MAIN POINTS:

• Investing is a “Loser’s Game” in which the player who makes fewer bad moves comes out on top. Investors should focus on avoiding losses rather than taking additional risk to score “winning” investments. This will allow the portfolio to continue growing over time.

• Investors should not compare their results solely against a benchmark index because even the most disciplined investment program will appear to underperform the stock market. This is due to the timing of cash flows during the accumulation of wealth.

• The disciplined rebalancing of your portfolio helps to preserve its value in bear markets, continue its participation in bull markets, and increase the odds of achieving your wealth goals.

WHAT MATTERS: WINNING BY NOT LOSING

Twenty years ago, the great investment writer Charles Ellis described investing as a "loser’s game."

As in golf, tennis or war, investment victory comes not to the side that pursues the most aggressive drives, volleys or incursions, but rather to the competitor who executes fewer bad moves.

As General Patton said, “you won by making the other poor dumb [soul] die for his country.” The competitor who avoids unforced errors remains in the game longer. The investor who avoids unforced losses allows his portfolio to continue growing over time.

Winning, By Not Losing
Why Beating the Market Doesn’t Matter

As investors scrutinize their returns during a bull market, a recurring thought often occurs: why don’t I or my money manager always beat the market? The financial media relentlessly bombards us with updates of what “the market” is doing. In the midst of a bull market, the updates get louder and more vivid. Because the comparisons are so immediately available, it’s understandable why investors worry about keeping up with the market (and love to gloat when their results are ahead).

We believe that an intense focus on market comparisons can be detrimental to our clients’ investment goals. It is misleading, especially over short-term horizons of a year or less, for the following reasons:

1. **Investing is often a loser’s game** in which gains are achieved not by the “winning” investments, but rather by avoiding losing investments that can destroy wealth. Successful investors adhere to a long-term investment plan that avoids “unforced errors,” such as selling during a market downturn, or buying overpriced securities near a market top.

2. **A disciplined investment strategy will underperform a benchmark index in a rising market.** This actual-vs.-reported performance gap is due to the fact that investors make investments over time rather than all at once. Because the incremental investments arrive at different times, the investor’s account results differ from the benchmark index results over the same time period.

3. **Rebalancing is the crucial instrument** in the investor’s toolkit – one that adds to portfolio wealth with little additional risk or costs. A simple, infrequent discipline of rebalancing the portfolio (such as annually) outperforms both doing nothing and panicking amid significant stock market declines.
A key reason why investing has become a loser’s game is that the markets are largely dominated by the most educated, professional, competitive and well-funded people and organizations in the world. As the overall level of skill has risen in the investment industry, the difference in skills between individual market participants has shrunk. This “paradox of skill” is similar to what one sees in other highly competitive endeavors such as professional sports. The relative difference in athletic skills between all-star players is quite small, even though any one of them possesses athletic abilities that far surpass those of the common man.

**“THE MOST POWERFUL FORCE IN THE UNIVERSE”**

Albert Einstein is reported to have said that “compound interest is the most powerful force in the universe.” It is remarkable how powerful positive compound interest can be. It is also important, however, to know that negative compound interest is even more powerful because of the uneven nature of compound returns.

Investment returns are asymmetrical (uneven) because of the mathematics of negative compounding. For example, a -30% loss requires more than a +30% gain for an investor to break even. A decline from $100 to $70 requires a gain of +43% ($30/$70) for a recovery back to the original $100. The impacts of negative compounding become increasingly severe after a -50% loss, as the gains required for recovery increasingly become multiples of the loss.

<table>
<thead>
<tr>
<th>% Loss</th>
<th>Value</th>
<th>Gain required to return to $100</th>
<th>Required gain as a multiple of the loss</th>
</tr>
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<tbody>
<tr>
<td>0%</td>
<td>$100</td>
<td>0%</td>
<td>0x</td>
</tr>
<tr>
<td>-10%</td>
<td>$90</td>
<td>11%</td>
<td>1.1x</td>
</tr>
<tr>
<td>-20%</td>
<td>$80</td>
<td>25%</td>
<td>1.3x</td>
</tr>
<tr>
<td>-30%</td>
<td>$70</td>
<td>43%</td>
<td>1.4x</td>
</tr>
<tr>
<td>-40%</td>
<td>$60</td>
<td>67%</td>
<td>1.7x</td>
</tr>
<tr>
<td>-50%</td>
<td>$50</td>
<td>100%</td>
<td>2.0x</td>
</tr>
<tr>
<td>-60%</td>
<td>$40</td>
<td>150%</td>
<td>2.5x</td>
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<tr>
<td>-70%</td>
<td>$30</td>
<td>233%</td>
<td>3.3x</td>
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<td>-80%</td>
<td>$20</td>
<td>400%</td>
<td>5.0x</td>
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<tr>
<td>-90%</td>
<td>$10</td>
<td>900%</td>
<td>10.0x</td>
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</table>

Source: Webster Private Bank calculations.

**UNFORCED ERRORS: CHASING HOT MARKETS, UP AND THEN DOWN**

Avoiding or minimizing negative compounding should be among the highest priorities for investors. However, since the time of our ancestors on the savannas, human attention has tended to focus more quickly on what moves fast rather than on what grows consistently. For example, in the midst of the internet dot-com bubble of the late 1990s, many investors were seduced by the eye-popping returns of technology companies relative to traditional brick-and-mortar businesses. It was an exciting time to follow the herd into the growth stocks of the New Economy and an uncomfortable time to buy value stocks of the old economy. In the final three years of the tech-stock mania, 1997-1999, the Russell 1000 Value index gained +57%, a +16% annualized return which typically is considered an excellent result. However, it was peanuts compared to the stratospheric +215% cumulative gain of the Nasdaq Composite index. The cycle unfolded in the bear market of 2000-2002, and the Nasdaq Composite index fell -67% cumulatively while the Russell 1000 Value index slumped -20%. Investors that held tight to the Nasdaq turned $1,000,000 into $1,035,692, earning an annualized return of +0.6% over the six-year cycle. The investors that persevered in Russell 1000 Value stocks finished with $1,261,125, for an annualized return of +3.9%.
It is remarkable how much capital destruction the Nasdaq investor witnessed in order to earn a meager annualized return of +0.6% over the full bull-bear market cycle. From the peak at the end of 1999 to the finish at the end of 2002, losses of over $2 million from the peak would have dwarfed the investor's original $1 million investment. It is hard to imagine anyone who would have held on to their investments in the face of such losses. In fact, many investors sold out during the dot-com downturn and missed the rebound of the ensuing bull market of 2003-2007.

WHY IT’S HARD TO BEAT THE MARKET: A DISCIPLINED SAVINGS EXAMPLE

The actual mechanics of wealth accumulation work differently than the published results of the stock market. Many investors notice that the returns reported on their investment account statements imperfectly track the results of benchmark stock market indexes. This apparent performance gap occurs because of the measurement differences between time-weighted (overall reported) returns for indexes versus actual dollar-weighted (individually measured) returns earned by investors.

The investment industry reports returns based on the growth of an index, such as the S&P 500. This is a time-weighted return. By contrast, a dollar-weighted measurement accounts for returns earned by each of the cash flows that are invested into the investment account. In a rising stock market, which is the case most of the time, new investments enter the account at increasingly higher cost values. The result is that the investor's dollar-weighted return ends up being less than the market's time-weighted return over the same period. (see chart on page 4)

We recommend that investors compare their results not strictly against a benchmark index, because even the most disciplined savings program will appear to underperform the stock market. A fairer comparison is to the actual returns earned by other investors in the marketplace, which is the true “base rate” for comparison. This answers not “did I beat the index,” but rather “did I achieve what other investors achieved?” This makes the correct apple-to-apples comparison of investor vs. investor, rather than investor vs. benchmark index.

For the twenty years ended 2016, the average investor earned a compound annualized return of +2.29%, compared to the +7.68% return of the S&P 500 Index and the +5.29% of the bond market (as measured by the Barclays Aggregate Bond Index). It seems that individuals are often duped by their own emotions—selling out of fear near a market bottom and investing with excitement near the top. It is worth noting that this meager investor return over twenty years, barely beat the annual +2.11% growth of price inflation (as measured by the Consumer Price Index).4

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<tbody>
<tr>
<td>Nasdaq Composite</td>
<td>46.7%</td>
<td>-31.0%</td>
<td>0.6%</td>
<td>$ 1,000,000</td>
<td>$ 3,154,533</td>
<td>$ 1,035,392</td>
<td>-2,119,141</td>
</tr>
<tr>
<td>Russell 1000 Value</td>
<td>16.3%</td>
<td>-71%</td>
<td>3.9%</td>
<td>$ 1,000,000</td>
<td>$ 1,573,444</td>
<td>$ 1,261,125</td>
<td>-312,319</td>
</tr>
</tbody>
</table>

Source: FactSet Indexes.
Actual Account Returns Appear Less than Benchmark Index Returns

- S&P 500 Return: 23.5% 12.8% 0.0% 13.4% 29.6% 11.4% -0.7% 9.5%
- S&P 500 Index (Time Weighted Return): 13.8%
- Personal Account (Dollar Weighted Return): 11.7%

**THE VIRTUE OF REBALANCING**

Rebalancing is an important instrument in the investor’s toolkit. It helps the individual investor guard against the pitfalls of emotional, reactive investing. It enforces a routine method of buying investments at lower valuations and selling at higher ones, a safe way to add to portfolio wealth with little added risk or cost. Rebalancing swims against the tide of market opinion and exploits the tendency for financial markets to ignore the laws of supply and demand when prices fall.

Rebalancing is especially helpful to the portfolio during volatile times, which is often when investors are emotionally tempted to sell losing positions and hold onto investments that held their value. A rebalanced portfolio will lag in bull markets, as disciplined additions to under-performing investments fail to keep pace with the returns of a rapidly rising stock market. However, this lag effect is not important in the real world, where investors ultimately care about the absolute level of dollars that they will end up owning. With this real-world objective in mind, investors who practice disciplined rebalancing preserve a significant amount of value in bear markets, increasing the odds that they will achieve their objectives and goals.

Take, for example, a 50-50 stock-bond portfolio that began with $1 million in January 1990. At the end of December 2002, a portfolio that rebalanced back to 50-50 on an annual basis would have held $158,277 more than a buy-and-hold portfolio ($3,221,072 rebalanced vs. $3,062,795 buy-and-hold). The rebalanced portfolio’s lead would have increased further in the bear market year of 2008, growing to $286,039 more than the buy-and-hold approach ($4,031,269 rebalanced vs. $3,745,230 buy-and-hold).

**KEEP IN MIND:**

*Rebalancing is especially helpful to the portfolio during volatile times, which is often when investors are emotionally tempted to sell losing positions and hold onto investments that held their value.*
The advantage that the rebalanced portfolio has over the buy-and-hold portfolio lies not in its performance during bull markets, but rather in its results during bear markets. As illustrated in the chart here, the rebalanced portfolio experiences a smaller fraction of losses in bear markets than the buy-and-hold portfolio. This outperformance in bear markets more than makes up for the rebalanced portfolio’s slight lag in bull markets.

**Rebalancing results in more money at the end of market cycles**

For the past 27 years, comparable losses in bear markets were only 40% to 82% of the buy-and-hold portfolio, while gains in bull markets delivered between 93% and 95% of what the buy-and-hold portfolio achieved.

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</tr>
</thead>
<tbody>
<tr>
<td>Bear Market 2000-02</td>
<td>3,062,795</td>
<td>3,221,072</td>
<td>$158,277</td>
<td>-2.5%</td>
<td>40%</td>
<td></td>
<td>Bear Market 2000-02</td>
<td>4,778,541</td>
<td>4,899,657</td>
<td>$121,117</td>
<td>9.3%</td>
<td>8.8%</td>
<td>94%</td>
</tr>
<tr>
<td>Bull Market 2003-07</td>
<td>4,778,541</td>
<td>4,899,657</td>
<td>$121,117</td>
<td>9.3%</td>
<td>8.8%</td>
<td>94%</td>
<td>Bear Market 2008</td>
<td>3,745,230</td>
<td>4,031,269</td>
<td>$286,039</td>
<td>-21.6%</td>
<td>-177%</td>
<td>82%</td>
</tr>
</tbody>
</table>
| Bull Market 2009-16 | 8,126,469 | 8,285,827  | $159,358   | 11.7%      | 10.8%      | 93%     | Bull Market 2009-16 | 8,126,469 | 8,285,827 | $159,358 | 11.7% | 10.8% | 93% 

Source: FactSet Indexes. Assumes annual rebalancing at the beginning of the year for a 50-50 stock-bond portfolio whenever either stock or bond allocation diverges more than +/-5% from 50%.

**CONCLUSION**

Investing is a defensive game that requires adherence to a savings and investment plan, maintaining a mix of assets that increases the odds of achieving your financial goals and dutiful rebalancing toward assets that have recently underperformed by selling some of those that have recently outperformed. By treating investing as the Loser’s Game, investors avoid “hitting the ball into the net” via wealth-destroying actions such as chasing returns, making concentrated bets on single companies or industries, or failing to hold enough safe assets in their portfolio to live through the inevitable bouts of volatility that investing entails. Winning by not losing requires a defensive stance to keep the ball in play, allow wealth to continue compounding and, on the rare bear market occasion, take advantage of others’ reckless actions to make profitable investments when markets become cheaper. Beating the market is nearly impossible, and it doesn’t matter for investors who avoid unforced errors, adhere to disciplined savings and rebalance their portfolios regularly.

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2 General George S. Patton speech to the 6th Armored Division, May 31, 1944.
3 For a deeper explanation of the paradox of skill, see Michael Mauboussin, “Alpha and the Paradox of Skill” (Credit Suisse, July 15, 2013).
4 Data from Dalbar, BlackRock, Bloomberg and FactSet Indexes. Based on 20-year annualized returns, 1997-2016.
Jonathan A Bailly, CFA is a Senior Portfolio Manager based in Boston, and leads client investment management and education for Webster Private Bank.

We want you to be successful. If you would like a copy of the tables included in this newsletter, please contact Peter Gabriel, Head of Private Banking, at 203-328-8110 or pgabriel@websterbank.com.