Mohnish Pabrai's Lecture and Q&A with students of the Peking University (Guanghua School of Management) on Dec. 3, 2020

- Jiang: I will make a brief introduction. Actually, I have posted your resume to this WeChat group, and other students have seen amazing performance over the past 20 years plus. Actually, they are famous in China because of your book and also because of your two presentations in this class. The students love you. They are eager to hear your thoughts and insights today. You will make the presentation first, and then the teaching assistant have collected questions from the audience. He will then ask question on behalf of the students, and we have Q&A. Is that all right?
- Mohnish: Sounds great. Thank you.
- Jiang: Okay. Although we are spreading out across China and actually across the world, let us give a warm applaud to Mr. Mohnish to give us this wonderful talk. Okay, go ahead.
- Mohnish: Well, it is a pleasure to be here with everyone.
- Jiang: Wonderful.
- Mohnish: All right. Anyway, it is a pleasure and a honour to be invited back to be with you. I have always find the students at Peking University as the best of any students I interact with anywhere in the world. It is an amazing group of people. I am honoured and humbled to be with this August audience, and I am also very excited to continue the interaction and dialogue. I think this is the fourth time we have had different venues and including once in Irvine and once in Beijing, and a couple of times now online. Anyway, what I wanted to do was that, I wanted to share a few slides and thoughts with you and then we can open up to questions and we can talk about what I have just presented, or we can talk about whatever you would like to speak on. The thing is that, when I look back at my life and journey as a value investor, there are two years that stand out in terms of being a very significant step function, in terms of the learning and growth I went through. The first time that happened was in 1994, which is about 26 years ago. When I heard about Warren Buffett for the first time, and I had never been in the investing business, or never even really, I might have bought a stock here and there, but really didn't understand investing. I was taken and surprised by Buffett's approach to investing to the point that, in the next few years, I shifted completely to becoming an investor. I am an engineer by training, and I was running an IT services company. In a few years, I made the switch completely to a full-time investor. 1994 was a year of tremendous learning and growth for me and it was really helpful. Then, the second time I went through a step function of growth was this year in 2020. For most people, year 2020, they like to forget and move on because of the pandemic and all the issues we have had with shutdowns and all the fatalities and health issues and so on. Maybe, it was because of all the time at home. I am not sure. But I found that I went through another renaissance this year, and I wish I had gone through this second

renaissance many years ago. But, I think Charlie Munger says, 'we are old too soon, and why is too late but it's better late than never'. I want to talk about one aspect of the renaissance that I went through, and it is changing my approach to investing quite significantly, a lot of these things will appear very obvious to you. Some of us, like me, are not that smart, it maybe not so obvious, but let me share these with you, and then we can talk about it. If you are an investor, a value investor, really at the highest level, you have got kind of two kinds of options in terms of the businesses you can invest in. You can invest in what I would call growing pies, these are businesses that have strong growth ahead of them. They have got long runways, and these businesses can get pretty large. One can do quite well investing in growing pies, even if one is paying what might appear to be an optically expensive price and there are many advantages to being an investor in growing pies. You can set it and forget it. This is really one of the only ways you can get to really strong multi-bagger returns, maybe 10 times your money or a hundred times your money. Growing pies is definitely a great way to go. The second way to invest is discounted pies and discounted 50-cent dollars bills or 40 cent dollar bills. Here you are on a treadmill of activity because you have to buy and sell. Then again buy, and again sell and keep doing that in taxable accounts. It can be tax inefficient, and it is difficult to get more than a double or triple, because if you bought a company at 50% off and it did not grow, and you were correct about it, then maybe you will double your money when that valuation gap closes. Maybe even if it gets some growth, you might get three times your money or something, but it is hard to get more than that. When I started as an investor in 94, having just heard about Buffett and so on, I was focused on growing pies. The period from 94 to about 99, 2000 was a period of very strong stock market returns in the US. It eventually kind of peaked with a very massive bubble, the dollar bubble of 2000. Then of course, the NASDAQ index crashed and burned. It dropped about 80%, and even the S&P had a very long period of no returns. I could see by 98, 99 that things were getting frosty. I had done really well in that period. In fact, I captured 200 bagger in that period. I was an individual investor at the time. I was not running a fund, but then I got concerned around late 99, that this party at some point will end and it will probably end badly. The market was really interesting at that time because there were a set of companies that were very overvalued but there was another whole set of businesses that were not sexy businesses, which were very modestly priced and even maybe severely under-priced. One could actually make investments in those businesses. For example, in 2000, the day the NASDAQ peaked, I think March 6th or March 9th, 2000, was the same day that Berkshire Hathaway hit a multi-year low in stock price. I think the Berkshire stock price at that time got down to about 40,000. It was literally that people were pulling money out of Berkshire Hathaway and putting it into pets.com or chemdex.com, all these different kinds of euphoric eToys and all these things that were going on at the time. I switched in the early two thousand from investing in growing pies to focusing on discounted pies, because I thought the index would give me a lot of headwinds, and, traditionally, growing pies were quite overheated and such. What I should have done probably maybe a few

years back, maybe three or four years ago, five years ago, was, I should have switched back because we did extremely well with discounted pies in the funds. Because the NASDAQ was flat from 2000 to 2016. It basically went nowhere. In fact, it went down quite a bit before it got back to the same 2000 level. The S&P 500 was flat till about 2012. They took a long time to get back to their previous highs. Obviously, the better way to invest between these two is growing pies. But you also need to keep in mind a little bit about where the market and the index is at, where you are not kind of getting to euphoric, if you will. If you look at this path to 10, 200 baggers, there could be more, but there are basically five ways you could get there, right? One is, you could buy these, what I would call focused mouse straps. These are very narrowly focused players with long runways like Moutai in China, which just opened its first store in China, McDonald's and so on. You could also get there with great capital allocators, kind of like Berkshire Hathaway or Danaher or Exor, which is based in Europe. Or you could also get there by investing in Uber cannibals. Uber cannibals are companies that are very focused on stock buybacks, and they end up buying back large portions. For example, a company like NVR, which is a US-based home builder since 1996, and started doing stock buybacks until now 2020, they bought back something like 82% of their shares outstanding. Just 18% of the shares outstanding are left and NVR has delivered, I think more than 70 baggers. In that period, the stock has gone up more than 70 times. In fact in the last 20 years, it has gone up more than 55 times, and the business actually has not grown that much. All they have done is, they have taken all their free cash flow every year and pounded it into buybacks. AutoZone is another one. These are not rapidly growing businesses. But again, similar story. Then one that happened in the sixties and seventies was Teledyne with Henry Singleton. In fact, there is a book that you might enjoy called Distant Force. Teledyne issued a lot of stock in the 1960s when it acquired almost 150 businesses when the market gave it a very high multiple. Then in the 1970s when the US equity markets were very cheap and collapsed, Teledyne was trading at, maybe single digit multiple of earnings, Henry Singleton bought back more than 80% of the stock. Again, in the case of Teledyne, they delivered about 125 times the value from 1960 to 1980, it was about 125 x. Then you can also get to multi baggers by buying, deeply undervalued players, companies that have gone down a lot. I have done some of that. These are some companies I have invested in. Teck Cominco was one I bought, During the financial crisis in 09, it became a 10 bagger. Fiat Chrysler in 2012, which also did very well. Then great industries more recently. But the one I want to talk about today, which is part of the Renaissance this year, is the "spawners" and the "spawners" are companies that continuously spawned related and unrelated businesses. Very few companies have the DNA to be great spawners. We will drill down a little bit on the different kinds of spawners. Basically, these are companies that have a deep conviction of, and really it is part of the DNA to keep adding and incubating new businesses that have the potential to be massive growth engines. They expect many of these things to fail, and they take failure in stride. A good example is the Bezos quote. "if they are staying in day one requires you to

experiment patiently, accept failures, plant seeds, protect saplings, and double down when you see customer delight". Amazon is one of the great spawner companies that we have. Spawning also has a lot of advantages, in fact, a lot more advantages than cannibals, because cannibals have to pay tax on their earnings, and then they can use the money to buy back shares. In the case of spawning, what you are doing is, you are basically reducing your net income, which basically then reduces your taxes. In effect, you are getting an interest free loan from the government on very easy terms, payable when able. For example, through most of its history, Amazon has hardly reported much in earnings. Their core business was quite profitable, but they were taking all the cash flows and continuously investing them into new bets. 30-40% of the money that they were investing would have gone to the government if they didn't do that. It is a very capital-efficient way to do this if you are good at spawning. There are different kinds of spawners, and I came up with these different spawners on my own, they may be more, but I think this captures a lot of it. Adjacent spawners are companies that create businesses that are close to the business they are already on in, like Amazon, when they started they were only selling books, and then they started adding more categories. They started selling music, and they kept adding more categories. It didn't require a lot of change in the business. That is what I would call adjacent spawners. Embryonic spawners are companies that acquire businesses and then nurture them into much larger enterprises. For example, through most of its history, Microsoft has not been an acquisitive company. It basically kind of grew its businesses organically, but they bought what we know as PowerPoint as they actually bought the company, and then they changed the name to PowerPoint and then made it part of office. That was the example of an embryonic spawner. Cloner spawners are not innovative. They just copy successful products. Microsoft is a good example of cloner spawners and then non-adjacent spawners creator or buying new unrelated business areas. For example, recently during the pandemic, BYD went into the manufacturing of N95 masks. That business has nothing to do with what one would consider the core competencies of BYD but Chuan Fu Wang has never been limited by core competencies. He has repeatedly gone into businesses. When you would look at him from the outside, you would say, he has no competence in this, but he has repeatedly shown that he can get competent. They entered the car business, and they were able to make that quite a success, which is difficult. They entered the N95 mass business, and I am pretty sure if they haven't already turned business, they will. Then Apex Spawner is a business that uses all four of these strategies and such. Generally speaking, the reason I am giving you these categories is, Apex spawners are very rare, and Apex spawners can be amongst the very best investments you can make because they have got so many different ways to Nirvana. It's kind of a Swiss Army knife. They can bring out different tools and they are really good at all of the above. Let us look at some of these spawners with some examples. Adjacent spawns, we can look at Starbucks. They created the consumer packet good, the Frappuccino bottles, which first they did a deal with Pepsi, which they sold in supermarkets. They created a coffee machine. I think now in China, they

have opened the Starbucks Reserve stores, which have done really well. They are also experimenting with alcohol-infused drinks and such, which is quite a significant departure from what is traditionally a Starbucks store. But they are doing all these spawns and it extends the runway. Facebook has been really good at embryonic spawning where they bought Instagram, and they bought WhatsApp. They bought Oculus, and they have taken these embryonic businesses, and they have created pretty significant value and growth. The same with what Google did with YouTube. Very significant grid or what Google did with Android, which is also a company they bought. Microsoft doesn't do much embryonic spawning, but like I told you, they bought a company named Forethought and then later renamed it as PowerPoint. But they are very good at cloner spawning windows, the Mac, Word and Excel from Word Perfect and Lotus, Explorer from Netscape, surface from the iPod, Azure, from Google, and Amazon web services and Teams from Slate and such Apex spawners I told you, they are very rare. If you can spot a apex spawner early in its journey, it can be very attractive and can give you a pretty long runway. Because what happens is, Amazon started with just a bookstore, it is like all eggs in one basket. But as they start doing more things, because these are mostly digital bets, the return on capital is extremely high. It can also tolerate all of failure. They have done a very good job with obviously the adjacent spawning, embryonic spawning, like they bought Zappos and Whole Foods. Cloner you know, some of these cloners didn't work. Like they came up with a fire phone, which they offered for I think 99 cents. But they couldn't get any traction. Then the fire phone was buried and they moved on. Then they have done non-adjacent spawning, like Amazon Web Services is quite a departure from their typical retail, and it is done very well. Kindle was quite a departure because it required quite a few different competencies. Similarly, Alphabet has done all of the above. They have done a lot of embryonic stuff. They have also done a lot of non-adjacent stuff where they have gone into things like Google Fiber and so on. Alibaba, you guys are very familiar with, Alipay, which is the adjacent spawning. They have done a number of things on the embryonic front, cloners, and then even the non-adjacent with the Alibaba Cloud and Alitrip. Berkshire Hathaway, the insurance was a spawn that Ajit Jain did for them. Probably worth over a hundred billion in value that, that business has created for Berkshire from scratch, where they pretty much didn't have to put up a lot of risk capital to make that happen. For embryonic, they bought GEICO and it had been around for a long time, but it was pretty small, less than 2% market share of the US insurance business. Now it is more than 10%. Mid-American Energy has grown a lot. Nebraska Furniture Mart has grown a lot. They have started some digital insurance companies recently, three insurance and BiBerk, these are cutting out the agent. They have cloned some of the other players like, I think Wilco and so on. Then Tencent, again has done a number of things on all of the above. You guys use WeChat, the games, Future mobility, and Baidu is very similar. They have kind of done all of the above. These have been tremendous home runs, especially if you have got them early. One spawner I just want to talk about is Kotak Mahindra, a company in India. I actually was

smart enough to make a very small investment in this company in 1995 and I was also very dumb where I sold the company in 2000 with almost no returns. I will come back to this slide in a second, but I just want to show you kind of what happened with Kotak. In 1995, I invested a small amount of money in India, maybe around \$25,000. Personally, I was going to invest in three businesses in India at the time, which I thought they all had huge runways. Kotak was actually my broker that had opened the account in dealing with them. I was just really impressed with the quality of the people I was dealing with. Pretty much at the last minute, I said, "out of this 25,000, I will put 3000 or so into Kotak because they were listed company and such". What happened with my 25,000 investment is, one company that I would invest about 10,000 in was 140 X. It became 1.4 million in about five years. I was smart enough to exit that, I was part of the dotcom boom. Then I thought, the other three companies had not done much over that period of time. I said, "Okay, you hit the big time it won. It doesn't really matter for no good reason, really". I sold the other three companies at 2000, including Kotak. Of course, if I had just kept the 3000 dollars in Kotak, I would have about 600,000 today. But just to go back to Kotak, they were a very small broker. Goldman Sachs at the time had taken a 20% stake in them, because again, I think, like me, they were very impressed with them. The key thing that happened to them was in 2003, in 2003, they got a banking license. In India, it is really hard to get banking licenses. I mean, the Reserve Bank has issued very few banking licenses to private banks, and Kotak today has become one of the largest private banks in India. They have executed really well, and that is where the bulk of their upside has come from. But the company has spawned many adjacent businesses, and they have acquired a few businesses and gone from there. I told you, most companies do not have the DNA to do spawning. Spawning is an unusual kind of DNA, especially successful spawners. For example, some of you may be familiar with Chipotle, which is a very successful Mexican chain here in the US. I don't think they have entered China yet, but McDonald's actually spotted Chipotle when they just had about 20 or 30 stores in Denver, in Colorado. I think they took a 20 or 30% stake in Chipotle and then later McDonald's felt that it was a distraction for them to own this business. Chipotle had grown a lot. It had gone from 20, 30 stores to a few hundred stores. McDonald's had done really well with the investment. They could clearly see that, there was a long runway ahead, but they felt it was a distraction. They divested that stake and of course, Chipotle has been a major home run for them, so McDonald's is kind of a company where they, from a DNA perspective, are all in on the McDonald's brand, and they have innovated inside McDonald's. For example, breakfast was an innovation, drive through was an innovation, the Big Mac was a big innovation, the McMuffin and most of these innovations came from their franchisees, but McDonald's basically, you can say the opposite of Alibaba or an Amazon. They don't do very well having multiple brands or businesses. They just want to be all in on McDonald's and do that really well, and that works well for them. They are classically a nonspawner. Another one is Ford. Ford had, many years ago, invested and bought Land Rover and Jaguar, and then when Alan Mulally came in as a CEO, he felt traction because he noticed that most of the Ford executives were driving Land Rovers and Jaguars and not really driving Ford cars because they were getting employed discounts on all the brands. He really wanted to focus only on the Ford brand. In 2009, he got rid of these two companies, and actually they are decent companies. They have very strong brands built over, probably, close to a century or more. Most businesses are not good at spawning. In fact, these are two examples of businesses that actually got rid of what would have been adjacent businesses just because they felt it was a distraction. Some other examples of Non-spawners, Costco is a great example of a non-spawners. It executes really well. I mean, if you compare Costco to Walmart, Walmart has spawned quite a bit. They have a number of formats of stores and operations globally, and they have a number of formats even in the US. Moutai is also, you can say, very singularly focused in and around the core of Moutai brand and such. One of the things that spawning does, which makes it very good from an investing point of view, is, capitalism is very brutal. Every company is eventually going to die. It is just the nature of capitalism. Even for the strongest businesses, there will come a time when Alibaba will not be around. Amazon will not be around because if you just study the history of businesses that were dominant 50 years ago, a hundred years ago, they are not with us today. GE and IBM were good, strong Spawners. If they had not done spawning, they would have died a long time ago. Spawning extended the runway of these companies. Microsoft originally was just making compilers. They had a basic compiler, they were a compiler company. From there, they went into becoming an operating system company. They actually bought the company that became MS-DOS. It would just be a shadow itself without spawning, because all these things that they have done is all add on to the core business. Spawning basically keeps the mothership young and healthy. It has a lot of advantages, including, I already told you about tax advantages. Some rules on spawning investing is that, you can probably study these statistics in China, but if I look at the United States in the last 20 years, there were 3700 IPOs in the US. Only nine businesses with an IPO in the last 20 years have exceeded a hundred million market cap, now. If you just make a simple assumption that a business that you invest in will never get to more than a 50 billion market cap, if you just made that assumption, then by inversion, you get a couple of rules. If you want a 10 bagger, 10 times your money out of a business, it means you can't really buy a business which is more than a 5 billion market cap. If you want to buy a hundred bagger, then you really can't buy a business that has more than a 500 billion market cap. The important thing with these hundred baggers and 10 baggers. If you look at any public company, or most public companies, pretty much around the world, almost all of them have been hundred baggers. At some point, most of the hundred baggers is usually captured while they were still private. Once they come public, they may not be small enough where they can go a hundred times. But the earlier you can get to these businesses, the more likely it is that you can get to 10 times your money or a hundred times your money. If we look at a business like Alibaba today, it has 800 billion market value, can Alibaba be a hundred bagger in 20 years? Anything is possible, but it is probably unlikely because you are talking

about something like 80 trillion dollars. It is a really large number and we don't even have businesses anywhere in the world that are more than \$3 trillion. Even much more than \$2 trillion. Catching multi-bagger early is important, but also you have to remember that the earlier you go in a company's life, the wider the range of outcomes. If I invest in Moutai today, the path is relatively narrow in terms of outcomes, but if I go into a very early stage business, the range can be quite wide. There is an art and science here in terms of making sure you have enough fractions. What I call the Pabrai's spawning rules, which I just came up with a few days ago is, make an assumption that no business you invest in will ever exceed a 50 billion market cap. If you want to make 10 times your money, you go buy below 5 billion. If you want to make more than hundred times your money, you go buy below 500 million. What I found about spawning is that, spawning is not a trait that you can easily screen for automatically. You can run a screen for low PE, you can run a screen for low price to book, and you can run a screen for a lot of quantitative metrics about a company. It is generally, at least from what I have found, it is not obvious what business is a spawner or is not a spawner until you spend at least a little bit of time looking at the business. Once you look at the business with a little bit of more detail, then you can get to the nature of the spawning. Are they a non-spawner or are they a spawner? If they are a spawner, stronger spawner, are they okay? Does it have strong spawning DNA or not? One of the things I want to get to in my portfolio eventually is a portfolio that is only spawners and ideally a portfolio that is only Apex spawners, and ideally, a portfolio which is only Apex Spawners, where every company in the portfolio is a hundred billion market cap. That, to me, would be the holy grail. We have to look at, does it have strong spawning DNA, does it have a great capital allocator running it. What I found about spawning is that you don't need to make heroic assumptions. Even a 500 million or 300 million dollar business will have enough tread marks in the past from the time they were private and when they were public, which will make it obvious to you that, this company has spawning DNA or doesn't have spawning DNA and the nature of that DNA. Three businesses in the portfolio were great spawners, and they are all below a billion market cap. Recently I found a fourth one, which is below 400 million and had a strong spawning DNA and a very long history. You could easily tell what has been going on in that business. Of course, the hunt is on to find more of these. One of the reasons I am speaking to Peking U is, my email address is on this presentation, the last slide. Please send me spawners. I am desperate for Spawners. Okay, so set it and forget it. That is really what we want to do. We want to get to a portfolio of maybe five to 10 spawners. I love this quote by Thomas Phelps, and I am probably guilty of making a lot of errors. He says, "for an individual institution really out to make a fortune in the stock market, it can be argued, every sale is a confession of error". Actually, if we are doing our jobs right, what we really want to do is, we want to become silent minority partners with Jack Ma or with Sam Walton, all with Jeff Bezos. We want to find these people, we want to find them early, and then we want to ride with them as long as they are riding. That is the holy grail. Then my friend, Nick Sleep, I love this quote, this is a quote Nick put in his last email to me, which is

a few weeks ago. He said that "truly, brilliant investors weren't investors, they were entrepreneurs that didn't sell". He brought up Sam Walton in this quote. In fact, one of the things I would encourage a professor to do is to see if you can get Nick Sleep to speak to you guys. Nick Sleep ran the Nomad Investment Partnership, I think in 2013. They were managing about 3 billion dollars. The entire portfolio, probably 90 plus percent of it was in three stocks. It was in Amazon, Costco, and Berkshire Hathaway. Maybe 60 or 70% of the portfolio was Amazon. If you look at 2013, I think at that time, Amazon was around \$300 a share. Nick wrote to his investors in early 2014 that he was shutting his partnership and he said, "look, we own three stocks, 10 years from now, we will own these exact same three stocks". My partner, Zach and I are not going to make any decisions or sell anything or buy anything by selling any of these three positions. We quite frankly, don't want to sit here and write letters to you for the next 10 years. What we are doing is, we are shutting the partnership, we are returning all your money, and we recommend to you that you just put the money in the three stocks and don't pay any fees to anyone. My guess is, both of them, Nick and Zach, probably had, let us say a couple of hundred million each that they had made as with the carry and all that. When they shut down Nomad, I think that's how that couple of hundred million was invested. It was in these three stocks. It is mostly still sitting in these three stocks. You can just calculate how well they have done. They've probably beaten every professional manager out there since then. An entire portfolio composed of 5 to 10 great spawners, at reasonable prices are likely to do very well. You can't easily screen for Spawners quantitatively. But then, like Buffett says, "Why should it be easy to get rich? It's worth the effort, and not all will get to Nirvana, but this approach can handle several duds". If we look at Nick Sleeps three positions, Berkshire Hathaway, Costco, and Amazon. Berkshire actually has underperformed the S&P 500 for quite a while. Costco has probably done maybe a little bit better, but nothing to get overly excited about. But Amazon was the one that really blew the doors off. When you have a portfolio of spawners, maybe five to tens, you could do really well with just a couple of them hitting home runs. This is an approach that can tolerate more than a few dads. Actually, it is relatively easy to avoid the duds because you can look at the track record. Then the question comes up, when to get off the bus? I love this quote by Charlie. "The first rule of compounding is to never interrupt". Don't exit until it is absolutely clear that a secular decline has started. Business does not go up in a straight line. There are going to be ups and downs, ignore these temporary headwinds. But when you have absolute clarity that the business is in a secular decline, you can exit. Even if you give up 50%, you sell at 50% from the peak because it would take a while for the market and you to figure out that there is a problem here. Because you have had such a long run for such a long time, it doesn't matter. The return is still going to be good. If you find a long runway and you are a little late at getting off the bus, it is not going to be a problem. The important thing is not getting off the bus for a temporary hiccup. Quick word on conglomerates. In Korea and Japan, we had the Chaebol's and Keiretsu's and these actually were incredible spawners, but they are a little bit different in the sense that, they were

given a lot of government help and they were almost assured of success because imports were restricted, licenses to competitors were restricted. They are a different kind of spawner, but they have done really well. If you invested in these businesses early in their life, like if you bought the Chaebols in the 1980s, or you bought in the Keiretsu in the 1970s, you would have done extremely well. Mature conglomerate is very different because it has already scaled, and it is unlikely to be a 100x from where they are at. We also have a lot of fake spawners or spawners who lose their way, GE and IBM are two examples of companies that actually survived for more than a hundred years, but then lost their way. I had 200 bagger in the 1990s. CMGI was one, which is in the US and Satyam was in India. They are both what I would call fake spawners. I was lucky that I was able to get off the bottom, close to the peak in both of them. But CMGI, for example, was more than a 100x. But then they were spawning dotcoms and eventually, almost nothing worked and the company disappeared. Satyam actually had a real business, and then they built a dotcom on top of it. It would have been about a 25x for me if I had collected what was truly owed to me. But I got more than 140x because there was euphoria. Then we had a bunch of fake spawners in the 99, 2000 timeframe, like internet capital group, idea lab, safeguard scientific. You have to make sure that the spawners you are going into are not fake. They are real, and that they have some staying power. Pretty much every public company was or will be a hundred bagger. I already told you this, Walmart had already given the Walton family more than a 100x before the 1970 IPO, it gave them another 20,000x after the IPO. There was a long runway there. You could have gotten on the bus for a long time. That is an unusual spawner. Companies like Uber, etc., are unlikely to deliver a 100x post IPO because it became public at 50 billion. You would need to get to 5 trillion which I would be sceptical about. That is the song and dance, and you see my email address there to send me the spawners. I think we can open up to questions. Thank you.

Jiang: Great. Thank you.

- Student: Yeah, thank you. You have a very great insights about the spawners Mr. Pabrai. You mentioned that by looking at the histories, one can find clues about whether a company has the DNA of Spawning. My question here is, according to your experiences, how long on average does it takes to discover that a company at its early stage has this kind of DNA?
- Mohnish: That is a good question. It will vary by company. But what I have found is that, some of these companies that I have invested in were founded maybe more than 20 years ago. I won't name these because I am still buying them, but I think the one in Japan was founded in 1985, and I think they went public around 2003. The founder was 25 years old when he started the company, and now he is 55. He is a young 55, and the business is very non-Japanese in the way it runs and the kind of things he has done. He is an innovative guy. There is a very long history there. I mean, there is a 30 year history that I could look at in that business. It is very obvious that spawning is very core to the DNA. I think what you can do is, if you do not obviously see spawning in the DNA of the business,

and it doesn't need to be a 30-year-old business, it can be obvious in 10 years. It can even be obvious in five years. It is just that, you can see that relatively quickly in some businesses. But I would just say that, if you said that I am going to have a portfolio which is only a spawner portfolio, and I am only going to invest when it is very obvious to me that they have great spawning DNA, and I also put upper limit on the market cap. There is a quote from the Upanishads. The Upanishads are these holy scripture books in India, which are probably written about 3000 years ago. The full quote is "as is your wish, so is your will and as is your will, so is your desire and as is your desire, so is your deed". Then the punchline, your deepest desire is your destiny. If you truly want something, like you are in love with some girl and she doesn't care about you, but if you truly want that person and you purely and totally focus on that, it will happen. The same thing with the hunt for spawners, if you say that, it has to fit the following criteria, there are 50,000 stocks globally, thousands in China. If you just systematically go through that, you only need, if you can only find one in a year, that is enough. One a year is good; you don't need too many. You have so much time to find one, and then that is okay.

- Student: Okay. Thank you.
- Mohnish: All right.
- Student: Thanks for the great presentation. That was a really interesting perspective. What helps you identify spawn is, apart from their say, MNA, their spawning history, is management an important factor that you look at and how do you identify a good management that might turn the company into Spawner, for example, for Amazon, probably having Jeff Bezos as a CEO was pretty important for the company to turn into Spawner?
- Mohnish: Yeah. For me, it is a very new framework. It is just a few weeks old, probably the framework is still evolving, and in fact, you are the Guinea pigs I want to test the framework with. That is good. What I have found so far is, historically when I looked at businesses, let us take a business like Alphabet. Alphabet, when they release their financial, the quarterly results of their annual report, they talk about other bets. They have a section called other bets, and they make all these investments in these other bets. Historically, when I looked at a business like Alphabet, I would just take the other bets and ascribe a zero value to them. Because I would say, who knows what is going to happen over here? I would say that, let us put it this way, it was maybe not an explicit value assigned to it, but I said, Okay, this is upside without the downside. I just say, Okay, it is good to have that, but I really can't, right? Because these are too much embryonic, and who knows what is going to happen with these things? Now, when I look at Alphabet, I don't look at it that way. It becomes very clear. When I look at a company like Alphabet, it is a spawner, very clear. There is no ambiguity about it. Not only do I know it is a spawner, but I can also tell which categories of spawner they are, right? I can see if have they bought embryos and grown them, or have created businesses of their own, which are very different. Google started with only search, right and then they bought Android, Android

was not created by Google. Android was bought, and then they scaled Android, YouTube was bought, and they scaled YouTube. Some things they have grown in house and some things they have bought and scaled. You can clearly look at the categories of what they have done, and now you can say, okay, it is very obvious Alphabet is an Apex spawner, it is very obvious. You can say that about Alibaba, very obvious Tencent, and Baidu you can say it about all of them. These are very obvious because once you have the framework, you can put the categories and you are done, right? But what is also useful is that you look at smaller businesses. Some of you may have heard of Chamath, with his million followers, whatever he has on Twitter. Chamath is spawning SPACs, right? The special purpose acquisition companies and what he is saying is that he has one for every letter of the Alphabet. I was looking yesterday at a company with the ticker symbol is IPOB, okay? He has IPOA, IPOB, IPOC. These are all public companies. He said they will go all the way to IPOZ. It is very obvious that Chamath is a spawner. Now, the problem is, there is no mothership. I mean, I want to invest in the mothership, right? Chamath, I want to invest directly with him, not the IPOB, because I don't know if IPOB will make it or not. Chamath is going to do really well because he is getting these facts going. Probably more than half or two thirds of them may not work, but we don't need a large number of them to work because they are going into such high potential areas. For example, IPOB is a company, the name is Open Door, and they are doing something, which I am not sure whether it will work or not. They are basically trying to disrupt the way homes are bought and sold in the US. Instead of me listing a home for sale, they will just come and say, I will give you the cash today, and you are done. You don't have buyers come and look at your home and disrupt your life and all of that. We will give you 5% less than the market price, but you don't deal with anything, and you are done in three days. They are able to do billions of dollars' worth of home purchases doing this. Now, I don't know whether this business eventually works or doesn't work, but it is one of his bets, right? I think it becomes relatively easy once you have. In the past, I did not have the Spawner framework. When I didn't have the Spawner framework, I would just look at Google's other bets and just say, "Oh, we don't know". Now I know that if the company has spawned DNA like Google, if Google was less than a 500 billion market cap or even a 5 billion market cap, I would want to invest in that because I can say that it is in their DNA. I mean, they are giving one day in a year to employees to do whatever they want. It is in their DNA to create new businesses, right? I think it becomes very obvious when you look at a lot of companies with that framework in mind. You can tell it is obvious that they are a spawn or they are not a spawner.

Student: Okay, thanks a lot. Perhaps a quick follow on question if that is fine. How do you then evaluate that spawning part of the business? How would you evaluate Google's extra bets, because I guess doing a discounted cash flow is pretty difficult on that.

Mohnish: I would say you still can't value it, but what you would be willing to do is, pay more for the rest of the business.

Student:	Okay
Mohnish:	Previously, I would have taken an approach saying other bets at zero, I want for free. I am not paying for it. Now that I understand that DNA is like that, I am willing to pay something for the DNA.
Student:	Okay, that makes sense. So you make a normal,
Mohnish:	So you can say that, okay, let us say the business has the value of, for example, pieces that you can value. These other bets would be zero. You might say, I will give them 5, 10 billion for that other piece.
Student:	Thank you
Mohnish:	Because zero might be too extreme.
Student:	Okay, That makes sense. Thanks a lot.
Student:	Hi Mr. Pabrai, thank you for sharing. I think the key is really knowing who is a spawner and who is a fake one. Early on in your research, what is the common like culture or management style that you found among the successful spawners? You listed a few companies, but can you give us a company that you thought was a spawner at the beginning, but over time you found that it was actually not?
Mohnish:	Well, I actually invested in a fake spawner in 1995 and the end result was, I made 140 times my money and now it was a hundred times my money. I put a

times my money and now it was a hundred times my money. I put a hundred thousand, I got 10 million out. God loves me because after I sold the stock, it crashed and burned, not before I sold it, which was great. But CMGI was a business that was an internet incubator. In 1999, in that timeframe, there were a number of businesses created, which were all internet incubators. Ideal Lab was one, Safeguard Scientific was another one, CMGI was another one, internet capital group with another one. There were a bunch of these, and a number of these were public companies. Because I was in the IT business, you can say I was like two steps ahead of the rest of the market, not very far ahead, just a little bit ahead. I could see that on the internet, I think it was in 93 or 94 that I saw whitehouse.gov. The first website I ever saw was in 93 whitehouse.gov. I was just looking at the world wide web and all that at that time, and I could see that this thing could be transformational. At that time, I was saying, "I know the internet will be big. I have no idea who the winners are going to be. What have I invested in a company that just keeps spawning these companies, and we don't need a high hit rate". If you are paying very little for the mothership, at the time I invested in CMGI, I was not paying much more than cash for the business. It was not really understood by the market. As they started creating these dotcom, which eventually didn't go anywhere, the market got very excited about these businesses. Just like they are excited now about these SPACs. Those SPACs may have legs, we don't know, we will see how it goes. Then, the valuations became so extreme that I just felt that this is in bubble territory. Now, I couldn't still tell in 2000 whether their businesses were making it or not. I just felt that the valuation was ridiculous. I got off the bus. I think if you are riding curves, and especially if you are riding flavor of the day curves, it may be hard to be able to tell which one is a fake and which one is not a fake. For example, the year 2020 is the year of the SPACs. Everyone has a SPAC, clearly, there is when you have that type of stuff happening, it is likely that there is a bubble there. It is likely that a lot of those will not go anywhere. But it also could be possible that, if you could find a way to invest in mothership, like I would like to invest in Chamath if I can find a way to do it cheaply, not the SPACs he is creating, but directly him without paying high premium, that would be interesting. I think what you can do if you want to make sure that you avoid the fake ones is, don't take flyers on these things where you can't tell. Set a high bar saying it has to be obvious it is not fake. For example, I have these four investments in these four spawners. I don't think any of them are fake because they have such a long history. We will see, but I don't know how many of them will actually go to 10x or 100x. We will have to see what happens there. I am pretty sure at least, one or two of them will get there.

- Student: Sorry. For these four companies that you own the spawners, what would you say is the common factor, a commonality among the management style, like philosophy or their management style that makes you believe that?
- Mohnish: Yeah, the common element across all of them is that there is a long history that I could study about management. I could look at their behaviour and what they have actually executed over a very long period of time. I think in the case of the Japanese company, I could see 30 years. Some of the other companies I am able to see, at least 10, 15 years of history, which is a lot to gives you a lot of data on that. It becomes obvious if the business doesn't have more than five or 10 years of history, then you have to be able to get that level of history on the CEO or leader, what they have done in the past. You have to have at least 10, 15 years of history on the leader.
- Student: I see. On just on a practical side, If we look at let's say Facebook, Google, Tencent or Alibaba, and if we want to pick them up before there were 5 billion US dollar in market cap or even 10 billion US dollar in market cap, I think at the time they were not spawners. They were very small, single business with very highly uncertain future. I am curious, the holdings that you hold, these are long history, but still with long history of spawning, but still like under 10 billion is that the case?
- Mohnish: Yeah. The thing is that, if I were to give you their names, it would be underwhelmed because they are not in the sexy businesses that Google and Tencent are in. Okay. I think Google, Tencent, Alibaba is flavor of the day. Everyone loves them. I would say that yes, I agree with you completely, well, I won't say agree completely. I would say a business like Google was not a spawner, but it was not a fly by night company when it came public. When it came public, they dominated search and they had disrupted the previous players completely on search. They were sitting at 90% market share. You could easily tell with AdWords that their revenue potential just on search was huge. Google would have been a bet that would have been based on search, right? It would

not have been a bet based on spawning. But then, what you could have done if you had this presentation at the time is that, as they started to spawn, then you would know that this is a keeper, don't ever sell this. Another way to use a framework is that, you may invest in a business that does not have any trade marks that it is a spawner and it turns into one. I mean, I would say that probably, when Li Lu made first investment in BYD very early, it was not a spawner, but then he suddenly enters the car business which is completely different than the business they were in, in the past and probably a lot of people are deeply sceptical of that move and he made that work, and then you can now see that he can do all of that. I think, yeah, sometimes you may stumble into a spawner in the sense that you invest in a company which is a one trick pony, but it turns into a multi, and when that happens, you have a way to kind of put a framework around that and say, Okay, I can keep this business because now it has spawning DNA.

Student: Got it. Thank you very much.

Mohnish: Sure.

- Student: Thank you Mr. Pabrai for such great inspirations. I am just wondering, when you try to identify new spawner, are you concerned if companies may get a little bit too excited in burning cash or get distracted along the way instead of really other things they are truly good at? For example, if McDonald's tried to be a spawner in the early days, is it possible that it may just not get to where this at today?
- Mohnish: Yeah, one of the core DNA traits of a great spawner is, they are not going to make large early bets. They will be unwilling to bet the farm. I mean, this is classically what entrepreneurs do. What they want is a free lunch. If we study BYD's entry into N95 masks, for example, it is a completely different business than where they were in the future or in the past, but I am almost certain if I study the numbers, I would find that if that completely failed, it would be around error for them. It would not affect maybe 90% of everything else that they have. The key trait a great spawner has to have is that, when they make a bet, (and Amazon has this in the DNA), the bets are not very large bets. They do know a lot of capital until they see traction. They will put some money at it, then if they see there is something happening, they will put some more money. If they see something's happening, they will put some more money and they will keep going from there. The moment they start seeing that this is not working, they will pull back. If I look at Amazon with their fire phone, for example, they were very excited about it, but when they saw there is no traction, they buried it and they moved on. The bet size relative to the mothership for a good spawner is, the bet is always going to be small. No good spawner is going to bet the mothership on an unproven flyer. That is one of the DNA things you can look for. When they start doing these things, are they doing them on a small scale or are they doing them on a large scale? I think that there is a lot to be said for companies that don't do spawning. Spawning is hard. Spawning requires you to have an approach where you can watch five or 10 things and be good at

watching five or 10 things. Most humans are not good at that. They need to be focused on one thing. Very few companies can actually be good spawner companies. If I look at a company like Costco, Costco is the classic unspawner, one format and they have just stuck to that format forever, and they will not change that format, and that works well. It is a great investment, it has worked out great for a long time. I think you have to make sure that the spawner that you are looking at is not one that is making erratic huge bets. I would say that I don't know whether Tesla is a good example, but if we look at Tesla, one of the things that are bothersome to me about Tesla is, Elon doesn't care about money. He cares about a lot of other things. He cares about dying on Mars, just not on impact. But he does not care about money. He just sold all his homes. He doesn't even care about home. The thing is that capital allocation by someone like that is kind of bothersome to me, right? Because he could make a really large bet on something unproven, that would be entirely within what Elon would do. It is not the way Jeff Bezos would operate. I think you have to understand that.

- Student: Mr. Pabrai thanks for sharing and its a quite unique hammer and perspective. I have two questions. First one is, I am very curious about the persistence of spawning because most of these founders of authentic spawners like Facebook or Alibaba are still starting but how about the company's controlled by professional executives? The second question is how to balance the whole investment structure and match to avoid the risk of with Hammer and the word looks like a nail proposed by Charlie Munger. Thank you.
- Mohnish: Yeah, I think that you are absolutely right that the spawning DNA is very critical. When I look at the Munger I have invested in or accidentally invested in, they are founder led. The founder has the DNA and the founder still is young or relatively young and still running with the same DNA and yes, you have to study that. You have to make sure that you have enough data that the next generation can run things. In some cases, the next generation can be better than the previous generation. For example, in India, one of the largest companies is Reliance Industries. The second generation is running it, and the second generation is better than the founder. The son is better than the father. It would have taken some time to understand that is the case and I did not. I think, if there is a transition that has taken place to professional management and the spawning took place while there was a founder, it is a red flag. You have to have enough data on the professional manager, whether they understand that. One of the things we don't know, we would have to see that when a business like Amazon transitions to the next leader, the next leader has the spawning DNA deeply entrenched into the business so much that the next leader has that hardwired and ready to go. We will have to see if that is actually the case. I did not get your second question. Can you repeat the second question?
- Student: Okay. The second question is how to balance the whole investment structure and to avoid the risk of Hammer, the world looks like a nail. It is proposed by Charlie Munger.

- Mohnish: Yeah, I think the thing is that you have to make sure you are not fooling yourself because you are the easiest person to fool. But yeah, take a step back. One of the things Charlie Munger had told me, he said, "it is always good to have somebody to bounce your investment ideas with, someone you can talk to about your investment ideas". I said, "you mean like you had Warren? He said, I did not always have Warren. He said, sometimes I would discuss my ideas with somebody else, not always Warren Buffett, but he said that it was in investing, it is very important and the person you should discuss your ideas with needs to be a peer. It cannot be like an employee-employer relationship because there, the hierarchy may make the candid sharing of perspectives harder, but if you can share your ideas with a peer who can be honest and candid with you, that is one way to avoid thinking everything looks like a nail. You have to avoid making sure you don't think everything looks like a nail.
- Student: I am really wondering if this whole spawning picture is like the hammer for right now because maybe not every company can be classified as spawners or non-spawner.
- Mohnish: I think that if you look at every business, let us say we look at hundred random businesses and we decide that we want to start separating them into spawner and non-spawner. I think what you are going to find is, it is not a binary 01, okay? You are going to find that, there are companies that are complete nonspawners, extreme non-spawner, and there are companies that are extreme spawner. Throughout the continuum, you will find companies across that continuum. There would be companies that would have what I would call strong spawning DNA and then with the others that would have weak spawning DNA. It would be a continuum. It wouldn't be a binary switch if you looked at different businesses. As long as you can identify where you want to be, you say that spawning has to be a strong part of the business, then of course, I think you will be able to separate them. The other thing is that, just like in baseball, there is no call like, it is okay to let a spawner go, which is, it is okay to miss a spawner. It is problematic to think something is a spawner, but it is not. If you miss an Alibaba, you miss a Google, that is okay, but don't bring in McDonald's thinking it is a spawner when it's not. That is more problematic. I think what I am saying is that it should be obvious that a company has strong spawning DNA. I think it is pretty obvious to tell that, in my opinion. The other thing about this is that I have a hypothesis, which is a hypothesis today because I don't have the data, but I would hypothesize that, if I had a portfolio of 10 spawners carefully selected, 10% bet in each spawner and I didn't touch it for a long time, I think the odds are good. If you have done your selections properly, three or four may not be really good and that is all you need. If you get two or three that are really good, it will make up for all the mistakes that you can come up with in all the other ones. If you just identify a few, that gives you very strong returns, as long as you don't lose much money on the others, you will be okay. I think it is an approach that can tolerate you being wrong. Business is difficult. Trying to forecast the future of a business is difficult no matter what. We may be wrong on some of these spawners and that is perfectly okay, we don't need to be right

on all of them. He really was absolutely right on one business and that is all. The first Amazon shares he bought were at \$30 a share in 2002, right? He never sold, and he bought at \$30, he bought a hundred dollars, he bought a \$200, he even bought a \$300, right? It didn't matter, there were about a dozen companies in his portfolio. This was the only consequence that mattered. It didn't matter what else was happening.

Student: Thank you for sharing everything so generously. I have two questions. My first question is, because the past 10 years were a bull market. Does same make you change into the framework of spawner? What if the past 10 year have been the bear market, would you have a different thinking or change your philosophy and a quick follow up on CMGI, because you somehow capture a whole hundred percent x. If the position was not 10% bet, if they were a hundred percent bet, would you be too worried about the position or you somehow not be able to capture the whole process? I know there was a mistake because you mentioned that you said you should have sold at 5x. My question is, does that position sizing make you become less worried about the position so you could catch the whole process?

Mohnish: Those are good questions. With CMGI, actually, what happened at that time was, in 1994, my net worth was \$1 million. It was a 10% bet. A hundred thousand dollars. I let that bet run for five years and it just kept going up. I saw they were spawning all these companies and I said, maybe some of these will hit, we will see. Eventually, what happened is, the entire portfolio was worth about 14 or 15 million. Close to about 15 million. CMGI was sitting at about two-thirds of the entire portfolio. But I was not a professional money manager then. It was my own money and I really didn't feel or care that there was this degree of concentration. I was paying more attention to it as it became a larger and larger portion of my net worth and that is why I eventually, when it got to about 10 million, I looked at the numbers, I said, this thing this thing could blow up with the... I am not sure. At that point, I felt like 10 million will change my life. Okay. Guaranteed to change my life, right? I said, let us ring the register and put the money in the drawer and we are set with that. That was part of the thinking, but I didn't really want to do anything with it earlier. I think your second point about the last 10 years and so on, in my opinion, I think spawning transcends markets just like great businesses transcend markets. I think that if we find a great entrepreneur who is executing well, those businesses can do well regardless of the markets we are in. As long as we are able to invest them at a reasonable valuation, the bear market might make it easier to find those kinds of businesses because no one is interested.

Student: One more question.

Mohnish: Go ahead.

Student: My question is about short-term suffering. Because in 1970, Charlie Munger has suffered, his investment portfolio was suffering a lot. Mohnish you also said before that every time you buy something, things go down by like 20%. My question is how do you feel about lost short-term suffering?

- Mohnish: There is a saying, if wealth is lost, nothing is lost. If health is lost, something is lost. If character is lost, everything is lost. We are just talking about wealth. If you buy a stock and it goes down 20%, which happens to every stock I buy, by the way, you are not buying a stock, you are buying a business, right? Before you buy the business, you have to understand what that business does and what that business is worth. Then you are not going to get distressed. In fact, you should get happy if it has gone down, you can maybe get some more than what you had before. It has never bothered me, stock prices move around and all that. I think it is in the nature of auction-driven markets, that is, we are going to see these swings. If you just look at the Shanghai stock market and you throw a Dart, if you have a page with all the stock names and just throw a dart at any name, just look at the 52-week range of prices on that stock. It will be 70 to 150. Or 30 to 70, right? I mean, every stock in one year has a range, which is so wide. If we look at home prices over one year, the change is 5% or 10% or 15%. It is not 50%. Auction driven markets are going to give you very wide swings both ways. We can take advantage of those swings. It is just in the nature of auction driven markets that you are going to have movement and volatility. There is just part of the game.
- Student: Hi Mohnish, how are you? Thank you very much again for sharing your very candid thoughts with us. My question is a little bit different from the previous ones. The first question is related to Berkshire Hathaway, you are quite close with Warren Buffett and Charlie Munger. Any thoughts about Berkshire's latest trade? For example, dumping Costco and selling many banks stock, etc., and the second question, I am not sure is proper not so feel free to share whatever you can. Your portfolio seems quite concentrated, IEMU and SRG from some public materials. You had SRG in 2017, and now you loaded quite heavily from the second quarter this year. Any reason inside that you could share with us? Thank you very much.
- Mohnish: All right. Any data I have about Costco or the banks is not coming from Warren or Charlie, it is just what I think, the Costco sale is a complete surprise to me. There is very few companies that Charlie loves more than Costco. Every time I meet him, in fact, the last time I had dinner with him, we spend so much time talking about Costco. Every time I meet him, we talk about Costco, like he was asking me if I visit Costco and I told him, now Costco delivers to my home. I don't have to go to Costco, they deliver to my home. He said, "Oh, then you have to pay too many fees. Please go to Costco to get cheaper price". Anyway, I have no idea why they sold Costco. The only thing I would say is, investors buy stocks for only one reason. They sell stocks for 100 reasons. Okay? We cannot tell anything about what someone is thinking when they sell a stock. We can tell something about what someone is thinking when they buy a stock. All right? Just keep that in mind because there are many different reasons people could be selling. The bank stocks well, they are really good at banks, so they would know better what is going on there. But I know that Warren, from the actions I have seen, deeply loves Bank of America and maybe not so much Wells Fargo anymore, just from the actions I am seeing regarding my own

portfolio what gets reported is the US positions. We have two holdings in the US, Micron and Seritage. Those show up in the quarterly filings. I don't really have a whole lot to say about either one. I mean, I would say that Seritage, Micron we have held for, I think about maybe more than a couple of years now, but, Seritage we bought a stake in the second quarter of this year. The stock price was down 70, 80% from where it was a few weeks before that. Maybe that would give you some clue as to why I might be interested, but I do want to clarify that Seritage is not a spawner. In fact, Seritage is what I would call as unspawned because they keep selling some assets to keep the ship going. It is the opposite of a spawner because it was bought in an era when I did not have the Spawner framework. But I am still very happy with that investment.

- Terence: Thank you Mohnish, I really appreciate your time. I have really two quick questions. The first one is, you mentioned you were starting your own business while working full time, after work, and then spending on weekends. Do you think you would become the investor you are today without that entrepreneurial and operating experience? My second quick question is that you emphasize on the circle of competence, right? Do you think physical location is a big part of that? Because for example, even though I am Chinese, but I live in the US, I feel like I understand the business dynamics much more about US than China. Do you think the physical location matter, obviously you and Warren and Charlie invested in companies without probably visiting those countries. What's your thoughts on that as well? Thank you.
- Mohnish: Yeah, those are good questions, Terence. Yes, I think it is a very big advantage if you do business before, in fact, specifically the spawner framework. I am not sure I could have come up with the framework if I had not run businesses before. Because when I was running my IT company, and I thought about it when I was doing the Spawner framework, I was doing spawning in that business and it was adjacent spawning, right and I saw how little capital, it took some brain power, but it took very little capital and some of these bets that I made where the amount invested was so small, but they grew quite significantly. I saw the power of spawning directly, and that is when I realized that I have to pay attention. When I transported my own personal experience into some of these public companies and started looking at them, I could look at them from the same lens as I had looked at. Definitely, I think it is a huge advantage if you have run businesses before and such. I think there is no substitute for that. The second is that I think in terms of the circle of competence and where to invest and so on, I think you have to have a very high conviction. Anytime you are making investments, you have to have a very high conviction. You cannot be concerned that you don't understand something or whatever. The thing about investing is that the size of the circle of competence that we have is irrelevant. What is more relevant is that we stay within the circle. I think I have talked even in this class about Charlie's friend John Arriaga, who only invests in real estate within two miles of the Stanford campus. He is a billionaire, he only understands not only real estate, but within real estate, he only understands real estate in a very small area. If someone told him to invest in real estate in Los Angeles or another state or

anywhere, he would just not be interested. It did not stop him from becoming very wealthy. If you look at all these entrepreneurs like Sam Walton or Ray Kroc or any of these companies, Jim Sinegal with Costco, their expertise is very narrow expertise, but they became very wealthy. It is the same in investing. The important thing in investing is to stick to things that you are really good at and things that you really understand well. That is where you will get the biggest edge, and that is how you should approach it.

Yi Lu: Mr. Pabrai, in your last experience, what is your biggest mistake in investing and what influences did it have on you?

- Mohnish: Well, I think the area of investing that gave me the most trouble was companies with leverage. I had many investments over the last 26 years that did not work well, and a good number of them are concentrated on companies that either had too much debt or they were financial services companies where leverage was inherent in their model. I have been trying to make sure that the companies and businesses I'm investing in, do not have a big dependency on debt and leverage. I still have businesses in the portfolio even today that have leverage. I think they are okay, but we will find out. Maybe I am like an alcoholic who has not given up alcohol yet, but I definitely want to minimize, a good business should not need debt to do well. Good businesses can do well without debt.
- Jiang: All right. Already two hours, it's about midnight in California. I think we have a very wonderful two hours listening to your talk and your question and answer, actually, your first talk to us is through online like in 2016. The second one is on site here at the campus in 2017. Now we are in 2020, the third time online. I hope next year you will come back to Peking University campus to speak to this class again.
- Mohnish: Yeah, well, that would be a pleasure and an honor, I haven't gotten on an airplane for about 10 months now, and it will be very good to be able to travel maybe, I think May or June of next year onwards. In fact, one of the first trips I will be making to China, so looking forward to that. Thank you.
- Jiang: Okay. I think when you visit China, someone from this class will accompany you like last time.
- Mohnish: Yeah that will be wonderful
- Jiang: This class took you to Moutai
- Mohnish: I am hoping some of your students will give me a Chinese spawner tour of everything below 500 million.

Jiang: All right. Okay.

Mohnish: That is the goal.

Jiang: Okay. It also amazed me that value investors as successful as you still like developing new ideas. Although the title of your talks this time is the same as last one, but the content is brand new. Is spawners, as this is a new source and

	new ideas, new framework. I think this can also tell our students that, as a value investor, never stop learning.
Mohnish:	Yeah. I was not sure whether I should give this talk because it will mean I will have more competition, but it is okay. No problem. The plus side is, I will get feedback, which will be helpful, so that is great.
Jiang:	Yeah. Okay.
Mohnish:	Thank you very much. Thank you, Professor. Wonderful.
Jiang:	Let us see, Chang would you say something?
Chang:	Yeah, it is very inspiring to listen to this. As value investors, we always have to think about, what kind of companies we are investing in and how they can generate terms for us. Right. When you mention about BYD, to us, it is more like a public venture company. They do have some very interesting managerial and company type of competitive advantages that they leverage on, their manufacturing power and research capability that they leverage on. They also made many bad investment decisions. Like Yeah.
Mohnish:	But I think one thing you probably have seen with BYD is, the individual bets cannot sync the company.
Chang:	Yeah, that is right
Mohnish:	The bets are sized so that you can have a high failure rate and it is okay, you don't need very many of them to work. If they work, then they can scale quite a bit.
Chang:	Yeah. That is very important. The insight I learned, the entrepreneurs, how they make investments, you are totally right. They may bet that they did not kill themselves, that is very important. Yeah.
Mohnish:	Because I think that they are making such early-stage bets that, by definition, there is going to be a high failure rate. There is no way to avoid the failure rate. It is going to be high. Yeah, but it also means that the ones that work have huge runways.
Chang:	That is right. But the problem is, a lot of time when we look at these types of companies, they are too expensive for us.
Mohnish:	You have to find the ones that the public doesn't understand
Chang:	Yeah. When they are too small, it is hard to prove that they are the kind of companies we are looking for. Great. Yeah. Thank you very much. It is really a lot of learning for me too. I am pretty sure students have learned greatly. Yeah. Thank you very much, Mohnish. It is always very inspiring.
Mohnish:	Well, I always find that your students' professor generally is the best. Of all the students I talk to, this is the best group.
Chang:	Yeah. They asked very good questions.

Mohnish:	Yes, really good.
Jiang:	All right.
Mohnish:	Thanks very much
Jiang:	I am waiting for you to be at our campus next year
Mohnish:	Absolutely.
Jiang:	All right. Good night to you. Bye
Chang:	Thank you Mohnish. Bye
Mohnish:	Bye.