The Tao of the Turtle

September 2012

Risk, A Further Discussion

A few years ago, in the midst of the Credit Crisis, we wrote our first 'Tao of the Turtle'. It was on the topic of risk, entitled "How Do You Feel About Risk Now?". In it, we explained that risk is not a short term price decline but is the prospect of truly losing money – that if you understand the value of what you own, a price decline is most often simply an opportunity. In this article, we pick up the thread of our first Tao and continue our discussion of risk.

Investment return is easy to measure, investment risk is not.

The two elements of measuring investment performance are return (how much you make on your investments) and risk (how dangerous was the way you made your returns). Return is easy to measure after the fact. Risk, on the other hand, is not. It is in most cases impossible to know how much risk an investor took to earn his returns. The future is unknowable and whatever actually happens wasn't necessarily ordained to. As we like to say, you would need to run the universe through at least a few thousand times to really understand the likelihood of things happening.

The only way to deal with the inevitably uncertain future (risk) is to think properly in terms of probabilities. It is important to recognize that, just because an outcome happened, it was not inevitable. Many times events have occurred that were better or worse than our 'most likely' prediction. We are always asking ourselves the question: "are we properly handicapping the *range* of *possible* outcomes regardless of what the actual outcome turned out to be?". Our forecasts encompass a range of possible outcomes – although only one will occur. This is what we mean when we say we think probabilistically, and such a mindset is critical to superior long term investing. But before we explain further about how we think of risk, we would like to make two points.

Price volatility is a terrible proxy for risk.

First, using price volatility as a proxy for risk is wrong. Academics took to using volatility as a risk measure because no one had a better idea – and its use has exploded. It's understandable why this happened – determining actual risk levels is devilishly difficult (and sometimes impossible) and price volatility is readily measurable. But it isn't really a proper measure of risk; and its use has resulted in a number of distortions in the capital market such as investors plumping for rarely priced investments (think private investments) since they don't exhibit price volatility. The idea that private investments are less risky than public ones is absurd, yet this is one of the many confusions caused by a mistaken focus on short term price volatility.

Second, since you really can't know the true risk investment managers are taking, the best way to mitigate risk is to ensure you are aligned. The ancient Romans understood this well: the engineer who oversaw the building of a new Roman arch had to, upon its completion, stand under it while the scaffolding was removed. This severe consequence for failure tended to keep the builder's focus on quality and risk mitigation (as one can imagine). In a similar vein, the ideal alignment in investing is to ensure that all of a manager's investment assets are alongside his clients'. Most investors today under appreciate the importance of such full alignment.

Okay, so you should ignore price volatility and pay attention to alignment. But then what?

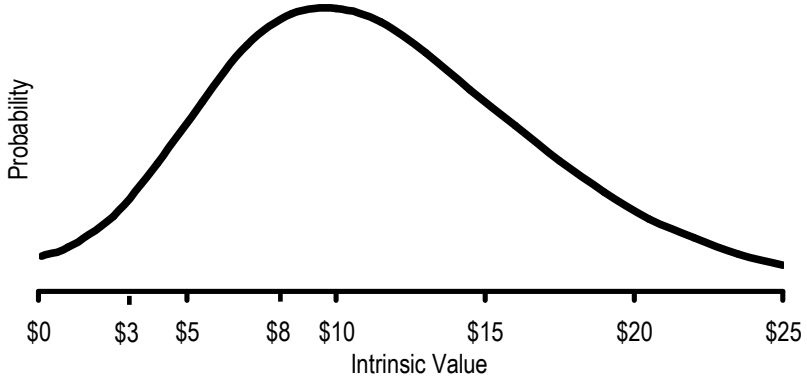
To reiterate, the proper way to think about investments is probabilistically: there are a range of possible outcomes but only one of those outcomes will occur. That means there are a large number of quite reasonable outcomes that could have occurred but didn't – at least this time around. We think of investments in this manner – as a range of outcomes as pictured on the following page. In this stylized example of a company, using a discount rate (investment return) of 10%, the distribution shows the present value of the future cash flows, or what we call intrinsic value. In this example, $10 is the most likely value (the largest area under the curve) but there are many better scenarios where the intrinsic value turns out to be higher than $10 and a similar number of worse scenarios where the intrinsic value turns out to be lower than $10.

TURTLE CREEK

4 King Street West, Suite 1300, Toronto, Ontario, M5H 1B6 T 416.363.7400 F 416.363.7511 www.turtlecreek.ca

Risk primarily comes from paying too high a price for an investment.

Stylized Probability Distribution of Intrinsic Value for a Company



Assuming a $10 purchase price, if the intrinsic value turns out to be higher than $10 (i.e. the future cash flows are more than expected), you would earn more than 10%. Similarly, if the intrinsic value turns out to be less than $10 (i.e. the future cash flows are less than expected) you would earn less than 10%.

But, having determined the range of intrinsic values, what if the same investment is available at $8? There are still a great number of outcomes that would see a lower than 10% return – but fewer than when one pays $10. And there are many more 'better than expected' outcomes. And what if one is able to pay only $5? Now, there are fewer 'bad outcomes' (outcomes where the return is lower than 10%) and many more 'good outcomes' (outcomes where the return is well above 10% – sometimes significantly so). And what if one is able to buy the investment for only $3? Now, there are extremely few 'bad outcomes' – almost all are good outcomes and many of them are fantastic outcomes. And remember, even in the rare event that the investment was only worth $3, a positive return of 10% would still be earned over a multi-year period. We are constantly trying to buy as "far to the left on the curve as possible", **not to enhance our returns but to reduce our risk.**

Our focus is on minimizing risk. Our superior returns are simply a byproduct of risk mitigation.

The price one pays for an investment is the biggest risk factor. How risky is the above investment if one pays $15, or $25? Very, because in the great majority of scenarios your return is well below 10% including many scenarios where the returns would be negative.

This is the key point: if you spend your efforts trying to find the lowest risk investments (within an asset class) the collateral benefit is that you increase your likely return. Reducing risk means owning the cheapest investments – the ones with very few scenarios that result in bad outcomes and many scenarios that result in good to very good outcomes. This is not about trying to enhance returns; it is about trying to avoid the loss of money. This turns the risk/return paradigm that we have all been taught on its head: the lower the risk (cheaper) the investment, the higher the expected returns whereas the more expensive the investment (the higher the risk) the lower the expected returns. This is so counter to what we have all been taught that it takes a while to register. But think about it: low risk and high expected returns coexist when you pay $3 for the above investment and high risk and low expected returns coexist when you pay $25.

This has been our approach since we began 14 years ago. At Turtle Creek we have always endeavoured to reduce our investment risk as much as possible by buying stocks that are trading at the greatest discount to their intrinsic value (buying as far to the left on the graph above). The greater the discount the greater the number of very good outcomes and the fewer the number of inferior outcomes. We have earned very strong returns over the life of Turtle Creek, but we haven't been trying to – we've been focused on minimizing risk by buying the least expensive investments. The superior returns are simply a byproduct.

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