

Mohnish Pabrai's Lecture at Boston College on October 14, 2021

Arvind: Okay, Mohnish, we're incredibly honored to have you today. Thank you so much for being here. The floor is all yours. We can't wait.

Mohnish: Okay. Well Arvind, it's a pleasure and honor to be with your class. I forget what year this is, but it's getting on in the years that we've been doing.

Arvind: I think it is number 10, actually.

Mohnish: Number 10, the 10th anniversary. Alright.

Mohnish: Time flies when you're having fun. Yeah. I think we did one live. Was it one live and nine virtual?

Arvind: That's right. Something like that.

Mohnish: Yeah. We have to try and maybe next year just to celebrate life, do it live or something. That would be great. But anyway, it's always been fun to interact with your class, and a big round of applause for Arvind for the wonderful work he does. Thank you, Arvind, for what you do for us. Thank you. Yeah, I always enjoy the interaction with you and your class, and usually I'm clueless about what I'm going to talk about. That was the same situation today. But I think I figure out a couple of things that I think might be things I haven't talked about much in the past, so that'll be fun. Without much I do, I'll get going basically with the same format, I'll go through a monologue, and then we'll open up for questions.

Mohnish: We really don't need to talk about what I talked about unless that's of interest. What was on your mind is fine. I think this was maybe five or six years ago, there's a video on YouTube. I think the title is Competition is for Losers. I think in 2015 or 2016, Peter Thiel posted that video on YouTube, it's a lecture. It's one of the lectures that he gave at Stanford Business School. He used to I don't know if he still teaches there, but he used to teach there in terms of things along the lines for startups and tech firms and so on. This particular lecture became quite popular. I think it has a pretty large view count, and I think subsequently some portions of the lecture became part of his book Zero to One.

But I think the lecture is a very good one to attend. I don't know whether he would really want to give that kind of lecture again today, especially after the Roth IRA backlash. He's faced and such, but he hasn't removed it. I don't know whether he has even got the right to remove it. But it's there. I think it's a good one to take a look at. I'll just go through a few minutes of what he focuses on in that lecture. But I would encourage everyone to go see the video directly rather than get it second

hand; from me. But Peter basically divides the business world into two sets of businesses. He says that businesses are either businesses that are monopolies or near-monopolies, or there are businesses that are in very competitive spaces.

Basically, a very small sliver of businesses will end up in these oligopoly or monopoly type situations. Most of capitalism is a doggie dog world, and it's very competitive and such. He makes the bold assertion. He's telling his students, basically, there is no point in wasting their time and forming a business or going to work for a business that deals with serious competitive forces. Of course, probably 99% of capitalism is businesses that are very competitive, which have a lot of competition and so on. Maybe 1% or less is these unusual modes and competitive advantages which give you some breathing room if you will. He says that the businesses that are monopolies typically go through some serious lengths to try to convince you that they are not a monopoly.

Because, they just don't want the added attention and they don't want regulatory changes or, just people don't like monopolies too much. They like to be under the radar and at least portray and to trend for the most part that they are not monopolies. The 99% that are in hypercompetitive spaces spend all their time trying to convince you that they actually are monopolies, that they have no competition, that they have great competitive advantages. Look, here's my list of advantages that nobody can touch me on. Basically, what the businesses are presenting for the most part is backward. The monopolist, just want to tell you, Oh, poor me. I'm not a monopoly. I'm just one of many competitive businesses and the ones which have the loser business models wanted to convince you that no, I'm a very special business and I have these special qualities.

One of the issues that come up is, I think your class is going to enjoy maybe in the next few weeks when I think maybe Nick Sleep might be coming to speak to them. We'll see, I think he spoke last year. I don't know if you have on your schedule or not, but Nick, Warren and Charlie, all these luminaries, read a lot. Nick especially, would just sit down in his office armchair, and his partner Qais would just pound through a large number of annual reports every year. Especially Qais Zakaria didn't even have a desk, I mean, in their setup in London, he just had a very comfortable armchair. Most of the time he didn't even have shoes on, heaven forbid.

His routine was to be in the office. I think Nick probably also didn't have shoes on, but the routine in the office was just, to be there without any shoes. In the case of Qais, he did not even have a desk, and had this big overstuffed chair and then pound through a large number of annual reports. Maybe when you have Nick, you can ask him about why Qais felt that he didn't need to have shoes on. (But, I digress). But anyway, when the Monopolies have no desire in telling you that they're a monopoly,

then to some extent when you read what they have to say is a little bit problematic, because there are probably two things going on for the most part. Number one, a lot of annual reports, they're not written by the CEO, it's a PR firm or the IR department, whatever, this comes up with some document and even the letter to shareholders and the CEO just signs it, whatever.

Or even if it is actually written by the CEO, The CEO doesn't really want to reveal his hand, especially if he's a monopolist, because they just don't want the attention. There's an obscure company in India that's been in my portfolio for I think like more than six years. It's called Rain Industries. It's not really a great business. Please don't go by the stock. But anyway, Rain is maybe not even a good business. I don't know why I make such investments, but such is life. Rain is basically, I would say maybe somewhat of an above-average business. It does have a gifted capital allocator, but what it does have is, it is a low-cost producer.

They don't really beat their chest and tell you that they're a low-cost producer. In fact, it hardly ever shows up anywhere in any of their writings or transcripts or anything. All I can tell is that when their competitors have pneumonia, they just have a mild cold. They're in this commodity space where their margins fluctuate, and sometimes the industry is in bad shape, and a lot of competitors are losing money. They have plants that are bleeding red ink and so on. Rain doesn't get to, usually red ink plants, the plants stay profitable while they are plants bleeding red ink. I've studied the business for more than six years, and I have met with them a few times. The CEO doesn't really like to meet investors. For the first three years, I couldn't even get him to take a phone call from me.

Since then, I've only met him really like maybe twice. I think I met him twice. But in all these six and a half years that I've followed the business, I do not understand why is it, and what is it that gives Rain this particular low-cost advantage and this particular nuance of being better than its competitors. I also do not understand fully why their competitors cannot clone it. These are obscure to me. I know it's there in the numbers. I also know that the numbers are not made up because I know that the people are very high quality and that's not the kind of games they would play, but it remains a mystery. It's very tangible, and it's there, but we can't really put a finger on it.

That is actually the nature of many monopolies. I think a business like Rain industry sees no upside in educating me because they would educate me about exactly what their competitive advantage is. They would also be educating their competitors, and that's really not of a much interest to them. A lot of public companies think that they will lose some of their edges if they openly share how their business runs and what their business model is and so on. This basically flies in the face of Qais

Zakaria being barefoot, because if these CEOs are not telling you exactly what's giving them their advantage, then all that reading gets somewhat diluted because it's like you're not really getting to the core because they don't want to really talk about it.

In that case, you have to kind of like a jigsaw puzzle, that the advantage is there, and you just kind of have to back into, try to figure out, Hey, how is this actually coming about? Is this sustainable? and all these things. If you look at a business like Amazon, right? Jeff is a gifted communicator, a terrific storyteller and a great writer. He has written great letters, and he's articulated reasonably well, I would say probably very well, things that he wanted to share with his shareholders and investors. But he also kept many things close to his breast. He didn't want to share many things because he understood really well that if you were to share those things, Amazon would end up being at a disadvantage because it'll invite scrutiny and competition and so on.

We'll get to that in a second. But one of the examples that Peter Theil uses in his talk is he uses the example of Google. He says that, we clearly know that in search, Google has a monopoly. We know that. We also know that in digital advertising, Google and Facebook control large swaths of that world, they dominate. It'd be hard to argue that they don't have an oligopoly or monopoly type position in those markets. But when the people from Google talk to you, they say, "oh, listen, poor me, I'm not really a monopoly. Look at the size of the global advertising market, and then look at me. I'm just such a small portion. Then look at the size of the internet industry, and then look at me. I'm just an itty bitty search in that industry.

Don't really focus on me being this be-all and end-all. I'm just like a tiny two-bit player in this big ecosystem". They want to deflect as much attention away from what is their massive competitive advantage, right? I mean, they just really don't want to talk about it. If we go back to Jeff at Amazon, they stumbled onto the cloud, they were kind of feeling their way in the dark. Amazon's DNA is to throw a lot of stuff against the wall. Most of the stuff they throw against the wall fails, it doesn't work. But they also don't spend much on stuff that they throw against the wall. They have kind of these small bets. They have kind of controlled experiments so that if they fail, they're not really going to affect the company that much.

If they work, then they end up creating incredible new businesses and business models and stumbling along in the dark. They started to basically think it, they said, "Look, we've got this great technology for selling all these things. Can we open this technology up to others on the internet to sell stuff too?" That was kind of the beginning of how they were thinking about it. There was a lot of pushback within his management team saying, "No, these are our crown jewels. We really can't go

to Bonds and Noble or someone we compete with and just give them our technology because these are our crown jewels”. Jeff was visionary enough to tell those people in this company that “look, if Bonds and Noble have advantages in selling books at a lower price than us, and making more money than us in that endeavor just because we enabled the technology end of things for them, they deserve to be the ones selling those books”.

He said, “it's perfectly fine if they cannibalize us because that means that they have an advantage in an area that we don't, and we can become great sellers or pickaxes in the gold rush”. We don't necessarily need to be the guys with the pans on the river or whatever. They started opening up different aspects, but they had to open their platform up, It required them to redo and it was very painful then for them to redo all their spaghetti code into APIs, which could be then allowed third parties to write to the APIs. Then eventually that over time led to what became AWS because they just started to find out that they could do more. Then it didn't nearly need to be competitors, and it didn't really even need to be people who were selling stuff.

It could be people trying to do different things in the cloud, and it just kind of incrementally, they finally got there. But many years before they came out and said that, hey, here's AWS, here's a new business, blah, blah, blah, they had figured out that they had a golden goose, and they also figured out that they were ahead of anybody else with that golden goose. Jeff also understood that the Golden Goose really did not give him a lot of competitive advantage, but that if he was able to keep his competitors at bay and get a time advantage and scale in stealth, it would make it very hard for the others eventually to catch up to where he is. They flew under the radar, and if you look at his writings, et cetera, they really don't talk about the cloud even though they already had customers and they already had a business and all of that.

I think they're like 2015 or 2016, somewhere around then that's when the whale finally surfaced. The first time Amazon actually acknowledged that they had a business unit called AWS, they actually released some top line numbers for AWS. One of the quotes that Warren Buffett had said to me when I met him for lunch with Guys Spier, (I don't know if this is the Buffett quote, or it's a quote by someone else that he was quoting), he said to me, "a whale only gets hard toned after its surfaces”. He said that in the context of Ajit Jain, I was talking to him about Ajit Jain and how Ajit is like so quiet and secretive and doesn't really talk much, and he has this monopoly business and whatever else in Berkshire, and you never hear anything about it. It's a huge business. Then Buffett said, well, “Mohnish a Whale only heart wounds when its surfaces, and Ajit has no desire to ever surface”. Anyway. AWS, the whale surfaced in 2015 or 2016, and as soon as it surfaced, two companies immediately took big notice of this. Microsoft jumped on the cloud in a

very big way, and Google jumped on the cloud. They were both actually shocked as to how much growth and scale Amazon already had. Jeff probably realized that maybe he surfaced too soon, or maybe he didn't have a choice. Maybe his internal people are telling him, (public company or reporting stuff), you can't just shove everything under a rug. At some point you have to talk about what you do as a business. But anyway, the whale surfaced and instantly Microsoft pounced on that in a major way.

Alphabet, Google also pounced on that in a major way. The difference between the two players that pounced on this market is Microsoft's been selling to the enterprise for like 50 years, long time, 40 years. Google really didn't really have any expertise in selling to the enterprise. They were really more a company that created great technology, and then they put it forth in the world, and it just virally went forth from there. Google still struggles with trying to get to the enterprise but Microsoft also had a second advantage, they had spent more than 40 years understanding how to scale by cloning, and they have masters at cloning. They understood they were not in almost all their businesses. They're not the first ones, but they're really good at copying what people have done.

The situation we find ourselves in today is, AWS still leads because of that multi-year advantage. But Microsoft has caught up quite a bit. I mean, they're still a number two player, but they're significantly ahead of Google which is a distant third. Then pretty much in the US we don't have any other players. It's basically a three-horse race, and it is unlikely that the positions of these three are going to change and such. Anyway, what ends up happening is that when we as investors, sit down and read a lot, this is a handicap we run into when we are looking at different businesses and the owners or the managers of these businesses really have no desire in spoon feeding us on exactly how they make their money and such.

It takes time. Many times, I think Arvind, when you did a deep dive on Costco, there were many facets of what you and your students found, which voluntarily really laid out in Costco's annual reports in terms of them explaining, Hey, look, these are the multiple ways which we gain an advantage. You had to kind of sift through and look at their behaviors and graduate, sort of understand how these pieces fit together and how they led to advantage and, and so on. I think the thing is that many times, one of the tools we have to use in order to try to get to the monopolies is in most cases, it'll eventually show up in the numbers. A great business, which has these oligopoly or monopoly type characteristics, will not be able to mask it in terms of the reporting that they have to do.

The numbers would show that, just like in Rain Industries. I could clearly see it in the numbers. I just couldn't see it in terms of how and why. The how and why is

not always made clear to us. We have to try to figure it out. Recently, I looked into a number of large Chinese tech company. For example, we've had Alibaba, we've had Tencent, we have Baidu, and then there's these few large Chinese tech players. Then, we have a few large US tech players. We have Amazon and Alphabet, Microsoft, Facebook. We have maybe seven or 10 companies across the US and China and all of these, Apple for example.

All of these companies, it is very clear that they have strong competitive advantages regardless of what they tell us in their writings or quarterly reporting. It is clear they have those advantages either from the net income numbers that they produce or the top line numbers that they produce, or in some cases we are consumers. We use search all the time. We use Amazon all the time. We use Apple products all the time. If you're in China, you're using WeChat all the time and you're using Alipay and all of that. As consumers, we can clearly see that there are monopoly characteristics to these businesses. We can also in many cases see that the economics are very favorable. I found Tencent a really interesting case study out of all of these companies.

I think someone like Jack Ma at Alibaba at least used to love to talk, not anymore, but there was a time when he liked to talk, but we don't hear much from him. Actually, he would pretty clearly and openly describe the Alibaba business models and how he thought about it and what and how they got their competitive advantage. He was pretty open about it. I remember that one time I was listening to one of the Jack Ma videos and you know, someone was asking him about the differences between Alibaba and Amazon. Jack went through great lengths to try to explain that his business was very different from Amazon. He also went on to say that the Amazon core business model, what they started with made no sense to him. What he was basically saying is that “Look, if I were to do all the logistics and take ownership of the inventory, own all these warehouses, own all these trucks, and own all these airplanes, I would need 10 million employees to do what Amazon does”.

At that time, I think Alibaba had like 25,000 employees. He says, “we have 25,000 people, and that's a significant amount to manage and handle. We don't even know how we would possibly handle 10 million people. If we look at Amazon on the other side, I think just during the pandemic, they hired more than a million people, and I think they're approaching 2 million or maybe gone even beyond 2 million employees. It's a very large footprint and operationally very intensive. Jack basically took the approaching look, we help people get and buy things that they want and need, and so on and so forth. We just do it in a different way than Amazon does. He's done it more with partners and historically more of digital control over the digital platforms and enabling a lot of partners.

Provider in the ecosystem to get to the finish line, which is different from the way Amazon did their core business. They do some of that with Marketplace and so on, and with their advertising businesses and such. But then, when I looked at Tencent and I went through 20 years of Tencent transcripts, they've been public since I think 2001, (I think when they went public, I think 2001 or two, three, I don't remember, maybe 2001). Right from the time they went public till now, I looked at everything that the management team and Pony Ma ever said about that business. In 18 or 20 years, basically Pony Ma has said nothing. If I look at everything he said, and then I went to the Tencent annual reports, and in the annual reports, the letter from Pony Ma also says nothing. In 18 years, there's nothing, like, what they would say, "WeChat now has 300 million users. Last year it had 200 million users, it grew by 33%. Okay?" They would report that fact with no other data behind that. Then next year they'd say, "Oh, WeChat is 420 million users, and last year it was 300 million", and that's nothing. WeChat would keep growing and they would just keep reporting that the numbers are growing till now is going to over a billion. But there was no talk anytime, anywhere in 18 years. Hey, listen guys, WeChat is kickass. It's a great monopoly. We have great economics and we make a lot of money and we control payments and we control this whole ecosystem and blah, blah, blah. That's never been talked about. Actually, I don't think most people who look at Tencent understand Tencent because then when I was looking at Tencent, I looked at this South African company called Naspers, I think they used to own like 31% of Tencent before 10 when Tencent went public.

They've held that position for the most part. I think now Naspers, which is spun out of a company called Prosus, Prosus owns like 29% of Tencent. Koos Bekker at Naspers, I went through because I was really curious. Just to digress a little bit, I think we have some time, so let's just digress a little bit, and then I'll come back to the point I'm trying to make. We have this hundred-plus-year-old newspaper publishing company in South Africa called Naspers. It's a public company, family controlled, kind of a boring little business, maybe market cap of like a hundred or 200 million. In 1998, they appoint a hired gun CEO. I think that's for the first time ever, it was not a family member who was going to run the business.

They appointed Koos Bekker, an African, as the CEO and Koos Bekker said to the family, "Listen, I don't want you to give me a base salary. Please make my base salary zero, and I don't want you to give me an annual bonus. Please make my annual bonus zero. I don't want any employment contract. Any time you want me to leave, you can let me go with no severance. All I ask for is that whatever value I create, 3% of that accrues to me". The family said, "where do we sign?" They said, "Hallelujah, someone wants to work for free and take 3% of the upside, let's go". Koos Bekker came on board and he took that business from under 200 million to

valuation of probably (if you looked at the assets inside the business), more than 200 billion.

It went from less than 200 million to 200 billion. It's like a thousand x, is that correct? Like a thousand x? Yeah. In about 20 years. Okay. What I found most amazing about that is, here you have this itty bitty newspaper publishing company in South Africa, and you get this outsider who comes in and he makes a bunch of crazy.com bets in 99, 98, and a lot of them blow up. They go to zero, but he makes one bet with \$32 million. For the \$32 million, he gets almost half of Tencent. I think the bet was made in 2001, and I think then 10 or maybe earlier than around, I'm little fuzzy on the exact dates. Then I think Tencent went public in a couple of years later.

But the interesting thing was that when Tencent went public, that stake was already worth in the hundreds of millions, if not in the billions, and they never sold a single share. Very soon the Tencent stake would've been 90% of the total asset value in the business. Then in a few years, it became 95%, and then it became 97%. Through all of that, a hired gun CEO basically decides I'm not selling a single share. (I said, how does somebody, I would say that who is Bekker is Nick Sleep on steroids?) In the case of Nick Sleep, Nick Sleep made bets on Amazon, Berkshire, and Costco. These were large holdings and the Amazon position became quite large, I'm guessing it was probably maybe one third or more of the pie that he was running.

I'm just reading between the lines from his letters that he was facing regulatory pressure for the non-diversified and large takes, et cetera. I think one of the drivers that maybe case and he had was that, look, we are independently wealthy, we have more money than we ever thought we'd have. Why do we need to sit here and keep writing letters to all these people? We can just wrap up shop and we can have as large stake of Amazon as we want individually and no one's going to tell us anything. He hung up his boots a long time back and they've outperformed everyone since then because they just kept those stakes in those businesses. If you just kept Amazon at one-third of your portfolio in 2013 or something and you didn't touch it, you pretty much outperformed everybody without doing much real work, if you will.

From then. I found that in the case of Koos Bekker, he didn't do a victory lap when Tencent was a 10 billion position and say, "Okay, look, we invested 32 million, it's now worth 10 billion. It's now worth 98% of our total assets. It has been a great ride. Let's take some chips off the table, or let's take all chips off the table". He took no chips off the table, right? I mean, he is a hired gun. He took no chips off the table until 2018. 2018 was the first time Naspers sold any Tencent shares. In fact, what they did with the proceeds is they brought back their own stock. That was part

of the reason they sold because there was a value gap. If you own shares of Naspers, you'll look through shares of Tencent that you own for each share of Naspers.

It has actually not gone down from 2001 till today. It's actually gone up because they've done buybacks, which have given you, basically in effect from an outside shareholder perspective, Koos Bekker has not diluted or sold Tencent in 20 years. It's very strange. Some obscure South African company owns 29% of one of the largest, most successful Chinese, not just tech any Chinese business ever in the history of China. It just sits there and doesn't do anything. Pony Ma is no fun. He doesn't talk, he doesn't say anything. He's like a government bureaucrat. If you overhear him talk, you think that some guy who's a member of the CCP is talking to you. It's not some entrepreneur talking to you. I then went and read everything Koos Bekker had to say, because this guy is interesting, for 20 years he doesn't sell this thing.

Koos Bekker talked about Pony Ma. I said, Okay, this is good because now I can finally understand because Naspers has had a stake in Tencent and they've had two board seats for a very long time, right from the time they were in public, I think maybe after that. Koos Bekker has been on the board for a long time, and if somebody knows Pony Ma, who is an outside shareholder, Koos Bekker. In the Naspers letters and the Naspers transcripts, which I went through, 18 years of those, there is a lot of commentary on Tencent and on Pony Ma and what Koos Bekker said, He said, "Look, there is no management team on the planet in any tech or non-tech business anywhere in the world that is better than Tencent". These are his, and he didn't say this once.

: He said this multiple times. I said, whoa, that's a pretty bold statement to make that, here's this company which is the best management team. Now if you look at the numbers for Tencent, you would not argue with that statement, Okay? I mean, Tencent went from nothing to becoming one of the largest market cap companies anywhere in the world. It has dominated the businesses that they're in. They dominated messaging and payments and video games and so on. They dominate a number of categories throughout. Then I said, why does Koos Bekker think that of all the businesses around, Tencent is the best? I said, is he biased? Is he drinking the Kool-Aid? Because after 18 years of 65% annualized return or something like that on your investment, you would've drunk a lot of Kool-Aid.

Of course, you would create a big shrine to Pony Ma and you would worship at that shrine every day. Why wouldn't you do that? But I said, what if he's actually rational and logical in making that statement? It's not just some statement he's making. Then I try to understand why does Koos Bekker think that Pony Ma is better than Jeff Bezos or Pony Ma is better than Jack Ma or Pony Ma is better than any tech

business, better than the Netflix CEO or anyone else? Why do they think that? I kept thinking about this question, and then finally it dawned on me why he says that. I had a aha moment. I said, “whoa, I think I figured this out”! I figured it out and then I understood why Pony Ma doesn't want to talk to anyone about anything.

He just wants to be kind of buried deep somewhere executing his model. What I realized is, if you look at these seven or eight companies, the three or four in China, and the four or five in the US, there are actually only two of them that understand capital allocation well, the two large tech business in the world that understand capital allocation according to me, are Amazon and Tencent, I don't think the others understand it, but I don't think they can execute. I'll explain why I say that. If you look at the balance sheets of these large 7 or 8 players, they are all drowning in cash except for two companies. Tencent has no cash, it has net debt. For the most part, Amazon has no cash. It may not be net debt, but basically has almost no cash.

But if you look at their competitors, if you look at Microsoft, massive dividends and buybacks and tens of billions. I haven't really looked at how much cash Microsoft has, but I have to imagine it's up there, 50 100, one 50 billion, whatever, Amazon Apple up there, Google up there, Alibaba up there, massive amounts of cash and Tencent no cash and Amazon, no cash. Then I said, why do Tencent and Amazon have no cash when they have businesses? Some businesses of Amazon are gushing a lot of cash. Well, the reason is that in the case of Amazon, they keep throwing stuff against the wall and they still throw stuff against the wall at such a furious rate in addition to investing in the existing core businesses that they've never been in a situation where there's 30 billion sitting on the balance sheet.

It's never happened, and it's unlikely to happen in the future. If you look at a business like Apple, it generates so much cash, but they have no use for the cash. They invest what they can in their core business. Then beyond that, the only really meaningful thing they're able to do is buyback shares. Even after all the buybacks, they still end up with a hundred plus billion just sitting on the balance sheet and it's gushing massive amounts of cash every quarter. Then when I looked at Tencent, I find that the cash balance is negative and it's been negative for a while. I realized that basically Pony Ma has a very simple business model, and I don't think he's ever going to describe that business model to anyone. Here I am, the Indian guy has to describe the business model because he won't, okay?

We had to do that in Arvind's class, so the business model is really simple. He has two businesses. One business that he has is his army of software engineers. I don't know how many engineers he has, maybe 25,000, might be 50,000 now. But it's a large army of software engineers. This army of software engineers. The way the software business works is that, the productivity difference between an incredible

engineer and just a good engineer could be a thousand to one. You would be willing as a company like Tencent to even pay \$50 million a year to a truly incredible software engineer and the run-of-the-mill ones, you might want to pay a hundred thousand or something like that. He just had this massive variance and Pony Ma understands that really well, and he's really good at sifting through which the rockstar superstars and he makes sure that those guys are well taken care of, et cetera. He's got this army of engineers, it's got this, it's basically a massive bazooka that he has with this army of engineers. He decides where and how he wants to fire the bazooka. The way they fired Bazooka is for the most part, even if they have some misses, they end up with this total dominance. For example, they have total dominance on video games, Okay? I realize that it really doesn't matter what the CCP or the Chinese government does regarding video games. It is like a pimple on a camel spot from Tencent perspective. They have almost no profits or revenues from within China in video games. It's for less than 5% of their video game, top line and bottom line that's coming from China. As soon as the Chinese Communist Party started making noise, that this is not such a great thing to have all these people playing all these video games within a femto second, that bazooka got completely pointed outside China.

He just took his army and said, Okay, ignore China, let's focus on the rest of the world. In fact, I would go even a step further and say, you could ban video games globally, and Tencent would still continue to prosper because they would still have the army, and the Army would just get redirected. Yes, there is a portion of the army is very specialized on video games, but they would eventually be able to convert that into something else. He's got basically this army that can do a lot of digital stuff in a variety of fields and they're really good at it. When Tencent makes, like for example, they made 15 billion cash flow last year. Pony Ma goes to his digital army and says, what do you need? How many more engineers would you like? The math is really simple.

Every billion dollars you spend gets you at least 5,000 grade engineers. If you take an average engineer, 200,000, 5,000 engineers would be 1 billion a year of expenditure. They tell Pony Ma, Pony, give me a billion. Pony says, Yeah, that's okay, here's your billion, but that's not enough. Can you take 5 billion? They say, No, we can't handle that. It's hard for us to hire five or 10,000 engineers. I cannot hire 25,000 great engineers. I don't know what I would do with them and how I would deploy them. I cannot take more than a billion. Pony says, it's so sad, but it's okay, here's your billion. Now Pony has 14 billion left. Then he goes to his business number two. His business number two is he's got 30 digital Warren Buffetts. He says, these losers and business number one, they can't use my money.

Here's 14 billion have fun. Then they go and they invest that in. Some of it will be whole acquisitions, but most of it is small minority stake in a number of businesses, okay? That digital Warren Buffett, which is not one guy, maybe, 20, 30 guys put that 14, 15 billion to work. Just to make sure that all the money is used, Pony makes sure that they spend a little more than the cash he generates because it bothers Pony. It doesn't bother Sundar that 70 billion earns less than 1% and it doesn't bother Apple that 100, 150 billion earns less than 1%. It doesn't bother Satya that, 8,000, 150 billion earns less than 1%. It bothers Pony Ma. Pony Ma doesn't even leave a hundred thousand dollars with him himself. If he makes 15 billion, he spends 15.5 billion because he wants to borrow at 1%.

He doesn't want some checking or savings account giving him 1%. He makes sure that when Bazooka number one cannot use the money, he puts it into Bazooka number two. Once he's fired both those Bazookas, he's got no money left and he's very happy. Okay? Then the following year, maybe he makes 20 billion again, he goes to his Bazooka number one, and they say, Pony, you come to us every year and you want to force feed us 50,000 engineers. We can't do it. Okay, I can take 6,000 and that's it. I can't take anymore. He gives them the billion too. And then again, he goes to the other team and says, my loser team number one cannot use anymore. You go to number two. Now here's the economics for the last 20 years, which Pony Ma will never tell you, I have to tell you, the Indian guy in the wonderful blue kurta, Model number one, bazooka number one earns 65% analyzed return on capital invested.

Mohnish: Day in and day out, any billion he puts in historically has made 65% a year. Model number two makes 35% a year. What a tellable business. He's just got these two models. One has been pounding out 65% a year, and the second one has been pounding out 35% a year. The DNA, so I told you there were only two large companies that knew how to do this using all the cash. What Tencent does actually run circles around Amazon, because Pony Ma is never going to hire a driver or a warehouse operator or some freighter aircraft pilot and put them on his payroll. He's just not interested. He's only going to hire software engineers. That's what he wants to do. When some business needs drivers and warehouses and all that, Pony Ma is going to have a minority investment in that business through his bazooka number two.

He has a stake in PDD and Jd.com and meet-one and all these companies that do all this crazy heavy lifting. He still gets the upside on those, but they're not on his payroll, okay? It's an investment. Jeff loves to have those people on his payroll, and I think it's somewhat inferior at the end of the day to now. It gives you more of a link with the customer. The relationship is tighter, and the service levels could be probably a bit better. But I would bet that given the superiority of the Tencent

model, it would not surprise me that if we look 10 years or 15 years from now, that it's the most valuable business on the planet. To a large extent, I feel that they may even be able to transcend a bunch of stuff that the CCP is throwing at them and continues to throw at them.

I think what they would like if the Chinese Communist Party would listen is, listen guys, just tell me all the rules right now. Don't dribble it out every few weeks. Just tell me all the rules that you want me to play with. If you tell me those rules, I will reprogram my two engines to still do well based on those rules. In the absence of clarity from the CCP telling them these are the rules, I think what Pony Ma has done, he just said, Okay, let's fire both bazookas as much as possible outside China. I think that's what they've done. They've taken their digital Warren Buffett and almost instantly move them completely out of China. They've already been doing non-Chinese investments forever. They've dominated in the way they've invested around the world and even anywhere the video games and all that was already outside China.

In both cases he's doing that. Just to come full circle, basically what I realized when I went through all of this is that if I had taken my shoes off, like Qais Zakaria and I had read 20 years of Tencent annual reports, I would be clueless. It was only because I got kind of cliff notes from Koos Bekker. I had to go to a different source, which started to enlighten me a little bit about what was going on here. I think I was speaking to the IR guys at Naspers a few months ago, and one of the junior guys made a comment, and I found that comment very stunning. They've publicly said that for the next three years, they won't sell any Tencent stock. They've made a public statement on that front. This guy says, we will never sell Tencent.

I said, Okay, we have this Koos Bekker saying that Pony Ma be all end, all great management team, and then this guy says they will never tell what's in the water, like, what's going on. These statements compelled me to dig in, like, why would you make a statement that you would never sell something? Then I realized when I figured out that these two bazookas is going on that, yeah, why would I sell, they're two great bazookas, it's got a great engine, it's firing, let it rip. The market basically, if you look at it, business like that. Now I don't want you to think of it as a stock tip, okay? Please don't think of either stock tips, don't go and buy Rain or Tencent or any of these things, just because me and the Koos is telling you that. I'm not telling you to go buy anything.

All I'm trying to say is that I think that the odds are high, that the way that business is configured, it's going to dominate for a long time. It was kind of fun to, and the bigger lesson I want you to all take home is you can get a sense that a business has an advantage from either being a customer or looking at their numbers or different

things. It can give you a sense that there is an advantage. It may take a lot of digging and it may take a lot of work to actually understand what that advantage is. That can be a big edge once you can figure that out, then, because a lot of people won't spend the time or the effort to do that. Then that can also give you very strong conviction to hold on when they have temporary headwinds or something. Arvind that's pretty much the song and the dance for this year can now go to questions. Thank you.

Arvind: Yeah. Thanks, Manish. That was really interesting. I think that Zach and Nick and that entire ethos clearly had a lot of insights into companies over very long periods of time. With that, I'll open it up to my students to jump in with questions. Please feel free to raise your hands and let's get started. Yeah. Rishi

Rishi: Hey Mohnish, thank you for taking the time to speak to our class today. I just have a quick question. How did you initially get interested in the financial markets and at what point in your career did you like say to yourself, I want to become an investor and that's really what I want to do?

Mohnish: Yeah, Rishi, that's a great question. I think it was about 27 years ago and 1994, my wife and I were vacationing in London I think just before our kids were born. I was looking for something to read on the plane back, and I was an engineer running a IT services company at the time, and I picked up one of Peter Lynch's books to read on the flight, I think One Up on Wall Street. I really enjoyed the book. I said, "Wow, this is really interesting". I don't think I'd ever bought a stock or anything. I might have dabbled a bit here and there, but I didn't really understand much about investing or markets or anything, and I enjoyed that book a lot. I said, Okay, this kind of makes a lot of sense.

I said, "Let me read some more". There was another Peter Lynch book, I read, and then I was out of Peter Lynch books and I said, what am I going to do now? I want to kind of know more. In the second book, he was talking in reverential terms, what Warren Buffett, and I hadn't talked about Buffett before. I said, well, who's this Buffett guy? What's she talking about? Why does he think this guy is so good? I was lucky the first couple of biographies were out on Buffett in 92, 93. I read those and then that led me to the Shire letters and so on. It opened up a huge world for me, and I realized something which was really compelling for me. What I realized when I read about how Warren invested, I found that it dovetails very closely with the way I would look at figuring out the strategy and direction of my company.

I was running this IT Company and every two or three years I had to reinvent the company because otherwise we would get obsolete and so on. I try to figure out where to go, into which areas, this and that, and that would take like two or 3% of

my time, and then 97% of the time would be the blocking and tapping the heavy lifting to try to make it happen, right? I enjoyed both aspects, the strategy as well as the execution, but I enjoyed the strategy a lot more than the execution. What I realized when I read about Buffett is that the part of the brain you use to figure out which companies are good investments, et cetera, is the same part of the brain I would use to figure out which area to focus on in my business and such.

It's almost the same, but the difference was in the way he did it, 80% of his time was spent in areas that would be 3% of my time. I said, I want to be like that guy. I don't want to be doing this for 3% of my time. I want to do this for 80%. I said, I really want to spend more time on figuring out businesses and business models and less time on herding a bunch of cats at work. The cat herding business was not that much fun. I had sold a small portion of the company, I had about a million in cash after taxes in 94, 95, and then I started to invest that money in the equity markets using Buffett's approach, that "you're not buying a stock, you're buying a business, you are looking at the valuations and intrinsic value, and you're trying to figure out the competitive advantage of the business.

Then if it had all these great characteristics, then you went in". That's how I got going with this 27 years ago. That's how it goes today. Like what I just talked about with Tencent and Naspers, this was so much fun to figure out, and I don't have to go run Tencent, which should be so complicated for me, long live, Pony Ma. Please keep running it. Okay? I just want to be passively on the side-lines when I find businesses and such. That's how I got going on this, on this journey.

Jamie: Thank you very much for sharing. I have one question. Will you be worried about the political risk associated with investing in Chinese Tech Giant? Because you just mentioned you have a lot about Tencent and Alibaba and recently, in Chinese education industry, the venue of the leading company just dropped seriously because of a government announcement. How do you see about this?

Mohnish: I'll give you a little longer answer, I hope you don't mind. Let me just go quickly into the education tech, the education businesses in China. I am completely in agreement with what the CCP did with that useless industry and took it out. I'd run a non-profit foundation with a lot of the activities in India where we take a bunch of underprivileged kids and try to get them into elite institution, so that they're out of poverty and so on. I've been doing that now for about 15 years. I've had a lot of front row seat observing many Indian for-profit education companies, and I have a friend of mine Guy Spier, who invested in a bunch of for-profit education companies in Singapore and the US and so on. I've had a lot of interactions and understanding of that space.

At the highest level, just to quickly go through this, there would be two kinds of private education companies in any place. There would be one type of company which increases the number of seats available for people to get educated like open a private university or open a private school where you actually have increased the opportunities available for people to get educated. The second type of company we own which helps to give people an unfair advantage on getting one of the limited seats in existing elite institutions. For example, in India we have the IITs, the Indian Institute of Technology. They have maybe 15,000 seats available every year to take incoming freshmen, and there are more than 1 million kids who want to get a seat at IIT. The top of the funnel is 1 million and only 15,000 can get a seat.

There has been a very large industry that has come about in India, which basically helps you, preps you and coaches you to try to get one of those 15,000 seats. You pay them money and you go through a lot of intense preparation, and then, basically, one and a half percent of the people who are attempting to get these seats, get these seats. The second engine does not increase the number of people who are getting seats in those elite institutions. It simply decides who gets those seats. What happened in China, which I have seen happen in India, and it's a very unfortunate situation is, there are not enough seats. Because there are not enough seats, capitalists have propped up and created businesses, which basically help filter who gets a seat.

The filtering process is not a completely objective and fair process, money makes a difference, and other factors make a difference on who gets a seat. I think it's a problem in India as well. The bigger issue is that, 15,000 seats needs to really be a hundred thousand seats. That's the bigger issue. But in India, what happens is, more money is spent by the million people trying to get these 15,000 seats than what the government spends on those 15,000 seats. It's kind of a backward system. Anyway, from my point of view, I did not like that business model because I had seen it's not a win-win. If you look at a business like Costco, everybody wins in that ecosystem. The consumer gets a better product, the manufacturer doesn't have to worry too much about sales, and they get large volumes and the employees get paid more than other competitors are trying to play them, and the shareholders do well as well.

Everybody in that ecosystem benefits from Costco. In the case of the Chinese education companies, 95% of the people who are paying these companies end up disappointed. They don't get a seat that they want. They work very hard, but they don't get what they want. In the meantime, in India, we've had issues with suicides and depression. It creates other issues. There are no easy answers, that funnel is problematic. I don't know what the answer to that funnel is, but from my point of view, I don't want to invest in that area because it's a win lose situation. That's my take on the education company. Actually, I am on the same page as the CCP on that

front. As far the investing in China, et cetera. You're absolutely right. Things can change and someone can come up with rules like they did with the education companies, and it can change the dynamics or economics of the businesses. That is why we don't have only one bet. I don't know whether Tencent will do really well in the future. I think Ally may be a decent bet, but there's nothing like a sure bet in investing. Capitalism is just hard. Right?

Frank: Thanks for coming on. I really appreciate it. My question is, how has your investment strategy changed from when you first wrote the Dhandho investor and have you added any additional elements to the Dhandho framework?

Mohnish: Yeah, I think this is one of the fun things about investing is that number one, even if you are Tom Brady, eventually you will go into decline. I know that Tom Brady doesn't believe he'll ever decline, but between us girls, we know that eventually he will decline. But in investing, one of the good things is that as the years go by and as Tom Brady declines, we keep getting better. Michael Jordan, already had the last stance, I think that the kind of investor I was when I was 35 years old versus what I know and can do when I'm 45 or 55 or 65, all knowledge is cumulative. Especially as we make investing mistakes and we lose money and we try to learn from those mistakes, we keep getting better, right?

Like, I just had this discussion about for-profit education. I don't have much interest in that area, right? Because I've had some experiences, now, there could be some companies there that could do really well in the future, but the other thing about this business is there's no call strikes. You can let a lot of good businesses go and you still do, okay? The frameworks keep changing and improving, hopefully because we learn more and such. One of the things that I've had a lot of learning in the last maybe 18 months or so, maybe because of COVID, maybe I should be thankful for COVID, it gave me more time to contemplate my naval. Usually contemplating your naval is a good exercise. When we are in a non-COVID world, we don't get enough time to look at our naval, which is a problem.

What I found is that, when I started in the nineties, I used to be a guy who was looking for great businesses and great business models kind of set it and forget it kind of thing. When we got to 99 and 2000, we had the massive tech dot-com bubble. I saw things get so crazy that I retreated into the safety of Ben Graham and basically shifted from buying great businesses that were going to grow a lot to businesses that were undervalued. Buy a dollar bill for 50 cents, 40 cents, and doesn't matter if it doesn't grow much. That actually I think in hindsight worked extremely well till maybe 2012 or 13 or 14, somewhere around then. What I should have done around that time was switch back to the great businesses, buy and hold

and so on. I got so used to this Graham approach and got so entrenched in all these years of practicing it that I missed that left term.

I realized last year, especially when I was reading the chapter on Nick and Zack and Richer, Wisser, Happier, which is a great book to read, that basically the holy grail was to find great businesses that had a great future and not pay too much for them and not get them too late in their journey and write them. Those become more, it's a better way to go. I've been shifting away from the grand world that I've been in for so long to the world of great compounders. But the journey continues. It's fun.

Student: Hello, Mohnish, thank you for joining us tonight. You already touched on how you transitioned from your first business into your investing career, but I was wondering your first point, your first principle in your book is focus on buying existing businesses. I'm wondering if your experience doing a start-up and running your own firm influenced your investing framework.

Mohnish: Yeah, I think the advantage with the Buffett approach is that we have a lot of trade marks when we look at existing businesses, we get to see plenty of history. We can extrapolate that history and we can take the risk down. Anytime you're doing a start-up or a brand-new venture, by definition, it's going to be much higher risk. I would distinguish between venture backed and non-venture back startups. 98% or 99% of startups globally are non-venture backed. The Laundromat that starts, the Chinese restaurant that starts, or the neighborhood taco that starts or whatever, these are all businesses that are not venture-backable and they don't get venture backing. Most startups are not venture-backed. They're entrepreneurs and dream and he or she goes at it.

Those have high risk. What entrepreneurs do is they do as much as they can to minimize that risk by limiting how much they could lose and what would happen if the business didn't work, and could they go back and get a job and get their finances back on track. I think that their venture of X startups is a little bit different because the entrepreneur for the most part is not putting their own capital up. They're getting some benefits there, so it's a different approach. I think that public equity investing Buffett style, you get to make a number of bets, you get to spread those bets out, and that helps you reduce your downside. It's a different framework.

Karl: Hey great. Thanks for coming to class today. Really appreciate it. I thought your discussion on kind of identifying potential monopolizes and competitive edge and stuff was really interesting. I was wondering how you kind of balance when you're looking at companies between having fewer disclosures and being like kind of competitively coy to maintain like a long-term advantage and potentially kind of

under disclosing because the numbers aren't as good as they appear to be, or there might be some sort of weakness under the hood. Like how do you kind of evaluate that when you're looking at different companies and investment opportunities?

Mohnish: Yeah, I think that if you look at it in a different way, let's say you had a portfolio and you made 10 bets, for example. I mean, the goal and objective should be that one or more of them gets you to the Promised Land. Kind of like Koos Bekker style, where you basically identify a business which has a very long runway where you have figured it out, took a lot of work, but you figured it out, but the rest of humanity has not. Even if you found one of those in a year, that's plenty. Because on the flip side, if you got a hundred bagger out of one of your portfolio investments, it pretty much doesn't matter what happened to the other nine, the most of the return would come from the 100 bags. I think the model should be that all of you in this class, you all have horsepower, very significant horsepower. If you can direct that horsepower towards finding these enduring competitive advantage monopolies, which most of the rest of the world has not yet figured out or doesn't fully understand, may not be in the evaluations and such, that gives you an advantage. I think that should be the game, the willingness to dive deep, to figure out the jigsaw possible when the companies are not helping you.

Chi: Yeah. Hi Mohnish. Thank you for coming to the class. Actually we've also been following Alibaba for several years and really glad you also listened to that interview. I have some questions about what you think about Alibaba. Based on there are several considerations I want to share with you. Would you mind sharing some of your thought to say, think to share about whether my consideration could be like a turning point or pretty much I want to share what my thought and would you mind discussing like how that can be? Oh my God, I'm so nervous.

Mohnish: No, I think Alibaba clearly had some stumbles with different actions that were taken against the company. Many of those actions might be justified because many of the ways that the company did business might be illegal in the US, for example, in the way they kind of restricted things and so on. But I think that at the end of the day, it has a very talented management team and it has a very dominant footprint in the minds of its consumers. I think the business will do fine and they're pretty smart about the way they go about it. I don't think the model is as good in my opinion as Tencent, but they both can do very well.

Chi: Yeah. I realized the model things when I had the same interview. It sounds to me, like, I believe that the host compared Alibaba with Amazon is kind of like a misunderstanding. Like China have another company called Jingdong, the stock ticker is JD. JD pretty much copy what Amazon is doing. Like they're having all the supply chain system building higher, tons of employers built something like

Amazon. Pretty much for Alibaba, they're just like a digital platform and why they're so, and digital platform is not something brand new in this world it's just why they're so successful. This is why the business model is so successful in China. I personally feel it is just because they built from zero to a certain stage, they're in fast growing just because China doesn't have this.

Chi: But right now, if you look at it, China have already built its business model though is really easy to copy. Like the PDD, like they're started growing. Pretty much they don't have this competitive advantage and that's why they're so successful just because they're at that time China has nothing. This kind of digital platform. Right now, I remember before the selling point for this business model, it's just because people are not going for Alibaba for buying certain products like Amazon, but they're buying for surprise or something they haven't expected. That may be a good thing when the economy is going well, but think about the timing, the micro economic, especially under post pandemic, people try to spend money more wisely. Seems like this kind of the so point for buying for lifestyle is no longer popular under the circumstances.

Chi: This could be a worst sign for its future growth, at least some limitation. Also, there's some aspect of the management style, like you just compare with Pony Ma and Jack Ma. One really like to give the speech in front of public, like try to be a teacher, not just for common investors, but coming for everybody. One is just be quiet, which is very Chinese style, like be quiet and just generate cash flow. That's also going to be a really risky thing for future growth. Also, you can see people are very sensitive if Jack Ma is up here to either speak in the public or miss somebody. You can see it's really a fact Alibaba stock price luxury, like a spec politic stock.

Mohnish: No, I would say they are better than Tencent or Alibaba because these are very large market caps probably businesses that would do a lot better in China are businesses today that may be private, or businesses that may be worth less than a billion dollars or less than a hundred million, where their runways are huge and they've got competitive advantage and they can grow a hundred x from here. I think that if I were you, I would focus, I have a handicapped, I can't do that, but it would be so much outside non-circle competence. But I think that, if someone can really figure out a bunch of smaller businesses in China that have great management and great models and teams, then that is where a lot of wealth will get created in the next 10 or 20 years. What I'm saying is that no matter how well Tencent or Alibaba does, it's hard to see them get to valuations more than 10 times. Where they are today, in some reasonable number of years, if everything goes well, I think you're better off rolling up your sleeves and digging deeper into the Tencent and Alibaba's of tomorrow.

Tureen: Thank you so much for taking the time to speak with us. I wanted to ask; I've read that you won't invest in a company just because it looks like it's going to do well in the future. There are a lot of IT and energy industry companies, some of them are trading at 10 times more than their revenue. I was wondering if you think those and other well performing companies in industries are overvalued?

Mohnish: Well, I want to invest in companies that will do well in the future. I hope that's what I'm trying to do. But the nature of investing is that very few things will be within the circle of competence of each of us. Most things will fall outside that circle. Just the nature of the world is a complicated place and we can't figure everything out. If I can figure out a business and if I think it's with myself, low competence, and I think it's going to do well. If it's trading well below underlying intrinsic value, I'd be very interested. Pretty much everything else I would just take a pass on. I think that entire industries that would take a pass on just because I don't think you have any edge in those areas. We are trying to get to unfair edges in a legal way and edges where the competence of understanding can lead to, conviction to hold a business for a while. That's fine.

Student: Hi, I'm really happy to have you here and thanks for you sharing. I have two questions, and the first one is, under the circumstances like COVID is there any change in your investment strategy? The second one is that, could you please talk about some sectors you are currently focusing on and to find some value stocks? Thank you.

Mohnish: Yeah, actually, everything about the way COVID unfolded was the exact opposite of what I thought would happen. In March 2000, the world was shutting down, I would've never imagined that in October of 2021, indices would be hitting all-time high. I also did not imagine at that time that 18 months later, COVID is still with us in a major way. I also did not imagine that they would be these significant permanent changes in human behavior. Many things that have happened with COVID have changed things forever. For example, I don't think business travel is going to come back the way it was for a long time. I think that the footprint the world has for business hotels is too large. It will take a while to grow into that footprint because people used to travel all the time and they needed those Marriott's and all of that.

I think that leisure travel will take over some of that, but I don't know how much it will. The same with business class and first class in air travel. A lot of that will get reconfigured. I think our lives have become a lot more digital. For example, all these delivery companies, like DoorDash have got massive tailwinds. They have changed a lot of behavior. Businesses like Door Dash will not really eventually be a food delivery business. It'll be a business of whatever you need within an hour or

within 30 minutes. There's a set of things you need within 30 to 60 minutes. There's a set of things you need in a day or two, and there's some things you need within one week or one month.

There'll be a set of providers which will horn in on those pieces. I think COVID has led to a lot of reconfigurations, which have significant changes. The space requirements for residential people have gone up, someone who had a one bedroom once, a one and a half bedroom or two bedrooms, two and a half, because you need kind of some more space because you're spending more time at home. This is why housing prices have gone up so much, suddenly the entire country or the entire world wants more living space and you cannot create that much living space instantaneously. The only thing that happens is price goes up. We are going to have more needs and different needs for housing, different needs for office space, different needs for shopping, entertainment. We got so used to not going to the movie theater, and I think there's a number of changes that COVID has brought about that are very secular and long-term. And it's important to try to understand those changes and see if there are things that can lead to investment opportunities and such from that.

Arvind: I think the fall on Mohnish was around sectors that may be interesting in areas of value.

Mohnish: Well, I'm like bottoms up, I don't start off saying, I want to invest in large tech and let me find the best large tech. That's not how my brain works. I am opportunistically sifting through stuff that shows up on the radar or someone sends me something and just seeing if it makes sense and then go from there. I think in 2009, I think commodities really collapsed in a big way and I made a bunch of basket bets in that space and they all worked. That only happens when the world goes to extremes. Most of the time we find ourselves in situations where there are so many investors and so much capital that good businesses tend to get fully priced or overpriced. You really have to find some edge where you have an understanding of the business, which is a little different from how the world understands them. That can give you evaluation difference. Then you could maybe play.

Arvind: Makes sense.

Brain: Hey, thank you for coming to speak with us tonight. My question is, I guess going back to something you said earlier around, cloning and cloners, businesses like that and using the AWS example. I guess my question is like, how do you judge whether a company's going to be, like, whether they're good at cloning, like Microsoft with Azure, or whether they're not going to be as successful like Google with GCP?

Mohnish: Yeah, I think cloning is a very powerful mental model to understand. You can say I've been a student of cloning now for I would say more than 33, 34, 35 years maybe. It's been a long time and I still don't fully understand. The majority of humans, overwhelming majority of humans, and overwhelming majority of companies look down on cloning. They think it's beneath them, and they also think that, they look at a Starbucks and say, Oh, this is a great idea, but someone's done it and that opportunity is gone. What they don't understand is that you could actually have three different players in the coffee space, and all three could do well, you can't have 30, but you could have two or three that could do well, I mean, it isn't just McDonald's working and does well.

The companies that understand cloning well and are good at cloning have a huge advantage. If you look at a business like Microsoft, they spend all these billions of dollars on R&D and whatever else, and most of that has just been money that's been burned with no return. Almost all of their success has come from cloning. Microsoft, I consider it isn't even that great a cloner like, look at how long it took Windows to get to the point that the Mac was at. We probably got to like the 15th version of Windows before it was approaching what the Mac could do in the second version, for example. But, they copied Google and didn't go very far and that's fine. A lot of the stuff doesn't work, but plenty worked.

I mean, Azure worked, Microsoft Word was a copy from Word Perfect. Excel was a copy from notice access, copied other relational databases and so on. A large amount of the Microsoft ecosystem has come from cloning. Even if you look at a business like Burger King for example, McDonald's used to have this huge army of people trying to figure out which locations made sense because it's in retail and in restaurants that's a big deal. Burger King had like two guys and all they would do is put Burger Kings or McDonald's. They would just look at where did McDonald's open a new McDonald's, and look at, oh, let's open across the street from there. That's a great model because somebody else is doing the heavy lifting. The Jim Sinegal at Costco, a lot of the Costco business model came from Price Club, Soul Price, and eventually Costco acquired Price Club.

Jim Sinegal will last one time, what have you learned from Soul Price? And there's a biography in Soul Price was reading that. He said, it's a wrong question. He said, there's nothing that I know that wasn't taught to me by Soul Price. And Costco pretty much cloned everything from the, the Price Club model. Eventually the cloner became better than the original business that they cloned and they became much larger and they actually acquired the company that taught them how to do it. Cloning is a very powerful model. Almost everything about Walmart was clone from Sears and Kmart, and he learned everything from his competitors. Sam

Walton was a great cloner so I think businesses that have the cloning DNA, which is a small sliver of businesses, have a huge advantage

Lakshmi: Mohnish, thanks for coming in today and sharing a wealth of information. My question for you is in one of your YouTube videos, you mentioned that you don't use analyst at all and you do everything by yourself. What sources do you use to pick your stocks and invest? You've already partially answered it by saying, you read a lot, try to listen to the top management, what they say and stuff. Other than these what sources do you delve into also, do you attend conferences and what type of conferences that you try to network and get the information and things like that? Can you share some of those?

Mohnish: Yeah, I don't think I get a lot of ideas from talking to other humans. That works well for me because I don't like to talk to many humans. Just the humans in Urban class are great. Yeah, for most of the time that I practice value investing, I did it alone and that worked well. Now I have two guys who work with me, and I think it's worked really well. I think I've always been against teams doing investing because if you're paying someone as an analyst, they're going to constantly be coming up with ideas and it gets frustrating for them because you'll keep saying no to almost everything. I mean, in a year I might make two investments, or one investment. But I think that the structure I have with the two guys on my team, and I really love them a lot, is they don't come up with new ideas.

Mohnish: They help me with the deep dives that we do on businesses we are looking at. I think that model works well. It also worked very well when I had nobody. I would say that there are some resources on the internet that are really great. I always liked Value Investors Club, and, and there's a lot of horsepower amongst the members of Value Investors Club. It takes quite a bit to become a member. The write-ups that go on that website tend to be quite thoughtful and well written. The price is free. You don't pay anything, it's zero. It works well. I also have a subscription to SumZero. There also you actually have to pay for it. Maybe I know 10, 15,000 a year or something. Value line, also the subscription. That's fine. But I think that there's a lot of stuff that I think if someone were to just focus, for example, on Value Line and just make one or two investments a year when things lined up very heavily, use that as a starting point of your research into businesses, I think one can do really well. You don't need much of a home than that.

Arvind: You don't attend conferences or anything like that. Right.

Mohnish: Of the question, I haven't been able to leave home for 18 months, but I think, yeah, historically I don't think I've, if I go to the Berkshire meeting every year. I used to go to the Fairfax meeting every year. I like to kind of resume that. I think, we'd

meet our fellow brothers and sisters of our tribe, which is great. But yeah, I think I can't imagine what conference I'd go to, I think. One is I'm so introverted, okay. I have a huge loss of energy if I am with a lot of people for a long time, Okay. With, which is probably the case with you and most of the people in your class. We would not thrive in a world where we have to constantly interact with people.

Arvind: Adam,

Adam: Hi Mohnish, thank you for the time to speak today. One of my questions was about the application of NLP with regards to reading, like investment in annual reports. You mentioned in one of your lectures online that Warren Buffett used to read about every single company publicly listed, and it would take me about a year. It seems like that's pretty tedious in these types of days where NLP is readily available. I was wondering if you see any application for that in the investment world and what you do.

Mohnish: I missed it. What were you seeing is readily available?

Adam: Natural language processing.

Mohnish: Okay. What approach are you suggesting?

Adam: I was just wondering NLP can be used to track emotions in people, like sentiments online through analyzing historical data. I was wondering if you could use that to analyze investment reports or letters to shareholders or stuff like that to cut down the work that you have to do.

Mohnish: I think it's possible. I haven't gone down that route, so I can't really give you any intelligent answer on this front. I can give you an anecdote that I think I found interesting. Buffett went through, and maybe this might become a little longer answer, but you might find it interesting. Humans, the way we are is hard coded by the time we are five years old. Between our genetics and the first five or six years of our life experience, who we are as people is not going to change from the age of six to 96, it's pretty much set our tendencies, traits, et cetera, gets set. I mean like, I'm going to have like my high school reunion and I haven't interacted with these people in some cases for like, 30, 35, 37 years. They're the same, nothing's changed.

Mohnish: All the weirdness they had at 17 is still there at 57, such is life. Anyway, the thing is, we are hard coded. When Buffett was, I think maybe nine or 10 years old, he used to go to this racetrack in Omaha called Aksarben it's Nebraska, spell backwards, and he used to go there after the races were over, pick up all the tickets these people had discarded because a lot of people were drunk at those races. Then he'd look at each ticket that he picked up to see if some drunk had discarded a

winning ticket. He'd pick up all these, hundreds and hundreds of tickets and process each one. Then he would find some, which would actually be winning tickets that people didn't understand or throw away. He would give those to his Aunt Alice because he couldn't go to the window as 11-year-old.

Then she would go to the window and cash in those tickets. Then when he was in his early twenties, maybe mid-twenties when he started investing, when he started his Buffett partnerships, he used to go through these Moody's manuals. I bought one or two of them on eBay. You can go on eBay and look at them there, these really thick manuals, which had maybe four or five stocks on a page, very fine print, giving you a little bit of data on each company. He went through those. I mean, that's a lot of work. He went through those manuals multiple times and he went through thousands of businesses. This was purely quantitative analysis with no technology tools of any kind, one reading at a time. He found some businesses that were just weirdly off, like, market cap is 25 million and earnings last year were 40 million, things like that.

He made those investments. He did really well. Then when I was visiting his office, the kid at 26 and the kid at 11 were the same. The exercise of going to the exurban and exercise with Moody's manuals is exactly the same. They're both treasure hunts. I was visiting Berkshire headquarters, I was going to have lunch with his assistant and then happened to Warren, Warren wanted to show us around when Guy and I went there, and I noticed that on his desk was the Japan Company Handbook. The Japan Company Handbook got two businesses per page in English, which is describing the financial, it's like the Moody's Manual, but it's for Japanese companies. When Berkshire has a hundred billion plus in cash, I mean, you can't even put 50 million dual businesses so obscure.

But the kid who enjoyed the treasure hunt still enjoyed it. When I saw the Japan Company Handbook, I actually had that handbook. I told Warren about some of the companies I found in the handbook, and I was kind of marking them for him. I think he might gotten horrified because I was dog-eared some pages in his copy. I don't know what he thought about that, but I said, some of these things were towards the back of the book. He said, All the good stuff is always at the back of the book. A Capital IQ basically allows you to do exactly what Japan company Handbook does, but it allows you to do it a lot faster, because all the data that's in the handbook is on the Capital IQ servers and you can slice and dice it and you can get there.

Mohnish: I told him that, Warren, you can actually do this a lot faster with Capital IQ and his assistant at the time Tracy Britt told me he's never going to do that. I said, Tracy, what if I showed you how to do it and then you can do it for him? Okay. I spent a little bit of time explaining and showing her how it works on Capital IQ, and she

told me he would never spend the 10 or 15,000 or whatever it would cost. He said that would just never happen. He spends 150 bucks on the Japan Company Handbook and that's about it. Warren is very set in his ways. He ended up becoming the richest guy. If I were you, without knowing much about NLP, what I would say is that it's not so much dicing the information quickly, it's more about the analytics that you put on the information.

I don't know how much of an edge you will get with NLP. I think the edge comes from how you look at the data. I don't know whether NLP will help you with that. It may, I mean, I haven't gone to that area, but I would say that Buffett has done better than a lot of people with a lot more technology. He has no computer on his desk, he's got nothing. He's just sitting there reading a bunch of stuff, and that's been enough to make him the wealthiest guy for a long time. That's where I think the game's at.

Chad: Yes. Thank you. This has been great. I know you've mentioned a lot of people, obviously Warren Buffett and Charlie Munger and others, but are there any up-and-comers or silent warriors in the investment space that we should pay attention to? Because clearly your success in par has been due to following really great minds in the space, and obviously we'll continue to follow you because you're clearly a fantastic person in this space. But are there any others that you haven't mentioned that we should keep an eye on, or is Warren Buffett the one and only.

Mohnish: The other you should keep on is the list of people that Arvind is going to have speak to you this semester? He knows them all. He's the real rock star, and he brings in all these rock stars. He's got some new names of some guys who are really good for you. The one thing that I think Joel Greenblatt mentioned, he said that in investing, what happens is when you have very little capital and you are looking in these obscure areas, because you can go into these areas because you could put \$10,000 into them and would make a difference for you, but Warren Buffett can't. What happens is that the people are really good at this stuff. They get wealthier and they have to move up the chain.

They have no choice to move up the chain. Constantly, Buffett starts with Theban tickets, and then he goes to the Moody's manual, and then he goes from there further up the chain, the bottom continuously gets emptied out, right? The people who were really good at finding the investments, less than 10,000 to put to work, less than a hundred thousand would work. If they're really good, they move up. I cannot look at businesses and make investments where I would be able to put 50,000 to work, just not worth it, not going to work, doing nothing for me. Constantly that space at the bottom is getting emptied out, and it's always available.

That's the beautiful thing about investing. Arvind, are we at the end of the road here?

Arvind: Yes. We're nearing it. Sean, why don't you ask a question and then I'll end with a couple of last questions if that's okay.

Sean: Hi, Mohnish. I was wondering if there was anything that you look for specifically when assessing the quality of management, and I guess in particular with regards to sort of understanding competencies of the business and then strategic vision also.

Mohnish: Well, I think, Buffett says that when you look at baseball hitters, some kind of stand low, some stand tall, they all have different ways they swing the bat and so on. There's multiple ways to Nirvana. I think that same thing with management is that you will encounter just with humans a variety of different types of people. I don't think a particular template maybe the way to go. I think they can be, I mean, if I look at someone like, Reed Hastings at Netflix, he doesn't have an office. He says that he goes to work and he just kind of wanders around. He picks up conversations with random people and starts talking to them. Then one time I was listening to him give a Ted Talk and he was saying that it's been three months since he made any decisions at Netflix.

He said, that's good. He said, the longer I can go where I don't make decisions. It's a really different way to manage. That management approach produces the Squid game. Here we are and I saw a tweet by Jeff Bezos the other day, congratulating them on the squid game. I mean, this is a direct competitor, very competitive guy telling his competitor, you guys hit it out of the park. Jeff doesn't do that very often, but I can never run anything like that. That'd be too weird for me. I think that there are people like Michael Bloomberg who worked both in the city and at Bloomberg in the middle of a bullpen, he didn't want a private office. He was in the middle of his team with all his team around him. I would find that really hard to, I mean, not get so distracted and Bruce Flatt at Brookfield works like that too. I don't think Buffett or Munger could work like that middle of a bullpen and Andy Grove came up with this management by walking around. I think there are many different ways to Nirvana, but different people come up with different approaches that kind of fit there. The glove fits different ways. I don't think we could come up with a template.

Arvind: Mohnish, just a couple of questions just in terms of book recommendations. Have you read any great books over the last 18 months that excited you and that you'd love to share with my students?

Mohnish: Well, one book I really think rambles a lot, but I did learn a few things from it was, it's called The Antisocial Network. As Rich, he wrote Bringing Down the House, whether the MIT Blackjack Team and stuff. I think Ben wrote that book more from

the vantage point that it becomes a movie. It feels more like a movie screenplay to me than a book. You can skim, I think it's a skimming book. It's not a sit down and read every word and make notes kind of book. But I think there were some interesting, I would say the whole, Robinhood and AMC and all this whole saga with GameStop and all that. I think this is unusual sort of things that happened and continue to happen. It was an interesting kind of, I learned a few things from that book

Arvind: Any others? Or that's, that's the one you highlight?

Mohnish: That's a recent one I liked. I think another one that was autobiography done by the Bear Stearns former chairman, Ace Greenberg. Charlie recommended that, and I think that was a good book. He was good to learn from failure. I think, well, he's passed away. Ace Greenberg passed away and the book came out a few years ago, and I don't think he was completely honest in his assessment of, I mean, part of it was kind of brandishing his legacy, but I think you can sift through all that in the book and give some good data human nature and different things. I think that was a good read.

Arvind: The final question that I have is sort of in this room, in this virtual room, in this COVID world, we have students from 21 years old to MBA students. What advice would you leave them with professionally and or personally?

Mohnish: Yeah, actually one more book. Just let me, let me give you one more book and then

Arvind: Sure. That'd be great.

Mohnish: The other book, which I read was Red Roulette. One of my friends who had talked to Charlie, Charlie never gave me that recommendation directly, but he told him about that book. I read the book. I think that the author has a number of issues, let's put it that way. But I still think it was a good read, so that was also some interesting data points there. But I think for your class, I mean, I think you guys are in a great place. I think you've gotten some great skills from being in a class like Arvind's class. I think that if you are interested in investing, I think investing is, to me it's really interesting because it's one of the broadest disciplines.

It touches so many different areas to try to figure out what makes the company great is, it goes into so many different areas and competencies that you develop. I think it's continuously challenging. It's kind of like bridge, you can never master it in your whole lifetime. You could never master it, but you could learn the game in 20 minutes. Investing is like that. People who get it in terms of value investing and such, they get it pretty quickly. But then the journey to continuously learn and grow and understand is a lifelong journey. It's a fun journey, so it's great.

Arvind: I would echo that. Well, Mohnish thank you so much. This has being a fantastic conversation as always, and I look forward to next year. We'll celebrate and stop.

Mohnish: Yeah, the only sad part is that I have to somehow find a way to pass the time for the next 365 days.

Arvind: Yeah. But you have number. I look forward to...

Mohnish: All right. But thank you very much. I enjoyed the interaction and I think it was fun. I hadn't really talked much about the stuff that we talked about today, so it was you guys who were kind of Guinea pigs on this, I think it went reasonably well. Thank you for allowing me. Thank you.

Arvind: It was great. Thanks Mohnish.