

Pabrai Investment Funds/Dhandho 2016 Annual Meeting Transcript

Copyright © 2016 by Mohnish Pabrai. All Rights Reserved. Please do not post this transcript on the web.

Note: This is the transcript of the September 10, 2016 meeting held in Aliso Viejo, California, the September 17, 2016 meeting held in Rosemont, Illinois, and the September 24, 2016 meeting held in San Juan, Puerto Rico. Mohnish's presentation style is extemporaneous; hence, there were some differences in the three presentations. Transcripts of all meetings were merged to produce this single document. The transcript has been edited for readability.

The transcript should be read in conjunction with the Annual Meeting presentation slides (the password to the video is "Warren"). They can be viewed at:

<https://vimeo.com/184764157>

Welcome and Introduction:

Our format is very similar to previous years. We will go through the performance for all the funds, a couple of postmortems on past holdings, and discussion on the intrinsic value of Pabrai Funds, Dhandho Holdings and Stonetrust. Lastly, we will have the Q&A.

Slides 4-14: 2015 Gran Fondo Dhandho Bike Ride Pictures

Ad: Jeep 75 Years Portraits Commercial

Ad: Fiat 500S What Bad Boys Drive Commercial

Slides 18-21:

We have three funds in Pabrai Funds because the SEC requires us to separate different classes of investors into different buckets. The oldest fund, PIF1, was rolled into PIF2. It is now 17 years old and it's done better than the indices. It has delivered about 11 percent annualized versus about 6 percent for the best index, it's approximately more than twice the best index over the life of the fund. If you go back to the beginning in 1999, every dollar is now worth a little over \$7 versus about \$2.50 for the Dow. The circled numbers are the ones that I really care about because these are the long term numbers. For PIF2, the life of the funds numbers are fine. The five-year numbers are bothersome because on a rolling five-year basis, five years is enough time for things to even themselves out. We should be doing better than the index which we clearly are not. I will go into a little more detail on these rolling five year periods once we get through the three funds. I think they are an anomaly and it will revert to better numbers in the next few years.

Slides 22-25:

The off-shore fund, PIF3, was started in 2002. This fund is for endowments, foundations, IRAs and investors based outside the US. Over the life of the fund, our performance is 9.5% annualized versus about 8.2% for the NASDAQ over that period. Every dollar is approximately \$4 versus about \$3 for the NASDAQ. A \$100,000 investment in 2002 is now close to \$373,000 versus \$314,000 for the best index. Over the life of fund and the five year numbers, clearly the five year numbers are way off. Like PIF2, it is likely to get better in the years ahead.

Slides 26-29:

PIF4 is the newest fund which was started in 2003. It is just about completing 13 years and is underperforming the indices, even over the life of the funds. It's doubled since it started, whereas the best index has more than tripled. We have some specific issues on why this is happening and I will address that. A \$100,000 invested in PIF4 is worth \$194,000. The best index is about \$313,000. We are significantly off on PIF4 in terms of annualized returns. As you can see over five years, our numbers are zero as of June 30, 2016. They are a little better now.

Slide 30:

We can look at a long term perspective on Pabrai Funds and break it up into a few different periods. In the first 8 year period between 1999 and 2007, we annualized about 29.4% and before fees about 34%. We did exceptionally well. We then had the financial crisis where over a 21-month period, we had about a two thirds decline in our portfolio. For the next five years coming out of the financial crisis to March 2014, we annualized about 33% and we made it all back. In the last period which was a little over two years, we had approximately a one third decline in asset values. If you look at the 2014 to 2016 period, it was being compounded by two simultaneous events. One was the Horsehead bankruptcy which was significant in terms of cost and close to a \$70 million cost hit. In terms of market value where the assets were marked before the decline, we had a \$100 million invested in Horsehead and we took that down to zero.

I have been doing this for 22 years now. The first five years was without the funds. It was just with my own money. I can clearly say that in terms of what I understand about investing and capital allocation, my current understanding is the best it's ever been. Just to give you a little bit of a contrast - sometimes it's also a matter of the pond you are fishing in. I can look back at the entire 22 years, although we don't have the entire 22 years at Pabrai Funds since the first five years was with my own capital.

In the 1994/1995 period, I had about a year's worth of experience in just reading about value investing and Warren Buffett. In January 1995, I just started to make some investments. I had a million dollars of my own money, and I started to invest in a few different places. I invested a very small portion of that \$1MM in four different stocks in India. At that time there was no electronic trading and no Demat.Account (dematerialized). When I bought shares, I got physical shares in my hand.

Out of the \$1MM, I only allocated \$30,000 to India, partially because of the bureaucratic hurdles to invest. Just looking at the way everything would happen, I was skeptical about whether the government would place capital controls over the ability to take money back. I had some macro

concerns, so I limited what we were going to invest. In one of the four stocks, I invested 50% - \$15,000 of the \$30,000. All the companies I invested in were businesses which I believed had very long secular tailwinds. My thought was to own these forever. When I received these certificates, I just placed them in the bottom drawer.

Once in a while I would look at their stock prices and I noticed that one of the businesses, an IT company, Satyam Computers, had gone up 140 times in about five years since I had bought. The exchange rate had moved against me but that \$15,000 was worth around \$1.5 million in early 2000. I decided to do some research and look at the business. It was trading at a very ridiculous multiple that spun out some dot coms and there was a lot of euphoria around it. I decided not to hold this forever and to get rid of it because I couldn't understand what was going on. I also wanted to test whether I could actually pull the capital back to the US, so I sold Satyam. I asked them to wire the money to my US account, and the next day the money was there. India does not impose any long-term capital gains taxes, so there were no taxes withheld and there were no issues. I did not have to file any paperwork, and it was very smooth.

As for the other three stocks, they hadn't done that much. They were flat to slightly above flat and around one and a half times what I had put in. I have to say that in 2001 we had a good run in India. \$30,000 became the \$1.5 million and the rest didn't matter, so I sold the other three holdings. On one of the holdings they told me that the share certificate was fake and it couldn't be sold. That certificate was floating around with me. I recently just tested it again and sent it to a broker to sell. We got 150X on that holding. I went back and looked at all four of them. If I had done nothing and kept the other three all the way, one declined in price and the other two went up 80 to 150 times over that period. I would have been better off not doing anything.

In 1995 I made the decision to buy one of the stocks when I was in India in the brokers office. This was one of the stocks which did the best -150X. I had done less than four hours of work on it. I just liked the business, I liked the people and I thought that it was something that would go somewhere. But I didn't know much more beyond that. The company was Kotak Mahindra, the broker from which I was buying the shares. They did the best out of all of them.

The approach I take today is far more robust because I know a lot more, and I have learned several things. The issue is the pond that we fish in is nothing like that pond. When I look at the US markets, I'm not a macro guy and I don't look at too many things on a high level looking down. I look at individual stocks and see whether they are undervalued or not. When I look at the markets today, for the most part they are either fairly valued or overvalued across most of the things we look at. The fishing pond makes a difference and I don't think we will see these for some time. Everything is cyclical and will come back, but it's hard to see it coming back at that kind of level.

Slide 31:

Going back to the five year data, I looked at complete calendar years. I ignored 1999 because we had only six months of data and the funds were up about 60%. I also ignored 2016 because we only had about seven or eight months of data. I looked at all the complete calendar years from 2000 to 2015. We had about a dozen periods in this sixteen-year period which were complete five-

year periods. I looked at how we did in terms of annualized returns and annualized returns versus the S&P.

As you can see, the second column is mostly positive except for a couple of five-year periods where the performance is negative. The better column to look at is the right hand column which is the amount of annualized outperformance/underperformance versus the S&P. In the early years, we had very significant outperformance and it continued through 2010. Then we had two five-year periods where we underperformed, and this is when we took the full brunt of the financial crisis and the draw downs. The last two periods are the outliers in the sense that they had the greatest degree of outperformance out of all the periods. If we could extend the timeline further for these last two periods and we were having this meeting in three or four years, I believe they would continue to show up as outliers. We will come back more towards the norm of outperforming. I believe there are particular reasons why this is happening. One reason is Horsehead, and the second is that the unusual things that we own are very mispriced and they will take care of themselves over time.

Slide 32:

The purpose for Pabrai Funds to exist is to beat the indices. If we don't beat the indices then there is no point in having the Funds. I would be the first one to say that we are done because we can't do it. I don't think that's the situation we are in, but that's our benchmark and it will always be our benchmark. One of the reasons why I'm going through the history is because we track that. I have not seen any significant activity in terms of investors asking for redemptions or seen anything different from previous years. I want the investors who are looking to redeem to have the data that I would want, if our positions were reversed. I will go through a little more detail on my view of the funds and where they are going.

Slides 33-34:

The current discount is one of the largest that we have seen in Pabrai Funds history. We had periods in 2003 and 2009 where we saw very significant gains after having these wide discounts. I haven't looked recently, but since June 30th we were up around 13-15%. Looking at a high level of the portfolio valued at over \$400 million, at the end of June it is closer to \$450 million. If we look at Fiat Chrysler which is one of our largest holdings, the \$84 million is at 3 to 5X that number. The GM warrants are worth significantly above where they are at. The rest of the portfolio is at least a double from where we are at right now. We are sitting on something that is worth somewhere above \$1 billion and maybe \$1.2 - \$1.4 billion. Even with some mistakes, we will still be more than a 2X. This is my assessment of where things stand and I could be wrong. But there are a number of good reasons why this is where it is and I covered a lot of this in the Second Quarter Letter to Investors where I went through some detail on Fiat and GM.

Slide 35:

Currently all the funds are open. I'm not really looking for more capital and I don't want us to be forced to sell things that I would rather not sell if we have outflows. We already had around \$8 or \$10 million come in and we expect more will be coming in. This will temper what's going out. I

believe that once we get past the redemption concerns I have, we will then go back to being closed again.

Slide 36:

We try to keep our expenses low. Pabrai Funds charges just performance fees and no annual fees. The investor pays for the audit, accounting and tax expenses, which is between 3 and 10 basis points and is very similar to a year ago. These are amongst the lowest across the entire mutual fund and hedge fund industry. Frictional cost is half the battle and we have that under control.

Slide 37:

The assets under management are around \$400 million.

Slide 38:

This is the only slide which is kind of a sales pitch. If you had a standard two and twenty structure, the fee would be \$9 million/year. I would get it for breathing. The Pabrai Family is the second largest investor, and we definitely eat our own cooking. We have high watermarks, there is no leverage and no short positions. Other than the GM warrants, there are no derivatives. These are the basic long holding investments, with a very good group of investors - many of them are represented at the Annual Meetings.

Slides 39-40:

I would like to go through a couple of postmortems and go over what's going on and how we think about things.

We had invested about \$70 million in Posco and we realized a nearly \$30 million loss over the 2014-2015 period. In late 2015 we had an unrealized loss, so I sold the position to capture the tax loss. I had planned to buy it back in 2016. In the interim we had redemptions that were about equal to our Posco proceeds. What seemed best at the time was to handle the redemptions rather than buying it back. I knew by that point we were going to exit Posco, and that we were probably going to exit at a loss. I also have a 2-year rule that I follow when I buy investments. The rule is: I don't sell if I know the current intrinsic value is below the current stock price and it has been less than two years. In this case, I violated the 2-year rule because of the tax situation. If we had just followed the standard 2-year rule with Posco, we would have had approximately \$10 million more in proceeds and our loss would have been a little less. It was accentuated with the tax laws and my aversion to selling. This unforced error could have been avoided. This chart is the stock chart which shows the buy and sell.

Slide 41:

Posco first came to my attention because it was in the portfolios of Berkshire Hathaway and the Daily Journal which is run by Charlie Munger. It was also in the portfolio of Himalaya Capital run by Li Lu. All three of these individuals are very smart investors and they all invested in Posco.

I originally thought they coordinated with each other. During discussions I had with Li Lu, he said it was actually a coincidence and that he bought Posco independently from when Warren had bought it. They never actually talked about it until after they both owned the investment. As for Charlie, I'm not sure. I think he was a straddle between Warren and Li Lu. I had some brief discussions with Charlie on Posco. He is an independent thinker and seemed very knowledgeable about it. This wasn't a cloned position in spite of the fact that all three of them bought it. I had done an enormous amount of work. Compared to some of the Indian stocks I have, I probably spent about six weeks studying the Posco history.

Going through some history - after World War II, Japan had its industrial base decimated and they formed the Ministry of International Trade and Industry (MITI). MITI was charged with helping Japan rebuild its industrial infrastructure, and it served that purpose really well. We saw a significant rise of Japan from the late forties to the eighties or nineties. Korea was about ten to fifteen years behind Japan. After the Korean War they experienced the same type of initiative as Japan, and they wanted to build their industrial base as well. In fact, the Japanese government provided aid to Korea in the form of a major technology transfer from Nippon Steel to help Posco and Korea create a steel industry.

Nippon Steel used to be the best steel maker in the world and they were exceptional at what they did. They passed on a lot of that DNA to Posco. What ended up happening is that Posco, basically the student, became better than the teacher. Posco over the years surpassed Nippon Steel and today they are probably the best and lowest cost steel maker on the planet. You can think of steel making as a commodity, which is converting the iron ore into steel and getting paid for the conversion. Posco adds value because when they do the conversion, it's about 7-10 % less and their profit margins are usually 6-7% better than anyone else. I believe this was the attraction that brought these great investors like Warren, Charlie, and Li Lu to Posco because they were clearly intrigued by that.

The second thing that made Posco unique was that it was the only time a country was able to set up a very large scale steel producing infrastructure without having any of the raw materials. Korea did not have any iron ore resources or any coking coal, and none of this was available inside the country. If you look at the US history, we were fortunate because our iron ore and coal resources ended up being very close to each other. They were not far from each other in the Midwest and they were connected by extensive navigable waterways - all the Great Lakes. The Midwestern industrial footprint in the US, all the auto makers and everything else came up around that. We were lucky that these resources were very close to each other. There wasn't very much in transport costs and it was very efficient to bring it all together.

In the case of Korea, they didn't have the material in the country, but they were able to design an efficient port infrastructure to bring in the raw materials and ship out the finished product. They also co-located a lot of their industrial infrastructures, like Hyundai and others, very close to Posco's facility so they could leverage that output. Posco basically became very good at sourcing steel from anywhere in the world and bringing it to Korea at a very low cost. Ocean shipping was very cheap and having an advanced port infrastructure made it quick to get into smelters. The whole thing was shaped like a "U" where the ships would come in on one side and then the finished products would leave on the other. It was extremely efficient in terms of how it was designed.

Each piece gave them a slight advantage over everyone else, and that's how they ended up where they were. None of that actually helped us in the end with Posco. At the end of the day, the investment didn't work because the steel industry went into a nuclear winter right after we invested. Almost everyone in the steel industry was losing money. Posco was losing about 7% less than the best of them but they were still having a hard time breaking even.

The lesson I can take from this is that you are better off having a bad house in a good neighborhood, than a good house in a bad neighborhood. Posco is a very good house but they are just in a bad neighborhood. We decided to exit and move on.

Slides 42-44:

Another business that we invested in was kind of a classic. It was a smaller bet for us and we couldn't really lose much if things didn't go our way. Unfortunately that ended up happening and we ended up almost flat versus what we invested.

Wilbur Ross is a very smart investor and some of you might be familiar with him. He is a distressed value investor and has done a number of roll ups in the past. They had International Coal Group and International Steel Group which rolled up a bunch of bankrupt steel companies by renegotiating labor contracts. I've had investments in the past in some of Wilbur's companies and they have done well. He has invested in the Cypriot banking system, the Greek banks and the Irish banks, whenever they had trouble. He set up a Special Purpose Acquisition Company (SPAC) which didn't disclose what they would buy, but said they are planning to buy something.

The stock was trading below cash. They had \$10 per share in cash and periodically the stock would go below \$10. Whenever it went below \$10, we would buy more shares. They also had some units where there was a warrant attached to it, so we bought some of those as well. We invested about \$23 million and it was a cash equivalent type investment.

We had uncertainty about where Wilbur would invest the money. They finally bought a specialty chemical company. That's when I could actually see what the investment looked like. At that time I came to the conclusion that I was outside my circle of competence. I didn't understand the business and I couldn't get my arms around it. We were able to exit with approximately what we had put in. We had invested \$23.2 million and we got about \$22.7 million over a 1.5 year holding period. This was classically a Dhandho bet of "heads I win, tails I don't lose much". I would do this bet over and over with Wilbur. If he did another SPAC, I would be willing to make the same bet because I think his batting average is pretty good.

TV Spot: 60 Minutes on Sergio Marchionne

Slides 46-47:

I'd like to talk a little about Fiat. I normally don't discuss present positions, but when it's \$90 or \$100 million of the portfolio and I believe it's worth three times that, I feel that I should not just make that statement without giving you some data as to why I feel that way. We bought Fiat Chrysler in 2012, paid about \$5 a share and we initially put about \$70 million into it. The current

value is about \$160 million. They spun out Ferrari and RCS Media. If we take the value of those two companies they spun out, that would approximately be what we invested in the business to begin with. Our investment was valued at \$70 million, the Ferrari spinout is approximately \$70 million and RCS Media was about \$0.6 million. Fiat makes about five million cars a year and Ferrari makes 7500 cars a year. We basically got our investment back from an important sliver of the company. The market four years ago, along with the rest of Fiat, was underpricing. The second question that comes up in this horrible industry, the auto industry, is what's left? What's left after we have Ferrari out of there?

Slides 48-49:

Both GM and Chrysler went through Chapter 11 bankruptcy. In Chapter 11 bankruptcy, there can be some very unique benefits. If you are a car manufacturer in the United States you cannot shut down a car dealer. The franchise laws do not allow you to tell a car dealer that they are redundant, we don't need you, or we are going to shut you down. There is an exception with bankruptcy. In one shot both Chrysler and GM knocked out thousands of car dealers that they thought were redundant. This was something they were never able to do. They also got rid of their huge healthcare liabilities. Their pensions and basically everything changed from being a defined benefit to a defined contribution, which is their 401(k) plan. None of the GM or Chrysler employees today accrue benefits in a pension plan, and they contribute to 401(k). They have some legacy liabilities, but those are frozen.

A number of things change in the auto business in the bankruptcy. The long and short of it is that Detroit went from one of the worst places on the planet to build a car, to one of the best. Today there is no Midwestern auto plant in the US that is not being run 24/7 and 365 days nonstop. They have curtailed their summer and winter shutdowns. They are short of capacity. One reason is because it is just as cost effective to build a car in Detroit, rather than go to Mexico or other countries to build the vehicle. The delta is so small that the transport cost and any other additional costs would eat up the cost savings.

The business was restructured in a very effective way. With Fiat Chrysler, one of the best leaders in the past 100 years in the business was put in charge of running this business, and he did a great job. You can look at Jeep, for example. Jeep used to sell a quarter million Jeeps a year in 2008-2009. They are at about 1.5 million now, six or seven years later. They have built on four continents and very soon they are going to be making Jeeps in India. They already started making them in China. The Wrangler, which is one of the sub-brands of Jeep, is approaching about a half a million. What used to be quarter million in all Jeeps, the Wrangler is at about half a million and they print money on them. They are short about 70,000 Jeeps in capacity in the US. If they could produce another 70,000, they could sell them at full price, and they have very high margins on these. The same goes for the Ram trucks.

Sergio has taken the North American footprint and he is moving it towards Jeeps, trucks and mini vans, and those margins are climbing. They release five-year plans. They have a 2018 plan that was published. It says that in 2018 they get to about \$9 billion pretax in income across the company. In fact, the market cap might be less than \$8 billion. If you believe Sergio, then two

years from now the business is approaching one times earnings. Sergio says that they are heading to \$9 billion pretax, which I think is conservative. I think he will up the number.

In a few weeks they are going to revise their plan. I think they will revise it to north of \$10 billion and I think that number is going up. All the analysts have them at a third of that number. There is a huge disconnect between the ways Fiat internally views the business and how the analyst community views it. For example, the analyst community has a lot of difficulty with stocks that are selling at \$10 and worth \$70. I have never seen an analyst report which says this is at \$10 and our price target is \$40. What I see is that it is at \$10 and our price target is \$13.

I remember this with India when I was looking at one of the businesses - the one that did a 100X. I knew the business really well because they were in the same IT Services industry that I was in. The broker said that they did research on this company and asked if I wanted to meet their analyst. I agreed to meet their analyst. The stock was at 40 rupees and the report said it was worth about 55 rupees. I asked how he came up with the 55 rupees, and he started to talk about future earnings and whatever else. I said the company had real estate in Hyderabad and they had a really good business, but they had hard assets. The hard assets were about three times the stock price on a conservative basis. The business was growing 50 percent a year and they had huge operating margins. I knew that I would make many times my money and I knew the 55 rupee stock price was not right. I didn't tell the analyst that, but they should have said it was going to be 500 because it was quite apparent.

Fiat Chrysler is hated and unloved because anything in Italy right now is hated and unloved, even though they have very little sales in Italy. The auto business is hated and unloved because of all the reasons they should be hated and unloved. The numbers are such a big change from the past that analysts have a hard time getting their arms around it. Even the three or five times number may be too low because they have the Grand Wagoneer and the Wagoneer coming out in the 2020 time frame, and some of the India sales really take off in the 2020s. Their finance arm gets built out in another five or six years. We are likely to be done with this in two or three years. It would not surprise me if we look back and say we could have got another double or triple from where we sold. .

The thing about equity investing is that we are on the lowest rung of the capital structure and the investors basically get the crumbs. The future is uncertain in terms of any business. Weird things can take place but it's hard to see things happening that could make this a mistake. Time will tell. We put 10% of our assets into it and haven't put in anymore, so we will just stick with it for some time.

One other thing is that analysts try to do these quick stabs. They say they are at peak autos and have sales at the highest level. We may be at peak autos in the US, but it's more of a plateau. I think it's going to stay there for a while because the fleet is sold and the population has gone up. At the same time, Latin America is at the bottom. The bottom line is that you can't have civilization without transportation. We saw that in the US in 2008-2009 when the volumes went down, and they came roaring back in a few years even though the incomes had not risen and the unemployment was still high. Even now we are seeing the 17-18 million unit volumes in the US with the construction of new homes. This is the big catalyst for auto sales and truck sales which

have not really caught up to replacement level. The US new home construction is approaching a ten year high at about 600-700 thousand homes/year, and the replacement is about a million. We are still not where we need to be.

There are a number of tailwinds that Fiat Chrysler has. One huge tailwind they have today is that their volumes in China are zero. China is the largest auto market and they love their Jeeps. They are on track and in a few years they will be doing half a million Jeeps a year in China alone. This is my quick synopsis since I rarely talk about investments that we presently own. I just wanted to give you a sense of what's going on.

Slides 50-51:

These are some of the companies where we've had positions in the past. You will see that there is no pattern in this, and we have gone wherever value exists. Sometimes we made money and once in a while we lost money, but overall things have worked out. I dislike the auto, aviation and airline industries, but we have about 48% of our assets in autos and 12% in aviation and airlines which is 60% of the portfolio. We have 22% in companies based outside the US and that excludes companies like Ferrari. I have more than 22% if I include companies in the auto or aviation industry that are based outside the US. Excluding auto and aviation, 22% is outside the US.

If you look at the Pabrai Funds portfolio, there is 48% autos, 12% aviation, 22% foreign and 18% other (including cash). The 18% is very weird and strange stuff. It's not Berkshire Hathaway. The reason why we have this kind of strange portfolio isn't because we wanted to go hunting in these places that I hate, but because we found value in these places. The reason why we found value in these places is because I'm not a macro man. If you look at the macro guy, things are either fairly priced or overpriced almost across the board. The only things that we've been able to find that are worth investing in are quirky things. That wasn't the case through most of our history but it's the case right now.

Slide 52:

Here are some of the Pabrai Funds and Dhandho service partners. PricewaterhouseCoopers is our auditor for Pabrai Funds. Grant Thornton and BDO do work for us with Dhandho. Liccar does our books on both sides, but mostly Pabrai Funds. Kotak Mahindra was the 150x investment, and they are our broker for the few investments we have in India. We use Cambria for our SEC exemptions and index provider for the Dhandho Funds business. K&L Gates is our legal counsel for Dhandho.

Slide 53:

This is the Irvine team.

Slide 54:

This is our Dhandho team in San Juan. The picture was taken the summer of 2015 when we had our interns working during the summer and some of them are on our team now.

Slide 55:

I will go through a little bit of background on Dhandho. Dhandho has had some challenges in the last couple of years. We started out at \$10 NAV and we took a hiccup with Horsehead. We had about 10% of our assets in Horsehead which didn't go well. Then we had a little bit of a headwind with Stonetrust Insurance. We had other startups, investments, overhead etc. We are down approximately 20% from where we started in terms of book value. Intrinsic value is a little harder to glean because many of the things that we have, such as our Dhandho Funds, is very embryonic. I think if we were to look at intrinsic value it would be past the \$10 dollars and beyond, but it's hard to put a number on it right now.

Slide 56:

We have owned Stonetrust since 2015. This slide goes through a history of the company for the last 17 years. The second column is the premiums earned over the years and you can see how the premium has increased. Stonetrust has increased its premiums quite nicely over the years. When we bought the business, I specifically requested that Tim not focus on growth, but to focus on underwriting discipline. I also told him that we don't have a problem if the business shrinks.

We also want to look at the marginal accounts which may or may not be worth keeping, and just be a little careful about what we want to do. The book of business that Stonetrust has today is superior to the book it had before we acquired them. They took out a bunch of folks who were very competitive in terms of premiums, a lot of claims coming in and the usage of their claims. If you look at their combined ratios over the years, it is actually a very good report card for most insurers.

In 2009-2011 the combined ratios went out of whack and they went well over a hundred. In 2012, Tim almost completely changed the team that reported to him directly. I think that everyone there now came in after 2012. There was a lot of restructuring that went on partly because the company had outgrown what had served it well in the early years. Then from 2012 on, they got back to their discipline.

Unfortunately what happened after Dhandho bought the business, as you can see in the second column, is that their combined ratios had adverse development going back to years before we purchased. One thing you would normally get when you buy an insurance company is reps and warranties. They would tell us reserves are X, investments are Y and claims are going to be Z. If things don't turn out that way we have recourse to go back. Because Stonetrust was a mutual company, we had very limited ability to get recourse. The regulators wanted mutual companies owned by the policy holders to pay the policy holders a check and they were done. We could not go back to the public and say, "By the way, the reserves are different and we want you to send back 10% of the check". Basically we had to make a call on where we stand on reserves and if we were comfortable.

The whole thing went against us to the tune of \$5.3 million. We had about \$1.5 million of recourse and we got a little bit more from carrying back on taxes. The gross number is \$5.3 but the net

number is much less than that. We had that to deal with. As you can see, the report card for Stonetrust over the years is quite good. I think the business is a better business today than when we bought it.

We just finished the re-domestication of Stonetrust in Nebraska. Insurance companies are regulated at the state level. Stonetrust was domiciled in Louisiana and Louisiana's insurance code is very convoluted from an investment perspective, and it's uncompetitive in terms of premium taxes. The more business Stonetrust did outside Louisiana, the bigger the penalty they paid. We did a search across all the states. I don't know whether the chicken came first or the egg, but Nebraska ended up being one of the best states for basing an insurer. The investment statutes are very attractive and the premium taxes are basically the most favored nation. We are now Nebraska domiciled and need to have at least one meeting a year in Omaha. That will probably be in early May. This has already allowed us some flexibility that we didn't have. For example, one rule in Louisiana is that the insurer cannot own any foreign stocks. Nebraska doesn't have any such guidelines. This is one example of some of the changes, and there are many more changes that make both the insurance side and the investment side work better.

Stonetrust does business in 5 states, they are licensed in 25 and they continue to get licenses in more states. They are conservative and even though they understand workers comp very well, each state has its own nuances and they have to study the states very carefully. We may start doing business in Nebraska and in a few other states, so that has some upside.

Slide 57:

Dhandho Junoon is a startup where we created an ETF and it launched on April 1, 2016. We ran into a little bit of a hiccup in the sense that ETFs rely on SEC exemptions. We used another firm's exemption. We have had some trouble and it's been very hard working with them. We decided to move the fund to another provider, Cambria. I think this will work a lot better.

While we move it over, we cannot have the assets grow. One of the steps is that we need to have a unit holder vote to approve this move. Basically what we did is that we own more than 50% of the units and we don't market for another two or three months when we finish the voting. Then we can expand.

We filed one patent. The group has done good work and we had another breakthrough in the last couple of weeks. In the long-term, I think Dhandho will outperform the S&P somewhere between 2-3% a year. This is very significant for an ETF, which is automated, to be able to do that. If this actually holds true in the next 10-15 years, it will scale quite nicely. The good news with the startup is that we have invested about \$1.5 million in the ETF so far and our burn rate will probably be around \$1 million a year. Relative to the capital at Dhandho, this is a small piece of the pie, and it can actually give us some tailwinds which are quite significant.

Ad: Chrysler Pacifica Exhausted Dad Commercial

Ad: Fiat 500S What Bad Boys Drive 2 Commercial

Q&A

Q: I'd like to know your thoughts about the wide discount you mentioned between your intrinsic value and the market price of your securities. I was trying to figure out what is the biggest driver of that discount - are the earnings significantly below what you expect them to be, which is what you talked about with Fiat; or is it that the multiples are significantly below where they are going to be from the market perspective?

A: Markets are discounting mechanisms. The markets tend to look deep into the future. They try to have some view on what the business looks like 5 years or 10 years from now and then get to a number. They can over-shoot that or under-shoot that because that is not an easy thing for markets to do. Facebook for example, trades at a relatively high multiple. If you look at the multiple of Apple, it had a relatively low multiple to earnings and Facebook has a relatively high multiple to earnings. Why is that? The market is basically saying that they believe there are higher streams of cash flow coming in the future from Facebook than there are from Apple. That is what the market believes. If it prices Apple at 10 times earnings and it prices Facebook, at for example, 30 times earnings, it is saying that implicitly the market is assuming that in the future Facebook will produce more cash flows relative to where the cash flows are today than Apple. Apple has cash flow today and they are not expecting them to grow a lot. These discounting mechanisms that the market uses is based on the best information that the market has. And sometimes markets blow it.

So for example, there was Myspace at one point sitting at a huge valuation. Clearly that deep look into the future did not pan out. Or you can take a stock like Amazon and if you had looked at it in 2003, Amazon was something like \$10 or \$12 a share. At that point looking deep into the future, the markets did not believe that Amazon would do what they did. Today when the markets look at Amazon, again they give it a very significant multiple because they expect it to do amazing things in the future.

For companies like GM or Fiat, one of the difficulties markets have is that they see incredible flux. You have Tesla, autonomous driving, car-sharing and also young people maybe not interested in getting a driver's license. You have a lot of different things going on. You can see that Ford, GM and of course Fiat is more extreme. They are priced relatively low based on their earnings and so the market has a view that the future earnings of these companies are not going to be that great or may not even keep up with where they are today. We have a view that is somewhat different from that. Time will tell whether the market is right or not. That is why you see this.

Q: If I own a share in Dhandho and there is an asset value and I have \$4 of earnings from all of the operations that we own - will I see more of the value come from an increase in the multiple or an increase in the earnings? Is my business under-earning from an earnings perspective or from a multiples perspective? What is the biggest driver?

A: If I were to look at something like Fiat, it is both. There is an earnings expansion taking place and probably a multiple expansion that will take place as well. It will come from both of those. It just depends on which business you are talking about, but I think this is what it is for Fiat.

Q: I had a few questions on Dhandho. Can you talk a little bit about the intrinsic value and where you think Dhandho is at now? I know originally there were plans to go public with Dhandho. What is going on with that? You also indicated in your last letter that you have about 10% of the position in Fiat and 10% of the position of Dhandho in GM. Can you give some light on how much of your portfolio is in common stock and other stuff?

A: A big piece of Dhandho is Stonetrust Insurance. If you take a high level view, we raised about \$150 million and spent about \$65 million or so in the purchase of Stonetrust. It is about 40% of the pie, which is why I talked about it. We haven't bought any other operating business - it's the only one we bought. It is outside of the insurance company and at the holding company level that we have a significant cash position. We have a few common stocks like GM and Fiat. We have a relatively small investment that we made in Dhandho Funds. About 1% of the capital we raised has gone into Dhandho Funds. We have a mix of different assets. We have public equities, a private insurance company and we also have a business in incubation. We have both our public equities and our cash position that can be used for another acquisition. If something showed up, we could sell our equities and buy another company. It is opportunistic and we'll see what happens.

In terms of going public with Dhandho, this would not be the right time to take it public. We have an embryonic startup which would be very hard for the market to ascribe value to, and we have an insurance company that has taken some stumbles recently. My best guess is that maybe in the next two or three years we set the ship up properly. At that point we can evaluate whether the entire mother-ship goes public, or if we just look at Dhandho Funds and whether that should be private or public. We aren't in a position where we can have a good offering with good demand today, and I don't think that would happen for at least a year or two or more. Once the dust settles we will evaluate that.

Q: One other question to follow up. When you talk about the 10% of the overall business, which number are you starting from on the 10%?

A: \$150 million.

Q: So about \$15 million?

A: Yes, \$15 million. One other thing I should say is that we have the \$150 million. If you look at Stonetrust which is about \$60 million, it actually has about \$120 million of cash and securities because it has float. I'm not talking about that. To give you a sense of what is in there, there is approximately a \$45 million bond portfolio, approximately a \$48 million stock portfolio, about \$30 million in cash and there is a building which is their offices (and they rent out other parts), which is worth about \$5.5 million. These are some of the pieces that are in Stonetrust. Another piece of optionality we have that has happened with the move to Nebraska is that we get a lot more flexibility in how those assets are deployed. Within Stonetrust Insurance it is regulated. There are limits to what we can do and cannot do, but we have some flexibility to do things in there as well.

Q: My question may not be so good to ask, but I will ask anyway. What do you think went wrong with Horsehead? The second part of my question is one of your friends and unfortunately I don't

remember his name, a value investor and a pretty successful author went after the judge and the bondholders and pushed the judge to set aside the bondholders' settlement. Can you talk about that at all and what is going on?

A: I discussed Horsehead at length in one of our letters and I'm happy to discuss that here. The original purchase of Horsehead which was made in late 2008 was what I would say a classic Ben Graham net-net. At that time things were so dislocated in price, it was trading below the liquidation value of just cash and inventory. If you forgot about their plants and just took Horsehead's cash and inventory and liquidated it, it exceeded the market cap after paying all liabilities. There was about \$500 million of plants that were coming for free. For a company with a market cap of \$100 million, you are picking up almost half a billion of assets. During that time in November, December of 2008 there was a lot of dislocation. We invested in Horsehead, it played out and the stock price quadrupled within a year.

We had made a number of different bets in the commodity space at that time. We exited all of them because we actually had no losers in any of those bets and they all did very well. Horsehead was a company where in the subsequent year in 2009 and beyond, I studied the company in more detail. I liked many of the things that were going on with the business and it was somewhat of an unusual misunderstood business. They had made two acquisitions, Zolchem and INMETCO. Both of those acquisitions were done at very low multiples and were around two or three times earnings. These businesses very quickly produced significant value for the company and did very well.

What happened with Horsehead is that when we bought the company, they had no debt - it was a debt free business. They had a legacy plant, which was 80 years-old and it had an expensive cost structure. The CEO Jim Hensler, investigated technologies for them to produce zinc, which would environmentally be friendlier and take them down the cost curve. These plants actually came up very well in a couple of places. They raised a significant amount of debt and some convertible bonds that they issued to fund that plant. The plant was supposed to cost about \$350 million and they raised more than that.

So, what went wrong? First of all they had severe cost overruns. They had hedged all their production to make sure that their cash flows were stable. The hedges not only had cost overruns, but they had time overruns. The plant did not come in on budget and it also did not come in on time. As the plant kept getting delayed, they kept extending their hedges. Then in December of 2015 when the zinc prices collapsed, they could not roll their hedges anymore. Their cash flows got constrained and they weren't in a position where they could fund the plant. Eventually the company went into bankruptcy.

So what was the mistake? The mistake made here was that I should have been more cognizant about the fact that this was moving away from being debt free. In hindsight the correct way for the company to have embarked on this project would have been an equity raise. Take the dilution and raise the equity because at that time they had a high stock price. If they had raised the \$400 million or so in equity, it really didn't matter because you didn't have any covenants you were going to trip or anything that was going to happen. In this case they took high yield debt with a bunch of covenants.

I also found out later during the bankruptcy proceedings that the CEO had offers to buy some of their plants before they filed for bankruptcy. This was shocking to me because they could have sold those plants and avoided bankruptcy, but they chose not to do that. I think the reason he chose not to do that was because he wanted to keep the entire pie together. They were two independent businesses, Zolchem and INMETCO that could have been sold. Of course in December the pricing was low and they still could have raised north of \$100 million and the rest of the plants could have been sold for another \$350 million. In my opinion, Jim did not act in the interest of the shareholders and acted more in the interest of keeping the pieces together. It was not so much in the shareholder interest, but I think his interest was to see all these things work together, which is different from the shareholder interest.

The bankruptcy proceeding is over and the equity got wiped out. I don't know the details of the recourse that the equity investors have. What we did when they were going to file for bankruptcy was move our equity position toward a debt position to try and get a better recovery. We have a little recovery but not much better than the equity and it is very small. At this point I am not an expert of knowing or understanding what claims the equity has or how that will play out with the insurance companies and the courts. In fact my suggestion to equity holders is that they should pursue it, but I wouldn't hold my breath in terms of big recoveries.

Q: I am a technology entrepreneur completely incompetent at most financial stuff. I am a little competent at judging people's values and I am a big fan of your values. I have been in your fund initially from 2002 and very recently moved all of our eggs into the basket that we want you to have more control over, which is Dhandho. I have four or five quick questions about Dhandho. If you could please answer whatever you think is worth everybody else's time and ignore the rest. My first question, what is the current path to liquidity? You mentioned a time period of two to three years and the initial path to liquidity that investors had in mind was about two or three initial years. In your mind you laid out the window for the Pabrai portfolio as a five-year window where you are evaluating success. What kind of a window would you layout your paths to liquidity? Second, what is the buyback philosophy? If you feel that there is significant upside? Is there any company that is sitting on a lot of cash in the public stock market that might offer a buyback to investors. Some investors might have invested with a slightly different path to liquidity horizon for the investments. And my third question, what are the three key learnings from Dhandho?

A: We have some balls in the air right now that I am not able to discuss. We obviously care a lot about the fact that the current asset value is below where people invested, at least on a book value basis. We also care about the fact that some people may have assumed liquidity sooner than expected.

What we have done in some cases on an ad hoc basis was arrange sales so that if someone wanted to exit and someone else wanted to enter, we served as an introductory party to both sides. We have also looked at ourselves buying back someone's stake. The thing is that I am not overly keen on taking advantage of my own partners. For example, if we were to do buybacks, it would be around book value and we are not in that business. What I am saying is that if someone said that they were under duress and they needed liquidity, we would try to find some solution for them. One option we have is that we can look at it and buy it back, which we have done in the past. I

think if you ask me this question six months or a year from now, I could probably give you a little more color which I can't give you today, which will address some of those issues.

I would say that the learning from Dhandho is still going on. One learning I've had is that I was keen to own an insurance company because of all the history with Berkshire Hathaway and I wanted to learn the insurance business. In the last 20 months, I got quite an education in insurance and I know a lot more about it than I did 2 years ago. If I could put the toothpaste back in the tube, I would not be in the insurance business. We will try to figure out a way to put the toothpaste back in the tube.

We have a good insurance business and it will probably do well in the future, but there are attributes to the business which are very bothersome. These are not attributes for Stonetrust but they are attributes to the insurance industry. For example, any time Stonetrust sells a policy for worker's comp, the companies that buy the policy believe they will never file a claim. They think of it as a tax being imposed on them by government regulation because in most states worker's comp is required. Since they think of it as a tax, they want the lowest price. It becomes a business which is very difficult to have any type of a sustainable advantage on pricing versus your competitors.

This is not just happening with Stonetrust and it is the case across the board with insurance companies. There are some exceptions, for example, GEICO is an exception because they do have to compete but they have a lower cost structure. They have a mousetrap that works well because the cost structure is lower. We don't have a mousetrap that is in anyway different from the 200 other companies we compete with every day to get business. This is a negative in the business and I knew that before I went in. I have seen it at an individual policy level and also seen how business owners think about these things.

The second is that on the claims side, there is a lot of fraud. The numbers you saw on our slide were inclusive of all the fraud. Stonetrust does a lot of business in Louisiana because they are based in Louisiana. When Katrina hit Louisiana and about 18 months later, there was an incredible amount of spending by the Federal Government to revamp the infrastructure. Huge amounts of money came in to the state from the Federal Government and employment skyrocketed.

What normally happens in the Stonetrust business is that someone will complain about back pain from something that happened at work which no one can diagnose. If they were to tell their employer I hurt my back because I was on a ladder and I pulled my back, it's considered a worker's comp claim. Nobody can really figure out whether they actually have the pain or not. When I look at the at the individual claim level and I see all the back pain claims, those back pain claims went close to zero when the Federal Government came in with all that money. People who were making \$10-\$15 an hour were getting jobs which were in the \$20-\$30 an hour range because they wanted these infrastructures built. Suddenly all the backs became great and instead of sitting at home watching Jerry Springer and collecting \$12 an hour, they could actually go work and make \$25 and the incentives to work were there.

In that year, Stonetrust's combined ratio was about 77% and that is real claims. This is a business based on current pricing that should be making 20% margins before any money is made on

investments. That doesn't happen because we have this layer of fraud which is across the industry. What I can say is that I have seen the underbelly of this industry and I don't wish to see more of it. It is very unlikely that we will buy another insurance company. I don't think it's in the cards and we aren't going to go there.

We are going to try and figure out how to make this work. It works pretty well and we'll figure out how to make it work better. One learning is to forget about insurance. In fact I think that Berkshire Hathaway would have done better long-term if they weren't in the insurance business. They have some very unusual businesses. I think that GEICO is a great business, Ajit Jain's reinsurance business is a good business and then some aspects of National Indemnity are good, but the rest of it is exactly the way I described it. They face all these issues and all the problems that come with it. Those combined ratios I put up are better than the Berkshire combined ratios. Stonetrust over the history has actually done significantly better than average. Even though they have done better than average, it is not a business I crave and aspire to be in long term and we will figure that out.

This is one learning and the other learning is that I had forgotten how much heavy lifting startups take. We have a great mousetrap in the making, but it does take effort and it interferes with the gentleman with a leisure lifestyle.

Q: I have two quick questions. My first question is, when you find a discrepancy between the intrinsic value and the current market price, is that always an immediate buy or do you take into account macro factors and sometimes delay that transaction to the future? My second question - you just mentioned that you forgot how much work and effort it is to be involved in a startup. Do you think that side of things has distracted you recently in terms of your other investing or is it completely separate?

A: You do want to understand the macro frameworks under which your companies are going to operate long-term, but I would say that macro is always hard to figure out. It can be very complicated and you can get lost. For most businesses there are two or three factors that drive the outcome. The important thing is that you have honed in on those two or three factors. Normally in most investments that we make, micro factors will out-trump macro factors. For example, we can look again at the question on Horsehead and why Horsehead went under. We can say that the zinc prices went up and so on, but quite frankly it was the decision internal to the company to build that plant and finance it in a certain way. That was the crux of why it went under and it had nothing to do with external factors. If they had financed it in a different way, the macro factors wouldn't have mattered that much. Say for example, I own a McDonald's franchise in Aliso Viejo. The affect that happens with long-term sales is whether a Burger King opens across the street or not. The micro factors around a business are going to have a lot more impact than macro factors. You are better off having a deeper understanding of the factors that are going to sway the business. I would say that in the case of Fiat Chrysler and whether or not Sergio Marchionne is there or not, has a huge impact. That has a bigger impact than whether unemployment moves up and down by even by 1%. This is how I look at it.

As for your second question about the startups – it has taken some time, but I enjoy equity research. I spend a lot of time reading and thinking and I don't think that there is any change in that aspect.

In general we are in an environment where there aren't many things that are mispriced, at least in the US at this time. For the most part when we look at stuff, we are not able to find too many things that look exciting or interesting and the startup hasn't had any impact on that front.

Q: I want to say that your humility and the way you conduct your life has really affected my conduct and my life and I want to thank you. My question is piggybacking off all the intrinsic value questions. I think you put up a slide or you referred to something about Ben Graham. I forgot the quote but it was something about the invisible hand or the weighing machine. Basically the idea is that intrinsic value is a catalyst for stock price conversions in and of itself, which I completely agree with. My question is how much should a value investor focus on how quickly conversions happens and whether value investors should even care about that because as a value investor you already submit yourself and you can't time markets?

A: We certainly cannot control when convergence happens. What I have always historically assumed is that when we try to buy things, we usually try to buy things for \$0.50 or less and we are trying to get at least a double. I usually want to see or make an implicit assumption that in two or three years, we get that convergence. It is not a hard and fast rule.

For example, we can look at General Motors. We invested in 2012 and now in 2016 we have about a 30% increase in our portfolio value, but nowhere near where I thought it would be after four years. This has taken longer than I would have thought. Fiat has taken a little bit less, in terms of the first bump. The number one scale to bring to bear in the investment business is patience and not be fixated on why this isn't converging. Patience is very important and you have to be willing to let things run.

Recently I was looking back at when I first started investing in 1995. Only about a year had passed since I heard about Warren Buffett for the first time. I had been reading a lot and I had about \$1 million with me. I thought we can't just keep reading. We needed to act to see how we can actually do. I started investing that \$1 million. Initially there were a total of 14 stocks that I ended up buying before that was fully invested. Four of the 14 stocks were in India. At that time India didn't have electronic trading so it took me about four months to get set up to buy the stocks in India. I had to physically be in Mumbai to buy the stocks. I actually received physical stock certificates and we didn't even have electronic custody. I was not very comfortable with all of this so I only invested \$30,000, 3% of that \$1 million in 1995 that went into the four companies in India.

The one company that I was most excited about and had the greatest conviction on, I made half of the pie. The allocation was: \$15,000 went to one company, \$8,000 went to another company, about \$6,500 went to a third company and then \$1,500 went to the last one. I bought these four companies and because it was so painful to buy them, when I received the stock certificates I placed them in a drawer and I decided not to touch them because I wanted to let them all run and see what happens. I did nothing with these stocks for five years.

Then we get to 2000 and the one company that I put \$15,000 into had gone up 130 times what I paid for it. It blew my mind and I never expected that. What happened was they had got caught up in this whole dotcom frenzy and they had spun out an IT company. Obviously I looked at the

price, but I hadn't looked at the detail. I looked at the financials to see what was going on here because this is so ridiculous. The company had done really well over the years, with their sales and earnings having gone up at ridiculous multiples.

This was March 2000, so I figured out how to sell. I sent all of the stocks to India and I sold the whole thing. The whole thing sold within 5% of the peak price and then it dropped. I cleared, including exchange rates going against me, \$1.5 million on a \$15,000 investment. I wasn't even sure I would be able to get the money out of India. I told them to wire it to the US and the next day it came into my account. Wow! This whole thing worked and it was great.

Then I had these three other stocks which we had also held for five years and they hadn't done much. None of them were tech companies and this was the only tech company. What was happening during this time was that all the money was going into the Yahoos and the Amazons and all the money was coming out of the Berkshire Hathaway's. There was kind of a vacuuming going on and so these three companies were just mainstream companies and they hadn't done much. Since we had such a great run where \$30,000 became \$1.5 million and why should we care about the other three, I decided to sell them. In the next year I got rid of them all.

I recently went back and looked at what has happened to these companies. If I had held from then to now, one company was a 150X, another one was about 120X and the third one was about a 50% loss and it went nowhere. Unfortunately we missed two very long runs, but to capture those runs I would have had to do nothing for 21 years. I would have just had to sit and do nothing and I am sure it would have gone all over the place.

So what is the lesson here? I learned a lesson here and Charlie Munger says this also - He says that all of us have a limited quota of these huge home runs that are going to somehow show up in our portfolios. We are not going to be gifted to have them show up frequently, but they will show up once in a while. What you need to do is be smart enough to hang on to them for dear life when they do show up. That is very hard to do because as value investors if I buy something at 10 times earnings, I think it is worth 17 or 20 times earnings. If it gets to 30 times earnings and we are out of there. Some of these businesses have attributes that you need to let them run and let them stay. I actually haven't figured out a way, but I keep thinking about those businesses and what I could have done to have a better outcome. Now the outcome still wasn't that bad and we actually captured one of them. If I had kept all of them and optimized it, we would have end up at something close to \$2.7 million. We got \$1.5 million which is not the end of the world and that's still pretty good. Charlie Munger says, "Why should it be easy to get rich"? These are not easy things to figure out. I don't know if the time to sell Fiat is 2018 or 2019, and not 2025. How would I know that and I don't know that. We just do the best we can. The good news is that even when you sub-optimize, you still end up doing okay.

Q: I just have another Horsehead question. Last week at the confirmation hearing, Judge Sontchi said that The Unsecured Creditors Committee settled far too low and The Equity Committee ended up fighting The Unsecured Creditors Committee, in addition to the debtors on valuation and the valuation that they were pushing towards would have put the unsecured at a full dollar, well in excess of what they settled at. I know that you sat or participated in one --

A: What I can tell you is that the proceedings of The Unsecured Creditors Committee are confidential, so I am not at liberty to go into the details of what went on inside the Committee. What I can say is that in my own opinion Judge Sontchi is correct. There are seven votes on that Committee and Dhandho Funds had only one vote. That is all I can say about it.

Q: I was curious about what level of participation you had?

A: I can tell you about the participation and we were very engaged. If I look at The Equity Committee, The Equity Committee is all singing Kum Ba Yah together. They are all having dinner together and they are all deeply in love with each other.

Q: I was on The Equity Committee and we were singing everything.

A: Yes, exactly. So you were all in love with all your fellow Equity Committee members. The Unsecured Creditors Committee is more typical of a bankruptcy committee. There are differing interests on that committee and many of the interests unfortunately is just a part of the bankruptcy process. I am not talking about the UCC, but I would say in general, the bankruptcy process is designed to be very heavily weighted in the favor of the DIP lenders and the pivotal securities, which are the secured securities. It is just lopsided in that direction. We did not have people on The Unsecured Committee which was six clones of Mohnish. It would have been great if that was the case. We had one Mohnish or my Rep on the committee, and we had six other folks who apparently saw life differently.

Q: You are usually a passive investor and you don't normally join Boards. In the case of Horsehead, you owned a large percentage and I am curious if you wished you had joined the Board or petitioned for a seat in order to prevent them from getting into debt or are you going to continue with the more passive strategy?

A: The influence on Boards is overrated and overestimated. If you think about what drives our capitalist system, it is the entrepreneur and a leader. Berkshire Hathaway is a great example. Most of the time when Berkshire is buying companies or doing anything, Warren never consults the Board. Half of the time the Board doesn't even know what is going on. He defines the role of the Berkshire Board as being focused on succession and that's how he looks at it. If I were running a public company, I would be required to have a Board as a public company. If that Board acted in a manner that stifled either my leadership or entrepreneur abilities or independent thought, you would lose most of the interest I would have in running that business. I take a very jaundiced view of activism. Investors are better off focusing on businesses where they have these superstar leaders and entrepreneurs running the place. Every time I buy into a business, I assume it is not the Board that calls the shots; I assume it is the leader that calls it.

Let's take General Motors, for example, it has a Board, but it is Mary Barra that is running the company. I believe if they don't allow Mary to run the company completely the way she wants, we are not going to get the right output out of Mary. There are many entrepreneurs in the room who will agree with that. The Board's decision in terms of Horsehead is very simple - is Jim Hensler the right person to run the company or not, and not to tell Jim what to do. Let's say I joined the Board of Horsehead; I would never join the Board of Horsehead with the idea of trying

to change Jim. Like Warren says, that is not going to work any better in the Board room than in your marriage. The most important decision you have to make is who your spouse is; not how you are going to change her.

Theoretically there are these Boards, there is governance and the Board represents the shareholders. A lot of that, in my opinion, is theoretical. The practical realities are that a company is run by strong leaders who act in their best interest and is aligned with the shareholder, employee and customer interest, all of that put together. This is how we should look at things. I am not invested in Fiat because it has a great Board. I am interested in Fiat because there is Sergio. I have to believe that I would not have the investment if I believed that Sergio is being stifled by his Board. I would not want to be invested in that company and that is how I look at it. So the idea of me joining Boards - I'd rather have a root canal and I am not looking to join Boards.

Q: My question is regarding the investment in Fiat Chrysler. You talked about how you could expect almost \$9 billion dollar earnings by 2018-19. What is the downside case because typically whenever you are looking at investments you are also looking at the downside case?

A: It's really hard to see a downside and I know this is a strange answer to give. In the \$9 billion there are some assumptions. One assumption is that Jeep produces 2 million units a year. Today Jeep is producing 1.4 million units a year. They just set up manufacturing in China which is expanding, and it will probably get to about 5 million in 2 or 3 years. They are already on pace in China at about 150,000 units or so, and they are going faster than they can make them. The same is happening in the US and they are undersupplied. If you go to a Jeep dealer in the US, the average incentive for most models is about \$3,000 and you will be hard-pressed to get that on most Jeep models. In fact for some Jeep models like the Wrangler, you would probably have to order it and may pay close to list price for it.

Jeep has a plant in Pernambuco and is now producing Jeeps in Brazil. Just to give you a little bit of detail on Jeep and these volumes, the 1.4 million today and going to 2 million is mostly in about 10 of the 200 countries in the world. They believe that if they have a slack in any of these countries, they can have that slack taken away by opening up distribution in other countries. Jeep is a unique asset - they are a global brand and they are recognized globally. In fact in China, the term that people use for SUV is "Jeep".

We are already seeing a secular shift in the US from cars to SUVs. There is a clear and definitive shift and it's almost a permanent shift. What can derail that? Oil prices going up may have an impact. The cars which produced 12-17 miles/gallon before are the same cars that are producing 25-30 miles/gallon today. What's happened with the autos isn't just that oil prices have gone down; it's that the efficiencies have gone up as well. We could see oil prices going up again, but personally I would not bank on that. I would say the odds of seeing something around \$70/barrel on oil on any sustained basis of 6 months or more over the next 3-4 years is as close to zero as you can get. There is still a lot of entrepreneurial innovation going on in the oil business with all the fracking and everything else that's happening. They have fields in Texas now where they are profitable at \$37-40 oil and fracking.

For profitability, simplistically think of something like \$3,000 profit/Jeep. If you take out half a million of Chinese Jeeps because those are the joint ventures, you have 1.5 million Jeeps. You have about \$4.5 billion coming from Jeep, and I think the \$3,000 is understated because they have margins higher than that. The Ram trucks are also very profitable and somewhere in the \$3,000 to \$5,000 per truck range. They have 600,000 units of those - that's another \$3 billion. I'm not even including a lot of the pieces like the Fiat 500, the Maserati and others. Most of this is coming from 3 or 4 brands, and those 3 or 4 brands are very constrained.

What's stopping their earnings from going even higher is how quickly they can bring these things on line. For example, the North American footprint is shifting from some cars to 100% trucks and SUVs. When Chrysler makes something like the Dodge Dart, they might make \$500 or \$1,000 dollars on that car. But when that capacity gets shifted to Ram 1500 or to a Grand Cherokee, that shifts to \$3,000 to \$5,000 per unit. This is not so much a US story, but it's a global story and it does rely on the US markets remaining relatively healthy. Today as I speak to you, they are just not able to supply the current demand and they have demands in other places. In the \$9 billion, we haven't counted any kind of major recovery in Latin America, Argentina or Brazil. The longer they go on without recovering, the quicker the ramp up on cars because those cars keep aging every month and every year.

Q: Thank you Mohnish for giving us the opportunity to attend this meeting. My question is regarding Ford. What do you think of Ford and their investment in technology?

A: We have someone who works for Ford here. Maybe you can introduce yourself and then give us your two cents on Ford.

Speaker: I work for Ford Motor Company in Detroit. With regards to the technology investment that is going to take the automotive companies forward, Ford is investing heavily into autonomous and future technologies. Ford and GM are in the cutting edge in terms of technology investment. We see Ford coming into the market with autonomous driving in about 2020-2021. That is what's published on the Ford website. Overall, all the automotive companies today are trying to become more service providers as the technology takes us into autonomous vehicles. They are trying to integrate what it takes to become a mobility company rather than just a commodity or a manufacturer of cars. That's where the industry is heading. In terms of technology investment which is key for the automotive growth, Ford, GM and Volkswagen in Europe are investing heavily into autonomous technology.

A: Let me add a little to the question about Ford. Ford is different from GM and Chrysler in the sense that it didn't go through a bankruptcy. The good news is that the Ford family and the Ford Foundation kept its stake and they weren't wiped out. The bad news is they did not get to cleanse themselves completely like the other two did. Ford had a bit more baggage from the past. They had Alan Mulally who cleaned up a lot of it. They had more baggage because they couldn't take care of some of the things since they didn't go through bankruptcy. Having said that, Ford is a very valid investment because it trades quite cheaply. They have the number one position in trucks, and they print money on those trucks. They have done a very good job and they are ahead. Fiat is the furthest behind in terms of platform integration. With Alan, Ford has taken their global

volumes and they have shrunk down their main architectures into 3 or 4 big buckets so that they can run these plants in those architectures.

GM is probably 2 or 3 years behind Ford. They are moving down that path which is why they are getting billions of dollars in benefits from that. Fiat Chrysler is probably another couple of years behind GM. They are all moving towards the common architectures which give them huge tailwinds. In the case of GM, they are getting about \$5 billion in cost out and Ford has already captured a lot of that. I think that all 3 of them are perfectly fine investments. None of them have the upside that Fiat has because quite simply they are not as cheap. The other 2 are not getting to one-time pretax earnings in multiple in 2018 like Fiat does.

Q: Where do you see Fiat Chrysler on autonomous driving?

A: Sergio's view, which I don't completely disagree with, is that GM and Ford are wasting money. He believes that the OEMs should not be investing in things like autonomous driving. He believes there will be enough of a response on that front from the supplier base, which will bring in those features. That supplier base is working very aggressively on the same things. Sergio believes that in the next 5 years, there will be a lot of things in the press - Ford is ahead by 6 months, or GM is doing this, or crude automation has done something, or Tesla has done something. And there will be a lot of response to all those things in market valuations. He thinks that's all noise and irrelevant.

The thing about autonomous driving is you have to define what you mean by it. There are different levels of autonomous driving and most of us think that autonomous driving is a Level 5. This will not happen for at least another 15 or perhaps 20 years. Level 5 driving would be getting into the back seat of a car with no driver. I tell the car to take me to Granny's house and it takes me there. Unfortunately that's not happening for a while. So what people are talking about when they say auto-pilot and autonomous driving for the most part is for driving either on highways, on specific routes or under specific conditions. To really have a disruption of transport, we need to get to Level 5. Until then it's a feature thing that we want, and you cannot get the driver out completely.

For example in Pittsburgh, Uber announces that they have self-driving cars. The self-driving cars don't have one driver, it has two drivers. We go from what they are calling self-driving, which is not a zero driver car but a car with two drivers. The reason it has two drivers is the same reason why Google did not want to put a steering wheel in a self-driving car. Google found in its testing of self-driving cars that humans are incapable of stepping in when they need to when the car's auto features don't work.

The recent Tesla accident was an unfortunate tragedy when the person hit the tractor trailer. Any time you turn on cruise control, adaptive cruise control or any lane warning systems, drivers get complacent. When you see a car doing everything, we get even more complacent. Google has found that the human's ability to react in real time and take over when there is a problem is very limited. Another thing with humans is when you tell them to listen, keep your eyes on the road and not do anything while the car is driving. This doesn't happen because there are other distractions going on. The person who tragically died was watching a Harry Potter DVD. He wasn't supposed to be doing that while the car was driving itself. We are distracted even more

when we see the car doing things on its own. In my opinion, the fully autonomous Level 5 car that takes you from here to there without a driver may never happen globally because you can get to 99.9% but can't get to 100%. It might happen in 20 years in constrained environments, certain campuses, certain metro areas, certain dedicated lanes.

I would be in Sergio's camp and disagree slightly with the previous speaker. Sergio believes that the automakers are making so much money that they have a little free to spend. Sergio's perspective is that Fiat is not interested in wasting its money in autonomous anything because he believes the supplier base will come there. He also thinks that the driver assist features, (which I think is a better way to call it rather than "autonomous driving"), will be colorless. So when we buy a car, we will not be able to tell whose driver assist feature is embedded in the car.

Tesla just did this. Tesla used to have Mobileye, an Israeli company who provided a lot of their software for the autopilot. Mobileye freaked out with the accident, and they had a disagreement with Elon and Tesla on what the company was saying the car could do. They told them if they wanted to use their technology, they can't make all these claims and needed to tone it back because of the liability. Unfortunately the companies couldn't come to terms. I don't know all the details but Tesla dropped significant portions of the Mobileye software. They plugged in another company's software and did an upgrade that had more features.

I think the feature sets of driver assist will be colorless for the most part. This means that you won't be able to tell who has the underlying technology in a car. These companies are all using very similar parts. The other thing that gets lost in all of this and I think will change is the \$100,000 of electronics in the self-driving Uber cars. There was no trunk space in the Uber cars in Pittsburg that had two drivers. The entire trunk is computer and the roof had all kinds of electronics on it worth about \$100,000. No doubt that will go down a lot. But we are quite a bit away from where it is today to where you get it down to \$2,000 or \$3,000, and get it down to where there is no human intervention required.

Q: It's my first time here and I have so many questions. I have narrowed it down to three, quick ones. So my first question is on GM. You talk about GM and Fiat and their cash flow being \$10 billion. I couldn't really figure out where the necessary capex falls in there.

A: That's after capex.

Q: My second question then will be on AerCap. I know that you don't like to discuss your current holdings, but maybe if there is something that worries you, to avoid consistency bias, maybe you could share that. And my last question is that Berkshire has some Apple positions and Icahn used to invest in Apple. If you looked at Apple, what made you decide not to buy Apple? Or if you haven't looked at Apple, would you be interested in looking at Apple?

A: We will save talking about AerCap for another year when we don't own the company, but obviously we must like it because we own it.

Apple is a great company with some great tailwinds after the Samsung Note 7 issues. That was bad for Samsung but great for Apple. I think the Apple investment at Berkshire was made by Todd

Combs, and this fits Todd's patterns and the way he thinks. You have to always keep in mind that Todd and Ted have about \$10 billion each. They want to put things to work with at least a billion at a time. There is a universe of things that they would be interested in. Berkshire doesn't want to own more than 5% of a business because then they will have all kinds of filings. They prefer no more than 2% or 3%. If you are going to put a billion to work, you really need the market cap to be north of \$30 billion so that you are 3% of the company. I think the Berkshire universe for Todd and Ted is companies that have market cap within the \$30 billion - \$600 billion limited range.

Our universe is somewhat different at Pabrai Funds. Thankfully we are not constrained to those sorts of ranges. I think that Berkshire will make money on Apple and that will work out for them. It's not a business that I really spent a lot of time analyzing. One simple reason is that unlike my 1995 Indian stocks, there is no chance of a 150X on \$600 billion or a 100X or a 10X or even a 3X. It's an industry with rapid change even though we don't think of it that way. Knowing Todd, my guess is that he was probably attracted not so much on the iPhone and the iPad, but the App store and the recurring revenues around that, and the entire embedded base of devices that feed that ecosystem. It's a great model and it would probably take a long time for anyone to be able to dislocate them from that model. I find that people who use the iPhone are very unlikely to switch to other devices. People who use the Android are equally unlikely to switch over. It's like they own that market.

Q: This is my tenth Pabrai Funds meeting. I was 15 years old when I attended the first meeting and I want to thank you for all I have learned over the years from coming to these meetings. My question is from the 2009 meeting when you responded to a question and you discussed the benefit of holding cash to be available in a period where there is a large drawdown in securities prices. Today you mentioned that most of the markets you are looking at are either fairly valued or overvalued. Is it a prudent time for people to hold some cash on the sidelines?

A: I struggle with this even in our case. For example, we have a position in Ferrari and we have \$70 million of Ferrari stock. We have sold close to half of it. At present prices, Ferrari is not cheap. While I'm saying Fiat Chrysler gets to 1X pretax earnings, Ferrari is maybe sitting at 20X earnings. The market values that business quite dearly, and it's not a cheap stock. It's run by Sergio who in my opinion is one of the greatest managers we have ever seen. When you have great managers they can do things that will blow your mind in terms of where they can take the business and what they can do. I can come up with scenarios where Ferrari is very undervalued, and I can come up with scenarios where Ferrari is overvalued. I can come up with scenarios where in a market correction we take a big hit.

Quite frankly, I have kind of gone middle of the road, where I have eliminated some of it but I haven't gone all the way. It's an area I think about quite a bit - our portfolio, the amount of cash in our portfolio and whether that cash would be higher. At the same time I also look at our portfolio and I find that we don't own normal things. We don't own the S&P. If we have big market corrections, there is no doubt we will go down. The things that we own are incredibly valuable and they will show up eventually in the right side. My answer to your question in a long winded way is, I'm thinking deeply about it. I'm thinking about whether we should significantly boost our cash, and even let near and dear positions go in the interest of that. The environment is kind of hard to figure out.

At the same time there is a flip side to all of that, which is that we have this kind of barbell. We have extremely low interest rates and either fairly valued or slightly overvalued stocks in general. I don't think it's egregious and there are some stocks that have reached the old price, but mostly it's slightly overvalued. The thing is that if those interest rates are here to stay for a very long period and you are sitting in a low rate environment for 20 years, there is a very strong case to be made that stocks are undervalued. Why should you be able to collect a 6% or 7% dividend on Ford when you can't get that with Treasuries? That is a dichotomy that quite frankly doesn't make sense. You shouldn't be able to collect those types of dividends in this type of environment, but you are able to. The equity markets and the fixed income markets are out of sync with each other. They are out of sync in a manner that they haven't been in the past. For example, if you look at the early 80's, we had 18% interest rates and we had PEs of 6 on GE or Coke. Both of those are in sync with each other because why should you invest in Coke, if it won't give you more than 18% a year that you can get from Treasuries. We had a sync up at that point. We have a complete out of sync at this point and I don't know how to bridge that.

Q: I believe back in 2008, there was another company that went bankrupt and at that time you decided to limit investments in particular companies as a percentage of your portfolio. Did you change? I was wondering if Horsehead had exceeded that percentage and also, could you talk about the equity committee and the bankruptcy and what that means?

A: The equity committee is over because the bankruptcy is over. You are talking about the New York Times Gretchen Morgenson article and that was right before they finalized the bankruptcy. The trial and proceedings of the bankruptcy of Horsehead finished at the end of August and the article came out right before that. In all cases, we have never put more than 10% of our assets into one position. We didn't do that in the case of Horsehead or Delta Financial from 2008, and we have never done that to any position. We did make changes after 2008 in terms of the checklist - more checks and balances, and how we did things. We had a very benign run from 2009 til about 2014/2015 and almost no losers. On a \$500 million dollar portfolio, we had about \$5 million in losses and it was almost close to zero. Horsehead came into the portfolio in 2008. We had a run up and we did quite well on the company. There are lot of subtleties in terms of why that investment went the way it did.

The bottom line is that there was a mistake I made in the analysis after we had bought the business. Initially when we bought the business in 2008, it was a debt-free company. It had no debt, the current assets exceeded the liabilities and you could liquidate it. We had a 400% return on Horsehead 12 months after we bought it. It was a 4X.

The character of the company changed after about 2011 when they started adding on debt. They were building a plant and it went through a change. I can use the analogy of a frog in hot water. If you put a frog in hot water, it immediately jumps out. But if it's in lukewarm water and you gradually raise the temperature, it never jumps out and it dies. I don't know if that's true or not but that's the way the story goes.

That's kind of how it went with Horsehead. We were in the water and the temperature went up gradually. We should have jumped out because there were signals that were available that

unfortunately I didn't pay enough attention to. The other side of this is that we also had a number of factors come together at the same time. Zinc prices collapsed for a short period of time. But the time when they collapsed was the same time when the hedges were running out and the same time when the liquidity was running low.

If I look at the 10-12 year history of zinc prices, this three or four month period stands out just like financial crisis stands out. Very quickly zinc prices rebounded. If in the December-March of this year timeframe Horsehead didn't have the liquidity issues they ran into, they would have done fine. The second thing that the company did, which we found out in discovery and bankruptcy, was that they had offers on the table to sell assets in December. Management neither disclosed it nor acted on those offers. I was flying to India at the end of December and I received an email from Jim Hensler that he wanted to talk to me. I spoke to him at 1:30 in the morning while I was driving to the hotel. He was talking about the fact that they were running out of cash and they needed cash. I went through various scenarios with him, but he never mentioned to me that they had these offers. I think that was quite egregious.

I believe that the reason they never mentioned the offers is that Jim's objectives were very different from the shareholder's objectives. His objectives were to run the entire thing as one unit. He didn't want his child to be broken up in pieces. I think he knew that the moment he brought it up we would say well, that's a no-brainer - just go do that because you can always have manufacturing contracts where they will sell you the output. He needed all those plants to be together but he could have sold them. There were two businesses that were unrelated, and it could also have been sold.

The shareholders are upset, as they should be, because he didn't act in the best interest. From a Pabrai Funds perspective the mistake we made was not about Jim Hensler and him acting in this way or that way. The bigger mistake is that we should've realized much before that - the way the balance sheet had changed was a problem and we didn't realize that.

The equity committee did a good job. They tried to do the best they could, but it didn't work out and that case is over. The bankruptcy is over and the assets have been transferred to another entity.

Q: My question is regarding the auto industry - all the buzz, other than the autonomous vehicles, is the electric segment. GM and Tesla are aggressively promoting the small car segment in electric vehicles. Is there any particular reason why Fiat isn't promoting electric cars aggressively? I know there is a 500e, but that's all.

A: Fiat has the 500e. They have also released or are close to releasing a hybrid of the same type as the Pacifica van in the ad you saw. The hybrid version goes about 30 miles on an electric charge and then the gas engine kicks in. Sergio's perspective is that these are vehicles on which you cannot make money. He believes that the \$35,000 Model 3 which Tesla wants to produce cannot be produced profitably and sold at \$35,000. He also says that if it is actually possible, he will produce one at the same price and it will have Italian flair. Sergio is very high on return on invested capital. He is not interested in doing things just because the herd is doing them. They have shown that they can make electric cars. He believes he can ramp up on that curve fairly quickly, but he also believes that they cannot be produced at that price profitably. Sergio is not convinced that on a standalone basis electric cars make sense, but I think that he will react and respond if he sees it.

The thing about Sergio is that he is a smart guy. He also has studied the auto business at some length. In the auto business, they go through these waves. There was a wave a while back when all the auto companies wanted to own car rental companies and they all went and bought all these car rental companies. Then a few years later they sold all the car rental companies at a loss.

Sergio has seen a number of waves where they have destroyed capital in doing these different ventures. Part of the reason they do these ventures is that the industry at times is drowning in capital or drowning in profits like they are right now. It's not that the people at Ford or the people at GM are stupid. They are very smart as well but they believe that these bets are relatively small bets in the broad scheme of their cash flow. If GM is producing ten billion, what's wrong with taking a half a billion or a billion and hedging your bets. That's how I think they think about it. Sergio's perspective is that he doesn't want to take those kind of flyers.

GM has the Chevy Bolt coming out and the Bolt after incentives is \$30,000. I don't know whether GM actually makes money on that or not. But because they get all these average mileage boosts which helped them sell more trucks, they make a lot of money on the Silverado. Even if they lose a couple of thousand on each of those Bolts, they more than make up for it on the other side because it allows them to sell more trucks.

One of the things that has happened in the auto business which actually gets lost in translation is that over the decades the auto business actually has become far more capital efficient than we might think it is. What the auto companies actually do is they design vehicles, and they do the branding of vehicles. They do not sell the vehicles - they have a got a distribution network that sells them and they actually don't even manufacture the vehicles. We think they manufacture them but there are large chunks of these vehicles that show up on their assembly lines and then they put them together.

The reason why we can tell that they don't manufacture them is because if you buy a \$35,000 car, the labor content by GM or Ford on that car is along the lines of about \$1,700 - it's about five percent. There is a lot more labor than \$1,700 that goes into that car but most of that labor is not on GM's payroll or on Ford's payroll. It's in the supplier base. A lot of the capital intensity of the business has been pushed out to the supplier base. In effect, the industry is not as bad as we think it is. It's actually become a better industry over the years. As we get through one more wave of consolidation which hopefully will come in the 2020 timeframe or so and we shrink down little bit more, we will get even more efficiency on that.

Q: Could you comment on the process of the acquisition of companies? In regards to Dhandho, you mentioned in your Letter that there is so much money around and it is very difficult to buy new companies. Would you make any comments in that regard, and how is that process coming along? Is there anything new on the horizon?

A: What we have seen so far in terms of the market for private businesses in general is that it's quite an overheated market in the sense that the multiples are up there. The reason why the multiples are up is because of the interest rates. There are a lot of private equity firms who want to come in and lever up quite significantly so that they can justify very significant multiples

because of the leverage and the cost of the leverage. Our take has been to be patient on that front rather than trying to quickly do deals. We see a lot of promise and more return on the green field Dhandho Funds. We see a much higher ROI on that versus trying to buy a private company at this point and we also see relatively high ROIs on some public equity investments. For example, if I were to invest \$15 million of Dhandho's money in Fiat Chrysler stock, I wouldn't find much in the public, private, or any markets that would do better than that. It's just hard to come up with economics that do better than that.

Our take is to be opportunistic. If we aren't seeing great private market deals then we will be happy to sit on the sidelines. At this point I don't have anything in the hopper that looks promising, but we will wait and figure it out.

Q: My question is a follow on question from the previous question about Dhandho. Can you share with us your vision for the ETF Funds and how it's going to make investors in Dhandho rich?

A: Rich might be pushing it. The ETF Fund is a startup and we own all the equity in that. We also have all the downside in that we didn't pay for it, and we have a good team. I have had some experience with startups, and I've also had some experience with taking things that are very nebulous and getting them to some shape that makes sense. The economics of that business are excellent after it gets scaled.

The reason why we decided to go into the ETF business is because of what I would call one of Moses' Ten Commandments. There is actually a Commandment that comes from Warren Buffett and he says, "If you deliver above market returns they will swim to you in the middle of the Atlantic in shark infested waters to invest with you" - even if you are a leper, and the leper part I'm adding myself. We believe through our back tests that we have a mouse trap that in the long run beats the S&P quite soundly by 3% or more per year on average. It does that for many good reasons. We don't know today if in the real world it will do that, but we think it will. If we are able to deliver 2% better than the S&P in the next 10 years, I have no doubt there will be many billions of dollars in that ETF. It is a business that has almost 100% operating margins once you get past a certain size.

The economics of the business are very simple. If we have a \$100 million in the ETF, we will lose money. We break even on the business at \$200 million, and at around \$1 billion it starts making about \$3 or \$4 million a year. At something like \$10 billion, it is north of \$50 million a year and it goes up significantly. The ETF business is better than the mutual fund business or the hedge fund business because we have nothing to do. We don't have to manage or allocate the cash because it's all algorithms driven. There are a bunch of third party providers that do all the pieces and we just get quarterly checks for our fees.

The economics are good. We believe that if the 2% percent a year holds true, then it will have \$10 billion or more in it. If it has \$10 billion or more in it and we are making \$20 million a year, then the business is worth north of \$500 million and it's a very valuable business. If it doesn't do that, then the worst case scenario is we have lost that bet. The downside is that we may end up losing \$5 million. On the upside the very best case is making a few hundred million. That's the range of how it looks.

I don't think of it as making the Dhandho investors wealthy even though we have \$150 million that we raised. If the ETF becomes worth \$500 million and if everything else stayed the same, it would triple the value of Dhandho. The capital that we have invested is definitely a major home run because we would have made a hundred times of what we put into it. This is why we are doing that.

The other reason why the business is appealing to me is because it is good for humanity. If it actually does 2% better than the S&P, in 50 years, it will have a huge impact on a 20-something-year-old's life. We will obviously get some benefit because we make money, but I think most of the benefit from that ETF ends up with the people who own the ETF. These are the reasons why we decided to pursue this. We will see how it unfolds. We have been doing this for a little over a year now and I don't see any data points that tell me to turn off the faucet at this point.

Q: Are there any capacity constraints for the holdings in the ETF?

A: We have a capacity constraint just like with Berkshire where we don't want to own more than 5% of a stock for reasons of filings. The ETF basically deals with the 1,200 largest companies. The way I look at the business is very simple. If we know that it's not going to do the 2% or more per year, we will be the first to shut it down because we have no interest in marketing a subpar product. If it does do at least 2%/year, and even if we don't do a good job at marketing or anything else, it will still take off because it will get a Morningstar rating. It will get picked up and it will do its thing. During the back tests and the 4%/year, we had many 3-year periods where it does worse but over longer periods it makes up and does better. We will have periods which are up and down, but it's over the long haul on average that it does better. This is what we will have to watch for and see if it does that over the long haul.

Q: I'd like to know what opportunities you see for Dhandho in 2017, and what sort of metrics you are using to watch and measure the success.

A: A few things have changed, on what I had thought and mostly on what I had communicated, from when we initially raised the capital. The first thing I have experienced, and never realized, is that the purchase of private businesses in the environment that we are in right now is very difficult. There is a lot of private equity money, and there is a lot of capital in general that is sloshing around.

In terms of private businesses that might be for sale, it's a sellers' market. We've looked at a lot of businesses. Sometimes the business is not the quality we want so we are not interested. But even when we are interested, we may not get the pricing that makes sense. We did one deal, and there were no other deals after that. I'm skeptical about whether we can get any deals done in the private markets.

I had not planned for Dhandho to go into a startup business. That came about by accident. We stumbled upon some of these new ones, then we decided to go further and we decided to invest in it.

It's a no brainer for us to put efforts behind something like Dhandho Funds versus almost anything that we could do in the private market. Even if you compare something like Stonetrust and where we end up long term with Stonetrust, it is not going to be able to deliver huge spectacular returns. It's a regulated business, and it's a tough business.

There are pieces of Dhandho that are exciting. We have a small amount of capital in the Dhandho Funds space. If, for example, we end up investing \$5 million and had a 50X return on invested capital, at some point we have a business worth \$250 million.

We can look at it in terms of the whole ship and having raised \$150 million. If we keep everything else constant, we now have \$400 million. Even though one piece did so well, it moves the radar but it doesn't move the radar a whole lot. But that will be a great home run and I will take that. There are pieces that I think Dhandho will do well on. I think it will do well on its public equities portfolio. We have very significant cash condition, so we've got plenty of dry powder to work with. We've got about \$30 million in public equities and I think that will do well.

The other option is that if something shows up on the radar that's interesting, we will look at it. Depending on how these things play out, at some point we might decide that it may make sense to dividend out some of our capital. Give it back.

I told you that I don't see a lot of opportunities even in the public markets. Public markets have been very fully priced. It may come to a point, maybe six months or a year from now, when we are sitting on this capital, and we are not doing anything with it. I may come to the investors, and ask, "what do you prefer? Do you prefer that I hold on to it with the anticipation that you might find things good, or would you prefer it to be returned."

Right now, we are clearly down around 20%. I have no doubt that we will get past our \$10 starting point in the not too distance future. It may take a couple of years. Once we get past that point, we have a moonshot in the Dhandho Funds. Then we'll figure out the rest of the pieces to see what makes the most sense.

I've always been an opportunistic investor. I don't really have a game plan. I like to go here or there, and see what the landscape gives us. Currently, I don't see any great places to put the capital. What we have invested in Stonetrust is pretty solid, and what we have invested in the public equity is pretty solid. Those work and the funds look good. Beyond that, we'll just see what happens.

Q: Given your conviction on Fiat and General Motors, why not invest more of Dhandho in those?

A: In Pabrai Funds we never put more than 10% in a single bet, and I carried that model into Dhandho. If we wanted to go down the path to take Fiat from 10% to 20%, which is unlikely because I would have reservations, I would want to ask the investors whether they were in favor. I would put it out for them to vote on this. I'm not comfortable increasing the bet sizes.

There are some reasons why you ought to not have a one stock portfolio. I manage my daughter's portfolio for example, and three stocks make up the whole thing. But that's family money and I

don't have anyone to be accountable to. It's fine to concentrate, but when you gamble with other people's money and if we are changing the game plan, then we need to have a talk.

Q: My question is on the research process. A lot of funds - hedge funds, mutual funds –now employ third party service providers and expert networks to ramp up on names. This costs a lot of money. I know, as you mentioned in some of your talks, that part of your research process is talking to your investors and your networks. But in addition to that, how do you do things differently since the bar is getting so much higher especially for some of these large cap names?

A: I am not a person who is formally trained in investments. I didn't get an MBA, I didn't go to business school. Basically I learned from studying Warren Buffett and Charlie Munger, and I studied them carefully.

When we started Pabrai Funds, I took their model and I modeled the funds after what they'd done. One of the core principles of the Buffett Model School of Investing is that you do not delegate any part of the investment process. In fact, in my meeting with both Charlie and Warren, I was surprised because they spent a lot of time asking me about this. They asked me if I had an analyst, if I had partners, if I had other people, and they asked how I worked. They even ask me who I had doing the back office work. I could see that it was an important metric for them. When I study other investment operations. I look for what I would call, violations from the Bible, deviations from the Bible. The first thing I look for is the investment team size. The moment I see that an investment team size exceeds one, that's a violation of one of the core commandments.

The investment business is one that goes in cycles. Today we may be, as you pointed out, in a situation where you may need a lot of bells and whistles. You may need expert networks to try to get to some kind of competitive advantage. In my opinion that violates the Bible and it's the wrong way to do it. It is wrong to delegate part of the process. For good or bad, I do my own work. It's not a matter of expense. Warren and Charlie could afford to spend tens or hundreds of millions of dollars on experts. They have never done that. They have never even spent \$50,000 on an analyst or \$100,000 on an analyst. Warren Buffett for example, has 300,000 employees, has 80 CEOs reporting to him directly, is playing 10 hours a week of bridge, and he just bought a stock for his personal portfolio. A company called Seritage. Given how Warren works, 100% of the work on that was done by him, with no help from anyone else.

We are certainly not going to go down the path of having analyst. Very unlikely to go down the path of having expert networks. We also saw the SEC take a dim view of expert networks in some of those insider trading cases. You get into a lot of grey areas because if you hire someone and you are paying them, they may have incentives to get you non-public information. Our perspective is that we definitely want to play with purely public information, and my only competitive advantage is patience and slightly superior analytics on the same information that everyone else receives. So far that's worked out fine and we think it will work out in the future as well.

Q: I see that one of your criteria is to hold the stock for a minimum of about two years. Do you consider ever taking option bets expiring let's say about two and two and a half years from today?

A: I can clarify the two year rule. I don't need to hold a stock for two years. If I buy something for \$10 that I think is worth \$20, and it gets there in two weeks then I am fine to sell it. The two year rule is because the mistress always looks prettier than the wife. Let's say you want some stocks, and you look at the stocks in the stock market. Psychologically you are always going to think that what you don't own is always more interesting than what you do own. The two year rule is really meant to be kind of a circuit breaker. Let's say I bought a stock for \$10, and let's say six months from now it's trading at \$5. That's 50% off, so one will be inclined to think that we made a mistake. But prices are not meant to educate you. They are meant for you to take advantage of something else, but not to use that as an indicator to tell you what the company is worth.

If it goes to \$5, I ask myself, "What is the intrinsic value of the company and is the intrinsic value of the company below the current stock price?" I bought it at \$10, and I probably thought it was worth \$20 when I bought it. This means the intrinsic value at that time was \$20, and now the price is \$5. I ask myself the question again - what is the intrinsic value of this business? Let's say, for example, my answer is that we made some mistake in our analytics and it is \$7 - not \$20, not \$10. The present intrinsic value is above the present stock price and if that holds true then we will hold on to it.

One of the things about stock prices is that they don't follow normal bell curve distributions. A good example of that is our position in General Motors. We invested in General Motors in 2012. In late 2012, early 2013, it was trading at \$35 a share and three years later it's trading at \$32 a share. If I bought leads in 2014 or 2013 they would have expired and I would have lost money.

Patience is a very key attribute towards having success as an investor. If you go into options, especially leads which give you two or three years, there is a problem that you have now set a clock. And what you really want are investments which do not have a clock. How do you avoid clock? You avoid a clock by not having leverage and by not having any kind of options in the portfolio. Then you can let it play out.

I made some investments in 1995. I held these companies for 6 years until to 2001. One of them was Kotak Mahindra Bank. After 6 years, I thought, this is not going anywhere. I had done well enough in India that I didn't care, so I sold the position. And then from 2001 to 2015 it did wonderfully. The thing is that the business was a great business even in 2000 and 2001. It just wasn't recognized by the market.

I am giving a talk on Monday and one of the things I'll talk about is the magic of compounding. For example, we buy a stock for \$10 and we think it's worth \$20. The core premise of my investing in the past 22 years has been the internal implicit assumption that the conversion from \$10 to \$20 happens in two to three years or less. So let's say it goes from \$10 to \$20 in three years. The annualized return is 26%. Now let say after you get to \$20 you make another investment. You buy a stock at \$20 and you think it's worth \$40, and within three years it gets to \$40. And you keep going down that path. If you are compounding at this 26% rate, that's a very high rate of compounding. Every three years the money will double.

How old are you?

Q: 29.

A: You're probably going to be around for at least 60 years. With this three year thing going on you've got the opportunity for 20X in the next 60 years. If your net worth is \$100,000 and you simply focus on buying stocks that are half off, and we ignore taxes because we are in San Juan (no taxes), after 30 years you'll have \$100 million. And it would be 1000 times after 60 years. That's 1000 times \$100 million. You'll have \$100 billion, and that's assuming that from 29 to 89 you don't have any other income. Whatever you're making is keeping you alive and have no savings or anything else. What is the necessity to being in a hurry and doing options and taking high risk? The key is that you want to eliminate downside.

Even though I tried to eliminate the downside, I get whacked from time to time. My whole objective is to try to get whacked less and keep the down side muted and keep that upside up there.

Q: I have two very different questions. First, what do you feel is most commonly misunderstood about value investing? Secondly, can you talk a little bit about the re-domicile of the insurance company to Nebraska and what you saw as a benefit specifically related to statutory capital flexibility there versus Louisiana or even Tennessee or Connecticut?

A: You want to get into the weeds of the insurance business and bore these nice people? The good news is that we can do the weeds of the insurance business but it cannot go more than 33 minutes. That's a max of the learning pain. Let me just go through and answer your insurance question, and then I'll answer your investing question.

There are two aspects to the rules in different states which make a difference. One is that each state charges something known as premium tax. For example, Louisiana has one of the highest premium taxes at 3%. This means that if a company takes in a \$1,000 premium they will pay \$30 to the state as the premium tax. There are other states like, Nebraska, which are at the low end. Nebraska charges a 1% premium tax. If a Nebraska domicile insurance company writes a policy in Louisiana, Louisiana is going to force their insurers to pay them a 3% premium tax. In response, when a Louisiana domicile insurance company does business in Nebraska, Nebraska puts a retaliatory tax for 1% premium tax plus 2% retaliatory tax because their home companies are being forced to pay higher taxes. It's really stupid but all the states have retaliated against each other like they're all separate countries.

In the US, all 50 states have insurance rules, and they all have different premium taxes. We studied what each state charges - the different premium taxes in different states. We wanted to be domiciled in the state with the lowest premium tax because then when you go to any other states to do business, you don't face any retaliatory taxes because your state charges lower taxes. We found that Iowa was really low (about 1%), Nebraska was really low, and Illinois was low.

If you look at it, large national insurance companies tend to be based in these geographies - Allstate, State Farm are in Illinois. A lot of big insurance companies are in Iowa, and there are a number of huge ones in Nebraska. So first was from the premium tax perspective and being in Nebraska you get most favored status.

The second piece are the investment statutes - how the money gets invested. All the states have regulators and the regulators have a very important function. An example where they are involved is for worker's comp insurance.

Someone who gets injured on the job becomes a quadriplegic. We may have a payout to that person for 50 years. The regulators want to make sure that the insurance company is around for 50 years. For example, we may have written a policy in the year 2000, and we may have a payment due to the insurer in 2015. They want to make sure we're around in 2015 to make that payment. Because they want to make sure we're around, they put a lot of restrictions and regulations on how the capital, surplus and float is invested. In general, the regulators go in the direction of wanting very conservative investments. You can't put 100% into a venture fund thinking it could go 100X. You can't do that. When you are investing, you may be limited with venture capital investing to about one tenth of one percent of assets at the most. Louisiana has had a lot of history with a lot of companies going belly up over the years and leaving the insurance high and dry.

Louisiana put bandages around them and they've found a lot of problems in their investment statutes. They put on bandages to the point that when you look at the investment statutes, even the regulators couldn't even tell us what we're supposed to do. We would ask the regulators - the people in the Louisiana Department Insurance - and they would admit to us that they don't understand the statute either, so they can't tell us what to do.

Louisiana had a lot of restrictions. One of the restrictions for example, is that we can't buy foreign stock. This didn't make any sense to us. They were saying that a company headquartered in the UK or Canada or Germany is useless; and just because a company is part of the US, it's great to invest in. They also have a lot of restrictions on what can hold equities, how much can hold equities, how much can go into a single equity. They are all good things but they're very restricted. We can't even buy a foreign government solvent debt, for example. When we looked at all the investment statutes across the country in the different states, we found Nebraska is very favorable.

I don't know whether the chicken came first or the egg came first but one of those came first. Warren being in Nebraska may have had something to do with it. My take was that there are large companies in Nebraska, Warren is in Nebraska, I love Nebraska, why not us be in Nebraska? We found when we started working with them that Nebraska Department Insurance is very sophisticated because they have lots of very large insurers in the state. We found them very professional to work with and we found that they're very easy to work with. It's a very pro-business state.

Your second question was about what is most commonly misunderstood about investing. Charlie Munger says: "you don't make money when you buy a stock, you don't make money when you sell a stock, you make money by being patient and you make money by waiting". Waiting for the right pitch, and then waiting for that pitch to kind of mature and develop. The single most important skill set that you can bring to value investing is patience. You have to have a temperament where you're very happy watching paint dry. I would say that is the most difficult thing for investors and you can trade lot of IQ points for patience. You don't need a lot of IQ points but you need a lot of patience. That's the piece that usually gets missed.

Q: I really enjoyed your talk on Coca Cola which was about looking at the right businesses over time. You said you have a couple of new investments in industries you don't really like but they're very, very cheap and you like that aspect. Have you thought about situations in the future where you can find great businesses at prices that you would like? When will you buy these great businesses?

A: Your question is a question that I'm still trying to answer for myself. Absolutely the best thing you can do is have an ownership stake in a business that has secular tailwinds for 50 or 100 years, and has superior economics in terms of earnings and returns.

I talked about a company I had in 2001, Kotak Mahindra Bank in India, that has done extremely well. It's a business that is in many ways a business like Coke. Very high quality management. They had a huge vast market that they could expand in. They had very sound underwriting and their loan loss ratio was excellent. And it's very well run business with great human capital. They've operated and executed really well. What I've learned is that if you identify a business like that, you should be willing to pay up for it.

For example, assume Kotak Mahindra Bank in 2000 was trading at 30 times earnings, and in 2016 it's trading at 10 times earnings. And also assume earnings have gone up 100 times in that period. You would have a huge home run. The difficulty that comes to play with investments like that are two-fold. One difficulty is what you do when that multiple goes from 30 to 45 and it becomes overvalued or looks overvalued. What do you do in that case?

The second thing is that there are very few things in capitalism that can continue for very long periods without having competitors come in and take down their moats. The nature of capitalism is that moats get destroyed and we have a period of destruction going on all the time. Clearly the Holy Grail is long term ownership of great businesses that can stay great, but let's take the case, for example, of Wells Fargo. This is a recent situation and they have an issue right now. There are questions to ask. Is that deep in their culture? Is that something that they can fix? How long does it take to fix it? What are the impacts? And the most important question is - we know it's a great business, but what will Wells Fargo look like 20 years from now?

That's a very difficult question to answer. Warren Buffett, as you saw in the Coke presentation, was able to go forward 50 years and answer that question on Coke. If you're confident about a business to the point that you can answer that question very far into the future with very high probabilities, then that's a great place to go. I have a friend, Guy Spier. He has a great mental model. He says that: "If I find a business or industry that has really great economics in the United States, I'm going to go and try to find the same business in different geographies where maybe the rest of the world doesn't understand." For example, he understood that the rating agencies for bonds, like Moody's and S&P, were fantastic businesses. They hire some analysts, they pay them \$100,000 - \$200,000/year, and they're going to get maybe \$5 million of revenue off that analyst. It's a very high value business - a great business. It's an acquired product that people have to use no matter what the price. So it's very inelastic. Guy loved that business, and he found the exact same business in India around 1997. He found CRISIL, which is very small but is the biggest rating agency for Indian debt.

By 2000 or 2001 he had 4X on it, and it looked expensive and he exited. From 1996 to now, it's 1600 times what he paid for it. Any time I want to irritate him I just bring that up.

If you put a gun to my head and ask in 30 years from now which is still cranking and doing really well, I'd say the odds are higher for Moody's than Wells Fargo. It's much harder to make a mistake on Moody's than it is to make a mistake on Wells Fargo. Even with Coke. It's much harder to make a mistake with Moody's than to make a mistake with Coke. There are two parts to this. First, you have to be able to identify long enduring moats. Secondly, you have to have the confidence that when they get expensive, not to sell them.

My model has always been to get the double in three years, then move on. I've been doing that for 20 years. I'm usually not willing to sit there for these long rides. But in the past there were two that I captured 100X on because I sat there for a long time - long enough time to capture that.

Fiat may end up being a 6X or 7X. We'll see where it ends up. If it works out, it could be a 7X in seven years. That's pretty good, and I'm happy with 7X in seven years. The best part is that it's on a significant amount of capital. It's not on a small amount of capital.

But your question is a question that I have not figured out the answer because of issues that come up. For example, how confident are you on the nature of the moat? How confident are you about the future when it's trading at a really high multiple and the world is paying you a lot for it? Warren Buffett said that in 1999-2000 it was a mistake for him not to have sold Coke. Even though he talks about Coke having its enduring qualities, it got to 40 times earnings at that time. Because he didn't sell, Berkshire didn't get any return on Coke from 2000 till almost 2010 or 2011. This was a 12-year period where they had no returns because it was so high in price.

Q: I know you don't normally like questions on interest rates but I saw an interview a few months ago with Warren Buffett, Charlie Munger and Bill Gates. What are your thoughts on interest rates and the stock market?

A: Interest rates very directly impact all of us. There's a relationship between interest rates and stock markets, and that relationship has been very strong almost since the dawn of stock markets. Currently that relationship is broken, and there's a disconnect between interest rates and the stock market. There are very few times in history when we've had that kind of disconnect. For example, in 1982 there were 18% interest rates and in 1982 Coke was at 6 times earnings. Both of these things were insane because you should not have Coke at 20 times earnings with 3% or 4% annual yields when you could just buy treasuries and get 18%.

Today we have close to zero interest rates, and we have a fully priced market or slightly overpriced market. The question is - will we be at these interest rates 20 years from now? If we are at these interest rates 20 years from now, stock prices today are a bargain because the discount rate would need to change to some ridiculously low number. 30 times earnings would be fine to pay for a business because that's what the world wants. But we don't know that. The Fed is very keenly interested in going up the interest rate curve.

We have also seen the example of Japan. They haven't been able to go anywhere, but Japan has big issues peculiar to Japan itself.

My best guess is that we will, on a very slow trajectory, get to rates rising over time. If that trajectory is slow enough, you could get to a point where you can justify higher stock prices. But we also have kind of a peculiar world. Across the world governments are not doing enough to correct these imbalances, so almost all of it is pushed on to the monetary people.

Instead of a balance between fiscal policy and market policy, we have a lopsided monetary policy trying to push everything. I am a proponent in the US of significant infrastructure spending which goes in the right places. This would distribute the money to the have not's and would change the parameters. Because interest rates are so low we could get that funded quite cheaply.

I'm also a proponent of low tuition for colleges because this is like infrastructure spending. We are spending on our people. Raising the quality of the work force has a payback in the future. In spite of me thinking all these things, when I actually make investments and pick stocks, the discount rates I use are 10%. This is very high compared to where interest rates are, but that 10% has not changed in 22 years. I've always kept it at that type of level. Maybe that should change, but it keeps me out of trouble.

Q: My question is regarding the Junoon Fund. Has your investment principle on value investing changed? Indexing is not value investing, and ETFs are not value investing. Are you indicating that investing is more of a science than an art?

A: The Junoon product is a very different product than Pabrai Funds and Dhandho. We manage a few hundred million dollars in Pabrai Funds. The Junoon products are designed to grow into several billions. They can scale quite a bit because they own 80 to 100 stocks, and they can be much larger in size. Junoon has some value principles built into the algorithm. Some of the algorithms are bias towards value. But its apples and oranges in the sense that I continue to run Pabrai Funds the way I always have - picking stocks that I think are undervalued.

Junoon is something where we think that the masses are better off being indexed because that's where they will probably do well compared to most other options. If we can deliver a product that is better than the index, then Junoon becomes more of a public service than what we would make from Junoon. If, for example at some point we gained \$500 million in value from Junoon, we will be delivering very significant value to society. Because for us to make a \$500 million, we would have something like \$10 billion in assets. What I would consider properly invested assets. And if the \$10 billion in assets came from Joe- public, then we would have thousands and thousands of families that benefit. Most of that would end up with the investors, which is what we want. That's why we are doing Junoon. I don't think there is a conflict.

Q: What lessons have been learned with dealing with Greywolf and some of the other more distressed-type hedge funds through the entire Horsehead bankruptcy process?

A: I never dealt significantly with Greywolf. We only had a little dealing with them because we were on the Unsecured Creditors Committee. The big issue with Horsehead was the mistake of

investing in the business. It's not related to the bankruptcy process. I shouldn't have made the investment. Actually the correct thing to say is that I shouldn't have *reinvested* in it the business. In 2008 when we first invested, we had a 4X return within the year. We initially invested in a business that had no leverage and no debt, and it transformed into a business with a lot of leverage and a lot of debt. We didn't watch it as closely and we were not as skeptical as we should have been. In hindsight, because of the direction the business was going, I should have exited that position a few years ago.

Distressed debt, DIP financing and investing in companies that are in bankruptcy is an interesting area of the market. It's an area that has an inefficiency in the market, but there is also a lot of ugliness. Every once in a while you will end up with a business in bankruptcy that is a great business with a bad capital structure. To the extent that we can identify a great business with bad capital structure and we are able to invest in it in a senior manner - DIP lender or senior debt - it might make sense. That is one of the learnings that came out of the Horsehead bankruptcy. I can only say that if I fast forward 10 or 15 years and if we end up making some investment of that type, maybe we can redeem ourselves from Horsehead. Maybe there is a return there. But I'm not holding my breath on it.

The big lesson I learned is that the single biggest area of failure in the checklist is leverage. The biggest failure we had in the investment is that we weren't watching the leverage as closely as we should have as it kept creeping up. In hind sight the company should have bit the bullet and raised equity when they were embarking on the \$350 million plant. Then they wouldn't have had the situation they are in.

Q: What do you think will happen to housing and the economy in the future?

A: That's not my forte, but I would say that housing hasn't gone back to base levels. In previous times when you go recession to recession, you will go to baseline and cross beyond the baseline. On many fronts we haven't gotten to the baseline. You have stagnant income, and you have labor-forced participation rates that are lower than the norm. On many fronts it doesn't feel like we are in boom times. It's hard for me to forecast what the future is, but we may go sideways for a while. We'll have to see. There are a lot of things that are going on in different parts of the world and probably some of those shocks that may be coming to the US come from outside. They may come from China or other places.

Q: My question is partly related to the question on thinking 10-20 years down the road and letting companies compound; and thinking back to some of the changes that may be made in the investing process back in '08, '09 around position sizing. How do you differentiate between eliminating the positioning cost, versus when is the right time to limit its market value?

A: We have a limited quota of these businesses that are multi-bagger homeruns that are somehow going to show up in our portfolio. We are not going to have 100 of them. What I really want to do when those do show up is hang on to them for dear life. The issue that comes up when you hang onto them with your dear life is, what do you do when it becomes 80% of your portfolio? My answer so far has been not to cut the flowers to water the weeds, but to let the flowers grow. So far, I have never cut a position because it has increased in size. That's the nature of investing - we

are going to end up with some businesses that become larger than one would like. But it's a mistake to cut them down in size because of those types of inspirations.

So far I have not been tested on that in extreme limits, but we may get tested on it. If we get to a point where something is 40% or 50% of the portfolio, then I would ask the investors. I would say, "You tell me." If the majority wants me to trim this, then we will trim it. In my personal portfolio I would not do it, because I think that it's a mistake.

Most entrepreneurs have 98% of net worth in a single illiquid business. So why should we be so concerned about a large position in a business where you have liquidity. It's worth letting things grow if you've studied enough and you understand it, but you also run the risk that the future is uncertain. And capitalism is brutal. And things that look invincible can become not so invincible in the future.

Q: In the research that you have done on General Motors, what impressions have you had of General Motors' management and Mary Barra? Not just as an operator but also allocating capital or being opportunistic about buybacks - kind of working both sides. I'd love to also hear an impression about Sergio Marchionne of Fiat.

A: Mary is an exceptional manager and she's very good. This may be difficult to fathom but there is a good chance that in the 2-3 years GM's pre-tax earnings are north of \$15 billion. They also have about \$40 billion in NOLs, and a lot of tax shields because of bankruptcy. General Motors is a company that has a lot of strengths. A company the size of GM is going to have a lot of bureaucracy and Mary's been fighting that. But she will probably never win that battle. Even Sergio wouldn't win that battle, because these are such large businesses with hundreds of thousands of employees. It's very hard to get lean mean fighting machines. But from everything I've seen, the way Mary is executing is really good. I would give her a 9/10 or 9 ½ /10.

There is a philosophical difference between Sergio and Mary on making investments in areas where the future is uncertain. Sergio would be absolutely unwilling to do this. Mary believes you ought to do it. And GM has more resources to make those bets. If we sat down with Sergio, I think he would say that GM has blown away more than a billion dollars on Cruise Automation and Lyft. But GM may have looked at Cruise Automation succeeding as an independent company, not part of GM - an independent company, making autonomous driving units. They would probably license and charge four figures/car for that software - somewhere in the \$1000-\$3000 range, for example.

GM produces 10 million cars a year. If they did this to the entire fleet that is \$10 billion in licenses and fees. If it went into 10% of the fleet it would be a billion. GM paid \$600 million for Cruise Automation. GM probably thought, "These guys seem to be on a path where there may be a supplier for us and we will be giving them \$2 billion a year. Why do we want to give them \$2 billion a year; why don't we just own them?" We will not know on these things until a few years go by.

Sergio's perspective is that I don't have time for all that. I think Sergio's probably in the end going to be right and the supplier would provide it at a cheaper price

But a \$1 billion of misallocated capital is irrelevant for GM because it's a small amount for them. Mary is very good. The bottom line is that Mary beat Elon Musk at his own game, and in my opinion beat him by several years. GM's execution of new products is only a few years. They can show a concept car, and then 22 months later have it in production. I've never seen a company so large like GM do this. For example, Tesla takes longer on the execution than GM. And GM's battery costs per kilowatts is significantly lower than Tesla, and Tesla has been going at this for longer than GM. The execution that Mary is showing seems to be really good. Sergio's execution, in my opinion, is even better, but he has a much weaker hand. Mary doesn't really execute as well to have better results than Sergio because she is starting in a stronger position. Our answer is to be in both so that we don't need to choose.

Q: Spending 15 to 25% of the presentation talking about Pabrai Funds loss positions puts you in a defensive position. It's my view that this is a waste of your time, especially if you have already explained it in your quarterly and annual letters. Why do you continue to talk about the positions where you lost money?

A: The reason I talk about past positions and why we try to bias the past positions on discussing losers is because it's really good to rub your nose in your mistakes in public. In the three Annual Meetings that I've had this month, there have been a number of questions on Horsehead. I had a number of questions on why things didn't go well. Those questions are very good for me because 1) I can learn from it, and 2) I can reinforce the lessons.

I think most investment shops slide their mistakes under the rug. There aren't a lot of discussions about the years and the places when they screwed up. This is a mistake because they hurt themselves. They don't learn, and we *want* to air the laundry in public. Part of airing the laundry in public helps us to learn. Warren does the same thing at Berkshire, and he always started his letters with the mistakes first. We want to do that too, because we want to learn. It's the only way to improve.

Thank you for coming and I hope you enjoy dinner.

Copyright © 2017 by Mohnish Pabrai. All Rights Reserved. Please do not post this transcript on the web.