

[Mohnish Pabrai's Lecture at the Boston College \(Carroll School of Management\)
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Arvind: Thank you so much as always for being here. We're incredibly grateful. Let's get started if you're ready.

Mohnish: Well Arvind, it's a pleasure to be here with you. I always look forward to this session every year. Actually, the best way to learn is to teach. I always come away slightly wiser at the end. Not so much big because of what I said, but because of some of the interactions and such. I'm very grateful. I'll go through some prepared remarks. They're not really prepared, but they're, let's say a monologue. I have a few slides and then I think we can open up for questions, which is the fun part for me, and we can focus on what I talked about, or we can focus on pretty much anything under the sun maybe other than specific portfolio positions and such. We can take it from there. Is that good?

Arvind: Yeah, here it is.

Mohnish: All right. In the early 2000, this book came out by Maggie Mahar, actually, Buffett had recommended this book. It's a great book to read. Maggie pointed out that, even though we have these, like if you look at the S&P over a hundred-year period, nine odd percent a year that's not the full truth if you will. There's more to that than just that 9%. This is a chart of the Dow from 1896 till now. It's covering about 124 years. You can see that there have been very long periods where end to end, the result has been zero for investors.

For example, Famous One is after the crash of 29, it took a good quarter century to get back to the same levels. More recently, if you look at the period from 65 to 82, the Dow was like, I think 870 or 865 or so at that time in 65. That's approximately where it ended in 81, 82, 17-year period, when the US economy grew quite a bit. But the Dow was flat. Then 82 to 99 which is also probably before the time of most of the people attending the Dow was turbocharged. It went from less than a 1000 to more than 12,000. Then more recently, from 99 to 2011 was flat. Then since 2011, we've been on the rise.

I'll show you a few more charts like this. But this particular one has some symmetry. The symmetry is that we had a 17-year period, 65 to 82, where the Dow was flat, and we had another exact 17 year period when the Dow did incredible things. The reason we get these periods, and especially I think 17 years, is an important number in general, human memory does not go past 17 years. The reason we see these kinds of long periods of flat markets, and then, similar periods of very euphoric rises in

prices, if you will, or just rise in prices, is usually like for example, in 1965, stocks were quite overheated.

Very high PE ratios high multiples. In 81, 82, they were extremely undervalued. One could argue whether it's undervalued, because at that time, in 81 or so, treasuries were yielding 18%. In the 81, 82 timeframes, you could have bought a lot of blue chips at single digit multiples, Coke and McDonald's, and all kinds of great businesses were available very cheap. Then when you got to 99, 2000, those same businesses were priced for perfection. For example, in the year 2000, Microsoft became, for some time, the most valued company on the planet. Cisco was right up there. Both these companies were about 600 billion or so in value, and Microsoft, I think, was making less than 10 billion and such. I think it was at 70 plus trailing earnings multiple.

These charts are very relevant to me because I always have great timing in life. I started my fund in 1999 and what a beautiful time to start a fund. I actually knew pretty soon after I started that. I assumed at that time that there was poetry and symmetry, and history did not just rhyme, but history repeats itself. I just assumed that till 2016 we were going to be flat. I assume we were going to be flat on the Dow on the S&P till 2016 or so. The NASDAQ, I didn't even know when that would come back because that had crashed and burned from 5000 down to 1000. I thought that was just done for a very long time.

I started my journey as an investor in 94. That was the first time I heard about Warren Buffett. It opened up a whole big world for me. 1994 was one of the years of maximized learning and growth for me. It was a completely new area for me, and I was just like a sponge. I was just drinking from a fire hydrant, and it was great. At that time, life was really good because pretty much anything you did went up. I was running an IT business.

I was kind of, around the software business and so on. Some of the investments were tech investments at that time. In that period, I was only running my personal money at that time. There was no fund. In that period, I captured more than a hundred baggers. Unfortunately, there wasn't much of a net worth. For example, one business in India, I put about 10 or \$12,000, and I cashed out about 1.5 million. Of course, I should not have any regrets about that. That's pretty good. Then there was another business here in the US. The India business was Satyam computers and the one in the US which was a way to kind of ride the internet wave and so on.

On the upside the downside company called CMGI. I actually visited them in Massachusetts around that period. That was about a hundred bagger, which I captured in there. I had actually put in more money. I put in about a hundred

thousand. There is also pretty good there, about 10 million. But then, when I was starting the funds in 99 and 2000 and so on, I knew I was really facing these huge headwinds. I knew that pretty much anything you looked at, all the popular stuff was euphoric. But actually, the day the NASDAQ peaked in March 9th or something, 2000, was the day that Berkshire hit multi-year low. Basically, what was happening is that money was going from Berkshire Hathaway into pets.com, there was that transfer going on.

A lot of stuff which was very basic stuff, was undervalued in 99, 2000. But if you were trying to play any kind of momentum game or, flavor of the day or any of that stuff, you very quickly got your head handed to you. Because then, the NASDAQ went from like 5,000 to 1000 next two, three years. The modus operandi I took on when I started my fund was, I really didn't care about the market much, I knew the market was going to give me a headwind, but I said, "How does it matter what these market levels and all that are, or whether it's euphoric or not? If all I do is I focus on buying a dollar for 50 cents, and when that dollar gets to 90 cents or more, I sell it".

That became the cornerstone of how I invested, I looked for dollar bills that were trading for 50 cents or less, and then as they get to nine, got to 90 cents or more, I was unloading them, which was different from the previous five years where, for example, the company I bought in India, I just took those shares and I actually got physical shares, stuck them in a drawer. My mental model was to never open that drawer. I wasn't even concerned with the multiple, I knew that they had so much tailwinds in terms of growth that I didn't want to really mess with any calculations. I just said, set it and forget it kind of thing. The same thing with CMGI, I could not tell kind of what the upper limits of CMGI were.

It was kind of very nebulous, but I was buying at a pretty floor price because CMGI was spawning dotcoms. How many dotcoms they're going to spawn? I have no idea. What valuations are those going to have? no idea, but it all looks wild and crazy. we'll just keep the mothership that keeps producing these eggs and see where it goes. Eventually got to a ridiculous valuation. Thankfully I was smart enough to sell and move on but in the last 20 years or 21 years, I took this, buy at 50 or less and sell it 90 or more. That actually works quite well in this environment from 1999 to 2011. What I'm trying to say is that, if I look at my 25 year or 26-year journey, I was using two different models for two different periods, okay?

One of the things I forgot, because it had been so long that I'd been doing the buying at 50 and selling at 90, that it completely left my mind that I'm supposed to, at some point, switch back. Okay? I never really, I just thought this buy at 50 and sell at 90 is kind of the way I go through permanently. Let me just go through some of these

slides and then I'll continue with the kind of, because the year 2020, most humans want to go from the year 2019 straight to 2021. They want to purge 2020, they want to behave like 2020 never happened. That's how they would like to go through life. In my case, 2020, I would say, has been probably the second highest year of learning after 94. I've had incredible learning and growth this year.

I'm very grateful for the learning and growth. Who knows if the pandemic had anything to do with it, maybe it did, because I got so much time to stare at my navel. When I contemplate my navel, good things happen. I had a lot of contemplation of the navel this year. Anyway, this is the Dow, and you look at the S and P and it's somewhat similar. It didn't have the exact 17, but recently till 2013, it was completely flat. Then you look at the NASDAQ and what a beautiful chart. You look at the NASDAQ, and from 1980 to 2000, 20% a year. Awesome. Great. Of course, you can see the head handed to you from 2000 till 2003 or something, when it, gets close to a thousand, and then it takes 16 years to get back to the 5,000 level.

Then more recently, it's been doing that 21% or so. The NASDAQ is kind of interesting because it's actually gone through this. Actually, if you think about the NASDAQ, from 1980 to 2000, there was incredible technological innovations in tech and software and hardware and so on. But so was the case from 2000 to 2016. I mean, even till now, there have been incredible changes, but what happened is that, the valuations in 2000 were so high that all the growth and profits and all of that were not enough to get the index back to where it was. A good example is Microsoft. I remember in 2000 I just started the fund.

There was a guy who was one of the early employees at Microsoft pretty high up, and he had retired, and he said he joined my fund. He said, "Mohnish, if you are ever in Seattle, I could introduce you to some of my former colleagues and some people have left, they may have an interest in your fund, and so on". I told him, "hey, I'm going to be in Seattle the day after tomorrow, what a coincidence". he said, "Oh, that's great". We spent a day where he took me to Microsoft headquarters, and I went from one office to the other, he was a great sales guy for me, trying to convince these guys to give me money. I got a lot of commitments and a lot of investors from Microsoft or former Microsoft people; some current, some former, it was great.

But I told them all at that time when we were just talking, I said, "Look, you guys have, in many cases, 90% of your net worth in Microsoft's stock and options, and your livelihood comes from the same place. I said, "I hate to burst your bubble, but this is not going to end well". They all told me, "Oh, you don't understand our business. The stock just goes up like clockwork, and we get our options, and we hang on to them, and life is great". I told them that was not going to be the case.

But none of them actually even wanted to hear the math about the 70 times trailing earnings or whatever else. Until 2015 or 16, Microsoft was zero returns. It wasn't just zero returns.

It was a very violent ride with a huge drop in the next two or three years, and then another huge drop during the financial crisis. It had been very hard to hold the stock over that period. Of course, finally they've kind of digested that, and now we are back on the upswing. Then we get to the Nike which peaked in 1990 and has not yet come back. It's been 30 or 31 years of minus 2% a year. The more fun the party, the more extreme the hangover. This was a very fun party. This was a party like no other. At that time, I think in 1990, and this was anecdotal evidence, I looked it up.

They said the Imperial Palace in Tokyo was valued more than all the real estate, I mean the entire state of California in terms of real estate. I actually found that statistic pretty hard to believe. I actually researched it, and it was absolutely true, actually, if you looked at the transaction prices of the properties right around the Imperial Palace, and then extrapolate it to the square footage and acreage of the Imperial Palace, you would get to a valuation that would exceed the state of California. Of course, that's a ridiculous valuation. We have a beautiful coastline for thousands of miles here in California, and there's some very valuable real estate. That bubble popped, and we haven't come back yet.

We'll have to see when we come back. Then you look at the Korean Cosby, and this is another one where if you ignore that 2009 to 2011 period, it's pretty similar to Japan. It's basically been about 30 plus years of pretty much nothing, and especially the last few years and Korea. I mean, if you look at Korea in 89, the Korea economy, as we know, it doesn't exist at that time. I mean, it's an incredible miracle growth economy. I mean, Japan was already an advanced civilization. Korea was yet to have its run. In spite of all that run, Cosby hasn't moved. Actually, Korea as quite a cheap market, it's a place I'm actually interested in and excited to invest in.

Anyway, those are the slides I wanted to share. If we look at all of this, in the year 2000, I told you that I had this really terrific growth and learning. When I tell you about what I learned you're going to say, what a dummy, like it took him 26 years to learn this stupid stuff. Well, some of us are dense and it takes some time to learn these lessons. Charlie Munger says, "we are old too soon and wise too late". But I still feel it's not too late. I mean, I'm 56, hopefully, there is a good three decades of compounding ahead.

If I can get two and a half or three decades of compounding life is great. One of the things that Munger has mentioned is, he said that there's no intellectual way to

defend it, but he does not sell businesses he owns when they get above intrinsic value. He won't buy them above intrinsic value, but he won't sell them if they are somewhat above intrinsic value, even reasonably above intrinsic value. I think if it gets egregiously above intrinsic value, I think he would look at it. But the Berkshire history is that, even when they looked at, for example, if you look at Coke, which in the year 2000 was at 40 plus times earnings, and it didn't do anything for a long time because it was quite overvalued.

They haven't touched their coke position in 32 years. My guess would be, they won't touch it for another few decades. It'll go on for a while. When Munger says that he's willing to hold businesses above intrinsic value, that kind of goes against what I'm trying to do with the 50 cents to 90 cents, right? Because the two are different frameworks. But when I studied that some more, I realized that, the key, and this is especially true, I believe if we look at this period, I wish I had made this change. Ideally, if I'd made this change in thinking about two or three years ago, I would've hit the nail on the head perfectly if I'd made this because till 2016 or so, the markets hadn't done a whole lot.

Actually, the previous approach worked really well in terms of returns and so on. I think I'm probably two or two years or so behind. But in a 26-year history, we can be forgiven for being a couple of years behind on something. A few things kind of came together for me this year. Some of you may have looked at a company called NVR, and NVR is a home builder, I think in Virginia, the mid-Atlantic and so on. They have had religion related to buybacks, which has been very intense. From 1994 till now, (other than for a couple of years, in 2008 or 2009 when their business was upside down), they pretty much bought back their stock every year.

Over this period, they have spent at least a hundred percent of owner earnings on buybacks, and probably over a hundred percent, they were actually even willing to spend beyond their own earnings on buybacks. The NVR business itself, if I look at it from 2000, like the last 20 years, the top line's gone up maybe three, four times. It's not a company that has any intellectual property, it's a home builder. The top line has gone up three, or four times. They've bought back in the last 20 years, 56% of their shares outstanding, over the last 26 years, I haven't looked at it exactly, but it's over 80%. It may be approaching 90% of the share outstanding have been bought back, but in the last 20 years, the 56% reduction in share count, the stock has up 55 times.

The company delivered 55 x returns in the last 20 years against the headwind of the overheated index. That didn't even matter for a company like NVR. I looked at NVR, and then, I have a friend, Nick Sleep, who's in the UK. Nick had most of his money, I believe he was running his fund in three stocks. It was Amazon, Costco,

and Berkshire. I think it was in 2015 or so, he hung up his boots and returned all the capital he was running. I think he returned probably 3 billion or so to his investors and basically told them that in effect, I have three stocks, 10 years from now, I'm going to have these three stocks.

There's no need for you to pay me ridiculous fees, just go buy these three stocks. Of course, his institutional investors freaked out when they got the money back. I got some calls asking, "hey, we got to mark this money back. What should we do?" I said, "He told you what to do" and then they'd say, "oh, our mandate doesn't allow us to buy stocks". Then I said, "would you like me to set up a vehicle where I buy those three stocks for you, and then you can pay me a carry." The life is kind of funny that way. If you look at Nick, Nick also, like, Charlie, once he finds these great compounders and he's got a number of models he's using, he's looking to let them run and looking to let them run for decades.

Actually, in Nick's portfolio, it didn't even matter what he owned as long as he owned Amazon. What I'm saying is that, he didn't have much of an error rate. But even if you're wrong on a few of these but you end up with a few compounders in the mix over a long period of time, or a diehard cannibal, which has a very stable business, results are very non-linear. I operated in a very linear fashion for the last two decades. What I learned this year is two or three things. One thing I learned is, "Hey, Mohnish we are back to that curve going up. The flat curve period is over, okay?" The second is that, you can look at the Berkshire examples, or the Nick Sleep examples, or number of other examples you could look at.

Chuck Akre can look at the number of investors, and you'll see that, if they've held these compounders for long periods of time, the results are really good. I mean, it works out well. It would not have worked out well from 2000 to 2015, 2016. I think what I was doing worked a lot better in that period because if you're buying these compounds at 50 times earnings, not very many good things are going to happen to you probably. Valuation and price matter, and it was hard to find a lot of compounders in 2000. You could have bought Berkshire, for example, you'd run fairly well for at least 10 years. But for the most part, what worked in that period was this buy and sell, which is tax inefficient.

But it definitely was better than holding Microsoft from 2000 to 2016, for example. The period we're in right now, right? What I'm assuming, even though I don't use macro or any of the things, but what I'm assuming will end up happening is what has happened in the past and this party that's underway right now will end when we get to extreme euphoria, and at some point, we will get to extreme euphoria. I don't know if that extreme euphoria comes in 2025 or 2030 but my guess is somewhere between the late 2020s and maybe the early 2030s is my best guess, this is when

we would get to ridiculous valuations again, because the human memory doesn't go back that far. People always say, oh, these companies are different.

They don't have an insight into the companies in the past. There's no real correlation. But there are correlations. As long as humans are involved in markets, we will go from extreme undervaluation to extreme valuation. If you look at the period from 82 to 99, extreme undervaluation to extreme more valuation, and then 99 to again, 2015, 2016, extreme overvaluation to undervalued, and then you again start going. I don't believe we will have these boom and bust periods go away. I don't know whether they'll be 17 years long or 30 years long, or 10 years long. We've seen a few examples where they go on for different periods. I mean, if you get to extreme binges you will go for longer periods. In general, I think that's true.

For me, the learnings I have been focused on are the compounders. The wiring of Mohnish doesn't allow him to pay up. I'm too cheap to pay up, right? I'm stuck in a world where I have to buy things fairly cheap. But there's 50,000 stocks in the world. There are stocks from time to time, which are great compounders or great cannibals, and which do get cheap periodically. We don't need too many of them. I mean, for the most part, great compounders are well recognized by the world, and they typically trade at premium valuations like they should. But that's not always the case. If we can find two or three things or even one idea a year, which is a great compounder or a great cannibal or both, and we can get it at a reasonable price, then set it and forget it, great.

When I look at my portfolio today, it needs some work to get positioned where it needs to be, but it's on its way. I'm actually very happy with the way it looks. I will make a few more changes over the next few years to get it more aligned to where I want it to be as these ideas show up. But the framework is very simple, that I'm not looking for a 50 cent dollar bill. That's not what I'm looking for anymore. What I'm looking for is very long runways at very reasonable prices with a lot of stability. With that, I think we can open up for questions, comments on this subject, or whatever else you'd like to talk about.

Student 1: Hi, Sir. I want to ask question. Can you talk about one example of the failure of your investment experience that gives you the most impression? I mean, the failure in your investment experience?

Mohnish: There are a lot of failures and there are a lot of investing mistakes. I think that's just far from the course. You're not going to be able to go through an investing career without a number of things that don't work out. I mean, in general, what we are trying to do is, we are trying to extrapolate deep into the future, and businesses are kind of living, breathing things. Capitalism is brutal. There are a lot of competitive

forces acting a lot of businesses. There are a number of reasons why things may not work out. If I go back and look at the failures or the businesses that I've invested in that did not work out, probably the number one reason why a number of investments didn't work out was leverage. I had a few zeros and a few near zeros because businesses were over-leveraged and they couldn't handle the leverage they had.

I've had a difficult time with financials, for example. In the financial crisis in 2008 or 2009, there was a company I owned called Delta Financial, which was a mortgage lender that went bankrupt; went to zero. I used to own another company called CompuCredit that didn't go to zero, but we had a significant loss there. I would say that, probably, the area that stands out, and it's not just me, when I built my checklist and I looked at, what were the businesses that create, invested in, and where they didn't work out well, the number one reason for the investment not working out was leverage. I've become a lot more cautious but I'm still not there, in the sense that, I think there are businesses in my portfolio which have leverage, and I wish they had less of it. But that's definitely a lesson that has been well received

Student 2: I was just wondering when you're valuing a company, what are the most important criteria or metrics you use in determining its intrinsic value?

Mohnish: It depends on the business. I think for different industries and different companies, you have to use different yardsticks. For example, I used to own a company in China called Moutai which makes premium liquor. It's a business I should have held onto. But in my infinite wisdom, I sold it because of the 50, 90 and such. But I think Moutai went up over a four, five-year period, about six, seven times. That's a business where the cost of the product is, I mean, a bottle of the amount I buy due is maybe their cost is \$3, \$4 and it goes for like \$150. Anytime you have a business like that, you're going to do really well.

The \$150 in a few years can be \$300, because they've got this incredible brand and this massive growth of China backdrop and it's a status symbol to be able to serve Moutai and so on. When you are valuating, when you're looking at a business like that, it's going to be quite a different analysis than, for example, when I looked at another business we owned I think in 2012, we bought Fiat Chrysler. The calculus was very different, there, we had a star manager, it was a business that was doing 130 plus billion in revenue and a five, 6 billion market cap. Pretty much, if they were able to just, even slightly, right the ship and even, eke out 2, 3%, 4% in profits, that stock was going to be a multi-bagger. It just depends on each business and each industry. The key is that, you have to get to the factors that matter.

If you look at a company like NVR, and every year they are taking a hundred percent of their own earnings and putting it into buybacks and you can own the stock, those owner earnings are not coming to you, okay? You're owning a bigger and bigger portion of the buy, but you're not seeing any cash come to you, right? All that matters when you own a business like that is that, whatever end point you want to look at, the question is, what the shares outstanding at that end point are? What is the stability and cash flow of the business at that point? Because that's how the market would value it. It's a very different calculus of Moutai, it's a very different calculus from Fiat Chrysler.

Each business that you're looking at, I think you, you need to look at. The first question, even before you get to all those things is, do I understand the business? Is it within my circle of competence? Can I figure out the two or three variables that really matter? For example, one of the things about the NVR home building businesses is, they don't start building a home till there's already a person who's bought it. They don't build any speculative homes. I go to them and I look at the model and say, Yeah, that's great. I'll buy the home. We sign a contract, they see I have a bank loan, and that's when they start building that home. Which means that, they do not put any capital in till there's a confirmed sale, right?

The second thing about NVR is they do not own land, which is the biggest investment for a lot of builders. They have options on land. They basically believe in just in time manufacturing where they're saying all the factors of production that I need to build this home, I want to be bringing those together as close to the sale point as possible. When you look at a business like that, what that means is that, if the business ebbs and flows, which is the number of homes they build, goes up and down with the economy and so on, it doesn't really matter as long as their core overheads are low.

Let's say, for example, their corporate overhead, if they built zero homes in a year is 25 million. If they didn't build any homes, they would lose 25 million, for example. If you can see that the balance sheet can handle that for several years, then you're fine. If they build more than a thousand homes, they'll make money or more than 500 homes, they'll make money. You figure out the metric, at what point they break even, and maybe they're building 5,000 homes a year, and the number of homes they build typically fluctuates between 2000, 5,000. I'm just pulling these numbers out, and I'm not, NVR is a train, (according to me), that left the station. But who knows, maybe in the next 20 years, they prove me wrong, where they'll buyback another 9% of those stock and be 1% shares outstanding. Anyway, what I'm trying to say is that each business is completely different. The key is, can you understand two or three variables that are going to drive the outcome? It's very important that you've honed in on those key variables. Then usually, the

entrepreneur or the CEO running the business needs to be honed in on the same variables. If you have gotten to the point where you can see the business and visualize it the way the CEO does, then it's typically that you've got the right variables

Student 3: Thanks much for being here. In Dhandho investor, you advised the reader to look for low-risk, high-uncertainty businesses, and I thought that was a fascinating construct. But also last year, in this class, I watched the recording and you mentioned that you hate retail. I'd be curious if you could go a little bit more into that analysis and kind of how you see the retail landscape, let's say, over the next decade or two. Then maybe if you could tie that in with your observation about this period that you see going until perhaps the late 2020s or early 2030s, but specifically, how that low risk, high uncertainty formulation links to how you see retail right now.

Mohnish: I hate retail and Arvind loves retail. If you ever want the other point of view on why retail is awesome, you should talk to Arvind. But yeah, I've never liked retail. One of the things about investing is, this morning I was on a bike ride with another money manager. He was saying to me that he really doesn't get these restaurants. Like he doesn't get Burger king, he doesn't get Domino's and so on. I tried to explain some of those businesses to him, makes the bike ride go quickly. But I also told him, I said, you can have a very happy life. Never understanding what makes these, like his complaint to me was that, he can understand Starbucks really well, okay?

He understands that the substitution options on Starbucks, for most humans, is pretty limited. Like, if you get to a routine, nowadays we don't go to work or whatever, you get to a routine, you're not going to be switching your coffee every day to a different place or whatever, right? You get to a routine, but you may change the place you have lunch every day, okay? The recurrence of Starbucks and the recurrence of Chipotle are not the same. His perspective was that, if I look at Wendy's, there's so many options besides Wendy's when you go to eat, right? I told him, "Listen, whether that framework is correct or wrong in terms of taking a bypass on Wendy's, it doesn't matter. All that matters is what you do invest in.

If you unfairly get rid of, because it might be a good business because they have 90 plus percent franchise and all that stuff and they just introduce breakfast and so on no issues. We are in a business of no call strikes, okay? You can take entire industries and say, I'm not interested, and there's no penalty. I have taken this entire industry of retail and in one big lump, just dumped it on the side. We have Arvind, though the other hand, who's pouring through each one, okay? I don't even want to pull through each one. I won't take the whole chunk; I can just get rid of it as quickly

as possible. In fact, even now, I don't understand Amazon's retail business. I don't understand, because I say that the last mile is so expensive, like if I order a \$7 item, they deliver it to my doorstep.

The cost of that has to be like 10 bucks, 15 bucks just to get it to my door. I mean, all the things you have to go through. But somehow Amazon makes money and it probably works because not everything I order will be \$7 and so on. Statistically probably works out, but the thing is that, I don't get it right. If I don't get it, it doesn't matter. I'll just let it go. The problem with retail, traditional retail, brick and mortar retail is, it's the most transparent of businesses. Sam Walton took advantage of that. Sam Walton spent an incredible amount of time in his competitor stores, and he would constantly, I mean, he would go to any town, any place he was going, he'd always take his team into, and it didn't even need to be the big guys.

He would go to little stores, big stores. He was going all over the world, right? One time in Brazil, there's a supermarket and some old guys flat on the ground, they call the paramedics, okay? Then they find out it's Sam Walton, and he wanted to measure the space between aisles, and he didn't have a tape measure. He said, I'll use my body because I know how tall I am. What I'm saying is, he was fanatical about the inches between the aisles, okay? Every minor thing. The problem in retail is that, there are no trade secrets, okay? For every single thing that you're doing, your competitors can just walk in and get everything. The second problem is, if I look at a business, let's say a business like ADP, payroll processing. How frequently do businesses change their payroll processor?

Let me just tell you, I hate ADP. I use ADP, I hate them. Why do I hate them? I look at all the costs I'm paying, and I'm saying, this is ridiculous. It's a bunch of digital stuff they're doing, and why do they charge me so much? Every few years, I look to get out of ADP, okay? Then I figure out that, yeah, I can do it the middle of the year and whatever, they'll give two W-2s and all that. But really, for the employees, what is seamless is to do it just once at the end of the year, right? It's simpler. You are switching is limited, like one day, okay? Then the other guy I talked to Paychex, there's no difference. I talk to the Paychex guy and I'm not getting any special deal.

Then I go to like, smaller guys. In the end, I'm back to ADP. ADP has something very important, in my opinion, the most important thing in business is RRS, (RRS recurring revenue streams). It's an acronym I just made up, okay? Recurring revenue streams is the Holy Grail. What we want in a business, we want franchises, which are just pounding. The reason retail is such a massive graveyard of all these companies going under is because the customer has no contract with you. I go to a Kmart, and if for whatever reason, I'm not very happy with something or the other,

or someone else offers something on sale, I don't have any obligation to go to them. I can go to someone else.

It's totally different from ADP. I mean, ADP, they've got another business there, which is automating these auto dealerships. Every time you go to an auto dealer, they pull up and they give you either your sale contract or your maintenance stuff. All that is running on a, I think this spun off that company, but that'll all based on ADP All of these businesses that ADP had with these recurring revenue businesses. Those businesses have another one that is spun out Broadridge, we send out all the filings all these companies, public companies that send out to the investors and all that. Broadridge gets paid per investor, whether they send it digitally on in the mail. What does it cost them to send up digitally? Zero. Approaching zero. But they're still charge. It's a great business.

What I'm trying to say is that most retail doesn't have those attributes, okay? Now, there are retailers. For example, when I take this whole industry and dump it, what happens is, when I dump the industry, part of the dumping includes Costco, part of the dumping includes Amazon, or even Walmart, I dump all of them, right? Then I look at the stock chart on these, and it looks great, but the thing is, even when I look at Walmart, I say it's a business that does well, but they need to be so good. Costco needs to be so good. Now, Costco has so much goodwill with its customers and so much that they do for their customers, that Moat is very solid.

I think I understand Costco's moat, but I understand it at 40 times earnings, I did not understand it at eight times earnings or whatever, right? It's okay, that train has left the station, there's no problem, there are a million trains yet to come. What I find is that, when I look at these businesses, Home Depot and Costco and Walmart and all this stuff, they are very good businesses. But what is hidden beneath the surface is, these businesses require incredible execution. They have to, every day win back the loyalty of their customers. Because there's constant erosion taking place from new entrants, right? I mean, Amazon comes in and no matter how well Walmart executes, it's a paradigm shift. It's difficult. Walmart has to kind of change the way it is.

I think I find retail very hard. In general, I'm not interested. One of the things is, if you look at someone like Buffett and look at someone like Berkshire Hathaway. Berkshire Hathaway has made lots of retail investments, okay? They bought many jewelers, and they bought many furniture guys. Now, if you look at Warren's track record, when you invest in financials or when you invest in banks or anything like that, he's batting a thousand. It's a flawless record. I've never seen him lose money investing in a bank. He's really good at it. But in retail Berkshire, I mean, they don't talk about it because he doesn't want to have the managers lose all motivation. But

it's a graveyard, basically. I think every furniture operation they bought other than Nebraska Furniture Mart, did not work. Every jewelry operation they bought other than Borsheims did not work. On and on. They made a lot of forays into retail, and by and large, they didn't work. Now, it didn't matter to Berkshire because by and large, they've been small relative to the size of Berkshire, and they carry a lot of those businesses, and it's okay. But it didn't work so well.

Arvind: To clarify, Mohnish's reference to my retail love is really a Costco love.

Mohnish: I think Arvind goes beyond Costco. Costco is like a corporate Affair. Costco is not just an affair too. Costco is like gone off the chart, but the others are still there.

Arvind: Costco is more,

Mohnish: There's still some love with the others.

Arvind: Costco is more like my wife. There's just my wife and I

Mohnish: Make sure she can't hear that

Arvind: I did that

Mohnish: To Costco.

Arvind: I think she may love Costco

Mohnish: More than you, than me.

Arvind: All right, more than me. But did I see you raised your hand as well.

Student 4: Mohnish, thank you for being here. As a South Asian immigrant, obviously, I enjoyed the Dhandho investor, so thanks again. I was curious, you mentioned earlier in your remarks, 50,000 stocks. You clearly have breadth across geography and industries and business models. Where do you start, sort of, what is the top of funnel for you especially since it seems like, with the 50 cent and exit at 90 cent strategy, you have form velocity and portfolio than many other value investors. I've sort of read about and spoken with.

Mohnish: Well, hopefully that Velocity is going to zero soon. That's where we want to get to. When Buffett is asked that question, he says, start with the A's. Okay, But I'll try to give you a better answer than Warren. There are some hacks. 50,000 stocks is a lot. Actually, when Warren says, start with the A, he's not kidding because he went through the Moody's manual, every page of it and they start publishing the Moody's Manual several decades ago. I bought a few of those on eBay just to get a feel of what the Messiah used. It's pretty dense stuff and got like four or five businesses

per page, very small fine print. He went through all that. He and Li Lu did the same thing.

Definitely, you can put your nose to the grindstone, and you can start pounding through these businesses. I tried to get Warren interested in Capital IQ, one time in his office, he was going through the Japan Company handbook. I said, “Warren, if we get you to splurge on capital, like you can run screens and this and that”. I even got to showing one of his assistants how to do all that and everything. He's not going to spend that money. He wants his \$50 book, and that's all he wants. Anyway, it's worked fine for him. But you can hack this a little bit. One way I hack it is, you can look at what other great investors have bought.

You can make a list of investors, and it's interesting to actually categorize them. If you look at someone like Chuck Akre, you'll see a certain pattern to what he buys. You look at David Tepper, you'll see some different patterns, or you look at Jeff Urban and so on. You can find different patterns with the different investors. DataRoma does a good job of giving you a whole bunch of investors and what they own and such, pretty easily the price is zero. That 50,000 share can take the 50,000 stocks down by more than 90%, maybe even 98%. Okay? The second hack you can do is, the first question I ask myself when I look at a business, is it within the circle of competence?

You can winnow that list in different ways. You could run screens for lope or whatever, but I think that, looking at other great investors is a good filter, because they already gone through one filter, especially if they're larger holdings. Then the second question you ask yourself is, is it within your circle of competence? That'll take out quite a few businesses as well. If you're like me, like, anything retail, gone, anything financials, gone, anything Pharma, gone, healthcare, gone, all of that. I can take out a lot of stuff relatively quickly, and it doesn't matter if I'm doing this mass stuff and there's good stuff going away, there's no penalty for that. There's infinite amount of good stuff, so you can keep throwing away a lot of stuff. Then you get down to some things that strike your fancy, or you get interested in, and then you go deep.

Arvind: Feel, feel free to jump in. I saw, Rusty, Sam, all at questions.

Sam: Take us back a couple of questions, but to kind of piggyback off what Frank had mentioned, as far as valuations, a lot of your investments are emerging markets overseas where accounting standards aren't exactly a thing. Management may be a little bit more difficult to get in touch with. What sort of extra legwork do you have to go through in order to make your investments arrive at an investment decision?

Mohnish: I think most of the international stuff, I think I've usually had to go see the business and kick the tires and assess the management and so on. It's definitely involved more work. But it's a lot of fun work, actually. I enjoy that. You do have a few more layers to peel as you go from..., I mean, one of the things I don't have to worry too much about is that I think the odds that I would lose money in the US on an investment because of fraud approach is zero. They make the headlines here and there, the Enron and stuff, but the odds that something like that enters your portfolio is very low, especially if you're doing research, work on it and you understand the business.

I think something like Enron would be just beyond my understanding, a pretty easy pass. If I can understand Amazon, Enron is very far from that. Basically, I think you have a little more work to do, but you also have more reward in the sense that, sometimes the tailwinds can be a lot stronger. I think, in general, entrepreneurs around the world, most of them are trying to make a go at it fairly honestly. I think that's a general trade across, and yeah, you do have to kind of check that box and test it a little carefully, but you can get there. Not a problem.

Student 6: Mohnish, thank you so much for doing this. This is so much fun so far. I have two quick questions for you. You mentioned earlier that you've learned a lot during this pandemic. I was just curious to learn more about like, how you managed your portfolio during the pandemic, or are managing your portfolio, and what have you learned so far? My second question is, we had someone from Fidelity last week and that portfolio manager told us that a lot of people currently are investing in growth. I'm just wondering if value investing is dead, or do you still believe that value investing has a place today?

Mohnish: Yeah, I think regarding the pandemic, so couple of things. I think in the March timeframe, when this data was kind of coming out about how big this was going to be and the shutdowns were starting and so on, I was trying to understand what kind of impacts it would have on the existing portfolio. The thing is that capitalism is very brutal, and in the best of times, most businesses are very fragile. Most businesses cannot withstand the kind of shock of shutdowns and stuff. Most businesses cannot handle that. It's really hard. When I looked at my portfolio, for example, I owned some real estate companies in India. These businesses, they don't have much leverage.

Their sales velocity was going to go down, but I didn't have any concern about stability of the business. I say, Yeah, they'll have less sales, and they've got some, poppet overhead, and can they handle that? I said, Yeah, it's not a problem for them to handle the overhead. I was not concerned about those businesses. I got quite concerned about one of our companies, Fiat Chrysler, because the car business is

so much operating leverage. When you shut down a car plant, I mean, you've taken that whole thing in reverse. I actually could not see, I was very concerned about how this is going to affect them, how long it's going to last, et cetera. We completely exited the position and I exited at a significant discount to where it was trading before the pandemic.

Even now, it's come back in a manner that was different from the way I expected. If I had done nothing, I would've been better off, but I couldn't see it. Its uncertainty levels are way too high. I had seen that business have trouble in the past. We didn't take a lot of actions in the portfolio. We took some actions. But on the flip side, what also happened at that time was, there were great opportunities. Especially towards the end of March when the markets were tanking, we were able to put money to work. I made two investments and they have done very well. I'm very happy that we made those. The pandemic, there's more clarity about it and it's still going to last for quite a while.

I think that it'll take a while because we need to get to the point where, in effect, people have some kind of certificate or passport or something which says, I'm vaccinated and whatever, and such. For business to come back and business people to have meetings, everyone needs to have that sort of thing in place. That'll take a while. But we are already finding in California, for example, the freeways are getting clogged up and things are coming. This is really stressful. They have nots, and it's really, unfortunately widened the gap between the haves and have nots. It's a very sad thing in terms of what's happened with the pandemic, in terms of who it has impacted, growth and value are joined at the hip.

There's no difference. All intelligent investing is value investing. If a company is growing, all that means is that you've got more coupons in the future, and they've got higher coupons, and then you discount them to whatever rate. It doesn't matter whether those coupons are growing at 20% a year, or they're growing at 0% a year, or they're declining 5% a year, all three cases will give you a valuation on which you can invest. You're better off having high return on equity and high growth in general. That's really what's going to and long runways with that, but I don't particularly see it as, one is different from the other. I think if I have a choice, I want to invest in growth. Anyway, I told you that, the 50 to 90 cents is not of much interest. I want to get to the long runways and such, but I want to get to the long runways without paying up too much.

Student 7: Thank you for joining us today. My question for you relates to one of the points that you made in your book that when I read it a couple of years ago, I thought was really brilliant, which is that embedded options tend to be mispriced. Since I've read that, it's something I've been on lookout for, for a few years now, and one of the

things that I've observed is that, actually these things tend to be understood at least in the businesses that I've looked at. I'm wondering whether you think that's a concept that now tends to be more widely understood by the markets, or whether you still find options that are in fact, mispriced.

Mohnish: You're talking of the optionality in a business, right?

Student 7: Exactly.

Mohnish: I think that persists always; I mean markets don't like this kind of wide outcome ranges. I think what markets are really good at is, they want to see a cookie cutter, and they want to be able to see what that cookie cutter can do over a long period of time, and they want a straight line, right? If I have a business like Costco that gets as much as a cookie cutter, you can imagine, right? They have a pretty well-defined model. They do innovate within that model, but they know the path they're going down. I would say optionality on Costco would be like, they're in such a small number of countries they could expand that quite dramatically.

Mohnish: China just started for them and so on. But it's also richly priced. I found out that what markets don't appreciate, (because most markets risk participants did not run businesses or have not run businesses), is they don't appreciate the messiness of the real world, and they don't like the messiness of the real world. That actually gives an advantage to an investor who appreciates that. The reality we know in businesses is that things don't go in a straight line, you're going to have ups and downs, and businesses will open up brand new things that you never imagined. Things that were not part of the model, like Starbucks starts reserve, right? They kind of go higher end on the coffee or even starts serving alcohol, for example. If those kinds of tangents work, it changes the paradigm, but the market's not willing to recognize those typically because they see a lot of uncertainty with those. If you can figure out optionality of the business and you can handicap the probabilities of the option, or you're not paying for it at all, you're paying for the core business, you're not paying for the optionality, then those can be really good absolutely.

One of the things I didn't appreciate but came out later was, like when we bought Fiat Chrysler in 2012, I was just looking at this as a car business with a great CEO who was going to right the ship. If you right to the ship, they would make a few billion dollars a year, and the market cap would go to four or five times. What I did not appreciate about Fiat Chrysler was that, I knew that, for example, Ferrari was embedded inside the company. But at the time when I made the investment, Ferrari was making less than 150 million a year. I said, "Okay, you can give this a 15 multiple or something, and it's got maybe, a couple of billion of value or something.

What I was looking at is that, can this 5, 6 billion get to 30 billion, for example, right?

I could see that the core business could get to that, right? But I just dismissed Ferrari. And as it turned out, we paid about \$16 a share for Ferrari inside Fiat Chrysler, and it went to 190 or 200, right? We eventually got one third of the value. It did way better than the rest of the other pieces. They had several parts businesses, which they got rid of and spun out and so on. There was a lot of stuff that came out of Fiat Chrysler, which was not part of my original analysis. I just said, "Okay, we've got a gifted manager and he's going to make sure that we get good value from these pieces". The optionality there was not even something I was focused on, but then, after a few years, I realized there's a lot of different pieces here that I haven't accounted for, and that worked out very well.

Student 8: You've talked about long runways, and I was just wondering, how do you find long runways and where do you see long runways

Mohnish: For on long runways is Arvind, that's what you need to do. You need to put your arms around Arvind and ask him.

Arvind: It's hard to do that in a COVID world.

Mohnish: He's a Mr. Long runway guy, his full name is Arvind Long runway Navaratnam, it's his middle name., I think that it's a really good question, and I think the best way I can answer that is that if you make 10 bets, carefully selected, all with long runways at leads, your perception that they have long runway. One of the problems with long runways is that I already told you capitalism is very brutal. I mean, there's all these forces coming from left field and center and everywhere else, trying to chip away any competitive advantage, right? People look at ADP and they look at that incredible moat and they want to constantly hammer against that moat or people look at Visa and MasterCard, look at that moat, and they want to keep going against that moat.

Many times, they will succeed. They will succeed at collapsing that boat. That's the nature of, I mean, if you look at dominant businesses 50 years ago, a hundred years ago, even 30 years, ago how many of those are dominant today? I mean, most have gone by the wayside because capitalism is really hard. But if you make eight or 10 bets and you're careful on the valuation and what you're willing to pay, and you are convinced that the modes are quite resilient, even if you're wrong 40% of the time, you will still end up very wealthy.

You are not going to bat a hundred percent on the long runway game. I mean, look at, Warren and Charlie. All they're doing is trying to buy long runways. But if you

looked at every acquisition Berkshire has made, and you equal weight every acquisition, I would say easily a third have not worked. Right now, if you dollar weight it, probably 80, 90% have worked. But if you equally weigh it, a lot of the decisions didn't work. These are the guards of investing, right? We are going to have mistaken, we are going to have things that we think are going to work and they won't work. Bottom line is that, if you make 10 bets and each one is 10% and one of them becomes a 30 bagger, and three or four go by the wayside, and some of them are five or 10 baggers over 20, 30 year period, you do just fine.

Student 9: I have a question kind of on that topic about moats. When you're assessing moats, is it more conceptually or do you do it more analytically? How confident in a moat do you have to be, to ultimately invest in that company?

Mohnish: What should be really obvious to you? I think you should be able to look at it, and you should have very high degrees. Let's say we look at a business like Starbucks, right? I mean, if you were investing in Starbucks, the big question is that what does this company look like 20 years from now, or 10 years from now? Is the moat intact? Are people still going in? Who are their competitors at that point? These are the questions you need to answer, how big the runway is, how far they can go, what can happen. There's a range of outcomes, but you need to be convinced, probabilistically, that most of that is skewed towards a great answer. If you look at a business like Chipotle, for example, a lot of people will look at Chipotle and say, what's the difference between Chipotle and Taco?

I think there's a difference. I think there's a big difference between almost all Mexican restaurants and Chipotle and, in my opinion, they've widened and deepened the out. I mean, their app is great. They have, in the pandemic, done a really good job with keeping the business profitable with deliveries, and all of that. I mean, the dining rooms are shut down, but they've been able to survive all that. The infinite customization you can do on it. There's a number of things there, but again, the question would be, when you look out 10 years, 15 years, what does that business look like? Does it become Chipotles all over Europe, all over Asia, all over Latin America? Does that happen? What are the probabilities of that happening?

Who else has entered a space? Will they keep executing? What will be their ROEs in the future? There's a whole bunch of things that come up. I think what I'm saying is that, you've got to start out with admiring the business and the mode. Like you've got to intrinsically know that, even before I look at any ADP numbers, I know it's a great business, okay? Even before I look at any visa numbers, I know it's a great business, right? First thing is, you've got to mentally have a kind of framework in your head that tells you, yes, I like this business, and I think it's great. I think that,

businesses like Chipotle are harder because they don't have recurring revenue and all these things. I think some businesses like ADP may have more resilience because, even if there's a disruptor, businesses are not going to be wanting to change payroll quickly because it's such a small portion of their costs.

Like, for me, messing around with payroll makes no economic sense. It just irritates me. I go down these irrational paths but basically, for most businesses, it's not worth the time of day. Its payroll is running fine for leave it alone, right? Those businesses have a much higher degree of resilience, in my opinion, than a Chipotle, right? Because, there, you got to keep earning the customers confidence and trust every day and so on. I think moats come in so many, widely different shapes and sizes and all kinds of things happen. Boeing, what an incredible moat and then yeah, hell breaks loose. I mean, if you looked at Boeing three or four years ago, you would say, this is unbelievable. They were this huge pipeline. They don't produce a white tail. I mean, just like NVR doesn't produce a home that's not already sold, Boeing doesn't produce an airplane that isn't already sold, right? There's no white tails, and they've got a big auto book, and they're a duopoly, and they've got a great defense business and all that. It's just an incredible business. But look where we are, such as life.

Student 10: Thanks for being here too. It's really great to have you here. My question is more on the selling side. You talk earlier about the 50 to 90% and you sell 90% internship value. Now we're talking about long, wrong runways, but you keep on looking for new business opportunities, I'm sure as well. At what point do you say, I thought this was a good business. I think it has good growth opportunities, but I got this business here that I'm looking at, and it looks like it's more valuable. How do you go about this part probably selling off, I don't know how you do it, but do you sell good positions for what you think might be even better?

Mohnish: No, it's all opportunity cost. I think those are why you get paid the big bucks. I think that, you have to continuously do that. But , it's a difficult exercise because the mistress always looks hotter than the wife, and actually the wife may be hotter, but you think the mistress is hotter, so you got to make sure that the mistress is actually hotter, not just that, you think it's that way. Anything that we know really well, we also know all the blemishes really well, right? This new shiny thing on the side, we don't know all the blemishes yet. That's one of the things is that the greater your familiarity with the business, the greater your familiarity is going to be with all the negative issues, like, Arvind's probably really familiar with all the negative issues with Costco. Okay. He knows those really well. Even, I can't believe Costco has anything negative.

Student 10: Long

Mohnish: I'm sorry, what?

Student 10: Long lines?

Mohnish: Oh yeah, long lines. Yeah. Like every time I pass a Costco gas station, I think I'm in some socialist country. I think I'm in Russia 30 years ago or something, I'm thinking why in a capitalist society do we have these long lines for gas? But that's the way it is, such is life. Yeah. I think you have to be careful that you don't fall into the mistress trap. And as long as you are genuinely looking at something that is better than what you own, that has better value than what you own. You consider the tax implications and all of that. I have a good friend, Guy Spier, and another friend of mine, the way he describes Guy is, he says he has the highest return of any investor on the planet based on effort expended. Okay? On every hour of effort expended, Guy is off the charts. The thing with Guy is that, and I bounce a lot of ideas off it, anytime I bring up any new idea to him, it doesn't matter how good it is, he is not changing anything. I tell him, "Guy, listen, you've got Nestle. Okay, Nestle has done 30, 40 times earnings, whatever, done. Okay? We've got this thing at three times earnings, which has got this massive runway.

Can we please sell Nestle? Please. I get nowhere". He's not willing to make any changes, okay? Then after I keep badgering him over and over, he'll buy 2%. I mean, he loves long runways, okay? He loves deep moats. He loves all these things. I told him about Moutai, I mean, great brand, blah, blah, blah. Also I said, "this is it, Guy, I know you don't like all the shit I bring to you, but this is like a real runway". He says, "I'm not buying any Chinese company. I'm not going". I said its fine. There's no issue there. 50% pay out all this stuff, good governance, blah, blah, blah. Okay? He said, I'm not going there. Then I kept badgering him, and I think he put like a hundred thousand dollars into it just to get me off his back.

Then after a few years, we went to China together, and we visited Moutai headquarters. By that time, it's now gone up about five times. Then the whole trip was, "Oh, I missed this. Oh, I should have bought this". I said, "Do you remember all the calls I made? I was pounding and I couldn't get through". Oh, yeah, I don't know what was happening. This is such a no brainer. This is so easy, blah, blah, blah. But, actually in action is what saves Guy. The best thing that you can do is, don't make switches if it's 60:40. Don't make switches if, this is a little bit better, and I'll make the switch. No, make the switch hurdle really high. Like the mistress has to be really hot. Okay? Not just better than the wife. They're all better than the wife, but really hot. Then you're fine.

Student11: Question about competitive advantages. You have a role of only investing in copycats as opposed to innovators. My question is, do you believe that there's a first mover advantage?

Mohnish: That's a really good question. I think that one of the mental models, which has served me really well, and it's a weird nuance of humans. I still don't understand why humans are this way, but they are this way. Humans are bad at cloning and copying. Most humans and most companies almost think that it's beneath them. What that does is, it opens up a significant window of opportunities that would not exist without it. Obviously, we are right on the innovators and the innovators grow and scale and whatever we do really well. If we look at a company like Microsoft for example, Microsoft is the ultimate cloner okay?

After they came up with the basic compiler in 1976 in New Mexico, everything has been copied or stolen from then on. They're not even very good at cloning. Like, when they tried to clone the Mac, it took them like 15 years and 10 versions to get there. Excel was copied from Lotus, and Word was copied from Word perfect. PowerPoint was acquired, access copied Oracle and Sybase, and they finally gave up on search and they kind of went with Google. But the acronym for it is Bing, but it's not Google. They are not only a good cloner, many a times they fail, like forever they tried to clone Quicken and they came out with money, and they were never able to get traction there.

They put a lot of effort into search. They could never get traction there. Even with being a bad cloner, like for example, now Microsoft has teams, right? Teams copied slate, right? They will probably kill slate because they're so good at eventually getting these things working. Then eventually, the incumbent has a problem. If you look at something, when someone like Walmart, for more than 10 or 15 years after Sam Walton founded Walmart, for at least the first 15 years, there was no innovation. Every single thing about Walmart was copied from Kmart and Sears. They just lifted that model. The reason why Sam Walton spent all this time in all the competitor stores is that he had no ideas of his own.

He just looked at what other people are doing, and he copied the best of what he could find. If you look at Walmart, I mean, what is the intellectual property of Walmart? After 15, 20 years, they got a bunch of competitive advantage with scale and logistics and all of that, but in the first 10 or 15 years, there's no advantage. All they're doing is execution. It's great execution on a base model. If you look at Costco, everything about Costco was copied from Price Club. Someone asked Jim Senegal, what did you learn from Sole Price? He said, it's the wrong question. There's nothing I know that I didn't learn from sole Price. The whole Costco model, everything about it. Actually, the cloner became better than the original. Like

Walmart became better than Kmart and Microsoft became better than so many other companies. I think that, yes, you can invest in the innovators, but I think that's much harder to get right if some businesses are consistent cloners and they're good at it. I don't think markets recognize the power of great cloning. If you can identify, I think even at some level, if you look at someone like Starbucks, he looked at what was happening in Italy and he said, I think this would play in Peoria. He took that Italian cafe and brought it to Peoria. The funny thing is, now Starbucks is scaling in Italy. Who would've thought that they can scale in Italy, but they're scaling in Italy. I always feel that if you can identify a business that is good at cloning and has kind of embraced it the way NVR embraced the buybacks. That's a great mental model and advantage to have in your arsenal.

Student 12: Well, I really appreciate it. I was curious if you could talk a little bit about how you document your investing process. Earlier you mentioned a bit of a checklist and you mentioned a little bit about focusing and really honing in on those two or three variables that you really have to understand. Maybe just talk about that checklist. Do you write things down? Do you do Excel models or, what gets put to paper and what's the output along the way from idea to purchase?

Mohnish: For most of my career, I functioned alone. Because I had another entity and I've got horsepower, I've got two guys who help me and work with me. I have never built Excel models or anything like that. They will do that sometimes and such, but the precision can lead you astray because businesses are not linear, and they don't grow 15% every year and so on. I think that model in your head, where you're able to figure out kind of what is going on and how this business works and how it makes money, and then you go deeper and see if all the facts check out, the checklist comes in before the investment. The main benefit the checklist has is that we are driven by greed. When we encounter some new shiny investment ideas, we can be enamored by it. The checklist kind of puts a lot of cold water and a lot of stuff. It asks a bunch of questions, that's the big advantage it has is that many times I've not even thought about those questions. I think I've thought about every side of it, but when I actually go through the individual questions, like I think our checklist are about 160 questions on it, and I'll find that I don't know the answers to 10 questions, which means that I have more work to do. That's the big advantage. It identifies and holds in the analysis and then I go back and do the work to be able to answer those 10 questions. That's where the checklist comes. It's really just trying to make sure you've thought about things in a complete manner. What it also shows you is, there are no businesses, maybe other than Costco, that go through a checklist with no blemishes. Like everything is fine. Every business has issues, and those issues will get highlighted by the checklist. The question you got to decide is, is this issue going to be the one that does the NEP, right? You got to make a judgment call on

that. I think that it's part of art, part of science, so you can look at the areas where the business has vulnerabilities and issues, and then you got to just see, hey, does it still make sense when I know these are the areas where the business may have difficulty? Does it still make sense?

Student 13: Hi Sir. Thank you for your time. I saw one of your speech, and you mentioned that you invested in one steel company that is unvalued, and you made over 100% returns in just half and one year. What tools do you use to find out a company that is unvalued? You read the balance sheet, or you have other tools?

Mohnish: We made a 14:03 4X on that company in a couple of years. That was a company called IPSCO. It was a Canadian steel company. There, I think, it was a relatively simple thesis where the stock was in the low 40s and they had no debt. They had about \$15 a share in cash, and the next two years of contracts that they had on their books was going to give them about \$15 a year in earnings. It's a very high uncertainty business with a lot of fluctuation in earnings because they made tubular steel, which went into pipelines. If a big pipeline is being built, then they have contracts and there could be no contracts after a couple of years, right? The situation was, I'm paying \$45 a share and I fast forward to two years, I have \$45 on the balance sheet, and all the plants and equipment and inventory is free.

I said that doesn't make sense. The business has to have a value over \$45 because all those things can be liquidated for some price if you're not a going concern. If you're a going concern, it has even more value than a liquidation scenario. I said, "what I'm going to do is, I'm just going to buy this company and own it for two years and just see what the market does to the price", because I said, "let the \$30 come in and let's see what the market does". I think about eight or 10 months after I bought it, the company said that they have one more year of \$15 a share in earnings. I said, "Oh, so now we are at \$60, right?" Because we got three years or \$15 and the stock went to, by that time, it had gone to \$70, \$80 a share at that time.

Then it was inching up to maybe about \$90. Then a Swedish company came and offered to buy them for \$160 a share in 2006. I didn't even wait for the deal to close. The stock went to like 150 something and five minutes after that I was out of there. That was fine. If you look at Value Investors Club and you read write-ups there, that's a good place to understand and find businesses. If you have a subscription to some zero or you're a member of some zero, that's another area where you can get some of this. Sometimes there are articles seeking Alpha and so on. There are a few different places. You can look at Data Roma, and then you can try to reverse engineer, why does David Tepper own this, or why does Haken owned something and so on.

You can try to reverse engineer some of those and take it from there. Different things happen, last year I visited a company in Turkey, in Istanbul, they have a few different businesses, but they have a bunch of warehouses. They have like 12 million square feet of warehouses, and they're the largest warehouse operator in Turkey. Their tenants are all like, IKEA, car for Amazon and so on. I mean, they've got really blue-chip tenants, and the market cap of the company was less than 30 million dollars and the liquidation value was somewhere between maybe three, four hundred million to a billion dollars. Once, I had kicked the tires enough to know that all those things were real, we spent an afternoon going to all the warehouses and so on. We loaded up even better than IPSCO, right?

If I can buy an asset for 30 million, that, on a bad day, is worth 300 million, Turkey has a lot of challenges, but in many cases, micro will trump macro and at some price, your risk levels go down. That business has gone up about seven, eight times in value in the last 13, 14 months, in spite of the pandemic and all that. What I'm saying is that, you keep poking around and once in a while, things hit you in the head like a two by four. When they hit you in a head, would say "what was that?" When you're really shocked and surprised, that's when you act. It was like, if you just say, Ah, yeah, okay, whatever. Just ignore all of those. Look at the ones that totally blow you away, and then go for those, shock it all.

Student 15: I look in your book, you talked a lot about the Kelly criteria, but you kind of say, you never go full Kelly or anything like that. How much of a role does it play in your capital asset allocation decisions? Is it more of a guideline or hard and fast, like do the math out kind of thing? The follow-up would be like, do you apply it to your entire portfolio or just your dry powder?

Mohnish: If I ever do a revision to The Dhandho Investor, I will take out the Kelly discussion entirely. In fact, I will even say that it doesn't apply to investing. I don't use the Kelly, and it was a mistake to put in the book. The main issue with the Kelly criteria is that, it works really well if we get to make a bunch of similar bets. Like if we do a hundred coin tosses, where heads is 51% and tails is 49%, and I keep betting heads, you can use that formula to figure out if you have a hundred dollars, how much you should put on each bet? It's good when you get an opportunity to make many bets, which are very similar in odds, but it doesn't apply. Like when I talked about the company in Turkey or the steel company, whatever else. I mean, those are investing we are making one bet at a time, and we don't have the luxury of making a second or third bet like that. I would just ignore Kelly completely. I know it sounds exciting and everything, but it's not relevant.

Student15: How do you manage the balance between diversification and then also you talked a lot about staying within your sugar of competence. How do you manage those things without throwing away everything?

Mohnish: You can throw away nearly everything, and that's fine. Arvind has heard me talk many times about Charlie's friend, John Arriaga in northern California who's a billionaire, and all he's done in his career is invest in real estate within a couple of miles of the Stanford campus. John Arriaga's circle of competence is like this small, it's really tiny. It's not even real estate in California, and it's not even real estate in Northern California. It's real estate in a very narrow geography. If you showed him a deal in Sacramento, it would take him a femtosecond to say, I'm not interested because he doesn't want to go there. With being in a very narrow circle of competence, it did not prevent him from becoming extremely wealthy. The good thing about investing is that it doesn't matter how big your circle of competence is, what really important is to not step out of it.

What is even more important is to try to play in the epicenter of that circle. If you look at a business and you say, I'm not sure about this, or I don't understand this, or whatever, be a harsh grader and get rid of it. Focus on the most obvious stuff. Some of the most obvious stuff is things that we are consumers of. If you're using a certain brand, you're using some service or whatever else, like, I like to bike. A lot of the biking parts come from a company called Shimano in Japan. I know from biking that Shimano has very strong brand recognition and they've got pricing power and all these things. I've never looked at a balance sheet; I just know this from the way they dominate in cycling and then when I looked at them, I also found they dominated in fishing. Even in the fishing area, they've got, and they've innovated a lot in their area. I looked at Shimano and it didn't look obviously cheap like I was hoping that no one else would understand Shimano, and it'll be two times earnings and the rest would be history, but it wasn't that easy. I said, "Oh, it's like double-digit earnings, whatever, forget about it, move on". If it was really cheap, I would've spent more time on it, I only looked at that because I was just familiar with it from cycling, right? It can come to you from different places.

Student 16: You mentioned Sergio from Fiat, then obviously Howard Schultz, Starbucks, Sam Walton obviously all of the very great leaders. I'm kind of curious, what do you look for, the certain traits that you look for in a board or a CEO management team when you're making those investments, how you kind of judge a management team. Then if there's any other specific leaders that have really stuck out in today's market.

Mohnish: Good question. The way to figure out the quality of the leader is to not focus on what they're saying, but to focus on what they've done. Typically, these guys have track records, and you can look back at the track record. I mean, it would've been

hard to invest in Walmart in 1970 unless you were really familiar with Sam. But if you're investing in 1980 or 1990, you've got quite a track record to look at. Sergio, it was very obvious to me in 2012, he was a very unusual and good leader, and I was very excited, and actually as that investment progressed, my assessment of him kept getting better. Like I had underestimated how good he was, and he just kept getting better and better and such.

I think, the one thing that public market investors have, which venture investors don't have is, we do have trend marks that we can look at, and we do have relatively long histories that you can look at. I think that is really helpful and that's really important. It's really important to get a mental model in your mind about the nature of the leader, the quality of the leader, and their nuances. You don't need to always get this right. I mean, there's an error rate. When I bought Fiat, I also bought GM. We made some money in GM. I think we made 40, 50% on what we invested after several years, but eventually, I sold it because I just saw very big differences.

That was a good example, because, I felt like, GM had competent leadership, but it was nothing like Sergio. If you look at someone like Elon, I mean, he's on a different planet. I don't know if you guys saw Battery Day when he had the battery day and the annual meeting recently, I mean, if I was a comparator of Elon, any OEM car manufacturer, I'd be very afraid because those guys, every other CEO has no understanding of first principles of physics and so I think they're going to have a very hard time. He's increasing the distance. We don't know how that works out, but I would just say that he's an extremely impressive guy and kind of strange, somewhat weird. I'm on the Charlie Munger board, which is saying, don't go long or don't go short Elon. It's hard to go long Elon because it's just so expensive. But I would not want to short a guy who lands two rockets simultaneously backwards. I mean, I don't know why anyone would want a short guy like that. I think that you study the history and the credit marks.

Arvind: Mohnish, you've being so generous with your time, thank you so much. I guess maybe I would end with one last question, which is, on this Zoom call, there are students who are graduating from business school, from college just that, the world has shifted dramatically. They may feel for their opportunity set. Are there any thoughts that you have or any advice that you would give over or the decades to long and also the short term?

Mohnish: A couple of thoughts. One is that, in an advanced civilization like the United States, the odds that any of you will be homeless or not have enough food to eat or can't pay a rent or any of that, is zero. Basically, the bottom line is that, the society has enough safety nets and has enough opportunities that none of you will ever face those circumstances. Given that reality, what I would focus on, if I were you, is, I

would focus on the pursuit of passion. I would really try to figure out what is really exciting for me and what I really like to do. One of the things Buffett talks about is, “people will say, oh, I'm going to do banking for three years, then I'm going to get my MBA, then I'm going to do X, Y, Z and then, after 10 years, I'm going to do my own thing”. You don't need to take these long circuitous paths. Think about what you want to do and just go for it, get there without making a 20-year plan to get there. I think one of the problems that comes up when you graduate from elite institutions, the problem you have when you graduate from Boston College or Harvard, is the opportunity cost. What happens is that the world is willing to pay quite a bit for your services, and many times the world is willing to pay more for your services than you would make if you pursued your passion. If you pursue your passion, you are giving up a lot of certainty. But given that, I told you that you're not going to end up homeless and you're not going to end up with no food on your table, I would say that stretch a bit.

Try to understand internally what you love to do. Then the other thing is that, even if you take the easy path, which is some guys giving you a great offer and it looks great, whatever, you still have plenty of time, evenings, weekends, etcetera, to try to think about what else might be your passion or interest, and to try to build something. Like my first business, I got off the ground part-time while I was working full time, and then when I got enough to action, I resigned, and I didn't have any money or anything. I actually was on credit cards and so on to try to get it up and running. What I would say is that the younger you are when you do that, the easier.

When you don't have kids and do that, it's easier. When you're single and you do that, it's easier. For many of you, all of those are true. What I would suggest is, if you really want to go down a certain path, I think you should really think about, humans are driven by peers and we like to compare ourselves to peers, and you have a lot of peers in the institutions you're at. It can be difficult to do something. I remember that the founder of Staples went to Harvard Business School and then after that, he joined some grocer and I think while he was in school, he was working in a grocery store, kind of doing the shelves and whatever else. He said some Harvard Professor walked into the store, saw him doing that, and didn't want to embarrass him, and just kind of went the other way.

He went out and reached out to the Professor, and said, “how you're doing”. He was not at all concerned. That guy wanted to go into retail in spite of all the things I've said. He was passionate about it, and he turned down a lot of other offers, which were probably higher paying, and he went into that area and eventually founded Staples and went from there. You have to be willing to get off the beaten path, and what I would suggest is to be willing and bold to do that.

Arvind: Well, what a great note to end on Mohnish. Thank you so much. This was fantastic as always.

Mohnish: Thank you, Arvind. It was a pleasure. Thank you.