Mohnish Pabrai Lecture at Boston College (Carroll School of Mgmt) on November 7, 2019

Arvind: Mohnish thank you so much for being here as always. I think this is your eighth or ninth year speaking to our class. We are incredibly grateful, and we can't wait to get started. With that, let us welcome him.

Mohnish: Well Arvind, it is a pleasure to be here, and I am surprised every year I actually get invited back, but I will take that. Just a quick show of hands from the audience. How many of you have participated in this before? Is this your first time? If you attended earlier, just raise your hand.

Arvind: They're not many, they are all new.

Mohnish: Oh, good. I can repeat all the old jokes

Arvind: That is right.

Mohnish: Also, show of hands, how many of you read that Columbia Newsletter article, at least the pertinent pages related to GrafTech? Good. We have a few humans who have done that, which is good.

Arvind: No, they have all read it.

Mohnish: Okay. I would say Arvind, if you can maybe mute on your end.

Arvind: Sure.

Mohnish: Then I will just go through a monologue a little bit about GrafTech, and from then on, we will open up to questions and we can discuss GrafTech or we can discuss whatever else you would like to, we can take it from there. The GrafTech discussion is not really designed to have you go trade the stock or buy the stock or any of that. It is more in the kind of the spirit of Ben Graham because Ben Graham in his class used to discuss live examples of securities and of course, in his class, people used to go out and trade those stocks. But I think one of the negatives of talking about case studies from the past is that there is a selection bias. I can pick businesses where we have had huge home runs and keep patting myself on the back, so you get distortions which I don't think are ideal in a learning environment. I pick GrafTech from a point of view that it is a kind of current position. The current valuation is pretty close to where we bought our position and a lot of the facts around the situation are current as well. John Templeton says, "one in three times, the best security analyst is going to be wrong. This is a game of probabilities. I don't know exactly how the future will unfold for GrafTech. I have some maybe perspectives on that. But, the kinds of things that can affect the future trajectory of a business are a very wide range. You can have kind of extreme outcomes. I mean, if you take a company like Johnson and Johnson, who would have thought that talcum powder which they have sold forever would have a issue after so many decades of sale, etc., Or you look at PGE, the utility in California, people who would have bought the stock five years ago, they were buying things that are great for grandmothers and widows to own and that didn't go exactly that way. In fact, PGE might have been a stock that at some point that Berkshire Hathaway might have been interested in buying. I don't think they are so interested today. I think the future trajectory of businesses is hard to predict, which is why we don't want to own one or two of them. We want to own a few of them. GrafTech is particularly interesting because Arvind's all-time favourite stock since the birth of Christ is IPSCO. Because every time I talk to him, he only wants to talk about IPSCO and he has always been hunting for more IPSCOs, because all he wants to do is he wants to own about 10 IPSCO in portfolio, and then ride off into the sunset. That is all he aspires to do. I said, what better than to give Arvind IPSCO 2.0 as a gift for him being a new father in all GrafTech and IPSCO have some similarities. They also have some differences. But just to give you a quick recap on IPSCO, which was in the Columbia newsletter you guys read, I think in 2003 or 2004 when I was looking at it, the stock was in the forties, and they had about $15 a share in cash. They had projections for the next two years of cash flows of $15 a share each year for the next couple of years. They made tubular steel, and one of the large kind of applications of their products was in pipelines, so when these kinds of pipelines got laid in kind of central US that is kind of a multi-year project, and they usually would place orders which steel companies like IPSCO to have a certainty of delivery and price and so on. IPSCO had this kind of confirmed orders and backlog with confirmed margins etc., and so it made it pretty easy where you say, okay, the company has no debt. It has got $15 a share in cash. The next two years, $30 a share in cash is going to show up on the balance sheet, and that is $45. I can do the third-grade math and the stock is below 45. At that point, the plants, equipment, inventory, know-how customer relationships, everything is for free. I thought all those other things have some value at the end of two years, maybe not insignificant value. But also, it is a very cyclical business where it was entirely possible after two years earnings could be zero or maybe $5, or maybe negative $5. There was a range of things that could happen after a couple of years. But I thought the risk reward scenario with IPSCO was very favourable because you would have all these kind of assets with no debt and was highly likely that those assets had real value. In the case of GrafTech, there are some similarities and there are some differences. One is that, GrafTech has backwards integration into the key raw material required to make the ultra-high performance electrodes which is needle coke and the needle coke captive plant that they have are only outside of China. They're only four needle coke producers in the world, two are in the US and two are in Japan. One of them in the US is GrafTech in Texas because GrafTech has that backward integration into needle coke. They have two advantages with needle coke. One is that they know what their costs are for several years because they have hedged decanted oil. They pretty much have a lock on the production cost of needle coke. The second is they are a low-cost producer for needle coke. For example, today, if you are a UHP producer, you would be paying like 4,500 to maybe 5,500 per ton for needle coke. In the case of GrafTech, their production cost needle coke and everything else that they need to make their electrodes is 2750 per ton. While the other producers might be at, let us say

6,000 or 7,000 per ton, GrafTech is at 3000 or 2700 per ton that is a pretty significant delta. They have that delta for about 70% of the production. If you just look at it very simply, the company realistically has an ability to produce maybe 180,000 or maybe 190,000 tons of UHP electrodes a year. Approximately 145,000 of that, they have this low cost advantage. Maybe there is about 30, 40,000 tons where they don't have the low cost advantage, those 30, 40,000 tons, even in today's environment where profits are good for everyone it is probably like maybe 60 to 80 million in kind of EBITDA type income from that non-captive tonnage of 30%. The captive tonnage, which is the 145,000 that has got before you take out corporate overhead and everything else, you are at 2750 and you are selling at close to 10,000. You got close to 7,000. It is kind of like north of a billion in margins. Then you can take out 60, 70 million of overhead and another 60, 70 million of CapEx and maybe 125 million for debt. You take out about 300 million and then you take out taxes, you still have 500, 600 million coming out of the captive and that 500 million pretty close to 600 million is locked for several years. Basically, their cash flow in the next five years is pretty much approximately equal to the market cap. GrafTech has couple of differences versus IPSCO. One is disadvantage which they have with needle coke could extend well beyond five years. If someone were to try to bring in new capacity of needle coke, there are a number of challenges. One of the challenges is that the last needle coke plant built in the world was actually the GrafTech plant, which was built close to 40 years ago. The know-how to build those plants and run those plants is almost non-existent. Pretty much, I think the only players who could even go there might be the existing players. The second is that the time it would take from the time you said, “okay, let us go build a plan” to the time you have production coming out the other end is close to seven years, and the cost would be several hundred million dollars. It is very hard to kind of justify the capital required, let us say 500 million or something, and the gestation period of the seven years with no crystal ball to tell you what the market looks like seven years from now. As far as we know, none of the non-China players, needle coke players are planning any or have announced any capacity increases auditions. This tightness with needle coke may continue well past five years. In fact, it is five years today. If someone doesn't announce a plant or it is seven years today, someone doesn't do anything for another year, it is another seven years, it just keeps kind of rolling. That is actually a significant advantage. The other thing is, a needle coke has another application, which is in EV batteries. That demand is we all know skyrocketing. There could be some substitution effects that come in with EV batteries, etc., depending on the pricing, but it could cause significant tightness. We will have to see. The bet I made is that we have got a very prudent capital allocator and owner of GrafTech and Brookfield and Brookfield understands share buybacks very well. They understand capital allocation really well. They own 80% of the stock, and three of their guys are sitting on the board. I would expect that the cash flow that comes out of GrafTech in the next few years will have some very efficient usage. Probably most likely a large portion is going to get returned to shareholders because they don't have any other need for the cash unless they go do something interesting. It looks like a kind of head side wind fails I don't lose much. The downside is quite well protected. The upside is kind of hard to gauge. We don't know what the upside is. But I think if you can make bets like that where you have covered the floor, like Buffett says, “rule number one, don't lose money. Rule number two don't forget rule number one”. I mean, if you can make bets where your downside is covered, that is much of the battle and such so, it is not a stock tip. I think it was just given as a contemporary example of a class of investments that doesn't fit the typical mould. Ideally what we want is long term compounders, that is what we always want. We want these businesses which have huge runways which have a flywheel that is hard to penetrate. They just got like decades of growth ahead. I mean, if I take an example of a company like Costco for example, they just opened up in China. They opened their first store in China, and the store got mobbed. There were long lines. They just maximize capacity of people trying to get in and what could the size of Costco's China business be in 20 years? It could be a pretty large number. It could also be a pretty small number. We don't know. I mean there are uncertainties in business, but if they can make China work, it could dwarf their footprint in the US. How many countries can Costco roll out that model? I mean, they are only in a handful of countries today. If you look at a business like Costco or a business like Amazon, you can see that there are possibilities of these compounders running for a while. I think Arvind had mentioned that Jim Sinegal is coming to BC I think to see you guys, what a treat! I think you should press him to tell you about the competitive advantages and the moat of Costco, because that is a fascinating discussion. Anyway, those were some of my thoughts on GrafTech. We can now take the discussion in any direction you would like to take it. If you could just introduce yourself and then ask your question, that would be great. Thank you.

Arvind: Mohnish thank you. That was great. We are really excited to explore the point you raised on quality compounders. Maybe we can start with that a little bit before we move into Q&A and how do you think about connecting price to the quality compounder and your willingness to pay for that type of business relative to the GrafTech of the world?

Mohnish: Yeah. I think that is an area where someone like me is at a big disadvantage and actually repeatedly makes a lot of mistakes because I am a chief skate at the core. I think one time Charlie Munger told me that Costco and Walmart had talked about merging a long time ago. Both were much smaller businesses then, and they couldn't come to terms on price, on kind of what would be a ratio to combine and so on, and the two walked away. Charlie said to me that it really did not matter what the deal was it wouldn't have mattered much, in the end the pie would have been so much larger. What he was saying is that, if these two forces had come together to great cultures and they compete ferociously in the marketplace and both have extremely unique cultures, it is very likely you would not have had another entity rise up to challenge them. Just like the situation today that once you get past Costco and Walmart, you don't have another entity which has that level of culture and execution in that space.

Walmart might have made a lot more money in the absence of a Costco or if Costco was part of Walmart. Not having to have Sam's Club and Costco would also have been an advantage. I think someone like me has a disadvantage because the unwillingness to pay up is a huge disadvantage. Like, I am thinking about this even for Costco. If I look at the stock it won't look cheap, but if you think creatively about where this company could be in 20 years, it could look very cheap. It could be very cheap under that scenario. But of course, the thing is that you are making assumptions about the growth and the competitive advantage and the culture being intact and all those sorts of things. Someone like me is still trying to learn to pay up and it is probably worth paying up for the great businesses, especially the ones that have these huge runways ahead. But I think that where I am with my biases, I am stuck with the businesses that hopefully are great, but they get cheap every once in a while. Then someone like me get pounds on the bandwagon. Then the second thing I have got to learn, which also is difficult for someone like me is, if I buy something at four times earnings and it is a compounder and I wake up after a few years and it is 30 times earnings, someone like me is going to be looking to sell that, and that may probably be the wrong thing to do. There are two lessons that I have yet to learn. Well, the lesson to pay up and the lesson to hold on, but you guys are young without my biases, so maybe you will get there.

Arvind: As you think about this evolution and your willingness to potentially pay up for great businesses, how do you think about the numbers that you are willing to pay for as you go out a few years because you have owned Moutai for example, and you have owned some of these great businesses in the past. What is the number that you are comfortable with as you begin to explore that piece of yourself?

Mohnish: Well, yeah, I think Moutai is a very good example. It is the most valued liquor company in the world, I think I bought our position less than 150 RMB per share maybe about four or five years ago. It is now at about 1200 RMB per share. It has gone up about 8x “well done Mohnish”. But the problem that Mohnish has is that before it hit a thousand a share, I was completely out. I think probably my average selling price of Moutai if I look back is between 800 and 900 on average, maybe somewhere around there. We captured a 5, 6x over five, six years, which is pretty good. But Moutai is a business. I can't think of any business with a deeper or stronger moat more than Moutai on the planet. I mean, I would say if you look at Costco versus Moutai, I mean, Costco has to really execute really well every day. Every day when you go in and shop at Costco you have to be blown away to keep coming back. Moutai is a not in that situation. They have got this thousand-year-old brand and it has got mystique. It has got uniqueness, it has got a lot of things about premium in people's minds, and it has got this brand that is entrenched in the minds of north of a billion people. That is an extremely powerful moat. I am Mohnish Pabrai, and I am an alcoholic, and I should have never, ever sold Moutai, but here we are in our AA meeting, making the confessions

Arvind: Right. When I see you at the next meeting and a few meetings from now, how do you think that Mohnish would have evolved from his learnings from Moutai and how do you push yourself in this general direction of quality compounders? I don't mean to press you on this, it is such an interesting dichotomy between the pursuit of the PE of ones and the quality compounders. I just think there is so much learning that happens in which you have done publicly and very graciously shared with us. I think it is just so important. It is a similar transition to Buffett and Munger, and how you are thinking about that is very important I think over the fullness of time.

Mohnish: No, I agree. I think that in many ways I would say Guy is light years ahead of me on this. I will just give you an example. The thing is that, if you look at the investment in Fiat Chrysler which Guy clone for me, I was his unpaid analyst on Fiat Chrysler. I am still waiting to get paid on that from him and the check hasn't shown up yet. But anyway, the thing is that, the aquamarine fund, which Guy runs, I think at the time maybe it was 200 million in assets, and I was trying to get Guy to make a 10% bet on Fiat Chrysler. He did agree to make the bet but he stopped at 2 million shares. He was buying at about $5 a share. It was about a 10-million-dollar investment that he made. It was a 5% bet, $10 million. What he has done with that bet and what I have done with that bet are somewhat different. For example, we both made bet in 2012. In his case, he bought 2 million shares and in my case, I bought almost 12 million shares. Even though I wasn't running six times a capital, he was running, I made a full 10% bet on that. Today, after like seven and a half years, he has not touched that position. It is still sitting at 2 million shares. But another thing that happened with him over this period is they spun out Ferrari. For every 10 shares of Fiat Chrysler you owned, you got a share of Ferrari and if there is a moat that compares to Moutai, not quite there, but I would say Ferrari's moat is up there. It is one of the most recognized brands in the world, and in 70 plus year history, they have never placed an ad, they have never spent a dollar on advertising which is remarkable. But anyway, he got gifted 200,000 shares of Ferrari, which are now 165 dollars a share or so, and that is like 33 million. He made a 10-million-dollar investment. The Ferrari position is worth about 33 million and the Fiat position, which is after the spin out, they had a dividend. Let us say it is about 18 or $19 a share, it is almost a 4x. You are looking at like a 70 million valuation of Fiat Chrysler and Ferrari combined on the $10 million bet that I did all the work on, no check has shown up yet. Guy is right now at a Vipassana retreat, trying to learn what Buddha meant by the meaning of life. Hopefully he will understand that he owes Mohnish big time. But anyway, what I am saying is that Fiat Chrysler is not a compounder in the traditional sense of the word. It could be a compounder if you kind of put on somewhat different glasses and look at it because it does have a good capital allocator, does have great governance, had great management, and a lot of different things that are very good about it. But Ferrari is clearly a compounder, and it was obvious to me the Ferrari is a compounder, but a lot of the Ferrari shares I got, in fact, when the spin out happened, the Ferrari shares were at about 45 or $50 a share. In Mohnish’s moments of brilliance, I thought $50 a share is a full price for Ferrari.

It is fully priced; it is more than three times that price. I sold some Ferrari at 50, 60, 100, 120, etc., I think I ended up making about a hundred million dollars in Ferrari, but if I had been as smart as Guy, the 70 million would be about 3.3 times. It would be about 220 million just in Ferrari stock, and it would be about 150 million just in gains on Ferrari, right? I look at Moutai from the sidelines with the occasional tear in my eye, and I look at Ferrari with more than an occasional tear in my eye. But we live and learn. As these things keep happening Mohnish is getting slightly more educated each time. But I will give you an example. I mean, I don't want to really talk about this much, but recently we bought Micron. I do think actually Micron is a compounder. People don't actually understand the business. I am thinking that God must really love Mohnish because he gives Mohnish Moutai and then Mohnish is too dumb to keep it. Then he gives Mohnish Ferrari and he is again too dumb to keep it. Then he says, Okay, I am going to try again, he gives me Moutai and this time Arvind, I am going to really try to hold on even when it gets to four or five times the current value. We will try to hold on and we will see where we can go with that. But yeah, I know it is hard. What can I say? These are very tough things. They are very hard things for me, holding Ferrari at $165 a share is a very hard thing for Mohnish and holding Moutai at 1200 RMB is a very hard thing for Mohnish.

Arvind: Yeah, that was really interesting Mohnish, thanks for that.

Mohnish: But Arvind, keep bringing it up maybe it will sink in a little bit.

Arvind: Yeah, no commitment biases can be really powerful. I think that is really interesting. Maybe we can open it up for questions. I don't know if anyone has any questions on this topic. If they do, I welcome it. Yeah.

Paul: I have a question about Micron specifically, you brought it up. How do you evaluate a company? There is so many things on the horizon like cyclicality, there is Chinese implications trying to get out of US semiconductors. It is hard to look at a five year future and beyond, I would say, for this company. What is your process when you look at something like that? There is so many different things up in the air.

Mohnish: Yeah. I am going to duck all Micron questions. I shouldn't have even brought it up, but I am going to duck the Micron questions maybe for a few years. Hopefully at some point. I hope we can talk about it. But I don't want to. I think generally, I always say Arvind we don't really want to talk about portfolio positions. We already opened up the box a little bit with GrafTech, but I think my interest was, because Arvind is so eager about IPSCO now, he is so eager with the compounders that IPSCO just been discarded. Like he is not interested in IPSCO no more.

Arvind: That is interesting.

Mohnish: Now he loves Moutai

Arvind: No, I love the PE of one.

Mohnish: The PE of one long live the PE one man, the PE of one is very sad. Now what I really want to do when I grow up is I want to buy Moutai at a PE of one

Arvind: Right.

Mohnish: Keep it when it is at a PE of 100

Arvind: Right.

Mohnish: When the E goes from 50 to one or 70 to one, and the earnings have grown 20 or 30 x and I am about to go to my grave, it is still there in the portfolio. I don't know whether I can get there in this lifetime, but I will try.

Arvind: There is always the next lifetime after I will still be there.

Mohnish: Absolutely. But if the gentleman who had the micron question, if he has another question, so he doesn't lose his short of question. I am happy to take another question if you have one.

Student: Yeah. More of a basic question about the superb writeup about Patels, and you say frequently to make bets where you don't lose much, then you have a really high outside. But it was just strange that he risk kind of everything he had and everything that he wrestle off what. I know you spoke to get back on his pretty quickly, but it is just hard. How do you make a bet that is not really risking much in the monetary sense, but it could be risking a lot for your network?

Mohnish: Arvind, can you just repeat that, because I didn't get all of it.

Arvind: I will repeat the question and if I am off, please correct me. I think he is trying to better understand; heads I win, tails I don't lose much, and how you come up with bets in that sort of line of thinking.

Mohnish: Well, I think that the heads I win, tails I don’t lose much comes up. I think you ideally want that in every investment. Downside protection is, I think, fundamental. I think this core to any investment. In some cases like IPSCO, it is very obvious that you have downside protection. I also felt when we were making the Fiat Chrysler bet that we had a lot of downside protection because at the time they pretty much got all of Chrysler for free, which included Jeep and RAM and everything. I read the new UAW contract in 2009 when they were in bankruptcy. That is better than Shakespeare, and the funny thing is that, every five years a UAW renegotiates contracts with the big three, and it is kind of a battle, they threatened to strike. We just had the longest strike in 40 years, almost 50 of the GM. In 2009, the Auto Task Force which was part of the treasury department in DC, they went to Detroit, like three of them for a day to kind of look at the different plants and meet some of the leaders. They had a meeting with the UAW leadership, and that meeting started at 4 o'clock and their plane was going to leave at 5 o'clock. They told the UAW leadership that, “listen, we have got a new contract for you, here is the new contract, and this is where you sign this contract”. The leadership at UAW said, “you don't understand how things work in Detroit. You give us this contract we will review it. It might take a few weeks and then we will get back to you. It is highly unlikely large portions of it will be acceptable to us. That is how we work things". The chief Ratner, who is part of the task force told the union leadership, he said, "look, my plane leaves at 5 o'clock. If by 4:45 I don't have a signed contract, then tomorrow I shut down all the lights in the city of Detroit. I don't particularly care whether we ever make another car or not". That contract was signed in 20 minutes and that is the contract I read, and it was beautiful. It was the only time when that contract was done that way. Detroit went from being one of the worst places on the planet to build a car, to (just after that contract) got signed to being the best place on the planet to build a car. It became more competitive. In fact, the Koreans have told me that they would rather manufacture in Detroit than in Busan in Korea. It is a lot cheaper. Anyway, the thing is that Fiat actually had a bunch of competitive advantages at that time that were not visible like the redone UAW contracts and so on. I think the thing is that we really want to focus on minimizing the downside. I think that when we look at businesses, and that is one of the things that becomes hard for me when I look at a business like Amazon, which is such an incredible business with such incredible leadership and management just incredible moats around their business. The downside is where I stumble, I mean when you look at great brands, the value is intangible. It is not like IPSCO, you can look at the balance sheet, or you can look at contracts and you can look at guaranteed cash flows coming in. It is a lot harder. There you have to have a leap of faith on the value of the brands and the moat and such. That is what makes it harder. Someone like Warren Buffett has a Swiss Army knife kind of approach to investing. He has had so much experience in so many different scenarios and asset classes and such that he can make it happen so that Berkshire continue to build value in a variety of different structures. Occidental is buying something. They do 10-billion-dollar financing, 8% coupon with a bunch of warrants, it is like what they did in 2009. Those are tremendous deals. But if you are an investor, for most of us, when we start out, and even through most of our lives, we may never develop a Swiss army knife. We may only have one or two or three tricks in our bag. Even if you have just one trick in your bag, that is more than enough to become extremely wealthy. I always give the example of Charlie Munger's friend John Arrillaga who's a billionaire, and he is a real estate developer. All his real estate ventures have been within five miles of the Stanford campus. I mean, he has never gone outside real estate. He has not gone outside of Northern California, not even outside of just the core area around Stanford and his circle of competence is just extremely tiny, just probably the tiniest circle you can think of. But that did not stop him from becoming one of the wealthiest people on the planet. Probably 99.999% of great investments are outside the competence of John Arrillaga. If anything is not in real estate, he is going to take a pass. If anything is not even just in that particular geography of real estate, he is going to take a pass. Even in that geography, he has been very disciplined, where when the market got extremely bearish and vacancies went high, he went and bought a whole bunch of stuff and when things were cresting that is when he would, at very low cap rates, get rid of a lot of stuff and so on. He just played that game just perfectly. I think that the key is, stay within your circular competence, do not have envy for your neighbour, your idiot neighbour who is making money hands over fist without having any brains. Envy is really bad, but having envy of that type is very detrimental to your financial health. Just sticking to your circular competence and being very patience is two of the stronger skills that you can bring to bear, you don't even need a high IQ. You can give away IQ points and get more patients genes and get more stick to circular competence genes. That is the holy grail.

Andrew: My name is Andrew Hicky. My question has to do with kind of career and investing in balance. Do you believe that you can have a career that you are very passionate in and still have the time to be a successful investor looking for PEs of one and doing all the necessary research and digging that that requires?

Mohnish: Yeah. The implicit in your question is that your career is not an investing career.

Andrew: Correct.

Mohnish: That your job is in some other area, right?

Andrew: Yeah, sure.

Mohnish: Yeah. That is how I started out. I was running my IT company and I was probably spending 15, 20 hours a week on investments, and it was fine. I think that the key is, how much passion do you have for it? I have a former college roommate who is a radiation oncologist, and he is an extremely good investor. He has done really well to the point that even though he makes like a million dollars a year as an oncologist, it is dwarfs by the wealth he has built on the investing side because he has done so well on the investing side. At this point, I always tell him that, “hey, is an oncology a hobby?” He says, “yeah Mohnish, It has been a hobby for a long time”. In fact, in some ways it could be an advantage to be a part-time investor because the key is the you know, if you have, if you become like Guy Spier basically comatose as far as trading goes generally that will be good for your financial health and so if you were a part-time guy and he just said, listen, I just want to focus on maybe finding on average one investment a year, or a couple of investments every couple of years that is more than enough. You don't need many investments to do well. I think the important thing is that you have to have a passion for it. You have to have a drive for it. I mean, it is something that needs to really excite you. If that is a case then anything you are generally passionate about you will generally do well, so no problem and again, the thing is that you can be like John Arrillaga, you know, you can find a particular niche that appeals to you and just hone in on that. You don't need to know everything about everything. In fact, you can become very specialized in particular areas of investing and that can be more than enough.

Arvind: I saw a bunch of hands, yeah please

Brain: Okay. Can you hear me from here or should I go up there?

Mohnish: No, no, you are very clear. Go ahead

Brain: Yeah, I am Brian Regan. I am more interested in mistakes that have happened in the past, and I thought it was interesting in your book. When you were given the example of intrinsic value, you talked about that beyond, which at the time was trading at 11 billion dollars, and I looked at it now and it is at 1.4 billion dollars market cap. You did recommend it in your book. I just think it is interesting how far it has fallen. Like evaluating mistake where that might have seemed kind of investable at the time of your book, or at least fair value, and how much of the disasters become and how to avoid those. Also, like how do you recognize the mistake in trade out it?

Mohnish: Yeah. Do you know the name of the company you read about

Brain: Bed Bath and Beyond?

Mohnish: Yeah. Oh, Bed Bath and Beyond. Actually, Bed Bath and Beyond is a business I never invested in. I think I actually used it as an example of a company not to invest in, I have to go back and look at it, but I have never made investment, I hate retail. It keeps me out of trouble to, but I would say this, that mistakes are very much part of the game. For example, one of my mistakes, which went to zero, I have had a few zeros. One of the zeros was a company named Horsehead Holdings it is coming in Pittsburgh which was a zinc processor. They went bankrupt, went to zero, etc., It was a significant loss because we had quite a gain for a while, and then it went the other way. I wrote about Horsehead probably more than I should have in my letters to investors. In the annual meetings, I spent a lot of time explaining to my investors about Horsehead and I think in one particular letter I went on and on about the mistake and so on. There has been only one time in my life when Charlie Munger has called me and I remember I was at Kennedy Airport, I was at the Jet Blue Terminal, and I was about to take a flight back to LA and the phone rings and Charlie's assistant is on the line saying, Mr. Munger would like to talk to you. I said, Oh shit, what did I do wrong? I think they were boarding, but I said, Okay, well, let us find a quiet place to talk to Charlie. I told her, Yeah, that is great. Anyway, he came on the line, and he said to me that he read my letter and he said, “Mohnish you want to learn from your mistakes, but you don't want to learn too much, and you have to move on, you have to move on quickly”. I think I was very touched because his concern was whether my mind was being messed with, I think recently there was a letter written by, I think it is Wedgewood Partners where these guys had been very long-term holders of Berkshire Hathaway, and they wrote a letter in which they gave a long list of reasons of why they have unloaded their Berkshire position. How many of you have seen that letter? Okay. You can just go to God Google and say, Wedgewood partners, Berkshire Hathaway and God Google will pop up that letter for you. It will show you all the different things that they said in that letter that Warren has done wrong. They were saying, “look, we have had this massive bull market in the last 10 years, and you bought IBM and that didn't work well, you bought Precision Castparts and that didn't work well, and you bought Lubrizol and that didn't work well. Then you bought Apple, but you didn't buy enough, and then you should have bought Microsoft”. For whatever reason, I mean, Microsoft has said, can't buy it because of his friendship with Bill Gates, but you know, you know, Bill so well and know Microsoft so well, and that has done so well. It is not in the portfolio. And you guys knew that Google was great because the founders came to you on and on. The guy listed a whole bunch of mistakes of Warren Buffett, right and actually, if you look at the Berkshire, and I pointed this out in the Columbia interview that if every Berkshire acquisition were equal weighted, they have a very large number of mistakes. I mean almost all their retail investments other than Borsheims and Nebraska Furniture Mart didn't work. There're dozens of them. The thing is that, if you equal weight them, the record isn't great, but the reality is they are not equal weighted and he has been right on the big ones. When you dollar weighted, the record is great, and we are human. Warren Buffett is not God, he makes a lot of mistakes, and God's first apostle, also known as Charlie, called from the heavens and said, "It is okay. Don't beat yourself up too much because mistakes are par for the course, even God makes them". That is why Templeton said that you can have a phenomenal record even being wrong one out of three times. In the investing business, mistakes are par for the course, there are going to be plenty of mistakes, and I think I really got a lot out of the Munger phone call because we are humans and we like to analyze and we like to get better, you can get into a tailspin when you are trying to learn too much from the mistakes. There are scenarios under which we can lose money on GrafTech. There are some scenarios under which Graftech can go to zero. There are many things that can happen, which can destroy the thesis, that doesn't mean it is a bad investment. There are businesses where you could make 10 times your money and it would not have been a prudent investment. That businesses that you would have lost lot of money, and it was absolutely correct to make the investment. It is a game of probabilities, and I think as long as we have done our homework and try to assess the probabilities correctly, you cannot always tell the score by what is on the board you got to go deeper than that, to tell the score. I think mistakes are inevitable in investing. They are going to happen. Even if you look at the book like Good to Great all those companies went AWOL. They were all counted as great businesses and they all faltered, or most of them faltered. That is the nature of capitalism. I mean, that is one of the reasons that keeps me away from the capitalism because almost no businesses survive for 30 years. If you extend that to 50 years, it becomes an even smaller number. How many businesses have been great compounders for a hundred years, well, I think GE is the only one that has been around for that long and look where they are at, when you are trying to go through these kinds of long runways, the history of long runways isn't that great? I can't point to 10 businesses which have done really well for a hundred years on the planet. I couldn't come up with a list like that. That tells you that there are very strong forces in capitalism with creative destruction, which take the mighty down and such. That is one of the things that kind of goes on in my head about what can go wrong is and probably I am overdosed on the mighty going down, and probably to temper that back a little bit but that is where that is. Mistakes are our friend we want to learn, but don't learn too much. Next question?

Arvind: Mohnish, that was just a very interesting response. How do you balance learning but not learning too much? How do you find the right balance there from your mistakes?

Mohnish: I spent a lot of time thinking about what Charlie said because my phone call with Charlie is not long. The phone call with God are only two or three minutes long.

Arvind: Right

Mohnish: God has got a few things going on but I spent a lot of time thinking about those two or three minutes. I think the most important thing is it can't mess with your brain. You can't get it into your head where it takes control. What I am saying is that mistakes are going to happen. We want to learn from them. We want to keep getting better, but you have to keep playing the game, and you have to keep moving on. If it is stopping you from moving on, one I can tell you very directly, that since Guy is not in the room, we can beat up on him especially since he hasn't paid yet. But Guy went long Horsehead and it actually messed with his head because he was then very deeply involved in the bankruptcy proceedings and on the creditors committees and all of that. I kept trying to tell him through that entire process that it is not worth it, move on, none of these things that just because enormous amount of time and actually there were no recovery. Actually, there was a total waste of time to do all of that. But one thing he would point to very directly is, while all that was going on, while he was completely focused on Horsehead after it had gone to zero and in bankruptcy, I brought up Moutai to him, and I tried to get through, but his brain was completely on Horsehead. I kept telling him, "Guy, Moutai", and he says, "Mou, what"? I said, "Moutai'. I couldn't get past, right? I think he made maybe a hundred thousand dollars investment in Moutai or something. It is a very tiny investment, very irrelevant. Basically, couldn't make any dent to the portfolio. In 2017, Guy, me and my daughter went to Moutai headquarters. We made a field trip. By that time it was already at about 600 RMB. He thought it is all over. He had such deep regrets, and of course, I didn't want him to ever forget those regrets. I spent the entire trip just telling him, "Guy do you remember all those phone calls and all those conversations I tried to talk to you?" I would try to shake him up and said, "you are a compounder guy". I bring up all crappy businesses to you. Here I am bringing you a great compounder and the greatest of all compounders and I couldn't get through. Of course, that really irritated him because what he wants to do is he now tells me I should have just bought 10% of my fund in Moutai and I should have just kept it till the day I die. Very simple. I know that if he had bought it, unlike me, he wouldn't have sold it because he has got superior genetics on that front. But the thing is that he has inferior genetics on seeing the diamond in the rough, right? Anyway, that is the way life is. But yeah, learn, but don't learn too much. We let you fill in the blanks of how to figure that out.

Arvind: Wonderful. Other questions? Yeah.

Chris: Hi Chris Kern. My question kind of pigtails off that. It seems like you are a great friend to Guy giving him tips on Fiat and Moutai and I think from the article we read, I believe it was GrafTech, you actually got the tip from someone that wrote into you and gave you a tip. I am curious about kind of the process you go through vetting some of those, and then also how much the check that you wrote to that individual was.

Mohnish: First of all, let the record reflect that I called Guy not once. I brought up GraFTech to him on at least 10 different occasions, and I have tried to have very long conversations with him, and I sent him that writeup and many other writeups. His total investment in GrafTech, currently to the best of my knowledge, is zero. It is even less than the Moutai investment. I just want for permanent posterity for the record to reflect while Guy is in the Vipassana retreat, his GrafTech position is at zero. The individual in Canada who brought it up to me has not been paid yet by me. I do owe him a meal. I do need to take him to a meal. Next time, maybe I am in Toronto, I will take him out and we will take it from there. But yeah, I am the shameless cloner and I am in desperate need of your ideas. mp@pabraifunds.com, please send me more Moutais and more IPSCOs and more compounders. Thank you.

Arvind: Other questions? Saw a few hands in the front. Yeah, go off

Student: From there

Mohnish: Okay. Yeah. Good. The back row got the message, come on in the front.

Cameron: Hey Mohnish. I am Cameron. Earlier you were kind of talking about shifting to quality compounds, and then we started talking about kind of how the mighty falls. Made me kind of think, do you have a process for differentiating between quality compounders and kind of undisciplined growth? How do you go about separating those?

Mohnish: Yeah, that is a good question. Actually, the thing is that you can almost take this as a law of physics that pretty much every company in existence today will eventually be a zero. It will disappear. I mean, I already told you, if you go to the New York Stock Exchange, look at companies all last a hundred years, kind of one has survived that period, and they were kicked out. I think the record is a hundred percent record that you can take it to the bank that businesses being around 50 years from now. I would say you can make a guess that Moutai may be around 50 years from now. That is a pretty good bet to make. But I would say if I look at a business like Costco, I don't know if 50 years from now they are still cranking, culture can erode, managements change, cultures erode, 50 years is a long time in retail. I think that is where the difficulty comes in and the other thing that can happen is that they can get into trouble. If you look at a company like GEICO, it has been around since the 1930s, but it was on its knees in the seventies, and would have gone bankrupt if the regulators weren't benevolent as they were or Buffett didn't step in and so on. You see a lot of history where great brands get into trouble, and some of them may come out the other end and some of them may not. I think the difficulty is that it is not just unconstrained growth. I think that the capitalism is extremely brutal. The competitive forces that work on a business every day are very intense. This a very small sliver of businesses that can withstand that continuous badgering for decades. I mean, if you look at a business like MasterCard, it is very dominant. Are they around 50 years from now? I don't know whether I can make that bet. Payment spaces got a lot of competition, and there's a lot of things going on. People bring up American Express all the time to Buffett and Munger. Every time they question the moat, Buffett and Munger's response has always been that they don't see issues with the moat and they are happy to hold. Actually the numbers so far support them. In fact, I was just reading recently that the centurion card by American Express used to have a $2,500 annual fee. They just bumped it up to 5,000, and it used to have a $5,000 initiation fee, and they just bumped that up to 10,000. They increased some benefits. I think that is an incredible franchise. They have no competition in that space at the very top end when people are paying them 10,000 a year or 5,000 a year to carry the card. It is quite an incredible moat and such. I think that these are difficult, like what Charlie says, why should it be easy to get rich? Why should it be easy for us to figure out which compounders will get us 20x with very muted downside, and which compounders are we going to lose our shirt on? That is an extremely hard question to answer. I don't have the answers, I mean, things can come out of that field but that is what makes this fun. That is also a reason why you want to have more than one stock.

Arvind: Other questions?

Eddie: Yeah, sure. I am Eddie Walsh thank you again. In considering from your book Mittal steel, Mr. Mittal, might be pronouncing incorrectly, it is clear that those were distressed assets that had significant upside potential and limited downside since he basically got many of them for free. But I think something that maybe I missed is how did he operationally turn those around? Like, how did he realize the upside potential? Ultimately that is kind of from the operator's perspective, and then separately as an investor, how do you kind of look at a situation like that from the outside where you are reliant so much on management's ability to accomplish an objective?

Mohnish: I am sorry, which example in the book were you referring to?

Eddie: It is Mittal when he had the steel mills

Mohnish: Oh Mittal. Yeah. Lakshmi Mittal, I think you could have looked at very long history where if you just looked at his trajectory of he repeatedly bought very distressed assets, and there is a company now, I talked about this. If you look at YouTube video of mine where I spoke to Peking University, I spoke about a company in India called Motherson Sumi which basically rolls up auto parts companies. I think the Mittal culture, and I think in to a large extent, a lot of that was present in Fiat Chrysler in 2012, it was very clear to me when I was making that investment in 2012 that Sergio Marchionne the CEO of Fiat Chrysler, was an extremely unusual human being, an extremely unusual manager and they had already been Harvard case studies on him before I had invested. There was an eight-year history of him in the auto business from 2004 onwards. I think that Fiat was losing more than a hundred million a month, maybe 150 million a month when he came in. They were upside down. The capital was gone, the banks were on their throats, and in that environment, he got them to the Promised Land and then orchestrated the Chrysler deal and so on. There was a lot of historical trademarks we could look at. If you study the guy, and you just look at my video on Motherson Sumi, he has got a fly wheel, which is very unusual in the sense that Motherson Sumi never reaches out to a company to acquire them, and they never answer the phone when a company wants to be acquired. The only time they really kind of start moving is when one of the large OEMs contacts them, like BMW contact them and say, "look, this company that makes rear view mirrors for the seven series is losing 2 million a month, and we are afraid they are going to go under and our second source doesn't have the capacity or whatever else, can you take them over?" At that point, what the Motherson guy says is, he told BMW, "Of course I am here to service you. How much are you going to pay me to take over the business?" They get paid to take over the business. They are not paying to buy the business. Over a 25, 30-year period, he has compounded at 30% a year in the stupid auto parts business. If you look at someone like Chaand Sehgal at Motherson Sumi, I think Peter Drucker said that culture reach strategy for breakfast. Motherson has a very unusual culture of how they do things. For example, they have never relocated a plant to China for labor advantage. If they buy a plant in Germany, they keep it there. They have never injected their people into those plants. They have actually fired the top guy always, but then found someone young, maybe even three or four levels down a 35-year-old and then they put in charge of the plant. They might get paid 50 million or 75 million to take over this mirror manufacturer. Which just gives them a two-year, three-year runway to fix the company. In three months, the company is going to stop losing money, and in six months they are probably going to start making money. About a year or 18 months, they are making 2, 3 million a month. They have completely flipped it around. The way Buffett and Munger talk about is that, they don't put any faith in projections. They look at the track record and when you are looking at these investments, when you look at ArcelorMittal or Lakshmi Mittal, Sergio Marchionne or Chaand Sehgal or any of these guys, at MasterCard we have Ajay Banga, you can look at his track record at Citibank and other places before he is just a incredible executor. Many times the record is obvious. I would say that Fiat Chrysler is now going through a possible merger with Peugeot PSA. The guy who runs PSA, Carlos Tavares, is like Sergio, I mean, incredible record, this amazing record, amazing execution, proven it over and over for decades. You have got a rockstar, and the odds are that rockstar will make things work because he has made it work so many times in the past, and he has never failed in the past in any major way. Many times we don't have enough of a trademark on a manager where we can't tell, we can always take a pass, but plenty of times we do have trademarks and we do have a lot of history. We can look at that history. One of the things about Jim Collins, he talks about level five leaders. You can look at those traits. What are the traits that make a level five leader? You can pretty clearly tell, is the guy, high ego or a low ego, that the best leaders are ambitious, but they are not ambitious for themselves, they are ambitious for the organization. They want the organization to be a rockstar. They don't want them. For example, before your time, there was a guy named Al Dunlap Chainsaw Al who took over Sunbeam and whatever, and everything blew up in spectacular manner. There is a number of leaders who appear to be good, but the egos are very high for themselves. That is not a level five leader. You can run a test on the different traits. Servant leadership is another trait. If you read Philp Fisher's book, he goes into a number of traits of great leaders. I think you can look for those traits and it becomes obvious, like Carlos Tavares, all his suits are off the rack, no custom suits for him. The guy loves to travel coach, all his peers are doing private jets. When he goes visits a plant, he goes, gets lunch himself at a local deli, some sandwich, and then goes in. He can squeeze blood out of a rock. For 20 years, GM multiple different managers went to Europe to try to fix GM Europe. They continuously lost money for 20 years, and finally they paid him to take the business, and in nine months they were making money. All the same nuances of Europe, he made it work, and they are making, I think GM Europe is making north of a million dollars a year. I mean, billion dollars a year. It is a very profitable business now, and GM was happy to get rid of it for nothing. What is the difference? The only difference is that Carlos came in. That is it. Then Carlos put his frameworks to work and the same people, same everything and the business is humming. Next question.

Ranci: Hi Mohnish. My name is Ranci. I had a quick question. I read in the Columbia interview that you had seen some interesting opportunities in Turkey, and I know you said an investor should ignore the macro picture, but how do you feel investing in a country where the institutions of the government are deteriorating significantly?

Mohnish: Yeah. The thing is, I grew up in India at the time when it was very heavily socialist, very anti-entrepreneur. But if you own the Coke Bottler in India you do just fine. I would say that in any country in the world, if you own the Coke bottler or the Pepsi bottler, probably a good business. If you own the dominant credit rating agency, probably good business, what I am saying is that there are businesses that transcend geography, and they transcend currency. For example, let us say some country has crazy inflation. If you are the Coke Bottler, it doesn't matter. You will still get paid, you will get a margin, they could use seashells for currency. It will still work. The thing is that people will be willing to trade certain amount of their labor for a Coke. That trade will happen no matter what. When I looked at Turkey, I was mainly interested in these, what I would call bulletproof businesses. There is the good news with the internet and YouTube and everything there are fans of Mohnish globally, and there are fans of Mohnish in Turkey. The interesting thing about these fans of Mohnish is like the one guy who is my good buddy in Turkey, he is overdosed on Graham, Buffett, and Munger before I ever met him. The guy is already completely well trained and a friend of Mohnish and offering services for free. Like I tell these guys, listen is it okay if I visit Istanbul and can we just go meet all the companies in your portfolio, and is it okay if I buy them if I like them? Oh yeah, it would be so good. It would be great to hang out with you. I said, you want to get paid? He said "Oh, why do you embarrass me?" I do try to pay them, but I am usually unsuccessful. They are completely immersed in Graham, Munger, and Buffett well trained. If a person has overdosed on Buffett and Munger, generally speaking, they are high quality human being because that means they have generally picked up some finer skills in terms of what the soft human skills. They generally are going to be honest, high quality people. That is what I found. I like my buddy in Turkey, and the problem my buddy in Turkey had was that he overdosed on Graham, and he underdosed on Fisher. I told him, "listen, can we not go see the PE of ones in Turkey and can we go meet the Coke Bottlers in Turkey, please?" Because he was showing me PE of 0.1, forget PE of one. He was showing me PE of 0.1, Arvind is probably orgasmic at this point. But I told him, I don't want to see the PE of 0.1, please, because I know that there is going to be hair on them that I won't be able to deal with. I said, it is okay to play three times earnings for a Coke Bottlers let us go meet those guys, and that is what we did. He is so deeply into Graham with all this PE of 0.1 stuff, and it is so great when you have that whole portfolio of those businesses, but he is moving, the good news with him is that he is seeing the light. One of the things that took me a long time to figure out is you don't want to focus on discounted pies. Discounted pies are okay, what you really want are growing pies, because growing pies is really where the holy grail is. I tried to tell my friend in Turkey, "listen, please, the growing pies and the great pies, not the ones that have been stale and sitting for two days". I think that you can go to Turkey, no problem, and you can go to I think the same thing in South Korea. There is my buddy in South Korea completely trained in the ways of Graham, Buffett, and Munger, etc., again the problem with these guys is because these are cheap markets, they overdose on the cheap stuff. The Turkish guy and the South Korean guy are both overdosed on Graham. I worked on both of them, and I think they are happier for those lessons. Of course, the thing is that when we are sitting by the seaside next to the Bosphorus, having great seafood for dinner with fresh grilled Mediterranean Sea bass coming to you and then we are talking about the switch from Graham to Munger, all of it goes down really well. It is awesome. In fact, I have a trip coming up now to South Korea in early December, and this will be my third trip. I told the guy, "Listen, I know you took me to all these cheap companies, and I was trying to get you to make me see the good companies. This time it is only great businesses. We are not seeing any Mickey Mouse PE of 0.1 or PE of 1. I am looking at the great businesses, and because the market is so cheap, they are still available at great prices". That is okay. Next question.

Arvind: Right, Mohnish on that subject as you are looking for these great businesses

Mohnish: I knew Arvind, the 0.1 would get your attention

Arvind: No, it is not the 0.1. I think the goal is really to get a great business at a great price, that anomaly. As you are thinking about that or in different markets how are you balancing the price relative to the business quality? Because functionally, you gave the example of buying the Coke bottler at three times earnings. That is much better than buying at surface value a crappy discounted business where the pie isn't growing at one time earnings. Are you rarely seeing them at three times earnings that in those types of markets?

Mohnish: I have not yet found a co-partner three times earnings, but the hunt is on. Okay.

Arvind: Right.

Mohnish: But I would say this, that both Turkey and South Korea are both interesting because I like South Korea better because Turkey is a lot more discounted pies and South Korea is a lot more growing pies in general. If I were to generalize the two countries, I would say that you could just look at the growth rate that you have seen in South Korea the last few decades, you compared to the growth rate of Turkey. It is just night and day. But when you peel the onion, like in Turkey we only have one bet and it is a great entrepreneur and he has got great assets and he is really smart about how he goes about his business and allocating capital and all of that. I bought the existing pie at a ridiculously cheap price. But the issue is that the whole pie was like 40 million dollars. We couldn't put a lot of money into it. That pie is probably worth north of 500 million. But the other thing is that, that entrepreneur is a young guy, and I think he has got decades of compounding ahead of him. As long as he stays hungry and goes after it, I think he is patient enough and the game will come to him. I think he will make that pie grow, but even if he doesn't, we are just buying at such a discount, we are still okay. We bought great assets at a great price. My only problem with Turkey is I can't put a hundred million into that stupid thing. I wish I could. In Korea, I think we are able to put a lot more capital. The pricing is not as extreme, but the pies are growing and there is some great pies. Like Munger says, you go fishing where the fish are, I think Korea is just a great market to fish. The cost has done nothing for three decades. Things are quite cheap, and the governance is getting better. The tables are losing power. All the factors are moving in the favor of the investor. So it is good.

Arvind: Other questions?

Eddie: Yeah, sure. I'm Eddie. You talked earlier about John Arrillaga kind of maintaining a small focus circular competence. We can find success there. But I think we have seen some examples of how you may be expanded your circular competence to include opportunities like graphic, that someone sense to you, you are willing to expand your circular competence that maybe understand that business. How do you go about expanding your circular competence and feeling very confident in that new area within your circular competence and then two, is it important to be like a poly map as a value investor, someone who's kind of curious about everything and not super focused in one circle?

Mohnish: Well, I think you are better off. I don't think one should be consciously trying to expand one circular competence. I would say that investing is one of the broadest disciplines because, when you look at a GrafTech, you are going to run into a whole bunch of issues which you may have never thought about and dig into those issues and try to figure them out, whatever else. If you are a curious mind and you are curious about how business works, what makes a business tick then I think that you are going to understand a few things that will lead to a good outcome. I mean, if you look at a business like GrafTech and you just study it from the perspective of a student of business, right, not from the perspective, and that is how you should approach it, student of business. If you look at GrafTech, there is several things. One of the things is that before Brookfield bought them, they had six plants. What Brookfield did is, it took six plants down to three. They got rid of three plants, and they honed in on a whole bunch of manufacturing efficiencies and streamlined those plants and their cost structures and all of that. They really kind of rolled up their sleeves and they went to work. It is not a business where they are just looking at huge tailwinds and just flying on those tailwinds. They actually went just like fit Fiat Chrysler; they went into the details of manufacturing to get efficiencies. Even like today, GrafTech had earnings call. They have two plants. Two are these three plants, one is in Monterey, and one is in Pennsylvania of the North Pole, they just bring it back to life. They are kind of moving some work from Monterey to Pennsylvania. It is about a two- or three-year project for them to do these movements. It doesn't increase capacity, but it definitely takes their cost structures down. This is a business that is doing continuous kind of blocking and tackling to improve their efficiencies and such. I think the thing is, when you look at these businesses, don't look at them from the perspective of making an investment. Look at them as from the perspective of a HBS case study. Just a case is assigned to you as part of the MBA program, whatever else, and you are studying it. I think that is the way you should look at these businesses. When seven moons line up and it hits you between your eyelids or your eyebrows, that this is a total no brainer. That is when you should act. But beyond that, you should just keep reading and ingesting. As you keep reading and ingesting, the circular competence will gradually expand, and you will get there. I mean, if anyone sends me anything on US healthcare, I never read it. US Pharma, I never read it. Biotech, I never read it, because those are so far away from my circular competence that I am never going to get there. I think US healthcare has so many forces that are non-market forces and that are such corrupt forces. I just ignore the entire sector because I just think that once I get past, if I am not operating in a sector with market economics, then it is just something doesn't appeal to me. I don't want to look at health insurers, I don't want to look at hospitals. I don't want look at all the different participants in the US healthcare system because there is so many issues with it, which are not market driven. That is like one sixth of the economy, right? You can ignore 80% of the economy, 90% of the economy still do well. Some areas I just don't want to read about because I know I may learn stuff, but I have never got to go there so I can focus on areas. I think it is worth studying the Amazons of the world, the Googles of the world, because those are so much stuff happening in the world will go through them if you will. You may never make an investment there, but I think it is worth learning them, worth understanding them. Arvind, he is muted.

Michael: Yeah, my question is more general, and it is what percent, how much of your day spent reading and how much of that reading is based on companies that you own in your portfolio versus new opportunities?

Mohnish: Yeah, I am looking at all the portfolio businesses, at least quarterly, because at least look at their updates and stuff. One of the things about investing is that real change in businesses happens over years. It is not weeks or months; the timelines are a lot longer. You have to really kind of have an understanding that it takes a while. The new companies that show up, I mean, I get a decent flow of writeups from people and such, and I look at them, but a lot of them are the stocks at 13 and they think it should be at 17. When I see that I am done, because I am saying, okay, if the guy who's bullish on the company can't see a 3x or a 5x on the position then what is the point? Don't send me stuff. It is a 13 and it is worth 18, please. At least it is 13 and worth 50. Someone has got to pay for the shirt and the library and all that. The 13 to 18 just won't get me there. We need some more meat on the bone. I look at those sometimes, they are in industries where I just know I don't want to go there. Today, I think someone had sent me some natural gas play where the most bullish scenario was about 80x return. I didn't spend much time on it, between us girls it just looked like there was a lot of that directional bet is on prices and, and all of that. Nothing was coming up from that, that made it obvious that I ought to drop everything and go all in on this. I think you have to make judgment calls where you see something and you say, Okay let me spend 10 minutes on it. After 10 minutes you say, do I want to spend 30 minutes more on it? After 30 minutes, do you want to spend two more hours on it and just keep taking a call at each point. Next question.

Student: Yeah. Thanks. I'm curious, so you said you want to look for something that is going to give you a 3 to 5x return. How long are you willing to wait generally to achieve and realize that return?

Mohnish: Yeah, 5x in five years is very nice. Even 5x in 10 years, there is no problems with that. We can get those types of numbers where in good shape.,

Arvind: Other questions? Yeah.

Student: One of the things that I struggle with is companies that have good earnings, but they have poor free cash flow, because they have high Capex. Do you like that scenario? Because I can see people liking because probably reinvesting their capital well, but to me it seems like I like free cash as well.

Mohnish: What is the name of the company you talked about?

Student: Micron

Mohnish: I am sorry, I thought you mentioned the company. I think what you want to look at is, you want to look at owner earnings, you want to look at the cash the business generates that can be distributed to owners, okay. After Capex and after everything. If Micron is on your mind, then at least for me, you have to wait sometime. We can't discuss it today, but I would say that if I am looking at a company like Micron and Capex is not a deal killer, but I definitely want to see what the owner earnings are after Capex, I mean, just because a business has high. I agree with you. The best business are the ones that have no Capex needs, MasterCard, or Amazon, or Google, whatever, these are great businesses, but you can do really well, even in businesses where the Capex needs a significant, I mean, the extreme case is I hate the auto business because of the Capex, but even a crappy business like autos, I am not even talking about Ferrari, the mass market auto. I mean, even if I take out Ferrari, Fiat still gave me a 4x in seven years with all the Capex and with everything else going on, right? It wasn't a bad investment. I think that the memory players they do have high Capex, but they also have high owner earnings. Other questions? Yeah. You definitely want to look at the owner earnings. You definitely want to look at it after Capex. Like I said, if you take the stance that I have a friend of mine in Singapore who probably wants to go unnamed, the guy won't buy any business which has Capex period. For him, what is very important is the incremental widget that they put out doesn't need any Capex, he likes the Amazons, he likes the apples, he likes the Google that he is done really well. You can have a framework which says, I don't want to look at high Capex businesses, and you can have a very comfortable life.

Arvind: Other questions? Mohnish are there any great recent reads that you have enjoyed? I know you read very widely.

Mohnish: Yeah, I think that one is that book that just came out on Jim Simons, the Renaissance guy? "The Dust Jacket, The Man Who Solved the Market". Yeah, I just start reading it, but the author Gregory Zuckerman, he is just a really good writer and he does very thorough research. He wrote a bunch of good books in the past, I haven't finished it, I probably think 20, 30 pages into it, but it is already captivating, I think that is a good read. There is another book that I just ran into recently which is called More from Less, it is a guy named John McAfee. He wanders a bit I think chapter five and chapter seven has a lot of the essence of that book. But that book actually forced me to reset some thinking. Actually, one of the things that we don't realize and I think many of you might be too young to realize is that, but if you go back about 20 years and you think about all the things that we had in our life as kind of individual devices is all gone into the iPhone. For example, we used to buy cameras, right? Most of us don't buy cameras anymore, and we used to have like music systems and different nuances of music and that has gone away. We used to print everything, like I used to print the maps and all that, and that has gone away. A lot of physical devices that we had are all basically gone. Basically atoms got converted into bits and a lot of atoms got converted into bits. We are seeing a lot of efficiencies come out in terms of usage of resources. We are getting a lot of GDP growth without a proportional use of resources that we had in the past. A lot of it is because of the efficiencies, not just with the iPhone, but the efficiencies that have come about in manufacturing and in different industries and such. The book actually takes it just a longer term view to show you that. I think it is just a good food for thought.

Arvind: Got it. Well, Mohnish this has been fantastic as always. Thank you so much for doing this, as always.

Mohnish: Well, Arvind it was a pleasure, and you have a great class and some wonderful questions. Thank you very much and enjoy the rest of the evening.

Arvind: Well, thank you.