STATERA
ASSET MANAGEMENT

Commentary: April 2017

EXPECT RETURN? RESPECT RISK

With investing come no guarantees. Nonetheless, a few reasonably sound principles so far have stood the test of time and form the core of our Investment Approach. The first element of our approach involves the mapping of combinations of broadly diversified global equity, fixed income and other exposures to specific risk-tolerance levels to formulate our range of investment solutions. Reiterating that return and risk are two sides of the same coin, this month we want to demonstrate how this component of our investment approach translates into the asset allocation decision.

Discussing Tolerance

We offer a suite of portfolios that we have dubbed our Target Risk Series. The "Target Risk" part denotes the fact that a primary distinction between each portfolio is the expected level of overall risk. As we have discussed in prior commentaries, investment risk can mean lots of things. For the purposes of determining a suitable asset allocation, we narrow the concept to three basic components. First, risk to most can be expressed in terms of a loss in value in absolute dollar or percentage terms. Second, we find it additionally informative to place levels of loss in the context of time. That is, we care about both the *depth* and the *duration* of the loss. Further, we can express risk in terms of volatility, as markets that bounce about often can be just as uncomfortable as a steady decline.

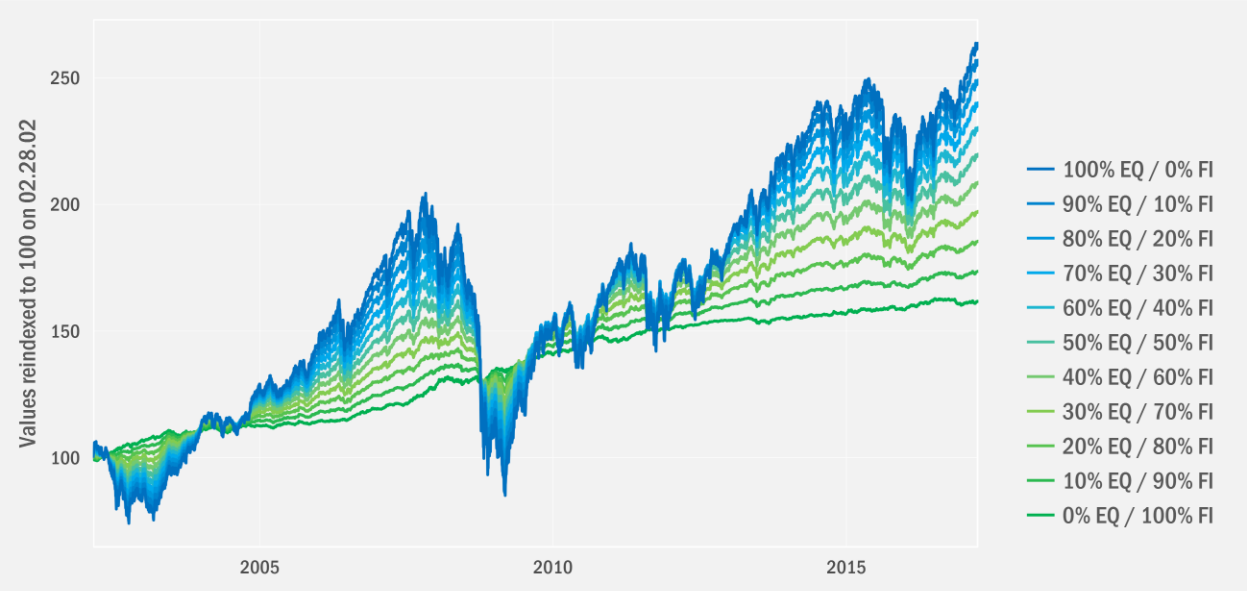
Speaking to depth and duration, readers may recall that we walked through the concept of drawdowns in our January 2017 commentary. Drawdowns measure both depth and duration: how low did we fall and how long did it take to get back to breakeven? Imagining a pair of investors, one might be comfortable with a 10% drawdown that lasted five years, while another might be comfortable with a 20% loss over that same five-year period. The latter person thus expresses a higher tolerance for risk.

When we engage clients, we attempt to determine just how concerned they might be after having experienced various levels of risk. We say "might" as we can never be sure. Certainly, though, attempting to determine such comfort ahead of substantial loss or volatility is better than not having made the effort. To gauge risk tolerance, therefore, we use a combination of hypothetical scenarios. For example, we review a range of drawdown scenarios to determine where comfort falls to concern. We also talk about prior experience with market losses, including reactions to prior downturns. Further, we use the past performance of equity and fixed income markets as representative (though, of course, not firmly indicative) of what we might expect in terms of relative risk on a going-forward basis.

One Pic...1,000 Scenarios

One go-to chart is a bit busy, but the discussions that it generates seem to be very helpful in the determination of risk tolerance. In Figure 1, we show the past 15 years of hypothetical, index-based[1] returns for various mixes of global equity markets and domestic short- to intermediate-term investment-grade bonds. The color of the series denotes the level of equity exposure, shifting from blue to green as we reduce the level of equity in 10% increments ("EQ" in the legend represents equity). We show all the indexes on the same chart to emphasize the various natures of risk for each combination.

Figure 1: Cumulative Total Return of Various Asset Allocations



From 02.28.02 through 03.31.17. The equity index used for this chart is the the MSCI ACWI Index, captures large- and mid-cap representation across 23 Developed Markets countries and 23 Emerging Markets countries. The fixed income index used for this cahrt is the Bloomberg Barclays U.S. 1-5 Year Government/Credit Bond Index, which is a broad-based benchmark that includes investment grade, U.S. dollar-denominated, fixed-rate Treasuries, government-related and corporate securities with maturities between 1 and 5 years.Past performance is not indicative of future results. Investing in securities involves risk, including risk of losing some or all of the invested capital. One cannot directly invest in an index. Index performance reflects the reinvestment of dividends, but does not reflect the expenses associated with the management of an actual portfolio. Please see additional important information regarding indexes at the end of this report. SOURCE: SRCM using data from Bloomberg

[1] These return series represent hypothetical backtested performance of a static benchmark allocation. Benchmark performance data are entirely hypothetical in nature and should not be relied upon as a source of probable or possible investment return or risk scenarios. No risk or return profile can be guaranteed. This backtested performance review involves simulation of a quantitative investment allocation by applying investment rules to a hypothetical benchmark during a specific market period and measuring the changes in value of the hypothetical benchmark based on the actual prices of the indexes during the period covered. Investors should be aware of the following: 1) Hypothetical benchmark allocations are based on a static allocation to indexes and allocations are rebalanced at each quarter end. 2) Backtested performance does not represent actual account performance and should not be interpreted as such. 3) Backtested performance does not reflect the impact that material economic and market factors might have had on Advisor's decision-making process if Advisor were actually managing clients' assets. 4) The benchmark allocation that the backtested results are based on can be changed at any time in order to reflect better backtested results, and the allocation can continue to be tested and adjusted until the desired results are achieved.

Risk is Relative

Always interesting to see on which features of that chart viewers focus, as the resulting discussion purposefully lends a bit of insight into how they might perceive market moves in the future. Obvious is the fact that higher levels of equity have demonstrated higher long-term return. Also plainly obvious is the increasing magnitudes of drawdowns as we add equity to portfolios. Further, greater levels of equity can result in heightened volatility, which we can see by the increasing squiggle of lines as they move from green to blue (more equity).

Where we display the relative magnitude of risk in Figure 1, we attempt to quantify it in Figure 2. For each of 11 levels of equity (0% to 100%), we show the long-term annualized return, standard deviation[2] and maximum drawdown along with the best and worst 1-month, 1-year, 3-year and 5-year periods. The table expresses the trade-off between risk and return: with more potential long-term return generally have come greater general volatility, in addition to heightened potential for interim loss.

Figure 2: Total Return Metrics of Various Asset Allocations

	Return (annual)	Std Dev (annual)	Maximum Drawdown	1 mo Best	1 mo Worst	1 yr Best	1 yr Worst	3 yr Best	3 yr Worst	5 yr Best	5 yr Worst
0% Equity / 100% Fixed Income	3.2	1.7	-2.7	2.9	-2.0	9.8	-1.0	6.2	0.9	5.5	1.2
10% Equity / 90% Fixed Income	3.7	1.7	-6.5	2.8	-4.3	12.0	-4.6	6.5	1.3	5.6	1.9
20% Equity / 80% Fixed Income	4.2	2.6	-12.1	4.2	-7.1	17.9	-10.7	8.7	1.1	7.0	2.0
30% Equity / 70% Fixed Income	4.6	3.7	-18.9	6.2	-10.6	24.1	-16.5	10.9	-1.2	8.8	1.1
40% Equity / 60% Fixed Income	5.0	5.0	-25.2	8.3	-14.1	30.7	-22.1	13.2	-3.4	10.7	0.2
50% Equity / 50% Fixed Income	5.3	6.4	-31.6	10.5	-17.5	37.5	-27.6	15.4	-5.6	12.5	-0.7
60% Equity / 40% Fixed Income	5.7	7.7	-37.8	12.8	-20.9	44.8	-32.7	17.6	-7.9	14.4	-1.7
70% Equity / 30% Fixed Income	6.0	9.2	-43.5	15.3	-24.3	52.4	-37.7	19.9	-10.2	16.3	-2.7
80% Equity / 20% Fixed Income	6.2	10.6	-48.9	17.8	-27.7	60.4	-42.4	22.2	-12.4	18.2	-3.8
90% Equity / 10% Fixed Income	6.4	12.1	-53.8	20.5	-31.1	68.9	-46.8	24.4	-14.7	20.1	-4.9
100% Equity / 0% Fixed Income	6.6	13.6	-58.4	23.3	-34.4	77.9	-51.0	26.7	-17.0	22.0	-6.0

From 02.28.02 through 03.31.17. Rolling periods using daily data. Returns for periods greater than one year are annualized. The equity index used for this chart is the the MSCI ACWI Index, captures large- and mid-cap representation across 23 Developed Markets countries and 23 Emerging Markets countries. The fixed income index used for this cahrt is the Bloomberg Barclays U.S. 1-5 Year Government/Credit Bond Index which is a broad-based benchmark that includes investment grade, U.S. dollar-denominated, fixed-rate Treasuries, government-related and corporate securities with maturities between 1 and 5 years.Past performance is not indicative of future results. Investing in securities involves risk, including risk of losing some or all of the invested capital. One cannot directly invest in an index. Index performance reflects the reinvestment of dividends, but does not reflect the expenses associated with the management of an actual portfolio. Please see additional important information regarding indexes at the end of this report. SOURCE: SRCM using data from Bloomberg

Regular Assessment

Also core to our work is the understanding that tolerance for risk generally is not static. Indeed, market volatility itself can have the effect of shifting risk tolerance, so we want to be sure that we acknowledge what might prove in time to be short-lived fear or exuberance from masking a truer tolerance for volatility and loss. Nonetheless, life circumstances change as does our tolerance for risk, if for no other reason than the fact

[2] Standard deviation is a statistical metric that describes the variation of a set of data about its average. A higher number reflects more variation (or volatility).

that we age. What once was a 20-year time frame becomes a 10-year, then a 5-year window. Thus, as time horizons approach, as emergencies arise, as major milestones are met, and as markets variously test our mettle and toast our gains, we regularly revisit the risk tolerance discussion.

Ultimately, our primary objective is to construct and execute plans that seek to target financial goals in as pragmatic, transparent and efficient a manner as practicable. Gauging risk tolerance is just one aspect of that work. As we begin the second quarter of 2017, we invite readers to visit with your Advisors to ensure that the breadth of our effort remain on plan and on path.

Important Information

Investing involves risks. Past performance is not indicative of future results.

One cannot invest directly in an index. Index performance does not reflect the expenses associated with the management of an actual portfolio.

The MSCI ACWI Index captures large- and mid-cap representation across 23 Developed Markets countries and 23 Emerging Markets countries.

The Bloomberg Barclays U.S. 1-5 Year Government/Credit Bond Index is a broad-based benchmark that includes investment grade, U.S. dollar-denominated, fixed-rate Treasuries, government-related and corporate securities with maturities between 1 and 5 years.

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