



## Toward an Understanding of Risk

By Robert Huebscher

February 15, 2011

How should clients think about risk in their portfolios? *Advisor Perspectives* put that question to a cross-section of prominent advisors and academics. Their answers encompassed diverse opinions and underscored how crucial that question is to the investment process.

In part one of this series, we hear from seven practitioners in the financial planning community. Next week, we'll hear from a group of well-known academics, including a couple of Nobel Prize winners.

We asked each person the following questions:

1. How should a 25-year-old, who is beginning to save for retirement, think about and measure the risk in his or her portfolio?
2. How should a 65-year-old, who is beginning the withdrawal phase of their retirement, and the adequacy of whose portfolio is precarious, think about risk in his or her portfolio?

We were not asking how that person should invest, but rather how they should think about risk.

Here are the responses from Carl Richards, Bill Bengen, Roger Gibson, Rob Arnott, Harold Evensky, William Bernstein and Jonathan Guyton.

**Carl Richards is the founder of Prasada Capital Management, based in Utah. He is author of the [Behavior Gap](#), a column on personal finance.**

*Volatility and risk are not the same thing, though they are often treated as such.*

Risk is what is left over after we think we have thought of everything. It is the "unknown unknowns." Viewed in that light, which is not the conventional industry perspective, the entire discussion of measurement and management of risk takes on a different tone.

The traditional view of risk traces back to economist Frank Knight, who in 1916 began (and largely ended) this discussion for our industry. Knight, a founder of the "Chicago school of economics," made a distinction between risk and uncertainty and set the course for the industry to focus on risk as he defined it – what we think of as volatility. Knight's approach was, and still is, convenient in the sense that risk,



as defined by Knight, can be measured and managed. The issue is that most real people don't view risk this way. To most people, risk is indeed what is left over after you think you have thought of everything, or what Knight referred to as uncertainty. Uncertainty is messy, impossible to manage, and therefore often left out of the discussion.

When, in the sterile lab of modern finance, we say that risk equals volatility, we assume that the range of outcomes is pretty much fixed within a normal distribution (bell curve). Our clients, however, face uncertainty, and the greatest risks to their portfolios are the things that are left over after we think we have thought of everything. It is often said that the last four words of any great investor are "this time it's different," but do we really believe that the limited historical data we have represents a complete set of outcomes? Is there any room for the possibility of unknown unknowns?

When we talk about risk management, whether to 25-year-olds or to 65-year-olds, clients think about risk generally, not as an abstract academic idea. This difference in the way we communicate risk leads clients to expect things that we simply can't deliver.

We need to review the role that uncertainty plays in portfolio management and how we communicate this reality to clients. Open conversations about the nature of risk and the uncertainty we face when making portfolio decisions can go a long way toward setting realistic expectations and helping clients understand that even after all we can do, the future is still uncertain. Our job is not to forecast exactly what will happen but to be there to help them deal with events as they come.

**Bill Bengen is a personal financial advisor in El Cajon, CA. He is recognized for his extensive research into sustainable withdrawals from retirement portfolios.**

*Understanding the difference between risk and volatility can help clients decide when to gamble and how to make intelligent choices.*

Risk is the possibility that an individual will not be able to meet his or her financial objectives. I am not referring to its alternative definition, namely "volatility," which has perniciously taken hold in financial planning circles in recent years.

Risk and volatility are distinct concepts. Volatility is generally temporary in its effects, although in the short term those effects may be pronounced. Risk, on the other hand, can have terminal effects. As such, long-term investors needn't worry much about volatility, but they should seriously consider their risks. Strangely, people often worry more about the volatility of their investments than their risk, often not realizing how much risk they have assumed until something goes wrong. By then, it's too late.



For the 25-year-old, that individual must carefully define his short-term, intermediate-term, and long-term goals and how his or her finances will support them. He then might have a separate portfolio designed for each major goal. For example, if one goal is to save the funds for the down payment or purchase of a home in five years, the corresponding portfolio should be very low-risk. If another goal is to enjoy a certain inflation-adjusted income stream during retirement, that would have a very long timeframe, and therefore he or she can take some risks in that portfolio.

It is unwise to take large risks at any age with a substantial portion of one's assets, unless one has no hope of achieving reasonable goals without "rolling the dice." In that case, losing what little you have doesn't make much of a difference, while a big win would be a life-changer. In that case, buying a triple-leveraged ETF on maximum margin could make some sense.

For the 65-year-old, some risks will have to be assumed to ensure a more rewarding lifestyle. But the timing of those risks is very important. Buying stocks at the current 10-year trailing P/E of 24 looks as if it is a poor risk. Waiting for stocks to become more reasonably valued, which is inevitable, and buying at a P/E of 15 or less, will be more fruitful.

In other words, if you are going to take a trip to the casino, play a game with more favorable odds. Play craps and fade the shooter. Stay away from slot machines.

**Roger Gibson is the founder and chief investment officer of Gibson Capital, based in Wexford, PA. He is author of the best-selling book, *Asset Allocation: Balancing Financial Risk*.**

*Risk from inflation and volatility are different, and be mindful of the distinction between risk capacity and risk tolerance.*

In the most general terms, the two biggest risks investors face are inflation and volatility. Fighting one of these risks tends to expose you to the other. Since it is difficult to fight both risks simultaneously, each investor must determine which risk is more dangerous to them.

Time horizon is the dimension along which an investor determines which risk, inflation or volatility, is more dangerous. For investors with short time horizons, volatility, the downside of market losses, is usually a larger risk than inflation, and such investors should position their portfolios more heavily in interest-generating investments in order to gain more portfolio stability. For investors with long time horizons, inflation is usually a larger risk than volatility, and such investors should



position their portfolios more heavily in equity investments in order to maintain and grow their purchasing power.

Having said this, it is simultaneously important in each client circumstance to consider issues of risk *capacity* – the factual ability to withstand downside risk – and risk *tolerance* – the psychological willingness to tolerate downside risk. In the end, a good investment strategy should make good investment sense from a risk capacity standpoint and also have a pattern of returns that will not lead the client to abandon the strategy because their risk tolerance is insufficient, particularly during market extremes.

For the 25-year-old, who is beginning to invest for retirement, inflation is a bigger risk than volatility, and he or she should therefore have a portfolio weighted more heavily in equity investments. Since the investor will not be touching this money for several decades, he or she has a very high capacity to tolerate the volatility of equity investing. We don't know this person's risk tolerance, which will determine just how equity-oriented his or her portfolio can be. For example, even though an 80% equity portfolio will very likely outperform a 60% equity portfolio over a 40-year horizon, it does an investor no good to implement an 80% equity structure if, during a market extreme, he or she will abandon the strategy.

For the 65-year-old who is beginning the withdrawal phase of their retirement, inflation may still be a bigger risk than volatility, and hence an equity-oriented strategy may still make sense if the person has a sufficiently long life expectancy. This is, of course, again conditioned on his or her risk tolerance, which may decline as an investor moves from the portfolio's accumulation phase to the distribution phase. If there is a risk capacity issue here that may be constraining the situation – perhaps the investor cannot objectively handle much downside risk because of some threshold portfolio value they need – then the portfolio strategy will be capped as to its equity exposure, even though the time horizon may still be fairly long.

**Rob Arnott is the CEO of Research Affiliates, a research and investment management firm based in Newport Beach, CA. Also contributing to this response was Chris Brightman, the Director of Strategy at Research Affiliates.**

*The authors outline the major considerations each investor faces.*

Firstly, many of the key elements of personal investment risk management do not depend upon age. Diversification can reduce risk without reducing expected return for investors of all ages. A 100% bond allocation or a 100% stock allocation makes sense for absolutely no one. Another commonality is that low expenses and regular rebalancing can improve returns without generating additional risk for young and old alike.



That said, a 25-year-old should think about risk differently than a 65-year-old. Investment risk affects the young less than the old, because the relative value of their human capital as compared to their financial capital is much higher. The young can and should tolerate more investment risk, *as long as the incremental risk is tied to incremental prospective returns*. This latter point is a nuance that many investors overlook. Buying stocks at a 1% yield and Shiller P/E ratio of 45 in 2000 was riskier than buying TIPS at a 4% yield. For those investors, the incremental risk will probably lead to lower returns for decades, if not for life.

For most 25-year-olds, the value of human capital (the present value of future earnings) is near a lifetime maximum, while financial capital is near zero or often negative. The risk of their financial capital has no material impact on their total wealth, which is almost entirely human capital. For this reason, a 25-year-old can tolerate extreme volatility in financial wealth. The best financial advice for 25 year-olds is to:

- develop their job skills
- pay down debt (often the highest-return investment available!)
- save aggressively as income rises
- and invest aggressively

Most young adults fail miserably on the third point. Most 25-year-olds know someone who makes 20% less than they do and who has a perfectly acceptable lifestyle. *Emulate that lifestyle and save 20% of income!* It is easier and ultimately more profitable to save 20% from age 25 to 45 than it is later in life.

Most 65-year-olds have relatively little to look forward to in future earnings (their human capital is dwindling) and are considering how to live on their life savings (financial capital). For those on the brink of retirement, wealth is almost entirely financial. Sadly, this holds as true for those who failed to plan ahead as for those who have an ample nest egg. Preservation of financial wealth is critically important at this stage. The best financial advice for 65-year-olds is to:

- invest conservatively, with careful attention to inflation risk, not just volatility
- reasonably estimate the annuity supported by their financial wealth
- and adjust their consumption to something modestly below this amount

The latter two points are problematic; investors often set spending rules that are too aggressive. My rule of thumb is really simple. Take your liquid assets (forget the home equity, unless you're happy to move to a small condo ... you've got to live somewhere), adjust for taxes if necessary, and divide by your life expectancy. Actuaries tell me that I've got about 25 years left. If I've got \$1 million in liquid assets, then I can spend 1/25<sup>th</sup> (4%). If I'm happy to retire on \$40,000 per year, plus any pensions I'm entitled to receive (assuming the sponsor is solvent!), then I



can retire now. If that lifestyle is uninteresting to me, then I'd better work a bit longer.

**Harold Evensky is president of Evensky and Katz, a Florida-based investment advisor.**

*A 25-year-old can best be aggressive and 65-year-olds can best play it safe.*

The 25-year-old is easier; as much as I object to generalities, with the time horizon of a 25-year-old I fall back on a generic recommendation. Assuming he or she can live with turbulent markets, the more growth, the better. There is no way on earth, after all, that anyone can project what his or her needs will be in 40+ years. Therefore, I'd recommend an 80% equity/20% fixed portfolio. Having some element of fixed provides the ability to establish a rebalancing policy (e.g., quarterly), thus insuring that when the market runs some profits may be taken off the table, and when it collapses there will be funds to invest at the lower prices. Needless to say, this is premised on the assumption that over many decades the returns on equities will exceed those of fixed income.

The 65-year-old is tougher, as by that age the needs of each person are far more individualized. In addition, continual withdrawal from an investment portfolio adds an additional complication to the investment process. My recommendation is what I refer to as "anchoring on the efficient frontier." An investor needs to determine two criteria – what real return they will need in order to achieve their goals, and what market volatility they can live with in the interim. If they're lucky, they can achieve their goals with a portfolio that has a risk exposure below their tolerance. (For example, a 50% equity portfolio will achieve an investor's goals, but he or she has a tolerance that would match to a 70% equity portfolio.)

I would recommend the lower return portfolio in that case, as I'm very doubtful of anyone's ability to really determine risk tolerance when the world seems to be coming to an end. If their tolerance is less than needed to achieve their goals, I jokingly say they need to decide if they want to eat less well or sleep less well. My recommendation is that they plan on eating less well. It's easy to assume that you will live with more risk, but years later when the market is in free-fall, that commitment is likely to go by the wayside. In other words, it may be unfortunate that the portfolio is "precarious," but it's naive to believe that the solution is to invest beyond one's risk tolerance.



**William Bernstein is an author and is known for his research in the field of modern portfolio theory and for his finance books for individual investors who wish to manage their own equity portfolios.**

*Young investors are actually much less risk-tolerant than conventional wisdom suggests.*

I could give you the conventional answer, which would be to say that there is very, very little risk in a young person's portfolio, since it's dwarfed in size by their future income/human capital. Even if the portfolio is 100% in stock, or even 200% with leverage, that's still only going to be a few percent of the investment-plus-human-capital total. I could also say, equally accurately, that the major risk a young person faces is not investing aggressively enough and not losing money in a bear market. But, of course, that's not how young human beings think. A 30 year-old who sees their \$30,000 nest egg cut in half during a bad downturn is going to be devastated, and in an extreme case may never get back into stocks again. My opinion is that in fact young people are far less risk-tolerant than older ones.

The major risk that an older person with marginal savings has is outliving their money; mitigating that "longevity risk" should be an older investor's major goal, so he or she should be heavily invested in annuities and a TIPS ladder constructed to provide a reasonably steady stream of real income.

**Jonathan Guyton is the principal of Cornerstone Wealth Advisors of Edina, MN.**

*Clients in both age groups face challenges and tradeoffs in the current investment environment.*

For the 25-year-old, assuming they have had *any* awareness of investing and the economy in their young adult years, investing is not too appetizing a prospect! In addition, the lifetime earning projections for people entering the workforce around a significant recession suggest that they will have a hard time "catching up." For the 25-year-old, attitudes about saving may be more important than attitudes about investing.

So, speaking to them, I would say, "More than ever, you are your only retirement plan. Based on that, risk is the chance that you may not be able to accumulate what you will need in the future unless you structure your life to save at least 10% of what you make each and every year and that you put it in places that make the global economy's ups and downs your friend and not your enemy."

It's also worth noting to young investors that predictions of Social Security's future death are greatly exaggerated. Even with no changes, the system can still pay 75% of promised benefits by the time these young men and women retire in the 2050s.



Maybe it's because I've done so much work in this area, but for the 65-year-old my message is more direct. I'd say "There are many different risks that come into play over the rest of your life, so it's vitally important to minimize the ones that truly matter most – both now *and* in the future. First, you have much less risk if you can build a little flexibility into your future lifestyle and cost-of-living. And there is a direct trade-off between short-term and long-term security: for many retirees, the more conservatively you invest to minimize short-term fluctuations, the greater the chance that you'll have to choose between unnecessarily reducing your living standard and unnecessarily increasing the risk in your portfolio later on. Lastly, beware of solutions that sound too good to be true; a financial product offering guarantees with a high initial payout can only do so by using a payout method that ensures one will have to compromise their lifestyle to accommodate fixed payouts that don't keep pace with the cost of living later in life."

[www.advisorperspectives.com](http://www.advisorperspectives.com)

For a free subscription to the Advisor Perspectives newsletter, visit:  
<http://www.advisorperspectives.com/subscribers/subscribe.php>