Managing Retirement and Pre-Retirement Assets in Volatile Markets

Typically, the word “volatility” is used to refer to daily changes in the prices of stocks or bonds. Volatility affects the market value of your retirement portfolio. Thus, volatility is an important aspect of investment management and a topic that deserves special consideration when managing retirement and pre-retirement assets.

There are many things that cause market volatility, including reactions to economic data and global conditions, market news, world events, political disruptions, unforeseen catastrophic events, expectations about the future, corporate announcements, and so on. While the timing and severity of volatility are generally unpredictable, the presence of market volatility over time is virtually assured.

Volatility has proven to be easier to weather when investing over a long investment holding period. While volatility cannot be eliminated, it is important to plan your retirement strategy with an understanding of market fluctuations and their consequences, as well as your individual tolerance for volatility. Retirees, who may rely on investment dollars and income, and pre-retirees (those nearing retirement) are particularly vulnerable to market shifts. In order to develop an approach that takes into account volatility when investing for retirement we address the following considerations in this paper:

- the importance of asset allocation;
- systematic rebalancing;
- building a cash cushion;
- establishing an income floor; and
- staying invested (not panic selling).

Market declines are not predictable, so trying to time them is an unreliable tactic. What we do know is that over the long term stocks have tended to produce significant positive real returns—returns after inflation (Table 1). We also know by looking at history that the longer-term upward trend in stocks includes shorter periods of market declines or disruptions. An investor rarely experiences the average in any given year; rather the investor can experience significantly

### Table 1

<table>
<thead>
<tr>
<th>Historical Average Annualized Returns</th>
<th>Real</th>
<th>Nominal</th>
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<tbody>
<tr>
<td>S&amp;P 500</td>
<td>6.82%</td>
<td>10.00%</td>
</tr>
<tr>
<td>Long-Term Gov’t Bond</td>
<td>2.49%</td>
<td>5.54%</td>
</tr>
<tr>
<td>30-Day T-Bill</td>
<td>0.52%</td>
<td>3.51%</td>
</tr>
<tr>
<td>Inflation</td>
<td>NA</td>
<td>2.97%</td>
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*Source: Ibbotson Associates, MorningStar, PNC*
higher- or lower-than-average returns. In addition, the declines during a calendar year can be steep, averaging close to 15%, even if the final result for that year is satisfactory (Chart 1). Without proper planning, a retiree could make less-than-optimal decisions should the market environment prove difficult. Many retirees were faced with such circumstances after the technology bubble burst in the early 2000s; following the events of September 11, 2001; and during the financial crisis and subsequent market declines in 2008-09.

Since the S&P 500® historically has experienced a large decline—defined as a 20% drop in stock values—about every two and a half years, retirees and pre-retirees who are more susceptible to market declines should plan for this eventuality.

**Asset Allocation**

Asset allocation, a topic we have often discussed, is at the heart of investing for retirement because it includes an understanding of and risk tolerance level for many things, including volatility. A mix of assets can reduce volatility through diversification. We believe selecting an appropriate asset allocation is a good place to start to manage your retirement portfolio and volatility (Table 2 and Chart 2).
Since 1926, 28% of stock market and 8% of bond market returns were negative on an annual basis. However, only rarely (about 2% of the time) did stocks and bonds post simultaneous annual negative returns. Therefore, managing the stock/bond allocation can have a significant impact on the stability and predictability of portfolio performance.

In addition, selecting an appropriate long-term strategic asset allocation to match retirement objectives, investment holding period, and risk tolerance from a behavioral finance perspective may help mitigate the danger in becoming distracted from the long-term focus. In the simplest terms, behavioral finance looks at individuals’ most primitive impulses to explain why they experience these feelings that may lead to some suboptimal financial decision-making.

Systematic Rebalancing
Once an asset allocation has been set, it is important to re-evaluate the portfolio from time to time for a few reasons:

- systematically (on a set time frame, such as annually);
- to reassess any changes in personal life circumstances; and
- in response to changing market conditions.

An allocation should be rebalanced toward the target periodically—annually or when it falls outside of the allocation by 10 percentage points or more. This accomplishes a few goals.

- First, it systematically implements buy low and sell high. For example, an investor who targeted 50% in stocks and 50% in bonds would sell stocks and buy bonds after a year with very good stock returns and vice versa.
- Second, it keeps the investor’s targeted risk level consistent with his or her goal as assessed rather than allowing it to drift to a significantly higher or lower level.
- Third, our analysis has shown that periodic rebalancing can improve both the absolute and risk-adjusted return of a portfolio.1

The benefits of rebalancing are illustrated via a stylized example of an investor with an asset allocation target of 65% stocks and 35% bonds from the end of 1994 through November 2013. In the example, one investor rebalanced the portfolio back to the target allocation at the end of each year, while the other investor made no changes during the period. As one can see, the simple, systematic strategy significantly outperformed the do-nothing strategy (Chart 3, page 4). It is worth noting that a more optimized rebalancing strategy could have produced even better results, but in our opinion the power in the idea is that even a very simple, systematic plan should improve results over time.

Now if some withdrawal assumptions are added, the difference between the rebalanced and do nothing portfolios becomes even more stark. This investor chose to retire in 2000 and set a plan to take $13 per year starting in 2000 with the annual withdrawal growing at a 2% rate. This $13 was equal to 5% of

1 Please see the PNC white paper Integrated Investment Approach for more details on this study.
of the 1999 ending portfolio value of the rebalanced portfolio. There are a few things worth noting in the differences between the portfolios both with and without distributions and with and without systematic rebalancing.

The portfolios without distributions have a significantly higher value. This should not be surprising, because there is money being removed from the account and we chose an extremely poor time for this individual to retire. The difference may in fact be understated, because if the investor was contributing toward retirement, they would have actually been adding to their assets at this time while the retiree was forced to remove funds. Obviously such poor timing is only known in retrospect, but this underscores the risk to retirees and pre-retirees. Most importantly, the difference in value between the rebalanced portfolio and the do-nothing portfolio is large in the withdrawal scenario. While the portfolios without withdrawals (Chart 3) show the rebalanced portfolio as worth 6% more than the do nothing portfolio, the portfolios with the withdrawals show a much larger difference in value (Chart 4). The systematically rebalanced portfolio is worth 17% more than the do-nothing portfolio.

Changes in market prices can cause a portfolio asset mix to veer off its original plan, which could affect longer-term goals. For example, a robust stock market, while beneficial to asset growth, can tilt a portfolio more heavily toward stocks. In this example, a readjustment back to a retiree’s asset allocation plan may in fact dictate selling some stocks and readjusting toward more income-producing assets, such as bonds.

An investor’s asset allocation is actually an iterative process and should be revisited at least every few years (we believe annually makes the most sense) or whenever there are significant changes to the general issues. While one might want to adapt some portions of an asset allocation based on market conditions, an investor should not, however, change investment plans solely based on market behavior. Allowing the markets to dictate behavior is a recipe for retirement failure, as we outline below. Because publicly traded securities have a quoted price every day, they are subject to the whims of human behavior and irrational activity at times. Imagine if an investor were to behave reactively with some other large assets, such as a home. That
behavior would lead to depending on what people were willing to offer for a home on any given day, the homeowner may want to sell just because others decided it was not worth as much as it was the day before. What if no one wants to buy it? Does that make it worthless or make the homeowner want to sell it more? Obviously this is an extreme example, but hopefully it illuminates the underlying philosophy.

The financial crisis provided a good example of the dark side of letting the market determine an investor’s actions. The S&P 500 hit a peak in mid-October 2007 at 1,576, then the market proceeded to get hit extremely hard by the financial crisis, bottoming in early March 2009 at 667—a stomach churning decline of about 58%. Anyone selling stocks during that decline probably felt pretty good about it as stocks continued to feel pressure, but then, before the economy even started to recover, stocks began to rise. With the S&P 500 around 1,800 in December 2013, stocks are selling for 270% of the low index value (Chart 5). Selling stocks based on price action alone actually required two correct decisions to be successful—when to sell stocks and when to buy them back. It is highly unlikely that anyone can time those transactions perfectly. Using this time frame as an example it is easy to see that anyone selling out of stocks and moving to cash at any point is now behind in terms of performance. Worse, anyone selling out anywhere near the bottom has lost out on so much of the rebound that their net worth is likely impaired indefinitely. This illustrates the importance of staying invested and not allowing the market to dictate your actions.

Please see our January 2014 5 Keys to a Successful Retirement publication for a more expansive discussion of the iterative process of setting an asset allocation and adapting to market conditions.

**Building a Cash Cushion**

In periods of volatility during retirement, the best offense is a strong defense. Because retirees are no longer working and are unable to add to their retirement fund to recoup losses like they did during the career years, we believe it is advisable for retirees to build a cash or income shield. It is possible to reduce volatility risk by investing the money needed in the next few years in more conservative investments, while maintaining normal allocations with the money earmarked for use over longer investment holding periods. Building a reserve to cover necessary expenses (such as those discussed in the Income Floor section that follows) instead of the retirement portfolio allows retirees to avoid withdrawing funds while their investments are at their weakest. Nothing is more harmful than having to sell during a down market. Being what we call a “forced seller” during a downturn turns the strong attributes of an investor, the ability to take advantage of market declines, into the weakness of a speculator or those invested on margin who can be forced to liquidate at inopportune times.

This requires some thinking on the retiree’s part in order to calculate how much of a retirement portfolio will be withdrawn annually. While one might
want to err on the side of caution and make this number bigger than needed, the reverse actually holds true for maintaining portfolio market values. Keeping withdrawal assumptions conservative helps keep more of your portfolio invested. You can always readjust as you go along.

For example, imagine a portfolio that suffered a 25% decline—the typical decline experienced by the stock market in the average post-World War II bear market. To recover, the portfolio would need to grow 33%. If a retiree withdrew a typical 5% to cover living expenses in such a bear market, the portfolio would instead have to grow about 40% to return to form. Ill-timed withdrawals only deepen the nadir from which a portfolio needs to recover.

Building cash reserves allows a retiree to avoid such inopportune withdrawals. Cash here refers to any safe, near-liquid investment. This could include money market mutual funds, bank certificates of deposit (CDs), or Treasury bills. Certainly, these investments eke out only modest returns even in the best of times and near zero returns in the current environment, but the stability they provide acts as type of insurance against becoming a forced seller.

This reserve has several other benefits.

- It provides assurance. By giving investors access to cash regardless of market performance, it lets them better ignore the ebb and flow of the stock market, while hopefully easing anxieties in the process.
- Because cash is inherently nonvolatile, a robust cash reserve makes the overall portfolio less risky and helps retirees soften the typical 25% downdraft.

How big of a cushion is enough? A prospective or current retiree should set aside at least a year of expenses. A larger cushion is certainly preferred. The idea is to hold enough so that the portfolio can suitably weather a typical market tumult. Since World War II, the average stock market recovery took 24 months to surpass its previous peak. But, recent recoveries have taken even longer: The most recent S&P 500 recovery took more than five years; the rebound from the dot-com bust in the early 2000s took even longer—almost seven years. As a result, those who are especially risk-averse might consider holding even larger cash cushions than the recommended one to two years.

While your investment portfolio will earn a certain amount calculated in order to produce enough income to cover your expenses, there may be times when you have short-term cash needs. Assuming markets revert back to normal over time as they always have, you can replenish these funds when markets recover.

**Income Floor**

Retirees dependent on monthly income streams may find an income floor approach reassuring. The income floor method can bring peace of mind, while markets may fluctuate, the portfolio is structured to yield enough to help cover basic needs. Through this method, PNC structures the income floor portion to meet such needs while maintaining a portfolio asset allocation that is aimed at preserving capital, managing risks, and attempting to ward off inflation.
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The place to begin when using the income floor approach is to thoroughly and honestly assess a retiree’s income needs.

First, take into account noninvestment income from other sources, such as pensions and Social Security. This is the theoretical floor for retirees.

But for many, noninvestment income is not enough. For them it is important to then determine how much is needed in regular cash distributions above those amounts. Income generated through retirement savings therefore serves its purpose as a supplement.

For our purposes in this section, we will use the term "income floor" to pertain to cash generated from a retiree’s investment portfolio. We recognize in assessing a retiree’s total cash needs noninvestment income is added to investment income.

This so-called “floor and upside” strategy is backed by the Retirement Income Industry Association. Under this method, a floor of predictable cash flow streams is built first, before investment in anything riskier. The portfolio uses an individualized asset allocation to invest for growth, capital preservation, and risk management. By looking at the yield of portfolios with various asset allocations, one can gain a rough sense of whether or not a portfolio yields sufficient income to meet a retiree’s cash needs (Table 3).

The next step involves selecting securities that generate a predictable income stream to satisfy the yield portion of the portfolio. Income from bonds or bond funds can provide such stable cash generation. A bond ladder, or portfolio of bonds with different maturities matching each year of retirement, is another method that aims to meet cash needs.

With retirees living longer and retirement periods lasting longer, preservation of capital is important in addition to ongoing risk management and the attempt to counter the effects of inflation. After the income floor is met, the balance of the portfolio can be managed for longevity and growth.

The goal of any investment portfolio, including retirement income, is to produce the most satisfactory outcome for the investor over a specific investment holding period. Achieving this requires a thorough understanding of the return and risk parameters best suited to the investor’s goals. In considering retirement income, holding period and risk and return may change over time.

The purpose of the income floor investment strategy is to establish a portfolio that combines the assets and the relative weightings of those assets that will produce the desired portfolio objectives over a specified time period. In the income floor approach, these objectives include a reliable income stream in addition to the retention, and even growth, of purchasing power over time.

For the portfolio, well-defined risk and return parameters, along with a specified investment holding period, provide a road map for a well-constructed asset allocation. Despite the fact that individual assets are often volatile, we believe assets can be combined to effectively manage risk,

Table 3
Portfolio Yields at Various Asset Allocations*

<table>
<thead>
<tr>
<th>Asset Allocation</th>
<th>Yield</th>
<th>Income on $1 Million Portfolio</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% Bonds</td>
<td>3.83%</td>
<td>$38,300</td>
</tr>
<tr>
<td>80% Bonds/20% Stocks</td>
<td>3.49%</td>
<td>34,860</td>
</tr>
<tr>
<td>65% Bonds/35% Stocks</td>
<td>3.23%</td>
<td>32,280</td>
</tr>
<tr>
<td>35% Bonds/65% Stocks</td>
<td>2.71%</td>
<td>27,120</td>
</tr>
<tr>
<td>20% Bonds/80% Stocks</td>
<td>2.45%</td>
<td>24,540</td>
</tr>
<tr>
<td>100% Stocks</td>
<td>2.11%</td>
<td>21,100</td>
</tr>
</tbody>
</table>

*Based on yields as of May 11, 2012

Bonds = PIMCO Total Return Bond Fund
Stocks = S&P 500®

Source: Bloomberg L.P., PNC
enhancing the predictability of asset returns. In addition to providing a plan to achieve the portfolio objectives, establishing a strategic match between the asset allocation and the client objectives provides a basis for:

- consistent evaluation of progress toward achievement of those objectives; and
- measurement of the success of the investment strategy.

The success of strategically matching an asset allocation to an investor’s objectives is heavily dependent on the accuracy of the assessment of risk tolerance and on the process used to determine and manage the investor’s strategic (long-term) asset allocation.

PNC believes that one of the most important approaches to investing is to diversify across all major asset classes to more effectively manage risk and return. We use our proprietary tools, analytical techniques, and expertise to allocate assets among the major asset classes to achieve uniquely focused client objectives, rather than simply concentrate on beating a stock market index. The strategic matching concept:

- brings the investor together with an appropriate mix of assets to achieve objectives;
- establishes a road map to long-term goals;
- allows for a consistent basis for evaluation of progress in achieving objectives; and
- moves beyond thinking only of S&P 500 performance as an appropriate benchmark.

**Why Not Just Live Off the Income?**

Even if one seemingly has enough assets to live off the income rather than taking on market risk, there is good reason to consider purchasing-power risk as a significant enemy of the retiree. Consider the example of an investor that chooses to invest a $1 million nest egg 100% in bonds yielding 3.83% and, to be conservative, decides to take distributions of only $35,000 per year. Given these assumptions, the investor expects the portfolio to actually grow in nominal terms over time.

The issue is that in real terms (adjusted for inflation) the retiree is losing purchasing power both in the annual payout and in the asset value of the account. Our example assumes an inflation rate of 2.5%, which is a good proxy for the recent average even though the long-term U.S. average is around 3%. After 20 years the annual payout is worth only a little more than 60% of what it was in today’s dollars and the asset value is only 67% despite paying out less than the income generated each year (Chart 6, page 9).

After 30 years the annual payout is worth less than half of its original value and the asset value is only 56% of its original value (Chart 7, page 9).

As illustrated by our example, investors funding retirement spending should consider keeping some exposure to assets such as stocks that have historically grown purchasing power over time, which should help provide some protection against the ravages of inflation.
Stay Invested and Do Not Panic Sell

Managing retirement assets just before or during retirement brings with it different characteristics in that you sometimes are no longer working, your investment holding period is shorter, and the need is there to make sure savings last throughout your retirement period. This may decrease your risk tolerance level.

The importance here is to not panic with volatility, acknowledging the aforementioned concerns. Creating a long-term strategy and not swaying from this with market moves is the best way to achieve retirement investment goals.

The power of staying invested is clear, for the 20-year period ended in 2013; the market enjoyed an average annualized total return of 9.2%. A $10,000 initial investment—assuming one stayed fully invested in the turbulent periods as described above—would have grown to $39,524, not including the reinvestment of dividends, in which case the total investment would be closer $50,000. Using the price appreciation only, if an investor for some reason pulled money out during that 20-year period, the problem is usually that it hard to catch the upturn in the market. For example:

- missing the 10 best days, a portfolio balance would be worth: $19,739 ($19,785 less); and
- missing the 20 best days, a portfolio balance would be worth: $12,306 ($27,218 less).

The short answer is: Stay invested if you can and ride out the market downswings.

Conclusion

While many of the concepts might sound simple and certainly our goal is to help individuals take action to improve their retirement planning and investing by simplifying the steps, the actual implementation can be daunting.
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and confusing. This confusion should not be shocking, given the vast array of investment products, strategies, and advice available in the marketplace and the fact that individuals get only one lifetime to plan and enjoy their retirement. With PNC’s long history of helping individuals invest and plan for their retirement goals, you can feel confident that PNC investment professionals have the institutional experience behind them to help you navigate the complex path to a successful retirement.