# Mohnish Pabrai's Talk at the MDI Gurgaon, India on December 22, 2015

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Sanjay: Since 2011, Mohnish Pabrai is an accomplished investor, philanthropist, author and entrepreneur, and then coming to MDI to share his accumulate with your seniors, today you will get the same, all of you, I hope you end up reading material on Mohnish, which I sent to you earlier. As you know, one of the most dazzling accomplishments of Mohnish is the Dakshana Foundation, which has a fantastic track record and I have sent some material on that, it's absolutely astonishing. During its years of operations, IITs have accepted 888 Dakshana's scholars out of a total universe of 1715. That is a hit rate of 52%. Most of you, I recall engineers, even though just how astonishing this track record is you know IIT's they have accepted this ratio of this about 2%. Last year, Mohnish got along with a few Dakshana's scholar. They were sitting over there at the end of the room. Their presence absolutely electrified the audience because they spoke about their journey through Dakshana and to IIT. How their own life and the life of their family have been transformed thanks to the Dakshana Foundation. Most of these scholars I can guarantee wouldn't have finished even high school but for Dakshana help. Like everything else in life, Mohnish explained how we approached Dakshana Foundation as an investor. One who wants to get the best bang for the bucks, where the bang for the buck in the context of the Dakshana means, the social impact, and I think that is one of the most remarkable talks I have ever hosted in this room. We also had with us Srinivas Pulavarti who will also speak to you. He is the CIO of a very famous endowment of UCLA. I am sure you have all heard about UCLA. Srini is the CIO and president of the foundation. He manages their money. Both of them will speak to you about our topic, which I haven't told you. But to keep the suspense, they are going to tell you about Bubbles. Ladies and gentlemen, please welcome Mohnish.

Mohnish: It is always a pleasure to be here. I think that there are very few places on the planet as far as graduate MBA programs go, that actually have focused on value investing. It is quite a blessing for MDI in India to have such a place. I think this credit goes to Sanjay, so round applause for him. Probably there are a few, I could name them, not even fill up five fingers on one hand, in terms of the number of schools that focus on this area. When professors decide to focus on what they will specialize in, they generally want to focus on things where they attract sponsors and drags a lot of money and grants and consulting and so on. That doesn't happen with value. Then there are no natural sponsors, which is why you don't have that much in academia. It is the same reason why entrepreneurship also doesn't get much in MBA program. The few places that you have it and what Sanjay put together is quite unique. It is always a pleasure to be here, and I think the quality of the students is world class, I guess the best questions from anywhere. It is a great asset; it is a wonderful asset. What I am going to do is, I am going to talk about Bubbles and let's see if we can make this work, right.

It doesn't repeat itself, but it does line. Sometimes it is kind of good to go through some history. In 1922, there was a big car network, that was the Motors Bubbles. At that time in 1922, we had hundreds and hundreds of car companies. Basically, if you looked at the United States at that time, you would see the trend in terms of the number of cars being sold. It was emerging markets. I mean, envision the whole country going through industrialization. The high rates are going to get built out, population going to be rapid. You can see that in 1990, we have 1.3 million, and especially from 21 to 22, you see that 50% jump from 1.7, 2.5 million even China in this day and age has not seen those types of jumps at all. It was very significant in terms of growth. The growth was very much real. Basically, investors had a certain perspective, right? They felt that autos were going to grow. Obviously, the country was going to grow, the population was going to grow up. The country would industrialize all funds. Investors were absolutely right. What ended up happening is that nearly all the 1921 investors from the industry lost the entire investment. Even though they were right on all the macro trends, you still couldn't make money. It was a difficult time to make money, even though every part of their forecast is correct. This is a listing of it's not a complete list, a partial list of some of the companies. They were literally hundreds of water companies at the time.

Basically, you see the name and you see the start and end date, when they existed over the years. You can just see that most of them just disappeared. We haven't even heard of them over that period. About 38 years after that Bubble burst, there was another Bubble, which is the electronics Bubble. At that time, basically, the expectation was that electronics and semiconductors and all the miniaturization of stuff that was going to happen were going to be huge. People were correct, they were absolutely correct. All the investors were right that it was going to transform. Moore's law the transistor all the silicon on chips and the rapid, growth in brain power silicon, I mean, everything laid out. In fact, from 1959 to 2015 it is quick, and that is like a 56 year run. But even then, what ended up happening is, the 1959 investors in the Tronics type companies lost their entire investment, If you look at some of these names, so what people did, they floated companies, which either ended with the tron at the end or onics at the end. You are like Astron, Dutron, Vulcatron and then circuitronics, supronics and one with both Powertron Ultrasonics. How could you lose the Powertron Ultrasonics and of course it didn't go so well. We ended up with complete losses. Then, about 40 years after that, we had the dot com bubble. Since it has been about 15 years, I think many of you wouldn't have been adults inside, probably teenagers and less than years we are 12 years old or so, 10 years old.

But Srini and I are old enough to remember this, Sanjay remembers this of course. This is one we won't forget for life. Basically, when we had the dot com bubble, the internet was a game changer. It has been a game changer, radically changed people's lives, and still continues to do that. That is absolutely, and it would reconfigure the economy. These are things that people believe internet would do, and it has done all those things. Again, almost over the 1999 investors in dot coms lost their entire investment bad place to invest money. It ends up with not so good results, even though you had all the factors matter factor behind you. Some of these companies, Boo.com, WebVan and so on, we have all these different companies that came on board at that time and you have some pretty spectacular valuations. For example, you look at some of the deals that were done at the time. You see some of these deals, some of the interesting ones are, you see all these issues going on Yahoo right now. They bought broadcast.com for 5.7 billion. Most people have never heard of broadcast.com. But you might have heard of Mark Cuban. How many of you heard of Mark Cuban? Yeah, See, some people heard of Mark Cuban. That is pretty good. Mark Cuban sold broadcast.com to Yahoo and the only smart thing he did after the sale, and he insisted on doing this after the sale, was being allowed to hedge a hundred percent of Yahoo stock because all these deals happened in Chinese money, when he got Yahoo stock, also known as Chinese money, he hedged the entire position. The funny thing is his net worth which is over $5 billion was completely hedged. His net worth now is I think $2.3 billion. Somehow in the last 15 years with all the ventures he didn't add to his net worth, but that one decision probably saved him a few billion dollars of his private jet Dallas Mavericks and got him a spot on that shark Tank. How many of you watch Shark Tank? The Shark Tank show up here. Indian version, I have Shark Tank. *To shuru kar do.* Anytime an entrepreneur you have a offering there, so there is Indian version of Shark Tank. You had all these crazy things going on, Ask.com bought by IAC interactive for 1.9 billion, I don't even know what IAC interactive's current market capital is, but that is a huge portion that created at that time for this. You had some crazy behavior. And so, you know, if you look at these three bubbles, the interesting thing is they are all about 38 to 40 years above. They are very similar to each other and those two things are not coincidences. The reason why the bubbles are that far apart is because like, Sanjay and I or Srini and I we know what happened during the dotcom bubble. So if there is another bubble like that, we would find the table and say, "Hey guys, don't do this, we have seen this movie before".

But I remember that in early 2000, I think January 2000, I was living in Chicago. I got in the cab and most of the cab drivers are either a Sikh or a Pakistani. This Pakistani cab driver from Lahore says to me "*aapka Cisco ke baare me kya khayal hai?*" He didn't know I am an engineer, and I would actually know something about Cisco. I said *"aapne Cisco mein invest kiya?"* He said "*haan,*

*haan".* He named all these, Yahoo all these things. He said, *"laga diya hai isme"* and he said it is going up and everything. That is when you knew like the 1929, the shoeshine boy in Wall Street giving you stock tips you pretty much knew there was a cab driver from Lahore and Chicago and Francisco and saying that is the one you should buy, that you were taking a top.

The reason that these things take about this much time to happen is because the set of investors who saw it need to have left the scene. If you think of human lifetime and such, if we looked at the dot com bubble happening in 2000 and let us say the next bubble was coming in 2040, so a person who was 30 years old, for example, in 2000 would be about 70. What is the cause of the 2040 bubble, maybe transport to Mars we don't know, they are not in the picture. In fact, Buffet raised the issue with the Motors bubble during the dot come burst and I think Business Week ran a cover that says what is wrong? No, I think it was apparent – "What is wrong?" In 1999 that was their response when Warren Buffett tells them about the Motors bubble, but he was seeing the paradigm. Bubbles need that kind of 40-year period for the same type of thing. But the thing with bubble is, they actually happen all the time. Almost all the time, more than one bubble is building up. That is, it will actually surprise you how common the bubbles up then, we have a different sort of bubble which took place just about 40 years, in the late sixties, early seventies, there was this concept you are responsible of Nifty 50 in India, which is not the same Nifty 50, this is your grandmother's Nifty 50. In 19, late sixties, early seventies, the idea was that you could buy these very high-quality blue check names and the price didn't match. Basically, the idea was, you buy these, and you hold them because they were so good, and they were so entrenched in the positions that the price didn't match. If you think about 1971 and you think about company like McDonald's and you look at it 45 years after, and that is really true, McDonald's has dramatically increased the size of its moat, the size of its sales, products, all these offerings over that period all was trading close to 90 time earning, and at Disney, it is at 80 times earnings. Coke is massive, it's P/E were just huge, 70, 80, 90, 100 time earnings. Since everyone was being given this advice, so you're basically a bipolar market, you have the Nifty fifty creating a very high valuations and then everything else trading at "who cares" and then basically we had a crash in slow motion, but it crashes. In 1970 to 74, we had a very significant down graph in US stock, but wasn't like 1939, where you got one day, we didn't have a single day when we, over a two year period something like 40% 50% of market value was gone.

When you looked at the price drop from the peak of 72 to the bottom of 74, and what happened in the US in 73 and 74 was that it was gloom and doom, so for the first time, we had the impeachment and the resignation of a US President, for the first time you had the oil embargo, for the first time in the US, Americans had to queue up miles, long lines near gas stations, and they couldn't get gas. What you just saw is the car business. You had a president who in all his wisdom-imposed price control. We had this whole bunch of kind of ugly stuff, all these things are coming together. What happened is that when the market started to crater in 73, the Nifty fifty stayed intact, but then they were taken out back one by one. By the time ended in the end of 74 you had a blood bath. That took place about what, 30 what? 20, 38, about 38 years ago, 37, 38 years ago. If you look at the situation today, we have some behavior and something going on in US markets which are similar to the Nifty fifty in 73, 74. It is not the same, because it is never the same, right? But it is similar. We have these companies which are very high-quality companies, McDonald's and Coke such, but they are ridiculous valuations, right? Amazon is at 600 times earnings and Netflix 240 times earnings, and the Netflix CEO, when he asked about the stock price, he says it’s a mystery to me. Explain the market cap, SolarCity invest money and there would be at more than 250, Facebook at 95 times earnings. Who knows what Uber's market cap do when it goes public. You have some of that going on in India as well, where you have the flip cards and make cousins of some of these companies, if you will. Again, you know that you have the same frenzy going on where people are trying to invest in the equivalence in the Indian space as well. If you look at a company like Tesla for example, they have about $4 billion in revenue. They are losing about $400 million a year, 30% or 20% are market cap. Even if they made money, even if they are an 8% margin, the best of BMW type margins even then you pay hundred times earnings on that and they go those margins and such, and no idea when they will make money. If you look at, for example, a company like General Motors? People say that Tesla is a future, right? Because it has got electric cars and all these things. GM has all electric, they already have electric car on the road, but they have an all-electric 200 miles range car coming out next year, two years ahead of Tesla for $30,000. There is nothing kind of spectacular or electrification that gives Tesla any kind of edge. Look at something, General Motors back out some of that cash and such. It is cheaper than Tesla. One is in $4 billion revenue, the other is $150 billion revenue. GM's cash flows are on their way to $10 billion and probably on the way to $13 or $14 billion. If you look at a couple like GM, they have two businesses. One is their auto business, which is not even heavy Capex or anything. It is a captive bank, if you will. That business makes a billion dollar a year or $2 billion a year. If you take a business like that, probably $13 billion at some point. The China business, which makes $2 billion a year, so you are the largest auto market with the number one market share. Just those two businesses of GM and took out everything else, it would still exceed what the business should be worth. But the thing is, GM is not sexy, and Tesla is sexy. You have these distortions that happen because of that.

I took this quote from David Einhorn letter recently without asking David, so I hope he doesn't mind. He talked about their own Micron technology, which is now an oligopoly position in D Rams. They are only three suppliers in the world, and Micron is number two after Samsung. Micron basically takes close to $4 billion in pre-tax earnings and actually after-tax earnings. Then Netflix is making 240 million. Of course, the market cap of Netflix is over 50 billion now. Micron keeps dropping, I think $13 or $14 billion its gone the other way. Here is a huge variance between the two and Netflix. Do we have Netflix in India yet? Is it in the cards to come.

Student: Next year

Mohnish: Next year, is there an Indian player, another offering. The thing about Netflix is, it is a pipe, right? I mean, the content they make internally is really the pipe, but the thing is that when they feed content to the pipe, we have to license. Like, I have Netflix, Srini you have Netflix 999. Yeah. $10 a month, all you get is 8 movies you can watch, but each time we are watching the movies, there are royalty payments that need to be made to the content. When you look at Netflix, even if you assume that the distribution types are free, you still have to pay for the content. It is not clear. I mean, Netflix is a fantastic business run by a great CEO, great team, everything is fantastic. But it is not clear what the long term economy is, when they finally get built up what portion of the $10 goes to content providers versus the pipe? We had this battle play out in the cable business in the US and the content guys have a lot of clout. What I would say is that, at best it is not obvious that certain things would go. The markets are kind of different way of looking at things. This is a chart that shows a number of companies trading at any given time in the US with a P/E over 100. In the dot com era, we cross like 120 companies with P/E over hundred. The only other time we have come closer right now are about 80 companies. You are seeing this polarization in the market, just like you saw on the Nifty fifty at that time. Of course, what we saw in 2000 was the day the Nasdaq peaked $41,000 same way the Berkshire hit a multi-year low I mean, both events happened the same day, it could literally see the money getting pulled out of Berkshire and those people taking that and buying out, there was an activity taking place then.

In fact, when Pabrai Investment Funds was launched in July'99 in the frenzy of the internet bubbles, it worked out really well. The first year were up 70% because we sidestepped all the dotcom stuff and all the non-dotcom stuff was really cheap, so things worked at this point. In fact, the next few years, the bubble kept popping. We did very well as a result. If you look at the US Nasdaq, there is 2200 stocks, combined total value of $7 trillion used to have value of $2 trillion in 2002 and 2009, and then the top 10 names are $2 trillion, so you have something like 30% if value of 2200 company in the top 10 names and the top hundred names are like 70 plus percent of value. A huge portion is sitting in those Netflix type names.

These things are kind of hard to forecast. It is hard to see what kind of events play out, which causes any of this to change whether the flat line, the drop a lot. These are kind of things that are hard to forecast. But the simple thing I think may make sense is to avoid the sector. Because you don't need to have exposure to all sectors, or some sectors go crazy, just do other things. While you do other thing, you might look stupid in the short term, but that's what Sanjay teaches you, to look stupid in the short term. Isn't that right Sanjay? Yeah. It is good to look stupid in the short term. If you look at what we have and what we are seeing happen right now is, I think what we are seeing is we are seeing these companies kind of get to your before evaluations and then they're in effect, basically being taken out back and shot. In 73, 74, what popped the Nifty Fifty was macro events unrelated to the Nifty fifty. What we are seeing now is the markets. At one point Go Pro, how many of you familiar with Go Pro, well, a lot of people. Have you sold it yet? Popular?

Student: Not popular

Mohnish: Not popular, hasn't been taken down.

Student: Expensive, Expensive.

Mohnish: Expensive, how much is it? Okay. That is right. If you are familiar with, Go Pro, like, I have one of my bicycles, it’s great for good videos. It's a camera with waterproof case, it has some software none of those pieces, I believe are rocket science, but the market at one point put a $9 billion value on that camera with a waterproof case. It has since taken that valuation down. We don't know where it is going from here, it may be that this bubble pops one company at a time. Go Pro is a little bit easier to see, Netflix maybe harder, we got to see how that plays out and just going to kind of watch what happens there. We have seen some of this happening already. Like we have seen Twitter, basically $48 billion value gone, living social some laying off people, a lot of these companies are now IPOed below the last couple of venture rounds. They are going out below and another thing that I think happens is that, when companies get venture capital, the venture capitalists are getting participating firms and such, so they are pretty much almost guaranteed to get their money back before the founders and start seeing much in terms of cash, just the way. Nobody cares if you are investing in Twitter. Let us invest in Uber even a hundred billion valuation because the valuation comes in eventually at 20 billion, then the investors indicate, or we paid off for venture investors. They are not really going to lose, which is why they are willing to kind of get these things up to pay numbers, but they are not going to make money. They just kind of get their money back. Now we have all these uniforms, which is companies or a billion-dollar valuation where still private and there is a 141 of them combined value of $500 billion. The bubble is not just in public equities, in my opinion, it is in both sides, public and private. We would like to see, because again, like 73-74 these are real companies, and they are world class companies, Amazon is absolutely world class with how they operate. Netflix is world class. There are real businesses, real companies, real customers doing a great job, valuations will matter.

I think that with that we have Srini come in. One thing I would just say is that, there are few books on bubbles. There is one book called Trendwatching which was written by a former TV news anchor, I don't know normally have too much confidence in books by TV news anchors, but Trendwatching by Ron Insana. If you read the Trendwatching, it will show you that almost all the time, there are problems going on around us. It is the nature as long as humans are involved in markets because it is just a nature of the beast. I think it is quite a treat to have Srini here. Recently Srini had dinner with Charlie a few months back, Charlie Munger, and I think the next day Charlie Munger was at the Daily Journal annual meeting and he brought up the dinner with Srini and he said that Munger and Buffett are very good at reading people, he said that, he thought that this Indian money manager had his head school, right and also that the way Srini has approached allocating the 2 billion plus of capital UCLA is probably a model for a lot of investors to follow.

Srini: Hello, Good afternoon. It is a very tough act to follow people like Mohnish. But I will try to give you a perspective from an asset allocator. Very briefly, in the US, we have this phenomenon where students like you become very successful, leave and build companies and give a lot of money back to the schools, right? I hope that you will all do that. Next time when I come, I hope there is a $100 million dollar here, it will happen, don't laugh. This is a very unique phenomenon unique to US, but I think it is an important job, right? It is all about branding. You want the brand in people at UCLA, Harvard, Princeton, Columbia students have given money that are in billions of dollars. Why do kids give money? It is part of branding, right? The universities in the US are very good at branding. Schools are very good at branding. I have a 12-year-old boy, Mohnish has two girls. From the time he was five years old, he is to come back with the flag of his team, right? They inculcate a sense of pride of the institution, of their home team, the school team, the city, it doesn't matter, professional college. The one thing that I wish that institutions here do a better job is branding and try to keep the kids after they leave the school, students leave engaged because the engagement is what returns to school. That is how you created endowment foundations. Okay, so to Bubble, Mohnish mentioned to me that he is going to talk about Bubble. I mentioned at UCLA frequently at the Anderson Business School. One of the topics I cover in behavioral finance. As part of that course, I cover some aspect of problems. I am not going to go through every Bubble, but as Mohnish said earlier, the world is not new to problems. Human behavior is a primary region policy by Dominic officials. Innovation is another reason. My job as an asset allocator is to try to understand what makes us Bubbles, and if we can get that right, because our job, ultimate goal is to make money. To get insight into why we create Bubbles, why Bubbles inflate, and what causes the bubbles to inflate, many of those things are very common-sense questions, right? Many of the answers to these are also very common sense to the questions, but you can never underestimate human stupidity, right? Why is GoPro and Mohnish said, it is a camera, and my son has one, it is $400. He, I think, blew the camera out. The second time he went under water, I wanted to go stupid diving. I need to be underwater, and he is 12 years old. He didn't put the seal properly, but why should it cause night building? It defies common sense. These Bubbles are all around and most of them are one Bubble burst, and then it creates the pathway to the next Bubble, right? There is always a continuation in how, and as I tell my team and my students is that there are two aspects to the Bubble. One is the creating of the Bubbles and other is the bursting of the bubble, right? We are worried about both, but bursting is not the problem. What causes the Bubble is the problem. We spend an amount of time trying to understand. I thought that I will take you through one recent problem that we all are part of, and it is right in front of us, but sometimes there is not much you can do. If you are an economist, I worked as an economist for five years before I got into money management. The University of Chicago has a very simple identity. It is called the Chicago identity. The treatment came up with this. The identity is if you market. It is the product of money times velocity of money should approximate what growth Vs x Vm = GROWTH.

What does the Federal Reserve do in the US right after the global financial crisis? They inject lot of liquidity. We put around $4 trillion into the market. The idea was the economy had slowed down. We were in a crisis mode. We lost two of our biggest banks, Lehman and Bear Stearns. Clearly the world was on fire. How many of you know the history of Federal Reserve? Federal Reserve was created in 1913. We had a panic in 1907. I think Mohnish showed you a slide where the first Bubble was 1921. Between 1893 and 1907, the US markets were on fire. We had many financial crises. The big one was in 1907. Then in 1907, the Knickerbocker scandal, the United Copper Company scandal. The result of that, they created a committee, and their job was to come up with the idea of central bank. Most other European countries already had a central bank, US was the last one to come up with in the idea of central bank in the developed countries. It took them six years of handling and good robust sign, so their job was to reach. In the last hundred years, we had many crises, but 2008 was a big one. After 29 years, this was the next big one. What do they do? They injected liquidity and, in history, this goes back to 1955. In the last 50 odd years, you have never had the cost of capital as low for as long as cost of money in the US exist until last March 25. All that money that came into the system, and with the cost of capital being as low as it is, this is the same chart showing you how the money supply increased in the US. I don't need to explain to you this graph, but then what happened to the velocity of amount, so velocity of money crashed, so this equation was no longer bad. The fed cap only controlled the front end of, so they injected the liquidity. The velocity of money stayed constant, then you would've seen growth, but the velocity of money crashed. We didn't have the growth that the federalism thought that they can influence. The only tool they had at that time was put into play but is not good. This is a very powerful graph. How many of you know Tom Piketty? If you read Tom Piketty's book, he covers this concept of inequality, wealth inequality, income inequality quite vividly. This graph is the perfect example to explain the idea of inequality. Because when the velocity of money drops, what it is suggesting is, the amount of money in circulation is reducing. Why is it reducing? When there was so much liquidity injected into the system, all that money went to the top five businesspeople. It didn't go to the people it was meant to go to, but it went through the top five. What does that mean? What it makes is who has the money, the rich people, who have the assets, the rich people. When rich people get more money, what happens, they buy more assets, then you create an asset problem. What are the assets that you can inflate stocks and what not inflated in the US, drugs and real estate. This is how Bubbles are formed. Who instigated this moat? The federalism. I have this lecture that I do on institutions, inclusive institutions and extractive institutions. If you read this book called My Nations Fail, Daron Acemoglu and Robinson wrote this book. What do they talk about? They talk about institutions that can be deemed inclusive or extractive. In this, it is an extremely profoundly difficult to answer the question whether an institution is inclusive or it is the extractive. The Federal Reserve was meant to be a global institution, but over the last seven years, we can argue that it behaved like an extractive institution. What is the difference, Inclusive institutions are institutions that are meant to benefit society at large. Extracting institutions are those that extract value out of society by oxford. In this case, by federalism of keeping the cost of capital as low as it has kept, it benefited very few people at the expense of all the others. I just wanted to give you a sense of how policy developments, policy boost by large institutions can create Bubbles and how it can infect society. As an economist, all of you are very familiar with distort ion. Cost of capital at zero is a distortion, right and this is the chart that shows you European countries issuing tech at rate interest rates. It defies common sense. Why would Germany raise a $5 billion bond and ask you to pay the money to keep the money? But this is another side, these are all signals, right. What is happening to countries where you have negative interest rates, where you have debt to GDP, the red boxes so cheap buddy has a way to distort almost all aspects of Amazon. I will come back to this. The debt to GDP is at the highest level in the US. The shaded part is the recessions that we experience in the US. The question now to most US investors is, we have had the US stock market deliver at 20% annualized over the last six years. Part of that is the asset bubble being traded in this case of the stock market. The question is whether there is a disconnect between what is happening in the equity market and in the real economy. The next few slides are just trying to del down to one sector, what is happening in the energy sector. I am sure all of you are familiar that with the fact that the price of oil is now at its lowest in probably 15 years. If you look at the oil production, it is at all high now. This is a commodity that the old world uses. The demand for the commodity has not really slack it down, but the price has 10. I'll go through the next few slides very quickly so that you extend. These are the examples of the deflating of the bubble. In this case, it is based on oil rigs, so you look at the rig and half of it is just collapsed. It is directly related to price of oil. It is not economical in the US to drill for oil at defects. This is national death. Yesterday, I had dinner with a gentleman who was invested in energy in India. He was promised $9 for the natural gas for one PTU of natural gas. But then Modi remained on his promise, and now he wants to pay the four and a half, but the import price that they're paying is $9 for this, consortium is asking them to pay at least the import price and for political reasons they don't want to. These guys stopped to drill. The implications of what is happening in the, and all the rigs are out at specific Island, because they're saying that you rather rule than go and pump if you're receiving half a cost. Bubbles are inevitable and they can't solve these bubbles with more debt. In the US, especially as a value investor, I was always taught that you should always try to buy a dollar for 50 cents. If you can buy an asset for 50 cents and you hold it for five years, and if you analyze it at 50%, you're about to one. For the first time in the last seven years, we are seeing at this location, the net market in the US. We can now buy certain assets at 60 cents, maybe 50 cents if we are careful and if we wait and not about putting massive positions on. That bubble that I showed you is at the cusp. We don't know whether it is going to be sustained, but likely, we will have our opportunities to buy assets at 50 cents. I went through this slide very quickly because I want you to have a chance to ask questions from Mohnish because you don't get to see him more often than others, his annual trip here. But if you have any questions on what an asset allocator does, what a CIO does, how we come up with strategy, I can answer any questions now, by the time Mohnish.

Mohnish: Yeah.

Speaker: You’re welcome.

Student: In terms of social impact which asset allocator do you think has the potential to over maximum return the tools of investment, can really be money, time, and earning?

Srini: From a social impact, what? Okay, it's a very complicated question, but I'll try. Mohnish and I know two gentlemen, the Nicholas Sleep and Kaiser and they used to run several billion, maybe $3 to $4 billion, and they had a third of their allocation to one stock. That stock was Amazon and they had it for 15 years. I'm a value investor. I never understood how somebody could put one and a half billion dollar in Amazon, not today, going back 10 years ago. I spent a lot of time just studying, like Mohnish I believe in a one-man investment confidently. I make all the decisions that I spend a lot of time just thinking. If you came to my house 10 years ago and told me that I would give my credit card information and I would buy stuff for internet, I would laugh you out, because I wouldn't do that at that time. But today, if you came to our house, 95% of everything we buy are from Amazon, we have Amazon Prime, everything is delivered. We rarely ever go shop. We just don't. I heard this morning before we came here, several of you were in the room and we are discussing Flipkart and Amazon. It took me a long time to get an app to understand why two value investors that Mohnish know, and I know who are very Buffett like in their investment approach and their other holdings are very buffeted like Costco and things that you identified, why Amazon? I used to go to London just to see them and spend a lot of time thinking and asking about why they called Amazon. It is a very risky decision to put 35% of your money in one stock or anything, like Mohnish says that you are pregnant with that stock and you're really pregnant with that stock. They changed by month and the lesson I learned from understanding why investors invest in Amazon, or I know Flipkart, I know Tiger, I know Sachs

Goldman very well, the old Tiger family. I'll come to your question; I'm just trying to put the context in order. Amazon or Netflix or any of these companies, are companies that can change behavior and change behavior across billions of people. How do you assign value to a company's ability to change mass behavior, so what Flipkart is going through today here is they're trying to change mass behavior of a billion people. Can you change the behavior of a billion people without cost? Probably, you can't. But with cost you can change it probably faster. I don't have that slide here. I have a slide that shows you just companies like FedEx, Dell, Amazon, UPS, Microsoft, Google. What do all these companies do? They change our behavior without even realizing, I've been in the US now almost 30 years. Mohnish has been there for as long. I can tell you that when we were in the US, the way to go on vacation was sit in a car and drive for days. Nobody does it. My son would strangle me if I decided half for 20 minutes. People fly. Southwest Airlines just changed that behavior. Then other copycat stop come, JetBlue comes, Ryanair in Europe. I'm sure every airline in India is there like Southwest, how many Indians now fly? It's staggering to think in 10 years they changed the way India's behave. The ability to change behavior is a very powerful engine, and that is value to it. Or why is Netflix valued the way it's valued? Why is Amazon valued the way it's valued? I think it is not because of their built-in motor or their IP, I think it is in their ability to change mass behavior. As a value investor, I would never buy Amazon, right. My job as an asset allocator, I don't have the luxury to do what Mohnish does. Mohnish manages money for many institutions, he probably manages 5% of somebody's money. I manage 100% of the sales money. I must have by definition, so in the asset liability model, there are four basic models, right. There are insurance companies from Buffett, Mohnish has Dhandho and then we have pension funds. Yesterday I had dinner with Siddharth, who is your Minister of Finance, and he was telling me that the return assumptions of the ETF here are 15%. I said, how are you going get it? They guarantee 8.75% to all retires in India, which is unheard of. In the US all pension modules are broken. Our PBO pension benefit obligations, asset benefit obligations that we can't beat that. There's a huge mismatch between assets and liabilities. Anyway, I'll stop here with respect to Mohnish. Mohnish, why don't you come.

Mohnish: Yeah, okay.

Srini: Come take some questions.

Mohnish: Let's take another question.

Srini: Yeah, please.

Student: The foundation that you have. I was a student of an organization called Super 30 in Patna. We also train students for IIT, they have high conversion rate. My learning from there has changed me. I would like to know what's one core idea on which you gain your strength.

Mohnish: Well first of all, if there wasn't Anand Kumar or a Super 30, there wouldn't be a Dakshana, we would have cloned that model. Thank you, Anand, good model but I don't think they're trying to do, I always tell people, and the people who are in Dakshana that, when they start hearing some of the reasons and way we operate, why we do things, I think there opinion of me would fall quite dramatically. At the risk of making that fall quite dramatically, first of all, Dakshana is a cloned model, right, we looked at what Anand Kumar and Super 30 was doing. It sounded quite sensible to us. It's great to see a Super 30 product in the room. That's wonderful. I visited Anand, actually, I emailed him in 2006. There was an article in Business Week as he was randomly reading a business article and at that time, I was trying to figure out, I knew I wanted to give our money away, but I was trying to figure out a model that would make sense. This article basically talked about Super 30 and it was the first time I ever heard about it. It dawned on me that it was an incredibly powerful model. Because if you take a population of rural billion and you think about how many children in that population are, top 1 or 2% intelligence, this big high IQs that number of approach infinity for graduate purposes. Because we're starting with such a huge population. Then what portion of those infinite number of high-quality grains get wasted, that number is also infinite, because almost all of it doesn't get converted. What Anand was doing was, he was tapping into a pool of very high quality brains and harnessing the power, right at a very low cost. There's a United Legal College Fund in the US. I don't know if there's two college.

Speaker: There are two colleges.

Mohnish: The United Legal College Fund had a tagline. Tagline was a mind is a terrible thing to waste, okay. In India we have millions upon millions upon millions of minds that get wasted, because of just the logistics and the way where you are born and who your parents are and all those things. What Anand was doing is, he was harnessing these very high IQ brains. Quite frankly if you took an average brain and took a high IQ brain and you inject the same amount of resource on it, you're going to have a dramatically different outcome on the high IQ brain, just the brain once, so if you have a limited number of resources, you must make choices. The choice should be to put it where the return to society is the highest. For many reasons, when I read the article Super 30 made a lot of sense. He was converting high potential brains into global talent at $700 a person, right. I mean, you went Super 30. Basically, mother was cooking for the kids. He rented low-cost housing and he taught another. The cost of the program was very and very efficient. We will do that. I contacted Anand, got an email address, contacted him and said I wanted to kind of help him scale and so on. He responded saying, “thanks, but no thanks”. He was the only lifeline doing something that made sense to me. Nothing else made sense to me. I said, “okay, I'm coming to Patna, so will you meet me?” He said, oh, yeah. What year did you finish your super 30?

Speaker: 2006-7 batch.

Mohnish: Okay, so were you there when I visited? No, because I met the 2007 batch, so did you take your JEE in 2007?

Speaker: Yes.

Mohnish: I was there just before you mentioned the exam, March 2007. Probably, but anyway, I met Anand and again, talked to him in person again. He said, he's not interested in taking out that money or taking donation. He just wants to do his own thing the way he was doing. I said, “okay, then do you mind us stealing your money and scaling it?” And he said, “not only I do not mind, I’ll help you any way. I didn't have to help you in any way account, which you've always done. He's always been very fact trained. Seven of our Dakshana alums to become faculty who are now teaching national scholars. It's become full circle where we had kids who were in our program, went to IIT, I finished mine, we went to Anand, and they're some of our faculty which is great. Dakshana idea is very simple, when we cloned a model, which I got made sense, and it still makes sense, probably makes sense for a long time. The second is that I wanted to find a way, because efficient and higher return for society in terms of recycling well back to society. My dad used to say, we're not going to take anything with us. The second thing is that large inheritances are a disservice to your kids. Like Buffett says that “if you are Jesse Owen's son who is a sprinter, it's not going to help Jesse Owen's son to put him on the 15-meter line and a hundred-meter base. Then everyone else have zero line. It's okay to put him on a 10 meter, but not on a 15”. You can help your kids. But if you help your kids a lot then what's going to end up happening is they will never reach their potential. You're doing disservice to them. If you have more assets than you’re going to consume and if the assets did not go to your gene pool, then the choice way you get, you can basically give to society or in Srini’s case, UCLA and take it from there or MDI right. I knew we wanted to recycle back. I also knew that giving money is a way hard and I wanted to do it in education in India. I also assumed that we would hit our head against a brick wall for 10 years. We're willing to lose everything in the sense that whatever we have contributed to Dakshana, I was very comfortable with the outcome being a zero. Some of the principles that I use for Dakshana was that I didn't care, I would say any positive or negative impact to my reputation, I didn't care about that. The other thing that you must do, I think you embark on a charitable endeavor. The charity much harder than making money, I think is swing for the fences. I think India will go just for 6 cents, it doesn't matter if your middle stump is gone, but go for sixer, because the sixers are the only way to move the needle. If you are going to be careful, then the moving of the needle is hard. Dakshana is very willing to make bold bets whether or not they work and what will happened with us, thankfully, that we just have a lot of tailwind when I don't think much of our assets have gone in a negative way, but we don't have grand plans. The kids in the Dakshana program, we don't really spend time telling them how they should do that. That's not a focus. When we first started Dakshana, we had this stupid idea that we should tell them, give 10% of their earnings back lifetime, back to society, not productional, but back to society. We don't even do that right now. Now, my model is the UCLA model. The way it works for the Harvard model, which is that we have a large number 888, well, even the others have gone to NIITs and other great schools in a decade or two, we will have several Dakshana millionaires and maybe even billionaires. We just tap those guys on the ship in 10, 15 years and then we can talk to them and say, "hey, you want to do something?" And the rest of them, we don't need to bother them, right? Is that your model Srini? Right. The efficient model, right? Again, we clone it from UCLA. The idea is not to try to, they want people or put ideologies into them, I think what I have noticed is that the Dakshana scholars we have are deeply interested in giving back, not because we tell them to give back, already we have had a little conversations, but when they're in college, they give back heavily with time and they're helping other Dakshana students. I mean, now what happens is some Dakshana scholars get admitted to IIT Kharagpur, 20 alums from Kharagpur come to receive them at the training station, which never happened, right. That whole system but put in place because of all the volunteers at Dakshana and they have a whole program of mentoring in all the different streams. They help them get their way around campus, what to focus on, how to evaluate their problems. There're now significant support systems at all the IIT and NIIT for Dakshana alums, which is tremendous, so these are things that have come about because the kids are interested in giving back. Sorry to disappoint you, but we don't try to add more, there is enough to worry about just tracking the chain so they don't need more input from us. Other questions?

Student: Sir, once we have identified a bubble, how do we go about predicting when exactly the bubble is going to get worse? As a pure value investor, should I be concerned about betting against Tesla's betting? Or should I be concerned more about investing in General Motors?

Mohnish: Well, that's a good question. The good news is that there's this two hard parts. One time I visited Omaha and Warren, Warren gave me a tour of his office, and I saw that on his desk, there's a box which is labeled "too hard". I told Warren that the box is empty, I said, there's nothing in the box. He said, "oh, we'll take care of that right now". He put a whole bunch of stuff in the box, the thing is that the 99% of things that are happening in terms of assets and whatever's going on ought to go into a too hard time. The good news is. we can become extremely wealthy without ever predicting when the bubbles were approached. If you just have enough knowledge to know that something may be about, not even is about, like, I don't know if Amazon is or is not about right, but the good news is we don't need to answer that question. It's in, so the key thing is you don't need to try to forecast when a bubble is going to start or when it's going to end, or any of those things. You can sidestep most of it because what ought to happen in value investing is it is hard enough when you focus on the no brainers. At the end of the day, before I finally make an investment, I always try to ask myself, is this a no-brainer? Of course, the investor is a no-brainer. Even then, we get a helping hand. When there's already so much trouble with no-brainers, why go to an area which is slightly off from being a no-brainer? The other thing, to answer your question a little differently. is Charlie Munger talks about a friend of his John Arrillaga. John Arrillaga was one of the 400 billionaires. The only thing he has ever invested in his entire career is real estate within two miles of the Stanford campus. He has not invested in anything else. What is John Arrillaga's circle of competence, it's like this small, right. It's not even real estate, it's not even real estate in California. It's not even real estate in Northern California. It's not even real estate in Bay. It is very specific to a particular area. The importance is not the size of the surface. The importance is knowing the boundaries. Knowing the boundary is very critical. Charlie Munger also says that if you just own a small town and just own the best apartment building in town, the best office building in town, the McDonald's franchise, and the Ford dealership, you don't need anything. You have four stocks in effect. Then you just sit on your ass for your whole life and work before one day you'll be welcomed. What people forget is that compounding is amazing, it's an incredibly amazing concept. My daughter is at NYU, and she was just coming home for the holidays. I went to LAH to pick her up for a 450 miles drive. When I was coming back home with her, I knew this would get her attention, because she was sleepy and all that. But I said, I just want to say that she had worked in the summer, and she had made $4,800. Let's say it's 5,000 rupees. In the US we have these individual retirement accounts, they put the money in and it's not tax. Whatever you invest in is all tax free, as long as it stays in the account. I told her, I opened for her something known as the Roth IRA, which she had signed on these papers. She had no idea what she was signing. But anyway, she had this Roth IRA account, which is the Roth IRA where it's after-tax money that goes in, but never gets tax when you pull it out in tax, right. I told her that the $4,800 went into this Roth IRA, and I asked her, I said that "let's say it's 5,000, you're 18 years old right now, let's say you don't touch this $5,000 till you are 78 years old. Let's say this money stays for 60 years. Let's say it grows at 15% of you, right, so I said, what would it become when you are 78 years old?" I helped her out in this, as she was sleepy, I said, "no, in five years a little down. $5,000 become $10,000. Then in 60 years, how much can you raise, can you raise your hand?

Student: It's 4,000 times. So, 4,000x?

Mohnish: Very good. 4000 x $5,000 is how much? I told her, you'll have $20 million, and that's when she woke up, wide awake, and said "what?" I said, "yeah, when you're 78 years old you'll have $20 million, and that's assuming that from 19 till 78, you never saved to die.

Student: And never put any more money into that.

Mohnish: And never put any more money in that, just one summer when you were not even in college, before you went to college, you put the money in. Then I tried to play a mind game with it, right. I said, let's say after college you are making

$80,000. Let's say you put away 15%, and let's say after five years, you're making $150,000. she said, "I can't". It's too big, right? That is the magic of compounding, right. The thing is, what does Warren Buffet want more than anything is, anyone want to answer that. If you ask Buffett, the genie comes to you, Warren you could have anything, what do you think is going to last? Exactly, it's like when people ask him, what do you want people to say in your funeral, he said "just happens in, man, he was old". The thing with Warren, understood long time back, you need a really long time back, the second thing, which I tried to address on my daughter is that, if the $5,000 didn't go at the age of 18, if it went to the age of 38, it's four, right. You need the long runway. The second is you don't need heroics. We don't need to kind of find the next Amazon or find the next Google or find the next Tesla or whatever else. We don't need heroics. What we need to do is make sure to follow the two rules and do you all know what are the two rules, and second rule, there you go, that's it. You just need to know those two rules. She doesn't need to come down 15%. What is it that 10% every seven years?

Student: Yeah. Yearly, in 1986 had less than $2 billion, today they have over 20 buck billion, it just double every seven digits. That's all we try to do. We try to double every seven digits, okay.

Mohnish: Srini, how many decades are you going to UCLA? How many doubles are you going to give UCLA?

Srini: Hopefully three to four dollars.

Mohnish: Okay. The key in life is how many dollars? That's the most important, how many dollars? Quite frankly, it doesn't matter. Sanjay makes you read all the Buffett letter, right. You make them read all of them, right? You see in the early Buffett letters, he talks about the sale of Manhattan, right? You remember that? Have you guys forgotten who owns the sale of Manhattan? No one remembers. What about the test? What about the test, they don't remember and what was the other long one he talks about, the Spain's conquests and what are the other long one?

Lecturer: We've done that in the class, you guys have forgotten that. If you had the same skill, if you could double your money every year to market, I mean, or one time stock bought something in double for 30 years, and if you bought something, they sold something and you paid a tax on that and you reinvested that in double the next year, this is 30 years, you end a very different outcome.

Mohnish: That's right. But he talked about the purchase of Manhattan from the Indians for $20. Now, that was a bad deal because you've done better with the small compounding engine on that. Also, what Spain spent on the conquest of all these major territories actually was a bad deal when looked at what we were today. What I'm trying to say is, it gate wonder is keeping in focus the long term, very long term, and not trying to get into heroics and remembering, you don't need to know a whole lot about many things. It's better to be an inch wide and a mile deep than a mile wide and an inch deep and that's it. Other questions? Srini you want to cover?

Srini: Yeah, you had the question on Tesla. I think Peter shorting is bad karma, right, shorting is right. You're getting somebody to fail. If GM is going to do reasonably well, why would you waste your energy in shorting something, right? It's very hot, I know a short seller.

Mohnish: Srini and I have a common friend Tom Gayner.

Srini: Yes.

Mohnish: Right, and Srini used to be his neighbor.

Srini: Yeah.

Mohnish: How far did you live from Tom Gayner?

Srini: A mile.

Mohnish: Okay. They used to live close by and Tom Gayner runs the investment, and recently actually he made some comments in Grant's Interest Rate Observer. He was talking about a NIFTY 50. You know how actually the bubble was now. He said, let's say you had $50 in 1972, and you put it in the SMT5. That $50 today is about $2,800. That's how much it's grown. He says, "now let's say you took $1 of each of those $50 and you put it into the NIFTY 50 at the peak, right? Now you are one dollar and then he says, let's say you assume that 47 or 50 dollars, 47 companies disappeared, which didn't happen with NIFTY 50, but three companies where you put $3, the value today is above $20. Of course, I have a little bit of an issue with Tom and talked to him about, one of the three companies that he assumes, is part of is Walmart, which is one version, whether his or his not. If you take Walmart out, it doesn't quite get there, but if you take it in, then it definitely gets that. The second thing he said is that we all get to know about Buffett's big bet on American Express in the sixties 40% of the assets into Amex when it dropped a lot, but Tom said, let's say you are the schmuck, you bought Amex one day before Salvo oil crisis at the peak. You bought, for example, a hundred dollars and Buffett bought, let's say a $60 for example. Both you and Warren held a position through from then today, they would be basically no difference in those two numbers on and like basis when you look at it. Even though the entry price was very different, so what does that tell you? What that tells you is that compounding machines great, consistent long term compounding machines is where the game, and that's why someone like Charlie Munger is willing to pay up for the Costco for these big compounding machines. The key is, I think, rather than focus on cheap assets, what you're better off doing is focus on assets which are durable. That's where the game becomes complicated, can you identify durable franchise now, can you be like Warren and identified durable franchises and then keep them. Warren also will tell you were not smart enough to hang on and he was not smart enough to hang on Disney. He bought Disney in the sixties as well. Inactivity is a great skill for an investor. Spend your time talking to students. Trading is very good for you and patience is an amazing skill and inactivity and patience are the essence, the core of everything.

Student: What’s your take on microgram investing, I know the names that you usually invested are north of everything? But if you really wanted a lot of sort of multi baggers, then you would probably want to enter into a company which is fairly small with a huge runway in front. Does that sort of imply that microcap will sort of?

Mohnish: Well, I don't think it's so much microcap. I think the thing is that if you can identify long runway, one of the difficulties is that capitalism is proven in our creative discussion, right? If you are a moat, everyone is hell bent to restore that, right? The nature of capitalism is that moats are going to get destroyed. The number of enduring moats are very rare and infrequent. The difficulty is in the identification of long-term moats. If you have identified something that is a great moat for long period, and the good news is you don't need to on one basket you can make like the Nifty 50 gauge, you could put 10% into that one and the other 90% you can do other stuff with. In fact, through most of our Pabrai Investment funds history, we have not invested in very large companies. We end up recently there, but we end up there cause that's where we find the opportunity. I'm never specifically looking for certain market cap. Now one of the advantages a small investor has, which is a disadvantage for me and Srini is, we can't make $1 million, just can't dish out capital that rate, this wouldn't work for us. I have to have businesses, at least, a certain size to invest in them. This is an industry with a small investor, has a huge advantage over the institutions because small investor can make a hundred thousand one lakh would bet and that can be significant for them. The universal opportunity that opens up is much wider. But that's sometimes can be a problem because you have too many things to look at. You need to hone in and take it from there Srini.

Srini: In the US, there is a saying that “the best large cap investor is a big cap stock investor”. Ideally you want to buy cap companies and can large, but you know your microcap story. Mohnish mentioned earlier that in the twenties, there are three thousand three hundred caps, Buffett talks about it. How do you know which three would've survived that? It's a very hard place to bet on micro and if you're a value investor, it’s hard for you to understand what value is of a company that is two years old you need a lot more information. The colleagues in the retail space today in the US or here in India, you don't know whether it's going to be a Flipkart that survives or somebody. Amazon eat everybody up in US. Amazon survived. We still don't know who's going be the survivor, Ola or Uber or I don't know the other names. Somebody will survive, but how are you going to, so it's much harder to back on these microcap things then identifying very good businesses in 50 billion dollar and hope that it becomes a hundred million dollar.

Student: Professor Bakshi invested in a few names cannot take in this discussion, complications with long history, but it's not big in size.

Mohnish: You can share the name. We're looking for stock tips.

Student: Relaxo is the name.

Mohnish: After four or five years, I might actually be smart enough to buy the stock. I'll relax. So go ahead.

Student: Okay, within our market cap was hundred billion to a billion in about four years. It was not that you didn't know about that name. My point was, you have companies where you can see the history but they're not scale on the size. For some reason, you have the special insight. You can sense that this is the kind of time that the transition is taking place.

Srini: Sure. There are always stories, but for every good story there are a hundred disasters. You'll never have a one stock portfolio. If you had a 25 microcap before, then I would like to see the success and the failure, then you can get a better, it's very hard, it's not impossible.

Student: I'm not a micro guy but recently a guy wrote that Buffett talked about rates staying low. Then this makes sense and that fascinating with rates being that low does it affect how each of you think you have to take, where rates will be 10 years from now? I know rates are related to other things, but for the first time, do we need to worry that in India for example, rates can be a 4% percent and the US be 1% forever? How does one thing of PEs and asset evaluations in that context,

Srini: When you start your investment career, you rarely spend time. When I was a board manager, the tenure year used to be a 6 and a half and two today's one something. This is around 20 years, at that time I thought six and a half was too long. Now fast forward to 20 years and I think Mohnish and I, when we were coming down, I think we had this very brief exchange, the way US is today, IV cannot conceive our rates much higher than we are in a low rate environment for a long time. If you just use back of the envelope calculations on why macro is important to this extent, but we know what our total debt is in the US, we know the tenure of the total debt, most of the US borrowing is short for the grazing the cattle. Even though the long rates are low, you would think common sense will dictate that they borrow long term, then short term. But that's not how it has been. We know what happens to the cost of managing today's debt and what we think the debt in future, it'll be prohibitively expensive to from the cost of carrying the debt per stature. We know that the growth is not materialized. That there's one thing that we do very well in the US that is of every type. We know that the other issue we read in the US we have very serious situation of employment, and no major question we know and the media per capita household income been around rest of the world, China, India, of equation, at least in the education sector, but in the US media household that know and with the oil price where it is today, that is a tax rate for most American farmers. If you put all these things together, it's hard to see rates going up because as I said earlier, we don't have a problem of CPI anymore. We don't have a problem if you adjust for inflation and look at the famous McDonald Burger index, the McDonald burger property costs the same 30 years ago, just question US had abundance of food. Food is not our problem. The question is, what happens with innovation? The types of jobs we create under employment, like today we were at Oberoi and all these young people, they're unbelievably smart. You can see the energy, the hunger, the hustle in the faces of these people, right? But you can also see that under employed, they could probably be doing a hundred smart, innovative things if you give them the opportunity. But you can see the same thing in the US. Like most of the young people that come to our office are a million times smarter than I am. But they all can't do; there's only one CIO and it is a pyramid structure everywhere. The underemployment is a big issue. With the number of young people in the ecosystem growing dramatically with the creation of middle class at all, our challenge is to keep you to the fullest extent employed because that's what matter, but there are only so many. The long story short, we don't see interest rates going. You want to take the stock question before I end up taking? To the value the cost of capital?

Mohnish: Yeah. I think I've always taken an approach to use of discount rate and which sounds kind of stupid in this environment, but keeping our problem, which is probably why I can't find anything to buy. But yeah, I'd probably take an approach where I don't want to spend too much time on macro. I think we're better off understanding business are headed in a wide range of outcomes. I think that's maybe more robust, take the John Arrillaga understand the competence and focus on those things and get some diversification so that you're not always one aspect. That's the best. But I think what Warren said, which I would say sounds reasonable, is that interest rates go for a long time. The chart put up is for most of the history the US interest rates has been pretty low, six and a half likely on the higher rates and so there's a good chance straight low for a long time. The interest rate is low then stocks in hindsight turned out to be under benefit. That's good. We might have some tailwind but we're not banging it. We have past your time. Yeah.

Moderator: They are willing to stay back, but we have to let them go, they have classes and lunch to have. One more formal question.

Student: You mentioned Yale. Every year, Yale is getting popular.

Mohnish: Every seven years, it makes a big difference.

Student: What is your view on that? How do you differentiate on that?

Srini: Yeah, that's a good question. There is some truth to that. We study this carefully because this is how we fact of decision making. Before I answer that, just to give you a set, the S&P 500, Mohnish knows that index very well cause they're working on it, has analyzed it over 10% of the last 75 years. I think it goes to the other questions that you ask. 90% of returns that people is actually better, right? If market is giving you 10%, and if we can add 1%, not 2%, that is humongous impactful over 30, a 2% differential can translate into billions if you are dealing with, the markets have been very cooperative and very rewarding for the last 15 to 75 years, in spite of 2008, my portfolio generated over 10. We doubled in seven years in spite of 2008 since. The saying is that it's very important to be in the right place even if you are with an average man. If you have to be in the last seven years since we doubled analyzed it percent, we bottomed it around $700 and we are around $2100. Whether you were with the top, the site manager or an average manager was not really an issue, but the fact that you had to be in the US was more important. In the last three years, for example, we thought that Europe was coming to an end, world was coming to an end with the Greece and Italy and Spain and the Euro zone and what was happening in Belgium. Brussels the European account union, but Europe did fabulous. We are learning that asset allocation is as important as stock selection. If you want to be in value stocks, you have to be in the value stock. Decision to be in the value stock is as important as which value stock. That is what the difference between us are. That's how we see it.

Student: I have a question about position sizing. Let's say you have figured out a Grade A business, having a good model. Where do you draw the lines as to how much to allocate, provided there are no constraints in terms of liquidity of a stock?

Srini: Yeah. This is what I usually stack by a lecture with, right? There are only three things that we do. We do three things. We come up with a strategy. If we come up as he slows, he'll study what others are doing and then you figure some, okay, this is what I want to do. In our case, we have a global playground, we can anywhere, anytime, anybody, we have no constrains. We have to come up with some starting point. Where are you going to invest and strategy? Is it US or India or China? The second question we answer is how much, let's say I have Angles coming to my office all the time, I love this. Then I said, okay, how much do you want to put? Nobody has it answer because it’s very hard. It's not easy. The third one is which stock, if you get the market right, and if you know which stock you want to invest in, then the third is look at how much it's profoundly difficult. It is the hardest thing we do. Right now, for example this is a real example. We know that the US debt market is dislocated right? My team has prizes on every bond that we would potentially invest in and how it is corrected. We have been studying this for the last two years. Cause we have expected that I market in the US bubble. We know the space we want to be, we know the names that we want to, but there are technical issues either in the US about liquidity or size of issue, how much you want, right? Those are different questions, but it's very hard. How much are you going? We manage couple of billion, right? Do I put 10% of the portfolio? 20%. Why? It's a very difficult question. That's why it's very impressive to see what people like or one or Mohnish can put 35% of the name in one name of their assets 35% of their assets, is difficult to do. You have to have conviction levels that are unbelievably high.

Student: But that can be involving your own money.

Srini: Yes.

Student: How do you draw that.

Srini: What we do is because we manage, we are so focused on not losing because we are a living being, endowments are living being because there are real people who depend on pays every month for research, for salaries or program. We don't have the liberty of having a 30% drop. I tell my team that let's get 20 great ideas and put 5% in each idea. It's not rocket science, but that's what we are also saying, we could lose two or three ideas to zero and it's not. But if I put three ideas of 33% before one idea goes down, then the institution is in problem from many perspectives. We have constituent boards, we have alumni. If I lose 33% of my money, I'll be Wall Street Journal page one that Srini lost 33%. There's a cost to it. Not just losing the money, but we are telegraphing to the market many more things than just the loss of money in one stock. There are various other issues, but 3% to 5% is you have to believe that if you are a global manager, that you can find two, three great ideas in the US two, three, great in Asia, two, three great ones in Europe and individual equity debt or some others. We can find 20 ideas to populate 3% to 5%. So that's how we position, size our investments.

Mohnish: The only thing I want to add is that at least Pabrai Investment Funds never put 35% in anything. We max out at 10%. When they go up the price, that's a good thing at cost. That's right.

Srini: Which is a great thing if it becomes a third that.

Mohnish: I think with that Sanjay.

Sanjay: There's an interesting point that you made. Isn't that functionally equivalent to retake that position at that price?

Mohnish: Well, I think the second issue is do you want to cut it down? I think if I look at the example of Amex and so on, the key is the long runway. These are positions that we have held or have some conviction about them. I have never sold down a position strictly because of such, we made a mistake, but I just think the unfortunate thing is when we think it's been discovered and such.

Sanjay: Thank you so much for both of you.