2021 First Quarter Review:
A Look into Risk-Adjusted Returns

"The essence of investment management is the management of risks, not the management of returns."
- Benjamin Graham

The investment objective with our U.S. Risk Managed Equity (U.S. RME) strategy is to achieve superior risk-adjusted performance relative to our benchmark, the S&P 500.[1] Risk-adjusted performance measures both the returns and the risks taken to achieve those returns. Measuring risk in a standardized way that everyone can relate to is difficult because investors have different views on what constitutes risk, have individualized goals and varied time horizons. This letter explains how we think about and how we measure risk-adjusted performance.

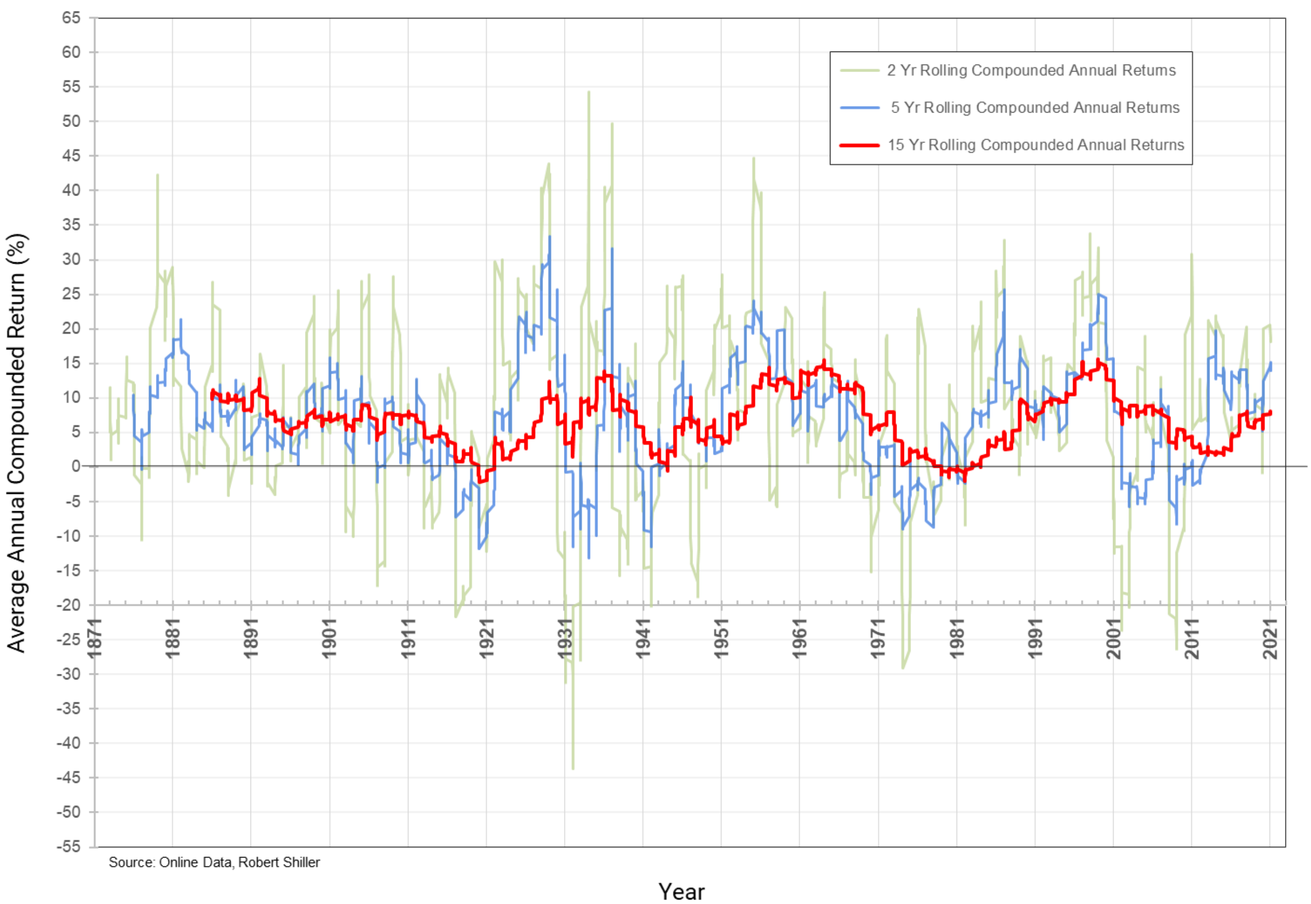
Let's start with the fundamental question, what is the purpose of investing? Taking inspiration from Warren Buffett, we think of investing as "putting our money to work today for more money in the future." If this is the purpose, then investment risk could be broadly defined as anything that prevents our investment portfolio from increasing in future value.[2]

While equity markets offer great potential to increase the value of our invested wealth over the long run, the results can vary tremendously in the short run. For example, Figure 1 shows the historical total returns over different holding periods in the S&P 500 over the past 150 years.[3] We see that increasing the timeframe of equity market participation resulted in i) lower return volatility and ii) an increased chance to earn a positive return. If we examine the shorter two-year investment timeframe (green line), there were many more negative periods where the market value decreased, with tremendous volatility in total returns as compared to longer holding periods.

Supported by historical returns in Figure 1, we believe that equity investing should only be undertaken with a sufficiently long time horizon, our preference being at least five years and ideally longer. We consider the stock market to be a tremendous tool for increasing wealth over long timeframes and continue to believe that the longer you stay invested in the market, the higher the likelihood that you will increase the future value of your current investments, which is the primary goal of investing.

[1] We use the SPDR S&P 500 ETF Trust (SPY) as our benchmark. We use the term "market", S&P 500 and SPDR S&P 500 ETF Trust (SPY) interchangeably.
[2] We think in terms of earning a real return, which is a return over and above inflation. For simplicity, this note makes references to nominal returns.
[3] Source data from Robert Shiller online: http://www.econ.yale.edu/~shiller/data.htm

Figure 1: S&P 500 Returns Over Different Holding Periods



As previously mentioned, our main objective is to deliver attractive investment performance with less volatility than the market. There are two main reasons for this. First, it is much easier to make plans around a steadier path of investment returns as opposed to a more volatile one. Sometimes our well-intentioned investment plans are interrupted by life's challenges and we may need to sell our equity positions prematurely. While equity returns will never be constant, a less volatile return stream can prove beneficial, especially if we need to access our capital earlier than expected and hope to reduce the negative impact caused by the unplanned selling of equities during a stock market rout.

Second, the field of behavioral finance has demonstrated that when it comes to investing, humans tend to repeat the same errors in judgment over time.[4] Many of these investing errors are brought about by rapidly rising or falling stock prices, referred to as price momentum. For example, it is typical to want to buy stocks after they have risen significantly in price as investors can no longer tolerate the idea of missing out. In this case, stocks are purchased impulsively without proper consideration of the investment risks and often at a time when prices can no longer be prudently justified based on the intrinsic value of the underlying businesses.[5]

[4] An excellent book on Behavioural Finance is *Misbehaving* by Richard Thaler.

[5] We calculate the intrinsic value of a company based on its fundamental attributes of growth, profits, cash flows, debt and other financial items including future business prospects.

On the flip side, after stock prices have fallen sharply, people often become panicked sellers and liquidate their investments without considering the true value of those businesses and the likelihood that their holdings may appreciate after such a steep decline. As we can see in Figure 1, large market declines are often followed by periods of strong recovery, provided you can stay invested long enough. Price momentum in stocks often causes people to do the opposite of what is most effective for compounding their wealth over time.

Therefore, we believe that if we can dampen the negative returns in our strategy as compared to the market, then we can help our clients resist the urge to sell their investments during price declines and stay invested long enough to realize positive returns and thus improve the likelihood of achieving their investment goals.

While there are many ways to think about returns and risk-adjusted performance, we try to keep things simple but effective by focusing on the following key ideas:

i) Relative Performance
ii) Maximum Drawdowns
iii) Time to Recovery
iv) Sortino Ratio
v) Use of Leverage

Relative performance measures the difference in total return between our U.S. RME strategy and the S&P 500. As mentioned, while the objective is to outperform our benchmark, we want to do so with less downside volatility (i.e. negative returns). Our approach attempts to incur smaller declines than the market to increase the chances of outperforming the S&P 500 over the long term.

Maximum drawdown reflects downside risk by calculating the largest percentage portfolio decline in a given time period. Due to the asymmetric impact of losses, minimizing this metric is critical to our long-term investment success.[6] We believe we can accomplish smaller drawdowns in our U.S. RME strategy vs. the market by following our equity portfolio construction process and through the judicious use of our protective options strategy.[7]

During a significant market decline, most equity portfolios will decrease in value to various degrees. Ideally, we would like our portfolio to recover to its previous peak value as fast as possible. Time to Recovery measures how many days it takes for a portfolio to recover to its previous high. We aim to deliver a shorter time to recovery than the S&P 500 by doing the following:

i) Not declining as much as the market and therefore not needing to recover as much lost value.
ii) Owning safe businesses that we expect will recover quickly after a temporary decline.

[6] Asymmetric impact of losses refers to the idea that a 25% loss requires a 33% return to recover, a 50% loss requires a 100% return to recover, increasing exponentially as losses steepen.
[7] More information is available on our equity construction process and use of protective options in our marketing deck.

The last risk-adjusted metric we employ to quantify risk is the **Sortino Ratio**. This ratio measures the return of a portfolio over and above prevailing interest rates divided by the downside deviation of returns.[8] Achieving a higher Sortino Ratio, combined with smaller maximum drawdowns and faster Time to Recovery, demonstrate robust and superior risk-adjusted performance vs. the benchmark.

Employing **leverage** in a portfolio means borrowing money to invest. We don't use leverage in our strategy because while it can amplify returns, it can also result in disastrous losses, which is what we are trying to avoid. In general, a strategy that delivers similar performance to another without the use of leverage is superior from a risk-adjusted perspective.

To summarize, this is what good risk-adjusted performance looks like from our perspective:

i) Higher returns than the market over the long run (**Relative Performance**)

ii) Smaller peak-to-trough declines (**Maximum Drawdown**)

iii) Faster recovery than the market (**Time to Recovery**)

iv) Greater returns per unit of downside risk than the market (**Sortino Ratio**)

v) No leverage used in the portfolio (**No Leverage**)

Tracking these metrics keeps us focused on managing risks for our clients. Here is how our U.S. RME strategy has performed since inception:

U.S. Risk Managed Equity vs. S&P 500

September 01, 2020 to March 31, 2021[9]

	U.S. RME	S&P 500 (SPY)
Return (%)	17.0%	14.8%
Maximum Drawdown (%)	-7.3%	-9.4%
Time to Recovery (days)	13	70
Sortino Ratio	2.81	1.93
Leverage	none	none

At this point, our U.S. RME strategy has surpassed its benchmark on all of the metrics we consider fundamental for performance measurement.

[8] Downside deviation is a measure of price volatility focused on downside risk.

[9] Performance data is measured in USD terms and calculated from actual investment results (not simulated or theoretical), for the period indicated. The returns shown are net of trading commissions. Management and custody fees are an additional cost for individual client accounts. For full disclosure please refer to your Investment Management Agreement or contact us directly for a complete breakdown of all applicable costs for individual investment accounts.

It is worth mentioning that this performance was achieved during a strong market and after paying for portfolio protection. While the results are thus far encouraging, we continue to focus on the opportunities and risks ahead of us and not those that are behind us.

These are some of the risks we are most concerned about at the present time:

i) Rising inflation
ii) Higher long-term interest rates
iii) The amount of debt in the system

Given these risks, our current portfolio owns more companies that can pass along rising inflation costs and fewer companies that are highly sensitive to rising long-term interest rates. In addition, we own some portfolio insurance in the form of put options on the S&P 500.

While our results have been strong to date, we don't expect to beat the market all of the time. However, given our focus on risk management, we would expect to outperform the benchmark especially during pronounced market declines and in doing so, deliver better risk-adjusted returns with a smoother trajectory and therefore greater peace of mind for our clients.

Kind regards,

Reyer Barel
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Oak Bay Capital Inc.