The New Paradigm for Portfolio Construction
Harnessing the Power of Liquid Alternatives

June 2012
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Envestnet, Inc. (NYSE: ENV)

Envestnet, Inc. (NYSE: ENV) is a leading provider of technology-enabled wealth management solutions to investment advisors. Envestnet's Advisor Suite software empowers advisors to better manage client outcomes and strengthen their practice. Envestnet offers advanced portfolio solutions through its Portfolio Management Consultants Group, Envestnet | PMC. Envestnet | Tamarac provides leading rebalancing, reporting and practice management software. Envestnet | Prima provides institutional-quality research and due diligence on investment and fund managers. Envestnet | Vantage gives advisors an in-depth view of clients’ investments, empowering them to give holistic, personalized advice.

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Today’s Speaker
Ryan Tagal, Vice President, Product Management
Envestnet, Inc.

Ryan Tagal is the vice president of product management at Envestnet and focuses on the firm’s separately managed account program and PMC manager research. He serves on Envestnet’s liquid alternatives group. Tagal’s responsibilities include the development of Envestnet’s classification and portfolio construction framework for mutual funds that employ alternative investment strategies.

Prior to joining Envestnet, Tagal led Morningstar’s hedge fund initiative. In this role, he oversaw the development of Morningstar’s hedge fund database, associated product development, and related research and methodology. Tagal also served as director of quantitative research at Cerulli Associates, where he initiated Cerulli’s research in managed accounts, alternative investment products and hedge funds.

Mr. Tagal has frequently been quoted in financial publications such as The Wall Street Journal, Barron’s and BusinessWeek. He holds an S.B. in physics from MIT and an MBA from the University of Chicago.
How to Ask a Question

1. Click on "Questions".
2. Enter your question and click "Send".

Audio Mode: Use Telephone

Dial: +1 (312) 878-0222
Access Code: 293-433-814
Audio PIN: 74

If you're already on the call, press #74# now.
Agenda

1. Defining alternative strategies
2. The alternative landscape
   a) Industry growth
   b) Key drivers of interest
3. Potential advantages of liquid alternatives
4. Implementing liquid alternative strategies
Alternative Investments: Background
What are alternative investments?

- Alternative investment strategies have risk & return characteristics not found in traditional long-only portfolios.
- These characteristics typically occur in portfolios with the ability to use leverage, sell short some type of market exposure, or access non-correlated opportunities.

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Product Type</th>
<th>Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional</td>
<td>• Equities</td>
<td>• Mutual Fund</td>
</tr>
<tr>
<td></td>
<td>• Fixed Income</td>
<td>• ETF</td>
</tr>
<tr>
<td></td>
<td>• Cash</td>
<td>• Separate Accounts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Individual Securities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Long-only</td>
</tr>
<tr>
<td>Alternative</td>
<td>• Long/short</td>
<td>• LP, LLC (i.e., Hedge Funds, Fund of Funds, Private Equity Funds)</td>
</tr>
<tr>
<td></td>
<td>• Global macro</td>
<td>• Long/short</td>
</tr>
<tr>
<td></td>
<td>• Arbitrage</td>
<td>• Global macro</td>
</tr>
<tr>
<td></td>
<td>• Trading strategies</td>
<td>• Arbitrage</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Trading strategies</td>
</tr>
</tbody>
</table>
Liquid Alternatives
Definition

Liquid Alternatives
• Mutual funds or ETFs that are registered with the SEC under the 1940 Act and that:
  – Seek returns that are uncorrelated with traditional asset classes
  – Employ unique or non-traditional investment strategies, including selling short or employing derivatives
Liquid Alternatives
Definition

Liquid Alternatives

- Liquid alternatives have many of the same characteristics of traditional alternatives but eliminate some disadvantages by offering:
  - Daily liquidity
  - Transparency
  - Reduced fee structure
  - Efficient tax reporting
  - No accreditation issues
  - Low investment minimums
The Alternative Investments Landscape
Liquid Alternatives on the Rise
Product Developers Meeting Demand

• According to Cerulli, alternative mutual fund assets experienced explosive growth – near tripling in assets between 2008 and 2011, going from $78B in AUM to $214B in AUM, compared to just 55% overall growth for the mutual fund industry over the same time period.
• Firms launched 72 new alternative mutual funds in 2011 – a new record.
• New launches had never exceeded 50 in a year.
• Managers are growing their alternatives staff
  – On average they employ 12 alternative investment-focused professionals dedicated to product, marketing and sales in 2012, up from 10 employees in 2011.
Assets & Growth Rate of Alternative Mutual Funds (2003-2011)

Source: Cerulli Associates, 2012
Net Flows of Alternative Mutual Funds
2003 – 2011

Source: Cerulli Associates, 2012
Drivers of Interest

Advisors recognize the need to incorporate alternatives into a portfolio, but need a way to communicate that in a meaningful way to individual investors.
Significant Drivers of Interest
2011 vs. 2012

<table>
<thead>
<tr>
<th>Category</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investors need alternatives to optimize the risk-adjusted performance of their portfolios</td>
<td>73%</td>
<td>89%</td>
</tr>
<tr>
<td>Expectations regarding future capital markets returns (i.e., need to offer a variety of asset classes)</td>
<td>60%</td>
<td>72%</td>
</tr>
<tr>
<td>Need to differentiate in a competitive marketplace</td>
<td>79%</td>
<td>56%</td>
</tr>
<tr>
<td>Demand from institutional clients</td>
<td>64%</td>
<td>53%</td>
</tr>
<tr>
<td>Demand from financial advisors</td>
<td>53%</td>
<td>53%</td>
</tr>
<tr>
<td>Demand from distributors/platforms</td>
<td>47%</td>
<td>42%</td>
</tr>
<tr>
<td>Demand from individual investors</td>
<td>27%</td>
<td>21%</td>
</tr>
</tbody>
</table>

Source: Cerulli Associates, 2012

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Advisor Interest and Challenges

Advisors’ major challenge is client education.
### Attributes Resonating Most with Advisors 2012

<table>
<thead>
<tr>
<th>Least important</th>
<th>Most important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce portfolio volatility/provide more diversification</td>
<td>4.65</td>
</tr>
<tr>
<td>Risk reduction</td>
<td>3.67</td>
</tr>
<tr>
<td>Provide greater return opportunity/more alpha</td>
<td>2.61</td>
</tr>
<tr>
<td>Hedge against inflation/real returns</td>
<td>2.18</td>
</tr>
<tr>
<td>Defensive play/bear market protection</td>
<td>2.11</td>
</tr>
</tbody>
</table>

**Source:** Cerulli Associates, 2012
Challenges to Development & Delivery
2012

Source: Cerulli Associates, 2012
How Much Should Individual Investors Allocate to Alternatives?

Asset Managers’ Recommended Alternative Investments Allocation
By Investor Risk Tolerance
2011

Conservative

<table>
<thead>
<tr>
<th>Allocation Range</th>
<th>Percentage</th>
<th>Pie Chart</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%-5%</td>
<td>64%</td>
<td>Green</td>
<td>16%-25% (18%)</td>
</tr>
<tr>
<td>6%-15%</td>
<td>18%</td>
<td>Green</td>
<td>6%-15% (18%)</td>
</tr>
<tr>
<td>16%-25%</td>
<td>18%</td>
<td>Green</td>
<td>16%-25% (18%)</td>
</tr>
</tbody>
</table>

Moderate

<table>
<thead>
<tr>
<th>Allocation Range</th>
<th>Percentage</th>
<th>Pie Chart</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%-5%</td>
<td>6%</td>
<td>Blue</td>
<td>6%-15% (82%)</td>
</tr>
<tr>
<td>6%-15%</td>
<td>16%</td>
<td>Blue</td>
<td>16%-25% (18%)</td>
</tr>
</tbody>
</table>

Aggressive

<table>
<thead>
<tr>
<th>Allocation Range</th>
<th>Percentage</th>
<th>Pie Chart</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%-5%</td>
<td>26%</td>
<td>Blue</td>
<td>6%-15% (10%)</td>
</tr>
<tr>
<td>6%-15%</td>
<td>40%</td>
<td>Blue</td>
<td>16%-25% (40%)</td>
</tr>
<tr>
<td>16%-25%</td>
<td>50%</td>
<td>Blue</td>
<td>26%-40% (50%)</td>
</tr>
</tbody>
</table>

Note: Each slice represents a response. For example, for a “Conservative Investor,” 64% of those surveyed believe a 0%-5% allocation to alternatives is appropriate; 18% of those surveyed believe a 5%-15% allocation is appropriate; and 18% of those surveyed believe a 15%-25% allocation to alternatives is appropriate.

Source: Cerulli Associates, 2012
Potential Advantages of Liquid Alternatives
Why Liquid Alternatives?

The proliferation of alternative mutual funds & ETFs has provided access to some of the benefits of alternative limited partnerships without many of the drawbacks of direct hedge fund investing.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Private Partnerships (Hedge Funds)</th>
<th>Liquid Alternatives (Mutual Funds/ ETFs)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fees</strong></td>
<td>High (2% mgmt fees, 20% performance fees)</td>
<td>Low (~1.50%)</td>
</tr>
<tr>
<td><strong>Transparency</strong></td>
<td>None</td>
<td>Full</td>
</tr>
<tr>
<td><strong>Liquidity</strong></td>
<td>Limited (monthly/quarterly)</td>
<td>Daily</td>
</tr>
<tr>
<td><strong>Event Risk</strong></td>
<td>High</td>
<td>Reduced</td>
</tr>
<tr>
<td><strong>Taxes</strong></td>
<td>K-1</td>
<td>1099</td>
</tr>
<tr>
<td><strong>Capacity</strong></td>
<td>Discretionary</td>
<td>Flexible</td>
</tr>
<tr>
<td><strong>Minimums</strong></td>
<td>High</td>
<td>Low</td>
</tr>
</tbody>
</table>
Advantages

Traditional Alternatives

Advantages

• Ability to access specialist money managers employing unique approaches

• Diversification
  - Alternatives can be used as a third primary asset class

• Risk reduction
  - Potential risk reduction through low correlation

• Performance
  - Potential return enhancement through use of unique strategies
Disadvantages
Traditional Alternatives

Historical Disadvantages

• Limited liquidity
  – Ability to liquidate holdings often difficult

• Limited transparency
  – Difficult to obtain insight into portfolio holdings/strategy

• Limited availability
  – Best managers often closed to new investors

• Fees
  – High fees often charged by even mediocre funds
Alternatives Can Offer Capital Protection

Source: Zephyr Associates, Inc.
Alternatives Can Offer Capital Protection

Up/Down Capture
January 1, 1990 - August 31, 2011

Source: Zephyr Associates, Inc.
A Framework for Liquid Alternatives
Framework for Liquid Alternatives
Use in Portfolios

What is it?

- An investment framework and solution set empowering advisors to effectively and efficiently construct portfolios benefiting from exposure to liquid alternatives
Framework for Liquid Alternatives
Use in Portfolios

What does the program consist of?

- A liquid alternatives platform
  - A systematic process for identifying and classifying liquid alternatives vehicles
  - A statistically-determined system of liquid alternatives asset classes or clusters
  - A rigorous quantitative and qualitative approval process resulting in a liquid alternatives Approved List

- A portfolio construction framework
  - A framework for determining how much to allocate to liquid alternatives
  - Objective guidance on the composition of liquid alternatives portfolios
Framework for Liquid Alternatives
Program Goals

**Understanding and Access**
Help advisors better understand the landscape of alternative investment strategies and provide access to liquid alternative solutions. Ongoing education is essential.

**Research**
Deliver a research methodology that assists advisors in manager selection. We believe that a liquid alternatives approval process should be objective, transparent, and consistent with a traditional, long-only approach.
Framework for Liquid Alternatives
Program Goals

**Implementation Framework**
Provide a framework to help advisors implement alternatives into client portfolios.

**Insight**
Assist advisors with varying levels of need. While some advisors may simply reference our classification scheme, others may prefer to leverage PMC’s portfolio construction skill.
# PMC Liquid Alternatives

## Strategy Framework

<table>
<thead>
<tr>
<th>Implementation</th>
<th>Strategy</th>
<th>Objective</th>
<th>Beta</th>
<th>Example Strategies</th>
</tr>
</thead>
</table>
| Equity Complement | Hedged Equity  | • Seeks to reduce overall equity portfolio volatility by hedging or through distinct sources of equity returns | 0.4-0.6   | • Long/ Short  
|                 |                |                                                                            |            | • Options Hedge  
|                 |                |                                                                            |            | • Merger Arbitrage  |
|                 | Hedge FoFs     | • Seeks to **Diversify** across multiple strategies to seek different sources of returns | ~0.5      | • Portfolio of funds  |
|                 | Multi-Strategy | • Seeks to add value through tactical allocation shifts across various strategies | 0-0.5     | • Global Tactical  
|                 |                |                                                                            |            | • Global Macro  |
|                 | Equity Arb     | • Seeks to benefit from differences in acquiring and target company stocks  | ~0.2      | • Merger Arbitrage  
| Fixed Income Complement | Strategic Income | • Seeks to exploit inefficiencies in the fixed income markets | ~0        | • Convertible Arbitrage  
|                 | Market Neutral | • Seeks to capitalize on a non-trending equities market by singling out stock picking ability and targeting zero equity beta | ~0        | • Absolute Return  
|                 | Managed Futures| • Seeks to tap into non-correlated source of returns across multiple asset classes | ~0        | • Passive  
|                 |                |                                                                            |            | • Trend Following  
|                 |                |                                                                            |            | • Portfolio of Funds  |
|                 | Short Bias     | • Seeks to reduce equity exposure or implement a tactical view to potentially profit from a declining equity market | -0.2 – (-1.0) | • Passive Inverse  
|                 |                |                                                                            |            | • Sector Bearish  |
PMC Liquid Alternatives: Portfolio Construction

Risk-Based Portfolios: Portfolio Construction Process

- PMC’s portfolio construction process uses advanced optimization techniques to determine:
  - How much to allocate to alternatives
  - What we believe are the best possible combination of alternative sub-strategies

- Objective: minimize Conditional Value at Risk (CVaR) – or expected shortfall risk – of the overall portfolio, including alternatives
  - Traditional Mean-Variance Optimization (MVO) assumes a normal return distribution
  - In reality, distributions are non-normal, and typically exhibit “fat tails”
  - CVaR is an optimization process which takes into account non-normality and minimizes the fat tails
Using CVaR to Minimize “Fat” Left Tails

Include alternatives or other diversifying asset classes to the long-only portfolio in order to minimize CVaR (i.e., reduce “fat” left tail).

- The size of the allocation to diversifying assets will depend on the desired tracking error (TE) or beta between the overall and long-only portfolios.
  - The higher the TE or beta reduction that is acceptable, the larger the allocation to alternatives.
## Determining Liquid Alternatives Application

### 1. Allocation Decision

**Allocate to Liquid Alternatives?**

- **YES**

### 2. Determine Objectives

- **Seek complementary exposure to existing fixed income allocation**
- **Potentially obtain protection against rising interest rates**
- **Potentially enhance risk-adjusted return of portfolio**

- **Minimize risk of overall portfolio**
- **Reduce “fat tail” exposure.**
- **Willing to tolerate somewhat lower return**
- **Potentially enhance risk-adjusted return of portfolio**

- **Seek complementary exposure to existing equity allocation**
- **Potentially obtain upside participation with reduced correlation**
- **Potentially enhance risk-adjusted return of portfolio**

#### 2.1. Fixed Income Complement
- **Seek complementary exposure to existing fixed income allocation**
- **Potentially obtain protection against rising interest rates**
- **Potentially enhance risk-adjusted return of portfolio**

#### 2.2. Diversifier
- **Minimize risk of overall portfolio**
- **Reduce “fat tail” exposure.**
- **Willing to tolerate somewhat lower return**
- **Potentially enhance risk-adjusted return of portfolio**

#### 2.3. Equity Complement
- **Seek complementary exposure to existing equity allocation**
- **Potentially obtain upside participation with reduced correlation**
- **Potentially enhance risk-adjusted return of portfolio**

### 3. Implement Application

- **Fixed Income Complement**
- **Diversifier**
- **Equity Complement**
Determining Liquid Alternatives Application

- **Fixed Income Complement**
  - Min: 10%
  - Max: 40%
  - Suggested: 20%
  - Long-Only: 60-90%

- **Diversifier**
  - Min: 10%
  - Max: 40%
  - Suggested: 25%
  - Long-Only: 60-90%

- **Equity Complement**
  - Min: 10%
  - Max: 40%
  - Suggested: 25%
  - Long-Only: 60-90%
Determining Liquid Alternatives Application
Initial Allocation

- **Fixed Income Complement**
  - Equity: 64%
  - Fixed Income: 20%
  - Complement: 16%
  - Suggested: 20%

- **Portfolio Diversifier**
  - Equity: 25%
  - Fixed Income: 60%
  - Complement: 15%
  - Suggested: 25%

- **Equity Complement**
  - Equity: 80%
  - Complement: 15%
  - Fixed Income: 5%
  - Suggested: 25%
Determining Liquid Alternatives Application

Initial Allocation

- **Fixed Income Complement**:
  - Suggested: 20%
  - Equity: 40%
  - Fixed Income: 10%
  - Complement: 50%

- **Portfolio Diversifier**:
  - Suggested: 25%
  - Equity: 38%
  - Fixed Income: 25%
  - Diversifying Complement: 38%

- **Equity Complement**:
  - Suggested: 25%
  - Equity: 38%
  - Diversifying Complement: 13%
  - Fixed Income: 50%

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Determining Liquid Alternatives Application
Initial Allocation

- **Equity Complement**: 60%
  - 20% Equity
  - 40% Fixed Income

- **Portfolio Diversifier**: 60%
  - 25% Equity
  - 35% Fixed Income
  - 15% Diversifying Compliment

- **Fixed Income Complement**: 80%
  - 20% Equity
  - 80% Fixed Income

Suggested allocations:
- **20%**: Equity
- **25%**: Equity
- **25%**: Equity
Summary

• Alternative investments can offer valuable diversifying investment characteristics when combined with traditional asset classes and may offer superior risk-adjusted returns.

• Traditional alternatives have some inherent structural disadvantages and can be limited in accessibility.

• Liquid alternatives enable any investor to access the potential beneficial investment characteristics of alternatives without the limitations of traditional structures.

• As with traditional alternatives, a rigorous fund selection and implementation framework is essential for a liquid alternatives program.
Paradigm Liquid Alternatives

New Choices for New Challenges
Harnessing the Power of Liquid Alternatives
Paradigm Liquid Alternatives
THANK YOU FOR YOUR PARTICIPATION
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