For many years, cutting edge investment officers in endowments, foundations, pensions and corporations followed an investment model first introduced by one man close to 30 years ago. David Swensen, Chief Investment Officer at Yale University, dominated the investment world with his “Endowment Model” philosophy, articulated in his book *Pioneering Portfolio Management*. But then the 2008 financial crisis and resulting liquidity crunch left investors wondering if the endowment model had broken.

Five years later, investment officers still worry. Where will the next crisis come from and what kind of weakness will it reveal in their portfolios? How will they grapple with it? What asset allocation approach will help them achieve returns without inflicting new pain? While investors sought new ways to think about their asset allocation models, just talking about it did not help. The time had come to act.

Inspiration again came from David Swensen. The story goes that the Endowment Model was born back in the 1980s, when he gathered his colleagues, took out a blank piece of paper, and charged them to build a new model from the ground up.

The Portfolio Whiteboard Project (PWP) on May 14, 2013 sought to replicate Swensen’s process by convening a roomful of experts to see what they would produce if they were handed a blank whiteboard. Close to 30 investment officers – representing next generation leaders from endowments, foundations, public and corporate pension plans and insurance companies – collaborated with 10 asset managers to answer one key question:

“How would you allocate your portfolio if you could start from just a blank whiteboard?”

We posed this as an asset allocation challenge but quickly learned that our constituents faced a much bigger problem - the very framework of investing, from governance to execution, needs to be re-considered - and perhaps that was the most important insight of the project. It’s not just an isolated issue of choosing the perfect asset allocation, but a broader question of systems and process.

In this white paper, we present the insights, concerns, and conclusions of the investment professionals working on the front lines of top institutions. Revolution wasn’t on our agenda, but rather an evolution that changes the way overseers of long-term pools of capital think about their responsibilities and how they can best manage them according to their individual institutional needs and capabilities. We view this paper as a starting point for an important conversation that will unfold over time.

Please join the conversation and post your comments online at theuncorrelated.wordpress.com.
Executive Summary

The next generation model for institutions is not simply about asset allocation but about the entire investing framework – governance, asset allocation, and execution. Components of the model are not functioning because of faulty deployment:

- **Governance has regressed**, unable to assign responsibility effectively and create an environment of flexibility and empowerment
- **Asset allocation is undergoing a sea change**, but the apparatus around the shift is out of sync, slowing innovation and adoption
- **Execution and monitoring** require more sophisticated support both in terms of systems and personnel

Three components to the Endowment Model: Governance, Asset Allocation, Execution

At the PWP workshop in May, we challenged the asset managers and investors in the room to design a model for a $2 billion portfolio with a return objective of 7%-8% per annum over the next 20 years. We presented the exercise as an opportunity to "break the endowment model". The workshop participants split into three different groups and built up to the objective first by selecting big investing themes, then by choosing assets and risk premia that could take advantage of those themes, and finally, by creating a model to present to their peers.

Very quickly we learned that the word “model” was surprisingly ambiguous. The ambiguity turned out to be the greatest asset of the day. The three groups came back with very different models designed around fundamentally different aspects of investing:

- Governance, asset allocation, execution. Those differences gave us insight into what was on the minds of the next generation of Chief Investment Officers. We used the phrase “Endowment Model” interchangeably with “asset allocation.” But we came to see that “Endowment Model” should really mean “the model for managing an institution’s assets” - the real contribution made by David Swensen. The phrases were used interchangeably, but one meant “process” and the other means “allocation”.

This subtlety in nomenclature matters. It affected the outcome at the PWP workshop, essentially an investing laboratory. It signaled something important. Institutions who say they have adopted the Swensen endowment model have perhaps failed to incorporate its most central feature: the process underlying it. Swensen's model isn’t just a recipe for asset allocation -- although that may be a result of the process.

The uninvited guest at the PWP workshop was the ghost of the 2008 financial crisis. It hovered over the conversations in every room and infused each with angst. The PWP asked participants to “break” the endowment model, but as it was, some were wondering if the model wasn’t already broken. Hadn’t the model already failed them? In retrospect, as we analyzed the day with our editorial board, we re-phrased the question: Did investors
and managers fail to understand the model itself? What, after all, is a model? As one investor observed: “The Yale Model is more about process. How do we examine the world and make optimal decisions given the unique constraints of our portfolio?”

The answer to that question turned out to be complex. Each group of investors responded by focusing on what they saw as the weakest link in the model. After lengthy review and numerous conversations, the PWP drew out the key components that each group felt needed revising. In our view, this is the stepping-off point -- a call to action -- for the next generation of investment officers and stewards of long-term capital.

I. Governance: Lagging despite well-documented best practices

What is needed:
- Mission-driven culture
- Principles for execution
- Clearly defined roles
- Long-term mindset

Governance turned out to be *primus inter pares*, the leading component that both needs fixing and promises to give investment officers what they most need to succeed. “It is noteworthy to point out that Yale’s success also has a great deal to do with the latitude given to the investment team, i.e. governance structure and mindset,” commented one investor. Said another: “Most importantly, the Swensen Model is based on simple, core, fundamental principles that are specific enough to be actionable but broad enough to apply across different market environments and different institutions.” In other words, the Yale Model was not just an asset allocation program but a comprehensive approach to investing that embraced governance issues, process, and creativity.

Governance establishes the process and puts the policies and procedures in place to ensure investment officers can execute. Through a principle-based system, it gives them the latitude to achieve their goals. “The discussion of asset allocation is in many ways secondary to the conversation of effective governance and execution because without effective governance no one will be able to implement a new and exciting model for asset allocation, assuming such a model exists.”

This is particularly important during rough patches. “Every approach works well sometimes and poorly other times. In order for the approach and investment staff to survive these periods, the governance structure needs to understand and believe in the process,” said one participant.

The investment officers agreed a mission statement that reveals the culture and core investing principles was the key to empowering them to implement investment objectives and policy. “In a very crowded world, there is something special in a mission-driven investment program that is next to impossible to recreate in a commercial setting. We need to keep this ‘secret sauce’ alive in the future.”

Participants also sought a set of guidelines from their boards that would clearly define responsibilities and empower them to make decisions. This stronger governance vision would give the boards and committees oversight,
while giving investment officers more flexibility. Such mandates would actually improve their ability to implement the investing goals of their institutions.

Investment officers also felt that ironically, their boards were more subject to short-term pressures than they were themselves. Boards frequently answer to stakeholders and the press—people with strong opinions but limited financial knowledge. These political constraints prevented them from taking advantage of their core investment strength, their long-term investment horizon, and the ability to be opportunistic or concentrated or contrarian. Said one investor: “The political risk of being different from your peers is meaningful. For those of us that dare to step further and further out on a limb, we look increasingly different and become easier targets for public/donor scrutiny. Herding is not good, but face it, you will be compared to your peers regardless of how faulty that comparison may be.”

II. Asset allocation: In transition, embracing new approaches

Where it is heading:
- Objectives-based choices
- Risk framework
- Asset classes more broadly defined
- Vehicle agnostic

Investors argued to toss aside the classical asset class divisions in favor of a system built around the components of return and risks and geared to achieving specific objectives. The objectives could include classic themes, like growth or inflation hedging or forms of market risks. The key point is that they choose objectives first and then select assets based on their underlying risk premia.

As one investor put it, “I would encourage investors to consider viewing their portfolio through a ‘risk lens’ as opposed to a ‘capital lens’ and asking themselves—how will I get paid for taking this risk? Does a risk premium exist for this? Why are people ‘underpricing’ these assets?”

As a result of this shift, traditional asset class definitions are becoming increasingly irrelevant. Caution off guard by unexpected correlations during the financial crisis, investment officers today are viewing assets in terms of the underlying risk premia and their potential for "co-movement". Instruments that would have once been in different allocation buckets are now grouped together. For instance, high yield corporate bonds may end up grouped with equities because their performance characteristics are similar.

Many investment officers have become vehicle agnostic. For instance, asset allocation policies should not have a dedicated allocation to “hedge funds”. They are an investment vehicle. Such an allocation tells you nothing of the risk you take. An allocation to “hedge funds” makes no more sense than an allocation to “mutual funds”.

Rather, a hedge fund vehicle should be included in a broader asset allocation and risk framework. For example, a long/short equity hedge fund and a private equity investment should be viewed as part of an equity allocation. This approach requires investors to set a liquidity budget along with their asset allocation policy, since different vehicles do have different liquidity profiles.

Investment officers who are switching to this asset allocation approach face a more complex road ahead when it comes time to explaining the portfolio to the overseers of their funds. After identifying the portfolio objectives, investors must then map the objectives to specific assets with components and risk premia that they believe will embody their goals. This brings the PWP to the next challenge: Execution.

Objectives Based Portfolio Example
- Liquidity (0-5%)
- Inflation (0-15%)
- Return Generation (80-100%)

Mapping Assets Example
- Return Generation: equity and credit risk
- Inflation: real assets
- Deflation: cash and interest rate risk
- Alpha: trading portfolio
III. Execution & Process — adding complexity but boosting oversight

New demands on (1) asset class selection and (2) monitoring

- Map objectives to appropriate assets classes
- Monitor risk
- Reporting to governors

Objective-based investing sounds great. But the reality is this: Asset classes remain the only game in town for expressing investment objectives. For the most part, portfolio managers can’t go to the board and simply say, “We just bought an ‘inflation hedge’ fund”. While derivatives or vehicles like ETFs may help achieve goals, they are very unlikely to be the core of a portfolio. The objectives must be mapped to specific assets, and they must be able to explain clearly to the people in charge how the assets they select fit the bill. The objectives-based portfolio cannot be a codename for a “black box” approach.

Further, the research team still needs to be organized around assets, as does execution of the portfolio. Your objective may be to find a risk-reducer, but you will generally still need to select asset managers and require a team of asset class specialists.

This system adds a layer of complexity to the portfolio for risk management and monitoring, and it can certainly make it more expensive. Draw down tolerance must be established, stress testing must be instituted and cross-correlations must be studied. This translates into a bigger investment in systems and technology and more carefully defined processes and procedures, probably adding more personnel. Yet it gives governance ways to hold the investment office accountable, to make sure that this new framework is actually working as expected and to correct any unexpected outcomes.

### Portfolio Whiteboard Project Investment Model

1. **Governance**
   - Assumes Best Practices
   - Mission driven
   - Long-term horizon
   - Clearly defined roles

2. **Asset Allocation**
   - Objectives-based
   - Risk framework
   - Broad asset class definitions
   - Vehicle-agnostic

3. **Execution**
   - More complex organizations and processes
   - Asset classes still rule
   - Risk management and monitoring crucial
Behind the Scenes at the Portfolio Whiteboard Project Workshop

What is on the minds of next generation chief investment officers?

This section summarizes and highlights conversations that took place among three groups of next generation of chief investment officers and asset manager participants. They tackled the significant themes, most important asset classes and the key components of future investment models.

Assignment

What asset allocation model would you create if you could start today with just a blank whiteboard?

Premise

The Uncorrelated Foundation has been funded with $2 billion. The founder is flying to London tonight to attend next week’s Global ARC conference. Groups need to have the proposal done by the end of the day so the committee chair can review.

Parameters

• $2 billion portfolio
• Return objective: 7-8% per annum over the next 20 years
• Time frame: Perpetuity, but realistically long term is the next 20-25 years
• Constraints: minimal
• Liquidity: 5% per year
• Avoid a drawdown greater than 25%
• Governance: Full discretion from the committee, free reign
• Empowered to come up with your best ideas

Session 1: Determine the themes, trends, threats, opportunities investors will confront over the next 20-25 years.

Technology. Deflation. Inflation. The aging population in the developed world. The rising middle class in emerging markets. Central bank market manipulation. The themes were similar from room to room – although the emphasis on each varied. “Higher risk” was its own category in one group. Speed of information and complexity earned a spot in another; the third highlighted regulatory change in banking and geopolitical upheaval. But similar insights pinged from room to room.

One investor wondered if they were thinking big enough – that the ideas were too recognizable. Everyone seemed to be hunting for something new or fresh, but almost everyone seemed to feel that the “un-crowded” space was a phantom asset. It just didn’t exist.
Another commented: “We are assuming that finance theory will be based on interest rate returns. What if 20 years from now the world may be viewed from a different prism? More like merchant banking or Islamic finance?”

The very task of making themes came under the microscope: To be intellectually honest, one investor suggested that they should only project a few years out, because that’s how often the portfolio will need to change. Another touched on the difficulty of projecting so far ahead by asking: “Are we making a statement about the economic environment? Or are we trying to say what will happen in the next 20 years over discrete annual periods?”

“Twenty years is a long time, and everything is changing. Are we moving towards strategic or tactical asset allocation?” Chimed in another, “We have to react to short thematic moves.”

Participants struggled to come up with new themes – especially since the language of investing hasn’t changed in more than a generation. The financial crisis seriously undermined the value of Modern Portfolio Theory, yet MPT continues to dominate for manager selection and asset allocation frameworks. “How can we unlearn a lot of that?”, asked one investor.

The investors and managers noted other practical shortcomings: Pension funds are understaffed, especially public funds. Investors expressed frustrations with cumbersome governance restrictions and trustees with little financial knowledge obstructing the process. Manager selection is inefficient; the risk tolerance won’t stray beyond a comfort zone and thwarts investors from reaching their goals.

Technology was accelerating changes in the way everyone can invest and the way markets trade. The world is more transparent but also considerably more competitive. “Everything is institutionalized. That’s usually a good thing but maybe not now. I used to search for a manager, and no one had heard of them. Now there are five others competing for access,” observed one investor. “You only get paid for what is messy and complex.” The speed at which information travels has also changed the performance of assets in the portfolio. One investor notes that the turnover in his portfolio is startling. Asset prices rise much more quickly, hitting their target much earlier than anticipated. Yet the 7% annual goal of the PWP workshop seemed too hard, given the low interest rate environment.

### Session 2: Determine the asset classes, factors and risk premia that should be components of future asset allocation approaches

Key questions included:

- What instruments are available to exploit opportunities and manage risk?
- What will be the ways to execute on these themes and get paid for the risks we take?
- How will we protect ourselves from risks we want to avoid?

<table>
<thead>
<tr>
<th>“Japan” Syndrome</th>
<th>Developing /Emerging Markets</th>
<th>Market Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low rates</td>
<td>Young population</td>
<td>Banking/ Regulatory Super-structures</td>
</tr>
<tr>
<td>Low inflation—possible deflation</td>
<td>Social change</td>
<td>Visible hand (central banks)</td>
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<tr>
<td>Aging population</td>
<td>Geopolitical upheaval</td>
<td>Investment crowding</td>
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<tr>
<td>Devaluation fiat currencies</td>
<td>Rising middle class</td>
<td>Higher risk/ Speed/complexity</td>
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The value of liquidity and juggling risks in a hyper-competitive world

Is cash trash or king? The question, never expressed quite that way during the PWP conference, was a sore point. Investors lamented trustees who stopped them from keeping cash on hand for unexpected opportunities. They also lamented that they were largely under-invested. Central bank policies around the world have largely ensured super low interest rates and anomalously high values on all other assets. That is unlikely to change very soon, even as investors anticipate the end of the Federal Reserve’s asset buying program. Opportunities were both hard to find and fleeting.

Investors wondered whether they were invested in too many highly liquid assets, i.e., stocks. If endowments and pensions are truly long-term buyers, why not get the benefit of an illiquidity premium and invest in private deals or take direct stakes in projects? Even private equity firms are investing directly in water projects in Africa. But smaller funds cannot easily buy private companies. Quite apart from insufficient funds, they would lack resources to manage those companies. Hedge funds or private equity firms may provide access, but unlike pensions or foundations, they do not hold companies for perpetuity, selling them after a limited amount of time. And then there’s this reality that came up repeatedly in one form or another: “The more of us that buy illiquid investments, the smaller the premium becomes.” If you’re there first, you benefit from the piling in from peers. “Ponzi schemes,” joked one person. Bitcoin, anyone?

In pursuing an investment to match a theme, investors pondered the value of beta versus alpha. Hedge funds have been largely disappointing in recent years; they are pricey and even when they do well, they might not do well enough to justify the time spent vetting them. Perhaps a classic 60/40 portfolio with leverage and some insurance is the way to go. It all boils down to execution, some observed.

As long-term investors, the funds need to ignore the daily vagaries of the market. “The only true loss is the permanent loss of capital; mark-to-market loss or change in the market value is not a loss. There are two types of risk in foundations: risk that you can’t keep up with inflation, so the purchasing power erodes over time, and the other risk is the permanent loss of capital.”

Frontier markets, wine, weather and ETFs – the right assets for the expected trends

The participants may have disagreed over whether inflation or deflation was the greater risk in the next 20 years, but they agreed they needed to be prepared for either eventuality. Some of the traditional ways to gear up for this and other scenarios was very, very tricky. Commodities? Energy? Once they were good proxies for inflation. But advances in technology have changed consumption. The central bank tinkering in the economy has changed relationships. Will investing patterns revert to the old patterns?

Capturing bigger trends like the aging population in the developed world and the uptick of the middle class in emerging markets raised big questions over how best to profit. Senior citizen
housing and healthcare seem like good venues for US or European investing. Africa seemed like a no-brainer while China was controversial. One person said that investing indiscriminately in emerging markets wasn’t wise. Rather they should aim their funds at opportunities that profit quite specifically from a rising middle class, especially in Asia. Technology companies, regardless of country origin, perched to sell to this new cadre of consumer, would be a prime target.

Everyone cast about for new ideas. Currency as an asset class. Monetizing privacy – selling your opinions on Amazon. Wine. Intellectual property and investing in space. Another suggested they consider looking into the collections of their donors – private art and other collectibles representing trillions in value. Could they access it? Others recommended investing in the worst run countries in the world or the last Communist country on the planet. “Look at Colombia, it is an interesting example of what North Korea might become,” opined one investor. Perhaps, for geopolitical risk investing, investors should seek managers with political savvy more than financial skills.

“Twenty years is a long time, and everything is changing. Are we moving towards strategic or tactical asset allocation?” Chimed in another, “We have to react to short thematic moves.”

As long as you have a basic asset allocation that optimizes your risk profile, then you just need the best manager you can find in those different areas,” said one person. Or as another put it: “The key question is not ‘What is the optimal asset allocation model?’ but, ‘What’s the optimal selection process?’ It’s not what percentage you put in which asset, but what is in those buckets and what is the process.”

Concluded one investor: “So it is the journey, not the destination.”

Connecting Themes to Investment Opportunities and Asset Classes

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<thead>
<tr>
<th>Theme</th>
<th>Opportunity</th>
<th>Asset Classes</th>
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<tbody>
<tr>
<td>Bank Restructuring</td>
<td>Crowd Funding</td>
<td>Distressed Debt</td>
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<td></td>
<td>Recap European banks</td>
<td>Direct lending</td>
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<td></td>
<td>Claims (bankruptcy)</td>
<td>Credit markets</td>
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<td>Mortgage servicing</td>
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<td>Technology</td>
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<td>Social Media</td>
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<td>Social Change</td>
<td>Desalination, etc.</td>
<td>Infrastructure</td>
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<td>Waste management</td>
<td>Venture capital</td>
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<td>Solar/Wind</td>
<td>Private equity</td>
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<td>Foods/Agriculture</td>
<td>Commodities</td>
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<td>Shariah Law</td>
<td>Weather derivatives</td>
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<td>Global Growth (demographics)</td>
<td>US Senior housing</td>
<td>Distressed debt</td>
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<td>Spanish real estate</td>
<td>Real estate</td>
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<td></td>
<td>Regional mandates</td>
<td>Infrastructure</td>
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<td>Global healthcare</td>
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Session 3: The Models: Three core values, three approaches

In the last session, each group proposed a new institutional investment model. The three models each hooked onto different aspects of portfolio management. This came in part because each group understood the assignment differently. What exactly is a model? The answers reveal how each group would answer that question.

1. Governance, the first among equals: This group set aside questions about asset classes and focused on governance and culture: Success isn’t a product of asset class selection but rather attention to first principles. They craved a governance structure that empowered them to focus on their core strengths, to go against the tide and make strong statements.

2. Asset-agnostic, focusing on underlying risk: The second group agreed that asset classes were passé and focused on fashioning a portfolio that invested according to buckets of risk. In that scenario, certain kinds of credit could share the same risk bucket as equity or real estate investments. Benchmarks faded in importance, and the focus turned once again to process, requiring the investors to constantly monitor their decisions. The group also insisted on analysts and associates who acted as generalists, no one would be jockeying to invest as a way of boosting their own individual power in the organization.

3. Execution, the devil in the details: The third group turned its attention to execution. The participants asked: How do we find the highest rate of return? Their portfolio, at first blush, looked as if it was organized around traditional asset classes, but really it, too, was focused on allocation around core risk. They noted that asset classes are passé – an important insight. But they followed up and asked: How do you organize your research effort? They also emphasized that vehicles – with hedge funds or private equity – were a means to an end to implementation.

The key question is not ‘What is the optimal asset allocation model?’ but, ‘What’s the optimal selection process?’

Proposed models reveal the key concern in each group: governance, risk, execution

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<tr>
<th>Governance</th>
<th>Risk Allocation</th>
<th>Execution</th>
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<tbody>
<tr>
<td>Implicit questions</td>
<td>What kind of organization succeeds?</td>
<td>How do we manage risk, catch unexpected correlations, and grow?</td>
</tr>
</tbody>
</table>
| Portfolio structure | • Direct Investments  
• Center Book  
• Strategic positions  
• Internal management | Three objectives:  
• Inflation (0-15%)  
• Liquidity (0-5%)  
• Return Generation (80-100%) | • Credit risk  
• Residual risk – equity  
• Inflation protection: commodities  
• Deflation: Cash/Fixed income  
• Alpha: A trading portfolio |
| Comments | Consider a George Soros model  
• No view at first, layer one in tactically | All about process:  
• Stress testing  
• Beta analysis  
• Volatility targets  
• Max on illiquid assets | Review lock-ups and liquidity fees  
• Go far afield |
Conclusion

We launched the PWP to inspire new thinking about asset allocation among next generation institutional investors by using the same process Yale CIO David Swensen reportedly used to develop his influential “Endowment Model”. Quickly we learned that asset allocation is just one component of an overall process.

The PWP taught us that the Endowment Model – when defined as the process for managing an institution’s assets – remains unbroken. At the same time, no single investment approach suits all organizations. There is not one “Asset Allocation” model.

While the endowment model works, its elements are changing and evolving. The Portfolio Whiteboard Project identified trends in each of those elements – backsliding governance practices, new asset allocation approaches and more complex execution demands – that committees and investment staff need to evaluate versus academic research, well-documented best practices, and individual needs and capabilities.

Questions and challenges for the next generation of institutional officers

The Portfolio Whiteboard Project was an unprecedented gathering of the leaders of the next generation of institutional investors, top asset managers and industry experts. Great minds joined to collaborate on an industry challenge, engage in discussions and generate ideas. Participants gained insights, developed relationships and produced an outcome.

The participants in the Portfolio Whiteboard Project, as well as the editorial board, spent hours debating and discussing the next steps for institutional investing. The discussions were far from theoretical. In this whitepaper, we shared some of the insights the participants derived from their hard work. However, the work is far from complete, and many unanswered questions remain:

• What lessons have you learned from the Portfolio Whiteboard Project?
• What do you think of the conclusions we reached? Do you agree or disagree, and why?
• What investment ideas did you get from this white paper? What would you like to explore more?
• What would you do if you could start with just a blank whiteboard?

Continuing the Conversation

What conversations do you want to have? What challenges would you want to whiteboard with your colleagues and peers?

Please join the conversation by posting your comments and questions online at theuncorrelated.wordpress.com.

Starting in the first quarter of 2014, future Portfolio Whiteboard Workshops will focus on asset allocation, risk management and equity exposure.

To learn more register online at: theuncorrelated.wordpress.com or email info@uncorrelated.us.
Asset Management Partners

Barings is an international investment management firm with offices, clients and business lines spanning the world’s major markets. We provide investment management services within developed and emerging equity and bond markets to investors worldwide, and have $57.5 billion of assets under management as of 30 June 2013.

At Barings Asset Management, our sole focus is fulfilling our clients’ objectives by providing top-quality investment products and superior service delivered by dedicated teams of experienced and talented professionals. By combining top-down and bottom-up insights that cut across location, sector and asset classes, Barings offers a unique world-view into today’s economies and markets. Our investment professionals combine an informed perspective with local knowledge and presence to seek out investment opportunities with the potential to perform well and deliver the returns investors demand.

Today, Barings operates as a subsidiary of MassMutual Financial Group, a leading diversified financial services organization.

BNY Mellon Investment Management is one of the world’s leading investment management organizations and one of the top U.S. wealth managers. Our business encompasses BNY Mellon’s affiliated investment management firms, wealth management organizations and global distribution companies.

Our goal is to build and deliver investment strategies and solutions to meet investor needs. Drawing on deep expertise, we collaborate with you to tailor our best ideas and resources to meet your specific requirements. Through our global network we have developed a significant understanding of local requirements. We pride ourselves on providing dedicated service through our teams.

With extensive experience in anticipating and responding to the investment and financial needs of the world’s governments, pension plans sponsors, corporations, foundations and endowments, advisors, intermediaries, families and family offices, BNY Mellon Investment Management can help you reach your goals.

Cascabel Fund LP, Cascabel QP Fund LP and Cascabel Offshore Ltd. employ a traditional long-short equity strategy in pursuit of above-market returns with below-market risk across cycles. The mandate is global and opportunistic, with emphasis on the US and Asian equity markets. The methodology entails intensive company-level research of potential public market mispricings, meant to identify exceptional risk-reward. In assembling a concentrated portfolio of such investments long and short from a wide universe, Cascabel taps the experience of Portfolio Manager Scott Sinclair and Strategist Laurence Chang, whose decades of investing lend depth and perspective on sectors of interest such as media, retail, consumer products, gaming, and real estate. The firm’s collective experience also includes volatile markets and full economic cycles, informing views on region-specific market dynamics and the economic backdrop. Seeded by Julian H. Robertson, Jr. of Tiger Management LLC, Cascabel launched in September 2008.
Gapstow  
Gapstow Capital Partners is an independent, SEC-registered investment adviser with over $1 billion under management. From its inception in 2009, Gapstow has pursued a differentiated business model by focusing on unique opportunities in credit, particularly non-traditional credit, within its multi-manager portfolios. Gapstow purposely defines credit in a broad manner to include not only traditional corporate credit, but also mortgage securities, whole loans, real estate debt, hybrid bank investments (e.g., TARP and trust preferred CDOs), and a myriad of structured products. Gapstow’s mission is to help institutional investors develop appropriate standing allocations to credit, and do so in a comprehensive manner. The firm is distinguished by its ability to work in a variety of formats (hedge fund, private equity, and direct investments), as well as its ability to work with established managers to create new fund structures which capture desired risk exposures.

HighVista Strategies was founded in 2004 by an experienced group of professionals with backgrounds in endowment and hedge fund management, wealth management, principal investing and academia. The firm began investing on behalf of clients on October 1, 2005 and presently manages $3.8 billion.

Our mission is to help investors achieve their return and spending goals within their tolerance for risk. We strive to generate attractive long-term, risk-adjusted returns through active asset allocation, broad diversification, and our access to extraordinary managers and other distinctive sources of return.

Our approach is anchored in the endowment model, but is distinguished by its focus on controlling risk and maintaining liquidity. The priority we place on capital preservation and avoiding major drawdowns fosters the patient and rigorous pursuit of excess returns, and it is a critical driver of long-term outperformance. Moreover, it is designed to achieve asymmetric returns on behalf of our clients—helping them participate in rising markets while protecting capital during volatile periods.

Our clients utilize HighVista in a variety of ways: as a complete outsourced solution, as a long-term core portfolio holding, and as a tool to more efficiently manage risk through periods of changing volatility.

Morgan Creek Capital Management, LLC is an SEC-regulated investment adviser formed in July 2004 to provide investment management and advisory services to a diverse client base of institutional partners and family offices. We are a global investment management firm that harnesses the Endowment Model of investing to help clients pursue their long-term objectives. Consistent with the Endowment Model and an active management approach, Morgan Creek maintains opportunistic exposures across asset classes, from traditional equities and fixed income to alternatives such as hedge funds, private equity, real estate and venture capital. The firm offers its investment products across a platform of closed-end and open-ended funds. With the collective experience of its senior investment team, Morgan Creek was an early pioneer of the “Outsourced Investment Office.” More information on Morgan Creek’s investment team and strategies is available at www.morgancreekcap.com.
At Principal Global Investors, designing and delivering the investment solutions that our clients need, when they need them, is our singular and constant focus — and the diverse group of specialized investment boutiques that comprise our asset management business are an important facilitator in this endeavor. We offer investment strategies that support the growing demand for income and yield, and leverage our quality-focused alpha and beta offerings in both developed and emerging markets.

Our strength as a solutions provider lies in the fact that, unlike many other investment managers, we focus on delivering successful outcomes, not simply returns. Our ability to achieve those successful outcomes relies first on the time we take and our ability to understand our clients’ complex investment needs, and then in our knowledge of how best to combine our investment capabilities, which span multiple asset classes and global markets, to help them achieve their current and future investment objectives. We believe it is this multi-asset know-how that is critical to successfully leveraging our global investment prowess and delivering the best total investment results and outcomes for our clients.

RS Investments is a trusted research-driven investment management firm. We offer a spectrum of investment solutions to meet the diverse needs of our clients.

Our approach to asset management is shaped by two simple beliefs: a deep conviction to multifaceted research is paramount; and you cannot succeed without superior security selection. Founded in 1986, RS Investments is a focused, specialized investment firm that applies institutional quality rigor to everything we do. Headquartered in San Francisco, we manage separate accounts and mutual funds for institutions and individuals. We recognize that our clients—including institutions, financial advisors, and individuals—face distinct challenges, which is why we offer investment strategies built on deep research and careful security selection. We’re dedicated to helping our clients fulfill their most important investment goals. We believe the best way to add value over time is by investing with discipline, committing capital to our best investment ideas, and ensuring that the risks we take are deliberate in every strategy we manage, while supporting the autonomous environment in which our investment teams thrive.

SEI’s Institutional Group is one of the first and largest global providers of outsourced fiduciary management investment services. The company began offering these services in 1992 and today acts as a fiduciary manager to more than 450 retirement, nonprofit and healthcare clients in seven different countries. Through a flexible model designed to help our clients achieve financial goals, we provide asset allocation advice and modeling, investment management, risk monitoring and stress testing, active liability-focused investing and integrated goals-based reporting.

Watershed Asset Management, L.L.C. is a $1.2 billion credit-focused asset management firm that was founded in July 2002. It invests in value-oriented and event driven debt and equity securities while emphasizing current income and capital preservation. Watershed invests in developed markets and seeks to capitalize on pricing inefficiencies inherent in industries, companies and other assets affected by change. The firm seeks contractual cash flows or an identified catalyst in each of its core positions, and uses fundamental value and cash flow analysis to project returns. Watershed sells debt short or buys credit protection in companies in which its research identifies a risk or vulnerability that is misunderstood by the market. Watershed does not use portfolio leverage to enhance returns, thereby reducing risk. The firm’s success has been built around its willingness to embrace complexity, and its deep understanding of the industries and companies it covers. All of its senior investment professionals are invested in the fund.
Contributors

Annual Connect was established in August of 2010 with a vision of offering specialized conference consultation and program management services to Morgan Creek Capital Management and its investment managers, clients and friends. Today Annual Connect has broadened its offering to work with myriad clients to provide strategic conference planning advice and event planning services. Annual Connect allows our clients to focus on their core business functions and delivers a personalized, professional event experience, so they can host, mingle and network with their clients, prospects and guests. As professionals with over 20 years of experience in conference production, we will manage your meeting from start to finish and make you look incredible to the outside world.

Annual Connect also hosts its own investment education forums, roundtables and summits. Our programs provide high level content and bring senior investment professionals together to discuss and debate strategies and industry trends. Annual Connect hosts the NC Investment Institute’s (NCII) Annual Forum in October and will launch the iCIO Investment Summit in New York City on December 4th, 2013. For more information please contact andrea@annualconnect.com.

Brooklyn Bridge Ventures seeks to make investments in early and seed stage technology companies in the “Greater Brooklyn Area” (which includes Manhattan and other boroughs) across a variety of information technology sectors. Founder Charlie O’Donnell has been an active member of the NYC startup community for nearly a decade in roles ranging from venture investor to founder. He has venture experience at two of the top firms in the country, Union Square Ventures and First Round Capital, and founded an innovative Big Data startup in the careers space called Path101. Brooklyn Bridge Ventures is based out of the NYU-Poly Incubator in DUMBO.
Fund Evaluation Group, LLC (FEG) provides investment consulting, portfolio management and research services. Established in 1988, the independently-owned firm has approximately $38 billion in total client assets under advisement and approximately 100 employees (as of 3/31/2013).

FEG specializes in designing sophisticated, institutional-caliber portfolios. Clients include institutions, such as universities and corporate retirement plans, and financial advisors.

FEG’s research analysts are uniquely tenured for the industry, with the average analyst possessing approximately 10 years of investment experience. Analysts have been featured by CNBC and the Wall Street Journal.

FEG is headquartered in downtown Cincinnati, and has offices in Detroit and Indianapolis.

Founded in 2002, Global ARC convenes a network of the world’s foremost pension funds, endowments, sovereign wealth funds and asset managers focused on the intersection of macro-economic developments, capital markets, and alternative investments. Meetings are held annually in Europe and North America to discuss both regional and global issues facing institutional investors. All gatherings are held strictly off-the-record with no media in attendance. Global ARC is an independent organization that is not affiliated with any media company or individual supplier of services to the investment industry.

TWT Investment Partners, LP (the “Fund”) is a private investment partnership that seeks to generate capital returns by investing in portfolio companies which primarily buy, sell and trade Investment Grade Wines (“IGW”). Specifically, the Fund primarily makes, or directs, investments in bottled wines from quality-driven producers whose wines have a track-record of appreciating substantially in price after their release and which are actively traded across multiple secondary markets for years following their release. The Fund estimates that there are approximately 250-300 potential IGW producers in Bordeaux (which comprises over 75% of the IGW market), Burgundy, Champagne and the Rhone Valley in France, as well as from select regions in Italy, the US and Spain. The Fund also seeks to make, or direct, other wine-related investments consistent with its return projections.

The Fund commenced operations in Q3 2011 and builds upon the extensive experience of its principals investing in IGW and their numerous contacts across the global IGW supply chain to generate target net compounded annual investment returns in the mid- to high-teens percent.
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Acknowledgements

An unprecedented, innovative concept like the Portfolio Whiteboard Project workshop and whitepaper harnessed the support and effort of many individuals, the majority donating their time and expertise. Although many received credit in the previous pages, I want to acknowledge their contributions personally here as well.

Thank you to the 28 investment officers - the future leaders of endowments, foundations, pensions and insurance company portfolios - that participated in the Portfolio Whiteboard Project. Several other investment officers offered advice and support even though they could not attend. Their enthusiasm inspired me greatly. I owe particular thanks to the investor Editorial Board. Their efforts to help refine the workshop outcome proved crucial to the final result.

Our asset manager partners took a chance on a new and untried investor education program, enabling the collaboration we sought to achieve and aim to continue.

Special thanks go to our exclusive service provider sponsor, Kaufman Rossin Fund Services. Their willingness to serve the investment community in creative ways greatly enhanced the Portfolio Whiteboard Project experience.

I especially want to thank my co-producer, Karan Sampson, our managing editor and lead whitepaper writer Nancy Miller, and curriculum advisor, meeting facilitator and whitepaper contributor, Nolan Bean from the Fund Evaluation Group. Without their ideas, expertise, effort and support the project would not exist. Andrea Szigethy and Donna Holly of Annual Connect handled logistics - and so much more - superbly. Offsite, the creative brainstorming space in midtown Manhattan, provided a perfect setting for the workshop.

Additional thanks to:

Christopher Holt
GlobalARC

Lawrence E. Kochard
UVIMCO

Julia Lynch
New York University

Charlie O’Donnell
Brooklyn Bridge Ventures

Melissa Santaniello
AOI Association

Eddie Szigethy
Zig Zag Multimedia

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Tom Hughes
InTheBoombox

Stacy-Marie Ishmael
Percolate Industries, Inc.

Rebecca Randall
The Brand Kitchen
Finally, I must acknowledge Yale CIO David Swensen. Although I have never met him, his achievements have influenced me greatly. On the morning of the workshop, an investor asked if David Swensen would say his model is broken and I guessed, “No”. The PWP proved me right.

Swensen’s own whiteboard project created a classic process for managing institutional assets. The PWP identified how that process is changing and what aspects institutions and their overseers need to address. The project achieved our goal of moving the conversation forward, by inspiring big thinking, generating creative ideas and identifying new questions. We aim to explore those questions in future whiteboard projects and other Uncorrelated, LLC productions.

We look forward to hearing what you think about our results and hope you will join the conversation.

Sincerely,

Cathleen M. Rittereiser
Founder and CEO, Uncorrelated, LLC
Founder and Publisher, Portfolio Whiteboard Project

Cathleen Rittereiser founded Uncorrelated, LLC to focus on educating, mentoring and inspiring future institutional investment leaders. She is the co-author, with Lawrence E. Kochard, the CEO of the University of Virginia Investment Management Company, of the books Top Hedge Fund Investors: Stories, Strategies, and Advice (Wiley, 2010) and Foundation and Endowment Investing (Wiley, 2008).

The first Uncorrelated project, the Portfolio Whiteboard Project, is an innovative initiative to bring together this new generation of investors with asset managers to define and publish an investment model for the future. The Portfolio Whiteboard Project and other Uncorrelated productions are designed to stimulate long-term thinking and generate new ideas. The collaborative, discussion-based activities – with a focus on solving common problems - build collegial, productive, professional relationships and inspire ongoing industry discussions and learning.

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