Mohnish Pabrai's Q&A with students at the Boston College, Carroll School of Management on October 12, 2023

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Arvind: Mohnish, thank you so much as always for coming. It's great to see you and I can't wait to get started.

Mohnish: I'll go ahead with a brief monologue. Going back to Buffett's childhood, there was a racetrack in Nebraska called Ak-Sar-Ben, which is Nebraska spelled backward. That racetrack has been demolished and there's an incredible dim sum restaurant and a lot of gentrified condos and whatnot in its place. Ak-Sar-Ben is gone and all kinds of Avantgarde people have moved in. Anyway, when Buffett was a teenager, he used to go to the racetrack and he had several activities on the racetrack. He had tips for the bearers. He had a newsletter called Stable Boy Selections which he used to sell to help the people who are betting maybe win or not win, but Buffett would win because he'd get paid. Then, after all the races were over, he would gather up all the tickets that people had discarded on the ground or in the trash cans. He would bring them all home, and he would go through each one carefully to see if some drunkard had discarded a winning ticket. Of course, most tickets that are discarded are going to be useless, and they're discarded for good reasons. But, he found a decent number of these discarded tickets that were winning tickets. Because he was under 18, he couldn't go to the window to collect them. He would collect all the winning tickets and give them to his aunt Alice; his favorite aunt. Aunt Alice would go to the window and collect the money, and then she'd give it to Warren. This approach that Warren had as a teenager, which is a pretty dogged painstaking approach, violates what the University of Chicago efficient market theorist says; the story of two economists walking down the campus, seeing a dollar bill on the ground. One guy says, "Look, there's a dollar bill." The other guy says, "No, that's not a dollar bill. If it was a dollar bill, it would've been gone a long time ago because markets are efficient. We should keep walking because there's no dollar bill."

Anyway, when he was in his early twenties he went through the Moody's Manual, and I was always curious about what the Moody's Manual looked like because it doesn't quite exist. I went on eBay and I bought a Moody's Manual. It's a big, thick book. Many of them come out every year. This was the one for transportation. It has railroads, airlines, shipping buses, and truck lines. This is from 1953. But if you're so inclined before they become expensive, you could go on eBay and get yourself a copy, just for nostalgia's sake. There are multiple companies on a page, and you can't probably see it. It's even in finer print than Value Line. It's fine print. This thing is almost 1600 pages. Buffett would get all of these Moody's Manuals, maybe six or eight of them, covering all the different industries; something like 10,000 pages, and he would flip through every page. What he was looking for was exactly what he was looking for on the racetrack; he was looking for winning

tickets. He's mentioned in some of the MBA talks he's given, that he founded Western Insurance, which had a $15 million market cap and had made 25 million net profits in the previous year. Kind of extreme anomalies, very thinly traded stocks, but which were just so he was doing a very heavy, pure quantitative screen. He said that he didn't spend a lot of time on each company, but he was kind of skimming through it. This was when he was in his early twenties, and then running the Buffett partnerships and all that. He went through these manuals twice, and he found a bunch of what I would call anomalies. Anomalies are important in investing. We have Warren as a teenager, then we have Warren in the early twenties. When Guy and I met him in 2012, he was 81 years old because it was just before the annual meeting. I had bid for, and I had won a lunch with Warren in the charity lunch auction in 2007. While Guy and I were kind of setting up the dates for the lunch, we got to know Debbie Bosanek, who's Buffett's assistant, reasonably well. We had proposed to Debbie "When we're coming to Omaha if you're twiddling your thumbs, would you care to go to lunch with us?" And she said, "Oh, Mohnish and Guy, I'd love to go to lunch with you. The only thing is I can't do it on Friday because there are all kinds of celebrities coming into town; the office is a zoo. But, if you come on Thursday, we can do lunch on Thursday and the meetings on Saturday." So we said, "Oh, you know, we are twiddling our thumbs anyway, so we can come on any day." We would go on a Thursday and then we'd go to lunch with Debbie. We did this in like 2009, 2010, and 2011, and it continued for several years. The lunches with Debbie were vastly superior. Don't tell Warren this, but they were vastly superior to lunch with him because I would ask Debbie questions like, does he have a cell phone? She would start laughing and she'd say, "Yes, he has a cell phone, but it's in my drawer. He doesn't know how to use it. He just knows how to flip it open when a call comes to answer it. That's all he knows, and he knows how to call me." This was Warren in 2012. Anyway, in 2012 when we went to Omaha for lunch with Debbie, Buffett was at the elevator when Guy and I came off the elevator and I thought, "Oh, maybe he's going somewhere." It turns out he'd come to greet us at the elevator, and he tells us, "Hey before you go for lunch, do you want a tour of headquarters?" I said, "Warren, you want to waste time with a couple of yo-yos, no problem." He gives us a tour. He showed us the letter he sent to Long-Term Capital, the first BNSF stock certificate, all these memorabilia for decades. He showed us his fountain Coke machine which he was proud of. He took us into his private office, and I noticed in his private office, that there's this bad boy, the Japan Company Handbook. I knew what this Japan Company Handbook was, because coincidentally, at the same time around then I had a subscription to Japan Company Handbook. I saw it on his desk, and I was really surprised. The Japan Company Handbook is in English, which is helpful. It's kind of Japan's Value Line. It has half a page on every listed Japanese company in extremely small print. The print is even smaller than the Moody's Manual. It's giving you a little bit of quantitative data, earnings, dividends, market cap, book value, and a few things like that and whatever, with some history and so on. As it turned out just coincidentally before I went to Omaha in 2012, I had been going through the same Japan Company Handbook because we know Japanese stocks are so cheap; they're cheap. I told Warren, "Hey, Warren, you know I can make this faster for you. I already went through it. You're probably just starting; why don't I dog-ear the pages that are of most interest?" Before he even responded to me, I proceeded to mutilate his copy of the Japan Company Handbook by putting various dog

ears on different companies that I found interesting. Warren is just standing there, poker face, not saying anything, letting the Indian guy do his thing. Guy Spier is getting a little bit horrified that here we are, maybe overstepping our kind of welcome. What I found is that humans, the way we are, are hardcoded in terms of our traits and personality and all that; between our genetics in the first five or six years of our life experience, we are hardcoded after that. Not much is going to change. A good example of that is exactly this with Warren, with the teenager at Ak-Sar-Ben, and the guy in the early twenties with the Moody's Manual at 82 running Berkshire Hathaway, which can no longer do. Mickey Mouse bets are still coming through the Japan Company Handbook when he should be doing other things. This is not the stuff he should be doing, but he can help himself. He's still got the kid in him who wants to hunt for the treasures that everyone else has overlooked. Then we see that in 2020, there are several filings by Berkshire where they've gone over 5% on five Japanese trading companies. Now, the lunches with Debbie stopped; everything stopped after a few years. I have not had a chance to talk to Warren, but if I had a chance to talk to him, I would ask him, "Hey, Warren, I'm almost sure that those five ideas came out of that Japan Company Handbook.

That's really where you first saw them, and if you go back and look at these five companies, like Mitsui and Mitsubishi and so on, and you look at their stock prices in August 2020, they were hitting multi-year laws. The filing came out on his birthday on August 30th, 2020. It was Warren's way of celebrating his birthday. All of them had gone just over 5%. He must have been accumulating and gotten all to 4.99% on August 29th. Then he bought a few shares, and the filing was made on August 30th. He did a couple of interesting things with this Japanese bet. First, he didn't put up any capital. He invested, I believe, about 5 billion, and he borrowed the entire 5 billion in yen in Japan at half a percent interest per year fixed. These five trading companies had an 8% dividend yield. He was going to be paying on the 5 billion, about 25 million a year in interest, and he was going to be collecting about 400 million a year in dividends. Of course, they were a very low single-digit piece and all that, and very long histories. These companies have been around for decades and decades. He went with Greg Abel, earlier this year to Japan, and he met all the five companies, and he's bumped up the positions now; they're about 8% or so each. What has happened in the last three years since that filing is all of these stocks have doubled or quadrupled. They've gone up 2X to 4X, and all of them have doubled their dividend. The 400 million dividend is now 800 million, and the 5 billion is maybe 12 billion something. The return on equity on that bet is infinite because there was no equity put up. If you look at the 2022 letter that Buffett wrote, which came out this year, he said, that in 58 years of running Berkshire, there have been around 12 ideas or 12 things that he has done that have moved the needle. These 12 decisions have created the Berkshire that we know. It wasn't like he made 12 decisions, he made hundreds of decisions, he bought hundreds of stocks. One of these 12 decisions. For example, hiring a G chain. The other 11 are either marketable securities like Washington Post, Amex, or Coke, or they're wholly owned subsidiaries, like mid-American, Burlington Northern, and National Indemnity. If we look at the last several years for Buffett, the two ideas that stand out in terms of what he's done have been Apple and the Japanese Bets. If I go back over the last 10 years, for example, I would say that those were the two best

things that Warren has done. The Japanese bets are not that big because, in the broad scheme of things, Berkshire is small, but he's tried to bump the beds up. There are some important lessons here. One is that when we run investment funds or run some pool of capital or whatever we are doing, we are sifting through; we are under a lot of rocks to find anomalies. They are extremely rare. What I'm saying is that you might be looking around and find something worth $20 and it's trading at 14. It might grow at five or 10% a year. Those might be the best things you find, but those are not what are going to move the needle. It’s the anomalies that are going to move the needle.

Investing is hard because as Munger says, “Take a good idea and take it seriously.” Ideas pop up at very random times in very random places, in very unpredictable ways. Our job is to be vigilant to know when we have something amazing in front of us. I remember that after the dot-com crash in 2001-2002, Peter Kiewit and Sons, which was a construction company in Omaha, had spun out broadband carrier level three, which was doing a lot of fiber build-out. Level three was flying high when the whole internet mania was going on. Then what happened is the music stopped, all these companies went bankrupt, and level three was actually upside down. They didn't have enough revenue versus the amount of debt they had and servicing the debt. That balance sheet was upside down. They had too much leverage and a lot of issues going on, and I had invested at that time in level three. Interestingly, even though I didn't know Warren then, he made the same bet for the same reasons. Level three had issued convertible debt in the heydays of the dot-com boom. These convertible bonds were trading at about 20 cents on the dollar. Twenty cents on the dollar is a bond that's going to default. Forty cents on a dollar and 50 cents is going to default, so 20 cents for sure is going to default, but the bond had a 6% coupon. When you looked at their balance sheet, they were solvent enough to pay the interest for at least the next three years.

Level three was trying to buy these bonds. They were trying to buy off as many of these bonds themselves to wipe out the obligation. I was managing very little money at that time, but I was able to get a 10% position in my fund. My fund must have been around 10 million at that time, so maybe a million dollars were invested in these level-three bonds. My thesis was very simple at that time. I said that Walter Scott Jr, who's on Berkshire's board, is one of the highest integrity people you can ever run into. I don't think Walter Scott Jr. signed up to drag level three through bankruptcy. They're going to try everything under the sun to avoid bankruptcy. But even if they end up in bankruptcy, eventually I would've collected three years of coupons. I would've collected all the money I've invested, and then I have a hundred cents on the dollar claim on the assets. Even if it goes into bankruptcy, what do I care? I've got my principal back. This is one of the mental models I've found very useful. Sometimes we get to situations where the risk is low, but the uncertainty is high. When you see a situation where risk is low and uncertainty is high, Wall Street usually gets confused between risk and uncertainty, and it'll punish the stock usually because Wall Street hates uncertainty.

Let’s compare two companies; ADP to Exxon, for example. Let's say Exxon is an oil and gas producer, which has no hedges, completely unhedged, future oil production to be sold at unknown prices because they don't know,

and I don't know, and you don't know what price they're going to get. ADP on the other hand does payroll processing. They've been doing payroll processing for more than 60 years. If you look at their revenues and earnings and all of that, it's one of the most consistent charts you can ever see of any company. What ADP is going to earn in 23, 24, and 25, 20 analysts would get within 5% of that number, because the variance is so low, and Wall Street loves that. Do we have an interest in ADP? No, we have no interest in ADP, even though it's a great business because it's not under distress. Everyone loves it. It's priced to perfection. Now, with Exxon, on the other hand, Wall Street has a problem. What is the intrinsic value of Exxon? Well, the intrinsic value of Exxon is the sum of future cash produced in the Kingdom discounted to present value. Well, what is that number? We have no idea. Even the CEO of Exxon has no idea. No one has any idea. That is a situation where we've got high uncertainty.

If you had some kind of an edge on the oil business, which went something like this where you said, "I can look at cost curves. I can look at some forecasts for what oil demand might be, and I can look at some floors, and I don't think, for example, in the next three years, on average, oil would trade below $60 a barrel." You come up with some theory like that. Now you have a basis to make a floor valuation of cash flows. If you have a high degree of conviction, you can have a floor valuation, and you can look at that flow valuation and compare it to the stock price. You can say, "Is it undervalued if this $60 holds?" We might have periods in the future where the oil prices are 160 instead of 60, so you would have some upside because it wouldn't always stay at 60. After all, there's always turmoil and things happening in the world. Then you could get to supernormal profits. One of the things to look at is for these businesses where the predictability of earnings is low, but you have some mental model in a very small sliver of them, which is giving you some comfort on some range of cash flows or some floors of cash flows or something, which tells you the intrinsic value can't be below this number. If that number is, let's say for Exxon 500 billion, and the market cap is 200 billion or a hundred billion, you have a basis to do something, so that can work. In Buffett's case, with Japan and those five trading companies, he was looking at, Nike for example, peaked at 40,000 in 1990. It's now been like 33 years. It has not seen that level since then. It's at 70 or 75% of that level even now. It was such a massive bubble at that time, but probably a couple of generations of Japanese citizens have grown up, having been told not ever invest in equities. They just go straight down.

The reason Warren was kind of picking through the Japan Company Handbook is that probably it's a fertile hunting ground. Japan has issues with a declining population, and it has issues with Japanese companies that think that the cash is for the benefit of the employees; lifetime employment, and all that. It doesn't belong to the shareholders. It belongs to the employees. The employees come first, and then the others come after that. Buffett is very aware of these, but when you look at these five trading companies, their footprint is very large outside Japan. Their fortunes are not so much tied to Japan. They are multinational global players doing things and deals all over the world, and a declining, Japanese population is quite frankly, irrelevant to all of them. The second is that they are pumping the cash out of the country. The dividends are there. They're pushing a large number of dividends out. It tells you that the company's not being run in a

manner where they're hoarding capital. They've been smart about capital allocation. He looked at these things and said, “Okay, the baby's being thrown out of the bathwater, and we can do something about that.” What I've realized after all these years of investing is the name of the game is these anomalies. The issue with the anomalies is they don't come along that often, but they do come along at a decent clip. Just like level three bonds suddenly showed up, and what happened with level three bonds, by the way, was they never filed for bankruptcy. Those bonds eventually paid off at par, and it was a huge home run investment because you had a 5X on, and in three years, you got your capital back, and then you had a 5X eventually, and they did exchanges and so on. That was a bet that the quality of the people and the network of those people was so rich and deep that they continued to kind of pull rabbits out of the hat, continued to find sources of capital, and continued to keep kicking the can down the road in a manner that nobody thought was possible in 2002. But that's what happened. There's a stock investment I made in 2004, and Arvind still doesn't believe that I made the stock investment.

It's a company called IPSCO which was a Canadian steel producer. They made tubular steel; stuff that goes into pipelines. I ran into IPSCO in 2004, and the anomaly there was that this was a company with no debt. Normally when these pipelines are being built, they want certainty of delivery of the steel and the pipes, so they sign long-term contracts with people like IPSCO. IPSCO had given guidance that for the next two years, we’ll have $15 a share in cash flow after CapEx, after everything, after taxes. The company had $15 a share of cash on its balance sheet, so if you add the next two years of $15 a share, plus the 15 on the balance sheet, it was $45. The stock was at 42. Now year three, because this is a cyclical business, those cash flows could go to zero. Those cash flows could even go negative. Wall Street, again, looking at the very high uncertainty of this business, didn't know how to price it, and it priced it at 42. I said, “Okay, here's what we are going to do, Mohnish. We are just going to buy IPSCO. I have no idea what the earnings are going to be in year three, year four, year five. I just want to own the stock for two years and see what the stock price is in two years.” That was the only thinking I did. I said, “We are going to have $45 a share in cash on the balance sheet. I can’t lose money at that point. Now, I could lose if I continued owning the shares forever. And they started losing money like crazy for a few years, but let's just go for two years and see what happens.” That was all the thinking I did, nothing more than that. Now, one more year goes by 2005, and the company announces that we are going to have one more year or $15 a share of cash flow, and I said, “Hallelujah, life is great. Well done, Mohnish.” The stock has now been kind of inching up from the low forties to the sixties, and then when they made this announcement, it's now in the low nineties, and I'm thinking, “We have a double in like 15 months, and who knows what's going to happen to this business? I should just take the double and move on.” While I was thinking about these things, I woke up one morning and the IPSCO stock price was at 155, I was pleasantly surprised, and I noticed that some Swedish company had made an unsolicited offer to buy them for cash, $160 a share. I didn't even wait to digest the news of the realities of that deal. I just sold everything. I didn't want to do the arbitrage of the 155 or the 150. I said, “We are done here.” The bizarre thing about the way the world works is this Swedish company that bought them could have approached them 18 months ago and made an offer for $60 a share, and

they'd be forced to consider it because it's at a premium to the current stock price. But they show up after it's already bumped up. Then they negotiate with the company and the company rightfully says that 90 is not an appropriate price. You need to give a much higher offer, otherwise, the board is going to turn this down. I didn't know any of that. It worked out. Again, the model was a low risk and a high uncertainty. The level three bonds and IPSCO looked very similar. That's just a good model to keep in mind.

In 2015 someone sent me a write-up on a company called Rain Industries. Rain had a $200 million market cap at that time. It had 2 billion in revenue, and had bought something like 1.8 billion of revenue in a public LBO almost all with debt; two very large acquisitions, one in 2008, and another one in 2012. These two acquisitions were done interestingly in the sense that the debt was completely non-recourse. It was a high-yield debt, but if they were not able to service it the only recourse the bondholders had was to take the asset that they had helped to purchase. They had a core asset in India that would remain, even if things went to hell. What happened is that these two businesses that they bought, one in the US, one in Europe, a large business with several plants and so on in 2015, were not producing any cash. The market was pricing Rain as if those assets didn't exist. The Indian assets in India with 1/10 of revenue were the only thing that existed. I looked at it and I saw that is a cyclical low, and these assets are going to turn at some point. It's a very well-run company, and I can't see a way in which the lenders have recourse. I studied that part carefully. Again, it was low risk and high hunt, high uncertainty. Are they going to make money on this? Are they not going to make money? Who knows? But there's no downside because we are at a floor and within three years, the market cap of Rain was 2 billion from 200 million, and it went up 10X because, suddenly the business they were in was going through a very spectacular boom, and they went through kind of a super normal earning cycle, which completely changed. Those are some of the comments and things I wanted to share with you.

What I've found is that five years ago I made my first trip to Turkey, and I made that trip just on a whim. Not much thought. I knew a guy and I liked this guy. He's a hardcore Ben Graham disciple. He had been to some of my annual meetings, and I liked him. He was running a small fund at the time in Istanbul, and I noticed that the Istanbul stocks were kind of screening really, cheap. Everyone had exited and the currency was already unstable. I asked Heider, "Would you mind if I came to Istanbul and we just visited the companies that are in your portfolio? I don't want to visit companies that you like, or you think I should see. If you don't have your cash or your funds cash in the business at the time, please don't take me there." He said, "Oh, it'd be a pleasure, Mohnish, if you want to hang out." I made that trip, and I probably met around 12 or 14 spectacularly cheap companies. You could see that all the foreign investors were exiting. I started making those trips every year. The next year, he took me to this company which had a $16 million market cap with a 600 to $800 million liquidation value; a complete anomaly, more anomaly than its anomaly to the power of anomaly. I asked, "Heider, is this a fraud? What's going on here?" He said, "No, I own the stock, and it's a very good management team." I looked at it with a really simple business to figure out. The liquidation value was real. The people were very good. Then I thought, "What stock am I going to get?" This is going to be

some thinly traded trade-by-appointment kind of thing. In Turkey, the trading volumes are so high because everyone invests for one or two days. The average holding period, when I told this to local Turks, they thought it was too high, the entire float, if I take out the founders, promoters, insiders, and foreign investors, the companies cycle through the entire float in nine days. It's very high trading volumes. Buffett has a quote, "The stock market is a mechanism to transfer wealth from the active to the inactive." I said, "If these people don't want to do fundamental research, and they're buying at 10 o'clock and selling at three o'clock, there's a chance of mispricing in that situation. The volumes were high, and we ended up owning a third of the business for probably like $8 million or something, a 24 million market cap. The market cap moved a little bit as we were buying, but not much. Now the market cap is about 600 million US. The currency has collapsed since I invested in 2019 but that didn't matter. In Lira, our return would be infinite. I haven't even calculated that in dollars it's near infinite, but in Lira, it would be infinite. Again, a kind of extreme anomaly. That was the only one we found in Turkey that was so extremely off. We found others, which were also cheap, but nothing like this. We have some other investments, which will do well and have done well. But you don't need that many anomalies. Those were some of the ideas I wanted to share.

The Japan Company Handbook that I showed you, I hadn't been going through it in a long time, so I decided to get a new copy and just relive Buffett's youth. You can buy it on Amazon, Japan. I just googled, I went on their website and I saw a link to Amazon. I paid like $50 or less, including shipping, and in about 10 days it showed up. I already found a couple of juicy things, and found one thing that I want to dig into. It's a PE of 1.2. A PE of 1.2 is exciting, like a 12% dividend of something. We'll poke around in some of these; there's four or five of these that I saw in there. When I'm twiddling my thumbs, that's what I'm going to do; just figure out what's going on with these companies, and maybe take a trip to Tokyo. I don't know if you guys have seen the movie Jiro Dreams of Sushi which is a great movie. A few years back, I went to Japan and I ate at Jiro's. It was about a 10-hour trip to Japan that I made where I went, I ate at Jiro's and I flew out. But what I could do now if I find some businesses like that, I could spend a week or two eating some great sushi and seeing what the bargains look like. With that Arvind, we'll turn it over to see what you guys want to talk about. Thank you.

Arvind: Thank you, Mohnish. That was great. With that, we'll open it up to questions. Please use the raise hand tool and I'll call your name. Mohnish, before I take the first question here from Doug, can we talk a little bit about Guy's approach, which is different from yours? Guy Spier kind of sits on Ferrari and MasterCard and so on.

Mohnish: One of my very deep regrets in life is the sale of Ferrari. That was another anomaly that showed up in 2012. I invested in Fiat Chrysler, and I didn't even pay that much attention to Ferrari inside Fiat Chrysler. They owned 80% of Ferrari inside Fiat Chrysler at the time. The entire market cap of Fiat Chrysler was under 6 billion, and its revenues were 135 billion; the entire Jeep franchise, the entire RAM franchise. Now that I'm in Texas, I used to have a Ferrari. I sold the Ferrari and I bought a RAM Longhorn. Don't tell John Elkann this, but I like the Longhorn better. Anyway, Ferrari was inside that whole mix in that 6 billion, a lot of things were inside that 6 billion. There were a bunch of auto parts companies. They sold for a few billion after that.

At that time, Ferrari was making about 250 million a year, and I thought this thing is worth whatever, three, four, or five billion or something; it's a piece. But the thing that I was focused on at that time with Fiat Chrysler, was that the RAM franchise could produce at least 5 billion a year in cash flow. And the Jeep franchise was also capable of producing another 5 billion. Their minivan franchise could make at least a couple of billion. They had two or three franchises, and I'm not even calculating what Maserati and Alpha Romeo and all these other things were worth. They also had Magneti Marelli, the auto parts. There were a lot of different pieces in there, but I thought if RAM and Jeep are making 10 billion a year, the market cap shouldn't be 6 billion. That was the thesis. But anyway, they took Ferrari public at about $45 a share, and it looked fully priced to me. What do I know about Ferrari at that time?

I had decided that to get to know the company better, I should own a Ferrari. I'd gotten to know John Elkann, the chairman, and I told him, "Hey John, you know I'm thinking of getting a Ferrari." He says, "Look, Mohnish, I can help you with delivery. I can't help you with the price. We don't give discounts to anyone." I said, "I'm not looking for any discounts. I made plenty of money on Fiat Chrysler, so it's okay." He says, "I'll put you at the front of the queue." My Ferrari was delivered in three months instead of two years. Unfortunately, by the time the Ferrari got delivered, I started to understand the moat once I went to the dealership and bought the car, and after that, I'd already sold the stock because it looked so overpriced. Guy Spier got the Fiat Chrysler idea from me, like a lot of his other great ideas. He, unlike me, understood what a great business Ferrari was. He sold some, but he has kept it, and it's one of the largest positions in his fund. It would be one of the largest positions in my fund. Just to give you an idea, we had invested about 70 million or so in Fiat Chrysler. We got Ferrari at about $16 a share. About 20 million of the 70 million was in Ferrari. That $16 a share is today at 310. It's 20X almost. My Ferrari position would've been 400 million. Pabrai Investment Fund's total is like 750 million. It's so stupid.

Anyway, we made money, but we didn't make as much money as we should have. That's the other mental model; when you find yourself in the happy position of owning a great business, don't sell it. One of the things I do appreciate about Guy is that he's very lethargic. It's very painful for him to sell things. I always test him on this. I'll tell him, "Guy, look, we have this great idea. Can we please finally sell Nestle?" Nestle is like ADP, it has no variance. Everything is priced in. But, he will go to his grave with that Nestle stock. I beg him about all these things. I was trying to get him to buy Reysas in Turkey, and I was trying to tell him that this is buying at 2% of the liquidation value or 3% of the liquidation value. I was trying to tell him, "Listen, you can let Nestle go and you can buy Reysas and ride off into the sunset." He immediately went into his bomb shelter and said, "I'm never buying anything in Turkey." He never bought anything. Earlier this year, I dragged him kicking and screaming to Istanbul, and I took him to some meetings with me, I thought he might find that this is orgasmic but Nestle still is in the portfolio. Guy will do reasonably well because he has a portfolio full of great businesses. The good thing about these great businesses is that they may keep up with the S&P or maybe around them. If you own Ferrari, Amex, and MasterCard, it's not entirely a tragedy. It's not the Mohnish way,

and I hope it's not the Doug way, but we just have to leave it at that. What can I say?

Arvind: Sounds good. Doug, go ahead with your question, please.

Doug: Mohnish thank you. You invest across emerging markets and developed markets across the whole capital stack in debt and equity. Can you talk about how you narrow your universe of things you want to pay attention to? Are there different quantitative filters or qualitative filters that you apply? Do you say, "I can't look at everything, this is what I want to focus on?"

Mohnish: I don't think there's a systematic approach. It's very opportunistic. For example, I found that I was twiddling my thumbs recently, so I said, "Where is there opportunity? Is there an opportunity in those five stocks that Buffett bought?" He said he's never selling them. So I said, "Okay, if he's not selling them and he's still buying, they're still cheap, maybe I can ride his coattails." Warren can't buy the Mickey Mouse; really small stuff in Japan, and I was aware that Japan has these issues with the demographics and governance issues and all of that. But I said, "This company like Shimano, that trade in Japan, they're not that cheap, but they're tied to the global market. They're not tied to the Japanese market. There are lots and lots of Japanese companies whose fortunes are tied to what's happening outside Japan, not inside Japan. Maybe I'll spend some time poking around. I don't expect that anything will come out of it, but it's like, you read the Wall Street Journal now.

I also read Value Line every week, and I noticed that it just happened this week. Ben Graham, when he used to teach his class, he used to give live stock tips to all these people who would come to the class, and then they would have so much fun. I'm going to give you some live tips. The problem is they're not fully developed, okay? These are very raw ideas, so you need to figure out whether there's some meat on the bone or not. My email address is mp@pabraifunds.com. If you figure out that some of these things have actual meat on the bone, send me a condensed two-page write-up to make my life simple, and that'll be much appreciated. Yesterday, I was going through Value Line. One of the things I like to look at is the list of stocks with the lowest PEs, and I found some interesting things there historically. They have another list, which is stocks that have lost the most value in 13 weeks. I noticed that JetBlue was at like $4 and change per share. I've always admired JetBlue; I love the way they've entered the European market and the founder. It's just a very well-run good company. I like Southwest, I like JetBlue. They were a very good proposition. We know that airlines have problems, but we also know Buffett had invested in airlines a few years ago. Of course, the financial crisis made things topsy-turvy. He reversed those bets at that time because the whole world was shutting down. The bottom line is that the industry is consolidated very heavily. Most flights I'm on are just jam-packed; they've got pricing power. Quite frankly, if you're running the asset, the way Southwest runs its asset, JetBlue has a lot of similarities to Southwest. One difference is they're doing more long hauls where you don't get as much bang for the buck in the rapid turnarounds. The rapid turnarounds help you a lot more on the short hauls because you get more flights in a day versus the long hauls. I was going to look at some of these Japanese things. I was going to look at JetBlue. We don't have to have an agenda; we just go fish anywhere. The bar would be high. What I noticed

with JetBlue is that the market cap is very low. I got to dig into the whole spirit thing, and what's going on there. Of course, I have some theories on why they're buying Spirit. Spirit and JetBlue are such different cultures but also it's really hard to get airplanes nowadays. Boeing's having trouble. All of these airlines, their ability to get planes, it's squished. If we are in that market in that type of situation for a long time, then that gives you a lot of pricing power. Anyway, the thing is, these are very early thoughts. We'll dig into JetBlue, and we'll see if there's meat on the bone and we'll take it from there.

Arvind: Anthony, you're next.

Anthony: Thank you. Thanks for taking the time today. My question is, I was listening to an interview with Morningstar where you're going over the 10 commandments of investing, and I was surprised by the "don't use Excel" commandment because that's kind of like the main tool of everyone in finance. What do you recommend using instead?

Mohnish: I've tried so hard to tell Arvind not to use Excel, and I've tried so hard to tell Arvind not to tell his students to use Excel, but nobody listens to it

Arvind: I tell them.

Mohnish: Oh, you tell them not to use Excel?

Arvind: Well, in practical reality, I tell them not to. But, you know, for class projects, they must.

Mohnish: There's a Munger quote, "People calculate too much and think too little." We don't need Excel. When the level three bonds are at 20 cents and the coupon is 6%, what is Excel going to do for me? It's going to do nothing. The thing that I have to figure out is whether they are going to pay me for the next three coupons or not. That's what matters. Nothing else matters beyond that really, because after that we just had a claim, and then it becomes uncertain. Excel is not going to be helpful. You can build some hocus pocus model, but that's all it is. It's hocus pocus. I don't know if Pulak is going to speak to the class this year. Has he already spoken, Arvind?

Arvind: Yes, he spoke two weeks ago.

Mohnish: All right.

Arvind: He says the same thing; don't use Excel.

Mohnish: I keep asking Pulak and Arvind to invite me to that class, and then I'm shut out. They don't make a recording and it's all private; just you guys and Pulak, and that's it.

Arvind: You're the only public discussion.

Mohnish: Okay, there you go. We are trying to help. Let's help humanity. Let's not be like an exclusive private country club. We want to help humanity.

Arvind: It's a safe environment. Yes.

Mohnish: If we look at a guy like Pulak, and I don't know what he talked to you about, but they have no models. They have no future projections, nothing. They don't think they can figure out what the earnings or cash flows of a business that they've invested in are going to be in the next few years. They don't

even try. They just look at the business, look at the past, and they like all those pieces. They invest, and they've got some rules. I love his rules. One of his rules is “no leverage.” I don't fully buy that because one of the things in investing, which is useful, is to have a Swiss Army Knife. But, on the other hand, what also can work well is you have a set of very defined rules, like no leverage, no models, and no future projections. It also works well. It's very useful when you're looking at a company and you're trying to figure it out, not to turn on Excel. I know this is difficult because you guys are alcoholics, but you can always start by saying, I'm Anthony and I'm an Excel-holic. Then we can go from there and make some progress and get to the 10-step program. Excel is completely not needed. One of the interesting things about investing is that it's a jigsaw puzzle. When you look at a company like JetBlue, it’s a jigsaw puzzle. There are all these different moving parts; important factors, and others that are not. In a sliver of cases, a small sliver of cases, we can figure out the jigsaw puzzle. I don't know whether JetBlue will lend itself to being figured out or not, but let's say it can be figured out. If it can be figured out, what's going to happen is, in my head, I'm going to have a model of JetBlue, which I can give to a 10-year-old in about five or six sentences, and explain to the 10-year-old why this company is going to do well and why it's worth investing in it. How many sentences do I need to explain IPSCO? How many sentences do I need to explain level three? How many sentences do I need to explain Reysas in Turkey? None of these need models or Excel. What starts as being something complicated, if the job is done right, and if you've latched onto the right things, the complexity will give way to simplicity. It's very important before you invest, that the model in your head is extremely simple because what will happen after you invest is incredible amounts of noise is going to be coming at you. When that noise comes at you, you will have a North Star, which will tell you what data to pay attention to and what data to ignore. It becomes simple because you've taken the complexity down to something simple and you understand it well. That's what I would suggest; we don't need Excel.

Anthony: Great. Thank you for spending some time with us. Mohnish, you just answered this question. I was going to ask you about your mental model and how you know when you spent enough time on something or when you need to spend more time to make a decision, but it sounds like you distill down complicated material until you have no other solution, and maybe it varies depending on the investment. I appreciate your time. Mohnish, maybe you can talk about how long on average that process takes.

Mohnish: That's a variable amount of time. When I was studying Fiat Chrysler in 2012, my starting point was that I hated the auto business. Look at what's happening right now with the UAW, just terrible. As you know, I'm a shameless cloner, and what happened in 2012 is that I was looking at Data Roma, and I noticed that Berkshire had taken a position in General Motors and that David Einhorn had taken a position in General Motors. From the size of the position, it was either Todd or Ted, it wasn't Warren. My guess was it was Ted. Later I had a conversation with him, and it was Ted actually, who had made the GM bet. I said, “Ted's a smart guy. David's a smart guy. The auto business sucks. Why would these smart people go into a business like that? Why would they invest in a business like that? You know what, I'm going to study this a little bit just so they can answer that question.”

My purpose for studying General Motors was that I wanted to just prove to myself that these were bad businesses; GM was a bad business. I had nothing else going on so I started to poke around. What happened is, when I started studying it, I discovered that it was no longer a bad business. The horrible business in 2007 had become an exceptional business by 2010. What happened is that the GM and Chrysler boards went through bankruptcy, and when they went through bankruptcy, they got cleansed of a lot of their legacy liabilities. The most important thing that happened besides that, was they had to get a bailout from the US government and the Auto Task Force, which was headed by Steve Rattner. I remember reading that Steve Rattner and his coworkers flew to Detroit one day because they had a bunch of meetings with the auto execs, and the last meeting was with the UAW. They were meeting the UAW at four o'clock, and then they were going to leave Detroit at five o'clock. When they met the UAW at four o'clock, Steve Rattner told the head of the UAW leadership, "We have a new contract for you. We looked at your old contract, we made some changes, and here's the new contract. We need you to sign this contract before we get on the plane at five o'clock." The UAW looked at him and said, "Look, we don't know what planet you're from, and I don't think you understand how this works. We'll take your contract and we'll study it. But, we can tell you just looking at page one, that there's a lot of stuff we're not going to agree with, and we're going to come back to you with what we would recommend and suggest. And then we'll go through the process." Steve Rattner told them," My plane leaves at five, and if by 4:45, this contract is not signed without a comma changed, I will shut down the city of Detroit tomorrow. You're not negotiating with General Motors who is concerned about solvency and profits and all that. The US government is not going to put a dime into the auto business unless it gets this contract." When I was studying GM, I read that contract, the new contract that the UAW signed 15 minutes after that without a single comma being changed, which never, ever happened in the history of the UAW and not happening in 2023. It was an orgasmic experience to read that contract. When I read that contract, it dawned on me that Detroit had gone from being one of the worst places to build a car to probably one of the best places to build a car.

The US is accidentally very gifted because it has the greatest number of navigable waterways of any continent on the planet Earth with the ability to move goods across. If you use water to move goods, it's the cheapest way to move goods. We've got waterways going north to south across the country, and we have the Great Lakes. From the St. Lawrence Seaway to Minnesota, you can just go by water. As it turned out, there were large iron ore deposits around the Great Lakes. They were large metallurgical coal deposits around the Great Lakes. When Henry Ford set up the River Rouge plant in Detroit, all his factors of production, everything that he needed was right around the Great Lakes. He could ship products cheaply, and he could ship them out cheaply. There was a large number of available immigrants coming into the US who wanted to work. Detroit grew for really good reasons. It was a great place to build cars, and no other place had these advantages. It got diluted away and destroyed because of these crazy union contracts and so on.

Anyway, when I was studying it, I went from hatred to love. When I was studying it, I was studying all the players like Ford and Fiat Chrysler. I

realized Fiat Chrysler had hired a rock star manager named Sergio Marchionne. When I read about Sergio Marchionne, it just floored me. Sergio had given a five-year forecast; he'd given five-year guidance of what cash flows were going to be. This was a $5 billion market cap, and he was saying that in five years, his cash flows would exceed 5 billion, but the market didn't care. No one believed him. I believed him, but nobody else believed him. It became a no-brainer. That process with Fiat Chrysler probably took like four months of reading and studying. There were Harvard case studies on Sergio, and there were some books on him. It was great. Sometimes, you know things can take a while. I remember when I met with Reysas, I was buying the shares less than a week later, a very short time because it was so simple. That was a very simple thesis to come up with. Sometimes it's becoming really obvious, really quickly, and you can move, and sometimes it takes a while, but one thing that you have to be is you have to be like the salmon fishermen standing with a spear by the stream. You never know when a juicy salmon is going to come by. You might be standing there for 12 hours and nothing exciting happens, and then a juicy salmon comes. You have to be prepared to have long periods of dry spells with nothing interesting, and something suddenly shows up and it only takes two days of work and you're ready to go. Or sometimes something shows up that takes four months of work and you're ready to go. All of that is okay.

Arvind: Patrick, you’re next.

Patrick: Hi, Mohnish. I was hoping you could talk a little bit more about how you identify distressed industries. I feel like it's probably easy to confuse a distressed industry with an industry that's in long-term decline. I'm kind of thinking about how Buffett's investment in that newspaper company didn't work out because the newspaper industry was in a secular decline. How do you distinguish between an industry that is just temporarily distressed and one that's not going to turn around?

Mohnish: Well, I would say that most of the time the market gets it right. When things are trading cheap, usually they're trading cheap for really good reasons. Capitalism is brutal. Very few things will last for a long time. Everything, almost everything, will go into a decline eventually. It's this creative destruction that goes on. Even when we look at a business like Apple, which people would not say is distressed, I don't think that the Apple franchise has had any issues for 10 years. It's probably bullet-proofed, but I don't know if I can make that statement about 20 years. A lot can happen between year 10 and year 20. We've seen in technology, so many changes happen. Apple may be still doing well 20 years from now, but that's not a bet I'd be willing to make. To me, my little brain’s way of thinking about it is that it becomes a hard problem to try to figure out what happens in year 11. Like the example I gave on the auto business, I thought that was a done business, a done industry. It turned out that there was a massive vein of opportunity at that time. Eventually, the 60-70 million that we would have invested if we had kept Ferrari, becomes about 400 million, and then Fiat Chrysler becomes another 300 million or so. It's a 10X in a 10 years’ kind of thing out of the stupid auto business. It's the way to look at it. We’ll not have a high-conviction view on most things that are distressing. We’ll usually not have, but sometimes, you want to take a flyer on something and just spend some time digging it, not with the idea that you think you're going to find some

rich vein opportunity just from the perspective of learning. Initially, my work on GM was simply focused on learning. I wasn't wanting to invest. I just wanted to prove that Ted and David were being stupid, and it turned out they weren't being stupid. Sometimes, it's good to dig in when you see disconfirming evidence because that will probably be a learning opportunity for you. When things are hated and unloved there's a decent chance there's mispricing if the hatred is not justified. You must do the work. If you do the work, you may get to a point where you say, "I can see this differently than the way the market sees it. I have a very high degree of confidence that the way I see it's the correct way." Even then, you might still be wrong half the time, and you'll still do okay even with a 50% error rate. That'd be okay too.

Arvind: Maybe you can talk a little bit about how you know you're wrong. For example, at what point do you decide that it's a permanent loss of capital such that it's a mistake and that you were wrong, and there's learning there?

Mohnish: First of all, we know that we are going to be wrong half of the time, if not more. Mistakes are going to be very common in the investigation.

Arvind: Absolutely.

Mohnish: The second is that time will make it very apparent to you. Once you've held a stock for two or three years you would've seen a lot of data come at you. You would've seen what the valuation is. You would have had some internal objectives on what you think this business is worth. It would be usually obvious that either you've missed something, or you were wrong about something and kind of went from there. I don't think there's much debate. At times, it takes a while to know we are wrong, because we may just not be seeing. But at the end of the day, the numbers will tell you. A stock must get to intrinsic value at some point. That's the bedrock of Benjamin Graham. If you've given some time, two years, three years, five years, that's sufficient time for markets to get back to sanity on what the business is worth. If you're sitting there after, you know, five years or three years and you're down 30%, the odds are pretty high that something is off in your situation.

Arvind: Okay. So, you use three to five years?

Mohnish: Well, sometimes it can be clear in three months.

Arvind: Yes. If the facts change, for sure.

Mohnish: The one thing about the investing business is that you start to understand the business after you invest as much as you might try to know before you invest, but after you got drilled dollars, you're paying attention and there's more and more data coming at you and you're getting a richer and richer understanding of the business. You may find at some point that some of the assumptions that you had made are just flat-out wrong.

Eliza: Hi. Thanks for speaking with us. I saw on a video online that you decided to sell your company TransTech because you lost interest in it. I have two questions. Why did you lose interest in that and not in investing, and how did starting a company influence your approach to investing, as not everyone will start a company, let alone a successful one?

Mohnish: Those are great questions. TransTech was an IT services system and integration company that I started when I was 25 years old. It was extremely

exciting for me when I started the business. It was a very bootstrap operation because I had no money at the time. I took about 70,000 in credit cards and about 30,000 or 401k to get the company going. It started in my home, and then eventually we got an office and went from there and added people. I like to play math games. One of the common themes in my life is that I like to play math games.

One of the math games that I enjoy playing is this game with the sales funnel suspect, prospect, qualified lead, and close. I didn't have any money. There was no money to do any marketing, so it was bootstrap. I knew I had to get customers and I had no Rolodex or anything like that. What I used to do at that time was I used to send out 200 letters a week. I got this list of CIOs (Chief Information Officers) of every company, more than a hundred million in revenue in the entire Midwest; in 10 or 12 states. I was in Chicago at the time, so I had the name of the CIO, his address, and phone number. I didn't have any budget for anything. I just sent them a letter and I had to make sure that the letter I sent them got past their gatekeeper, their assistant, or whoever was going to open the letter. I made the letter appear so that the gatekeeper would get confused about whether I knew the person or not. For example, let's say the person's name is James Smith. I would address the letter, dear Jim, then throughout the letter, I'm referring to him as Jim, and then I put a post-it note on the letter, which said “Dear Jim let's connect and talk about this when you get a chance, Mohnish.” There was this letter, it was hand signed, it's talking to Jim and bringing up the name Jim several times. It goes to the assistant and the assistant can’t be sure whether it's junk mail or not. It doesn't look like junk mail. It’s hand-signed and all that. Then, I would send this to 200 people. The reason I sent 200 letters is that if you sent 200 letters, first class mail, the post office gave you a break on the postage if you sorted it by zip code. It was like 14 or 15 cents per letter instead of 22 cents at that time for the posting. The 6 cents made a big difference to me because I had no money. I'd send the 200 letters a week, then what I would do is I would make 200 calls to all of them after a week or 10 days, and then I had all the previous letters that had gone on. I would make the first call after seven days, the second call after 21 days, and the third call after 45 days. I'd keep extending the time, but nothing would get dropped out of that funnel till the person said, “Don't bother me, I'm not interested.” It was just dropping things through a funnel. To me, the math game was “How many of these letters and calls does it take me to get a meeting with somebody?” and then “How many meetings does it take me to get a sale?” A sale was big because it was hundreds of thousands of dollars. Then what was the stats on all of that? What happened is that I was doing all this part-time while I was working; mornings and evenings, weekends, and all that.

Eight or nine months after I started the business, it had three clients. The three clients were giving enough cash flow that it exceeded the salary that I was being paid. I was just dying to go full-time and not be doing two jobs. The early days of TransTech were really exciting because it was just Mohnish and there was no team. Then I moved into offices, and as the company kept growing, I added more people in sales, HR, and recruiting. When we fast forward about nine years, there were 170 people in the business. What happened is my job changed from math games to herding cats in HR. I got to a point where I hated to go to work because I'm a game player. I liked

those math games, and there were no more math games. I'd go to work and politics is going on.

In 99, I went through this psychological testing with these two industrial psychologists, which was about nine years after I started the company. They gave me what I call my owner's manual, and they said to me, "Mohnish, we don't even know how you can function in that business because it's so far from where you're." They were the first people ever. I was 35 years old when they explained it to me. I was wandering in the wilderness with no owner's manual for the first 35 years of my life, and then they told me, and these are the exact words, "Mohnish, you like to play games. Not only do you like to play games, you like to play mathematically oriented games. Not just any kind of mathematical game, they need to be single-player games. You like to play games where you control the outcome. What's happening at TransTech is you don't control the outcome at all. You have this huge team, they control the outcome, and that's not who Mohnish is." At that time, I was already feeling unhappy going to work. and I was thinking of starting Pabrai Investment Funds. Buffett had just told me he wasn't interested in me coming to work for him, so I told him, "Listen, I'm thinking of starting this new business; and investment fund." They looked at it and they said, "Mohnish, this is perfect for you. This is who you're; a single player."

I started Pabrai Investment Funds with $1 million. One of them gave me a hundred thousand. I said, "Listen, Jim, I don't want to lose your money. You don't know me, and you're not a friend of mine or anything, and I don't know whether you want to invest." I had only given them $2,000 and the guy was going to give me a hundred thousand. He said, "Mohnish, don't worry about it. I cracked your brain open. I looked inside, I will do extremely well." He had a great run with that. They were right. I read my manual. I tried to read it every year, and I tried to stay true to it. I try not to wander. One of the things that changed when I moved to Austin, is that the pandemic taught me that working from home is more productive for me; a lot more productive than going to work. Even though Pabrai Investment Funds has a very small team, I made a change when I moved to Austin where I don't go to work at all. I only work from home. Now, we have Teams and Zoom that make it so easy to do all that. I probably end up at the office no more than two times a year when somebody's coming for some meeting or something. My quality of life and quality of work have gone up even more because I'm back to single-player. There's Dakshana, which is in India, and there's Pabrai Investment Funds, which is about two miles from here. But, the way I deal with Dakshana and the way I deal with the other back office people, and people in Pabrai Investment Funds, are very similar. They're all remote. I can focus on being a single player. That is why the first venture kind of got me all crossed in knots in nine years. The second venture is now 25 years old, and I don't even know where the time went. I hope I can do this for the rest of my life because it's too much fun. That's why I ended up where I ended up.

Arvind: Todd, you're next.

Todd: Hey Mohnish, thanks for coming to talk with us. I have a question more about the low-risk, high-uncertainty framework and thought process that you've been talking about earlier. Could you talk a little bit more about what questions you're asking yourself about what low risk is, especially as you move into emerging markets where things aren't as clear to get the full

picture or if you're looking at your next anomaly, or even if you're looking at JetBlue? What kind of things are you asking yourself to determine if an investment is low in risk and high in uncertainty?

Mohnish: When I went to Turkey, I made several trips over the last several years, and we ended up with three investments. We have three investments in Turkey. I probably met with like 60 or 70 businesses over the last several years. The individuals in some of these businesses are Ivy League-educated in the US. They're extremely high quality, high caliber People. I met folks who went to Cornell and other top-end schools in the US and then went back to Turkey. What I found is that the quality of the management teams was just so off the charts in a few of the businesses that I was visiting.

Reysas was a little different. It was extremely cheap. I focused on the highest quality businesses with the highest quality management and the emerging market risk. That's one of the mental models where I felt like the market had got this wrong; the market didn't understand.

For example, we have an investment in the Coke bottler in Turkey. Not only did they bottle Coke in Turkey, but they also have exclusive bottling rights for Turkey and about 12 other countries, including all of Pakistan, which is big. The Coca-Cola Company owns 20% of the company and sits on the board. The individuals I met running the place have had global experience. Many of them are not Turks; the CFO was from Ukraine and the new CEO has relocated from Chicago. They had exceptional resumes and were exceptional people. The quality of the management was extremely high.

When you’re bottling Coke and if you’re worried about Turkey, something like two-thirds of their volume is outside Turkey. The family that owns that Coke bottler is the family that has the exclusive rights to all McDonald's franchises in the country. That's not a listed business; it's a private business owned by that family. The family also has joint ventures with AB InBev, the Budweiser people. All these multinationals did a lot of due diligence before they tied up with very different businesses like McDonald's or very different businesses from the beer business. It also has the largest grocery store like Walmart. I found that the family was super high quality, but they were not involved in the business. They had brought in professional managers. The managers are significantly higher quality than I would find in a Coke bottler in the United States, and probably anywhere else in the world. Here, I was looking at an anomaly where I was saying, people don't want to touch this business because it's in Turkey, but I'm looking at an exceptional team. I'm looking at an exceptional product. Just to give you an example of the why, the emerging market part of it is utter nonsense. It’s overweighed by people like Guy and many others. It's a big mistake. The Coca-Cola Company had a bottler in Uzbekistan and the bottler was the government. Uzbekistan used to be part of the former Soviet Union. It was a government entity that was the bottler, and this government entity was not a capitalist, kind of maximizing revenues and maximizing profits. The way they dealt with Coke was they sold everything at the factory gate. They told people around the country, “Okay, if you want Coke products, come to the factory gate, pay us, and take your Coke products.” This is unheard of everywhere else in the Coke system. Distribution is important. The Coke bottlers in Cleveland are stocking the shelves inside the Kroger; they're making sure the displays are great. The last mile is extremely important. Coke was extremely frustrated

with this bottling arrangement, and finally, the government decided that they were going to sell the bottle. The Coca-Cola Company said, “Well, we would love to buy it. Can you please sell it to us?” And they said, “No, we are going to do an auction and we're going to sell it to the highest bid. We are not particularly interested in selling to Coca-Cola, but to whoever pays us the most.” Coke owned 50% of the bottler. What Coke did was they told the Turkish bottler, “Please bid for this bottler, and please pay whatever it takes to win this auction. Pay whatever crazy multiple you have to pay to win this auction. We’ll sell you our half at next to nothing to make the numbers work for you.”

The Turkish bottler did that. They paid some very high multiple, north of 20, 25 times EBITDA for the 50% of the business that was owned by the company in that auction. Then the Cola company sold them their half for single digit EBITDA, multiple. Then, what happened after that was the second year of ownership of that bottler, the profits quadrupled. I asked them, “What do you guys do? You took a business that was making 20 million a year and you’re approaching a hundred million.” They said, “All we did was we hired some drivers, bought some trucks, went into town, and said hello to a bunch of people. That's all we've done so far, and we haven't even turned on our jets yet.” They said, “We have 20% of the product line that Coke has. We've just introduced Coke Zero. They don't have Monster in there. They don't have a lot of Costa Coffee and all of that. Uzbekistan is going to become a very different kind of cash flow machine than the way it was before. But what Coke did is, out of all the bottlers they had in the world, they went to them and said, “Do it,” because they knew that these guys were awesome. They just sold them 50% of the bottling operation that Coke owned in Pakistan. Now the bottler in Turkey has a hundred percent, and there are rumors which were on the internet that Coke is about to give them Bangladesh. These sound like basket-case countries. Bangladesh is not a basket-case country for Coke. I mean, Pakistan is doing 400 million cases a year, which was 40 million cases 15 years ago. Bangladesh is probably doing around 600 million cases a year. That is a huge bottler. Turkey is doing 600 million cases. They're selling Coke. If we have a thermonuclear global blast in the world, which takes out 95% of the global population somewhere someone will restart a Coke bottling plant and people will want Coke for a certain percentage, certain minutes of labor equal to one Coke. The currency is irrelevant. People will want Coke and they will exchange some of their labor for Coke. When I look at the way people process Turkey, and they do have like a broad brush sweep on Turkey saying, “Oh, it's an emerging market. Oh, it has high inflation,” that is where you should go digging because you're going to find some overlooked gems. maybe 90%, 95%, or 97% of the Turkish market is useless. That's fine. What do we care? We want the anomalies, and we can just go invest in the anomalies. When people say to me, “emerging markets,” what it says to me is they haven't done the work. That's fine. I'll do the work.

Arvind: It's about nine o'clock. We'll take the last two questions and then I'll ask an ending question. Yes, Jameson?

Jameson: I think you kind of touched upon this a little bit, but I was just curious, at this point in your career, in life, do you consider yourself successful? As a follow-up to that, how would you define success on a both personal and professional level?

Mohnish: One of the things that I learned from Buffett and Munger, not so much because they talked about it, but because I observed this and you know, when you look at these guys, they are highly successful, beyond success. What I found when I've interacted with Charlie, is he does not look at or dwell on the past. If he looks at his past accomplishments, it's a massive body of work. But what I find is that when I meet with him, that doesn't even take up one-tenth of 1% of the space in his brain. What is taking up the space in his brain is he was struggling some time back with succession at Daily Journal, and he would kind of moan and groan to me about how someone recommended someone and he didn't think that person was the right person, and this and that. He was very focused on that problem. He was just honed in and eventually, he solved the problem. Somebody gave him a referral, and then, he hired the person. What I find is that if I try to bring up with Charlie things about the past, and like the question you asked. have you been successful and this and that, he brushes it off; it just bounces off. I've tried to learn from that. The reason why these guys keep going, like the Energizer Bunny is because they're focused on the future and they don't dwell. It's a great mental model. All of you attending this class are very successful. Just to get to Arvind's class, you had to have a lot of success in life until now. Arvind doesn't deal with yo-yos. You're going to elite institutions; you're getting very highly sought-after degrees. You're going to have a great career. You're all very successful. But, I would say that if you spend brain cells patting yourself on the back about the past, that's going to take away some horsepower for the future. The way I look at it is that I had to change, make a change in myself after I saw this in Charlie. I thought that this is a good model to adopt; don't worry about the past. Don't say, "Oh, this is great, and I did this and I did that. Just ignore all that. Just look forward, look at the problems at hand, and keep chugging forward. That will help you do better. That's what I try to do.

Arvind: Andrew, you're next.

Andrew: Hey, Mohnish. I just wanted to ask about one of the investments that you made through your fund called Micron or Micron Technologies. I'm curious to know what factors you considered when you first entered and got a stake in the company, and why you left.

Mohnish: That's a good question. The Micron thesis was built around the fact that it was a rational oligopoly. There are three players; Samsung, Hynix, and Micron. Samsung and Hynix are in Korea, I met with Samsung and Hynix multiple times in Seoul. I had a conversation with Charlie about oligopolies when I was looking at this whole situation about rational oligopolies and so on. Charlie brought up a very interesting kind of case study data. He said that Buffett had studied Coke and Pepsi bottlers in virtually every geography he could around the world. He found that in something like 95 or 97% of the cases, both the bottlers made a lot of money. It was a great business for both. But he also found in like 3 to 5% of cases where neither of them made any money. What happened is that the Coke bottler or the Pepsi bottler in a particular geography decided that they wanted to dramatically increase market share, so they dropped their pricing dramatically in the hopes of raising volumes. Of course, there was a reaction from the other party who also dropped their pricing. They got into these bidding wars where the consumer ended up winning and neither of them could back off. He found that there were a few geographies, maybe 3% or something where

Coke bottling or Pepsi bottling was not a good business. The rest of the places was good.

When I met with Samsung, they were very clear that they had a 50% market share. They didn’t want more than 50% market share. They said, “Bad things happen to us when we go over 50%.” They were the low-cost producer when I was first investing. I told him, “Look, you're the low-cost producer. You can drop your prices to a point where your other two competitors will start bleeding and you will still be making money.” They said, “We know that. We also have this 50% rule where we don't want more than 50% market share. We are happy to have healthy competitors and keep it at that.” When I met with Hynix and Samsung, it was the same situation. When you have these oligopolies, it’s illegal for them to sit in a room and collude on pricing. You're going to jail if you're doing that, but they do what the airlines do. American Airlines will drop its price on a particular route, and five minutes later, United will announce that they've changed their pricing as well. But the way they communicate with each other is through the marketplace. What I noticed when I was looking at Micron, Hynix, and Samsung, is that the three companies issued a lot of press releases, and I was really confused why they issued so many of them. Then I realized they were not talking to me, they were talking to each other and they were signaling to each other. They would always say in the press release that, “We are at such and such capacity and this is our CapEx budget and this is what we are expecting to do.” Then the next guy, after two days, issues a very similar press release. After two days, a third guy releases a similar one. I was convinced that this was a rational oligopoly. The memory business is very complex. A fourth player can't enter the space. It's complicated technology. There are just too many patents. You would have to violate patents left and right, even if you’re willing to violate all the patents. The processes are complicated. The Chinese have been trying forever, for example, and they will not have a critical, credible memory business that can go up against these three guys. That was a thesis. Then what happened is in late 21 and 22, Samsung got antsy and decided they wanted more market share, and they wanted to increase their profits, so they went off the reservation. They increased production, and reduced margin, causing pain. By then, what had happened is Micron had become a low-cost producer. They had moved up the company. Sanjay Mathur was executing well. But once that happened, from my point of view, that shattered the thesis because you’re in uncharted waters now, and you're violating the core fundamentals of what our whole thesis was on. I couldn't see this thing working out in a good way. The second thing that started happening, which was also unexpected, was the US-China trade wars and all these intellectual property wars. Micron became a big casualty of that. China banned a bunch of Micron products and different things. That helped the other two players, but it hurt Micron. When I saw the US-China situation, which is hard to forecast and predict, and I saw that these people have gone off the reservation we had maybe 60, 70% gain on the stock over the years, I thought we would get a lot more. I said, “Okay, we take our chips off the table. The investment didn't work as well as we thought, and the thesis didn't work. We'll take the money and play elsewhere.”

Arvind: Mohnish, this has been such a great conversation and I'm looking forward to next year. With that, let's give a round of applause for Mohnish over here and have a great night.

Mohnish: Thank you, Arvind. It was a lot of fun.

Arvind: Thank you.

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