Alternative Thinking

Ideas for a Low Expected Return World

Investors today face a challenging world of low expected returns and high risks. The forward-looking real yield of the 60/40 U.S. stock/bond portfolio is at 2.6%, its lowest level in 112 years.

We think that risk-balanced diversification across well-chosen return sources is the most reliable strategic approach to achieving ambitious real return targets.

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Ideas for a Low-Expected Return World

Executive Summary

- Investors today face a challenging world of low expected returns and high risks.
- In this environment, the #1 challenge for investors is how to achieve 4-5% medium-term real return targets (or 7-8% nominal) if the expected return of a 60/40 portfolio is below 3%.
- We think that risk-balanced diversification across well-chosen return sources is the most reliable strategic approach to achieving ambitious real return targets.

Forward-Looking Returns

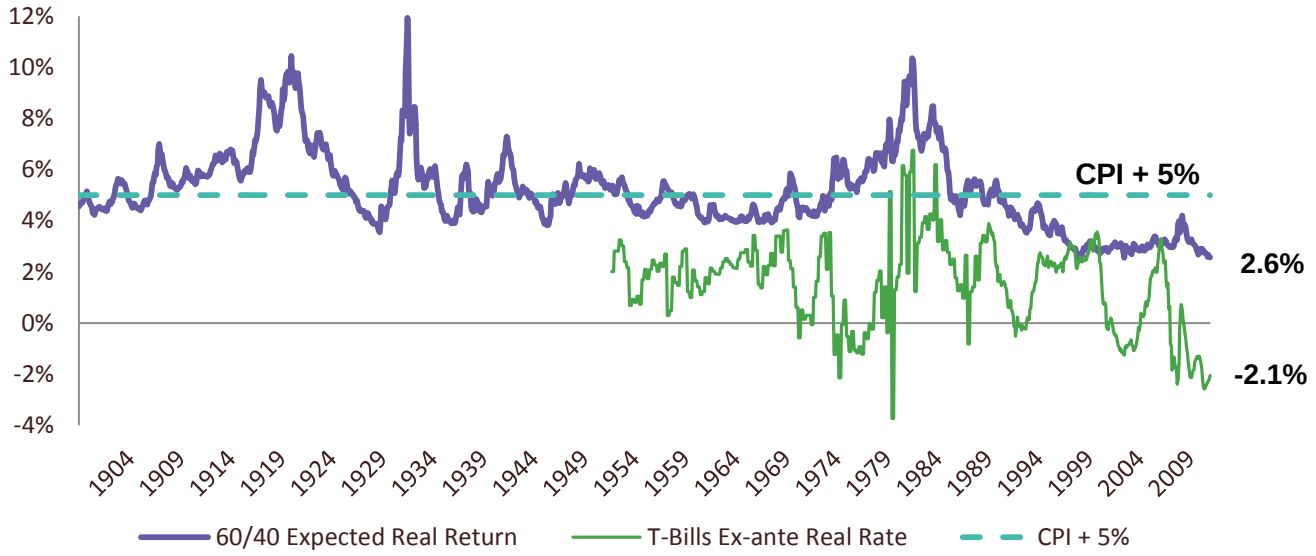
Investors today face a challenging world of low expected returns and high risks. As shown in **Exhibit 1**, the forward-looking real yield of the 60/40 U.S. stock/bond portfolio is at 2.6%, its lowest level in 112 years.

Until the 1990s it was relatively easy to achieve 5% long-run real returns. The long-run average real yield since 1900 is 5%, and reality matched the promise as the 60/40 portfolio delivered roughly 5% real annual return. However, since 1998 the ex-ante real yield has been below 3% most of the time, making investors' task that much harder.

It may seem surprising that forward-looking real yields do not look attractive even after a decade of poor returns. The reason is that the overall valuation outlook did not become much better: equity dividend yields doubled from near 1% in 2000 to near 2%, but real Treasury yields fell from near 4% to near zero.

Current low real yields partly reflect unprecedented monetary stimulus. The Federal Reserve and other major central banks hope that negative real policy rates make investors flee from money markets to riskier assets, ultimately stimulating economic growth. Such growth ambitions have not been met, but central bank policies – near-zero rates, large asset purchases – arguably have succeeded in

Exhibit 1 | *Ex-Ante Real Yields of the 60/40 Stocks/Bonds and T-Bills Are Near Record Lows, 1900-2011*



Source: AQR. Data description: The real equity yield is an average of two plausible approaches – the Shiller earnings yield (using 10- year smoothed earnings) and dividend yield plus 1.5% (roughly the long-run real growth of dividends-per-share and earnings-per-share). The real bond yield is long-term Treasury yield minus long-term expected inflation. Before survey data became available in 1978, expected long-term inflation is partly based on statistical estimates, partly on 1-year ahead Livingston inflation forecasts. The real T-Bill rate is short-term Treasury yield minus one-year expected inflation (using Livingston surveys since 1950s, later combined with Survey of Professional Forecasters and Blue Chip Economic Indicators; since 1990 only use Consensus Economics surveys). This is one set of estimates of ex-ante real yields for equities and bonds, but other reasonable specifications should tell broadly the same story.

making lower-risk assets expensive. The high valuations imply low forward-looking returns; thus, these policies can be viewed as financial repression, whereby savers are forced to share the costs of global debt and deleveraging problems.[1]

In this environment, the #1 challenge for investors is: **How can we achieve 4-5% medium-term real return targets (or 7-8% nominal) if the expected return of a 60/40 portfolio is below 3%?**

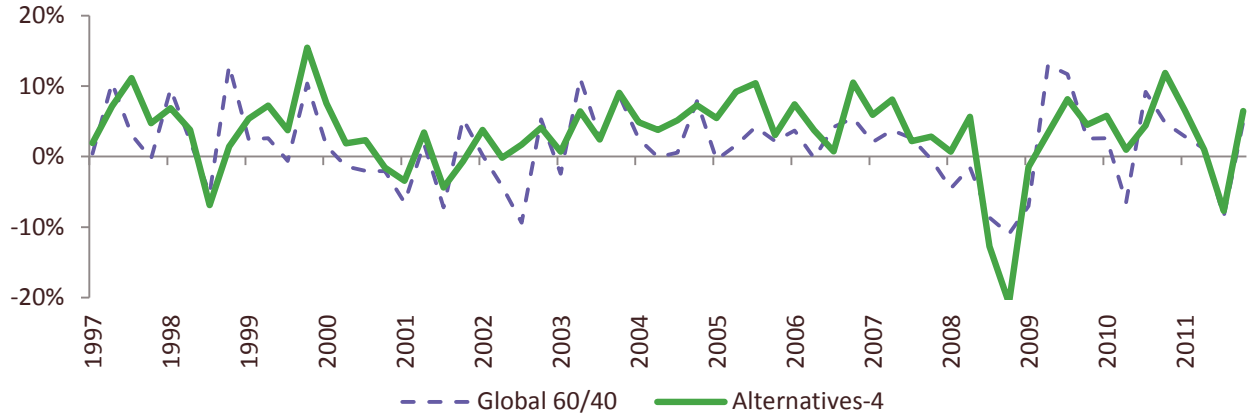
Investors' responses vary. Wishful thinking has been one approach (witness nominal return assumptions still near 8% for many pension funds), and increasing allocations to equities another. However, poor results and growing awareness of forward-looking valuations – their relevance in predicting returns and their still-uninspiring message about prospective returns – have led investors to look elsewhere.[2]

Over the past decade, many investors adopted the "endowment model" and diversified into various alternative asset classes, combining reliance on the equity premium with faith in an illiquidity premium and in hedge fund alpha. The experience has been mixed. There were some successes but many investors were disappointed in both their return and diversification realizations, as alternative investments moved in synch with the 60/40 portfolio (see **Exhibit 2**) and the true costs of private equity investments were revealed as commitments paralyzed many investors and forced them to sell liquid holdings.

"The Best Game in Town"

We think that risk-balanced diversification across well-chosen return sources is the most reliable strategic approach to achieving ambitious real return targets. Investors who confidently hold

Exhibit 2 | *The Endowment Model Is Not a "Silver Bullet": Quarterly Returns of 60/40 and Alternatives, 1997-2011*



Source: AQR. Data description: The 60/40 portfolio consists of 60% MSCI World (developed equity markets) index, 20% Barclays US Aggregate fixed-income index, 20% Citigroup World Government Bond Index ex-U.S., currency-hedged. The Alternatives-4 is a composite of direct real estate (NCREIF transaction-based index), commodity futures (SP GSCI index), hedge funds (DJ CS index), and private equity (Cambridge Associates private equity index). To give the four constituents roughly equal long-run volatilities, the nominal weight of real estate is 28%, hedge funds 38%, commodities 14%, and private equity 20%. The last-quarter observations for real estate and private equity are not yet available; beta-based proxies are used instead.

[1] Although G4 government bonds are record-expensive by almost any metric, we appreciate that they have a role in most investors' portfolios. You do not have to like Treasuries to want to hold them, if you view them as the only asset that can save you in the one tail scenario that would push your institution over the brink. A deflationary "Global Japan" scenario is the nightmare for many institutions, given its triple-whammy of ills: asset values going down, liability values going up, and sponsors in trouble. (However, if fiscal challenges become sufficiently ugly, Treasuries will lose even this safe-haven characteristic. Then the voluntary repression through safe-haven demand may need to be replaced by capital controls and further regulations.)

[2] See CFA Institute Research Foundation monograph Rethinking the Equity Risk Premium, edited by Hammond, Leibowitz, and Siegel (2011). Incidentally, valuation measures do have some predictive ability; for example, the ex-ante real yield of 60/40 in the first chart has almost 30% (50%) correlation with the realized return over the next year (five years).

special insights on tactical opportunities can deviate from a risk-balanced portfolio to add value.

In addition, this approach aids in the second major challenge many investors face: How can we mitigate our portfolio's pervasive market-directionality? The 60/40 portfolio and a typical endowment portfolio may seem diversified beyond equities, but their performance is predominantly driven by equities – over 90% of the volatility has been due to stock market gyrations. When equities become riskier, these portfolios become riskier; and when equities suffer, these portfolios suffer, recently forcing many "long term investors" to sell when equities were cheap.[3]

It is true that diversification is more difficult during bad times and especially amidst a global systemic crisis like we have been in since 2008, but we argue that "diversification is the best game in town".[4]

Capturing the Value of Diversification

Risk parity investing is one way to improve a portfolio's risk balance.[5] It also enables converting diversification benefits into higher expected returns.[6] Risk parity portfolios hold many of the same assets as traditional portfolios but allocate more evenly across them in risk space to deliver more consistent performance across a range of economic environments. For example, traditional portfolios are generally not well-positioned for increases in inflation, whereas a risk parity portfolio that includes inflation-sensitive assets like commodities may help ensure stronger performance in inflationary regimes.[7] The risk parity framework for constructing a portfolio can be extended beyond traditional asset classes to include dynamic trading strategies, such as hedge fund risk premiums. Such return sources may provide more effective diversification than asset class premiums, but like hedge fund styles, they have capacity constraints.

Long-term investment success requires three pillars, which could be dubbed the "Three R's":

- Risk Premium: identifying attractive return sources and harvesting them cost-effectively
- Risk Allocation: diversifying among them aggressively in a risk-balanced fashion
- Risk Control: ensuring long-run survival with risk management

Many investors focus only on the first activity, and underutilize portfolio construction, risk management, and cost control as sources of outperformance. Alternative Thinking will highlight the value in, and application of, these less covered but equally important steps in the investment process.

[3] The two main challenges we highlight are related. One could reach any return target by sufficiently levering up any return source with a positive expected excess return. However, relying on a single return source is dangerous, whether it is equity premium, value premium, or a thematic view such as sustained outperformance of emerging markets. Diversification across ideas (return sources) improves the consistency and thus the quality of risk-taking.

[4] Although critics focus on short-term "failings" of diversification, we find that diversification works well over longer horizons, generating substantial benefits over the medium and long-term; see "International Diversification Works (Eventually)" by Asness, Israelov and Liew in the Financial Analysts Journal (June 2011). Moreover, the other major ways to reduce risk -- purchasing tail insurance and de-risking into cash -- currently offer negative expected real returns.

[5] Risk parity allocations typically imply greater bond weight than in a 60/40 portfolio. It may seem surprising that we endorse raising bond weights despite the historical richness of government bonds. There are several answers. First, risk parity is mainly about smart long-run diversification. More effective diversification allows us to pursue more of everything; not just bonds but also other market exposures (such as commodities which help in rising inflation scenarios) and alternative betas. Second, risk parity is view-neutral in trying to achieve reasonable returns in all major scenarios, both inflationary and deflationary ones. Finally, we have several tactical components that allow the underweighting of bonds from our long-run norm, but our non-valuation signals do not yet support a bond-bearish stance.

[6] Diversification reduces portfolio volatility and raises its Sharpe ratio. Investors can use leverage to convert the higher risk-adjusted returns into higher expected returns; we will return to the topic of leverage in the coming issues of Alternative Thinking. Even without leverage, a combination of diversification and rebalancing can enhance portfolio return: Thanks to lower volatility, a portfolio's compound return may be higher than the weighted average compound return among its constituents (and this gap is greater for more diversified portfolios).

[7] Please see "Understanding Risk Parity" for more information on risk parity. Also see "Leverage Aversion and Risk Parity" by Asness, Frazzini and Pedersen in the forthcoming Financial Analysts Journal.

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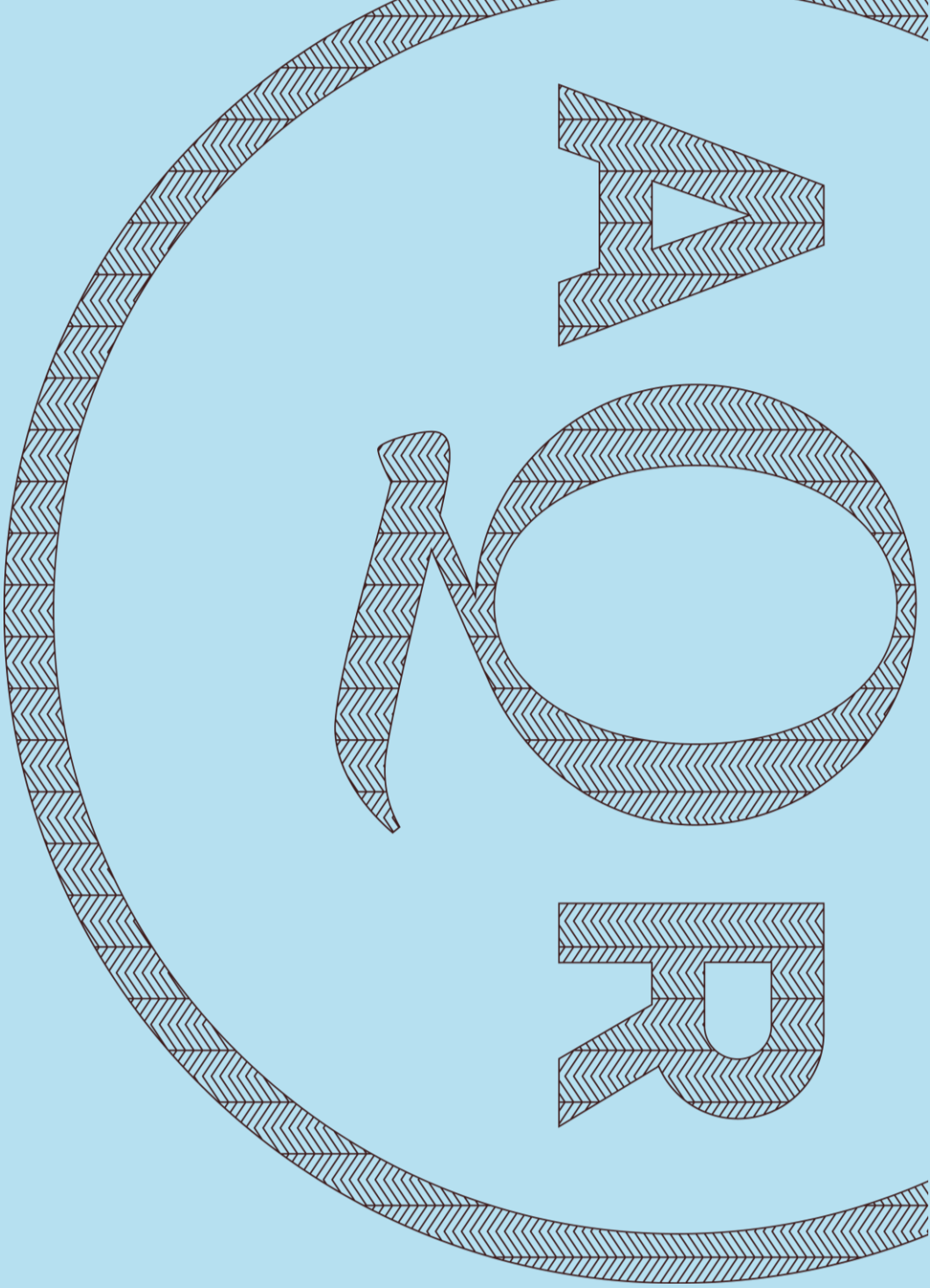

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