Mohnish Pabrai's Q&A Session with Francis Chou at Harvard University on April 7, 2020

Andrew Sandoe: Welcome back everybody. Can you hear me?

Interviewee: Yes.

Andrew Sandoe: Wonderful. All right. We've got a real treat in store for you tonight, and I hope that as you made your way through reading both Dhandho Investor and the Stonetrust yellow books. You started to get a sense of how Mr. Mohnish Pabrai approaches capital allocation and approaches value investing, and you'll see common themes with what we've talked about so far this semester, and you may see how he approaches it in slightly different ways than we have up to this point. Tonight, he's going to join us, as is Mr. Francis Chou, who was part of this Stonetrust acquisition. We'll go through kind of an orientation for tonight in just a moment, but they'll walk us through from start to finish what they saw in Stonetrust, what they were looking at before the acquisition, how it took place, and then how it has been since then. With that, I'm going to give you brief introductions to Mr. Pabrai and Mr. Chou, both of them are proceeded by their reputations. Mr. Pabrai was born in India and came to the US in 1983. He worked at Tellabs from 1986 to 1991 in their high-speed data networking group, and then international marketing and sales. He started TransTech, an IT consulting and systems integration company with 30,000 from his retirement savings and 70,000 in credit card debt. He sold it in 2000 for 20 million. Then started Pabrai Investment Funds, which he continues to run till today. Mr. Chou was raised in India, began his career as a Bell Telephone technician. He started investing with six colleagues and has a CAGR across his career of over 13%. With a high school diploma, he took the CFA exams and passed in 1985, earning his CFA designation. Barrons has called him one of the world's best investors, and there's actually a wonderful collection of articles about him on his website. I've provided the link there because you'll have access to the slides after this class and it would be worthwhile for all of you if you haven't seen the articles yet to go and explore those. With that, I'm going to turn it over to Mr. Pabrai and Mr. Chou, let me stop sharing the screen. If you could take us through Stonetrust and what led you to it, why it was a meritorious idea at the time of acquisition, how the acquisition went and how it's done subsequently, and then we go from there into the Q and A. I'll turn it over to you.

Mohnish Pabrai: Sure. I'll get started first if that's okay Francis. Professor Sandoe, thank you very much for having Francis and me join your class. When we had set this up many moons ago, it wasn't set up to happen with such an interesting backdrop. We thought it'd be a more sedate environment, but here we are. I think it's kind of interesting and fun to do this with all the events and things taking place around us. We truly live in unprecedented times. I definitely hope I don't re-live these times ever before I leave planet earth and probably that's likely and probably likely for all of you as well. Anyway, it's great to be here. I accidentally heard about Warren Buffett reading a book by Peter Lynch, this was maybe 26 years ago. I'm an engineer by training and I was just very intrigued once I heard about Warren Buffett and his approach to investing. That eventually led me to abandon tech and engineering and move into investing and compounding and so on. It's been a really fun quarter century over trying to practice that. I cloned many aspects of what Buffett did. I like to say that I'm the shameless cloner and cloning is one of the best mental models you can adapt. It's very powerful. A lot of people have figured out a lot of smart stuff and you can just lift and take that you don't need to invent everything yourself. Cloning is definitely good for your financial health and probably for your wellbeing in many other ways. I had always been intrigued with the Berkshire Hathaway model and always been intrigued with Buffett's use of float and so on. In the 2014 timeframe, I got to know that there was privately held insurance company in Baton Rouge, Louisiana, which focused on worker's comp that possibly might be available for sale. I thought it would be interesting to actually have a vehicle, an insurance vehicle with float, et cetera, and to try to clone that aspect of what Warren Buffett did. I set up another entity called Dhandho Holdings, separate from Pabrai Investment Funds. I raised about 150 million from a number of investors, and the idea was to acquire Stonetrust and also to, maybe, possibly acquire other private businesses. The funds I run; Pabrai Investment Funds are focused on public equity markets. They're not set up to do these kinds of private acquisitions and so on. I was setting up a second vehicle, which basically would give me the wherewithal to, in effect, be able to invest in a broader range of assets. We raised the money and we bought Stonetrust for 65 million. I think before the ink was dry, I was beginning to understand that maybe I made a mistake. One of the things about investing is that you really understand a business only after you own it. If you run some paper portfolio and buy and sell stocks or spreadsheet without real money involved, the learning is not really going to sink in as well as when you make real investments with real money and you end up losing some of it. That's really when the learning kicks in. There's no way to avoid that tuition bill in terms of learning. Once I was realizing that maybe it wasn't the brightest idea I ever came up with to buy an insurance company, I was then confronted with either living with the decision or be honest with myself and be honest with my investors and try to reverse the decision. We will all make mistakes. Mistakes are par for the course, but we also need to consider what we do once we know those mistakes have been made. I realized that Stonetrust had many aspects to the business that were really good, but I also realized it had some aspects of the business that were not so good. I concluded that I did not want to own and run that insurance company from a board level because it would be an opportunity cost of what else I could do and what else my investors could do with those assets. I consider it pretty high. If you have studied John Shackleton, when he embarked on getting to the south pole, that was his primary objective for that mission, get to the south pole. But once his ship got trapped in ice and started breaking apart, he knew there was no way in hell he was going to get to the south pole. He changed his mission and his mission was now to get his men back to safety. I realized that Stonetrust was a mistake, not where I wanted to be. My primary objective was to get my investors' capital back to them and ideally get them back a hundred cents on the dollar, even if they didn't make a return. If you have a mistake in investing and you get back all your money, that's a pretty good place to be. The insurance business, and of course, Francis is, on the other side, an owner of the business. I know he loves Stonetrust and I know they're doing extremely well actually under his leadership, which is wonderful. The insurance business has a number of great attributes. One of the biggest attributes is that it is a business where your customers give you money today, and they may never ever come back to take that money from you. They may never have a claim and such as life to get the time value of that money over time. The second is that there is a recurrence to that revenue. If I'm into a business, if I'm running a barber shop, I need to have business insurance. I need to have workers' comp insurance. I need to have a variety of different insurance coverages required by law. Workers' comp for example, is required by law in all states. It's a mandatory requirement like auto insurance. Generally speaking, if you've written a policy for that barbershop, the odds are pretty high that when the time comes to renew, a good portion of the business will be sticky. It'll come back year after year. The recurring revenue is one of the most beautiful aspects of any business you can own. Getting into businesses where you don't have recurring revenue can be quite uphill. There are a variety of business models that work well, but in general, recurring revenue is really good. Insurance has some really good aspects. It has a recurrence to it. It has other people giving you money today. Now, if I just compare that to lending, in my opinion, lending is one of the worst businesses to be in because when you make a sale, the money leaves your kitty, and you hope and pray it comes back. In the time of Corona, who knows how much is coming back. I think lending is the opposite of insurance in the sense that when you make a sale, it's terrible that you make a sale and money leaves the door. At least in insurance, you make a sale and money comes in, but you have to make sure the policy and the price are correct many times. One of the things I learned after buying Stonetrust and one of the things I really did not like about the business was, you make a sale, but you don't know your cost of goods for that sale many times for several years in the future. I've sold an item where I don't know what my cost of goods really is. I may have models that will help me estimate it, but those models may or may not work. It just depends on the way things unfold and such. Francis can probably tell you about the nature of their claims that they're seeing today in the business, in the time of Corona versus what they were seeing maybe six months ago, it has changed quite a bit. Once I decided to sell the business, the Stonetrust was doing reasonably well. It was a business in pretty good shape, which I said, okay, maybe this is a good time to sell it. I decided let's try to unwind a transaction and if we can get around 65 million, which we paid for it, maybe even a little bit less or a little bit more, that's fine, we'll go ahead. We hired bankers and we started the sale process. I think maybe Francis can correct me if my recollection is wrong. But he called me after we had started the process and he was almost offended. He said, “Mohnish, I heard you're selling your insurance company, and you did not call me to offer it to me”, and I said, "I didn't call you to offer it to you because you are a friend of mine. I'm selling a business that I'm not very happy with”. I really like Francis a lot. I value our friendship a lot. I don't want to do a transaction where I'm trying to exit with someone like you, because you're too near and dear to me. He said, "no, I would love to buy the business". I tried really hard to convince Francis not to buy the business. I tried really hard, just like I'm telling you all the negatives of the business and it fell on deaf ears. I told Francis, "please, please, don't buy the business". Francis would say to me, "Mohnish, please, please only sell the business to me". Here we are, and now, I think it's been more than a couple of years since we closed the deal. It was very important to me, no matter who the buyer was, that anytime I'm doing any kind of transaction or deal with anyone, they should get a good result, not just I should get a good result. I always think that one has to think about the greater good and not just think about transaction. Hey, I did well and that sucker got left holding the bag, that's a very bad way to live your life. If you lived your life that way, life is not going to turn out so well for you. It's always been very important to me that whoever is the people in my orbit, my investors or my vendors, or when I'm a customer to somebody else, et cetera, all of those relationships, we win relationships as far as possible. Francis had been a very close friend. He's a very high-quality human being. I did not want our friendship or our relationship to be negatively affected, which is why I tried really hard not to sell the business to him, but he insisted, and here we are. With that, maybe Francis, I'll pass the floor to you and let's hear your perspective on this.

Francis Chou: Thank you, Pabrai. No, I heard about Mohnish selling the business on one of the chat boards. I phoned Mohnish and asked him whether it was for sale, I was surprised how quickly we came to the price. We had some, a bit of concern about reserves and so on and so forth, but Mohnish was really quick and proposed the term and I accepted it within 48 hours. It was really quick, and he was teaching me how to buy a business. Mohnish told me, "first thing you should really consider is the person selling the business to you". He said, "it's me selling to you; therefore, you should do no due diligence". You should trust the person. If you know the story, I hardly did any due diligence based on what Mohnish was telling me and that is how it happened. There were a few things that are important when you buy an insurance company.

Mohnish Pabrai: In fact, if I can just interrupt Francis for a second. It was four months after he bought the business that he showed up to see it for the first time. He said it was kind of nice to see that it actually existed.

Francis Chou: What Mohnish is saying is quite true, I did not even visit the office. I had a chance to meet the executives, not in Baton Rouge, where it was based, but in New York by accident. We had a nice dinner and I had a chance to talk to the executives like; the president and the CFO and the actuary. I kind of had a good understanding that a lot of things that Mohnish had done previously was something that I would've done, and therefore I don't have to do it. Let's look at a few things that Mohnish said. First, he moved to Nebraska, where we report to the Nebraska commissioner instead of Louisiana. Now, Nebraska is really important because of what we call it, the investment rules. It's much laxer. Some states have investment rules where you can only put 5% of your capital into equities. Whereas Nebraska had far more liberal rules. You can put almost close to one. That is important in an insurance company, because if you cannot invest in equities, insurance as a rule just lousy business and you don't make an adequate return. When I was looking at the business, so reserves come first thing in mind, you can really play reserves. How do you evaluate reserves? I was fortunate enough that I've been involved with Fairfax since 1995. I've been in the insurance atmosphere for a long time. The first thing I looked at was like, when you look at workers comp, one of the biggest danger in workers comp is how many claims you have. Now if more than 90% of the claims are not resolved within two years, it can really spiral. That is the biggest danger in workers comp. Like if you don't settle it in two years, what happens is that, two years can become 10 years. You're still paying the claims over 10 years. In Stonetrust case, 90% of their claims were resolved in two years. I think it was around 91%. But that gave me a great comfort factor. A second one was the number of claims count. It was less than 300. I thought if it goes over 500, they were not doing their job. 300 meant they were really doing a fabulous job and looking after claims. The second one claims are extremely dangerous, when you go into insurance, you don't know your costs as Mohnish had said it earlier. Sometimes your pricing is something that you don't know, like 20 years later, what the price should be, but in Stonetrust's case, the duration of an average reserve was only three years. If I am off, I mean by pricing, I'm only off by three years. These were factors that came into it in terms of understanding whether I should do a total due diligence. They all came in really like they were lined up and knowing Mohnish, I knew it was a well-run company. The next part that becomes really difficult is: how do you make a deal? As you know, when you make a deal, it can become really acrimonious. But in our case, Mohnish and I, we struck a deal in less than 48 hours after I saw the numbers. There were a few things I was a little bit concerned about and Mohnish said, "why don't we do it like this?" and I agreed right away. Over the six-month period before closing the deal, there were minor issues here and there. We hardly ever went to any type of long negotiation. We just picked up the phone and we just resolved it over the phone. We didn't have lawyers battling each other, his lawyers and my lawyers battling. We just talked on the phone and we just resolved it ourselves. That's how it went from my side. In the end, it turned out really well. I go into Stonetrust four months later, and I thought, I'll be seeing a lot of cockroaches, lot of stuff Mohnish did not tell me, nope, it could be hiding in one cupboard, maybe in several cupboards. But I went there, it was truly, really clean. Everything that Mohnish told me was true. You can see, like Mohnish said in businesses knowing the person is important, knowing that guy is honorable, is important. That saved us I think most likely in a small deal like Stonetrust about 70 million dollars. That must be 2 to 5 million in legal fees and professional fees.

Mohnish Pabrai: Yeah. One of the things that I've always felt, which is a very good saying to keep in mind is, you cannot write a good contract with a bad person. You can never expect a contract to protect you if the ethics of the person who's signing the contract, your counterparty is in question. The most important thing you've got to figure out and I think this is the most important thing in life in general is all the people in your orbit, all the people you do business with, the people you work with, they all need to be high quality individuals. It is not worth it to try to go through life without that basic edict. When we closed the Stonetrust transaction, on closing, Dhandho received 45 million, and we had notes receivable from Francis for 26 million. I would've been unwilling to have even a small fraction of that receivable with anyone if it wasn't Francis, because a lot of that receivable was subject to adjustment based on what happened with reserves. We gave Francis a warranty and I knew that. What we said is, okay, look if the reserves actually proved to be inadequate, then you can take some portion of all of 16 million out of the 26 million and adjust the purchase price in the future. If we offer that to any buyer in insurance, they can fudge the future reserve numbers and say, hey, we are 3 million short or we are 5 million short or whatever and then the mechanisms should I resolve that, aren't the easiest. Because I had complete trust in Francis, in fact, what happened is we were supposed to every year, each pay an actuary to do an analysis on the reserves and then take a middle of those two. My actuary was like his. Every year we have both waived the actuary coming in to do that. Which means we both save a hundred thousand or something in cost because we've, like he said, he found it's a clean company and there were no misrepresentations I made to him. On the flip side, Francis has been an extremely honorable buyer where we've gone, I think more than two years now, there have been no purchase price adjustments. The purchase price is where it's been because the reserves have proven to be accurate and such. I think these lessons are not really related to insurance. They're not even related to M and A transactions. I think the lessons relate to how you should live your life in terms of who you go to work for, who your business partners are, just every facet of your life, you want the highest quality human beings all around you. Once you have that, everything else goes really simply after that.

Francis Chou: With regard to the reserve adjustments, we had two years, one was last year, and then the other one was this year. I would phone Mohnish sometime in September and October and say, forget getting your actuary to do a reserve analysis. It's been two years now. There's two more years to go, but you can see companies clean and it doesn't make sense playing with numbers.

Mohnish Pabrai: Maybe what we'll do is we'll open up to questions. If you want to ask questions on Stonetrust, that's perfectly fine. If you want to ask on other subjects that's also fine. Anything other than what we are buying right now, I think is fair game, so, please feel free.

Andrew Sandoe: You had a question, didn't you?

Interviewer 1: Yes. Can you hear me?

Mohnish Pabrai: Yep, absolutely.

Interviewer 1: Awesome. Thank you, Mr Pabrai and Mr Chou for taking the time to come talk to us. I have a couple of questions. The first one would be about insurance and the second one would be about your foundation. I guess I'll start with the insurance one. How do you value an insurance company? Is it based on the amount of reserve they have or do you value it based on book value?

Francis Chou: Okay. I can go. You always start not with the book value, but the adequacy of the reserve. Once you establish that the adequacy of reserve is fine, then you go to book value. That's where you start. If they rated companies higher, then you pay a premium to book. But for most companies it's somewhere around book plus 20% or book plus 10%, and during good times, it can go to like book plus 30%. But that is where you are most of the time.

Interviewer 1: My second question is about Mr. Chou's fund. You've had a lot of good years and couple of down years, how do your clients take that? Do they stay with you to the good and the bad or?

Francis Chou: It depends on your investors. I have not marketed my funds and I just have one employee with me. Most of them have come in through word of mouth and by knowing about how I invest. What I don't have is something called “hot money”. We have not done well in the last four or five years, and some of them could be because value has not done well. The other side is also, some of the stocks we picked were not the greatest. We made a few mistakes, a few assumptions that were wrong. We did not properly estimate how low, let's say, the price of oil and gas would be and how long they'd be at such a low price. The same thing with commodity businesses. We also made a lot of mistakes on the other side, good companies that we thought were overvalued, but when you look back on it now, let's say after 10 years, most probably they were undervalued because we did not accurately calculate how fast they were growing. Part of the intrinsic value is the growth of the company. We all, as value investors, we tend to underestimate that. Value investing is, you make mistakes and best thing is face them up and acknowledge them because if you don't face them up and acknowledge them, you will keep repeating it.

Interviewer 2: I have a question regarding the trust, it's amazing how you were able to do big transactions with such good friendship and stuff. But what if it's not really available like for us or these days, it could be hard to trust another investor or another potential partner, again, how do you trust the employees as well? I would love to hear your feedback on that.

Mohnish Pabrai: Maybe I'll go first. Maybe Francis can join. I think that's a really, really good question. When I had lunch with Warren Buffett in 2008, it was a slightly expensive lunch, but now in hindsight it looks pretty cheap. But anyway, one of the questions, actually, I made a comment to him. I said, “Warren, how come you are such a good judge of human nature? How are you able to figure out people so well?” He said, “actually, Mohnish, I'm not good at judging people.” He said, “if you put me in a cocktail party, hundred people in a room, and I got a chance to spend a few minutes with each person I could probably tell you that, four people are exceptionally good and I could probably tell you that, four people are exceptionally bad and the other 92, I wouldn’t be able to make any judgment on”. He says that the way he lives his life is by being a harsh grader. He said “I only let in the four people into my life who are exceptionally good and I don't give benefit of doubt to the 92, who we don't know whether they're good or not”. We definitely have no interest in the ones who are the bottom 4% if you will. The thing is that as we go through life and as we encounter people, there will be data points that will make it clear relatively quickly, in some cases that some individuals are exceptional and there will also be some data points would tell us that some individuals are just not worth bothering with. It might be the way they treat server at a restaurant or their perspective on different things in life. There could be a subtle clue of that. The key which I've taken to heart from Buffett is; be a harsh grader. When you pick up some signals, even though they may be relatively weak about some people, Charlie Munger says there are enough nice people in this world that you don't really need to make exceptions or accommodation. It is not natural in human nature to be a harsh grader with various humans. That's a very, almost inhumane thing to say, but it is extremely good to have an exceptional life. Because one of the things about humans is that there's a gravitational effect. If we hang out with people who are better than us, we are going to get better and if we hang out with people who are worse than us, we're going to get worse. Our quest should always be to hang out with people that we like, admire, and trust and to minimize or get rid of the relationships where we have question marks. One of the things that Buffett says to students, he says, “let's say you are in a class with 40 other students, and you know these 40 people quite well”. He says, “let's say you could offer a deal to any student in the class where you would give that person half of your lifetime income and in return, you would get half of their lifetime income; a swap. The question he asks is who would you do that deal with? The answer that's going to come out usually is it's not going to be the brightest person. It may not even be the hardest working person, but it's going to be a combination of integrity, intelligence, and energy. Someone who's got very high ethics, someone who's pretty smart and works hard. That kind of combination. Generally speaking, when you strive to identify those types of traits, it's not that hard to be able to figure out the lazy ones and take them out. It's also not that hard to start figuring out people who are cutting corners in different ways to take them out. Just be a harsh grader, look at the way things are, and you can start getting better over time. The advantages I can just tell you that, when I look at the friends I have, I look at the people I spend time with. It's a very blessed life because I've deliberately been doing for decades, culling, it's harsh, but culling is very important so that you have the time for the highest quality humans in your life.

Francis Chou: Yeah. When I was really young, coming out of Bell Canada as a technician, and I was looking to get into the investment field, I was just looking for a person I could work with for a long time. I was fortunate enough that in 1984, 1985, I met Prem Watsa, as you know, Prem Watsa is famous for having guided Fairfax Financial to what it is today. It's important to go with good people, good integrity and long term, but it'll make a big difference.

Interviewer 3: If I could just thank you for having a momentary lapse and spending some time with the 92%, you're not sure about, we certainly appreciate it this evening. I wanted to ask how you go about defining your circle of competence. When we have these, this is such a unique environment for me as an investor where markets moved so quickly, that the speed of the reaction and the opportunity that presented itself was really on a scale I hadn't seen before. I think it's really important to have to understand what your circle of competence is, but also when these opportunities are presented in front of you, how you go about evaluating, well, maybe this is an opportunity, or it's close enough to this area that maybe it's an adjacency I could venture into. How do you deal with setting hard boundaries and then when do you relax them?

Mohnish Pabrai: Well, maybe Francis, I'll go first and then maybe you can share your thoughts after that. First of all, we don't have the 92%, we have the 100% in the class. There's always the quest for the 4%. It's not an entirely lost cause to hang out guys, there are a few diamonds in the mix. I hope we have the smarts to figure that out. I think circle of competence, Charlie Munger says to ask the question is to answer it. If you have to ask yourself, if a particular company is in your circle of competence, you have already answered it and the answer is it is not in your circle of competence. It's a pretty simple test. The second thing I think, which is useful in this environment just to keep in mind is, I think when Bill Gates and Warren Buffett were asked the single most important trait that has been most important to their success in life, they both say it's focus. The thing is that as I look at what's happening with us, we see the human tragedy is terrible, and of course we have all our lives disrupted. But when we look at the markets, quite frankly, we were at relatively elevated levels before all of this. I don't find that many things that are obviously cheap based on what's happened in the last few weeks. I have found one business so far that I am quite excited about, and I've been buying and there possibly, maybe another one. But when I look back at 2008 or 2009, I mean, at that point it was an avalanche of incredible deals. Literally, you could throw darts and it was so hard to keep up with the amount of stuff coming at me. I was doing basket bets because there were so many companies that look so good. I said, okay, ensure making a 10% bet, I'm going to make five, 2% bets on all of them because they all look so cheap, and I don't know which one does the best. All of them went up five, six times or 10 times, whatever. In fact, at that time in 2008 or 2009, I don't think there was any business I invested in, which was not a winner. We are nowhere near those levels today. I hope we don't get to those levels because that would mean that there's a lot of other things going on which are quite ugly. I think in this environment also, even though we were not medically ready for COVID, fiscal and monetary response, especially in the United States has been remarkably fast and remarkably furious. I think part of it is the lessons that these guys learned in the financial crisis. I think that end of it is actually working better. This is a much deeper dive than we went through. We already passed 10% unemployment. It took us 15 months to get to 10% unemployment in 2008 and 2009. Yeah, I think circle of competence is very fundamental. It should be obvious to you that you understand how the business works and many businesses are relatively straightforward to figure out. If you look at MasterCard, it's not that hard to figure out that business. American Express, not that hard to figure out. Carnival Cruise lines, not that hard to figure out. But there could be many businesses which are pretty hard to figure out. You have to take a pass very quickly on the ones where you're scratching your head and hone on the ones that you think you can get your arms around. Francis?

Francis Chou: When you're looking in the market, like there's 30,000 stocks or maybe more, and you only need like 10 or 15 of them. If you miss something, you can always go to the next one. If you look at my career going back, like almost 40 years ago, I was just coming from Bell Canada as a technician. I concentrated on something called financial bargain. I was much closer to what Benjamin Graham was doing at buying net-nets and so on. When you buy net-nets, they are really cheap on an asset side. But in 1981, 1982, you had another big benefit, not only these companies that were net-nets, but they were also good companies. You had the best of both worlds. That is what I was doing when I started my career. As my knowledge grew, I went into higher quality companies that was willing to pay up, but you can see even in Stonetrust, I did not wear off my line. I went into something that I was quite familiar with. I dealt with workers comp when I was at Fairfax in 2001 and 2002. I knew what I was getting into. The key thing is, 'know what you're getting into and into the fields that you're in'. Just don't go adjacent to it. Like, even if you play a racket sport and if you're really good in racket sport, and if you're really good at tennis, stick to tennis, but don't go to squash or badminton. That is what I mean, sticking to a circle of confidence. That is what I do. Let's say because of the COVID crisis, I don't have confidence in terms of understanding how the stock will work out, but a lot of the bonds have been beaten up like by 50%, like something, a bond that is worth a hundred cents on a dollar, lot of them, you can buy them at 50 cents on a dollar. That is way, way, cheaper and way safer than buying equities. You can see that you have options, and you can look at it. Another way is to buy fixed income install, which is an easier way to play and safer way to play and you're getting almost the same kind of returns at stocks.

Interviewer 4: Again, thank you guys for being here. Mr. Pabrai I know that you have the ability to have lunch with Warren Buffett, so any other key insights into that would be great, but I guess thinking to your acquisition of Stonetrust, is Warren Buffett's history in insurance, do you think that swayed you to think that would be a great route for you to do in your investments? And were you thinking about buying any furniture marts in Nebraska?

Mohnish Pabrai: Well, thank you for the question. I think on the insurance side, yeah, I was swayed by Buffett, but one of the things that I think most people don't understand about Berkshire Hathaway and even I didn't understand this until recently is, at the highest level when you look at a property casualty insurance company, what the regulators and rating agencies want you to do is they, generally speaking, want you to take the money that has been set aside to pay future claims, the reserves, and invest that in a very low risk manner. If you're going to do it in bonds, they ideally want those bonds maturities, which are matching your liabilities. Then your surplus or book value, generally speaking that with some restrictions, they allow you to go into equities. All the different states and countries have different regulations like Francis mentioned, Nebraska is more favorable, no surprise because Buffett is there and probably part of his influence, but the one advantage Berkshire Hathaway has, which almost no other insurance company has, is Berkshire has almost no restriction that their float needs to be in fixed income.

Because of their AAA rating and they're such heavily over capitalized insurance companies, they put a railroad inside the insurance company, and those regulators love that railroad being inside that insurance company. They treat that railroad like it's a bond instrument. Okay. Just to give you an example, Buffett spent 30 billion on that railroad. It's worth over a hundred billion now. The regulators are treating that like a bond. No bond has done that since he bought the railroad. In fact, with Corona, if you held bond, you would've actually had not such a great ride on many of them. But of course, I think from now on that ride is pretty good. I think that I came to a conclusion that insurance is a business that's good from far, but far from good. I think Francis and his team, I think at Stronetrust, they will do okay because it's an exceptional team. There's an exceptional investment manager on that team and there's an exceptional set of executives on the underwriting side. It does take some incredible powers to make their engine work. Whereas if you owned a Coke bottler, your idiot nephew could run it and it would make money. You cannot have your idiot nephew run Stonetrust. It would get in trouble in no time. When we had lunch with Warren Buffett, that lunch went for like more than three hours. In fact, I think one of the first thing Buffett said is that "I got nothing going on all afternoon, when you get sick and tired of me, you let me know and I'll leave. I'm here till you kick me out" and he actually stuck to that. He actually just was totally laid back. I think between us we probably had more than 50 questions for him and many of the questions by themselves were worth the price of the lunch and then some, but for example, I asked him a question about Rick Guerin, who was one of the three musketeers with Warren and Charlie in the sixties. I hadn't heard of Rick Guerin in a long time. I said, "are you in touch with Rick because he kind of fell off the face of the earth." Of course now, Rick is a good friend of mine. I've reconnected with him. But at the time of the lunch, which was about 11 to 12 years ago, I didn't know that, so Warren said, "Yeah, I'm very much in touch with him." In fact, he plays bridge with Rick regularly. When the 1973 and 1974 crisis hit, there was a very intense drop in stock prices. Rick was levered and he got margin calls and he ended up selling a large portion of his Berkshire Hathaway shares to Warren Buffett at 40 dollars a share, the things that were recently priced at 300,000, was sold at that time for 40. Of course, Rick has done very well since then. He's not suffering. But Warren said that if you are even a slightly above average investor, over a lifetime, if you spend less than you earn, you cannot get rich. All of you in professor Sandoe's class with your past education and the degree you're getting now, you are definitely significantly above average in annual income versus the rest of the population, if not now, definitely in the near future. You can just run the math yourself. If you're maxing your 401k, maxing your IRA, and spending less than you earn, even if you have a single-digit return on the money maybe 5% to 10%, over time that's going to build up, especially with employer matches and everything. Einstein used to say, compounding is the eighth wonder of the world. There are three variables. You need to get fluency in compounding. We are not going to go there too much in this class, but there are three variables that control compounding: your starting capital or the capital you're contributing every year; the length of the runway; and your average analyze rate of return. If you think of those three variables, I have some videos you can look at, I think I gave a talk one time at University of Puerto Rico, which goes into it. I recommend you maybe hear that talk, but basically the bottom line is that if the runway is really long, even with very small amounts of capital and even with not such a high rate of return, you will end up with spectacular sums or if your runway is short, you need a higher return to end up with the same results. They're interchangeable. If you look at someone like Warren Buffett, so far, his runway is 70 years old. He started at the age of 20 with 10,000 and now he's 90 and he's been compounding for 70 years, and he's continuing to go and look at the opportunity which the market has served up to him now. The most important thing for all of you is to start early. One of the problems is, I asked Professor Sandoe before we did this, "What's the average age of students?" I was so disappointed when he said, you guys are in your thirties because I wish I was talking to you when you were 17. Even 17 is a little late, because if you had part-time jobs when you were 14, the IRA laws allow you to open an IRA even when you're three years old. There's no minimum age to open an IRA. You can put hundred percent of your earnings in the IRA as long as less than 5000 or 6000. Those early starts are extremely important, but all is not lost. Even though you are in your thirties, all is not lost because you will live a lot longer than Francis and me. Your runway end date will be a lot further out than our runway end date. You still have probably, I would guess maybe six decades or something of compounding ahead of you, get on with the task.

Francis Chou: What Mohnish is saying about starting as early as possible, it's not just that runway, but as we all know, we are human beings and earlier you start, what you'll have is that you're going to make mistakes. When you make mistakes when you're young, it's much easier to bounce back and say, okay, what I'm thinking, I was thinking this way, and I thought I would make a lot of money, but it proved I was wrong. Therefore, you can start early. If you start at 25 versus 50, at 50 if you make that same mistake, you would consider yourself an idiot. But at 20 and 25, just start again. You have that benefit when you're younger. You can make mistakes and you can bounce back. I was fortunate I started investing at a really young age and I've made a lot of mistakes, and I was able to bounce back without not really hurting myself. You have to allow something for mistakes. Even we as portfolio managers, we are only right most probably only 60% of the time, 40% of the time we are just either making mistakes or they're not right decisions. Those are the bating ratio to give you a rough idea.

Andrew Sandoe: Do you want to go ahead and ask?

Interviewer 5: Yes, Mr Pabrai and Mr. Chou, thanks for joining us. I'm interested in hearing when you first started your career, both of you have pretty incredible stories and you took a different path than most people who were continuing to work from company. I'd like to hear what was it that gave you the initiative to do that or to say it another way, if you have a son or a daughter, what type of advice are you giving them?

Mohnish Pabrai: Maybe, I'll go first. I think one of the negatives you run into when you have these advanced degrees from elite institutions is that, the opportunity cost for you to do something else is really high. What I mean by that is that, if you are an MBA from Harvard, the market place recognizes that and is willing to pay good sum for that. If you were to say, okay, I'll ignore that and I'll go on my own. What you're giving up in terms of lost income for a flyer is quite high, right? Because the opportunity cost is so high. Generally speaking, we don't end up with a lot of Harvard MBAs doing non-venture back startups because it's the risk factors for them and the risk reward doesn't appear palatable. But there's a way around it and what I've always told young people and my kids is that, and it's the same with my experience is when I was leaving my first job to start my first business, what I did was I actually ran my business while working for nine months because let somebody else pay the rent, let somebody else pay for the groceries, don't start any burn because my employer needs 40 hours a week. I used to put in a lot more hours, but once I started my own business, I went down to exactly 40 hours. I was no longer concerned with great reviews. I was only concerned about slightly about firing level. Like the New York governor wants to keep the shutdown, slightly under the number of ventilators and ICU beds, he just doesn't want to blow past that number. Every day he gives us all the data on how he's just under that thing. My take was, just do enough so you don't get fired. Okay, focus all the energies on the business. I was trying to get my business part-time off the ground. I used to go to work and evenings, weekends, I would work on the business. After nine months of doing that, I had a few clients. I had revenue and cash flow. I was dying to go full time because I was putting in probably a hundred hours a week. I went in to resign to my boss and his boss. They both talked to me and now it all makes sense because I told them I had started this company which was not comparative with what they were doing. They were very supportive, but they said we had many discussions over the year that your performance had dropped off, but it hadn't dropped off so much that we wanted to fire you. But we were just concerned, it had dropped off. I said, exactly, that was my point is to make sure you never get to a point where you're terminating me, because then the plan doesn't work. When I was leaving, my employer told me, "You can come back anytime, you'll get a raise, you'll get a higher position". I thought, wow, there's no risk because one is I've got a business that's already got some revenue. It's got some traction. I was single at the time. I took 70,000 in credit cards and emptied my 401K. My perspective was at 25 I had a clean shot; I didn't have a wife and kids and if I failed, I could go back to work and I would've given it one solid shot. The opportunity cost was low and it worked. The earlier you do it, the easier it is. If in this environment, with the way technology is, a lot of ideas that you can come up with for businesses don't require capital. They require what's between your ears. There's a lot of intellectual capital required. There's not a lot of capital required which is great. What that means is, you don't need a lot of money to get these businesses off the ground. You can still have somebody paying your rent and everything else. Then when the business has some traction and you can actually see some runway, at that point, you can make the switch and the cost is pretty low. Francis?

Francis Chou: You have a really good question. I could let you know what I was thinking in 1976 when I first came to Canada. I was working for Bell Canada like a technician, like a repair man or an installer that you see. I was getting restless. I was wondering what I should do with my life. I said, okay, if I go into engineering, most likely, I would just be kind of maybe average or above average and if I go and become a doctor, most likely I'll be an average doctor, maybe above average. The reason for going into engineering, let's say being a doctor is because of peer pressure. Parents expect you to go into those lines, it has some prestige. For oriental that's a perfect job, but I was not comfortable with that. I was hunting around, looking around, what field should I go, what field that I have a competitive advantage just based on my lifestyle and my DNA. All my life, as and when you live in India, you're basically shopping, like you're going to a bazaar. It's not like you go to a Walmart where all the prices are marked. You go and you haggle, you have to check the prices of any goods you buy, any vegetable you buy, and then you haggle. Then I read about Benjamin Graham in 1979 and I figured out that what he was saying is that; if you can estimate, value a company, if it is hundred, if you can buy it for 60 or 70% of that hundred, then you got to bargain. Then I suddenly realized, this is my field, this is what I've been doing all my life. I'm a notorious cheapskate, born like that. That is the feel why I picked. When I go to the stock market, I'm just looking for something that's marked down and has worked for me for 40 years. The key thing is, realize just the way you are, your DNA, the way you are as a person, the way you train yourself, and figure out you have a competitive advantage and then go to that field. But the second question is that if you decide to go to a certain field, you should have conviction. A lot of people say you cannot do it, you don't have a degree, and so on. But that is big confidence in yourself. Confidence that if you work hard, you can break through. That was the second thing I did, which was really important at that time.

Mohnish Pabrai: In case you guys haven't picked it up, Francis is not really Chinese. He's like a fake Chinese. He grew up in India and actually when he talks to me in Hindi, there are more cuss words in a sentence than I can utter over here, not allowed to utter them, but I'm just saying that he's got an extensive vocabulary of salty Hindi. He's a fake Chinese grew up in Allahabad in India.

Francis Chou: That is quite correct. I can speak the Indian language, I can read and write once upon a time, maybe not now.

Mohnish Pabrai: Now he only remembers the bad words.

Francis Chou: I can tell you if you shop a lot in India, it's a perfect training ground for you to be a good value investor.

Andrew Sandoe: Team, go ahead.

Interviewer 6: Yeah. Thank you both for your time. I was wondering about your investment process when you are analyzing and making investment decisions. Do you rely on the opinion and the analysis of all the analysis, or do you only and solely rely on your own opinion to make your investment decisions?

Francis Chou: Well, okay, Mohnish, maybe I'll go first. Basically, you have to rely on yourself. Early on in my career, because I was working in Bell Canada, and I didn't have too much experience with companies, I kind of had the security blanket, kind of looking for financial bargains, things are really, really cheap. But as you know, once you get into business, you understand the quality of business really matters. Now there's more emphasis on what the company could be worth 5 years down the road, what the company could be worth 10 years down the road. The analysis that you see on Wall Street is basically like short term, the earnings next quarter, earnings six months down the road, and those are kind of meaningless. In our cases, more valuation of company, what they're worth based on your valuation, and you go with that.

Mohnish Pabrai: I have nothing to add.

Francis Chou: Sounds like your buddy Munger.

Interviewer 6: Thank you.

Interviewer 7: Hi, this is Deblina, thanks sir. Thank you again, both of you, for coming and addressing us today. I've been following your website, chaiwithpabrai.com and the free lunch portfolio that you have very carefully put together there. You also show us the Uber Cannibals and the Shameless Cloning companies, and I know you have been speaking about cloning these well-known portfolios like yours. Now for us amateur investors to even think about cloning, such high-profile portfolios, what key factors do you think we should keep in mind?

Mohnish Pabrai: Well, I think the chaiwithpabrai free lunch portfolios, those are designed to be kind of like index investing. I think that stock picking with all the discount brokers and now, zero commissions and all of that appears to be very easy and very simple, but in reality, figuring out what a business is worth and what its value is a few years into the future is extremely complicated. For most humans, they are not going to have the time or the inclinations to be able to figure that out. I think the best thing for most investors to do is to index. You can index with the S and P 500, that's a perfectly good way to go. You can also index with the free lunch portfolio, which is a mix of Cannibals, Spinoffs and Cloned ideas. We run our back tests and we update that portfolio annually. Yeah, that's a good way to go, but it's kind of like watching paint dry. If you are the kind of person who gets entertained watching paint dry, then the freelance portfolio or indexing will work well for you. If you need more action, then it's not going to work well for you.

Interviewer 8: Well, first I wanted to thank Mr. Pabrai and Mr. Chou for the presentation tonight. It's very enlightening to me because my background is in engineering too and halfway through my career, I decided to move to the finance sector. That's part of the reason why I'm pursuing this graduate degree, so I can start investing on my own. I guess my question is when you're starting off, how did you increase your circle of competence in investing in financial instruments?

Francis Chou: I was kind of fortunate to start my investing career in that period of 1978 to 1981. The Dow had not gone anywhere from 1960 to 1981. It was 1000 in 1962. In 1981 it was at 1000, but during the recession of 1981 and 1982 went down to 600. The Dow was selling below book value, it was at six times earnings on average and a lot of them were at 6% dividend yield. I came in at a really good time. I started with financial bargain. But slowly, you cannot do it within six months or a year or two years. You started something really comfortable like financial bargains, and then you go into specializing into certain industries. But you have to give yourself time, you cannot rush. You're going to make some mistakes. You're going to go to some kind of a dead-end decision. Then, it's a mistake and you start again. Go initially with something you're really secure with, and then increase your circle of competence. But you have to test yourself where you're most comfortable with, like what is your engineering line. If it is in let's say airlines or engines, then you can start from there because you already have a background in what you're studying.

Mohnish Pabrai: Yeah. I think what I would add is that it should not be an objective to broaden your circle of competence. I think what should be your objective is to make sure that, so I always give the example of one of Charlie Munger's friends John Arriaga. John Arriaga is a billionaire. He lives in Palo Alto and throughout his life, he's only invested in real estate within one mile of the Stanford campus. His circle of competence is not real estate, It's not California real estate, it's not even Northern California real estate. It's a very, very small geography. But in that geography, I'm sure if I'm just walking with him on Palo Alto and I look at a random building, he could probably tell me everything about that building. He could probably tell me what the rents are, what it would sell for everything about it. He is operating in the epicenter of his circle of competence and with him having such a narrow circle of competence, it did not prohibit him from becoming extremely wealthy. One does not need to know everything about everything to do well. In this business, being an inch wide and a mile deep is much better than being a mile wide and an inch deep. The key is, first of all, there are areas and businesses today that you understand well, focus on those and the second is to have a curious mind and to read a lot. Buffett reads a lot of business biographies and business biographies are just a really good way to learn about different businesses and just how those founders or owners or managers thought about their business. Like recently a few months ago, I read a book called Plain Talk, and Plain Talk is written by Kenneth Iverson who was the CEO of Nucor. Nucor did really well in many mills and circles around all the integrated steel companies and all of that in a tough business. That book is an easy read and teaches you a lot about the minimal business. It also teaches you a lot about great management and business principles. I think that being curious about businesses and just being wanting to understand why things work a certain way. Like for example, I think Professor Sandoe brought up Carnival Cruise Lines, and I have never looked at Carnival Cruise Lines. But there are a few things that bother me about the business. One of the things that bothers me about the business is that probably not an insignificant portion of the revenue come from gambling. They've got captive casinos in all their boats, and once you get past 12 miles, the table's open. The second is that all the cruise ship companies from my vantage points, skirt the labor laws. Because they are not subject to the labor laws of any country, when you look at the cruise on the cruise ships and what they are paid on a monthly basis and the hours they have to work, that would not pass muster with the US Department of Labor. It would not pass muster with most countries. Those individuals have to provide that service because if they went back to their home countries, they wouldn't have even those opportunities. The thing is that, to me, some of these aspects of this business bother me. Now it may be rational or irrational to be bothered by these factors, but the way I look at it is that I don't need to spend any more time on the cruise ship business, because I see a couple of things that bother me. I could be completely off; it could be a straight 10 bagger very easily. My reservations may have no strong basis for. But the thing is that this is a business, so there's no call strikes. If Carnival ends up being a great investment and I don't make that investment; I have no tears I'm ever going to shed in the future about it because I'm not interested in going there. But if a business is well understood by me, I look at it and I study it and I see they can do well. Then, I just graze in my naval and never pull the trigger on a trade. I absolutely would regret that later because I should have pulled the trigger and I didn't. I think that being a student of business over time the circle will expand, but one doesn't need a large circle to do well.

Francis Chou: There's a lot of truth to what Mohnish is saying. I know that Davis family, they're worth a billion dollars and they just made it in insurance. There was another person I was talking to that only invest in small banks and he made a fortune out of it. You don't need to go into many different fields. You can see it also in sports. If you're outstanding, let's say in baseball, you don't need to be outstanding in tennis or volleyball or basketball, and that's where you can make your fortune.

Mohnish Pabrai: It's the same with entrepreneurs, the entrepreneurs we like admire and respect so much. They have such narrow circle of competence, right? I mean, they just know everything about this much and it's the only way they can succeed. They cannot succeed by being a jack of all trades. The keys to success like Buffett and Gates, they're focus is narrow your scope, not broaden your scope, just hone in very narrowly on a few things that you understand well, and that's more than enough.

Robert: I've been writing a list. I won't give you guys the full list, but I'll start with this one. Of the mistakes that you've made in investing, which one have you learned the most from over your careers?

Mohnish Pabrai: Well, Robert, I liked my library until I saw your library. Thank you for making me feel great. Well, I'll go first I think I had a couple of companies, well, one went to zero during the financial crisis, Delta Financial, and another one was almost a zero. Because I run a concentrated portfolio, zeros hit you and they're not that easy to recover from, but the thing is that those mistakes get seared in. After that, I developed the checklist and I studied why and what were the kinds of mistakes that most investors made. The number one reason why many investments don't work out is leverage, it's number one reason why businesses fail. It became obvious when I looked at the failures of other investors and my own. It gave me a lot of pause on making investment in leveraged institutions. I seriously cut back my interest in going into leveraged institutions because I came to the conclusion that if you're a really good business, Google or Amazon or Microsoft, you don't need leverage to make money. You would have very high returns on capital and you don't need to increase. We didn't even get a good look at him, man.

Robert: It's bedtime here.

Mohnish Pabrai: But the joys of COVID 19 anyway, so I think that for me the number one thing that I learned was leverage and to avoid it and to minimize it and to look at businesses which have the ability to make great returns without the use of leverage. Francis?

Francis Chou: Yeah. But Mohnish, you made a really good point, leverage is something that will really hurt you, especially, you can see just as a prime example, like last one month how the market has gone. But the second thing that I think can cause investors and definitely me a lot of grief is, let's say I go into a stock and I think it's worth hundred, but it was a mistake in my valuation. The stock goes down to 50, but instead of just admitting that I made a mistake in my valuation, I double up, it's just your emotions get in the way, your pride gets in the way. The proper thing to do is to just admit it and either sell it or just stay put or try to get out as soon as possible. But the worst thing to do is just to go and double your bet hoping to make back the money on that particular stock. You can always make back your money on something else, but does not have to be on that particular stock.

Robert: If I can ask a follow up because, so you have a checklist Mohnish, can you share substantially what it is like roughly?

Mohnish Pabrai: Yeah, the checklist is proprietary. I haven't shared it, but I'll just tell you kind of how I went about building it. It isn't rocket science. The premise was that, if some great investor had an investment that ended up with a negative return, which is relatively easy to figure out from 13F filings. I could, for example, take someone like Bill Ackman or David Einhorn or Warren Buffett, Charlie Munger. I can go back and look at all the investments they made. Then I can also look at which ones made money and which one didn't. I look at the ones where they lost money and I ask myself the question that, “would it have been obvious before the investment was made by these extremely good investors, not to make the investment? Was there some data point available that would've told you that this is probably not going to work out? Like, for example, Buffett investing in US Airways. They were not the low-cost providers, Southwest Airlines came in, clobbered them, etc. and then it went south. Then you can say, okay, are you the low-cost provider, like that becomes a checklist item, right? Because it was the lack of them being a low-cost operator. I went through probably, and I had a couple of really good interns helping me when I was doing this. I went through, probably, hundreds of businesses, maybe a dozen or 15 to 20 investors and all the failures. The surprising thing was in most cases it was obvious before the investment was made, that, there was a relatively easy week link to figure out. In my case, I used to look at these leveraged institutions and yeah, it looks great on the upside, but then on the downside, your equity leveraged 221 and you're just gone. You can't even take a gentle breeze, forget a storm. The thing is that, the checklist basically got built from post mortems on a number of good investors. Then what I did is I sorted the checklist by category. The biggest area of leverage was the one that caused the most issue, most hard ones. The number two area was related to moats, either misunderstanding or not figuring out the nuances of the moat. There were other things too like, let's say some company failed because of labor relation, that was pretty small or environmental factors, pretty small, but there were the big ones, the leverage, quality of management and moat, probably the three biggest one. Why do you need a checklist to tell you that, it should be obvious to us before we even run into look at a checklist, I mean, yeah. And so, one of the things that we, it's never too late to grow up when the financial prices was going on in 2008 and 2009, I was finding all these bargains and I was just interested. I set a threshold that I want at least a 5X, if I'm going to make an investment, it has to be a 5X. I wasn't concerned whether they were great businesses or not. All I wanted was the pie is discounted enough that I can get a 5 bagger, that did happen in the sense that the investments I made eventually most of them became 5X or more. This time around I said, I'm not interested in discounted pies. I'm interested in growing pies. Okay. Mohnish has grown up a little bit 11 years. Okay. I said, number one, I want growing pies. I don't want cheap discounted pies that are not going to grow. Number two, 5X is for losers. Okay. I'm going for 10X. I said, I want growing pies and I want that pie to be a 10X in five years. Once you set that benchmark; life becomes really simple because most things don't make that cut. Then you can plan accordingly. In 2019, I made three investments, even in the age of Corona, I'm really happy with two of them. The third one, I think we'll still do okay on, even with Corona and all that. In 2020, I made one investment, I'm really happy with, nice straight 10X in five years, nice moat. The thing is, investments fall to me and this is my learning in 11 years, Mohnish has finally figured out that investments fall into three categories. One discounted pies. I'm talking about value investments, right? We're not talking about, these moon-shot things trading at a hundred times earnings. But one thing is, the pie is heavily discounted. It's not going to grow much or may not grow at all, but you're getting a discounted pie. The second is obviously great businesses growing pies, but the whole planet knows they're glowing. Google, Amazon, Microsoft, Salesforce, et cetera. The problem with the growing pies, which Francis and I, I'm Mohnish Pabrai and I'm an alcoholic. I'll say for Francis, I'm Francis Chou and I'm an alcoholic. The problem Francis and I have is we are so cheap that we can never invest in those businesses. We know that those businesses are really good and we know 10 years from now, we look at them, we'll say you dummy, of course it was a great business. Why didn't you buy it? Well, we cannot buy those. We cannot buy. I mean, the day I see Microsoft in Francis' portfolio, I'll jump out of my chair. I'm not going to see Salesforce in his portfolio. I'm not going to see Microsoft in his portfolio and I'm definitely not going to see Amazon in his portfolio. You can just take that to the bank in happening even though they're phenomenal businesses. There's a third category. The third category is where we can actually make some A and those are the hidden moats. We cannot go after the obvious moats because the whole planet knows about them. The cats out of the bag, we're host. It's the hidden moats where the action is and 11 years ago, I didn't understand this. I just focused on discounted pies. Now I said, I don't want any discounted pies. I've had enough pie to last me a lifetime, which is discounted pies. I want growing pies and I want deep moats, but I want those moats where no human can understand that there's a moat or very few humans can understand it, and so we can go play there. Maybe sometime if we do another session, if professor Sandoe has us back, we'll go deep into the hidden moats. Francis?

Francis Chou: Let me, if I put into numbers, what Mohnish is saying between we investing in companies that have no growth versus the company that have growth. You can just take a simple number, a company growing at, let's say 15% a year, that 15% a year, that company is doubling every five years, so in 10 years, it has gone up four times. Think about it like this. You buy a company, let's say worth hundred in your estimation, you pay 50% of that. You're buying it at 50 cents on a dollar and you buy another company that is growing at 15% a year. Even if you pay let's say hundred cents on a dollar, let's say you pay a hundred, but in 10 years, that is worth 400. But if you go into a company that is not growing in 10 years, it is still stuck at 100 dollars. Which is a better buy? 100 cents on a dollar? or 50 cents on a dollar that has no growth? This is kind of a thing that we as value investors will always face. We always want something cheap today, but we don't put enough emphasis on what it'll be worth let's say 10 years down the road. We learned from experience just like Buffett had learned from experience that it makes more sense to go with companies that are growing rather than with companies that are not growing even if you get a big bargain.

Mohnish Pabrai: Francis, have you bought Salesforce yet?

Francis Chou: No, I bought Apple.

Mohnish Pabrai: You bought Apple? Oh, my God, he paid a double-digit PE.

Francis Chou: Yeah, no, I bought it at 160 bucks.

Mohnish Pabrai: Oh, that's great Francis. Why didn't you call me?

Francis Chou: Last year when it went down.

Mohnish Pabrai: Next time, Francis, call me collect. Okay.

Francis Chou: Okay.

Mohnish Pabrai: Yeah, call me collect. I know that from Toronto, it's an expensive call, so call collect.

Francis Chou: Okay. We do have that in the portfolio and the stuff you bought for Stonetrust, you bought Google at 500, I still kept it and went with it.

Mohnish Pabrai: That's right. I left him Google. It's good that he kept it.

Francis Chou: It was growing rapidly, so, it made sense to do it. Most probably I would've sold it 20 years ago, but as you know, with the experience you learn a little bit.

Mohnish Pabrai: See there's even some hope for Francis and me. We are still learning.

Francis Chou: The key part is, you have to reassess how you have done and where you have been successful. A lot of times, your failures are not the mistakes you made by buying the wrong stock, a lot of mistakes are made by not buying the stock that you should have bought, which is much harder to analyze. Second area that I would want students to be careful of is, sometimes, you're going to crappy companies where you can get seduced by financial bargain, let's say a financial deal. For example, Buffett knew airlines were really bad when he bought US air, but he got seduced by a big fat dividend that he got. He knew based on his experience that it's a lousy industry, I shouldn't be in it. He just got a little bit two to three points more in dividend and he got seduced by it. In a sense, what I'm trying to say is that look at the company itself, not at the deal that gets you into it. I had my fair share of that by the way.

Robert: Thank you so much.

Andrew Sandoe: Okay. Alex, why don't you go ahead.

Alex: Hey, thank you guys for being here, Mr. Chou and Mr. Pabrai. Mr. Pabrai, I have my whole afternoon out so nothing to do. If you want to go into those hidden notes I'll be here as long as you need me to be. I was going to ask you though and I'll ask you about the Kelly formula in terms of how much to allocate your portfolio. I mean, it's tough to like, even if you're a hundred percent sure to bet that much, like how much do you take the Kelly formula into your real-life experience. Do you at all? or is it just kinda an interesting thing to think about, or for both of you guys, and is that something, how do you take that and then practically use it?

Mohnish Pabrai: The Kelly formula is actually the mistake in my book, and if I were to do a second edition, I would basically say that I would take it out completely. The Kelly formula really does not apply to investing as we do it and the reason is that it works well if you get to place a zillion sequential bet. For example, if the odds of heads was 51% and the odds of tails was 49%, and you got to do this 2000 times, then you can come up with a formula for what is the optimal bet sizing based on your bank roll and those odds. But in investing, what happens is we get a one-off opportunity. We'll get one bet where heads is 70%, tails is 30% or heads is 90%, tails is 10%, but we don't get to do that repeatedly. The formula actually doesn't apply to the format that we find ourselves in. I would just ignore Kelly completely.

Alex: Thank you. How would you go about allocating, I mean, if you have a bet that you think is a 100%, you're like, oh, I can't wait to invest in this and you have 10,000 or 100,000 thousand million.

Mohnish Pabrai: Well, I think an error rate is guaranteed for every one of us. Anything you buy can go to zero. It’s probably not a good idea to be single stock, no matter what your conviction levels are. But I also feel that having 20 stocks is also not bright. It's very hard to really understand 20 businesses and 20 different industries really well. Very few of us can do that and to find all of them being heavily mispriced. In my portfolio, I've always targeted kind of a 10% upper limit, that's in the funds I manage. Personally, I've been willing, like, I had set up UGMA accounts for my daughters when they were very young, we'd put in 15,000 a year, my wife and I into those accounts. There was such a long runway on those, some three-year-old, I'm putting 30,000 in, it's a very long runway. Those counts, I was willing to go down to two or three investments, the highest conviction ideas, because even if it didn't work, I mean, there was a lot of leeway to come back and do things, but I wanted to make sure that, and actually it's ended up being significant sum of money for them at this point. It's worked out very well. I'd say that's probably not worth looking at more than one 10th allocation, unless you just bouncing off the walls of conviction, can't see a downside, et cetera. Francis?

Francis Chou: Known from my experience, the Kelly formula is extremely dangerous and part of it is something; called self-assessment. You may go into a situation and say, on this particular stock I had, that's a 90% confident it'll do well, but that is your assessment. But think about it like this, if that same stock, the same company that you have 90% confident, and I gave it to someone who's also equally confident, let's say someone who knows that equally well, let's say Buffett. He may say on that stock, I only have about 10% confident. There's a reality check between someone who has been in the field for a long time and knows the company, and based on this analysis, the success maybe just 10 or 20%, but based on your analysis could be 100% or 90%. You just have to be careful with that, where your level of confidence. When I was younger sometimes, I would go into certain situations and I think I would, 90% confident, I'm so confident I would put so much money into it. But when I look back on it now, that 90% confidence was not justified by my experience and the knowledge of that company and that industry, but at the moment of making it where you feel like so super confident. You have to sometimes be aware of that human element there. Now Munger can say it, Buffett can say it, but they're saying with so much more experience and knowledge in that given field, and therefore they can go into three or four stocks, that may not make sense for a lot of us. Your confidence should be equal to how knowledgeable, how solid, and how good you are in that given field.

Alex: Thank you very much

Andrew Sandoe: Moe, why don't you go ahead.

Moe: Thank you, gentlemen, Mr. Pabrai and Mr. Chou, thank you so much for coming. Great presentation. I have a two-part question. Once upon a time, there existed a company called Enron, that great organization, by all accounts, looking at the financial statements, the company looked great investment community, everybody was saying it was a great company, one of the seven greatest companies in America, and we all know what happened. Would you have invested in the company first of all, and if not, why? Before they went down- before everybody knew what really transpired. The second part of my question was, how long did it take for your portfolios to bounce back after the 2007, 2008 financial debacle?

Mohnish Pabrai: Yeah, regarding Enron, I never invested in the business and I never even seriously looked at it. I think a lot of stuff in energy is outside my circle of competence. I like to understand how a business makes money, and I think that's what, so I'll give you an example of Amazon. One of the things that I've never understood about Amazon, I mean, I think it's a phenomenal business to understand so well is they've got Amazon prime and we all are Amazon prime members. I know for a fact, with all the gazillion things I order from Amazon, that they lose money on shipping. There's no way they can ship me all the stuff I'm buying for a hundred bucks a year or whatever they're charging right now. When I look at Amazon's retail operations, in my head I cannot figure out how it makes money, right? I can understand that when they have the marketplace, third-party sellers and they provide all the services or whatever the charging fees, I can understand that part. But when Amazon is selling stuff themselves, they have warehouses. They're bringing stuff to the warehouses. They're shipping it to me in two days. All this stuff, I mean, I send a FedEx package from, a FedEx letter from Irvine to San Francisco, it's 25 to 30 bucks, this is a little letter that I sent. The way I look at it is that it somehow works for them. It must work for them because clearly, now Amazon web services, I understand it clearly, right? Google is a different business, so, I can understand those. Apple, I can understand. It doesn't, I'm not in any way implying there's any issues with Amazon's financials or anything like that. But what I am saying is I don't understand it. I don't need to go there. I don't need to understand. There are 30,000 other stocks to look at.

Francis Chou: Well, you have a good answer there that you don't need to go into Enron. But one of the big problems with Enron was a lot of their revenues were derivative accounting which is extremely dangerous. You come to a point where revenues were not real, but they were kind of derived, estimated. When you have something that is estimated or derived out to derivatives, you just have to be extremely careful. They were not like real revenues, nor real earnings. You can always play with numbers. GE got into some kind of trouble too, like the last two or three years, they were making deals going into 60 years and then trying to get revenues into it because they wanted to show some growth. Be very careful with accounting when you're looking at companies. What was your second question? I missed it.

Moe: The second part of the question was how long did it take your portfolio to bounce back after the 2007, 2008 financial tobacco?

Francis Chou: Normally you should bounce back within two years, roughly. There's a big bounce in 2009, 2010, and it comes back super-fast. In almost every downturn, like I said 1973, 1974, 1981, or 1982, the bounce back is fairly quick.

Mohnish Pabrai: Yeah. I think Moe, in my case, I have a deal by investors where I don't charge management fees, I just get paid one-fourth above 6%, but I have to hit high water marks. We were down 65 to 70% in the financial crisis, a lot more than the indices. For me to earn a fee, first I had to get back to a hundred cents and like say from 35 cents to 100 cents. Then I had to make up the 6% a year from the middle of 2007 when the previous high-water mark was. I came back to the 100 cents relatively quickly because I think in the first year, in 2009, we were up like 110%, for example, in 2010 also we were up a lot. To Francis' point, yeah, in two or three years, we are back, but it took me from 2007 to 2017, before I earned a fee on one of my funds, it took 10 years, but I was able to live very comfortably on fresh air and water for 10 years, as you can see it had no impact on my health.

The thing is that the fees are in this business, the leverage is so extreme. I mean, I think in 2007, my fees were like 30 million or something and in 2017, they were like more than 50 or 60 million. Life is great. If every 10 years I get 50 million, I can manage, I can make it work.

Moah: Thank you very much.

Andrew Sandoe: All right. I want to be respectful of your time gentlemen. We have three questions that remain, but I want to be respectful. If either of you have to drop off or want to drop off.

Mohnish Pabrai: Actually, Francis and I have no issues, Francis is here till midnight. No problem.

Francis Chou: Yeah, I'm fine with that.

Mohnish Pabrai: Yeah. He doesn't go to bed. He's bored. He's happy to be here. Whenever you get bored of us, we'll leave.

Andrew Sandoe: I take it away. Any of the three of you can?

Interviewer 9: Can I jump in? Can you hear me?

Andrew Sandoe: Yes. Go ahead.

Francis Chou: I can hear you.

Interviewer 9: Thank you. Yeah, first I'd like to thank both Francis and Mohnish for sharing your knowledge and experience. It's really an inspiration to me because both of you were like immigrant, but ended up with a very successful investment career. I also particularly like to thank Mohnish for your book, the Dhandho Investor. I read it completely. I think it's a book that's worth repeating. Also it resonates with me that book, because you have some experience that really kind of match my experience. You mentioned that you work for Tellabs. I also work for Tellabs and I wish I had met you there, as you said, you better start early. If I started earlier there with you, then you think about it, the compounding knowledge, right. That's really great. I think this is really serendipitous. I think one question I really have is about the Kelly formula because it seems to be a repeating thing in that book, but of course, as you guys just mentioned earlier, it seemed that this is the same that is out of date. I think Francis said that probably the reason it is not so good is because the estimate of the confidence for the outcomes, and actually when I was reading the scenarios that you wrote, I had similar question too, because I think, how do you estimate? And I'm just wondering, given that we know that's a limitation and is there any way for us to kind of get a more accurate estimate of the probability of the different outcomes, so that's kind my question?

Mohnish Pabrai: Francis?

Francis Chou: Oh, you have a difficult one, as mentioned valuation is as sometimes, just go range. You can say it's worth somewhere between 80 to 120 and you say, okay, on average, it's hundred, so it's not a precise number and you want lot of safety.

Mohnish Pabrai: Francis, he's asking for the probability, like, let's say stocks at 50, what's the probability it's worth a hundred?

Interviewer 9: Yeah. Upside or downside, the probability upside or multiple outcomes, something like that.

Francis Chou: Oh, okay. Basically, the old-fashioned ways, if we just took retain earnings and how much it's growing, something like that?

Interviewer 9: Retain earnings and how much it's growing.

Francis Chou: Whatever they make, it's retaining to the business, right? Indirectly you get an idea of the growth rate. Let's say if the ROE is 20% and the company has done as well as it has done in the past, most probably it'll be growing at 20% a year, as long as they can deploy that 20% earnings into the same kind of growth as they have in their original business, this a rough way of doing it. The other way is much harder. You can say, I'm going into technology, I'm going to something new, like internet and it's exploding at 30% a year, but that is far harder to do, like I missed out on a lot of great buys last 10 years. I never expected, for example, let's say Google to grow at like 25% a year in spite of being, 10 years ago was still a really big company. Same thing like Amazon has been growing at a really fast rate in terms of revenues, not in terms of profits. The same thing with Netflix and few other companies, 30% a year means revenues are doubling every two and a half years and in 10 years means, it's gone up like seven, eight times. It's really hard to imagine something that could grow that rapidly for a long time. You can think about it like for a small company, but not for some giants. At some point, that numbers will come into play, like there will be diminishing returns.

Mohnish Pabrai: I would say that it depends on the nature of the business. For example, let's say I'm looking at a funeral services operator. I don't know who will die in Cedar Rapids, Iowa next year, but I know how many will die in Cedar Rapids, Iowa next year. A business like the funeral services business, the number of people dying in a given year is somewhat predictable. If I look at a casino in Vegas, for example, let's say the Wynn Las Vegas or the Wynn Boston, for example, Encore Boston, right? What are their revenues in 2021? Well, the certainty on that is much different than the certainty on the funeral services business or Carnival's business in the future. Each business has a different certainty of likelihood of those revenues and profits coming in and it varies a lot. The other thing to keep in mind is, capitalism is very brutal. Everyone's out to take everyone out, dog eat dog. It's a very competitive landscape, creative disruption. It's what makes our economy work. The only defence we have against all of these factors is to have a number of bets. We cannot have, like Francis said, a high degree of conviction on our own, even, I mean, I could have never, no one could have said that Vegas would go to zero customers for several weeks in a row. Who would've ever imagined that, right? Who would've ever imagined that, like the other day, there's an airplane that flew with one passenger. I mean, the things we are seeing happening in the world would not have shown up in any projection you would've made. The only defence you have against that because, my friend, Guy Spier, I was talking to him earlier today, he says, he's come to the conclusion that 100-

year events happen every 10 years and 50-year events happen every seven years. His perspective is, there's no such thing as a 100-year events happening every 100 years. He thought, once he wrote out the financial crisis, 2008 or 2009, he could safely go to his grave and he'd never see another blimp again. Now, he's resigned to the fact that every 5 or 10 years, he's going to see some earth shovelling event come through, which you can't imagine. I think the best thing that we can do is make sure we make investments where knowingly we know the odds of us making money are really high and the odds of us losing money are really, really low. That's even more important than the making money part and making a few diversified bets. Don't buy three REITs and say you're diversified, don't buy three casinos and say you're diversified, right? Make a few diversified bets within your circle of competence, hopefully, 8 or 10 bets, don't sweat is it 90% or 80% or 70% because we don't know. We just aren't that good as humans to see the future.

Interviewer 9: That's great. Another quick question, what will be your maximum bets like the optimal number of bets you would like to make?

Mohnish Pabrai: I don't put more than 10% of the fund into anything.

Interviewer 9: I mean, how many bets, how many, like?

Mohnish Pabrai: Ideally, it will be 10 bets.

Interviewer 9: Okay. Got it. Like 10 times 10, 100%, that's great.

Mohnish Pabrai: What about you Francis?

Francis Chou: I'm between 10 and 15, and sometimes they're going to make mistakes in those 10 and 15 stocks, but sometimes you can get whacked from left field. I know recently we were in airlines and you can see what happened to airlines, and most probably the intrinsic value of what has happened recently, most probably you can take 20 to 30% off its intrinsic value. If I thought it was worth hundred on some of these airlines, right now, I think it's between 70 and 80. It has not destroyed that industry but definitely has impacted the intrinsic value. Those are the things you have to take into consideration. It can come from left field.

Mohnish Pabrai: The government doesn't care about the situation with the equity holder of airlines. They just care about airlines flying. The airlines are going to be around, but what happens to the equity investor is a different question.

Francis Chou: You can see the same thing happening with small banks, zero interest rates, and they cannot make any money on it. They don't have any other avenue. Small banks and rural studies are really suffering. The measures that the government has taken are, there are a lot of pain there, a lot of people don't see it, and as business people and investors taken a big hit, especially those who have borrowed money and have been on margin.

Interviewer 9: Yeah. Thank you. Both are perfect answers. Thank you so much.

Shimone: Hi, my name is Shimone. Thank you so much both of you for joining us and thank you so much for sharing your knowledge with us. I really appreciate it, and really appreciate reading your book as well, the Dhandho Investor. I know that Warren Buffett invests in businesses where he can go and see how the business is doing. Aside from the trusted business partners that you are, how important is it for each of you to see what you're investing in, to go and see how the business is doing? Go touch, feel, et cetera.

Mohnish Pabrai: I'll go first Francis, I used to have a perspective probably coming from Benjamin Graham that if you went and met the CEOs of the business, et cetera, the number one skill they all have in common is they're great sales guys. That's how they got that job. Generally speaking, your judgment would get swayed quite a bit negatively if you met those super salesmen. But on the other hand, if you read Philip Fisher's book, Common Stocks and Uncommon Profits, which is a terrific read, the scuttlebutt is really good, which is, to poke around in different areas of the business to try to understand if that's really good. I am probably guilty of doing very little scuttlebutt or things in terms of kicking the tires for most of my career than an investor, I used to just be an armchair investor if you will. When I started investing internationally, I had to eliminate fraud risk. I had to get an airplane and go kick the tires and so on. That actually, I found to be very invigorating. It was really good. I think my perspective was flawed. I think that the more you can do Philip Fisher type scuttlebutt, the better you can understand the business and you can get like, Philip Fisher is like doing a 360 talk to ex-employees, talk to customers, talk to vendors, just get a full view of what's going on in the business, that's going to help you a lot. Francis?

Francis Chou: Mohnish, what you're saying makes a lot of sense. Like I don't mind meeting the CEOs, but what I try to do is to know the company first. I would go through, let's say last 10 years of their numbers, look at capital allocation decisions, how it has gone and how they have made money and where they're allocating all those retain earnings. After I have a good idea and I have made some kind of sense to myself, how good the company is, how good the management is, then I'm quite willing to meet them. But sometimes, I just take it literally. Mohnish told me when I was buying Stonetrust, listen to me, when you buy a company, you need to know the man. I have Mohnish Pabrai, right. You don't need to do any due diligence. I took his word for it. I didn't even do any, I didn't even see the company until, like I didn't go to Baton Rouge until four months after I bought the company.

Interviewee: It looks like it worked out well.

Francis Chou: Yeah, it worked out really well, in this case, yes.

Rayne: Thank you very much for both of you for staying late with us tonight. I know your time is valuable, so, I'll keep my answer short. From your practice experience, even though you already find a company within your competence circle and when you do the evaluation for the company, what are the signals that can trigger you to sense the dangers, the risks or make you to be more cautious besides the legal issues, besides the tons of data, besides the longer in the account receivable that you cannot collect?

Mohnish Pabrai: That's a great question Rayne. I think one of the best pieces of advice I got from Charlie Munger is, he told me that it's very important to have somebody to talk to about your investments. He told me, I've always had somebody to talk to about my investments. I said, “oh, you mean like Warren Buffett?” He said, “well, it wasn't always Buffett, but it's very important to have somebody you can bounce things off”. Because the thing is that, when we look at a business, we are buyers based on all our past learning and experience. We may not see something that is obvious to someone else. If you can get different perspectives on the business from different people, it's going to help you understand the business better. Many times we are not going to really be able to get to the promised land just by looking at the data. I think the thing is that what Munger calls, the Latticework of Mental Models. The number of things that affect the future of a business is so many things, it could be the CEO, could be the team, could be the environment, could be competitive sources. There's a zillion things going on that affect the future of a business. The better you can get at understanding that, the better you're going to be as an investor. I think bouncing things off others can be really powerful. Buffett and Munger complained, they actually said it many times that the two of them think so similarly that they are very concerned that if it gets passed one filter, it'll go through the second filter too. To the extent that you can have someone who is a person you can trust and has different life experiences than you and looks at things differently, that's a very big advantage. Francis?

Francis Chou: Yeah. Mohnish, you have a really good point. When I was working in Fairfax and so we would come up, let's say we really like this stock, blah, blah, blah, and all that stuff. We would appoint someone really senior among ourselves to look at all the negatives and tell us what's wrong with the investments. We didn't take a junior guy because the junior guy, sometimes in organization will always differ to someone that is senior and that may not want to make a noise, but we would always get someone really senior to go and check if there's any fallacy, the way we are thinking and the way we're executing it or something that we missed. But the Charlie Munger and Buffett relationship is also special because Munger is not afraid to tell Buffett that you are an idiot. That worked really well too. You need someone like Munger, who is frank, open and just tell Buffett that you're making a mistake. Lot of people in the position of Munger most probably will differ to what Buffett is doing. Like in my case, when run my mutual funds, you need sometimes like checks and balances because I run it by myself. In my case, I just punished myself, like last in 2019, I did badly for my bond fund. I gave back 1.5 billion in fees as I rebated four years of fees as a punishment, that sharpens you up really quick.

Mohnish Pabrai: But generally speaking, that relationship shouldn't be a master slave relationship, it should be a peer relationship. Generally speaking, I think in investment shop, it shouldn't be someone reporting to you like, I've had a lot of great conversations with Guy Spier. I've had a number of great conversations with other people who don't work for me, but that gives them the freedom to be very objective.

Rayne: That's a great advice. Thank you so much.

Interviewer 10: Gentlemen thank you very much for spending the time you have with us. These have been wonderful insights. I'm not going to ask about anything you're buying now, but I am curious about what your view of the world is at this point in terms of where earnings could go, the macro picture in general, which I know is different than how you allocate investments, but that would be very helpful just to get your view of what's going on and how unique it is and what your expectations are.

Francis Chou: Okay. I can go first., my view is a little bit philosophical, a little bit, political. We live like in a free enterprise country, right? It's extremely resilient and it's a type of a system where most likely you can have events like the great depression, the great recession of 2008. You can have second world war, the first world war. In time every generation or every 10 years, things will be better than what it has been in the past. So, if you ask me, I would say, even 5 years from now or 10 years from now, we'll have, a higher GDP, a high standard of living and the stock market should be much higher just because of the type of systems we have and the type of government we have here.

Mohnish Pabrai: What I would say is that, man is a very clever animal. Even as we observe, like look at the US, you can say fumbled, stumbled response to COVID. Actually, this is a super athlete. The super athlete got on its knees and he's standing up very quickly. As I see things, like the other day I was listening to I think a PBS podcast where they had the CEO of Vintech making the ventilators and Vintech makes 150 ventilators a month. Obviously, you got all kinds of calls and they said, we can max it to a thousand a month with all our infrastructure. It's a max we can do. GM got paid up with them and about four days later, the guy is saying we will produce 20,000 a month. They went from 150 to 20,000 because the guy said that GM is not an auto parts company, it's this incredible global supply chain manager, GM through 800 of its people, it's supply chain engine onto Vintech went after the entire supply base, which makes auto parts. Those guys are taking pistons that went into cars and miniaturizing them and making pistons that go into ventilators. I think the human response is a superhuman response, and we are seeing that response on vaccines, we are seeing that response on antivirals, on every single facet of what's going on. I would be very surprised if we are not in a very different situation in maybe four to eight weeks. I think it'd be a very different ball game. Almost every day we are hearing what breakthroughs, breakthroughs and testing, breakthroughs in different aspects. It would really surprise me if eight weeks from now, this athlete is not sprinting. The second thing is that it's a very intense shock to the system, businesses by then very nature are extremely fragile. Most businesses cannot survive if you take away their revenue for two or three months. That's, I mean a lot of small businesses, small restaurants out of business, a lot of small businesses with all the help the government is giving will not make it. A lot of large businesses will have equities impaired in, like airlines, for example, I think they'll make it, but what those equity returns end up being is a different question. But I would say this and I would say that when you fast forward a few years, we would not even be able to look back and say, oh, we can see the scars of what happened. We cannot see the scars of what happened in the financial crisis very easily today. Those are the pretty deep scars, and we learned a lot of lessons. In fact, the banks are in such good shape because of all the lessons we learned then. I wouldn't ever count America out. I wouldn't count the World out. I wouldn't count humans out. I think we will prevail. I think we will not be having sessions like this too far into the future. Thank you.

Andrew Sandoe: This is great. Thank you for being willing to stick around and answer questions, enthusiastically respond, and also responding from your training, but also responding from your personality and your philosophy. I think this is exceeded expectations.

Mohnish Pabrai: All right, great. It was a fun afternoon.

Francis Chou: Thank you, Professor.

Andrew Sandoe: Okay. Thank you so much and take care.