Thoughts on Intrinsic Value

Shashank Gupta

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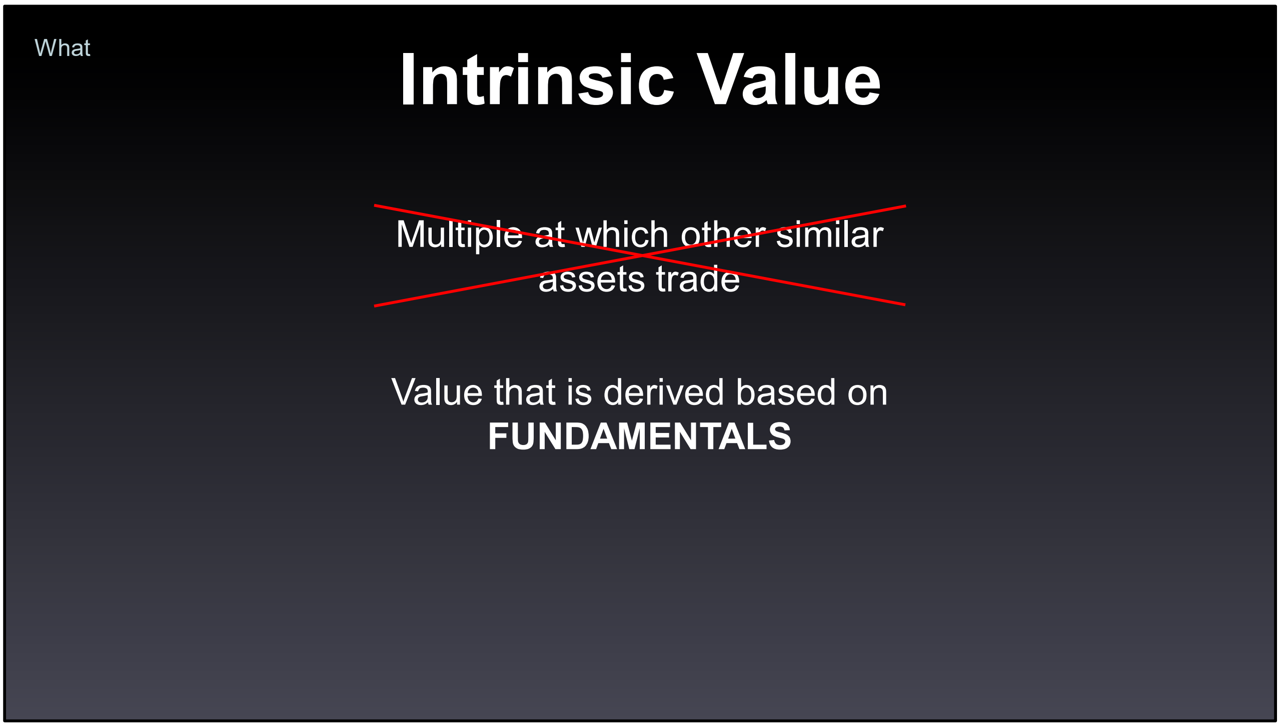
"An education in investing requires only two courses: How to value a business, and how to think about markets."

Warren Buffett once said, "an education in investing requires only two courses: How to value a business, and how to think about markets."

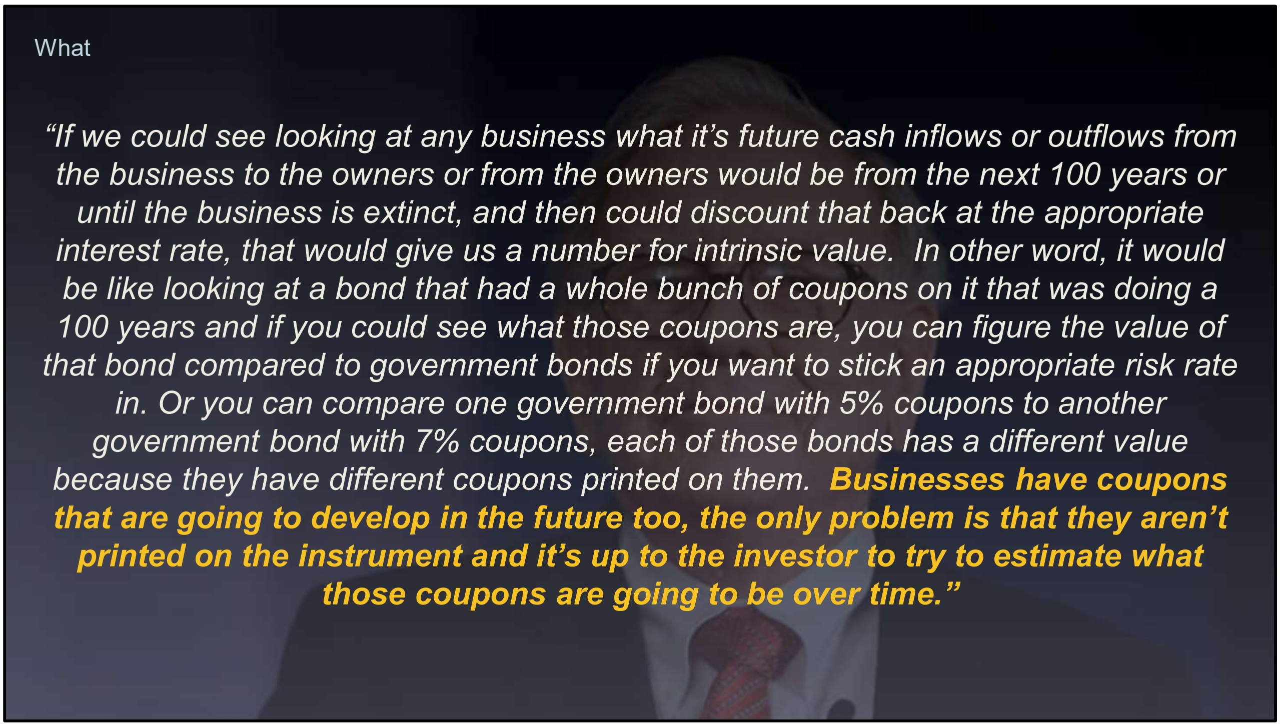
Today, I am going to talk about one of those topics and that is the concept of intrinsic value.

I've structured my presentation in 3 parts. First, I'm going to discuss what intrinsic value is. Then, I'll move onto a few propositions on intrinsic value. And then finally end with some of the lessons on building an investment framework given those propositions.

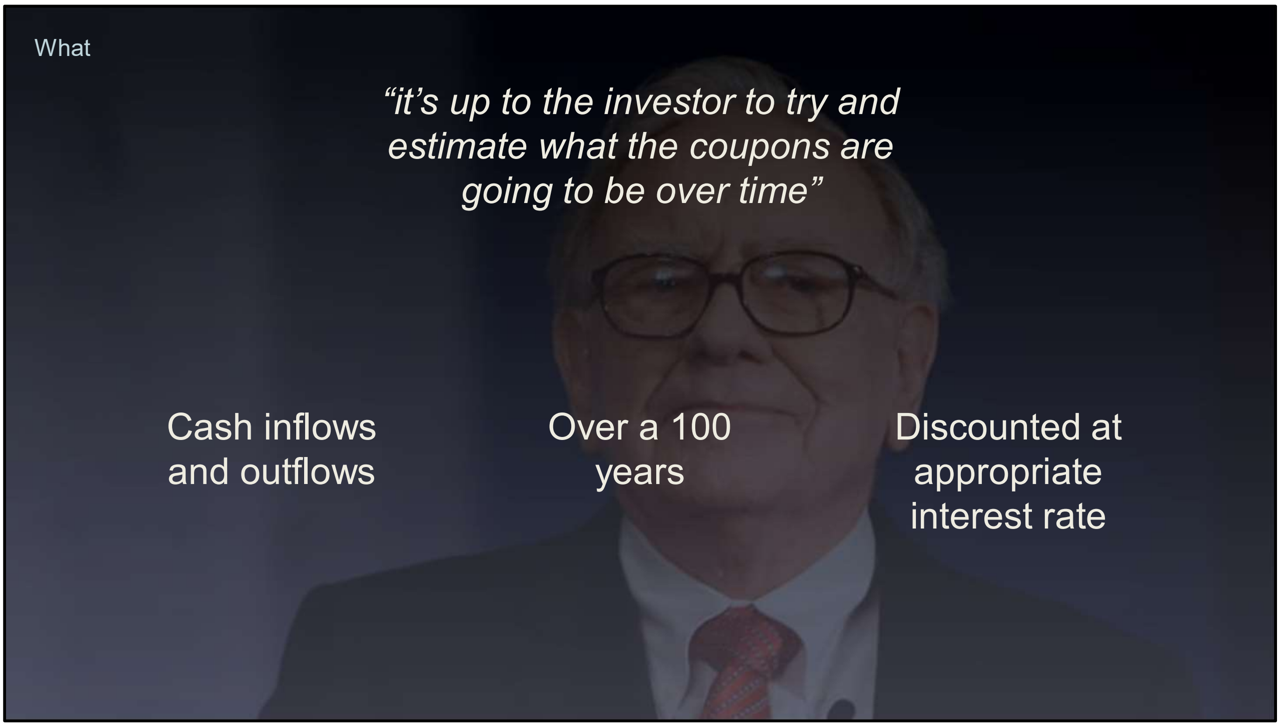


So, let's get started.

What is intrinsic value? Is it the multiple at which other similar assets trade on the market? In my view, it's not. Rather, it's the value that you would attach to an asset based on its fundamentals. Now as to what those fundamentals are, I'll let Warren explain!



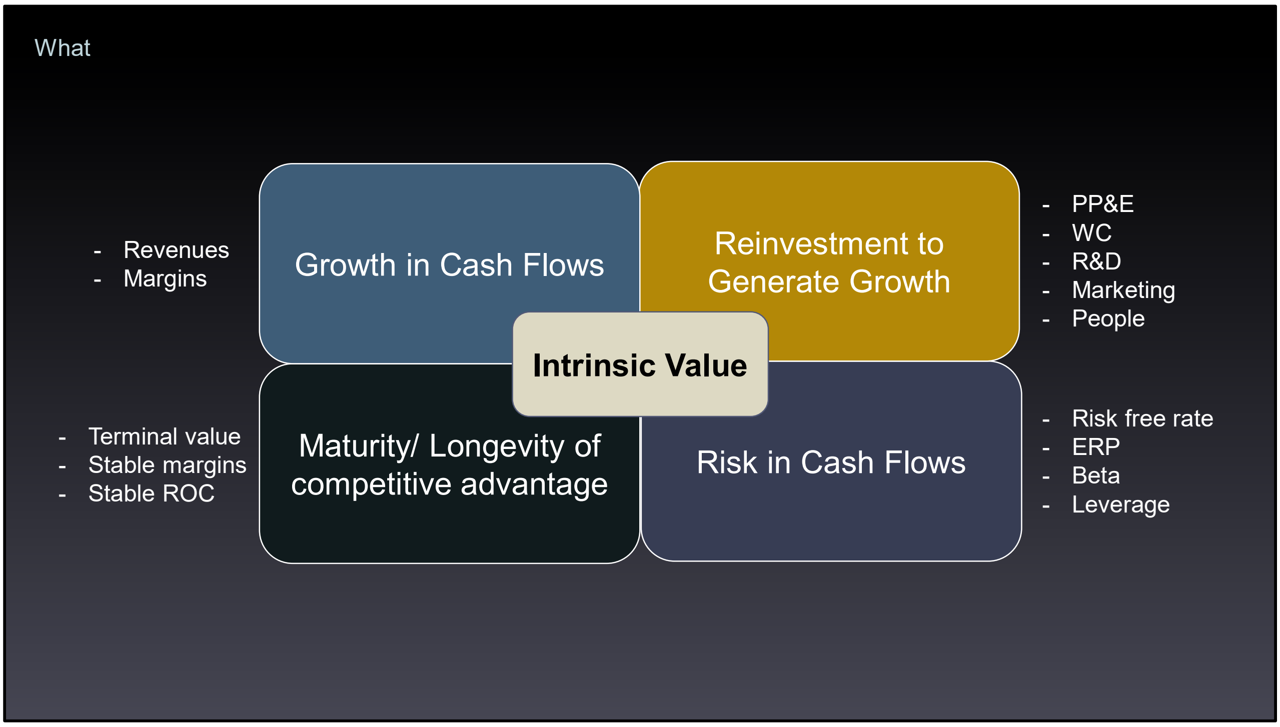
Here is Warren Buffett answering a question on what intrinsic value is and how to compute it.



The first thing that strikes me in that clip is what he said right towards the end – that in order to estimate intrinsic value, “it’s up to the investor to try and estimate what the coupons are going to be over time”.

And Warren basically identifies 3 variables that we have to think about when estimating the value of a business. Cash inflows and outflows, over a long period of time and they need to be discounted at an appropriate interest rate.

One of things that Warren doesn’t explicitly talk about in that video but what is implicit in it is another factor and that is a judgment about the longevity of a company’s competitive advantage period. It’s the period during which a company is able to grow faster than the economy and earn a return on capital that is significantly higher than it’s cost of capital.



So, I rearrange those variables as follows:

- Growth in cash flows which is essential driven by growth in revenues and margins.
- How much does the company have to reinvest back into the business to generate that growth because growth is not free – some companies have to reinvest less than others but overall, it's virtually impossible to sustain growth without reinvestment. Reinvestment can take the shape of putting up manufacturing plants, working capital or lately, R&D, Marketing and even people.
- What is the risk in the cash flows since not all companies are created equal – some business models are riskier than others. If your business has more fixed costs – either in terms of operating leverage or financial leverage, then you would be

inherently riskier than a company which does not.

- And finally, when will this firm become a mature business and its growth rate move down towards the growth rate of the economy or even starts declining and the incremental return on capital moves towards its cost of capital or industry average

Now that we have an idea of intrinsic value, let's move onto a few propositions about it.

Proposition 1: Good businesses increase in intrinsic value

"Time is the friend of the wonderful business, the enemy of the mediocre."

	Company A	Company B	Company C
Earnings	$100	$100	$100
ROC	5%	20%	20%
Reinvestment	100%	100%	50%
Earnings after 5 years	**$128**	**$248**	**$161**

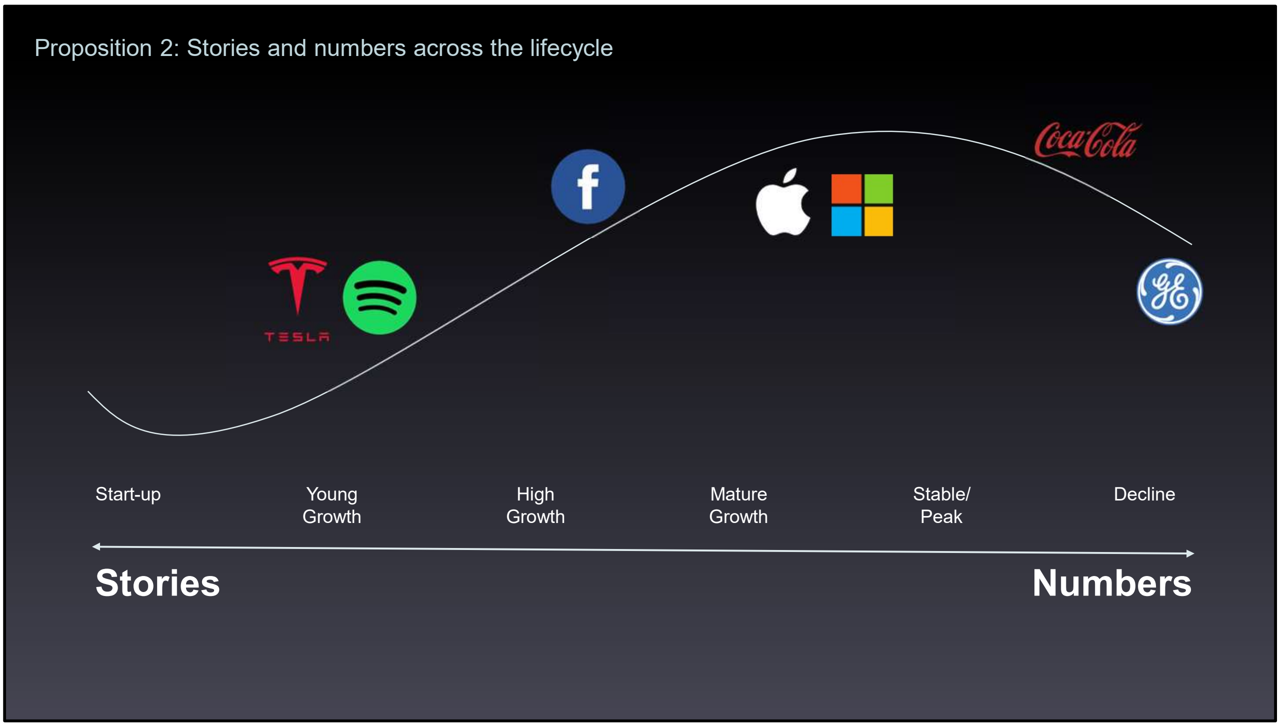
So first up, let's talk about good vs. bad businesses. When it comes to intrinsic value, good businesses widen the gap between themselves and bad businesses over time and the longer you hold onto them, the wider this gap becomes. Everyone has probably heard or read this quote – time is the friend of the wonderful business and enemy of the mediocre. Now we can use the intrinsic value framework to see why that is.

Let's take a very simple example of two businesses with both starting at a $100 of earnings. The first business earns 5% return on capital and Company B earns 20% return. Let's also assume that they have enough investment opportunities to redeploy all of their earnings at those rates. What will be the earnings of the two businesses 5 years from now?

Company A's earnings will be slightly less than $130. Company B however, would have raced away to an earnings number of close to $250.

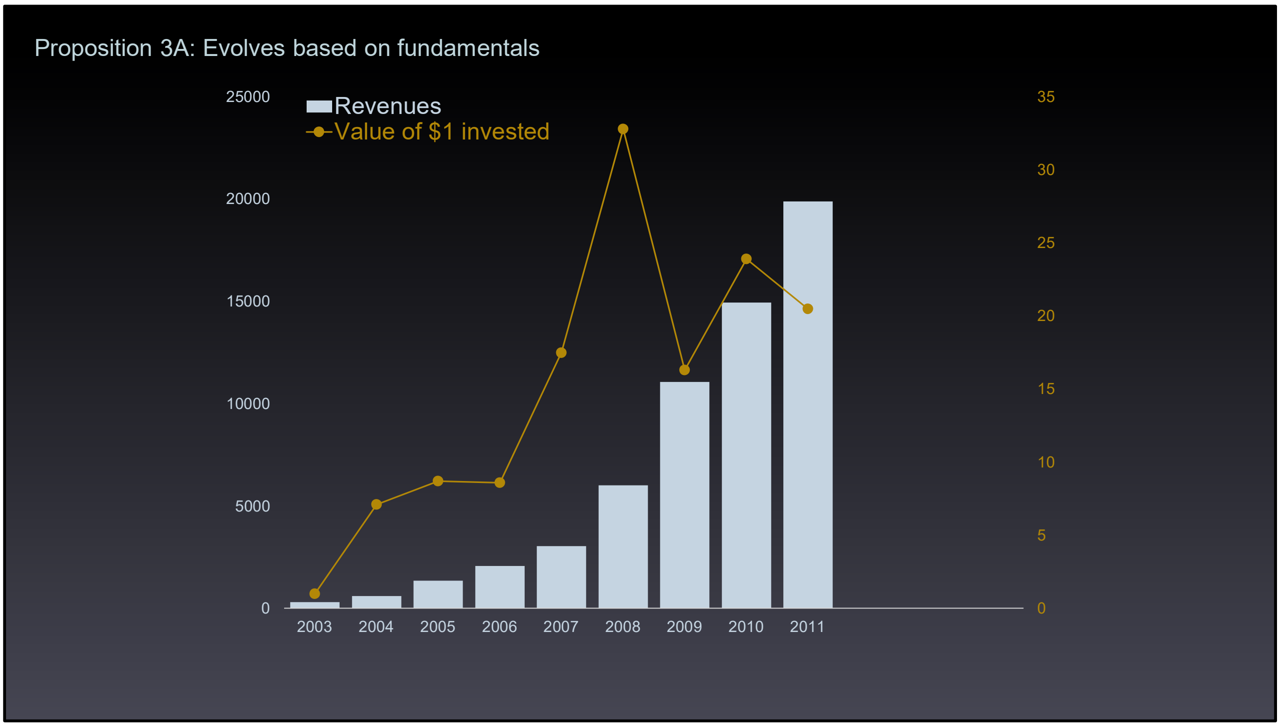
Now that was pretty obvious since Company A was earning such a low return on capital. So let's introduce another company, Company C. While it earns a similar return on capital, it differs from Company B in one aspect. It has limited opportunities to redeploy capital at those high rates and thus, has to return half its earnings back to shareholders while the remaining half get reinvested. This company C, despite earning similar return on capital to Company B, is only able to get to an earnings level of $160 in 5 years.

Great companies are those that are able to extend out the periods over which they are able to deploy earnings at high rates of return. Essentially, they are able to delay their eventual decay. Now of course, I am not saying that a great company can't be a bad investment, that of course depends on the price you are paying for those businesses but, if your holding periods are long, you are better off concentrating on those kinds of businesses.



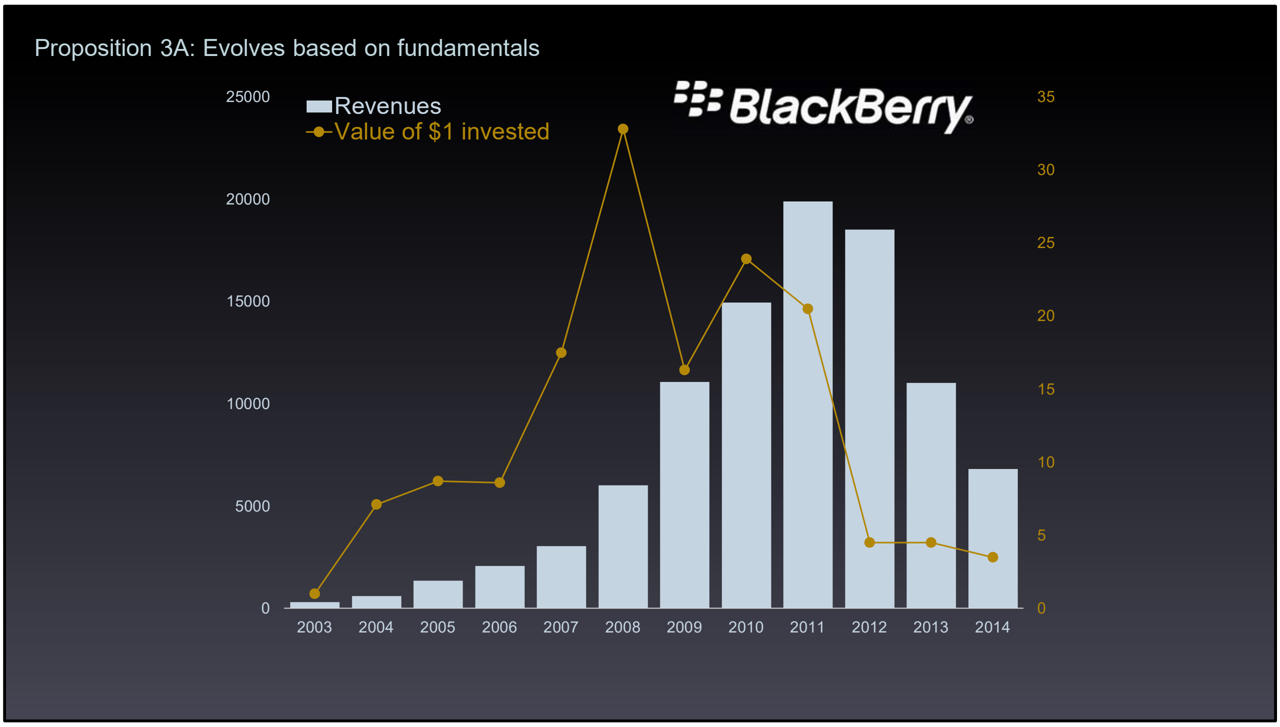
The next proposition is that intrinsic value is not a bunch of numbers on a spreadsheet that spits out an answer to two decimal places. And nor is it a pure fantasy since stories have to be bound by certain realities. A good intrinsic valuation is a combination of both stories and numbers and the relative weight of stories and numbers changes through the lifecycle of a company. Companies are like human beings, they are born, they go through growing pains, they mature, reach their peak and ultimately start declining. Stories dominate when a company is young since there are hardly any numbers to fall back on. As a company matures though, numbers start playing a bigger and bigger role and act as constraints on the stories that can be told.

So, when Elon Musk tells a story about Tesla, it can have a much bigger impact on value than the CEOs of GE or Coco Cola telling story about their businesses. Think of Coca Cola as being already in Chapter 35 of a 40-chapter novel. The characters have all been built and there's hardly any wiggle room to change the story here.



Next, intrinsic value is uncertain and it is not static. It changes as companies evolve over time.

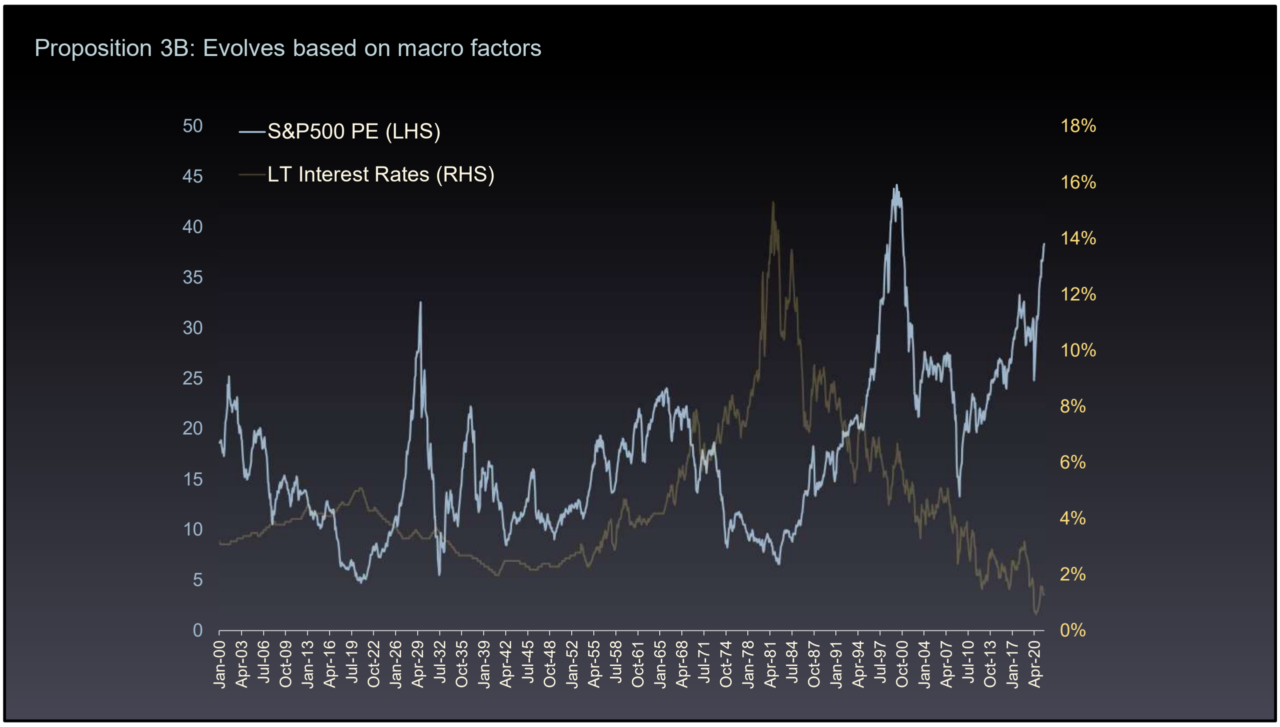
Most of the time intrinsic value changes as company-specific fundamentals change. It goes up as the company is doing well…



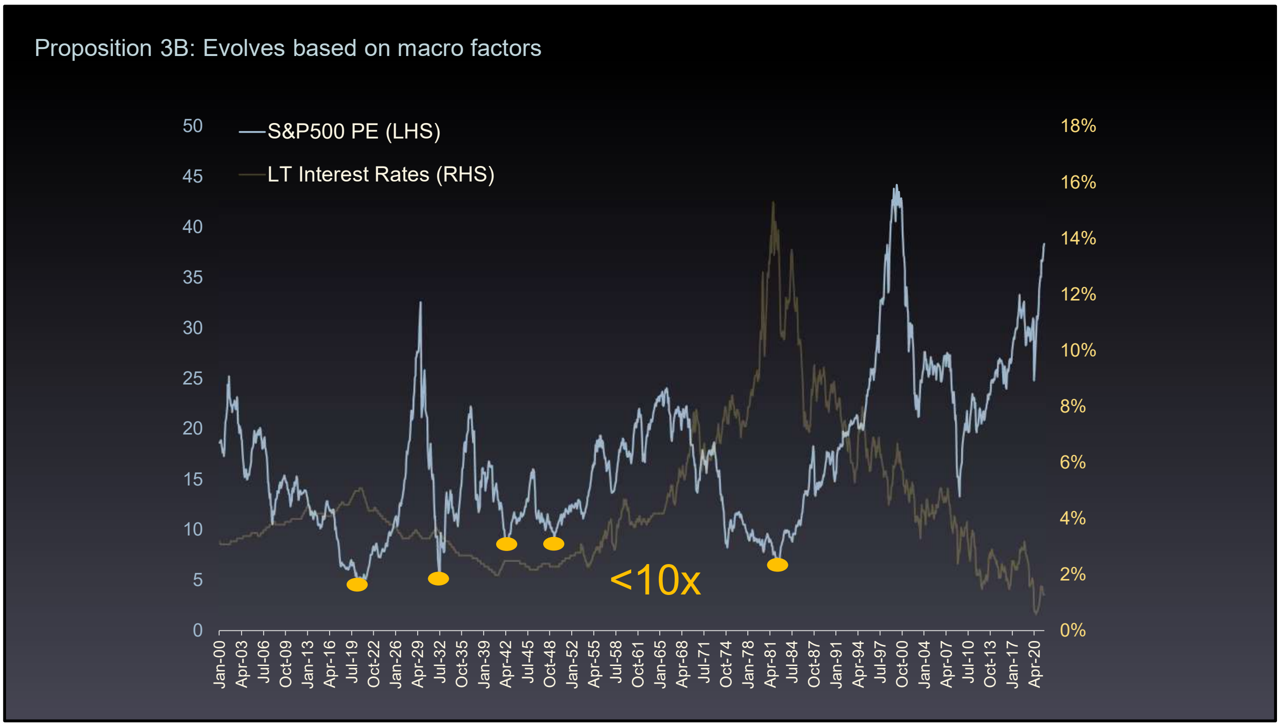
…and is quickly eroded, if it falters. Any guesses as to which company that is? That's Blackberry!

Here’s another example of a company that scaled massive heights quickly but who’s demise was swift as well. This is the headline that Forbes ran in November 2007. Quite ironic how perfectly they timed Nokia’s downfall as the first iPhone was launched only a couple months before this was published.

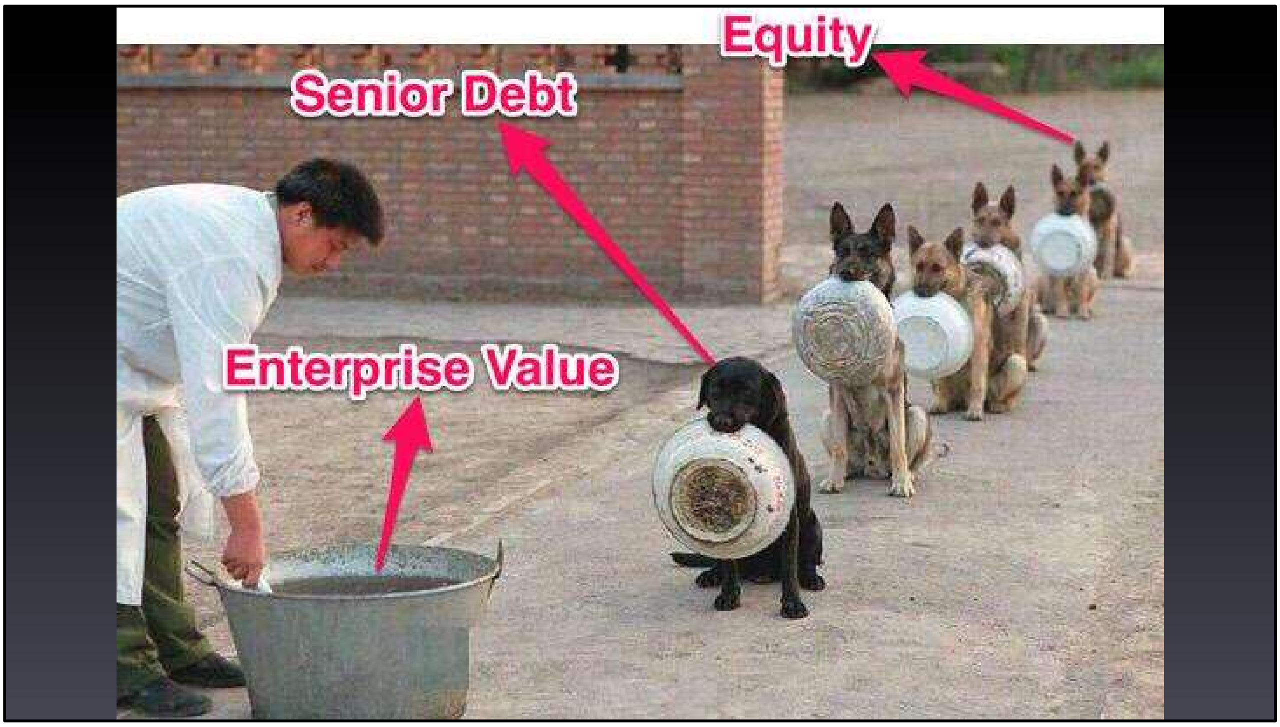
And this ties in to one of the factors that has a massive impact on intrinsic value – which is the longevity of a company’s competitive advantage period. While it’s always been an important factor, I think it’s becoming even more so today than it has been in the past. And the reason is this – internet has enabled companies to scale quickly – they are able to reach a much bigger audience much faster than at any other point in history. Which is great but as economists like to say, “there is no free lunch”. This ability to scale up comes with strings attached. Since access to the internet is not exclusive to anyone, someone else can come along, build a better mousetrap and access the vast global market quickly as well. And so, while it took the Coca Colas of the world several decades to reach global significance, once they did, they were able to remain at their peak spitting out cash for much longer as well.



And then there are times when macro factors have a disproportionate impact on value. This is a chart of the Cyclically Adjusted PE ratio of the S&P500 with an overlay of long-term interest rates in the US over the last 120 years. A lot of investing is based on comparing investments to market multiples, but it's important to keep in mind that market multiples can get decimated during crisis.



There have been several occasions when the market PE has traded at a single digit multiple and while that may seem distant memory now, who's to say it can't happen again. There's only one thing that you can be certain of with markets and it's that they will surprise you – both on the upside and the downside. We just don't know when and by how much.



Ultimately, remember your position in the capital structure and that equity is fraught with danger.

DIVERSIFY

RESPECT PROBABILITIES even though you will look foolish on some investments

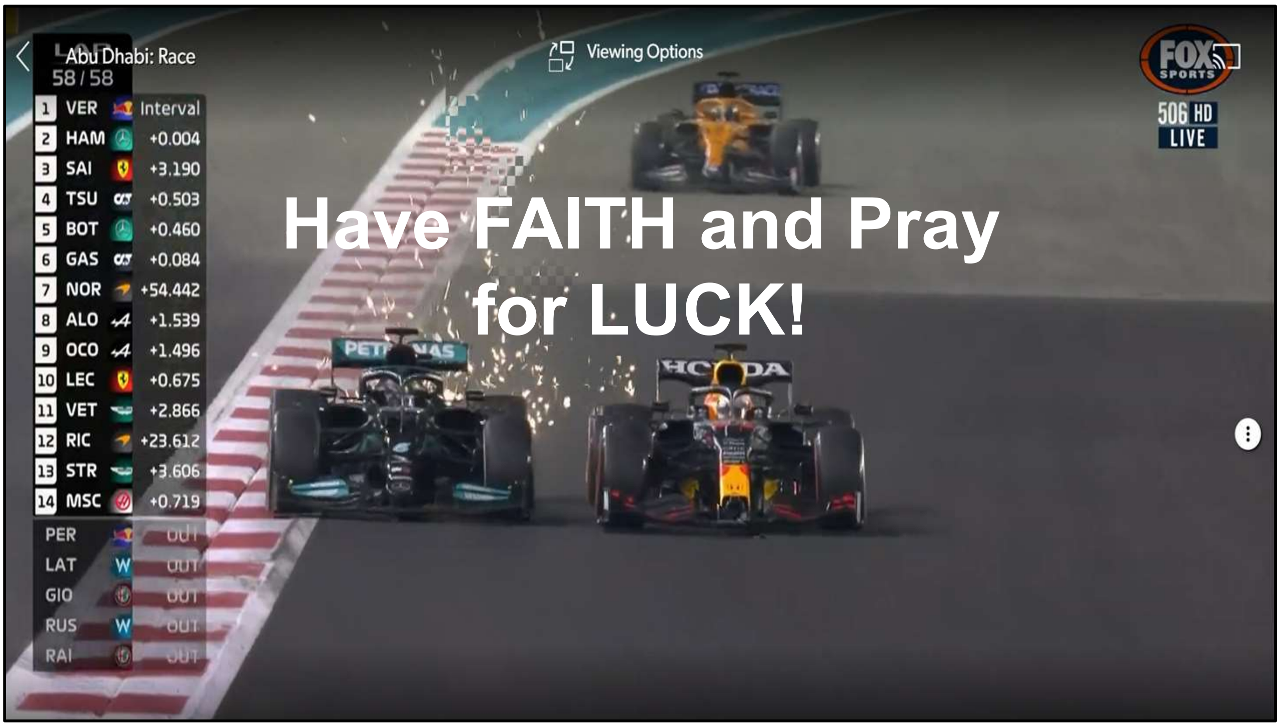
CONSEQUENCES trump probabilities

So, how do you go about building an investment framework to navigate these dangerous waters. In my view, it basically goes back to the time-tested fundamentals.

Diversify. Not just in terms of number of companies but also in terms of exposures. It is true that if you are able to catch the next Apple, Amazon, Google, Facebook and put all your money in that one stock, you would do better than almost anybody else in the world. But then again, not all fools get killed! And investing is probably one of the hardest professions to distinguish skill from luck.

Respect probabilities. The future is unknown and investing is all about putting the odds in your favour and probabilistic thinking goes a long way in doing that.

But even more important than probabilities, think about the consequences if things don't go your way. Never take an action, the consequence of which is disastrous that it becomes difficult to come back from no matter how low the probability of it occurring. And when I say disastrous, I mean it from a portfolio perspective. Individual companies can have bad outcomes but as long as those individual mistakes don’t cost you your survival, making individual mistakes is ok.



And finally, have faith! No matter how far markets stray from intrinsic value, they have a habit of eventually and inevitably coming back.