

APPLIED RISK STRATEGY July 2, 2012

Creatively Retaining the Ability to Function



F. Scott Fitzgerald famously wrote in *The Crack-Up* that, "The test of a first-rate intelligence is the ability to hold two opposing ideas in mind at the same time and still retain the ability to function."

There are of course a theoretically unlimited number of future event combinations that would in turn generate a multiplicity of market

and economic outcomes. For our purposes, let's consider two narratives detailing extreme ends of the event sequencing spectrum:

Over on the dark side, all roads lead to a debt and deleveraging-induced deflationary spiral. In the extreme version of this outcome, the Euro unravels, sovereign defaults ensue and contagion takes down large parts of the banking system. The global economy faces years of stagnation. Globalization and trade openness are reversed as countries turn inward; simultaneously, greater mistrust and conflict arise as each country fights over a shrinking pie. The world is turned backwards, covered in ashes from an economic nuclear winter.

On the sunny side, the Euro does not implode and the banking system heals. The growth of debt is arrested and current encumbrances begin to be paid down as economies recover. China's growth is maintained, albeit at a mid-single digit pace, and economic development continues apace in other emerging countries. Global trade is preserved and continues to expand. New technologies are applied that increase economic productivity around the world. Leadership in the US establishes greater clarity and confidence around tax policy and regulation. Corporations begin to invest their massive cash hoards. Unemployment begins to contract, economic growth momentum is restored and markets stabilize and recover.

These are "opposing ideas" indeed, and the likelihood of either version in its fully-articulated form occurring is low. Yet, based on the manic-depressive market behavior during the first half of 2012, it actually felt like market participants made a binary switch between two similarly extreme viewpoints.

Unfortunately, fund flows in and out of risk assets indicate – as they often do – that a lot of risk-on positioning was established once

equities had already risen substantially in the first quarter, and reversed after a fair amount of valuation pounding had already occurred during the second quarter.

Given the persistent violence of the risk-on/risk-off dynamic, it would appear easier than ever for investors to get whipsawed.

The End Should Define the Means

If nothing else, investors should have a coherent vision of what they are trying to accomplish. Absent such a foundation, one is condemned to reactivity or inertia, the two fatal enemies of capital growth and sound sleep.

Here is a basic idea: the purpose of investing is to grow whatever capital is invested in real terms. Why else would you invest, right? This end should then define the means by which the outcome is pursued.

This most fundamental of ideas is often obscured by more temporal impulses. These might include "beating the market" over some arbitrary time period (e.g., last quarter, year, etc.) or the "protecting on the downside" rhetoric now prominently featured by the growing number of investment firms inserting risk management language in their marketing pitches. The marketing emphasis – and investor attention – often shifts from the former in appreciating markets to the latter in adverse markets.

But "risk management" on its own is an abstraction, as is "beating the market" over a short time period, if the end goal is to generate a real capital growth over a longer time window.

The Creative Response

Tina Seelig's recently published book, *inGenius*, explores the systematic cultivation of creativity on both a personal level, as well as within organizations. Seelig is the executive director of the Stanford

Technology Ventures Program at the Stanford School of Engineering and teaches a popular course on creativity and innovation at Stanford's "d.school" (more formally known as the Hasso Plattner Institute of Design).

A basic premise of Seelig's book is that applying creativity to generate design innovations is a key source of competitive advantage for companies and "unlocks a universe of possibilities" to generate solutions to solve the most vexing problems. Here, she says that the biggest failures of our lives – or those of businesses and institutions – are not those of execution, but "failures of imagination."

The seemingly intractable investment dilemma is how to deal with markets lurching from exuberance to depression in unpredictable ways. One approach is to attempt to market time – hide out in bonds or cash when times are tough and expand risk asset exposure when the environment appears to be improving. But historical results would suggest very few investors have the ability to pull this off consistently. Furthermore, the vast majority of those who try to do so end up inflicting far worse damage on themselves by selling after the smackdown and buying after the run-up than they would by using a simple buy-and-hold approach.

For an asset manager seeking to generate long-term real growth of capital, the design problem is creating a portfolio structure that can both withstand periods of market turbulence and capture returns when they are available.

This, in turn, requires those responsible for designing the architecture of such strategies to simultaneously consider "opposing ideas" about possible future economic and market outcomes. Then they must "retain the ability to function" as they structure a portfolio that is at the same time both resilient and return-participatory.

The intended result is a portfolio that is not seeking to exploit a oneway bet on positive or negative market conditions. **As a result, the** investor for whom the portfolio is managed is liberated from the need to make reactive moves or try to get in front of the next zig or zag of the market. They, too, "retain the ability to function."

Risk Factor Diversification and Systematic Tactical Risk Allocation

There is much recent discussion about asset correlations rising to such elevated levels that diversification has been rendered useless. This would appear anecdotally true on any given day where the market makes a big up or down move.

If you take a risk-off day from the second quarter, you would likely see unified negative performance across all risk assets – equity regions, credit, real estate and commodities, for example. When the switch is flipped to risk-on, all these assets could likewise be expected to rise together.

Correlation does not tell the whole story, however, and fails to describe the true dynamics that an asset or strategy introduces to a portfolio. The surge of asset prices in the first quarter and subsequent collapse in the second quarter provide an interesting observation window.

Across the fifty assets and strategies in Lattice's risk-optimized core portfolios, there was a significant range of contributions across the quarters, measured as the spread between each component's upside capture during the first quarter and downside capture in the second (measured against the MSCI World Index as a global risk asset proxy).

The foundation of building a portfolio that is both resilient and participatory is combining exposures to a wide range of risk factors that have varied performance "shapes" across a market cycle. These dynamics can be further enhanced by systematically adjusting allocations to portfolio components as their relative risk/reward characteristics change, based on valuation, fundamentals and behavioral factors. The goal here is to systematically tilt the portfolio's exposure to those components that

provide the most positive spread of upside capture to downside capture.

The table on the following page indicates first and second quarter performance for Lattice portfolio components having the most positive and negative performance capture spread and tactical positioning (top ten best/worst).

With respect to the issue of asset correlations, it is interesting to observe that a number of the assets expected to suffer during risk-off periods – real estate, preferred stock, high-yield and emerging markets bonds – had negative overall downside capture during the second quarter, meaning they rose while global equities declined. Hence they were in fact quite positive diversification contributors, despite much high correlation critiquing to the contrary.

Additionally, the application of systematic tactical tilts was additive during the first half, with a "win/loss" ratio of 9-to-3 across those assets and strategies having the most positive and negative return capture spreads. Of the nine "winning" tilts, the positioning resulted in being overweight five of the most positive contributors and underweight four of the most negative contributors, while having a directionally losing tilt on two of the positive contributors and one of the negative contributors.

A portfolio's ability to withstand difficult market intervals while capturing upside during productive periods is of course a function of how the underlying components themselves respond to such environments and how they move in relation to one another. Having broad diversification across risk factors and applying a disciplined and structured approach to tactically adjusting asset exposures as relative risk/reward characteristics change improves the probability of success in this endeavor.

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Lattice Risk-Optimzed Core (ROC) Portfolios

H1 2012 Top/Bottom Return Capture Spread Contributors

							Q1 Upside v.	
				Q1 MSCI	Q2 MSCI	H1 MSCI	Q2 Downside	
				Upside	Downside	Upside	Capture	Q2 Tactical
	Q1 2012	Q2 2012	H1 2012	Capture	Capture	Capture	Spread	Risk Allocatio
US Long-Term Treasuries	-7.03%	12.37%	4.48%	-58.5%	-230.6%	74.6%	172.1%	▼
Developed Int'l Real Estate	16.41%	1.39%	18.03%	136.7%	-26.0%	300.6%	162.7%	=
US Real Estate	10.61%	3.65%	14.65%	88.4%	-68.0%	244.2%	156.4%	A
Preferred Stock	10.53%	1.45%	12.13%	87.7%	-27.1%	202.3%	114.7%	_
EM Sovereign Bonds (\$)	3.51%	2.99%	6.61%	29.3%	-55.8%	110.2%	85.1%	_
IG Corporate Bonds	2.34%	2.73%	5.13%	19.5%	-50.9%	85.6%	70.4%	=
HY Corporate Bonds	3.56%	2.11%	5.75%	29.7%	-39.4%	95.9%	69.0%	=
US Inflation-Indexed Bonds	0.82%	3.07%	3.92%	6.9%	-57.2%	65.3%	64.0%	_
FI Absolute Return (3)	4.64%	0.84%	5.46%	38.6%	-15.6%	91.1%	54.2%	_
US Equities	12.85%	-3.05%	9.41%	107.0%	56.8%	156.9%	50.2%	A
Japan Equities	11.69%	-6.62%	4.30%	97.4%	123.3%	71.7%	-25.9%	=
Developed Int'l Small Cap Equities	15.45%	-8.46%	5.68%	128.7%	157.7%	94.8%	-29.0%	=
Energy Transport Infrastructure	1.57%	-2.53%	-1.00%	13.1%	47.2%	-16.7%	-34.1%	=
Emerging Markets Equities	13.77%	-8.14%	4.50%	114.7%	151.8%	75.0%	-37.1%	_
Developed European Equities	11.25%	-7.07%	3.38%	93.7%	131.8%	56.3%	-38.2%	_
Global Macro / Relative Value (2)	1.29%	-3.29%	-2.12%	10.7%	61.4%	-35.3%	-50.6%	_
Timber	11.22%	-8.00%	2.33%	93.5%	149.0%	38.9%	-55.6%	=
Managed Futures (2)	-2.30%	-2.66%	-4.85 %	-19.2%	49.6%	-80.9%	-68.8%	_
Diversified Commodities	6.50%	-10.86%	-5.07%	54.1%	202.5%	-84.5%	-148.4%	_
Natural Resources Equities	3.95%	-9.79%	-6.23%	32.9%	182.5%	-103.8%	-149.6%	=
							1	
MSCI World Index	12.01%	-5.36%	6.00%	•				