

## Mohnish Pabrai's Q&A session with the Asian Institute of Technology, Bangkok on August 30, 2022

Tobias: I think most people are already here. I guess it is a good idea to start the session. I'm really delighted that we have a very big audience today. I welcome you. My name is Tobias Endress. I'm from the Faculty of School of Management at the Asian Institute of Technology, and I'm really delighted that we have a very interesting guest speaker today for a session. We aim to make this session as interactive as possible, so feel free to reach out with questions either in chat, just raise your hand so that you can ask the questions when we invite you to unmute. Without too much ado, I would like to hand over the floor to Mohnish Pabrai, who is an investor focused on value investments. Very successful in many terms, and maybe you just give us a few words about yourself before we start with the Q and A session.

Mohnish: Professor Tobias, it's a pleasure and honor to be with all of you. Also, AIT is a great institute doing some great work. It's a pleasure to speak to your students. I think it's a privileged student body that they have to study here. I'm actually very privileged and honored to be invited to speak to this August group. I have some remarks I would share initially with all of you, and then we'll open up to questions. The questions can relate to what I talk about or can be anything that the participants would like to talk about. I think other than things we currently own, I think we're pretty open to talk about anything. I think with that, maybe I can get going if that's okay with you guys.

There's a relatively famous investor in India, who passed away recently, you may have seen the news even in Thailand. Rakesh Jhunjhunwala and Rakesh was a billionaire several times over. He never managed money for others. He only really managed money for himself, and he actually started with nothing. He actually borrowed about \$20,000 at about 18% interest from some individuals to get going. When he passed away recently, he had a few billion to his name, and Rakesh was a, you know, he was kind of a split brain in the sense that he did a lot of A trading and rapid fire in and out trading, but at the same time, he had some positions that he held for decades, never touched them. For example, he had made an investment maybe about 25 or 30 years ago into a company in India called Titan, they actually are a jewelry retailer. They used to be a watch retailer, but now jewelry manufacturing retailer. He had put about, like I said, about three decades ago, about 4% of his network into Titan, and he never really touched it after that.

He also said in one of the interviews that he actually never visited a single manufacturing plant of Titan over that period. I think it represented about close to half of his network when he passed away. Something that was a 4% investment became 50% or more of his portfolio, and the rest of his portfolio had also done well. This was quite a significant return. There was another company, a pharmaceutical company, Lupin, which he'd also held for a very long time, and there was a third one that he very deeply regretted till the end

that he sold. He had made a few times his money on that. That was CRISIL, a credit rating agency, the best credit rating agency in India.

I think the holy grail of investing that I have figured out so far is to have partial ownership of businesses that can grow and compound for very long periods of time. Where the business has qualities that allow it to increase intrinsic value over a period of time. Usually, these companies have some attribute that allows us to maybe identify them. One of the attributes that they tend to have, they tend to be run by or founded by kind of fanatical leaders, Maverick leaders who don't really fit the normal mould. They kind of appear somewhat unusual. They're in their makeup. For example, in the United States, we have an airline called Southwest Airlines. Southwest Airlines has done extremely well. I mean, it's been around for 50 years, and I don't think they've maybe expected, except perhaps during COVID, they never lost money any year, and they actually pioneered the low-cost carrier movement around the world. A lot of companies around the world, Ryan Air and Asia Air and so on, all copied Southwest model, which Herb Kelleher came up with.

What Southwest was trying to do is, they were not trying to compete with other airlines. They were a short-haul carrier. Herb Kelleher said that I'm trying to compete with the driver trying to drive in his car to between two cities, 2 or 300 miles. He said I want to make flying cheaper than the person putting gas in his car and going one tank of gas to get to another city. He focused all the cost structures of Southwest to make it attractive for that particular type of customer to find southwest attractive. When he was able to make that attractive for that type of customer, other airlines just couldn't compete with him. Their cost structures were designed to compete with other airlines, not with people driving cars. Southwest got a kind of sustainable advantage and for a very long period of time, they compounded at a higher rate than Berkshire Hathaway from the seventies, on from there.

These multi baggers companies go up 50 times, a hundred times, a thousand times in value, they can come in different stripes and colors, but they do have some commonality and they do have some common frameworks that can help us identify. One of the frameworks that are actually easy to screen for and easy to look for is what I would call Uber cannibals. These are companies that are very aggressive about buying back their shares. Typically, these companies issue no dividends, and they are pretty much ploughing back sometimes more than a hundred percent of cash flows or close to a hundred percent of Cash flows into buybacks. There is something very unusual and magical and actually non-linear that happens when you do buybacks kind of ace over a few decades.

For example, we have a home builder in the United States, in the east coast called NVR. NVR basically for the last 28 years has ploughed back almost a hundred percent of their cash flows into buybacks. They don't issue dividends. They only do buybacks. The one thing they changed in their business model about three decades ago is most home builders, what they would do in the United States is they will have a lot of investment in land. They buy land banks

and then they develop the homes, and then they get rid of the land, and they keep buying more land. What NVR did is they changed that approach to being just in time. They basically went to landowners and got options, bought options to buy their land. If a piece of property would cost \$10 million or \$30 million, they might put up 2 or \$300,000 or \$500,000 to have the option to buy that land at a fixed price over some period of time.

That way they don't have capital tied up. Then when they need the land, they exercise that option. Once they go to land not being a factor of production that they need to invest in years in advance, it becomes a very capital like business, and it becomes a business that generates very high returns and equity. Home building is a cyclical business. It goes through ebbs and flows, but because they don't have a lot of fixed costs in their model, and because they don't have a lot of capital in their model, all they do is, when they hit an air pocket, demand is low and sales are low, they'll stop the buybacks. They won't have earnings; they'll stop the buybacks. From 94 till now, that only happened two years during the financial crisis, 2008 and 2009 when housing demand went down a lot in the US.

NVR basically has bought back 75% of the shares outstanding in the last 28 years. They used to have about 16 million shares outstanding. I think now it's about three and a half million and the shares used to be, and they don't split the stock. Actually, it's really easy to look at their returns. 28 years ago, the stock was \$6 a share, and it's gone down a little bit in 2022, but at the end of 21 it was about \$6,000 a share. It went from \$6 to \$6,000 over 28 years period. Wasn't a hundred-bagger, it was a thousand-bagger over 28 years period. It wasn't a company designing software or something that you would normally think of as a high return on equity business. They're just building homes. Basically, all their incentives and everything to management is around the return on equity and all of that. It's very focused in that area.

There's another company called AutoZone, which is an auto parts retailer in the US. AutoZone, again has, over the last three decades, a similar story to NVR where they basically have no dividend, and in their case, they're growing, they've been adding more stores. But again, it's a high return on equity business. There isn't much equity in the business. Its stock has gone up about 200 times in the last. When companies do buybacks, buying back 3%, 5% of the shares, doesn't do a whole lot. But if they do it for 20 years in a row and that share count goes down 80%, now it starts getting interesting because in the case of NVR, for example, in the last 28 years, the revenues went up 10 times. Okay?

The stock went up forth a thousand times. The revenue only went up 10 times. If you look at inflation over this 28 years period, adjusted for inflation, it may be much less than that, they didn't have extraordinary growth in terms of the top line. What they did have was the market recognizing that this is a compounder, and the market took the multiple really high stock trades like 40, 50 times earnings and maybe 20, 30 years ago just be single digit multiples and so on. They got a pop because of the consistency and then so on. One can screen for

these types of businesses relatively easily, right? Because you can look at share comps and you can see whether they issue dividends and once you see that a company doesn't issue dividends and the company is consistently buying back shares.

The most important thing is, the business model needs to be sustainable and enduring. We can look at the business and it is not that difficult to tell what is a great business, and what is a good business. That's not really difficult. It's more difficult to tell what is a good investment, but to actually tell what is a good business is not very difficult because what you're looking for is, does a business generate above average returns on equity without using much leverage? Is it able to grow? Does it have some enduring competitive advantage over its competitors? What is the secret sauce that makes it keep going year in and year out?

If you study a business like NVR or you study a business like AutoZone, it would take some time, but you would be able to figure out what is the enduring advantage these businesses have when you screen for these types of businesses. Then drill down on the ones that have this type of fanatical approach. There's very few of them that have this type of fanatical approach, right? Because most management, are not great capital allocation. They don't understand capital allocation really well, and buybacks are kind of weird from a management perspective. They kind of look like the cash leaves your door and you don't really see anything happen when the cash leaves your door, but it happens over a period. I think that the multi baggers can come in many shapes and sizes. One of them that is an important one to look at is the ones that understood the importance and power of buybacks. Once they understand that, and if the business model is very stable, then it can be a tremendous advantage.

I was speaking to Abbu just before we started our recording, and he brought up what I've mentioned in some previous talks, a company in Turkey called Reysas Logistics, and Reysas has never bought back any shares, right? This was a business that I invested in 2019, and at that time the market cap was around 20 million. The liquidation value is probably 7 or 800 million dollars. Intrinsic value is probably over a billion. I told the management of Reysas that, look, it's almost impossible. You guys are really good capital allocators. You have very good knowledge for how you do deals. It's almost impossible that you can find anything to do, which would be superior to buying back your shares because you're buying back at like 3% of liquidation value. I mean, the accretion to that. But whatever I said to them made no sense because they've never thought about it in those terms. What they have understood now, which took them again a couple of years to understand, is that they should buy back more. They should buy more shares for themselves. They've been doing that which is pretty good for them to do that.

But maybe after a few years and more trust, maybe five years or something, we may be, because that business has the qualities that we look for, they are leasing warehouses and they're like the number one warehouses company in the

country. 99% leased, 10-year inflation index leases. Cash flows are very stable. Cash flows are most stable than NVR or AutoZone. It's a very predictable recurring revenue business which, neither NVR nor AutoZone are. When you get those type of characteristics where a business is operating like clipping coupons on a bond and the stock is really cheap, you can get incredible results, but it takes time. It takes time to build trust and convince management and so on, and we'll do well even if they never do any of that, it's just that we would do exceptionally well if they did something so that that would be fine.

I think that multi-bagger can come in a number of shapes and sizes. The most obvious ones can be technology businesses, right? Now the issue with technology businesses is that like Buffett says, industries with rapid change are the enemy of the investor. We would need to find tech businesses that have kind of got attributes like for example, Microsoft, which has a very strong install base of cloud-based applications and software, which people cannot do without, and people cannot change easily and such. We would need to find those businesses at reasonable valuations. Usually, the problem we get into with these great software companies is everyone knows they're great and the prices reflect the greatness. But sometimes you can get aberrations, you can get, like one of the things that happen is that when a package software company is switching to the cloud, the revenue is going from licenses being sold to a recurring subscription based model, the revenue will take a dip initially because as they're transitioning, if Microsoft sold Microsoft office as a package, they would collect like \$500 or \$400 one chart for one user. When they do it through a cloud-based offering, they get like eight or \$10 a month.

Near term your revenue will drop. But long term you do a lot better because people may not, after four years, buy another package for you. They may run the same word software for 10 years without upgrade, for example. Sometimes you can get mispricing because the market doesn't appreciate this particular nuance of the earnings taking a dip temporarily and such, and it's not being normalized earnings and so on. You can get great compounders from the classic, very stable recurring revenue software businesses or cloud-based businesses and so on. That can be a valid way to go.

You can also get it from companies that are really good at what they do. Costco in the United States will be an example. Walmart might be an example. These are companies in really difficult spaces. Retail is a really difficult space to be in. But sometimes you get some businesses that are really great at it, and they have proven they can endure for a long time, then it can work out very well.

One other thing about these Multi-bagger compounds, if we go back to the example of Rakesh Jhunjhunwala is, like I said, he put 4% of his portfolio, which later became 50%, I think Titan compounded at more than 30% a year for a long time. It has a great model, it'll keep going. I mean, I think that runway is really long. It tolerates a very high error rate because let's take an example that the other 96% of Rakesh's portfolio went to zero. If that had happened, you would still have a major home run.

If we make these compounder bets, and let's say we put 10% of the portfolio into each bet, and we study these businesses carefully and we make 10 of these bets, NVR and AutoZone and whatever, the most important thing, which is the most difficult for investors is, after that you need to go to sleep. After making the bet, because nothing will go in a straight line, there will be news coming out all the time. There're invasions into Ukraine and there's the inflation in the US and the Fed is raising rates, and the business might take a hiccup here and there or whatever else. There are a hundred different reasons for which one might be tempted to take action. To Rakesh's credit, considering that he had like four screens in front of him all day long, he never touched the Titan position for several decades and died with it.

The important thing in investing is not how smart you are. This is not a game of the highest IQ person wins because it's not that difficult to figure out if you gave me, or if I gave you a list of 100, the top hundred market cap companies in Thailand, and I just ask you to rank them in terms of quality of business, forget the valuation, forget everything, just quality of business. I ask 50 students to do that, that list wouldn't be that different. What companies show up in the top 10 might be very similar, top 20 might be very similar, and bottom 20% might be very similar and so on. The identification of a great business is not that difficult. What is the most difficult is not doing anything after you find yourself in the fortunate position of ownership of these businesses?

Taking Rakesh as an example, if you made 10 bets and you just said, Okay, no matter what the news is, I'm just going to ignore everything. In some cases the news dictates that you should actually sell. The business has gone into secular decline, for example, and you can tell it, but let's say you take no action, you live with the secular declines, see some of them go to zero, all of that, it would still be an exceptional run at the end of 20 or 30 years. The reason why most investors don't enjoy those great returns is that they get in their own way. They are not content with watching paint dry. If you are the kind of person where some painter has painted some wall white color and you can just sit there for eight or 10 hours and watch it dry and be really happy, then this is the business for you.

French mathematician Pascal, one of his famous quote is that all man's misery stem from his inability to sit quietly in a room and do nothing. I would just paraphrase Pascal to say, all investment manager misery stems from their inability to sit quietly in a room and do nothing. One of the things I try to do is I try to do a lot of sessions with students like you because it absorbs the time. If I have too much time to worry about the portfolio or think about things, it might cause action. Buffett plays about 10 or 15 hours a week of bridge, and I play about 10 or 15 hours a week of the bridge. The bridge is almost as good activity for me as investing. I think investing still gets a little bit of an edge for me, but the bridge is a tremendous activity for me. I enjoy it a lot.

If you put me in a prison cell for the rest of my life with three other bridge players and the same food being served for every meal, I would be extremely

happy for the rest of my life. That would be a very blissful existence. The bridge is a very healthy pursuit for investors. I think that investing is a great activity for gentlemen or All Ladies of Leisure, gentlemen of Leisure or Ladies of Leisure, where basically if you can be really content to not take any actions on your portfolio, you'll do really well. One of the reasons the index is so hard to beat is the index is too dumb to know that it owns Microsoft. It's too dumb to know that it owns Alphabet and it's too dumb to know that it owns AutoZone and it's too dumb to sell any of these.

What happens with the index is that every once in a while, the people who run these indices make some change, right? Like they'll take GE out of the Dow Jones, take IBM out of the Dow Jones. Usually, the changes they're making are made such a long time after these absolute loser companies have proven that they're losers, but they'll never take a Tesla or a Microsoft or an Alphabet, which is cranking and climbing out of the index. That will not happen, right? They usually take out the companies with a CEO decline in sales losses, for many years the business has lost its way, and so on. That's the reason why the index is so hard to beat because the index is really good at watching paint dry. It just cranks with doing nothing. That's really what you want. The only way to get better than the index, is because the index also owns a lot of losers.

But like we saw with the Rakesh Jhunjhunwala example, a 4% position becomes 50% because he just doesn't touch it. What ends up happening with the index is, Apple starts off being really small and Apple becomes a really large position, and Microsoft starts off really small and it becomes a large position. When you look at the index after 20 or 30 years, you find like seven or eight companies that are makeup 30, 40% of the index and such. That's why indexing is really good for almost all market participants. Most market participants will do better by focusing on the index. I think with that, what I'd like to do is, learn about what you have on your mind and take it from there. Thank you for that.

Tobias: Okay, thank you so much. I think that was very interesting and opens the room for some questions. I still hope that you find some time for a good match of the bridge without going to prison. I wanted to catch up. You mentioned in your talk that it's not so difficult to identify a great company and was very build this one question that a student sent in even before the question. Do you think having a great company is a good predictor for a great investment? Or let me rephrase a little bit. What do you think if you have a great company is needed on top, to make it a great investment?

Mohnish: Yeah, I think that's a great question. I think that the identification of a great company is not that difficult, because even if you just looked at quantitative factors, we'll get to qualitative factors in a second, but if you look at this quantitative factors, you would want to see, okay, sales are growing, profits are growing, cash flows are growing, return on equity is consistently over 20%, 25% return on equity, doesn't need a lot of debt to grow and scale. If you looked at these factors, it would take out 90% of companies. Most companies will not have these attributes. Already you will be down to 10% of the universe or less.

Now, when you start looking at the names of the business, some businesses may be completely alien to some chemical business, nothing about.

The other thing about the investing business is, there are no called strikes. Like in baseball, a thousand balls go by, no one's going to tell you, you're stuck out. We don't pay a penalty by ignoring a company that's truly great. We do pay a penalty when we invest in a business that's not so great, right? If you see some chemical companies don't really understand it, don't know much about why it generates these high returns, leave it alone, but there will be some of the businesses in that list say, yeah, this is obvious. You would look at a business like MasterCard and say, Yeah, I know why MasterCard does well, it is a monopoly. I know why Visa does well, I know why AmEx, American Express does well, these are monopolies for oligopolies, right? It'll start becoming obvious.

If we look at Louis Vuitton, you look at the financials of Louis Vuitton, if you didn't even know it was Louis Vuitton, you will see some exceptional numbers. You would see very high. I mean, I think they're after-tax margins are more than 20% and that's after investing a lot in brand and so on. He's a serial acquirer. He keeps buying more and more brands. Any fool can tell you that Louis Vuitton is a great business. The question is, is it a great investment? If Louis Vuitton was trading at three times earnings, it's a great investment. It's a great business and a great investment because you can just see a long history. Now if it's trading at 50 times, it becomes harder to make that statement. Somewhere between 3 and 50 times, lies the true answer, right? At some point, the great business ceases to be a great investment because you're just paying too much, try to get a piece of the action, right? The thing is that, it is entirely possible that paying 25 times multiple for Louis Vuitton may be a great investment, but it also may not be obvious to someone like me or a cheap skate like me may not be obvious, right?

We can tailor it to what we want. I think the identification of a great business is very important, but it's also not difficult. We should restrict our universe to only the great businesses. Once you restrict your universe to the great businesses, now it just becomes that you've thrown out all the riff-raff and you have a small list and you say, Okay, which of these do I understand really well? I can understand what the business might look like 5 or 10 or 15 years from now. Maybe there's some nuances the market doesn't appreciate, which I understand and maybe the market doesn't and that can work out well.

Tobias: Okay, great. We have another raised hand. Do you want to ask your question?

Shah Rukh: Yes, sir. I am wondering about the 4% quotation; I think it's quite small. What is the appropriate side to invest in the best idea? I see Warren Buffett's whole Apple, like 40%, so what is the right number?

Mohnish: I think a lot of this might depend on what feels comfortable. I would say that probably less than 5% doesn't make too much sense. I think you need to have some conviction if you're going to invest in if you had a portfolio of 20 stocks.

I would say that should be the upper limit. I don't think you should have a portfolio of a hundred stocks, for example. On the other hand, unless you have really good picking skills, taking it down less than 5 or 10 stocks may also not be prudent. I would say that probably the lowest amount you should probably consider investing is maybe 5%. The highest amount you might want to consider investing, maybe like 20%. In my case, I usually don't want to go over 10%. I like a 10 by 10 portfolio; I don't like 5%. I'm happy if I can make 10 bets of 10% to me that fits my psyche well. But it could be 20 works and it could be that five or seven positions also work.

Tobias: Okay, great. Then we have some other raised hands, but we also have a question in the chat. I will read the question from the chat first. How do you do the valuation? What do you think about the DCF and what methods do you usually use?

Mohnish: Well, I think it's usually very straightforward. One time, for example, and this happens quite a bit, I was at my health club, and I was just changing to go play racquetball and this other guy in the locker room, knows I'm an investor, so he asked me, what do you think of buying Apple? I asked him, what's the market cap of Apple? He said the stock price is like 160. I said, I didn't ask you the stock price, I asked you the market cap, right? He said, what is that? I said, well, the market cap is what you could buy the entire business, right? That's what you would pay to buy the whole company. I think that the thing is that one of the first things I think in terms of what should be a model in your head, let's say Apple has a market cap of 2 trillion, for example, okay?

Let's say it's earning a hundred billion a year, you know, cash flows a hundred billion a year. It's trading at let's say 20 times earnings for example. The question I would ask the investor to ask themselves is that if you were managing your family's fortune, and let's say your family fortune was 10 trillion, okay? Out of all the choices available to you, would you want to put one-fifth of your family's fortune into the complete ownership of Apple? You have 10 trillion, you can pay 2 trillion and buy apple. Against that, you get a hundred billion of cash flows. When you look at it that way, the question you would ask yourself is, Okay, what is going to happen to this a hundred billion of cash flows? What does this look like five years from now? Or 10 years from now? Right?

Because you would say, I'm putting out 2 trillion, if the cash flows never change, it'll take me 20 years to get my money back, right? If the cash flows just are absolutely flat, if the cash flows grow 10% a year for 10 years and then start declining 10% a year for 10 years, again, it'll give you some number of what that is worth. To me, when I look at a business like Apple, I'm like saying, okay, like my family fortune is here. If I'm going to put 2 trillion out, I want to be able to see that 2 trillion come back to me maybe in five or six years, right? I just don't want to go out 15 years to get my money back. I want it back in five years or four years, or three years or two years. That feels better to me.

If there was a company that was worth 2 trillion and generating 1 trillion a year in cash flow, and I can see for the next 3, 4, 5 years, that's not going to change.

I'll say, I'm ready to buy it right now, right? Because I know that in two years, I'll get the money back because I have clear visibility, high probability, and then after that, I might even double my money for the next two, three years. I think that's the mindset an investor has to, I don't, so the DCF, if you need to go to Excel to figure this out, it's a pass. Okay? The moment you think you need Excel to figure out whether something is a good investment or not, the answer is it's not a good investment, from my point of view, a lot of other investors would not agree with it, but I'm just telling you the way I think.

I think it was in 2004 or 2005, there was a steel company, it was mainly in Canada, but it was headquartered in the US called IPSCO. IPSCO was trading at about \$45 a share, okay? They had no debt, they had \$15 a share of cash in that treasury. They had publicly announced that the earnings for the next two years were going to be \$15 a share per year for the next two years. They also said that they have no visibility about earnings after two years. They made tubular steel, the kind of steel that goes into pipelines. They would have these long contracts with these people building these pipelines where they knew two or three years in advance that we are going to sell so many, so much steel and so many pipelines. This is why they had the earnings visibility for the next two years because the contracts were already in place and, it was entirely possible that after two years that cash flow could go to zero and it could possibly even go negative. It was a cyclical business.

But my thinking was, okay, I just want to buy this stock and own it for two years and see what the market does to the stock price when there's \$45 a share of cash on the balance sheet. I put 10% of the fund I was running at the time into IPSCO, and 12 months went by, and they announced that they have one more year of visibility and they're going to make another \$15 a share, and I said, Hallelujah. God loves me. I knew he loved me. Okay, so now we are in the money, right? Because it's a minimum of 60 now. Now after three years, it can again go to zero. The stock had moved up to about 80, \$90 a share by this time. A year later when they announced this, it was at about \$60 a share.

Then when they said, we have another Euro visibility, the stock was sitting at about 90 and I was thinking, Mohnish, it's sitting at 90, we bought at 45, we know that this thing is a time bomb because it is cyclical, the contracts go away. I don't know what happens, right? I'm thinking it's been a good run. We get a double in like 14, 15 months, we can just move on, right? I was thinking about that. Then as I was kind of trying to digest that news, a Swedish company came in to buy the business and offered \$160 a share for the company. I said, God truly loves me. First, I had some doubts that he loved me and all, but now I know he loves me for sure. The stock immediately went to 155 right once this news came out, it's not a \$5 delta. I didn't wait for even five minutes, I put all the sell orders and we were done. Okay?

The economics for me of the investment in IPSCO when I made it, was more obvious than it would be today for me to make an investment in Apple. An investment in Apple requires me to have a viewpoint of what happens in the

next 10 years to Apple's Cash flows. I don't know if I'm smart enough to figure that out. I think Apple is one of the all-time greatest companies. I read an article the other day in the Wall Street Journal about how Apple iPhone users cannot ever use Android end of the story. They can never go there. Android users can never go to Apple. Just those you get the habits are so tightly ingrained in us, and they were talking in the article about this couple where before they started dating, one was iPhone and one was Android and then they dated and they got married and they're still iPhone and Android because neither of them can really switch to the other, right?

That's a great lock. Apple has a great lock, it has great margins and a great lock, and Buffett is still buying the shares at current prices, right? He doesn't even use an iPhone until a few years back, he didn't even have a cell phone. It's something that I would probably fall outside my circle of competence to try to figure it out. I think that when you are trying to look at a business, the most important thing to ask yourself is do you understand the business well? If you understand the business well, what I mean by that is you would have some ranges that you could put up on what the cash flows are likely to be from this business over some reasonable period of time. Now, if you were buying it really cheap, like when I was buying IPSCO, I was buying it really cheap. I didn't need to know much about cash flows five years, right? That was not really relevant. It would've been very hard to actually figure out what those cash flows would've been over that period.

The same thing, for example, in this warehouse company in Turkey, it was easy to figure out that if we can buy the whole business for 20 million and you could liquidate the business for 7 or 800 million, the odds that you would lose money would be pretty low. I would say that type of investment would be superior to anything else I can find in the market. It's not the most amazing business that becomes the most amazing investment. I think then you have to get into the valuations and a few other things. But I think that it's important to make sure that you can figure out everything in your head without going to excel. You could explain it to a 10-year-old within five or seven sentences why you are likely to make a lot of money and why you are likely not to lose money. If you are able to do that for the investment, then go ahead and if you have to go to Excel and build complex models and all of that, then I think you're barking up the wrong tree.

Tobias: I see. Okay. Thank you so much. We have a number of additional questions. Maybe we tried to address at least a few of them people, you have your hand raised already for quite a while. Do you want to ask a question?

Biplav Thapa: The recent interview you mentioned that the main goal of investing is to protect the downside. Mohnish, the question is, how does one protect the downside in investing? Is there anything more than just a margin of safety to protect that downside?

Mohnish: That's a great question. John Templeton said that the best investment analyst will be wrong one out of three times. That's the best. Even if you look at

someone like Warren Buffett. Berkshire Hathaway has bought maybe 80 or 90 businesses in the last 50 years or so, and at least 30 of them did not work out and now he doesn't like to talk about them because it would discourage the managers and so on. Warren doesn't like to dole out criticism by being specific, but they made a lot of investments in furniture retailers. Most, almost all of them except Nebraska from never worked. They made a lot of investments in jewelers and almost all of them never worked. They made a lot of investments in retail, almost all of them never worked. If every single bet was equal weighted for Berkshire Hathaway, more than one third did not work, but the big ones actually worked.

Actually, when you put the size of the bets, then he's probably been right maybe 90% of the time and that works. But Templeton said that the best of us will be right, only two out of three times, even if you're right, half the time you will have a home run. Because we are trying to look into the future of businesses, and because capitalism is very competitive and brutal, it is not easy to have a viewpoint on a company 10 years from now and have that viewpoint be accurate. That's just a difficult game. But if you make 10 bets carefully considering first the good businesses and filtering through all of that, not paying too much for them and all of that, and five of them don't work. Now, if they don't work doesn't mean they're going to zero. They may flat line or they will go down 20% or something. They're not going zero. But even if they all went to zero, if you look at the Rakesh example, it doesn't matter as long as you are patient on the right one.

It is not possible, it's like a law of physics. It's not possible that you would have a lifetime of investing without mistakes. It didn't happen to Warren Buffett who is also known as god. It's not going to happen to us, my models, but I think that the error rate is baked in. If I go back and look at every stock investment I made, I'd say probably 40, 50% have not worked. I think even in the future maybe 40, 50% won't work. That's just because the Templeton law is like a law of physics. It's just the way it is, and we don't need it. We don't need them all to work. You'll still have a very good life with 50, 60% bating app.

Tobias: Okay, thank you so much. We're already running a bit at the end of our session. I'm not sure if you have a deadline, you have some time, then maybe you would,

Mohnish: This is so much fun that we should go for five or 10 hours because the problem is that anytime you ask me a question, I take half an hour to give you an answer. By the time you ask three questions, the hour is gone. I think we need to go for about 12 hours and then we can get all the questions through.

Tobias: Maybe you have time for one or two more questions.

Mohnish: Oh yeah, I have all the time in the world.

Tobias: Back to the questions. Pranamyia, you have already long time waiting for your question, so here you go.

Pranamya: Yep. Thank you so much Dr. Tobias, and thanks so much Mohnish sir for being here. It's really nice to hear from you directly. My question is in regard to capital allocation, so earlier you mentioned that 10 by 10 is a good number that fits your category, it suits you. I want to know if this 10 by 10 role is actually applicable for people with less investment amount, like maybe a thousand dollars or \$10,000.

Mohnish: I think that for most investors or for most individuals, indexing is the way to go. I think most people will not do well picking stocks because their temperament is going to get in the way. They won't be able to watch paint dry and then that's what gets in the way. But I think that if you were going to be hell-bent on picking stocks, and if you're starting out you could start with 20 and then as your confidence grows, you could try to whittle that down. Sure. It's whatever you are comfortable with.

Tobias: Okay, maybe we go straight to the next question from Girish.

Girish: Hi Mr. Pabrai. I've been following you for a very long time now, and it's a great pleasure to be able to finally talk to you in person. My question is regarding what the correct time is and what is the correct philosophy to actually sell or stock as value investors we buy into companies that are very fundamentally strong, have strong economic moats. These companies are very rare to find. I've listened in your interview that you said, if a company is worth a hundred, you shouldn't sell it at 120. What is the correct multiple or correct way to think about when to sell a stock?

Mohnish: Selling is much harder than buying. Selling is very difficult to get right. I think the bar for selling needs to be really high. You can't look at one quarter or one year or even two or three years. I think you have to be very convinced that the business is in permanent secular decline. If the business continues to get better and the valuation is continuing to get richer, the mistake I made in most of my career is I was not willing to hold because I felt it was too richly valued. I think that was a mistake. I think the question to ask is, is the business getting better or not? If it's getting better, give it a lot of leeway and hope, keep it in the portfolio even if it looks expensive. Now, if it gets egregious like crazy, you bought it at 15 times earnings and it's a hundred times earnings or something on normalized earnings and you can't really justify that number under any circumstance, then yeah, you can look at possibly moving on.

But I would say that you would be served very well by being a very reluctant seller of great businesses regardless of valuations. Also not want to sell businesses that appear to be not doing well until there's absolutely conclusive proof that it's not salvaging the business has gone into decline. If you go back to the Rakesh example, it didn't really matter what he did, irrelevant, what really mattered it not selling Titan went through many ups and downs over that period, which is what was remarkable. Is he stuck through it throughout because he was able to look through the long term? That's what you have to think about. You have to think about the business as if it's a family business as if you own the whole business. What would you do if you own the business and it's been your

family for 50 years, how would you think about it? That's kind of what the mind-set needs to be.

Tobias: Okay, thank you so much. There are so many questions out raised hands and in the chat that indicates that this is really interesting for the students that we have to keep also in mind a little bit the timing and now I want to take advantage to ask the last question myself or actually to forward one question from one of our students that I find might be interesting for many. Our student read that you established a foundation focusing on poverty innovation through education in the light of the education sector with a new normal. Do you consider investing in education a profitable undertaking in a monetary sense?

Mohnish: Well, I think you can do well in a number of industries. You could do well in, in the education space. Now, of course, if you look at the Chinese example of like overnight, a bunch of education companies went from hero to zero because the tutoring business was kind of banned in China, if you will. Sometimes, things can come out of the left field, but I would say that the companies in China that faced that type of an end game were not truly adding value. They were helping you get one of the limited seats in one of the elite universities by giving you tutoring and all that, but they were not increasing the number of seats, right? They were not helping people get well-educated, they were just trying to be a little bit better in terms of who got the spot and who didn't. It wasn't really, I would say, a win-win type of business.

From that point of view, I don't have any investments in the education space and I don't approach it that way. I'm not focused that I have to be in a particular industry or be in a particular area. Sometimes I may have a lot of competence, which would be helpful. I definitely have to understand the business, but I'm more interested in whether I can understand the business and whether what the future looks like. For example, I never really went looking to invest in a warehouse company in Turkey. It's just that when I saw that business and I saw the economics of that business and the pricing and so on, it made a lot of sense. I think it's better to start off with a more open canvas in terms of what you're willing to look at that can generally work out better.

Now having said that, there's an investor in the US, Tom Russo, who's done quite well. Tom Russo only invests in luxury brands, dominant luxury brands around the world, and dominant premium liquor companies around the world. Both of these types of businesses have very strong attributes of great businesses and they have shown the ability to be around for decades, maybe even more than a hundred years, and such. He's hunting in the right area, and he just has a collection of great businesses, which works out really well. I think that's more important rather than being too honed in on one particular nuance like education. Education is such an easy field to make money because governments really have an objective of educating the masses without a lot of money being spent. That's kind of their mandate that might go against what the companies are trying to do.

Tobias: Okay, thank you so much. Maybe we have room for one very last question. Kanchuya, you want to ask your question?

Kanchuya: Sure. Thank you so much for taking my questions, Mohnish. I'm just wondering, you have invested in other markets, China and as we know, in the past year or two, regulators and the government has a big role in it. Just wondering if your thesis has changed according to the change in regulations and regimes change and whatnot, and if you still have the same view of investment in Chinese companies?

Mohnish: Yeah, it's a good question. I would say that's a good example of things getting murky after you make an investment because there is no absolute clarity. It's just some murkiness, probably the best thing to do is to do nothing. It's really important that the sell decisions happen when there is very little ambiguity. We had made an investment in Alibaba for example, and it went down a fair amount. Then I noticed after that Tencent also had gone down a fair amount. What we did is we swapped; I came to the conclusion between those two businesses that Tencent was a better business. I made the swap because we got a tax benefit from tax loss selling. Time will tell if that was the right decision. I think that's okay because we kind of swap one for a very similar business but with somewhat superior economics, I think.

But I think that if I had done nothing at all, just kept that position, that's also perfectly fine and that might be also just fine. Time will tell what happens here. We have to keep in mind what John Templeton says, that we are going to have a high error rate and we should not be trigger happy. It's really hard to figure out what these businesses look like 10 years from now. That's not so easy to figure out, but there is enough of a case to be made that they could be doing a lot better than today, 10 years from now. If there's a reasonable possibility of that, then we just want to leave it alone.

Tobias: Okay, great. Mohnish, thank you so much for your insight and to take the time today to speak with us and our students. It was really a pleasure to have you, you see from the number of questions and interactions in the chat that the topic apparently was very interesting for the students. I'm pretty sure we could go on with this and there are many questions that are still around. Maybe we could do this sometime again. For me, it was a big pleasure having you. I'm very delighted and thank you very much. Thank you to the students for the question and the interaction, we are really delighted that you could do it with us today. Give us some insight from your perspective as a professional investor. Thank you very much.

Mohnish: Yeah, Professor Tobias, I had a great time. I really enjoyed the interaction. I'll look forward to another session, maybe next year. That'll be great. I really enjoyed the questions. I think the questions are very insightful. The best way to learn is to teach. I have a kind of selfish motive in doing these things because I'm trying to better myself. These sessions help me get there. Plus, it helped me not make sell decisions, which is also good. Okay. It's like playing bridge. Thank you very much.

Tobias: Thank you too. Thanks everyone. We'll be in touch. See you soon.