

September 1, 2015

Oh Behave - Austin Powers

Often I write that our primary charge with respect to investment management is *risk management*. However more than a few clients ask: How that can be true in light of the fact that we own "risky" investments? Indeed we own securities that are likely to exhibit a great deal of price volatility and we also own individual stocks and other securities that may result in permanent loss of capital. Isn't there an inherent conflict between managing risk and also investing in risky investments? Broad diversification can help alleviate these risks. With respect to the equity portion, we want to be diversified across economic sectors, geographic regions and market capitalization. After all, leadership changes over the course of time and excessive concentration can lead to being decidedly concentrated in the wrong place at the wrong time. It is essential to reduce risk via diversification and that means deliberately allocating capital among investments that we expect to behave differently including those that are in their own right "risky". So while we might like returns to be steady and *markets to behave*; we should expect peaks and valleys along the way.*

As I mentioned in my last letter from the middle of August, I have recently read some interesting books including those that pertain directly to my chosen profession. Specifically, I recently read two books by famed behavioral expert and University of Chicago professor, Richard Thaler. Both books, Nudge: Improving Decisions on Health, Wealth, and Happiness and more recently, Misbehaving: The Story of Behavioral Economics, are insightful and humorous. He and others from the "behavioral school" have noted and documented clear examples of what classical economists would deem anomalies. Professor Thaler shows that real decisions are made by "Humans" as opposed to dispassionate, all knowing "Econs". You may recall the quote I shared from Albert Einstein that "In theory, theory and practice are the same. In practice, they are not." One simple example is instructive. In theory if you won slightly more than you lost in an even game of chance (i.e. a coin toss), people would use the law of large numbers and be happy to accept the payoff and play the games. In reality however, Thaler and others have documented "loss aversion" wherein most folks are only willing to play if the reward for "getting the call" right is roughly 2x the cost of being wrong. As you will see, I have included a lengthy endnote that reveals that in the absence of appropriate incentives, corporate executives are also prone to adopting "loss aversion" in their decision making¹.

Market declines tend to weigh heavy for me too. It is easy to look back in hindsight and "know that was going to happen" and therefore have remorse over things done and left undone. Like a parent, I wish I could shield my clients from pain. While I recognize that some of the capital we invest may suffer permanent loss of value that is seldom my chief concern. Rather my largest concern is whether or not clients will stay the course by adhering to what we believe is a sensible long-term plan to both preserve and grow capital, net of fees, taxes and inflation over the long haul. Over the decades, I have become more comfortable with my inability to predict let alone control price changes. The good news is that I have become increasingly confident that investors can achieve success without being able to predict whether XYZ (corporate earnings, PMI, inflation, employment, currency moves, etc., etc.) will be higher or lower than consensus and also what reaction will develop in the price of the security in question. Am I saying these things do not matter? No, I am simply sharing my firmly held belief that foreknowledge is not a pre-requisite for having a good outcome.

"Remain Calm, All is Well" - Animal House

You may recall the closing scene in *Animal House* when chaos ruled. It was incongruous for the earnest student who was clearly unglued to shout "all is well". Is today's economic situation the same? I don't think so. On Monday evening, August 24th, I watched an interesting interview on the PBS *NewsHour*. Specifically Mohamed A. El-Erian, a rather well-known investor, shared his view that 'the markets are re-pricing for slower global growth'. In other words, if market participants believed that earnings growth was going to be 5% and now they expect 4%, then PE ratios contract "for the new reality". That seems reasonable to me, but from a practical standpoint what does that mean? Does it mean that the worst of the recent declines are over? In the alternative, does it mean that investors are doomed to more and more pain in broadly diversified stock portfolios? Time will tell, but I thought it might be helpful to look at some basic math. I know this helps me stay the course when headlines are adverse. My hope is it will be helpful for you as well.

Modeling returns around valuation fluctuations

_											PE range expected most of the time
	Gro	wth in S	\$1.0	0 of ear	ninş	gs					-20% 25%
		1 year		3 years		5 years	10 years	15 years	20 years	30 years	"normal" "low" "high"
EPS growth	1										_
3%	\$	1.03	\$	1.09	\$	1.16	\$ 1.34	\$ 1.56	\$ 1.81	\$ 2.43	
4%	\$	1.04	\$	1.12	\$	1.22	\$ 1.48	\$ 1.80	\$ 2.19	\$ 3.24	12.00 9.60 15.00
5%	\$	1.05	\$	1.16	\$	1.28	\$ 1.63	\$ 2.08	\$ 2.65	\$ 4.32	
6%	\$	1.06	\$	1.19	\$	1.34	\$ 1.79	\$ 2.40	\$ 3.21	\$ 5.74	15.00 12.00 18.75
7%	\$	1.07	\$	1.23	\$	1.40	\$ 1.97	\$ 2.76	\$ 3.87	\$ 7.61	
9%	\$	1.09	\$	1.30	\$	1.54	\$ 2.37	\$ 3.64	\$ 5.60	\$ 13.27	18.00 14.40 22.50
12%	\$	1.12	\$	1.40	\$	1.76	\$ 3.11	\$ 5.47	\$ 9.65	\$ 29.96	
15%	\$	1.15	\$	1.52	\$	2.01	\$ 4.05	\$ 8.14	\$ 16.37	\$ 66.21	

For discussion purposes, let's just focus on 4%, 6% and 9% EPS growth

Please note that I placed the 4%, 6% and 9% growth rates in bold italics for easy identification. I think we could posit that a fair estimate of "average PE ratio" for each of these estimated growth rates might be approximately 12x, 15x and 18x, respectively. Moreover, we might also expect that under "normal" circumstances the actual PE range might be 20% lower or perhaps 25% greater than average. Therefore in the case of a stock that is expected to grow its earnings at 4% (and also provide a dividend yield of say 2%), we might expect the shares to usually trade for between 9.6x on the low side and 15x during ebullient times. All that said, we should expect that the market's assessment of long-term growth for this hypothetical stock may eventually differ from 4% (which may translate into an increase or decrease in the average PE and attendant range). Moreover, earnings increases are never perfectly linear; rather this simplified table depicts what happens to earnings growth at these average rates. In other words even in this simple example, there are quite a few moving parts.

Please also note the following –

- 1. if the PE was the same at the time you invest and the time you sell (e.g. your holding period) then the price change will mirror the change in earnings.
- 2. if the PE adjusts from "average" to the low end of its expected range (e.g. down 20%) that translates into a 20% decline in price.
- 3. the best results occur when earnings grow and the PE expands.

It is important to note that the PE could contract or expand due to any number of factors which pertain directly or even remotely to the company itself. For instance, the adjustment could simply be due to general market valuation change (as suggested by Mr. El-Erian about recent market declines). Perhaps most importantly, we need to be cognizant that after PE ratios expand, likely future returns may well be lower (as earnings may decelerate and/or the PE may contract). Conversely if the PE contracts, then future returns may be better due in part to the likelihood that it may expand (especially when news about the company improves). In other words, we need to be wary about placing too much significance into recent price changes. In my experience, this is difficult for most investors to do in part because we often seem "hardwired" to extrapolate trends.

Let's consider a set of examples from the table above. For example, if you purchase a stock that grows its earnings at an average rate of 6% then for each \$1.00 in earnings per share today grow to \$1.79 and \$3.21 in 10 and 20 years, respectively. Therefore if the PE at the time of purchase and sale is the same (perhaps 15x, but also if it were 10x or 20x) your annualized return would be 6% plus any dividends received. On the other hand, if you purchased it for 15x (e.g. \$15.00) and then at the 10 year point it was 12x earnings (12x * 1.79 = \$21.48), then your return in the first 10 years would be 3.7%. If over the next 10 years, earnings also averaged 6% and the PE expanded modestly (from 12x to 15x), then the return for the next 10 years would be \$21.48 today and (15 * \$3.21 = \$48.15) or 8.4% annually.

The main driver of long-term returns will tend to be the change in earnings, but along the way returns will be greatly affected by changes in the PE ratio. The good news is we can look to add to positions when prices decline and valuations are lower. Indeed recently we did some tax related trades in the taxable accounts we manage. In many instances, we added to positions that have recently declined significantly including energy stocks and emerging market equities. If for instance an initial \$10,000 position required purchase of 100 shares (e.g. \$100 per share), when we engaged in tax related repositioning we made use of the price decline to purchase 125 shares at \$80 per share thereby maintaining the original \$10,000 exposure. Of course, we do not know if or when the share price will recover (maybe soon, maybe later or perhaps never), but we do know that our clients stand to realize more dividends and price appreciation in large part because they now own a larger number of shares.

Our long-term view remains intact. Specifically while there are many possible futures for the US and international economies and markets, we believe that we will likely continue to see global *long-term* growth. In turn, we believe the aggregate economic growth will translate into greater sales, earnings and dividends generated by the sectors, industries and companies that underlie our broadly diversified portfolios. Time will tell whether the best segments of our portfolios will be U.S. or international, large companies or small and mid-sized, those in cyclical businesses or consumer staples and healthcare. In the meantime, we are confident that our thoughtful approach to risk management will help ensure that you have meaningful long-term ownership of the companies that will drive the lion's share of aggregate earnings and dividend growth. Perhaps most importantly, experience has taught me that investor actions or lack of actions sometimes aid and at other times harm results more than the underlying markets themselves. At times of stress, I find it helpful to envision sunnier days ahead. Conversely, when all is obviously going well, it is helpful to remember that conditions will likely change. For the most part, I believe investors are wise to avoid the temptation to outguess the markets or to second guess themselves. Patience is a virtue and an ally for long-term investors.

Warmest regards,

W. Richard Jones, CFA Senior Vice President, Investments

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*Diversification and strategic asset allocation do not ensure a profit or protect against a loss. Past performance is not indicative of future results. Investing always involves risk and you may incur a profit or loss. No investment strategy can guarantee success.

"The 'timid choice' part of Kahneman and Lovallo story is based upon loss aversion. Each manager is loss averse regarding any outcome that will be attributed to him. In an organizational setting, the natural feeling of loss aversion can be exacerbated by the system of rewards and punishment. In many companies, creating a large gain will lead to modest rewards, while creating an equal-sized loss will get you fired. Under those terms, even a manager who starts out risk neutral, willing to take any bet that will make money on average, will become highly risk averse. Rather than solving a problem, the organizational structure is making things worse.

Here's an example to show how this works. Sometime shortly after our year in New York, I was teaching a class on decision-making to a group of executives from a company in the print media industry. The company owned a bunch of publications, primarily magazines, and each executive in the audience was the head of one of the publications, which were run pretty much independently. The CEO of the firm was also in attendance, sitting in the back of the room, watching and listening. I put the executives this scenario: Suppose you were offered an investment opportunity for your division that will yield one of two payoffs. After the investment is made, there is a 50% chance it will make a profit of \$2 million, and a 50% chance it will lose \$1 million. (Notice the expected payoff is \$500,000 ...). I then asked a show of hands who would take on this project. Of the twenty-three executives, only three said they would do it.

Then I asked the CEO a question. If these projects were 'independent' – that is, the success of one was unrelated to the success of another – how many of these projects would you undertake? His answer: all of them! By taking the twenty-three projects the firm expects to make \$11.5 million (since each one is worth an expected \$500,000), and a bit of mathematics reveals the chance of losing any money is less than 5%. He considered undertaking a collection of projects like this a no-brainer.

"Well that means you have a problem,' I responded to the CEO. "Because you are not going to get twenty-three of these projects – you are only getting three. You must be doing something wrong, either by hiring wimpy managers who are unwilling to bear risks, or, more likely, by creating an incentive system in which taking this sort of a risk is not rewarded.' ... I turned to one of the managers who said he would not undertake the project and asked him why not. He said that if the project was a success, he would probably get a bonus, say three months' income. But if the project failed, he thought he would get fired. He liked his job and didn't want to risk a coin flip in which he only stood to gain three months' income.

Narrow framing prevents the CEO from getting the twenty-three projects he would like, and instead only getting three. **When broadly considering the twenty-three projects as a portfolio** (emphasis added by me), it is clear that the firm would find the collection of investments highly attractive, but when narrowly considering them one at a time, managers will be reluctant to bear the risk."

I decided to share that lengthy excerpt because I find it germane to portfolio management. There is a tendency for some investors to evaluate each investment and not the collective whole. This can cause professionals like my partners and me to avoid taking risks that we otherwise deem prudent including long-term commitments to things like emerging market equities as a "no win" situation for us because we risk losing clients. That said I believe most clients neither want us to shy away from our convictions with respect to providing suitably diversified portfolios (including "risky" assets) nor do they want us to be overly stubborn. More generally, we understand the challenges that we all face in achieving long-term success. After all, we are all "Humans" not "Econs". Our commitment is to try to do our level best to serve your long-term interests. While we know that volatility (e.g. declines) are psychologically painful, and we would like to avoid that, we want to make sure that we first and foremost manage long-term risk. We believe that entails accepting the fact that along the way, some of our decisions will, at a minimum, appear ill-timed. The good news is that some things that are most volatile on the downside often exhibit strong ability to rebound too.

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¹ The excerpt immediately below is from *Misbehaving: The Story of Behavioral Economics, by Richard Thaler*. It was found in Chapter 20, *Narrow Framing* on the Upper East Side on pages 187-189 (at least on my Kindle).