

CURRENTS

FALL 2012 ISSUE

# Risk Factor Investing, Revealed

Building Balanced Exposure to Rewarded Risks

by KAREN WITHAM



BLACKROCK®

Is a traditional approach to investing still working for you? Now may be the time to consider optimizing your strategy to help you reach your goals—whether this means hitting return targets, lowering volatility, boosting funded ratios, or achieving other measures of success. What we’re hearing from institutional investors is a need for improved performance but also for a greater predictability of returns, especially in an environment of anemic economic growth.

In response to this new challenge, several years ago BlackRock started researching how a strategy using risk factors instead of asset classes could help investors achieve their desired outcomes. This approach, a cousin of risk parity strategies, aims to provide more consistent returns than traditional balanced portfolios while also limiting downside risk.

“Institutional investors used to be able to rely on the equity risk premium to achieve their return targets,” says Vincent de Martel, a senior investment strategist in BlackRock’s Multi-Asset Strategies

“The goal is to generate higher returns, less risk, and more consistent portfolio performance.”

Group. “They have now lost confidence that a policy concentrated on a single source of returns can deliver the returns they need. We are seeing more and more investors contemplate changing from a single factor to a multi-factor investment strategy as they seek new ways to meet their long-term goals.”

### BUILDING BLOCKS FOR BETTER PORTFOLIOS

BlackRock’s research has identified macroeconomic risk factors that influence the returns of asset classes. The investment team uses this information to determine the optimal portfolio allocation with reference to the risk factors, then translates that allocation into asset classes. In contrast, balanced allocations of bonds and equities might appear diversified in asset class terms, but they may not be as diversified in risk factor terms.

“A risk-factor approach helps us better understand asset class returns and the correlation between assets so we can build a more diversified portfolio that performs more consistently in different environments,” says Philip Hodges, a senior member of BlackRock’s risk factor research team. “We seek to extract risk premia and then recombine them into an optimal portfolio. The goal is to generate higher returns, less risk, and more consistent portfolio performance.”



**Vincent de Martel, CFA**, is a senior investment strategist in BlackRock’s Multi-Asset Strategies Group.

---



**Philip Hodges, PhD**, is a senior member of the research team in BlackRock’s Multi-Asset Strategies Group.

---

**Figure 1: Risk Factor Roll Call**

**Asset classes are in reality a composite of exposures to these common risk factors**

<b>Inflation-Protected Bonds</b>	Real Rates				
<b>Nominal Bonds</b>	Real Rates	Inflation			
<b>Corporate Bonds</b>	Real Rates	Inflation	Credit		
<b>High Yield Bonds</b>	Real Rates	Inflation	Credit	Liquidity	
<b>Emerging Bonds</b>	Real Rates	Inflation	Credit	Liquidity	Political
<b>Global Equities</b>	Real Rates	Inflation	Economic	Liquidity	Political

So, what are these risk factors? We think of them as the fundamental building blocks that make up an asset class (see Figure 1 for a breakdown of the risks by asset class):

**1 Real rates:** The risk of bearing exposure to real interest rate changes. All cash flow instruments are subject to this risk. Even investors who hold real bonds to maturity are subject to market-to-market and opportunity-cost risk associated with real rate volatility.

**2 Inflation:** The risk of bearing exposure to changes in nominal prices. Any investment that offers a nominal return rather than a real return should offer an inflation premium to compensate for this additional uncertainty.

**3 Credit:** The risk of default. Typically this is strongly linked to economic growth and also earns a positive premium over time.

**4 Liquidity:** The risk associated with liquidity, which is reflected in the ability to trade an asset at low cost and with little price impact. Even typically liquid assets can be sensitive to illiquidity shocks.

**5 Political:** Risk that a sovereign government will change capital market rules.

**6 Economic:** Risks associated with uncertainty in economic growth. Investments such as equities and real estate that tend to generate poor returns when the economy is weak should earn a positive economic growth premium compared with assets such as high-quality government bonds, which are more likely to generate positive returns in bad economic environments.

## REDEFINING “DIVERSIFIED”

Most portfolios have some exposure to all six macro risk factors. However, as one example, the typical pension’s exposures to these factors are skewed very high or very low, and may not reflect the investor’s risk appetite or desire for return opportunity. Economic risk tends to be heavily over-represented, while typically there are just small slices of exposure to liquidity, credit and real rates risk. (See Figure 2 for a comparison across various types of portfolios.)

“A simple asset-class-based risk parity strategy is a step in the right direction as it reduces the over-representation of economic risk,” says Thomas McFarren, a member of the research team in

BlackRock’s Multi-Asset Strategies Group. “However, by focusing on the factors that drive returns rather than asset classes, we can build a more balanced portfolio of rewarded risk exposures. Historically, each risk factor has been rewarded at different times, so this may be a more sensible approach to portfolio construction.” (See Figure 3 for a look back at rewarded risks in different market environments from 1982 to today.)

For 2011, real-rates risk was by far the most highly rewarded at around 30% return. “Real interest rates are low at the moment, and our view is that we’re going to stay in a low-growth, low-rate regime for some time,” says Hodges.

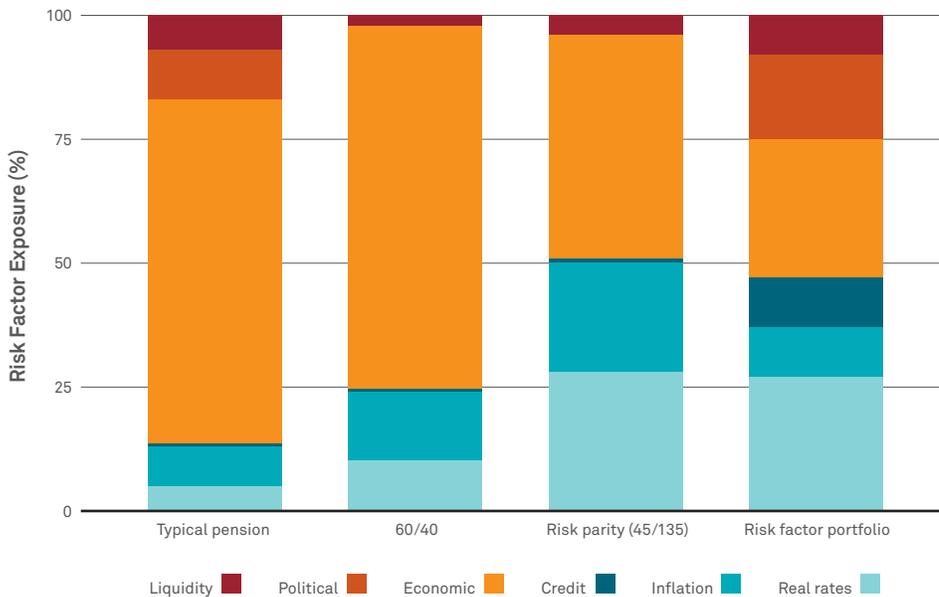


**Thomas McFarren, CFA,** is a member of the research team in BlackRock’s Multi-Asset Strategies Group.

**Figure 2: Balancing Act**

### Why use risk factors for your strategic allocation?

The average portfolio has some exposure to all six macro risk factors, but the weights can be skewed very high or very low, and may not reflect the investor’s risk appetite.



Aggregate top 200 defined benefit asset policy portfolio excludes assets classified in the survey by DB plans as ‘Alternatives’ or ‘Other.’ As of February 6, 2012. The 60/40 and 45/135 portfolios assume equities are invested in MSCI World and bonds are invested in Barclays US Aggregate.

Sources: BlackRock and *Pensions & Investments*.

“The interesting question is, what’s the next regime? If we go into a rising-rate environment, then this model says that equity-bond correlation is going to increase. The portfolio that you thought was well diversified will be less well diversified, which is why it’s really important to look for other sources of risk premia.”

### RESEARCH RESULTS AND THE ROAD AHEAD

Risk factor investing is not new, but up to this point it primarily has been concentrated in equity research. Emerging applications include the use of risk factors for multi-asset investing, and also for governance and setting a strategic benchmark.

The six factors highlighted here are the result of an intensive selection process whereby our risk factor researchers sought to identify the subset of factors most relevant in explaining returns in a diversified multi-asset portfolio. During this filtering process, the goal was to identify factors that reliably explained

returns across different asset types, made intuitive sense and were accessible enough to enable an investor to gain or hedge exposure to it.

For example, consider economic growth risk, which tends to dominate most investors’ portfolios. Our experts’ examination of this risk factor has led to some noteworthy observations:

- Investors should consider diversifying globally to capture economic growth in as many regions as possible. It is not necessary to forecast the fastest-growing economies to earn economic growth premia.
- Economic risk is among the best-rewarded risk factors; however, investors need a premium large enough to justify taking on additional risk here when they’re already exposed to it through their job or business.
- Equities are predominantly exposed to economic risk but they also are exposed to interest rate and inflation risk, even though the exposures to these two factors have appeared low over the past decade.

“The interesting question is, what’s the next regime?”

**Figure 3: Rewarded Risks Vary in Different Environments**

Market Environment	Years	Factors Best Rewarded
Post-Inflation	1982–1991	Inflation
Bull Market	1992–1999	Credit, Economic, Liquidity
Tech Bubble Collapse	2000–2003	Real Rates and Liquidity
Bull Market	2004–2007	Economic and Political
Great Recession	2008–2011	Real Rates
The Long Recovery	2012–	???

Source: BlackRock, August 2012.

## DEPLOYING DIVERSIFIED RISK STRATEGIES

Institutional investors are using risk-based asset allocation strategies in multiple ways, including as:

1. A core holding,
2. An opportunistic allocation (e.g., for educational purposes in order to explore the impact of this type of allocation, or as a holding on reserve for redeployment into tactical opportunities),
3. An intelligently balanced substitute for a traditional balanced portfolio (e.g., defined contribution), or
4. Part of custom-built solutions.

Investors are looking for something different, and many have adopted risk factor investment strategies. Doing so is not quick, or easy. Among other things, implementation takes strategic planning, organizational assessment and alignment with boards; however, the practical benefits and insights that can result make it an approach worth considering in today's challenging and uncertain environment. ♦

### DEEPER DIVE

To learn more about the risk factor approach to investing and BlackRock's macro views on the markets and economy, consider reading:

"Risk Factor How-To: Why old-fashioned asset allocation may thwart your investment goals," *Currents* magazine, Summer 2012.



"Standing Still... But Still Standing: Update of Our 2012 Outlook," BlackRock Investment Institute, July 2012.



"Balancing Act: Introducing a risk factor approach to liability-driven investing," *Currents* magazine, Fall 2011.



Ask your account manager for a copy of these articles.

## CURRENTS

Published by BlackRock, Inc.

Please direct story ideas, comments and questions to:  
Marcia Roitberg, editor  
Telephone 850-893-8586  
Facsimile 415-618-1455  
[marcia.roitberg@blackrock.com](mailto:marcia.roitberg@blackrock.com)

Find *Currents* on the web at  
[blackrock.com/currents](http://blackrock.com/currents)

To subscribe, visit  
[blackrock.com/subscribe/currents](http://blackrock.com/subscribe/currents)

The information included in this material has been taken from trade and other sources considered reliable. No representation is made that this information is complete and should not be relied upon as such. Any opinions expressed in this material reflect our judgment at this date and are subject to change. This material is not intended to provide investment advice. No part of this material may be reproduced in any manner without the prior written permission of BlackRock, Inc.

The strategies referred to herein are among various investment strategies that are managed by BlackRock, Inc., and its subsidiaries (together, "BlackRock") as part of its investment management and fiduciary services. Strategies may include collective investment funds maintained by BlackRock Institutional Trust Company, N.A., which are available only to certain qualified employee benefit plans and governmental plans and not offered to the general public. Accordingly, prospectuses are not required and prices are not available in local publications. To obtain pricing information, please contact a defined contribution strategist. Strategies maintained by BlackRock are not insured by the Federal Deposit Insurance Corporation and are not guaranteed by BlackRock or its affiliates.

Investing involves risk, including possible loss of principal. Past performance does not guarantee future results.

In Canada, this material is intended for accredited investors only. This material is provided for informational purposes only and does not constitute a solicitation or offering of shares or units of any fund or other security in any jurisdiction in which such solicitation or offering is unlawful or to any person to whom it is unlawful.

For Institutional and Professional Clients in Latin America only. This material is solely for educational purposes only and does not constitute an offer or a solicitation to sell or a solicitation of an offer to buy any shares of any securities (nor shall any such securities be offered or sold to any person) in any jurisdiction within Latin America in which an offer, solicitation, purchase or sale would be unlawful under the securities law of that jurisdiction. No information discussed herein can be provided to the general public in Latin America.

©2012 BlackRock, Inc. All rights reserved.

BLK-0380

5275\_R4\_v01AG\_9/12

FOR INSTITUTIONAL USE ONLY—  
NOT FOR PUBLIC DISTRIBUTION

## RISK FACTOR VALUATIONS

All asset classes share exposures to common risk factors. When one or several factors move out of their long-term normal valuation range, the asset classes that are exposed to them are faced with greater than normal upside or downside risk. For maximum diversification, investors should hold a balanced exposure to all risk factors that are expected to deliver positive returns in the long run. Here we present one way of looking at the potential returns of six risk factors and compare the risk premia for June 2012 vs. June 2011 to show how (and if) things have changed.



Source: BlackRock analysis, as of June 30, 2012.