Non-Core Fixed Income Process & Recommendations

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Weston Kasper, RVK
Agenda

I. Non-Core Fixed Income (NCFI) Timeline & Allocation Objectives
II. Market Opportunity
III. Manager Search Process
IV. Manager Selection Recommendations
V. Requested Board Action
I. NCFI Timeline & Allocation Objectives
NCFI Timeline

Fall 2014
• Board approves 2015 Non-Core Fixed Income Pacing Plan for EMD and other approved sub-asset classes

Spring 2015
• Board approves EMD recommended managers

Summer 2015
• Board approves target asset allocation of 20% of total plan to Non-Core Fixed Income

December 2015
• Board approves Direct Lending recommended managers

December 2015
• Board approves 3-phase Pacing Plan for Non-Core Fixed Income in 2016

Current 2016
• June Board meeting: Consider and act on Opportunistic Credit managers
NCFI Current & Target Portfolio
(as of March 31, 2016)

NCFI Current Allocation

- Bank Loan/CLO, 3.1%
- RMBS/CMBS, 3.2%
- Emerging Market Debt*, 2.0%
- Direct Lending*, 4.0%
- Unallocated, 7.7%

NCFI Expected Allocation

- Bank Loan/CLO, 3.1%
- RMBS/CMBS, 3.2%
- Oportunistic Credit**, 2.9%
- Direct Lending*, 4.0%
- Emerging Market Debt*, 2.0%
- Unallocated, 4.8%

* Approved by the board, funding pending.
** Pending Board’s approval
II. Market Opportunity
Opportunistic Credit

What is Opportunistic Credit?

A broad category ranging from multi sector fixed-income funds to direct hedge funds and less liquid, hedge fund/private equity fund hybrid structures. They generally represent a good substitute for traditional core/core plus fixed income.

• Strategies vary widely, but common attributes include:
  ✓ Enhanced flexibility to generate returns
  ✓ Usually have less duration risk than traditional fixed income
  ✓ Focus on identifying mispriced assets, often with a catalyst
  ✓ Complex and often less liquid holdings. Fund terms/structures vary, but need to be reflective of holdings

• Key characteristics include:
  ✓ Benchmark agnosticism
  ✓ Reliance on non-duration return drivers
  ✓ Broadened capital structure exposure

• Strategy exposure can include:
  ✓ Corporate Credit (Bank loans, High Yield, stressed/distressed, direct lending)
  ✓ Mortgage credit (RMBS, CMBS)
  ✓ Structured credit (ABS, CLO)

• Geographic exposure is more global than a traditional core/core plus fixed income portfolio:
  ✓ North America (U.S., Canada)
  ✓ Europe
  ✓ Asia/EM
Opportunistic Credit

Opportunistic credit managers adjust their strategies in an attempt to produce returns over various economic cycles.

<table>
<thead>
<tr>
<th>HIGHER GROWTH</th>
<th>LOWER GROWTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECOVERY</td>
<td>SLOWDOWN</td>
</tr>
<tr>
<td>EXPANSION</td>
<td>RECESSION</td>
</tr>
</tbody>
</table>

- **Higher Growth**
  - Recovery
    - Increase assets with upside/spread
    - Increase bonds and stressed debt
    - Reduce loans, distressed debt
  - Expansion
    - Focus on interest rate protection
    - Increase loans / senior debt
    - Reduce distressed debt
  - Slowdown
    - Defensive positioning and de-risking
    - Increase loans / stressed debt
    - Reduce equities
  - Recession
    - Preserve capital, buy opportunistically
    - Increase stressed and distressed debt
    - Start to reduce loans
Opportunistic Credit

Investment Drivers
Dramatic industry shifts alongside extraordinary policy and regulatory actions are driving market dislocations and creating uncertainty that are transforming how the credit markets function.

CAPITAL MARKETS
- Bank Disintermediation
- Less Liquidity

REGULATORY
- Regulatory aggressiveness has redefined the financing landscape
- Financing gap is most acute in Europe
- Dodd-Frank and Basel III

INDUSTRY
- Technology-driven disruption fundamentally changing industries: e.g. energy, retail, transportation
- Elevated price volatility in commodities and energy

ECONOMIC
- The path to policy normalization is expected to be bumpy and expose companies with weak financials
- Economic recession may occur during the Fund’s investment period

Portfolio Considerations
- Higher return potential than traditional fixed income strategies.
- Most products have less interest rate risk than traditional fixed income strategies.
- Diversification benefits – relatively low correlation to traditional credit and equity markets.
- Return based on manager skill, sourcing relationships, and are not reliant on leverage for returns.
Opportunistic Credit

Opportunistic credit focused strategies can be divided into two distinct approaches:

1. **Distressed (“Alternative Growth”)**: buying securities or loans at significant discounts with the anticipation of future price appreciation.

*Distressed debt through the last 20 years:*

**Multiple industries are in distress at any given time**

*As of 31 December 2015
SOURCE: Credit Suisse, Moody’s
*Distressed debt market size measured by high yield bonds trading at spreads greater than 1000 bps and institutional leveraged loans trading below a price of 80.
Refer to Appendix for additional outlook information.*
Opportunistic Credit

2. Cash Flow ("Alternative Yield"): implement strategies that focus on high current income generation. Within the Alternative Yield strategy, the most common types of assets include:

✓ Residential mortgage-backed securities (RMBS)
✓ Agency mortgage-backed securities (MBS)
✓ Commercial mortgage-backed securities (CMBS)
✓ Asset-backed securities (ABS)
✓ Collateralized debt obligations (CDO)
✓ Collateralized loan obligations (CLO)
✓ Direct Loan Origination
✓ Structured Finance
✓ Performing Loans
III. Manager Search Process
Manager Search Process Review (1 of 3)

Step 1
- **Initial Screening**
  - TMRS evaluated market opportunity and did an initial screening of potential managers.
  - TMRS fixed income team filtered managers with potential fit in the opportunistic credit strategy.

Step 2
- **Opportunistic Credit Manager Identification**
  - RVK and TMRS (team) identified 25 managers with opportunistic credit managers capabilities.

Step 3
- **Semi-Finalist Candidate Analysis (Best ideas)**
  - The team selected 7 managers to move to the semifinals.
  - Each of the 7 semi-finalist candidates was scored independently by the team.

Step 4
- **Finalist Candidate Analysis**
  - Based on the scoring, 4 managers were selected to move to the finals.

Step 5
- **Final Due Diligence & Manager Selection**
  - On site due diligence was performed at the 4 finalist locations.
  - The team re-ranked the managers.
  - 5 strategies across 3 managers were selected for recommendation to the Board.
Manager Search Process Review (2 of 3)

After an initial screening was completed by TMRS, the fixed income staff collaborated with RVK (the team) and identified 25 managers for further review. As a result of this review, the team carefully selected 7 managers for the semi-finalist stage. The criteria used for this selection was:

- Portfolio fit
- Broad capabilities and knowledge within their specific sector
- Proven track record

7 managers were selected to advance to the semifinalist. Next table shows the scoring of these managers.

<table>
<thead>
<tr>
<th>Scoring Category</th>
<th>Possible Points</th>
<th>Beach Point</th>
<th>Marathon</th>
<th>PIMCO</th>
<th>Oak Hill</th>
<th>Comp 1</th>
<th>Comp 2</th>
<th>Comp 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>People (Firm &amp; Team)</td>
<td>0 - 25</td>
<td>24.5</td>
<td>25.0</td>
<td>23.5</td>
<td>22.5</td>
<td>23.7</td>
<td>23.0</td>
<td>21.3</td>
</tr>
<tr>
<td>Process (Investment Process &amp; Risk Management)</td>
<td>0 - 25</td>
<td>24.5</td>
<td>24.3</td>
<td>24.8</td>
<td>23.8</td>
<td>23.3</td>
<td>22.0</td>
<td>20.7</td>
</tr>
<tr>
<td>Performance History</td>
<td>0 - 25</td>
<td>24.0</td>
<td>23.5</td>
<td>23.8</td>
<td>23.3</td>
<td>21.3</td>
<td>22.0</td>
<td>17.7</td>
</tr>
<tr>
<td>Philosophy/Strategy (Attractiveness of Opportunity/Portfolio Fit)</td>
<td>0 - 12.5</td>
<td>12.4</td>
<td>12.4</td>
<td>12.1</td>
<td>10.9</td>
<td>10.6</td>
<td>9.7</td>
<td>8.8</td>
</tr>
<tr>
<td>Terms (Fees, Liquidity, etc.)</td>
<td>0 - 12.5</td>
<td>11.4</td>
<td>12.5</td>
<td>11.5</td>
<td>10.8</td>
<td>11.5</td>
<td>10.0</td>
<td>12.5</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>96.8</td>
<td>97.6</td>
<td>95.6</td>
<td>91.1</td>
<td>90.3</td>
<td>86.7</td>
<td>81.0</td>
</tr>
</tbody>
</table>
Based on previous scoring, the team selected the 4 top managers to move to the finals. The team performed on-site due diligence for each manager. Next table shows how these managers were re-ranked.

<table>
<thead>
<tr>
<th></th>
<th>Beach Point</th>
<th>Marathon</th>
<th>Oak Hill</th>
<th>PIMCO</th>
</tr>
</thead>
<tbody>
<tr>
<td>TMRS 1</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>TMRS 2</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>RVK 1</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>RVK 2</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

After careful consideration and completing extensive analysis in addition to establishing the complementarity of each manager within a portfolio context, the team decided to recommend five strategies from the top three managers for approval at the June Board Meeting.
IV. Manager Selection Recommendations
## Executive Summary of Manager Recommendations

### Summary of Recommendations

<table>
<thead>
<tr>
<th>Recommended Fund</th>
<th>Strategy Focus</th>
<th>Recommended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beach Point Total Return Fund II LP (Beach Point)</td>
<td>Event Driven – Distressed/Restructuring</td>
<td>$200 million</td>
</tr>
<tr>
<td>Marathon Structured Product Strategies Fund, LP (SPS)</td>
<td>Multi-Strategy Structured Credit-Relative Value</td>
<td>$150 million</td>
</tr>
<tr>
<td>Marathon European Credit Opportunity Fund III, LP (ECO)</td>
<td>Multi-Strategy Structured Credit-Relative Value</td>
<td>$100 million</td>
</tr>
<tr>
<td>Marathon CLO Equity Fund, L.P. (CLO)</td>
<td>Multi-Strategy Structured Credit-Relative Value</td>
<td>$50 million</td>
</tr>
<tr>
<td>PIMCO Corporate Opportunities Fund II Onshore Feeder, L.P. (COF II)</td>
<td>Event Driven – Distressed/Restructuring</td>
<td>$200 million</td>
</tr>
</tbody>
</table>

**Total Recommendation** | **$700 million** |
Top Candidate Characteristics – Beach Point  (1/2)
$200 Million Recommendation

**Strategy Focus: Event Driven – Distressed/Restructuring**

**Firm**
- Beach Point Capital Management was founded in 2008 by Co-CIOs Carl Goldsmith and Scott Klein and remains 100% employee owned. The firm was spun out of Post Advisory Group, where Carl and Scott ran the alternative fixed income business. The two have worked together since 1997.
- The firm manages over $10 billion, specializing in opportunistic credit, high yield, and distressed/special situations.
- The firm is headquartered in Los Angeles with additional offices in London and New York.

**Team**
- 87 employees with 35 investment professionals with an average industry experience of 13 years.
- Low turnover within the firm, with no senior level departures since inception.
- Members of the investment team have a legal background, which lends well to building out covenant analysis and debt restructuring expertise.
Proposed Mandate
• Beach Point is their flagship opportunistic credit product. It is a dynamic portfolio seeking the best opportunities across the credit markets.
• Investments run up and down the capital structure and across asset classes, with a focus on stressed credit, distressed debt, special situations, securitized credit, senior loans and event-driven bonds.

Strategy
• This is a credit-oriented strategy that uses a fundamental bottom up approach to selecting investments.
• The investment team seeks to add value by concentrating on areas that are more complex or underfollowed, where they may have an information advantage.
• Process relies heavily on research coverage, including company due diligence and legal analysis of debt documentation/covenants
• The credit research process is augmented by in-house legal expertise.

Investment Case
• Differentiated focus
• Diversification
• Legal expertise
• Team and experience

Issues to Watch
• Limited liquidity
• Event driven strategy
• Potential limitations to size up best ideas
Top Candidate Characteristics – Marathon (1/3)

$300 Million Recommendation

Strategy Focus: Multi-Strategy Structured Credit-Relative Value

Firm
- Marathon was founded in 1998 by Bruce Richards and Louis Hanover.
- The firm manages over $12 billion focusing on developed markets, emerging markets, structured credit (ABS, CMBS, etc.), leveraged loans, and real estate.
- The firm is headquartered in New York with additional offices in London and Singapore.

Team
- 150 employees and 80 investment professionals.
- Investment committee of 15 members with an average of 25 years of industry experience.
- Separate, dedicated, teams across main strategies encompassing this mandate, structured credit, leveraged loans, and real estate. Additional resources for leasing, loan origination and underwriting.
Proposed Mandate

- Marathon will facilitate investment in three of their multi-strategy thematic drawdown funds in order to provide a high level of diversification, potential return enhancement and significant fee reductions for TMRS.
- Participation in all three funds allows TMRS to realize the benefits of multiple differentiated opportunistic credit strategies:

Strategies

1. **SPS ($150 million)**
   SPS seeks attractive yield oriented returns by originating, purchasing, managing, and financing structured and secured assets across the following sub-strategies:
   - Origination Assets
   - Asset-Backed Leases
   - Legacy Assets
   - Assets with Structural Leverage

   **Investment Case**
   - Deep fundamental analysis
   - Robust dedicated team w/12 years experience
   - High current income assets
   - Opportunistic approach
   - Diversification

   **Issues to Watch**
   - New staff recently added
   - Overlapping strategies
Top Candidate Characteristics – Marathon (3/3)

$300 Million Recommendation

2. ECO ($100 million)
• Fund seeks to capture value from special situations and stressed/distressed opportunities coming out of the European credit crisis and bank deregulation.
• Allocate capital across European based assets, including:
  • Real estate, including residential, commercial, and multi-family properties across Europe.
  • Corporates, specifically the debt and equity of entities facing reorganization, restructurings, liquidations or bankruptcy proceedings.

Investment Case
• Local European resources
• Strong credit platform
• European bank disintermediation
• European credit cycle
• Ability to transact quickly

Issues to Watch
• Local competition
• European team experienced fast growth

3. CLO ($50 million)
• Invest in the equity tranche of a Collateralize Loan Obligation (CLO) alongside manager.
  • Underlying holdings are a basket of leveraged loans, which are similar to high-yield bonds except secured, floating rate, with stronger documentation.
  • Interest from assets are distributed quarterly to equity investors after paying interest on liabilities and other fees/expenses.

Investment Case
• Long track record as a CLO manager
• Recent market correction
• Attractive yields
• Low price volatility
• Low interest rate sensitivity

Issues to Watch
• Recent distress
• Market regulation
Top Candidate Characteristics – COF II (1/2)

$200 Million Recommendation

Strategy Focus: Event Driven – Distressed/Restructuring

Firm
- PIMCO was founded in 1971. The firm is a wholly owned subsidiary of Allianz SE.
- The firm manages over $1.5 trillion across fixed income, alternatives, asset allocation and equity strategies. Over 80% of AUM in non-core strategies, with $24 billion across alternative strategies.
- Began investing in alternative credit space in 2008. First iteration of this fund was launched in 2010.
- The firm is headquartered in Newport Beach with 13 additional offices globally.

Team
- 2300 total employees firm wide with 240 portfolio managers and 115 analysts.
- Corporate opportunities platform has a dedicated team, with senior level contributors brought in as external hires. Strengths of this team lies not only with their expertise and experience, but also in their ability to leverage the broader firms extensive resources.
Top Candidate Characteristics – COF II (2/2)

$200 Million Recommendation

Proposed Mandate

• COF II which invests in both distressed and special situations holdings across both public and private firms.
• The strategy intends to target firms where they can obtain significant influence to drive specific outcomes.

Strategy

• An emphasis is placed on propriety (unsolicited deal flow, past investments, internal network) deal sourcing, where the firm feels they may have more room for negotiations.
• Strategy is managed by an Investment Committee structure to ensure dialogue across different corporate disciplines.
• Strategy harnesses the firm-wide corporate alternatives expertise supplemented by PIMCO’s macroeconomic leadership and analytical resources.
• Idea generation comes from both internal (macroeconomic process, existing credit team) and external sources (industry relationships, networks, etc.)

Investment Case

• PIMCO platform:
  • One of the largest below investment grade debt holders
  • Vast resources
  • Long term partner
• Focus on capital preservation
• Middle market focus

Issues to Watch

• Event driven strategy
• Recently assembled team
V. Requested Board Action
Requested Board Action

- TMRS Staff and RVK recommend that the Board of Trustees approve the selection of the following investments:

  - Beach Point $200 million
  - SPS $150 million
  - ECO $100 million
  - CLO $50 million
  - COF II $200 million
Disclosure

TMRS periodically discloses public information that is not excepted from disclosure under Section 552.0225(b) of the Texas Public Information Act. Information provided by a manager, a general partner or other data provider to TMRS or a TMRS service provider, and contained in these materials, may have been independently produced or modified by TMRS or the TMRS service provider.