A Fixed Income Gordian Knot: Low Yields, Abundant Risks

In this issue of Fixed Income Perspectives, Karl Tourville and Carrie Callahan discuss how a disciplined adherence to guiding investment principles has allowed Galliard to generate consistent, value-added performance over time.

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AN AGE OF TURBULENCE

Yields are low. Risks abound. These factors, against the backdrop of an increasingly interconnected and challenging global economic environment, make achieving attractive returns while controlling risk a fixed income “Gordian knot” for investors. Like the famous knot confronted by Alexander the Great, it’s a complex problem that can be solved by a solution that’s surprising in its simplicity. Rather than painstakingly unpicking the knot, Alexander sliced it with his sword. Galliard’s solution is also simple, yet not evident to many others.

Money market rates remain near zero. Yields on high-quality intermediate and long-maturity bonds remain near historical lows (Figure 1). Corporations have taken advantage of the low yield environment by issuing record amounts of debt, exceeding $1 trillion in annual issuance for the last five consecutive years.\(^1\) Corporate new issuance hit a new high in the first quarter of 2015.\(^2\) At the end of March, with the 10-year U.S. Treasury yield back below 2% and the Freddie Mac Survey rate of 30-year mortgages dipping below 4%\(^,\)\(^3\) putting downward pressure on agency mortgage-backed securities (MBS), investors found themselves facing a conundrum: how can they invest in an environment of paltry yields while the Fed’s preparing to increase the federal funds rate?\(^4\)

![Figure 1 | 10-Year U.S. Treasury Yield](image)

Source: Federal Reserve

While U.S. bond market total returns have been positive in fourteen of the past fifteen years ending in 2014, investors cannot overlook the significant volatility in certain fixed income sectors. They have been plagued by reverberations from around the globe. In the past year alone, an epic collapse in oil prices, municipal and sovereign defaults, tensions between Russia

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1, 2, 3, 4 Endnotes are located on page 11.
Central to everything we do at Galliard is our disciplined adherence to the principle that fixed income’s role is to provide income generation within a strong risk control framework.

GALLIARD’S INVESTMENT PHILOSOPHY—BREAKING THE GORDIAN KNOT

In the absence of Alexander’s sword, how does a bond manager solve this seemingly intractable situation to deliver value-added performance?

At Galliard, our solution to this Gordian knot has been simple, yet highly effective. We’ve remained true to the investment philosophy and approach that has produced value-added returns for our clients over the last 20 years. Central to everything we do at Galliard is our disciplined adherence to the principle that fixed income’s role is to provide income generation within a strong risk control framework. This principle guides all aspects of our portfolio management process (including asset allocation, security selection, and trading) and other elements, such as compliance, support systems, and even our firm’s culture. The success of our approach is reflected by our long-term track record. As shown below, Galliard’s separate account composites have generated outperformance on both an absolute- and risk-adjusted basis versus their benchmarks (Figure 2). Our investment philosophy also showed credibility during the most recent volatile market cycle, which included unprecedented moves in interest rates and credit, while Galliard clients experienced consistent return patterns.

**FIGURE 2 | ANNUALIZED PERFORMANCE:
JANUARY 2005 THROUGH DECEMBER 2014**

<table>
<thead>
<tr>
<th></th>
<th>Broad Market Core Composite</th>
<th>Intermediate Aggregate Composite</th>
<th>Intermediate Core Composite</th>
<th>Short Core Composite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Galliard Composite (before inv. mgmt. fees)</td>
<td>5.37</td>
<td>4.81</td>
<td>4.71</td>
<td>3.33</td>
</tr>
<tr>
<td>Galliard Composite (after maximum fees)</td>
<td>5.05</td>
<td>4.50</td>
<td>4.40</td>
<td>3.03</td>
</tr>
<tr>
<td>Benchmark Performance*</td>
<td>4.71</td>
<td>4.34</td>
<td>4.10</td>
<td>2.85</td>
</tr>
<tr>
<td><strong>Annualized Excess Returns</strong> (before inv. mgmt. fees)</td>
<td><strong>0.66</strong></td>
<td><strong>0.47</strong></td>
<td><strong>0.61</strong></td>
<td><strong>0.48</strong></td>
</tr>
<tr>
<td>Standard Deviation - Galliard Composite</td>
<td>1.00</td>
<td>0.86</td>
<td>0.77</td>
<td>0.44</td>
</tr>
<tr>
<td>Standard Deviation - Benchmark</td>
<td>1.01</td>
<td>0.88</td>
<td>0.76</td>
<td>0.43</td>
</tr>
</tbody>
</table>

*Benchmarks are Barclays U.S. Aggregate Bond Index, Barclays U.S. Intermediate Aggregate Bond Index, Barclays U.S. Intermediate Government/Credit Bond Index, and Barclays U.S. 1-3 Year Government Bond Index corresponding to Broad Market Core, Intermediate Aggregate, Intermediate Core, and Short Core composites, respectively. Benchmark returns were retrieved from Morningstar. The accounts in the composite are not insured by the FDIC, Federal Reserve Bank, nor guaranteed by Wells Fargo Bank, N.A. or any affiliate, including Galliard Capital Management, and may lose value. Past performance is not an indication of how the investment will perform in the future.

5, 6 Endnotes are located on page 11.
GALLIARD’S CORE FIXED INCOME INVESTMENT APPROACH

Our investment approach (Figures 3 and 4) is built on straightforward principles that strike the balance between strategies that generate income and those that control risk. Galliard’s investment process seeks to generate 50 to 70 basis points (0.50% to 0.70%) of excess return annually relative to the appropriate benchmark.

**FIGURE 3 | GALLIARD’S FIXED INCOME APPROACH: INCOME GENERATION WITH RISK CONTROL**

**WE EMPHASIZE**
- Disciplined value investing
- Broadly diversifying issuer and sector exposures
- Using high quality U.S. fixed income securities
- Adding value from yield rather than price
- Specializing in specific markets (i.e., taxable municipals and other governments)

**WE AVOID**
- Timing interest rates
- Rotating sectors
- Purchasing esoteric fixed income securities or sectors
- Making duration bets
- Excessive turnover

**FIGURE 4 | PORTFOLIO CONSTRUCTION: RETURN ENHANCEMENT STRATEGIES**

<table>
<thead>
<tr>
<th>STRATEGY</th>
<th>GUIDING PRINCIPLES</th>
<th>TARGETED ALPHA CONTRIBUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over Allocation to Non Treasury (Spread) Sectors</td>
<td><strong>Build a realizable yield advantage</strong>&lt;br&gt;• Overallocation to spread sectors&lt;br&gt;• Utilize lesser known sectors</td>
<td>30 – 45 bps</td>
</tr>
<tr>
<td>Security Selection</td>
<td><strong>Buy assets you can hold</strong>&lt;br&gt;• Focus on fundamental research&lt;br&gt;• Buy best relative value</td>
<td>25 – 40 bps</td>
</tr>
<tr>
<td>Sector Allocation</td>
<td><strong>Weight sectors based on bottom up relative value</strong></td>
<td>5 – 10 bps</td>
</tr>
<tr>
<td>Duration/Yield Curve Positioning</td>
<td><strong>Maintain duration within tight band around benchmark</strong></td>
<td>5 – 10 bps</td>
</tr>
</tbody>
</table>
A key strategy of our portfolio construction process is overweighting “spread sectors” strategically to create a realizable yield advantage versus the benchmark. Our team process emphasizes fundamental analysis to identify high-quality, undervalued securities that can be bought and held over a period of years. A key objective is to construct portfolios of attractively valued securities that generate income for the portfolio.

Other hallmarks of our process include broad diversification across both issuers and sectors, overall duration kept relatively close to the benchmark, and low turnover. We avoid interest rate timing, sector rotation, and excessive turnover. We believe these strategies add risk without compensatory return, increase trading costs, and rarely add value on a consistent basis. In other words, these strategies can tighten an already complex knot.

PORTFOLIO CONSTRUCTION
With our clients’ return objectives in mind, portfolios are carefully constructed with an emphasis on risk control (Figure 5), including a high-quality bias, extensive diversification, and management within narrow duration bands. Use of derivatives is strictly limited to managing duration. We prohibit the use of exotic or leveraged securities.

A key strategy of our portfolio construction process is overweighting “spread sectors” (for example, credit, MBS, and asset-backed securities) strategically to create a realizable yield advantage versus the benchmark. Then, within our disciplined risk control framework, we identify high-quality securities representing attractive relative value. This enables the portfolio to earn the yield advantage, while adjusting sector allocations based on bottom-up relative value and maintaining duration close to the benchmark.

FIGURE 5 | PORTFOLIO CONSTRUCTION RISK CONTROL TARGETS

GALLIARD PORTFOLIOS ARE DESIGNED TO HAVE:

High quality
>70% of holdings rated AAA or U.S. Government

Extensive diversification of credit risk
0.3%-0.5% average position size of non-U.S. Government holdings

Controlled portfolio duration
+/- 10% of benchmark

Low portfolio turnover
20%-30% annually
OVER ALLOCATION TO NON-TREASURY (SPREAD) SECTORS
Galliard generally targets 30 to 45 basis points (0.30% to 0.45%) of annual excess returns through our over-allocation to the non-U.S. Treasury (spread) sectors. We focus on sectors and subsectors that provide good relative value and diversify risk.

Within the credit sector, Galliard utilizes taxable municipals (primarily general obligation) and other non-corporate institutional credits, such as bonds issued by major universities. We also buy securities guaranteed by the Export-Import Bank (EX-IM) which carry the backing of the U.S. government. Use of these securities provides competitive yields versus corporates and additional diversification of credit risk.

We take a similar approach with structured products, where we underweight traditional fixed-rate agency pass-through securities in favor of other U.S. government-backed structures, such as Fannie Mae delegated underwriting and Servicing (FNMA DUS) securities, Small Business Administration (SBA) securitizations, and Ginnie Mae (GNMA) reverse mortgages. These securities exhibit better convexity characteristics than pass-throughs and offer attractive option-adjusted spreads (OAS).

Among collateralized mortgage-backed securities (CMBS) and asset-backed securities (ABS), we emphasize AAA-rated securities in the most senior tranches. We focus on structures with shorter average life and limited extension risk.

SECURITY SELECTION
Security selection is an integral part of Galliard’s targeted alpha contribution (25 to 40 basis points or 0.25% to 0.40%). Our process combines rigorous cash flow and yield analysis with an in-depth review of each issuer’s creditworthiness.

Because every sector of the bond market presents unique risks, each holding is underwritten with a long-term, buy-and-hold perspective to control risk.

The objective is to identify appropriate securities that represent attractive relative value and have yields that are realizable, meaning yields with limited likelihood of reduction due to changes in cash flows or credit impairments.

Our investable universe of securities is divided into two broad groups: credit and structured product.
SECURITY SELECTION—CREDIT

The Galliard security selection credit process seeks to find compelling relative value in the corporate, taxable municipal, and sovereign subsectors.

Our Credit Team employs a robust process that includes financial statement analysis and security structure review to determine whether adequate protective covenants and collateral are present. In conducting this research, the Galliard Credit Team identifies risk factors that jeopardize principal repayment. The effectiveness of our process is shown by Galliard’s successful navigation of many recent problems in the credit sector (Figure 6).

Complementing the security selection process is our practice of broad diversification across both issuer and subsector in the credit space. This is designed to limit a portfolio’s downside

### FIGURE 6 | GALLIARD CREDIT PROCESS: WORKING TO AVOID PITFALLS, STRIVING TO SEIZE OPPORTUNITY

<table>
<thead>
<tr>
<th>Market Event</th>
<th>Galliard Positioning</th>
<th>Galliard Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subprime Mortgage Crisis</td>
<td>Invest primarily in agency-backed issuances.</td>
<td>2.5% non-agency MBS allocations as of December 31, 2007.7</td>
</tr>
<tr>
<td>Bear Stearns and Lehman Brothers</td>
<td>Business analysis uncovered excessive reliance on investment banking business and short-term funding.</td>
<td>Minimal exposure to Bear Stearns and Lehman Brothers corporate bonds.8</td>
</tr>
<tr>
<td>Municipal Defaults</td>
<td>Focused on investing in the highest quality issuers.</td>
<td>Galliard has not been impacted by any municipal defaults (as of Q1 2015)</td>
</tr>
<tr>
<td>Falling Oil Prices</td>
<td>Biased toward higher quality, integrated oil companies.</td>
<td>These companies have strong balance sheets and their business models benefit from exposures to refining and chemicals, which is a natural hedge to lower oil prices.</td>
</tr>
<tr>
<td>Bernanke Taper Tantrum</td>
<td>Understand that consistently forecasting interest rates is difficult.</td>
<td>Maintained neutral duration positioning.</td>
</tr>
<tr>
<td>Greece Sovereign Default</td>
<td>Utilize only high-quality sovereign issuers.</td>
<td>No exposure to Greek bonds.</td>
</tr>
</tbody>
</table>

7,8 Endnotes are located on page 12.
risk from a negative credit event. On average, our portfolios have individual credit positions of about 0.21%.

**SECURITY SELECTION—STRUCTURED PRODUCT**

The Galliard Structured Product Team’s fundamental analysis and security selection process is similar to that of the Credit Team, emphasizing analysis of credit quality, cash flow, and optionality.

Our process generally favors agency MBS, and high-quality, liquid, shorter-maturity CMBS and ABS securities. Consequently, when the subprime mortgage crisis began, our portfolios were well positioned, with modest allocations to non-agency securities with subprime collaterals (*Figure 7*). In Galliard’s modest allocations to non-agency MBS, our high-quality bias led us to invest in the most senior tranches of those securities.

The subprime mortgage crisis notwithstanding, protecting yield by managing prepayment and extension risk is vital to adding value in structured product. Galliard addresses this through cash flow and optionality analysis, where we seek to mitigate the effects of both rising and declining interest rates on cash flows. We achieve this by investing in securities such as specified MBS pools, seasoned CMBS, shorter-average-life consumer ABS and agency hybrid adjustable-rate mortgages (ARMs).

**FIGURE 7 | TYPICAL SECTOR DIVERSIFICATION**

9, 10 Endnotes are located on page 12.
In our view, the most successful portfolio management approach in the current environment is to effectively balance two often competing objectives: the need for income return and the need to control risk.

**SECTOR ALLOCATION AND DURATION/ YIELD CURVE POSITIONING**

While the majority of Galliard’s alpha is generated by our strategic over-allocation to spread sectors and our security selection, additional value (10 to 20 basis points or 0.10% to 0.20%) is added through sector allocation and duration positioning.

As a result of our value-driven approach, sector allocations change gradually over time, based on bottom-up relative value analysis.

Portfolio durations are typically maintained within +/- 10% of the benchmark. Within this framework, we adjust maturities to benefit from changes in the configuration of the yield curve and roll down.

While these strategies are modest contributors to our overall value-added, in fixed income every little bit counts!

**KNOT-BREAKING SOLUTION: GALLIARD’S DISCIPLINED INVESTMENT APPROACH**

When interest rates fall and risk premia narrow, the ability to find yield and generate income for a fixed income portfolio is crucial. As volatility and illiquidity increase, controlling risk is essential. The current confluence of low yields and heightened risks has created a challenging set of circumstances—the Gordian knot—for fixed income investors.

In our view, the most successful portfolio management approach in the current environment is to effectively balance two often competing objectives: the need for income return and the need to control risk.

Like Alexander the Great’s fabled sword stroke, Galliard’s investment approach efficiently slices through the fixed income Gordian knot and delivers value-added performance.

2 SIFMA U.S. Corporate Bond Issuance Investment Grade and High Yield report, updated 3/3/2015

3 “Primary Mortgage Market Survey Archives,” Freddie Mac, January 2015; http://www.freddiemac.com/pmms/


From Page 3

From Page 4

5 The Broad Market Core Composite is a sub-composite of the Broad Market Core Total Composite. It consists of all discretionary separate accounts invested in fixed income securities managed against the Barclays U.S. Aggregate Bond Index or similar indices that do not use derivatives or certain more complex securities and/or strategies.

The Intermediate Aggregate Composite is a sub-composite of the Intermediate Aggregate Total Composite. It consists of all discretionary separate accounts invested in fixed income securities managed against the Barclays U.S. Intermediate Aggregate Bond Index or similar indices that do not use derivatives or certain more complex securities and/or strategies.

The Intermediate Core Composite is a sub-composite of the Intermediate Core Total Composite. It consists of all discretionary separate accounts invested in fixed income securities managed against the Barclays U.S. Intermediate Government/Credit Bond Index or similar indices that do not use derivatives or certain more complex securities and/or strategies.

The Short Core Composite is a sub-composite of the Short Core Total Composite. It consists of all discretionary separate accounts invested in fixed income securities managed against the Barclays U.S. 1-3 Year Government Bond Index or similar indices that do not use derivatives or certain more complex securities and/or strategies. The composite strategy focuses on risk control and adding value through security selection.

Returns for periods less than one year are not annualized. Returns are in U.S. dollars. Returns designated as being “before investment management fees” include all income, realized and unrealized gains and losses, and all transactional costs. Returns designated as “after maximum fees” are the “before investment management fees” returns less the maximum investment management fee of .30% which may be charged by Galliard for management of each client’s account. These returns may also be impacted by the effect of compounding and will be rounded to the nearest basis point. Galliard’s advisory fees are disclosed in the firm’s SEC Form ADV Part 2 which is available upon request. Benchmark returns do not include potential transaction costs or management fees. For comparison purposes the benchmark is fully invested and includes the reinvestment of income. While it is believed that the benchmarks used here represent appropriate points of comparison for the composites referenced above, prospective investors should be aware that the volatility of the above referenced benchmarks or indices may be substantially different from those of the composites; and holdings in the composites may differ significantly from the benchmarks or indices if the investment guidelines and criteria are different from the composites. The accounts in the composites are not insured by the FDIC, Federal Reserve Bank, nor guaranteed by Wells Fargo Bank, N.A. or any affiliate, including Galliard Capital Management, and may lose value. Past performance is not an indication of how the investment will perform in the future.

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5 Monthly return streams were used to calculated the annualized standard deviation.
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7This represents the average of the Broad Market Core, Intermediate Aggregate, and Intermediate Core composites' allocations to agency and non-agency issuances as a percentage of the composites' holdings. Short Core composite holdings were not available from this time period.

8As of December 31, 2007, Galliard's average Bear Stearns exposure across the Broad Market Core, Intermediate Aggregate, and Intermediate Core composites totaled 0.01%. As of June 30, 2008, Galliard's average Lehman Brothers exposure across the Broad Market Core, Intermediate Aggregate, and Intermediate Core composites totaled 0.17%. Short Core composite holdings were not available from this time period.

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9Average size of credit positions in Broad Market Core, Intermediate Aggregate, Intermediate Core, and Short Core composites as of December 31, 2014.

This represents the weighted average of the Broad Market Core, Intermediate Aggregate, and Intermediate Core composites' sector allocations as of 12/31/2014.

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