there was almost perfect symmetry. But in 1976, this is United States data by the way, although this data exists for every obviously market around the world and is similar for many other countries, including the UK, by the way. So in 1976, same pattern I should say. So in 1976, there were just under 4,800 public companies in the United States. In 1996, using our reckoning, it peaked at north of 7,300, and 2022, we're down to a little over 4,200. So not only do we have 40% fewer companies than we did at the peak in 1996, we actually have fewer companies than we had 1976, which seems quite remarkable obviously because the economy is bigger, the population is bigger, and other drivers of what you would think would lead to believe there should be more companies. So the academics who study this claim that there is a, they call it a listing gap, and that listing gap is anywhere between 5,800 and about 12,000 companies. That's sort of the economic model that would say. Okay, so why has this gone down? To your point, it's really births versus deaths. There have obviously been more deaths than there have been births. But the two factors I would point to, one is for a company to list, they basically have to do a cost benefit analysis. They have

to say what are the good things about listing, liquidity, ability to compensate employees with stock-based compensation, analyst coverage might be good, and then what are the costs, including regulatory costs, and listing costs, and perhaps giving away information to competitors, investor relations. And so what these academics who study this have claimed is that the proclivity to list is much less attractive today than it was say 20 or 25 years ago. In accordance with that, sort of related to that, if you examine the population of companies, what you find is a very high percent in 1996 for instance at the apex, were what are called micro capitalization companies. So micro caps are defined by the Center for Research in Security Prices of all those companies that have 2% or less of the aggregate market capitalization. So more than half the companies were in this tiny, little sliver of market capitalisation. And it turns out the vast majority, about two-thirds of those companies that have left in the last 25 or 30 years are those companies precisely. So the micro caps where again shouldering the costs of being public may have been least attractive are the ones that have left. So I think those would be some of the factors to look at. And you pointed out, we could maybe go into more detail, but you pointed out some other things that are interesting, which is companies have more of an incentive to stay private for longer. That could also be another factor. There's an adjustment period. That doesn't explain everything, but that's also been a factor I think as well.

Simon Brewer
And yet, Amazon, I think I'm right in saying, had most 80% of its wealth creation as a public company, as have many. Now, is that true simply of the tech sector? If it isn't, why wouldn't you as a principal of a private company want to go public because of the accruing benefits?

Michael Mauboussin
Yeah, no, Simon, it's a good point. I think for Amazon, effectively, all the value creation was in the public markets to your point. They went public in 1997. If you inflation adjust those numbers, I don't know, it was less than a billion dollars and the market cap today is whatever it is, 1.3 or 1.2 trillion. So all the wealth creation is happening. When you look at what we did in the report is look at subsequent deals. If you look at Facebook/Meta, or you look at Uber, you get very different value creation private versus public. And so more of the value creation is happening in the private markets for sure. An interesting one is Instacart that just went public this week. By the way, I should mention Amazon went public I think it was three years old from founding. So from founding to public, three years. Instacart is 11 years. You can see already quite a bit older, and again, having market caps in the tens of billions. So there's been a good sizeable chunk of wealth creation that's happened in the private markets already. So that's another interesting thing is where the wealth creation happens private versus public, and certainly because of the delay, some of it shifted to private markets. Now, one of the factors behind that to state the obvious is these companies, obviously, the higher cost to list would make them push off to be a little bit bigger to do that, but the bigger factor is that they have access to capital in a way they did not before. And some of that's for regulatory reasons and so forth, but many companies now can continue to get capital in the private markets, mostly growth equity firms that allow them to stick around in the private markets much longer than they could before.

Simon Brewer
Our speakers today, essentially, they're running public equity portfolios and that's what still the majority. Even though asset allocations in the US tilt towards private assets, and they still do here in Europe, the objective is to identify attractive companies around the globe. And yet your data has this surprising point. I'll read you. Nearly 60% of companies that have been public in the US over the last century have failed to create value as defined by earning shareholder returns over one-month treasury bills, and only 2% of companies were responsible for more than 90% of the aggregate net wealth creation. And I sort of sat there scratching my head. How does one dissect that?

Michael Mauboussin
Yeah, it's fascinating. First, let me just mention one thing. I'll give you one comment on asset classes, equity asset classes. Again, these are United States data. But as of year-end 2022, the US public equity market had a $43 trillion market cap, $43 trillion. The assets under management for the buyout industry were about $2 trillion and the assets under management for the venture capital industry were about $1.1 trillion. I just want to put this all in a little bit of context. And I think Simon, very much to your point, when you see wealth creation happen in the public markets, and the public markets are up 10 or 15% or down 10 or 15%, the dollar sums are very, very substantial. Now, I like you, I find this to be wondrous in terms of these results. I'll give full credit to the work of Hendrik Bessembinder. This is the guy who did this work. So we're using and leveraging his results. And as you point out, he went back to 1926, which is really when the databases started in the United States with some robustness, so we'll call it a century. And yeah, just to repeat the numbers you just gave, he examined about 28,000 companies, over 28,000 companies. He found about 60% of them did not earn treasury bill rates, as you just said, and that they destroyed $9.1 trillion of wealth in the process. So 60% destroy $9.1 trillion. The other 40% of the 28,000 created value, and they created $64.2 trillion. So you can already see the skew that's happening. So 64.2 minus 9.1 is $55.1 trillion. So that's the aggregate wealth creation in US public markets. Again, the bogey here being treasury bill rates, one-month treasury bill rates. But as you point out, the thing that's really startling is that 2% of that total population of 28,000 companies represented about 50 trillion of that $55 trillion of wealth creation. So what's really important to acknowledge is that there's massive skewness in these results and very difficult to understand. And it's probably the third quarter 2023, so this is hot off the press, Financial Analysts Journal, Bessembinder collaborated with some other co-authors to do the same analysis globally. They looked at 64,000 companies, including developed and developing markets, and the time period they looked at was shorter, 1990 through 2018, I believe, but the results were almost spot on. Same rate, sort of 55 to 60%, don't deliver treasury bill returns, that 40%, 45% doing much better, and again, the substantial skew. And if anything, the results are even more dramatic internationally than they are in the United States. Now, Simon, you know we talked a little bit about this before, but the reason I find this to be so difficult to understand is that most of us when we think about investment results, we all use similar terminologies in Alphas and Betas and Sharpe ratios, so we're thinking about these things statistically, but we tend to use one, three, maybe five-year periods where those types of tools albeit we know that they're not perfect, but they're not that horrible at capturing what's going on. What I think is very difficult for us to comprehend is if we allow those processes to compound out over long periods of times, we start to get these very huge power law distributions, these massive amounts of inequality. I'll mention one example that it turns out that the sizes of companies, just the size based on revenues or employees, follow a power law, and it's actually a very specific power law called the Zipf distribution. You can look this up. There's a lot of research on this. So the question is, why? Why does this happen? And it turns out there's a very simple process. I don't think it's empirically correct, but a very simple intellectual process called Gibrat's law. This guy Gibrat came up with this 100 years ago and basically says if you just distribute normal distributions of growth rates across the beginning sizes of companies and just let it compound over time, it will result in a power law. And so again, I don't think that's the actual underlying mechanism, but it does point to this idea that we have a very difficult time translating the one, the three, maybe five-year statistical properties that we look at and translating those into the long haul. So yeah, I think this is a remarkable fact about investing and obviously then introduces a number of questions we have to think about for that.

Simon Brewer
So we're here at the Quality Growth Conference. A few months ago was the sister show, the London Value Investor Conference. And can one draw anything, and it may be intuitive, you may not have the data that would suggest that quality growth investors have an advantage in that survival game?

Michael Mauboussin

Well it's interesting, I mean the first thing is, I teach at the Heilbrunn Center for Graham & Dodd Investing at Columbia Business School, so value investing is woven into what we do. I think that there's an important distinction that we always have to make between value investing and the value factor. I think sometimes people conflate those things. So value investing is buying something for less than what it's worth, which is why I'm very happy to speak at a quality conference, quality growth conference, because there can be things that are not statistically dirt cheap but are values, and likewise, the value factors low price to book or low price to earnings, and there can be plenty of things that are statistically cheap that are not great values. In fact, they're value traps. So to me, value investing is buying something for less than what it's worth. But Simon, I think more to your point, and Bessembinder did this I think through the great work of our friends and competitors, but our friends at Baillie Gifford who helped fund some of this research that Bessembinder did, you can look at the qualities of these companies that have been these superstar companies. And very much to your point, I think there are two or three things that were interesting. The first is not surprisingly, their fundamentals are quite good. They grow well in terms of earnings, they generate cash, all the things, that they invest prudently. It's all the things you would expect to see in quality growth that they very much check those boxes. Now, again, the challenge is to find these things ex-ante. The second thing that he pointed out, which I think is not always intuitive, is that whereas if you think about the leaderboard of the wealth creators of all time in the United States, the leading companies include Apple and Microsoft and Alphabet and Amazon. So you sort of hear technology. When Bessembinder got into the numbers, he found that technology was in fact not overrepresented. In fact, there are a lot of technology companies that do quite poorly. Other sectors actually had proportionally more representation, including healthcare and interestingly energy. The last thing he pointed out, and Simon I think this is really interesting for quality growth investors but just investors broadly speaking, he found that almost every one of these superstar firms at some point had undergone a very, very substantial drawdown. For example, we just looked at for fun the last 15 years all the companies that generate total shareholder returns in excess of 1,000%. We then examined the average and median size of the drawdown and the duration. And the answer is it's 60% drawdowns, and many of the leading companies had drawdowns 75%, 80%, 85%. And so it's one thing to identify one of these great companies, but it's a very different thing to be able to stay the course with that company as it went through these drawdowns. Apple is famous for this. We mentioned Amazon before. Amazon had multiple drawdowns of more than 80%. And so if you had bought out in the IPO and held it to today, you'd be quite happy of course, but you would have suffered through some very, very challenging periods in the interim. That's the other thing that becomes very interesting from the point of view of just first of all, emotionally and behaviourally, but also from the point of view of running a fund that is owned by investors, because the investor is going to see these drawdowns and think you've lost your mind even if those companies go on to create enormous value all the time.