

History and Scenarios: Helping Consumers Cope with Stock Market Volatility and Investment Losses

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Taken together, home mortgage defaults and foreclosures, public and private sector job losses, volatile stock market prices, declining home values, multiple bank and investment firm failures, a credit crunch, and increased costs for basic necessities created a "perfect tornado" in 2008 and 2009. A crisis that originated with arcane securities (e.g., credit default swaps) backed by low-quality mortgages that homeowners could no longer afford rapidly escalated worldwide. On December 1, 2008, the National Bureau of Economic Research officially declared the U.S. in a recession (defined as two straight quarters of shrinking GDP), retroactive to December 2007. Thus, the recession was officially identified well after it began and it has run longer than the average recession length of 10 months (Coffelt, 2009).

This article will discuss two outcomes of the recent recession that have negatively impacted many people - (1) stock market volatility and investment losses and (2) the derailment of retirement plans. Further, it will describe common emotional reactions to market losses and how financial educators can use historical investment performance data and computerized scenario modeling information to help consumers keep losses in perspective. Research about strategies to adjust retirement plans to account for losses, while still maintaining a high probability of having assets last a lifetime, will also be described. The article concludes with implications for education and practice.

Helping Consumers Handle Investment Losses

The following are five common reactions of investors to recent market volatility and historical investment performance data that make the case for long-term investing and against market timing.

The Stock Market is a Roller Coaster and I Want Out

It is common for investors to seek relief from market uncertainty when stock prices are extremely volatile. Any other place to put their money seems safe by comparison, even Treasury bills or bank accounts paying 1% or less (T. Rowe Price, 2008). The flip side of "going to cash" is that investors lose the opportunity to buy shares of stock at reduced prices or experience a rebound in the value of existing stock holdings. Due to historically lower returns on bonds and cash assets, investors who eschew stocks also run the risk of not being able to make up recession-induced losses. Further, these assets may not earn enough to compensate for what taxes and inflation strip away from investment earnings. Because of their short-term volatility, stocks are not a good investment if households anticipate a liquidity need within five years, especially for clearly defined goals such as a child's college tuition or wedding expenses (Markese & Crawford, 2008).

History shows that stocks have generated higher returns than less volatile alternatives over extended time periods (Anand, 2009). In addition, investment risk is reduced, and stock returns are less volatile, as an investor's time horizon increases, a principle known as time diversification. Studies show that missing just a small number of the market's best trading days (which often come soon after days with big losses) can dramatically lower investment returns. For example, consider the time period from January 1, 1980 through April 30, 2008. If \$10,000 was invested in the Standard & Poor's (S&P) 500 Index on January 1, 1980, it would have been worth \$131,013 on April 30, 2008. If the same investment missed the ten best performing days during this period of 28 years and 4 months, it would be worth \$76,581. Put another way, missing the 10 best days out of 7,150 trading days would result in a return worth 42% less ("The Cost of Losing," 2008).

Unlike department store sales, when stocks are cheap during market downturns, people often run out of the "store." Successful investors, however, avoid chasing market trends, and instead, follow a long-term investment strategy based on their financial

goals and true risk tolerance. When investors work with financial advisors, their investment plans are often recorded in a document called an investment policy statement or IPS, which serves as a "roadmap" for a defined investment process (Ziesenheim, 2004). Yet, even with an IPS and professional advisors, emotions (e.g., fear and greed) can drive investors in and out of the market at the wrong time, which can be detrimental to their investment returns (T. Rowe Price, 2008). Not surprisingly, legendary investor Warren Buffet was quoted as saying, "The stock market is designed to transfer money from the active to the patient" (Warren Buffet Quotes, n.d.).

The Recession is Getting Worse - I Don't Know How Much Longer I Can Own Stock

A key to wealth accumulation over time is "buy and hold" (Carlson, 2000), not "buy and fold." While it is tempting to cash out during a prolonged bear market, history has shown that the stock market is generally resilient in the face of crises. The stock market has rebounded from steep losses before and market drops have usually been followed by good rallies. For example, one month after September 11, 2001, the Dow Jones Industrial Average was up by 8%. After six months, it had risen 21.2% (T. Rowe Price, 2008). In addition, as noted above, cash assets generally do not have enough earning power to regain losses incurred by selling stock at a loss. Further, investors who sell stocks during a bear market will likely never re-enter the stock market or will repeat the mistake of "buying high and selling low" by trying to time the market. Either way, they will miss out on the stock market's long-term advantages (Markese & Crawford, 2008).

No single indicator can predict how long a recession will last. However, the stock market has a tendency to anticipate both recessions and subsequent economic upturns (recoveries). In other words, stocks often recover well before the economy recovers from a recession and historically turn up just beyond the mid-point of a recession (Coffelt, 2009; T. Rowe Price, 2008). Investors should, therefore, not automatically equate stock market

performance with economic indicators. Rather, it is critical to remain invested in stocks, and in fact, continue investing in a bear market to "buy low and sell high" for long-term wealth accumulation. For example, if an investor is holding stock (or accumulation units in a 401(k) or 403(b) plan) that drop from \$100 a share to \$50, this is a 50% decline in value. However increasing from \$50 to \$100 a share requires a 100% return. Buying shares when values are low make it easier to recover from recent losses. It is easier to go from \$50 to \$75 per share (an average of \$50 and \$100 share prices), which is a 50% increase, than from \$50 to \$100, which is a 100% increase.

The Market is Crazy – I Need to Do Something to Take Control

While investors cannot control financial markets, they can control their investment practices. One example, in both bear and bull markets, is portfolio rebalancing. This means periodically bringing the percentage of their portfolio in each asset class back to a desired asset allocation (e.g., 40% stocks, 40% bonds, and 20% cash) to get back on target as weightings shift according to market conditions (Riepe & Swerbenski, 2007). In a severe bear market, rebalancing involves selling bonds and cash assets and buying more stock at a time when shares are available at a discount. Rebalancing is a systematic way of buying investments when they are at a relatively low price, which over the long term can help investors smooth out the effects of a volatile stock market. In addition, it prompts investors to do what they otherwise would not do – buy stocks when prices are falling and sell them when prices are rising. Rebalancing can be done by selling assets in an asset class (e.g., stocks, bonds, or cash assets) that has exceeded its target percentage due to market-driven price shifts, and putting those assets in other asset classes that are below their target percentage. The tax consequences though need to be taken into consideration, as security sales in taxable accounts will trigger capital gains or losses.

Another way investors can maintain some control over their investments is to avoid depositing or withdrawing large sums all at

once. Instead, it is preferable to deposit or withdraw smaller amounts at regular time intervals (e.g., \$200 per month), a strategy known as dollar-cost averaging. The greatest benefit of dollar-cost averaging is risk reduction because investment prices are averaged over a period of time, thus reducing the risk of poor timing. The longer the averaging period, relative to an investment time horizon, the greater the risk reduction (Dubil, 2005).

A third investment control practice is to look for ways to reduce investment fees. Costs matter because they are subtracted from an investment's return. The higher the costs, the more an investment has to earn to offset the drag of fees on its performance. The higher a mutual fund's expense ratio, the more likely it is to underperform to the point that it will be liquidated or merged away ("Cheap Funds Hammer," 2007). Types of mutual funds with low expenses are index funds that track a benchmark market index such as the Standard & Poor's 500. Examples of high expense funds are those associated with 12b-1 fees, which are charged by some mutual funds to pay for marketing and distribution costs (e.g., broker commissions). Information about expenses can be found in the mutual fund's prospectus, which can often be downloaded from the Internet.

A fourth way to maintain control is to limit daily exposure to negative financial news, especially detailed stock market reports (e.g., CNN and CNBC). People who are experiencing a lack of control often put a lot of stock in any information that they hear (Zweig, 2008). Daily financial reports that report moment by moment market fluctuations with commentary feed on market jitters and can cause some people to panic. Finally, taking advantage of legal tax avoidance strategies (e.g., tax-deferred retirement savings plan contributions, long-term capital gains tax rates, tax deductions and credits, and write-offs for investment losses) are additional control measures.

I Just Got My Statement and Can't Believe How Much I Lost! I Want Something Safe

As noted above, cash does not last. With increased life expectancies, retirement has become a long-term proposition and many people must rely on their invested assets to last 20 to 30 years or more. Cash assets, such as bank CDs and Treasury bills, simply cannot sustain a retirement income stream for very long because their earnings barely beat inflation over the long term. T. Rowe Price notes that \$500,000 invested in an all cash portfolio (measured by the performance of U.S. Treasury Bills) in 1978 would have lasted only 14 years. On the other hand, a more diversified portfolio would have lasted longer – from one more year (a total of 15 years) for a conservative portfolio (50% cash, 35% bonds, 15% stock) to 15 more years (a total of 30 years) for a portfolio comprised of 20% bonds and 80% stocks. A portfolio comprised of more than half in stock was able to last over two decades (T. Rowe Price, 2008). When retirees have stock in their portfolio, it is possible for their investments to grow in value even when withdrawals are made. However, with bonds and cash in their portfolio, money that is spent is generally not replaced from investment gains.

To ride out periods of extreme stock market volatility, many financial advisors recommend that investors keep two to five years of unfunded spending needs in cash assets or bonds. For example, if a couple wants to live on \$60,000 annually and receives \$30,000 from Social Security or pension benefits, their required “cash stash” would be \$60,000 ($\$30,000 \times 2$) to \$150,000 ($\$30,000 \times 5$). A large emergency fund, to be sure, but the rationale is that this strategy allows investors to ride out market downturns and to not have to sell stock at a loss during bear markets to pay living expenses. The cash account should be regularly replenished with new cash deposits, bond interest, or stock dividends. Of course, the more cash set aside, the greater the opportunity cost of not being in stock.

Even if investors are not retired, they need to be concerned about inflation, which is a “silent” investment risk compared to

stock market volatility. For example, if inflation averages 3% or 4% over the next 20 years, \$1,000 will be worth only \$554 and \$456, respectively, in 2029. Historical investment data show that, while stocks can go down in value, they eventually rebound and can regain their losses and then some over time (Anand, 2009).

I Am In My 60s. I Don't Have Time to Wait for the Stock Market to Recover

For the past two years, market volatility (i.e., extreme ups and downs in stock prices) has chipped away at investors' account balances, leaving many people feeling afraid, uneasy, or discouraged. Stock market losses have been especially painful for those on the verge of retirement who see themselves as “running out of time.” It is important to note, however, that investors' time horizon is not the day that they retire but the remainder of their lifetime. Thus, people in their 60s could have an additional life expectancy of 20 or 30 years to ride out market fluctuations and that is the time frame to focus on. Moreover, people do not liquidate their assets as soon as they retire. Rather, they gradually spend them down over time, which gives battered assets time to recover from market downturns (“Worried About Retirement,” 2009).

The above observations notwithstanding, it is very common for investors to shift to more conservative asset allocations as they get older, regardless of market conditions. Older investors do indeed have less time to recover from market losses. Ideally, changes in asset weightings should be made gradually through portfolio rebalancing or dollar-cost averaging and not by transferring large lump sums at any one time, particularly in extremely volatile markets.

Regardless of an investor's age, history has shown that, as individuals extend their investment horizon, the extreme volatility experienced in relatively short time frames flattens out. In other words, the longer the time frame, the less investors are affected by short-term volatility. Studies of “rolling returns” using the Standard & Poor's (S&P) 500 Index in time frames ranging from

1 year to 20 years (e.g., 1926-1946, 1927-1947, etc.) indicate that one-year holding periods are extremely risky. With holding periods of 15 or 20 years, however, returns on stocks exhibit a relatively narrow range of returns of around 10%, which is roughly their long-term average annual return (Richards, 2002). What matters most is not timing the market, but time spent investing in the market. Of course, the past performance of stocks and other asset classes is no guarantee of future results.

Unfortunately, in volatile markets, investing often becomes equated with gambling in the minds of novice investors. The reality, however, is that time affects gamblers and investors quite differently. The longer people gamble, the more likely they are to experience losses. The longer people invest, the more likely they are to benefit from rising markets and make a profit. By remaining in stocks, investors do not miss significant long-term growth opportunities (T. Rowe Price, 2008). With a long time horizon, the odds of "winning" in the stock market increase.

Helping Consumers Revise Their Retirement Plans

The following are three common reactions to recent market volatility by retired or soon-to-be retired investors. Also included is a discussion of available options to help these individuals recover from recession-damaged portfolios.

I Just Retired and the Market Crashed - Now What?

"Meltdown" is not too strong of a term to describe the recent rise and fall of the U.S. stock market. By March 6, 2009, the Dow Jones Industrial Average stock market index had suffered a more than 50% decline from its peak on October 9, 2007 (United States Bear Market, n.d.). Fortunately, most investors did not place all of their money into stocks, or any single asset class, thus shielding them somewhat from losses. The stock market has rebounded somewhat since the March 2009 low. Yet, the magnitude of losses individuals have recently suffered in such a relatively short period of time has been unsettling.

In a normal market, financial advisors often recommend withdrawing no more than 4% of retirement savings annually, with annual inflation adjustments (e.g., 3%), to sustain assets over 30 years. Blanchett and Frank (2009), however, have studied sustainable retirement portfolio withdrawal strategies and recommend revisiting the withdrawal amount annually and lowering it if a portfolio is underperforming, such as during a prolonged bear market. Fahlund (2009) also recommends forgoing the annual inflation adjustment as a way to avoid outliving assets.

I Wanted to Retire This Year. Now I'll Need to Work to Age 92 to Make Ends Meet

Post-retirement employment does not have to last decades to be an effective recession recovery strategy. Even one or two years of additional work can be effective. Fahlund notes "no single decision will improve preretirees' potential retirement security as much as continuing to work even a few more years beyond the anticipated retirement date" ("Working Longer," 2008). By remaining employed, workers continue to contribute to retirement savings plans, earn higher Social Security and pension benefits, avoid early Social Security benefit reductions, delay making withdrawals from recession battered investments, and reduce the number of years that assets need to last. The combination of these factors greatly enhances workers' future financial security.

Working longer is an especially valuable recession recovery strategy for those on the cusp of retirement with limited time to rebuild their investment accounts. For example, \$40,000 of annual income is equivalent to withdrawing 4% a year from investments totaling \$1 million. To avoid feelings of deprivation, people can elect to spend more money on hobbies, travel, and other planned pursuits while continuing to work. Delaying retirement does not have to mean delaying some of their dreams. According to a T. Rowe Price study, combining catch-up strategies is particularly effective. Continuing to work, saving 15% of

income, and delaying Social Security benefits can increase the purchasing power of retirement income from retirees' combined investments and Social Security benefits by about 8% for each year after age 62 or 25% in three years ("Working Longer," 2008).

I'm Retired, Lost a lot of Money, and Won't Have Enough to Live Comfortably

Retirement income decumulation is a major concern of retirees, who fear outliving their assets (Stolz, 2008). The recession has exacerbated this concern. As noted above, strategies such as forgoing annual withdrawal inflation adjustments and working longer (or during retirement) can help stretch retirement assets. Other things that retirees can do to make ends meet include reducing housing costs (e.g., moving to a less expensive home or geographic location), investing part of their savings in an immediate annuity that provides guaranteed income for life, and spending down assets in a tax-efficient manner. The latter means taking withdrawals from dividends, capital gains, and taxable and tax-free investments before tapping tax-deferred accounts such as 401(k)s and traditional IRAs, at least before required minimum distributions at age 70½ are necessary. By liquidating assets in this way, tax-deferred accounts continue to compound longer; without the drag of taxes, resulting in a larger account balance (Raabe & Toolson, 2002).

Additionally, nervous retirees should implement some type of systematic income payment program (i.e., withdrawing fixed amounts at fixed time intervals). One study found that only 21% of retirees do this. By contrast, a majority make withdrawals from retirement assets in a random fashion based on living expenses, amount of investment income, gut feelings, or other factors. ("No Rhyme or Reason," 2009). Retirees can also scale back on overall spending or postpone "big ticket" purchases, such as a car, until their asset values recover.

Conclusion and Implications

This article has discussed reactions to the 2008-2009 financial crisis, specifically its impact on investments and retirement savings. Stock market volatility, combined with a severe recession, has made even experienced investors question the wisdom of buying and holding stock. Nevertheless, history and the results of Monte Carlo simulations make a strong case for investing in stock for goals that are five years or more away, the minimum time horizon for equity investing. The former editor of *Kiplinger's Personal Finance* (Kiplinger, 2008, p. 24) wrote: "Perhaps, a few years from now, I'll regret acting on the confidence that I still have in the resilience and ingenuity of the U.S. economy—indeed, the global economy. But in 40 years of patient investing, I haven't been disappointed yet." Hopefully, he will again be proven right. The following are ten implications for consumer educators.

1. Use history and scenarios to help investors understand the dangers and trade-offs of cashing out of stocks. First, it is likely that they will miss future market rebounds, and second, they will need to save more or withdraw less money in retirement as a result of the slower growth of their assets.
2. Help consumers accurately assess their investment risk tolerance. While financial planners differ on the best method to do this (McCarthy, 2009), assessments (e.g., risk tolerance questionnaires) used during a major bear market can serve as a valuable benchmark later when markets rebound. Convert historical percentages of investment loss into dollars and ask investors if they could live with a "\$X" loss. For example, "\$X" would be \$14,000 if you lost 35% of a \$40,000 401(k) account balance. Scenarios like this used to be asked as hypothetical questions, but not any more.
3. Use data about missing the "best trading days" to caution against trading in and out of stocks according to market conditions. Successful market timers need to be right twice

- (i.e., when to get out of the market and when to get back in), which is very difficult to do.
4. Fully acknowledge the fear and emotions associated with a recession and bear market. Like other investors, consumer educators feel uneasiness too. Educators are concerned, not only about their personal investment losses, but those of students they are teaching. Despite disclaimers such as "past history cannot predict future investment results" and "stocks have performed well over the long term," educators can feel uncomfortable portraying stocks in a positive light during a severe bear market. Educators should expect that students may want to know how their instructors are personally handling market volatility. They may also want to know details about the specific investment strategies their instructors are using.
 5. Brace yourself and consumers for what economists are calling "a new normal" when the recession ends (Hughes & Seneca, 2009). A new normality is inevitable because the financial crisis was precipitated by unsustainable trends and bubbles. The over-leveraged, debt-driven era of underpriced risk is now history, as are formerly loosely-regulated investment banks. In addition, Americans' prior level of spending was unsustainable and will be replaced with lifestyle changes marked by consumption as a declining share of GDP and rising savings rates (Hughes & Seneca, 2009).
 6. Make post-recession financial education programs personal with tools such as online investment risk tolerance questionnaires, financial calculators, and Monte Carlo analyses that determine the probability of not outliving one's assets. Especially useful are tools that allow consumers to compare and "stress test" the results of alternative courses of action (e.g., retiring at age 65 versus age 62 or determining how long retirement savings will last under various withdrawal scenarios).
 7. Remind investors of positive aspects of their retirement income stream. For example, many state and local government workers have access to a defined benefit pension. At a 4%

- withdrawal rate, a \$24,000 annual pension is equivalent to having \$600,000 in savings. Further, Social Security is akin to owning an inflation-indexed fixed annuity with benefits payable for life.
8. Teach investors about things they can control (e.g., investment expenses, portfolio rebalancing, dollar-cost averaging, financial news media exposure, and tax avoidance strategies). Additionally, discourage them from taking large risks in a desperate attempt to recoup losses (Zwieg, 2009).
 9. Understand that diversification does not work well when a major financial "tornado" affects virtually every type of asset class, both foreign and domestic. When this happens, assets are often sold indiscriminately, regardless of their underlying value, as a result of fear, panic, and programmed computerized trades. In more "normal" markets, diversification provides more shelter from investment risk because different asset classes often counterbalance each other.
 10. Know that, historically, the stock market bounces back after bear markets. Unfortunately, no one knows when in advance. Compared to market timing, "buying high and selling low," or withdrawing from the stock market completely, long-term investing in a portfolio that includes stocks or stock mutual funds is generally a superior strategy for investors to pursue. It is important that young adults not be terrified of stocks, after seeing current news, like many who came of age during the Great Depression were. Otherwise, they could lose decades of wealth-building returns. People always react negatively to current events, but over time, the best chance people have for wealth accumulation is a diverse mix of investments that includes stock. Financial educators will need to spread this message widely in years to come.

References

- Anand, S. (2009, February 2). Staying put in stocks. *The Wall Street Journal*, p. R5.
- Blanchett, D.M., & Frank, L.R. (2009). A dynamic and adaptive approach to distribution planning and monitoring. *Journal of Financial Planning*, 22(4), 52-66.
- Carlson, C. (2000). *Eight steps to seven figures*. New York, NY: Currency Books.
- Cheap funds hammer expensive funds. (2007). *Journal of Financial Planning*, 20(8), 12.
- Coffelt, M. (2009, January). Keeping the downturn in perspective. *NAPFA Advisor*, 26(1), 24-26.
- Dubil, R. (2005, October). Lifetime dollar-cost averaging: Forget cost savings, think risk reduction. *Journal of Financial Planning*, 18(10), 86-90.
- Fahlund, C. (2009, February). Retirement income: Repairing the damage to assure the flow. *AAIL Journal*, 31(2), 5-9.
- Hughes, J. W., & Seneca, J. J. (2009). 2009: The shape of new normal. *Sitar-Rutgers Regional Report*, 12(1). Retrieved November 1, 2009, from <http://www.policy.rutgers.edu/reports/sitar/sitarfeb09.pdf>
- Kiplinger, K. (2008, December). Why I'm buying stocks. *Kiplinger's Personal Finance*, 62(12), 24.
- Markese, J., & Crawford, M. C. (2008, October). Your portfolio: Maintaining perspective. *AAIL Journal*, 30(10), 5-7.
- McCarthy, E. (2009, February). Time for another look at client risk tolerance? *Journal of Financial Planning*, 22(2), 18-24.
- No rhyme or reason for spending withdrawals. (2009). *Journal of Financial Planning*, 22(1), 10.
- Raabe, W. A., & Toolson, R. B. (2002, May). Liquidating retirement assets in a tax-efficient manner. *AAIL Journal*, 24(5), 17-21.
- Richards, D. (2002, June). Hearts of darkness. *Financial Planning*, 32(6), 147-148.
- Riepe, M. W., & Swerbenski, B. (2007, April). Rebalancing for taxable accounts. *Journal of Financial Planning*, 20(4), 40-44.
- Stolz, R. F. (2008, March). Spending in retirement: Easing the reins or pulling them in. *Journal of Financial Planning*, 21(3), 20-26.
- The cost of losing the 10 best days of the S&P 500 index. (2008). Retrieved November 1, 2009, from <http://www.icmarc.org/xp/rc/marketview/chart/2008/20080509CostofLosing.html>
- T. Rowe Price Associates. (2008). *Speaking of markets: Responding to client concerns about the market*. Baltimore, MD: T. Rowe Price Associates, Inc.
- Working longer and other ways to optimize retirement income. (2008, Summer). *T. Rowe Price Report*, 100, 14-18. Retrieved November 1, 2009, http://www.troweprice.com/gcFiles/pdf/2A41.pdf?scn=Articles&src=Media_Near_or_In_Retirement&t=lgcy
- United States bear market of 2007-2009. (n.d.). Retrieved November 11, 2009, from http://en.wikipedia.org/wiki/United_States_bear_market_of_2007%E2%80%932009
- Warren Buffet quotes. (n.d.). Retrieved November 11, 2009, from http://refspace.com/quotes/Warren_Buffett.
- Worried about retirement? Here's what you can do. (2009, Winter). *In the Vanguard*, 8-9.
- Ziesenheim, K. (2004, September). You need a map. *Investment Advisor*, 5(9), 103-108.
- Zweig, J. (2008, October 7). For investors, dealing with a loss of control. *The Wall Street Journal*, pp. D1, D3.
- Zweig, J. (2009, February 21-22). As stock losses loom, don't throw a "hail mary." *The Wall Street Journal*, p. B1.

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