

## Framework for Evaluating Fixed Income Portfolio Structures

### Overview

Nearly five years have passed since the end of the U.S. financial crisis. With the economy and capital markets appearing to stabilize over the past six months, the Federal Reserve has responded with a gradual reduction of its quantitative easing (QE) program, which is already leading to rising long-term interest rates. Assuming a continuation of a more accommodative policy from the Fed—even if it is implemented over the course of several years—investors are understandably concerned about the impact. Not surprisingly, in a recent survey by Casey, Quirk & Associates, the impact of interest rate increases is the biggest concern among institutional fixed income investors. The results of this survey are presented in **Figure 1**.

#### Written By:

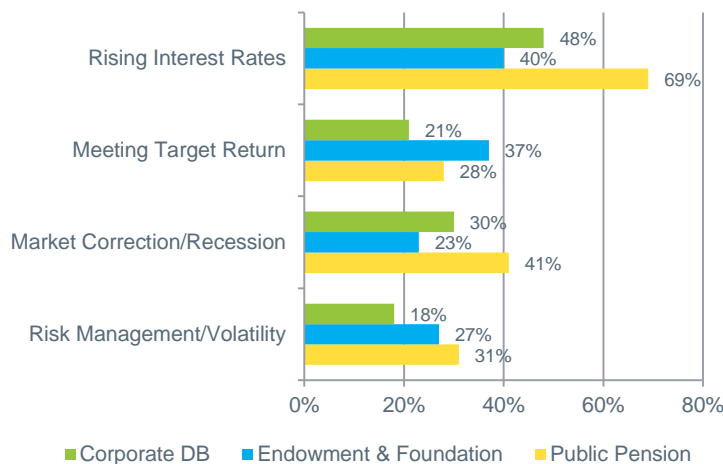
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**Figure 1: Primary Fixed Income Concern by Investor Type**



**Source:** Casey, Quirk & Associates (2014).

Unfortunately, despite intense investor concern, it is impossible to predict the precise timing and pace of Federal Reserve actions on QE and interest rates, as the Fed itself has indicated that its policy is subject to change based on evolving economic conditions. Additionally, while the slight flattening of the yield curve in the first quarter of 2014 suggests an earlier-than-expected rate hike, the spread between the short-end versus the long-end of the curve is still significant. That said, few investors doubt that these events will occur at some point over the next two to four years. In fact, the consensus outlook is supported by the Federal Reserve’s own forecast which, as of March 2014, suggests a high probability of the Federal Funds rate increasing by the end of 2015 and certainly by the end of 2016.<sup>1</sup>

The objective of this paper is to provide clients with a framework for thinking about the role of fixed income in their portfolios and guide their decision making on whether changes are needed to adapt to rising interest rates. We begin by providing a short history of fixed income markets to explain how we arrived at this point in the market cycle. Next, we highlight several unique attributes of the current interest rate environment and discuss how different types of investors are reacting. Finally, we conclude by offering a worksheet that clients can use to clarify their investment objectives and constraints and guide their decision making on their fixed income portfolio structure.

## Background: Evolution of Fixed Income Markets

Historically, investors have purchased fixed income to achieve multiple objectives, including capital preservation, income generation, diversification, and hedging against economic weakness or deflation. While these core objectives have remained largely static over time, the market climate and breadth of investment options has evolved dramatically over the past several decades. Detailed below and on the following pages are what we believe to be the most significant changes and the corresponding responses by different types of institutional investors.

### Trend #1: Secular Bull Market in Bonds Due to Multi-Decade Interest Rate Decline

Interest and growth in the bond markets—particularly in the wake of the 2008/2009 financial crisis—was fueled by a secular, 30-year decline in interest rates. While many economic factors influenced this decline, perhaps chief among them was the successful taming of U.S. inflation by the Federal Reserve. This began with the Volker era in the 1980s and continued with the Greenspan era throughout the 1990s and 2000s. While many believed the decline had reached its nadir in the several years prior to the financial crisis, rates continued to fall even further when the Fed injected unprecedented liquidity into markets via a multi-year, zero interest rate policy and several quantitative easing programs. **Figure 2** illustrates the secular interest rate decline by showing the yield of the 10-year Treasury from 1980 through March 31, 2014. As a result of the steady interest rate declines, fixed income portfolios provided investors with healthy return enhancement, in addition to the traditional benefits of capital preservation and diversification.

**Figure 2: 10-Year Treasury Yield**  
(1980 – 2014)

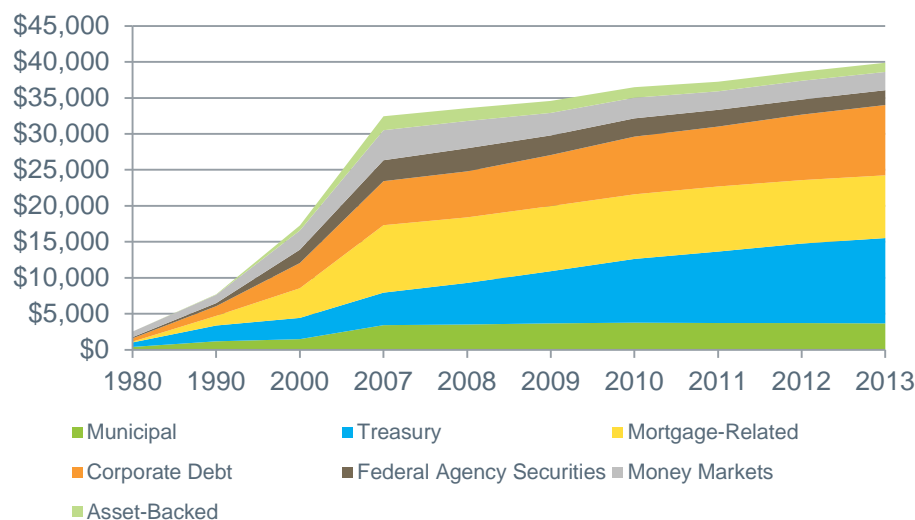


Source: Bloomberg (2014).

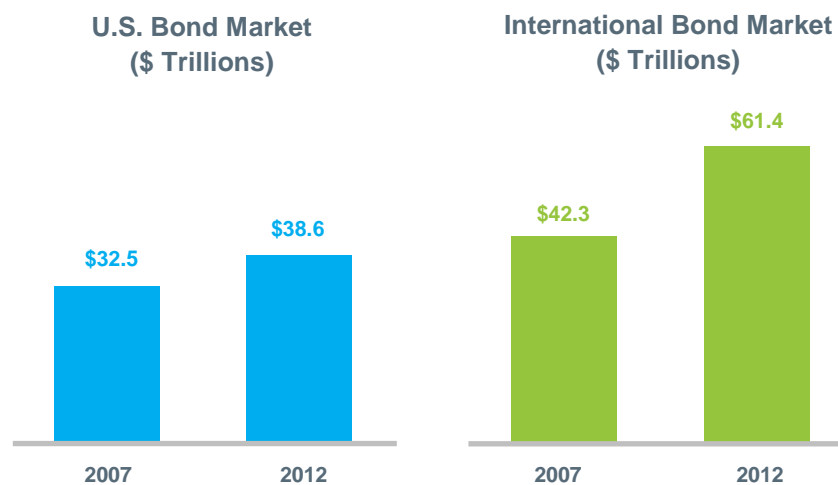
**Trend #2: Sector and Geographic Market Expansion**

As demand for fixed income accelerated throughout the 1970s and 1980s, market liquidity increased, which reduced trading costs. In addition to adding further downward pressure on rates, increased demand for fixed income sparked financial market innovation. Financial institutions steadily introduced new security types, such as mortgage-backed and asset-backed securities, while expanding the market for existing securities. Geographic expansion accompanied sector growth, and investors enjoyed greater access to European and emerging market debt securities. With more fixed income options, investors had greater flexibility to design fixed income portfolios to meet their unique return and risk objectives. By the late 1990s, institutional fixed income portfolios extended well beyond U.S. government securities and plain vanilla corporate bonds. **Figure 3 and Figure 4** shows the expansion of the fixed income markets by sector and geography.

**Figure 3: Fixed Income Growth by Sector (\$ Billions)**  
 (1980 – 2013)



**Figure 4: Growth of Global Cash Bond Market (\$ Billions)**  
 (2007 – 2012)



Source: sifma, BIS (2013).

## Institutional Investor Response

As the fixed income markets evolved, institutional investors reacted differently based on their distinct investment objectives. Listed below and on the following page, we outline the key investment objectives and evolving investment strategies of three types of investors: corporate defined benefit (DB) plans, endowments and foundations, and public pension plans.

### Corporate Defined Benefit Plans

Corporate DB plans have exhibited a significant shift in strategy over the past few decades. From 1984 to 1994, plans allocated an average of 33.3% of the portfolio to fixed income.<sup>\*</sup> In addition, given relatively high short term rates, DB plans were also able to reduce portfolio volatility without incurring a substantial loss of income by supplementing their core fixed income holdings with a large allocation to cash (approximately 6.9%). However, by the late 1990s, DB plans began to reallocate fixed income assets to equity as interest rates declined and the U.S. bull market advanced. Finally, in 2008 DB plans reversed course and shifted assets back from equity to fixed income, as funded ratios recovered along with the value of liability-hedging to lock in the current funded status. Given the accounting measures in place, corporate DB plans benefit specifically from holding high-quality corporate bonds, and will likely increase this focus in the coming years. **Figure 5** shows the allocation shifts over time among corporate DB plans.

#### Investor Fixed Income Profile Corporate DBs

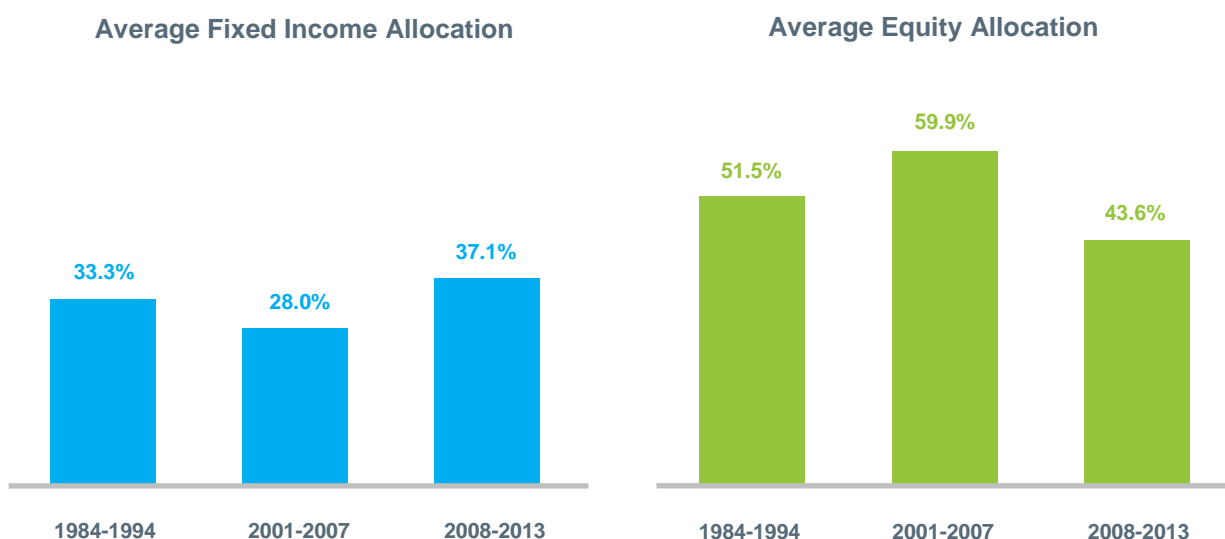
##### Key Roles

- Capital preservation
- Liability hedging

##### Key Constraints

- Sensitivity to funded status volatility
- Compressed investment time horizon

**Figure 5: Average Allocation for Corporate Defined Benefit Plans by Time Period**



Source: Pensions & Investments (2014)

<sup>\*</sup> We recognize that some shifts in allocation can be attributed to market movements; however, the survey data on which these observations are based does not indicate the precise amount of this influence.

## Endowments & Foundations

Endowments and foundations have shown a much lower appetite for fixed income relative to public and corporate DB plans. This is primarily due to the fact that these institutions typically benefit from perpetual time horizons and low liquidity requirements, making return enhancement rather than capital preservation a higher strategic priority. Since 2002, endowments and foundations have reduced fixed income allocations. However rather than simply swap fixed income for public equities, many have substantially increased allocations to alternative investments, which they hope will provide many of the diversification benefits of fixed income but with stronger return attributes. In terms of exposures, while two-thirds of endowment and foundation fixed income allocations remain invested in domestic investment grade strategies, many have added diversification in areas such as international bonds, domestic non-investment grade, and emerging markets in an effort to take advantage of more robust return enhancement potential. **Figure 6** shows the allocation shifts over time among endowments and foundations.

**Investor Fixed Income Profile  
 Endowments & Foundations**

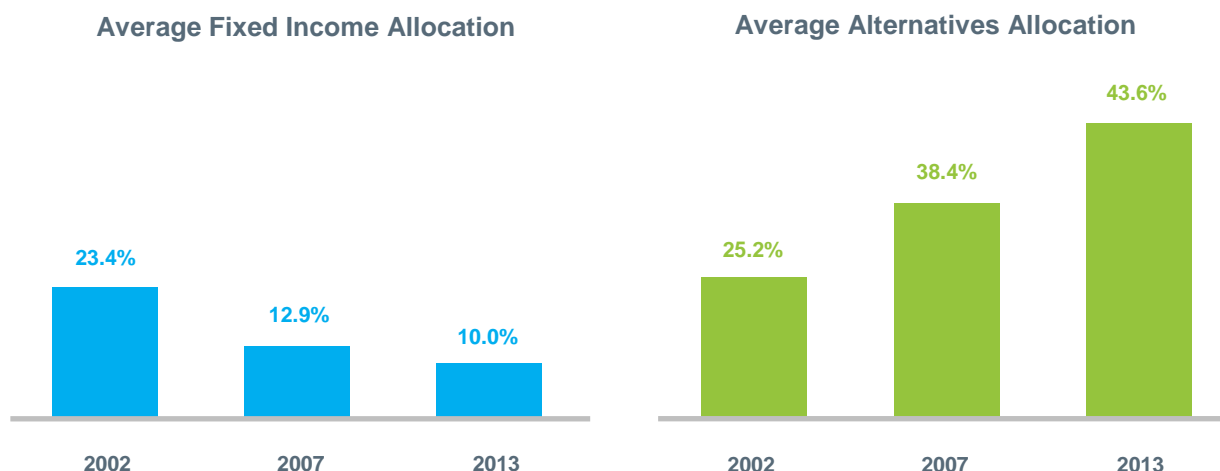
**Key Roles**

- Capital Preservation
- Income (Spending Rate Support)

**Key Constraints**

- None

**Figure 6: Average Allocation for Endowments & Foundations by Year**



**Source:** NACUBO-Commonfund Study of Endowments. (2002 - 2013)

## Public Pension Plans

Public pensions have shown the most dramatic shift away from fixed income over the past several decades. From 1984-1994, public pensions held conservative portfolios with nearly 50% allocated to fixed income and another 7.3% allocated to cash. In the late 1990s public pensions started moving out of fixed income and into equities and alternative investments. This trend continued into the 2000s up until the financial crisis. Perhaps in reaction to the steep decline in equity markets, public pensions have moderated their equity exposure over the past six years, but placed more funds into alternatives rather than moving back into fixed income. Given relatively high required portfolio returns (most public pensions require a 7%-8% return), this is understandable. The modest fixed income return expectations would

**Investor Fixed Income Profile  
 Public Pension Plans**

**Key Roles**

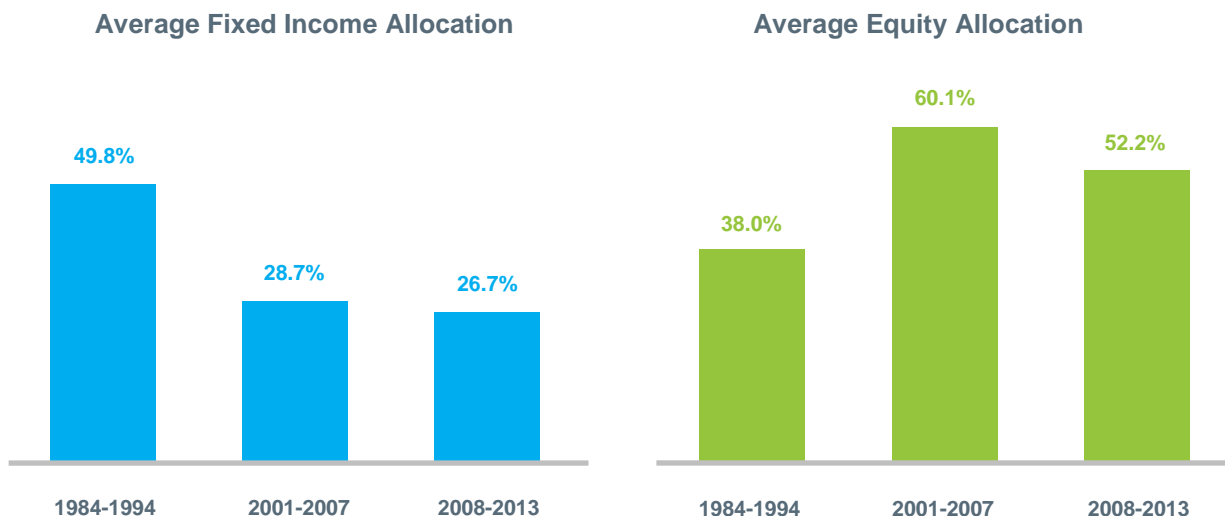
- Capital preservation
- Income (benefit payment support)

**Key Constraints**

- Liquidity to fund benefit payments
- Exposure constraints on non-traditional fixed income securities

create an intolerable return drag. Public pensions are attracted to asset classes, such as alternative investments, that provide the diversification and capital preservation benefits of fixed income without accepting a lower return target. **Figure 7** shows the allocation shifts over time among public pension plans.

**Figure 7: Average Allocation for Public Pension Plans by Year**



Source: Pensions & Investments (2014).

## Charting the Future of Fixed Income Investing

Knowing the history and current challenges of fixed income investing, institutional investors are understandably asking if and how they should react. Despite the challenges of investing in a rising rate environment, many compelling opportunities remain. If change in their portfolio is warranted, it is likely that investors will need to become comfortable with different strategies and underlying fixed income exposures. Looking forward, we believe that compelling fixed income strategies will incorporate at least some of the attributes listed below.

### Attributes of Evolving Fixed Income Strategies

1. **Benchmark Agnosticism**—Managers are altering or launching new strategies with less sensitivity to broad market benchmarks. The advantage is the introduction of greater flexibility to exploit market inefficiencies in different market segments. The risk, of course, is greater tracking error and the cost of potential underperformance.
2. **Reliance on Non-Duration Return Drivers**—In order to combat interest rate risk, investment managers are increasingly focused on non-duration return drivers, particularly credit and global macro, to deliver returns that are not directly correlated with potential rate increases.
3. **Enhanced Downside Protection**—Given the asymmetrical risk of rising rates, many investment managers are employing more sophisticated risk management to offer greater downside protection.
4. **Broadened Capital Structure Exposure**—Managers are investing broadly across the corporate capital structure in order to provide greater risk management, diversification, and income generation.

In order to enact the strategies above, managers may rely more heavily on less traditional exposures. **Figure 8** highlights compelling fixed income exposures (along with key attributes for each) that have garnered the most amount of interest in the last two years.

**Figure 8: Potential Fixed Income Strategies for a Rising Rate Environment**

	Return Target	Volatility Target	Yield	U.S. Interest Rate Risk	Liquidity
<b>BENCHMARK CONSTRAINED</b>					
Bank Loans	Medium	Medium	Medium	Low	Medium/High
EM Corporate	Medium	Medium	Medium	High	Medium/High
EM Local	Medium	Medium	Medium	Low	Medium/High
Global Multi-Credit	Medium	Medium	Medium	Medium	High
High Yield	Medium	Medium	Medium	Medium	Medium/High
<b>ABSOLUTE RETURN ORIENTED</b>					
Direct Lending	High	High	High	Low	Low
Distressed Debt	High	High	High	Low	Low
Long/Short Credit	Medium/High	Medium/High	Medium	Low	Medium/High
Structured Debt	Medium	Medium	Low/Medium	Low/Medium	Low/Medium
Unconstrained	Medium	Medium	Low/Medium	Low	High

*Note: Estimates are based on unlevered portfolios*

Source: RVK, Inc. (2014)

## Assessment of Key Fixed Income Objectives & Constraints

While we certainly do not advise the blind abandonment of any client’s current fixed income structure, we do see the merits of restructuring portfolios to gain exposure to the new strategies and sectors detailed on the previous page. In fact, we have already guided many clients away from traditional core, core-plus, and government-oriented strategies. These clients have introduced emerging fixed income strategies, such as global and emerging market bonds, high-yield and loan portfolios, alternative fixed income strategies, rising-rate defense strategies, and opportunistic mandates.

For the purposes of this paper, it is impossible for us to advise a single, optimal fixed income portfolio structure to meet the demands of all institutional investors. Investor objectives are too varied to even attempt this endeavor. However, we can provide a tool that will help institutional investors clarify their unique risk/return objectives and constraints so that they are better prepared for a structure conversation. The worksheet on the following page is intended to help our clients think through the various aspects of their investment objectives and, in the process, prepare for a conversation on their fixed income portfolio structure.

**Figure 9: Fixed Income Strategy Worksheet**

**Instructions:** The goal of this worksheet is to help investors clarify their unique objectives, risk tolerance, and investment constraints as it relates to their fixed income portfolio. Please complete this worksheet and use the results to guide a conversation regarding the potential restructuring of your fixed income portfolio.

Fixed Income Return Objectives	Response
1. What is the benchmark for your fixed income portfolio?	_____
2. Do you have an absolute return target for your fixed income portfolio?	Yes   No
2(a). If yes, what is your absolute return target return?	____%
2(b). If yes, how important is achieving return enhancement beyond your absolute return target return?	N/A   Low   Moderate   High
3. For pension plans, what is your current funded status?	____%
4. For pension plans, do you have an LDI strategy in place?	Yes   No

Fixed Income Risk Tolerance	Response
1. Is the objective of your fixed income strategy solely focused on capital preservation?	Yes – No
1(a). If no, how much equity-like risk do you wish to add?	None   Low   Medium   High
1(b). How much inflation protection do you wish to add?	None   Low   Medium   High
1(c). How much income enhancement do you wish to add?	None   Low   Medium   High
2. What is your tolerance for duration risk?	None   Low   Medium   High
3. What is your relative tolerance for tracking error (i.e., the degree to which returns differ from your fixed income benchmark).	N/A   Low   Medium   High
4. If you only have an absolute return benchmark, what do you consider to be acceptable annual volatility?	____%
5. How important is “headline risk” to your organization? In other words, if an investment suffers from negative publicity, are there significant consequences?	Low   Medium   High

Investment Constraints (Check and Describe All that Apply)		
Constraint	Check if Applicable	Description of Constraint
1. Use of derivatives	<input type="checkbox"/>	
2. Investment in private assets	<input type="checkbox"/>	
3. Investment in non-U.S. and emerging markets securities	<input type="checkbox"/>	
4. Investment in below investment grade securities	<input type="checkbox"/>	
5. Investment in non-U.S. currencies	<input type="checkbox"/>	
6. Investment in funds with liquidity constraints (e.g., redemption lock-ups)	<input type="checkbox"/>	
7. Time horizon-related constraints	<input type="checkbox"/>	
8. Fee sensitivity	<input type="checkbox"/>	

Source: RVK, Inc. (2014)



## Conclusion

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We believe that the Federal Reserve will continue to unwind its quantitative easing program and, over time, allow short term interest rates to rise. If this occurs, it is likely that both short and long term interest rates will continue to rise; however, it is impossible to predict when and at what speed. Despite continued uncertainty, many institutional investors and investment managers are altering their fixed income strategies to mitigate the negative impact on fixed income returns. While it is impossible to recommend a universal solution, we believe that investment committees can make informed decisions if they are armed with a clear and comprehensive understanding of their unique return objectives, risk sensitivities, and investment constraints. We encourage our clients to complete the short worksheet provided in this paper and use the results to facilitate effective decision making.

## Endnotes

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- <sup>1</sup> “Economic Projections of Federal Reserve Board Members and Federal Reserve Bank Presidents.” Federal Reserve Open Market Committee. (March 19, 2014).

### About RVK

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RVK was founded in 1985 to focus exclusively on investment consulting and today employs over 100 professionals. The firm is headquartered in Portland, Oregon, with regional offices in Chicago and New York City. RVK is one of the ten largest consulting firms in the U.S. (as defined by Pensions & Investments) and has a diversified client base of over 190 clients covering 28 states. This includes endowments, foundations, corporate and public defined benefit and contribution plans, Taft-Hartley plans, and high-net-worth individuals and families. The firm is independent, employee-owned, and derives 100% of its revenues from investment consulting services.

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