Market buzz
Now is the time for asset managers to redesign their global operating model
Performance attribution—Investment performance under the microscope
Setting the stage for future growth—Hedge fund spin-off considerations
Navigating the Swiss regulatory landscape for effective distribution

External perspective
Rebalancing the economics of the European mutual fund
The positive contributions of small international financial centres—Informing the global debate
The future of asset management—Davids and Goliaths?
Power law investing

Australian hedge funds—Why they are worth taking a look
Investing in a dynamic environment—is risk profiling the answer?

Regulatory angle
Linking the dots of the new regulatory framework for a better understanding of the new securities infrastructure landscape
In this issue

4 Foreword

5 Editorial

Market buzz

6 Now is the time for asset managers to redesign their global operating model

14 Performance attribution
Investment performance under the microscope

22 Setting the stage for future growth
Hedge fund spin-off considerations

30 Navigating the Swiss regulatory landscape for effective distribution

External perspective

34 Rebalancing the economics of the European mutual fund

42 The positive contributions of small international financial centres
Informing the global debate
48  The future of asset management
   Davids and Goliaths?

54  Power law investing

60  Australian hedge funds
   Why they are worth taking a look

66  Investing in a dynamic environment
   Is risk profiling the answer?

Regulatory angle

72  Linking the dots of the new regulatory framework
   for a better understanding of the new securities
   infrastructure landscape

80  Hot off the press

84  Contacts
Foreword

Dear investment management practitioners, faithful readers and new-comers to our magazine,

Welcome to the 12th edition of Deloitte’s first global investment management industry publication, Performance. We hope you all had the opportunity to spend quality time with your loved ones during the summer months. However, we realise that this is not always easy given the major personal investment needed to deal with the constant challenges faced by investment management executives. Considering the nature of our industry, there are naturally many other milestones to overcome, for example the EU’s alternative investment management directive. This is now a reality that has already been transposed in more than ten EU countries only a few weeks after its entry into force. Now that there is a regulatory level playing field between retail and non-retail investment products, it is up to us, the industry experts, to bring innovative solutions to investors in order to further enhance their trust in our investment management industry. Deloitte’s objective is to become the industry’s point of reference in innovation and we have the full commitment and support from Deloitte’s worldwide leadership to meet this challenge.

Our worldwide economic context shows an overall larger than expected yearly worldwide GDP growth, still mainly driven by emerging markets. While the U.S. and Japan show a yearly average growth rate of around 2%, the eurozone is showing a contraction in its yearly average GDP by an average of 0.5%. Inflation in the U.S. and eurozone has stabilised compared to last year, whereas in Japan it is considerably decreasing to reach a quasi-stagnation on average for this year. The emerging economies are still a major contributor in the global GDP growth, even though this year so far shows the same trends of 2011 and 2012 towards a less vigorous growth. It is expected that China will most probably still grow around 8% in 2013. Brazil’s strong growth of 2011 has decreased in 2012, although we still believe 2013 will show a growth just below 2%. For India, we recommend watching the volatility of the RBI’s impact on inflation despite the average growth in GDP of 5% so far this year. The lower than expected growth in developed countries may become a challenge for export champions while the subsisting eurozone crisis throws uncertainty in the future growth of emerging markets as well. Additionally the geo-political context in the Middle East may further increase the prices for commodities indexed to oil. In a nutshell, the previsions of macro economists are still positive for 2015 in both emerging and developed markets.

As already announced in our previous edition, Performance is currently undergoing a transformation, with plans for the new concept to be presented in the January 2014 edition. Our colleagues from the Deloitte Switzerland investment management practice have accepted the challenge to take the lead on the first new edition of the magazine, where our main objectives are to give our external contributors a more thought-provoking forum and increase the interactivity between external writers and Deloitte experts.

We wish you an excellent reading of Performance edition 12.

Vincent Gouverneur
EMEA Investment Management Leader

Peter Wright
EMEA Co-Leader Insurance

Fabien Sauvage
EMEA Co-Leader Insurance

Performance is a triannual magazine that gathers our most important or ‘hot topic’ articles. The various articles will reflect Deloitte’s multidisciplinary approach and combine advisory and consulting, audit, and tax expertise in analysing the latest developments in the industry. Each article will also provide an external expert’s or our own perspective on the different challenges and opportunities being faced by the investment management community. As such, the distribution of Performance will be broad and we hope to provide insightful and interesting information to all actors and players of the asset servicing and investment management value chains.
Dear readers of Performance,

We would like to welcome you to the 12th edition of Deloitte’s first global sectorial magazine created in December 2009. This very edition marks the transition between the original concept of the publication and the facelift currently being carried out by our editorial team. We felt this would be the perfect time to briefly retrace the timeline of our magazine, which started as a local publication in Luxembourg. From its second edition, it expanded to a European Deloitte effort and finally became a worldwide publication with dedicated America, EMEA and APAC versions, the latter even translated in Japanese. When initially creating the magazine, we never imagined this extraordinary growth and we would like to thank you for having facilitated this success.

Starting from the January 2014 edition, the editorial lead of the magazine will be coordinated by a different Deloitte investment management practice. Since every story has a starting point, our colleagues of the Deloitte Switzerland investment management practice will take the lead of the first revisited Performance publication. Thank you for this daring challenge which set the cornerstone for the ongoing success of the magazine in its new format.

The main changes will consist of adding a more thought-provoking aspect to our external contributor’s points of view on the industry’s challenges and opportunities. We will also increase the interactivity between our external contributors, who have played a major role in the success of Performance and the Deloitte subject matter practitioners.

We believe that the industry’s opinion leaders are increasingly willing to express their professional views. The new concept of the magazine is our reply to this increased demand to share industry related opinions regarding the future shape of investment management.

Sincerely,

[Signatures]

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Now is the time for asset managers to redesign their global operating model

In prosperous times, the asset management industry tends to pay less attention to its operating model. The vast majority of resources are targeted at growth and a little inefficiency is often tolerated. During financial downturns, the focus at many firms tends to shift to maximising immediate cost-savings with less focus on the long-term impact cuts might have on quality or risk management.
Many industry observers feel the industry is neither in an exuberance nor retrenchment phase at the moment. The pendulum seems to have swung back towards the middle which means now may be the time for asset managers to revisit their operating model. By doing so, they can bring all the dimensions of managing an asset management firm, revenue growth, expense control and risk management, into balance and strongly position themselves for the future.

**Why a redesign is needed**

The asset management industry is being shaped by several trends that are changing the essence of the business and are likely to have an impact far into the future. The regulatory environment continues to be a top concern for firms and ensuring operational compliance with these reforms is driving up expenses. Asset managers are also faced with an aging population that is likely to shift product demand and asset allocation strategies.

At the same time, wealth creation has slowed in the developed world but is increasing in many emerging markets, requiring firms to expand into new geographies. Fees are also under being challenged, due to the growth of passive investment products causing pressure on revenue.

Efforts to keep costs low in the last few years have resulted in under-investment in technology platforms just as demand for new capabilities, such as in the mobility arena, are emerging, and asset managers cannot delay the technology investment forever. The combined effect of these trends is putting pressure on profit margins, thereby incenting asset managers to tightly manage costs and increase efficiencies: one effective way to do so is by redesigning your operating model.
### Exhibit 1: Operating model components and levers

Each component of the operating model can be improved by using a specific set of levers:

<table>
<thead>
<tr>
<th>CUSTOMER NEEDS</th>
<th>BUSINESS DRIVERS</th>
<th>KEY LEVERS</th>
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<tbody>
<tr>
<td>1. Function/service delivery</td>
<td><strong>Centralisation</strong></td>
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<td>- Service delivery model decisions</td>
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<td></td>
<td>- Centers of excellence</td>
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<tr>
<td>2. Processes</td>
<td><strong>Outsourcing</strong></td>
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<td></td>
<td>- Outsourcing decisions</td>
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<td></td>
<td>- Service level assessment</td>
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<tr>
<td>3. People and organisation</td>
<td><strong>Automation and integration</strong></td>
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<td></td>
<td>- Process standardisation</td>
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<td>- Workflow implementation</td>
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<td>4. Data and technology</td>
<td><strong>Talent management</strong></td>
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<td></td>
<td>- Organisational design</td>
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<td>- Roles, responsibilities and performance metrics alignment</td>
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<td></td>
<td><strong>Rationalisation</strong></td>
<td></td>
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<td></td>
<td>- Technology strategy and architecture decisions</td>
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<td>- Application rationalisation</td>
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- Operating model components and levers

In exhibit 1 below, key components of the operating model are identified, along with the key levers that can be pulled to impact these components. This approach of breaking the operating model down, understanding the specific issues that an asset manager may face and knowing which levers can be pulled is the key to making improvements. By using this process, the uniqueness of each firm can be accounted for and specific action can be taken to resolve each firm’s challenges. It is also a very effective way to make progress without being overwhelmed. More than one asset manager has launched an operating model review, tried to change too many things at once and ended up making little overall progress. Using this methodology allows you to identify tasks and prioritise them into manageable projects.
Some of these core components are discussed in more detail in the section below, along with common challenges faced by asset managers. Some options to overcome these challenges are also highlighted. However, it is essential to understand that no two asset managers are the same, and there is no one-size-fits-all approach to improving an operating model.

**Function/service delivery**

It is not uncommon for existing service delivery models to exist merely because of inertia. A model may have been set up years ago but may no longer be the best fit. A common issue identified involves replication of responsibilities, where teams in different locations perform similar functions, resulting in duplication of effort. For example, redundant activities might be performed across functions, or by different teams within a division and across geographies. This is often caused when dispersed responsibilities create a need—real or perceived—to replicate activities. As a result, boundaries between functions are not clear, and key activities for each function not consistently aligned with the core functional objectives. Centralising core functions into ‘centres of excellence’ is one way to eliminate redundancies and maximize efficiencies while creating a consistently high-quality result. Centralisation can also drive clarity of roles and responsibilities, while ensuring consistency.

Outsourcing, which can take many forms, is another option to consider. Outsourcing is a critical decision for many firms because it can bring substantial benefits while also bringing potential risk. One two-pronged benefit of outsourcing is the ability to migrate onto modern technology platforms that can scale to support growth, while at the same time spreading the cost of system enhancements (such as for regulatory updates) across a wide customer base. Risk and cost can be reduced and quality improved, via shifting to variable-cost structure and a shared service model.

Another advantage of outsourcing is that it allows asset managers to focus on core competencies, such as portfolio management, marketing, sales, or customer service. Additionally, outsourcing can lead to the ability to access new product lines or geographies quickly, often with a lower up-front investment.

**Processes**

Process considerations focus on reducing the overall complexity of an organisation. Ineffective processes may hold an organisation back from achieving its highest operational potential, often because of significant manual processing which can result in limited integration between systems. This disconnect is often compounded by unclear ownership of tasks, and potential overlap of duties between groups that can result in multiple handoffs and processing delays.
Inefficient processes are important to evaluate, as they can consume excessive resources and be very costly to maintain. For example, one asset manager had a highly manual fee-billing process for its non-registered products. When a new large account was on-boarded, a required system setting was missed. The result was that the account was not billed for the first two months it was managed by the firm. When the error was discovered at the end of the quarter, the firm was faced with a stark choice: it could admit its error to the new client, and retroactively bill them, or absorb the loss of the fees. To ensure future compliance with on-boarding processes, the firm decided to implement an automated workflow to prevent these types of errors.

The goal of process redesign is to reduce complexity as much as possible. This includes identifying and lowering the number of features that are costly to maintain, yet provide limited value to clients. It also requires eliminating duplicate activities, such as those with low value-add. Whenever possible, firms need to consolidate similar activities across the organisation, in order to drive integration between teams and platforms. The focus of these activities should be on enabling efficient handoffs. In general, increasing automation and keeping manual activities to a minimum can have a powerful impact on the firm’s operations.

**People and organisation**

Many firms are now preparing to readdress their organisational model after years of more tactical approaches, with talent providing a significant set of challenges. Large organisations in particular tend to have operational concerns related to their workforce, including high staffing costs, complex management and organisation structures, and workforce demands or needs that are hard to address in the current model. This often leads to difficulty with engagement, development and retention of the workforce, thereby directly impacting the firm’s ability to execute its business mission. The combined effect of these issues can add a significant drag to a firm’s performance.

Exhibit 2 depicts the portfolio of solutions in the talent arena that need to come together in bringing the operating model to life for employees. The solution does not solely consist of having the correct talent; aligning people with the appropriate position within the firm is also critical. The chemistry of talent illustrates our view of how talent strategies and approaches can come to bear in the model. Once organisational design is complete, these elements—if crafted correctly—enable the people components of the model to function.
Exhibit 2: Chemistry of talent

Talent management is taking care of having the right people with the right skills in the right position in your organisation:

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Talent solutions</th>
<th>Work solutions</th>
<th>Catalysts</th>
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<td>Al</td>
<td>Align Analysis</td>
<td>Differentiate</td>
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<td>Ba</td>
<td>Business Alignment</td>
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<td>Wp</td>
<td>Workforce Planning</td>
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<td>Wi</td>
<td>Workforce Intelligence</td>
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<td>Rs</td>
<td>Recruitment &amp; Staffing</td>
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<td>Ld</td>
<td>Learning &amp; Development</td>
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<td>Kc</td>
<td>Knowledge &amp; Collaboration</td>
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<td>Organisation Design</td>
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<td>Mcc</td>
<td>Mass Career Customisation</td>
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<td>Rm</td>
<td>Risk Management</td>
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<td>Cws</td>
<td>Critical Workforce Segments</td>
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<td>Talent Roadmap</td>
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<td>O²</td>
<td>Orientation &amp; Onboarding</td>
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<td>Succession Management</td>
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<td>HR Service Delivery</td>
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<td>Diversity &amp; Inclusion</td>
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- **Core**
- **Differentiating**
The success of operational redesign may require cultural adaptation. Culture is defined through strategy, vision, and mission, but it is reinforced and sustained in the talent programs built and employed within the operating model. Therefore, educating and aligning people programmes to evolve with model changes is important. A culture that supports and remains agile to changes in operational models will be more adept and competitive.

The greatest opportunity in the talent area is to redesign the organisation to ensure that resources and management layers most efficiently meet the needs of the business. This often includes increasing spans of control and reducing organisational layers. Redesign can also include an assessment of alternative delivery methods such as shared service centres and centres of excellence. The goal is that roles and responsibilities are thoughtfully designed in order to avoid redundancy. The introduction of more streamlined processes where people focus on exceptions, not clerical tasks, is critical. Clearly defining the skills and competencies needed to effectively execute business operations, while raising workforce effectiveness, can have a substantial impact on performance.

Data and technology

Perhaps the greatest area of opportunity for asset managers is the alignment of a technology strategy and architecture with the operating model and business needs. The need for alignment is becoming more acute, as many asset managers still lack a comprehensive technology strategy that supports an operational model. Firms tend to support multiple fragmented databases and legacy systems with different standards and hierarchies that result in data inconsistencies.

These complex systems also require substantial effort to manage. This lack of integration between disparate systems often requires manual work to connect systems and reconcile the final output. The result is often higher costs and increased chance for human error. The great exuberance years (2003-2007) produced high growth, but also saw the adoption of multiple systems and applications that ultimately cost some asset managers scale and flexibility. As a result, functions such as risk reporting were made more difficult. Firms that decide to streamline these processes today can help reduce manual workarounds while making activities less labour intensive, resulting in increased efficiency and reduced operating cost. For example, one asset manager was supporting both a transfer agency system and a brokerage platform for its retail accounts. After an operational review, the firm realised that it could eliminate one of these systems, saving several million dollars a year in support costs, without losing any essential functionality.
Conclusion

Redesigning an operating model takes significant effort, yet can unlock benefits that may improve efficiencies within a potential range of 5% to 30%, according to estimates from Deloitte’s Enterprise Cost Management practice. This indicates that operational redesign may result in a real impact felt in the form of lower costs and better delivery.

In a time of structural change in the asset management arena, operational updates can make a profound impact on the long term goals of your organisation. Undertaking such a project is never an easy decision, and there are always plenty of reasons not to go forward. However, it is not necessary to take on every challenge at once. By breaking your operating model down to its core components, identifying the challenges unique to your firm, and prioritising the efforts that will have the greatest impact, substantial benefits can be gained. Taking on such a project might seem daunting, yet the current market environment of balanced normalcy appears to be ideal to moving forward with operational redesign.

To the point:

• Now is the time to re-evaluate your global operating model since we appear to be in neither an exuberance nor in retrenchment phase

• Function/service delivery, processes, people and organisation, as well as data and technology represent key areas to consider

• Redesigning an operating model takes significant effort, yet can unlock benefits that may improve efficiencies within a potential range of 5% to 30%, according to estimates from Deloitte’s Enterprise Cost Management practice
Performance attribution
Investment performance under the microscope

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Introduction
When assessing a fund manager’s performance, it is common practice to benchmark their performance. Regardless of the benchmark, a fund manager is deemed to have performed well if the excess performance (i.e. difference between the fund’s return and that of the benchmark) is positive, while a negative excess performance represents a poor performance.

While consistent positive excess performance is considered the ‘Holy Grail’ of the fund management industry, too little emphasis is placed on how the excess performance is actually achieved. The focus is typically put on the size of the excess performance and not on how it was achieved by the fund manager.

Was it achieved through superior stock selection or good asset allocation? Simply looking at the size of the excess performance will not answer this question. A more refined tool is needed to break down this excess performance, which is where performance attribution comes in.
While consistent positive excess performance is considered the 'Holy Grail' of the fund management industry, too little emphasis is placed on how the excess performance is actually achieved
Performance attribution techniques for equity portfolios
Performance attribution techniques fall into two broad categories: arithmetic and geometric models. We will review each of them in turn.

Arithmetic models
A key feature of arithmetic models is that they all define the excess performance as the arithmetic difference between portfolio and benchmark performances. They are by far the most common models found in the industry. Their success lies in the simple and intuitive nature of the way they calculate excess performance. We will discuss and compare two of the commonly used models below. While each of these models belongs to the arithmetic category, they have significant differences, which will be highlighted.

The BHB model
One of the earliest and most commonly used models is known as the BHB model; BHB standing for Brinson, Hood and Beebower. The BHB model breaks down the excess performance into three components:

- **Asset allocation effect**: positive (or negative) when the fund manager has overweighed (or underweighed) a benchmark segment showing positive performance. Here segment is understood as assets belonging to the same bucket (e.g. asset class, sector, geographical area, etc.)
- **Stock selection effect**: positive (or negative) when the fund manager has selected segments performing better (or worse) than the corresponding segment in the benchmark
- **Residual effect**: The remainder of the actual excess performance after deduction of asset allocation and stock selection effects

The excess performance is therefore essentially equal to the sum of these three attribution effects.
Each performance attribution model must be tailored to the needs of the fund managers or investors concerned

The BF model
This second model was developed by Brinson and Fachler. Unlike the BHB model, the BF model breaks down the excess performance into two components:

- **Asset allocation effect:** positive in two cases:
  - When the fund manager has overweighted a benchmark segment with a higher performance than the benchmark’s overall performance
  - When the fund manager has underweighted a benchmark segment with a lower performance than the benchmark’s overall performance

  In all other cases, the asset allocation effect is negative.

- **Stock selection effect:** positive (or negative) when the fund manager has selected segments performing better (or worse) than the corresponding segments in the benchmark

Model comparison
The main difference between the two above arithmetic models lies in the definition and interpretation of the asset allocation effect. In the BHB model, the effect is positive when the fund manager overweights (or underweights) a benchmark segment showing positive (or negative) performance. In the BF model, on the other hand, positive performance alone is not enough. Achieving a positive asset allocation effect also requires the segment performance to exceed the overall benchmark return.

In the BHB model the indication of the asset allocation effect is simply the same as that of the return generated by the segment in question. There is no reference to segment performance relative to benchmark performance. This model can therefore typically be used with absolute return strategies. The BF model, on the other hand, does not rely on whether the segment’s return is positive or negative; it rather observes how the segment has performed in comparison with the benchmark. Therefore, this model is typically applicable to relative return strategies.
**Geometric models**

Geometric models are characterised by the fact that they all define the excess performance using a geometric approach. For example, suppose a portfolio generates a return of 7% and a benchmark return of 5%.

The Geometric Excess performance (GE) is computed as follows:

\[
GE = \frac{1 + 7\%}{1 + 5\%} - 1 = 1.90\%
\]

In comparison, the Arithmetic Excess performance (AE) would be:

\[
AE = 7\% - 5\% = 2\%
\]

The arithmetic approach calculates excess return as the profit made in excess of the benchmark return. In other words, it is the remainder of the actual performance after deduction of the opportunity cost of not having invested in the benchmark. For example, suppose a portfolio has an initial market value of €1,000 and a growth of 7% over the period (with a final value of €1,070), and that the corresponding benchmark’s return is 5%. Had the €1,000 been invested in the benchmark, it would have grown to €1,050. The excess return, from an arithmetic point of view, would therefore be 2%. Another way to consider this is to compare the difference in profit (€70 minus €50).

The difference divided by the starting value provides the same arithmetic excess performance:

\[
AE = \frac{70 - 50}{1,000} = 2\%
\]

Similarly, geometric excess return can be considered from the perspective of the profit generated. However, instead of comparing the profit with the starting value of €1,000, in this case it must be made relative to the final value of such an amount invested in the benchmark:

\[
GE = \frac{70 - 50}{1,050} = 1.90\%
\]

Geometric excess return looks at the added value we get by investing in the portfolio, relative to the benchmark. In other words, “How much more money do I have than I would have had if I had invested in the benchmark?”

In practice, geometric models are not very popular because of the way they calculate excess performance. Geometric excess performance is not intuitive for the investor, and is in particular not as intuitive as the arithmetic model. In general, it is expected that excess return will be defined as portfolio return minus that of the benchmark. Using a fraction-based method of presentation does not make it easy to understand.

Although the interpretation of the results given by geometric models may be counterintuitive, they do have many advantages over arithmetic models. When chaining attribution effects (i.e. linking attribution effects over several periods), no residual effect will appear, making geometric models very appealing. We will touch on this topic in the next section.

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For arithmetic models, when linking attribution effects over time, the sum of periodic effects does not correspond to the excess performance generated over the entire period.
Chaining rule techniques

So far, only single-period performance techniques have been covered. In practice, attribution effects are typically calculated over several single periods (e.g. on a monthly basis) and aggregated over the entire period (e.g. a quarter). The process of aggregating single-period attribution effects over an entire period is called ‘chaining’ or ‘linking’. Linking attribution effects over time is one of the most challenging steps in performing a performance attribution. For arithmetic models, when linking attribution effects over time, the sum of periodic effects does not correspond to the excess performance generated over the entire period. In other words, excess performance cannot be fully explained by the different attribution effects. "Residual" effects appear and tend to grow as the number of single-periods in the chain increases.

This section covers the most common techniques used to link attribution effects for arithmetic models. This is by no means an exhaustive list as literature on the topic is extensive. For the sake of simplicity, we will keep the same illustrative example throughout the different linking methods examined below, and assume that the performance of the portfolio is identical each month.

<table>
<thead>
<tr>
<th></th>
<th>Return - portfolio</th>
<th>Return - benchmark</th>
<th>Asset allocation effect</th>
<th>Stock selection effect</th>
<th>Excess performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month 1</td>
<td>8.10%</td>
<td>7.20%</td>
<td>-0.25%</td>
<td>1.15%</td>
<td>0.90%</td>
</tr>
<tr>
<td>Month 2</td>
<td>8.10%</td>
<td>7.20%</td>
<td>-0.25%</td>
<td>1.15%</td>
<td>0.90%</td>
</tr>
<tr>
<td>Month 3</td>
<td>8.10%</td>
<td>7.20%</td>
<td>-0.25%</td>
<td>1.15%</td>
<td>0.90%</td>
</tr>
<tr>
<td>Quarter</td>
<td>26.32%</td>
<td>23.19%</td>
<td>?</td>
<td>?</td>
<td>3.13%</td>
</tr>
</tbody>
</table>

The objective of the linking methods is to determine the asset allocation and selection effects for the full quarter. Here we have assumed that the allocation effects are calculated according to the BF model.
Arithmetic linking

This simple method consists in adding the monthly attribution effects together in order to determine the quarterly attribution effects. The results are below:

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Return - portfolio</th>
<th>Return - benchmark</th>
<th>Asset allocation effect</th>
<th>Stock selection effect</th>
<th>Sum of effects</th>
<th>Excess performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>26.32%</td>
<td>23.19%</td>
<td>-0.75%</td>
<td>3.45%</td>
<td>2.70%</td>
<td>3.13%</td>
</tr>
</tbody>
</table>

As can be observed, the sum of the quarterly asset allocation and selection effects is not equal to the quarterly excess performance.

Geometric linking

Instead of taking the sum of the monthly attribution effects, the geometric linking method consists in multiplying the attribution effects across time to determine the quarterly attribution effects. The results are below:

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Return - portfolio</th>
<th>Return - benchmark</th>
<th>Asset allocation effect</th>
<th>Stock selection effect</th>
<th>Sum of effects</th>
<th>Excess performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>26.32%</td>
<td>23.19%</td>
<td>-0.75%</td>
<td>3.45%</td>
<td>2.74%</td>
<td>3.13%</td>
</tr>
</tbody>
</table>

Again, the sum of the quarterly asset allocation and selection effects is not equal to the quarterly excess performance. Note that the geometric linking method has nothing to do with the geometric attribution models. These two techniques should not be confused.

Logarithmic linking

Arithmetic and geometric methods can be viewed as rather simple approaches to linking but neither work in practice. More complex models need to be considered to link the period returns more effectively. These involved models use what may be called an ‘agent’ or adjustment factors to make the linked effects equal to the linked excess return. There are several more advanced techniques, but only the most common is presented here: the ‘logarithmic linking method’.

The logarithmic model for linking was first described by Carifo. This approach distributes a small residual proportionately among all the effects calculated for each period, and proposes mathematical formulae to calculate the factors used to adjust the attribution effects. This means that the sum of the monthly attribution effects should be equal to the quarterly excess performance.

The formulae for the quarterly selection effect take exactly the same form. The results are below:

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Return - portfolio</th>
<th>Return - benchmark</th>
<th>Asset allocation effect</th>
<th>Stock selection effect</th>
<th>Sum of effects</th>
<th>Excess performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>26.32%</td>
<td>23.19%</td>
<td>-0.87%</td>
<td>4.00%</td>
<td>3.13%</td>
<td>3.13%</td>
</tr>
</tbody>
</table>

In the logarithmic model, quarterly excess performance is fully explained by the sum of the quarterly adjusted attribution effects.
21

Use of performance attribution models

In the previous sections, we looked at tools used to analyse the source of the outperformance of a portfolio relative to its benchmark. But how can this information be used in practice? In general, there are two types of individuals likely to make use of this data: fund managers and investors.

- For fund managers, attribution performance analysis provides an effective tool for assessing the performance of their investment strategies. Attribution analysis can be used to assess the quality of security analysis (i.e. how efficient the fund manager is at selecting stocks) by calculating selection effects. It can be used to assess the ability of analysts, whether internal or external. If an analyst suggested a particular stock, the success of his or her recommendation can be measured. If an individual suggested underweighing a sector because of a poor economic outlook, it is possible to determine whether this was a good move or not. Employees may be rewarded based on their recommendations. In the case of internal resources, the different analysts may be monitored over time to determine whether or not they are doing the job for which they were hired. For external analysts, it can be determined whether or not their advice is worth the price that was paid.

- For investors, attribution performance analysis provides an effective tool to assess whether the investment manager is following his or her investment strategy. As a rule, an investment manager can secure an edge by either selecting high-performing asset classes (i.e. top-down approach) or in selecting high-performing stocks (i.e. bottom-up approach). Attribution performance analysis provides a way to check whether the excess performance was actually generated by following the stated investment style. For example, a fund manager may have beaten his benchmark by significantly overweighing a specific industry (i.e. positive asset allocation effect) but failed miserably at selecting stocks (i.e. negative selection effect). His or her competitive advantage was their ability to select over-performing stocks.

Without a proper attribution performance analysis, at first glance it may seem that skill was behind this excess performance, while it was probably simply a matter of luck. Attribution performance analysis also provides a dynamic tool for assessing the performance of a fund manager over time. Does the fund manager beat the benchmark consistently and by following his investment strategy? This is the kind of question typically asked by investors.

Conclusion

Performance attribution analysis provides an excellent tool for analysing the performance of a fund manager. While performance attribution suffers from a large number of pitfalls to overcome in practice, these are far outweighed by the benefits. While producing an attribution analysis is a challenge in itself, it does not tell the whole story. Knowing what it is intended for, what the resulting numbers mean, how to interpret them, and how to use these tools is the most important issue.

To the point:

- There is no such thing as a one-size-fits-all attribution model
- Performance attribution analyses the origin of excess performance and breaks it down into different effects
- Performance attribution can be used as a tool to assess the performance of an investment process
- Performance attribution can be used to check if the fund manager is respecting his or her investment process (i.e. style analysis)
- Linking attribution effects over time is a challenge in practice
Setting the stage for future growth

Hedge fund spin-off considerations

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Introduction

In July 2010, the Volcker Rule, which limits proprietary trading by banks, was enacted as part of the Dodd-Frank Wall Street Reform and Consumer Protection Act. The provisions were expected to be effective by July 2012, but the Federal Reserve later extended the deadline to July 2014, providing banks with additional time to meet the requirements. In the meantime, the industry witnessed several high profile spin-offs of bank-owned hedge funds and proprietary trading desks in anticipation of the Volcker Rule.

This growing trend has created a pool of hedge fund managers who have substantial portfolio management experience and a performance pedigree, but lack of experience in managing operations, technology and compliance. With institutional investors and regulators demanding an unprecedented level of transparency and regulatory compliance, focus on middle and back-office functions is emerging as a key priority for the spin-off fund managers.

In such circumstances, managing a stand-alone fund can be a daunting task. Fund managers need to strike a balance in allocating resources across investor relations, ensuring regulatory compliance and building out technology and operations infrastructure, all while continuing to maintain focus on portfolio management and establishing a performance history.

Spin-off considerations

To succeed, a holistic approach is needed to set-up a stand-alone fund that takes into consideration five unique characteristics of the future enterprise.

A structured review of these characteristics helps provide management with an understanding of the go-to-market alternatives that meet both business and regulatory requirements.
A structured review of these characteristics helps provide management with an understanding of the go-to-market alternatives that meet both business and regulatory requirements.
As a first step, the fund being launched should define its target operating model based on its strategic needs, growth plan and technology capabilities. For each of the functions in the target operating model, the fund should consider the functions that will be performed in-house as well as the functions that will be performed by third-party or affiliated service providers. The fund needs to decide for which functions it may still rely on the infrastructure of the parent company from which it has been spun-out and if this reliance is a short-term or long-term solution.

In defining its target operating model, the fund should weigh its alternatives, including: centralised vs. decentralised, internal vs. external, functionalised vs. productised. Further, the operating model should be customised based on the alternative chosen.

In the case of a functional model, the fund should incorporate a location strategy, including the advantages and disadvantages of centers of excellence as well as the time zone coverage required for each function. Moreover, the fund should perform a functional gap analysis that will provide descriptions of the current state processes, future state activities and areas for consideration as the fund implements the future state design. Areas for consideration are typically grouped by the associated impact to people, processes and technology.

For outsourced functions such as technology, the fund should define and execute a service provider selection and oversight criteria. Once a third-party relationship has been identified, the fund should define the Service Level Agreements (SLAs) and a comprehensive governance structure in terms of a Responsible, Accountable, Consulted, Informed (RACI) matrix.

1. Target operating model considerations

- Identify and categorise operational functions and develop model alternatives
  - Consider options to insource and outsource functions and the costs and benefits of each
  - Consider which functions the parent company may continue to support
  - Consider the impact of the Volcker Rule on model design option
- Assess capabilities of key service providers, including prime brokers and administrators
2. Organisational design considerations

- Leverage operating model to identify human capital needs
- Establish plan for bringing onboard any key resource gaps for launch
- Develop organisational structure alternatives

As a next step, the fund will need to define its organisational structure in line with investor, business and regulatory requirements. The organisation structure selection should be based on the fund’s immediate and long-term business needs. It should also include a governance framework based on the target state operating model, with respect to its internal operations and various service providers (e.g., service providers or sub-advisors).

At this stage, the fund will need to appoint leadership and assess the staffing requirements for the new entity. This assessment includes identifying staffing needs for functions that may not currently exist or for which the fund has relied on the parent company (e.g., HR services, accounting, operations and IT). Moreover, management should consider which positions are required to be part of the entity spun off from the parent company and which positions should be incorporated into the Transitional Service Agreement (TSA).

The organisation structure selection should be based on the fund’s immediate and long-term business needs.
Once the target state operating model and organisational structure have been identified, the fund needs to develop a technology architecture—which aligns with the current and future operating model. The technology architecture should document data and system requirements, including identification of data providers as well as data transformation, enrichment and integration needs for insourced processes. Meanwhile, reporting and data feed requirements for outsourced processes also should be considered.

The fund should also develop an overarching data strategy to help ensure data integrity and security from day one. Management should consider what systems and data will be required as well as what data should be managed internally vs. data that may be managed by a service provider.

Overall, the strategy should minimise data movement, identify the golden copy for key data, such as pricing data and security information, and provide a framework for controlling and sharing information. For data and systems required in-house a vendor shortlists and selection plan should be developed.

The next step is to identify the regulatory considerations. The fund may need to register as an investment adviser with the Securities and Exchange Commission (SEC) under the Investment Advisers Act of 1940 (Adviser’s Act) and should understand the reporting, governance and recordkeeping responsibilities of a registered adviser.

To begin with, the fund should determine and create appropriate legal entity and fund structures. Moreover, processes need to be set up to coordinate through various regulatory requirements, including:

- Preparing Form ADV filing
- Developing Form PF solution architecture
- Designating a Chief Compliance Officer to administer the firm’s advisory program
- Establishing a compliance program under the Adviser’s Act and related policies and procedures to comply with Rule 206 (4)—7 of the Adviser’s Act
- Setting-up a compliance training programme under the Adviser’s Act

In addition, the fund will need to set up appropriate oversight and supervisory controls based on investor and regulatory requirements. Management will also need to assess the fund’s readiness for an SEC inspection and establish appropriate data through a recordkeeping and documentation policy, such that records are easy to verify, explain or clarify and are prepared in a timely and standard manner. Moreover, if the fund plans to market to EU investors, it should evaluate the impact of the Alternative Investment Fund Managers Directive.
Finally, the fund needs to have a roadmap for executing the spin-off to facilitate identification and mitigation of potential risks and challenges. The plan should provide a timeline, call out milestones and assign ownership to activities, giving the team a common understanding of the timing for requisites for the spin-off.

The activities and timeline should take into account the regulatory environment, target operating model, technology architecture and organisational design. Capabilities and constraints of all stakeholders should be incorporated in the plan, including outside service providers.

The plan should include any TSA considerations, including how the fund will decouple key functions and systems from the parent company. Finally, the roadmap should reflect the balance that management wishes to achieve between time to market, cost of spin-off and the degree of target state completeness on day one of the launch post spin-off.

The activities and timeline should take into account the regulatory environment, target operating model, technology architecture and organisational design.

5. Roadmap for spin-off considerations

- Establish Transitional Services Agreement (TSA) needs
- Develop launch plan with timeline and key milestones
- Identify launch risks and develop mitigation strategy and contingency plan
Conclusion

For a smooth transition post spin-off, management should work through the five stages and align processes to regulator and investor priorities. Often, fund managers may find the entire process time-consuming and cost-prohibitive—given their limited experience in handling non-core operations. In such cases, leveraging a service provider may be more feasible.

One of the options available to management is to outsource non-core functions to the parent company. However, the choice between a third-party service provider and the parent company should be based on their capability to support the fund through its current and future growth plans; synergies between fund’s and service providers’ strategy and structure as well as locational and regulatory considerations. Management should also consider the costs and benefits of relying on the parent’s systems, including investor and regulator perception.

A solid operational foundation is necessary for the success of a stand-alone fund in the long-run. It is only when the fund identifies and fills the regulatory, operational, technology and human capital gaps that need to be addressed based on current state capabilities and future state requirements that a strong operational foundation for future growth can be laid.

To the point:

- A holistic approach to spin-off a hedge fund should involve five distinct characteristics:
  1. Define its target operating model based on its strategic needs, growth plan, and technology capabilities
  2. Lay-out an organisational structure in line with investor, business, and regulatory requirements
  3. Develop a technology architecture which aligns with the current and future operating model
  4. Identify regulatory considerations, and select and develop compliance solution structure
  5. Develop a spin-off roadmap to identify and mitigate and potential risks and challenges

Management should also consider the costs and benefits of relying on the parent’s systems, including investor and regulator perception.
Navigating the Swiss regulatory landscape for effective distribution

Switzerland and Luxembourg have grown in parallel as key centres for wealth management over the past 20 years and more.
Switzerland’s wealth managers have often sought to domicile funds in Luxembourg for distribution back to Switzerland and further afield. Meanwhile, Luxembourg funds have successfully sought access to the many wealth managers in Switzerland over the years.

According to FINMA statistics as at 30 June 2013, out of a total of 6,106 foreign funds registered with FINMA for distribution, 4,117 are Luxembourg domiciled. Luxembourg funds benefit most from Switzerland’s acceptance of foreign funds.

What changes can we foresee in the coming years?

With the revised Collective Investment Schemes Act (CISA) and the revised Collective Investment Schemes Ordinance (CISO), which both entered into force on 1 March 2013, some new rules applicable to the marketing of foreign collective investment schemes have been implemented and the private placement regime has been restricted.

Any form of advertising or offering of collective investment schemes to non-qualified investors or ‘retail investors’ is considered as distribution. The definition of distribution extends to public entities, pension schemes with professional treasury operations, companies with professional treasury operations and high net worth individuals (if they opted in to be considered as qualified investors).

Any type of ‘distribution’ will now require the appointment of a Swiss representative and paying agent. However, if distribution is limited to qualified investors only, authorisation of fund documents prior to their distribution in Switzerland is not required.

Foreign collective investment schemes already being distributed to Qualified Investors in Switzerland benefit from a 2 year transition period until they need to comply with the new rules, in particular having a Swiss Representative and paying agent appointed.

A few things not considered to be distribution include marketing to supervised financial intermediaries1 and insurance companies, the publication of prices and similar figures by regulated financial intermediaries2, the use of collective investment schemes for employee participation plans, and reverse solicitation or discretionary clients. They are therefore categorised as private placement activities which do not fall within the scope of CISA and have no additional requirements such as the appointment of a Swiss representative and paying agent or FINMA authorisation of collective investment schemes.

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1 Banks, securities dealers, fund management companies, asset managers and central banks
2 Provided that the publication of this information does not contain any contact details
The below illustration reflects the new concept of distribution and requirements for each of the four categories as well as the different methods to approaching qualified investors:

**Situation prior to 1 March 2013**
- Publication of prices and similar figures by regulated financial intermediaries
- Employee participation plans
- Reverse solicitation exemption (including advisory client and execution-only exemptions)

Qualified investors under CISA, art. 10 para. 3
- Regulated financial intermediaries such as banks, securities dealers, fund management companies, asset managers of collective investment schemes as well as central banks
- Supervised insurance companies
- Clients of discretionary asset management with regulated financial intermediaries
- Clients of discretionary asset management with independent asset managers (under certain additional conditions)
- Public entities and pension schemes with professional treasury operations
- Companies with professional treasury operations
- High net worth individuals (if opted-in)
- High number of non-qualified investors

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**Situation after 1 March 2013**

<table>
<thead>
<tr>
<th>FINMA fund approval required?</th>
<th>Swiss representative agent required?</th>
<th>Swiss paying agent required?</th>
</tr>
</thead>
<tbody>
<tr>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
</tbody>
</table>

- NO DISTRIBUTION
- PUBLIC ADVERTISING
- NO PUBLIC ADVERTISING
In 2012, the hot topic of foreign funds registered for distribution in Switzerland was FINMA’s concern regarding the governance structure in place within UCITS and in particular the segregation of duties and level of participation of board members. In some cases, UCITS fund applications were on hold after FINMA’s assessment of the responses provided. That said, many of these issues were resolved following the issuance of CSSF Circular 12/546 on substance requirements (in which all Luxembourg UCITS had to comply with by 30 June 2013), which addresses many of the issues that concerned FINMA.

Another significant change implemented by the revised CISA relates to the management of collective investment schemes. Under new regulations applicable from 1 March 2013, CISA now also applies to any entity managing foreign collective investment schemes from Switzerland. These entities now require FINMA authorisation and will be subject to supervision, whereas previously this was only required for investment managers of Swiss collective investment schemes.

The fact that any investment manager of foreign collective investment schemes operating from Switzerland requires authorisation is significant in light of the implementation of AIFMD. As of 23 July 2013, the management of EU alternative investment funds can only be delegated to a non-EU country provided that the investment manager in question is subject to a similar level of supervision comparable to that introduced by AIFMD. FINMA authorisation is required for entities performing asset management tasks and entities performing only advisory activities are out of scope. The lines are somewhat blurred between what is effectively classed as being management and what is considered advice but the general consensus so far is that this should be determined by questioning which entity has the power to decide on a fund’s investments. Further guidance on the latter is expected to be issued by FINMA.

The regulations are changing in both Switzerland and the EU, and Luxembourg’s fund industry needs to adapt to the new environment in order to benefit from the traditional access available to Swiss investors: the challenge is set.

To the point:

- Switzerland is inherently linked to Luxembourg from a wealth management perspective and vice versa, with Luxembourg funds holding the vast majority of the foreign fund market in Switzerland
- The financial regulatory landscape in Switzerland is evolving, along with several significant changes due to the revised CISA and CISO effected 1 March 2013
- The definition of what constitutes as ‘distribution’ in Switzerland was clearly set out in the revised Swiss law and those falling within this definition are now required to appoint a Swiss representative and paying agent. Activities falling outside of the aforementioned definition are considered as private placement
- The authorisation process of certain funds in Switzerland has been subject to significant delay, with the main bottleneck of funds requesting FINMA authorisation being substance questions on the governance structure of the UCITS. The latter was somewhat resolved by the CSSF Circular 12/546 on substance
- Under the new regulations, any entity managing foreign collective investment schemes from Switzerland will also have to be authorised and supervised by FINMA, which was not the case previously
- One element which still requires some clarification in relation to the management of collective investment schemes, is the precise definition of what is classified as management activities under the new requirements. This is important due to the fact that if an activity is only considered as ‘advice’, it will not require FINMA authorisation Further FINMA guidance on the latter is anticipated
Rebalancing the economics of the European mutual fund

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A proliferation of funds established across Europe over the years has left numerous legacy issues that pose a challenge to the profitability of European mutual funds.

These issues include bloated umbrella structures, a lack of concentration of strategic domicile, fragmented service provider arrangements and inefficient cost structures. This challenge has become more complex over the past few years, as European mutual funds have sought to comply with new regulations designed to improve transparency, enhance investor protection and curb the potential for systemic risk.

While there is no clear consensus on the precise cost of implementing the new regulations, there appears to be little doubt that such costs will be material. Added to this challenging backdrop is a period of relatively high inflation—further eroding investor returns—greater transparency on the costs investors pay for mutual funds, the explicit cost of advice, the high volatility of returns and households’ focus on debt clearance rather than saving. The result is a dilution of the economic bargain of the investment fund to the point where investors may be perfectly protected from a product they can no longer afford.

Asset managers have to decide whether to try to pass on the additional costs or absorb them. In any event, they will be obliged to seek ways of rebalancing the economics of the European mutual fund.

The table below reflects the relative size of regulated funds in Europe versus the U.S.:

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Assets (€ trillion)</th>
<th>Average Size (€ million)</th>
<th>Total Funds/ Sub Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>1.400</td>
<td>7,600</td>
<td>10.7</td>
</tr>
<tr>
<td>European Union</td>
<td>189</td>
<td>35,000</td>
<td>6.6</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>190</td>
<td>13,600</td>
<td>2.6</td>
</tr>
</tbody>
</table>

Sources: Investment Company Institute, 2013 Fact Book (www.icifactbook.org/fb_data.html) converted to approximate euro equivalent, European Fund and Asset Management Association (September 2012) and the Association of the Luxembourg Fund Industry (quarterly fact sheet, May 2013)
The Financial News CEO Snapshot survey of June this year—which included responses from over 30 European asset manager CEOs—revealed that 73% of respondents do not intend to pass on the additional costs to investors, while 50% say there is overcapacity (by number of funds) in Europe and 83% believe market consolidation is inevitable. A Cerulli survey earlier this year pointed to a reduction of as much as 30% in the number of European funds in 2013 alone. There are nearly 1,000 European equity funds and 1,500 European bond funds—providing investors with an extensive choice, but a potentially bewildering and intimidating selection process, especially for those investors acting without advice.

So what are the options available to asset management companies in pursuit of this economic goal, beyond simple economic closing sub-scale funds? Here we consider four areas of focus: distribution costs, fund restructuring and ‘super-sizing’, a shift in product mix and design and the service provider contribution.

1. Distribution costs

As a rule of thumb, distribution costs account for around half the total cost of a fund and should contribute proportionately to the need to rebalance economics. While there is much debate on the structure of distributor remuneration (commission—often referred to by policymakers as ‘inducements’—or fees) so far there has been little public debate on ways to transform the distribution channels and the quantum of the cost of distribution. Ten years ago we could not have imagined movie streaming, eBooks, iCloud, or the tablet and their impact on our personal and business lives. So why is it that fund distribution has barely changed in that period?

The debate around the shift from commission-based to fee-based remuneration models focuses on the impact this may have on the dominant bank distribution model in much of Europe but isn’t that model in need of some serious transformation? Why shouldn’t we imagine buying simple savings and investment products tomorrow in the same way we now buy books or movies online, with navigation and prompt tools with which we are all familiar: pre-packaged products that meet our lifestyle needs or are outcome-oriented for convenience and simplicity? Will tomorrow’s fund distribution channels be the likes of Amazon and iTunes?

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1 The Cerulli Report – European Distribution Dynamics 2013 – Navigating a Fragmented Market
The vast majority of retail investors with a portfolio of €50,000 shouldn’t have to pay for advice—they need to be offered options in simple terms in order to make their choice. Execution-only outlets, that are backed by a trusted brand (either the outlet itself or the packaged products on offer), would provide a one-stop solution for investors. It could be argued that such a scenario might lead to the emergence of a true open architecture and revolutionise the cost/yield equation for the vast majority of retail investors. Generally, it is difficult to argue that a tied sales model is good for the consumer. There is a requirement for creativity and vision to transform the way that products with an inherent degree of protection (UCITS) at the point of creation can be provided through new emerging channels offering trust, independence, convenience and an attractive price at the point of sale, with competition being based on the quality of the buying experience.

2. Fund restructuring and super-sizing

It is clear that rationalisation of legacy fund structures is no longer an option, but a necessity. The traditional distribution model will be reluctant to concede revenue; investors will not pay more even if they are persuaded that they are better protected; service providers are absorbing a massive transfer of risk from the investor and, in any event, represent a fraction of the overall cost. That leaves the fund manager, for whom simply absorbing additional costs is not an option, as the remaining margin will not justify the risk.

Super-sizing funds through consolidation, restructuring and reducing the number of domiciles and management companies is required to transform legacy structures into a fund range designed for efficient cross-border distribution that is well positioned for the future.

Some early examples of how master/feeder structures have been used to generate savings or create new distribution opportunities include:

- The first and most obvious example is the conversion of existing domestic funds into ‘feeders’, which in turn invest in a ‘master’ designed for cross-border distribution. The scale economies of the master are shared with the feeders and in many cases create the scale the master needs to attract larger investments from institutional investors it may not otherwise have attracted
- Establishing a feeder to ‘brand’ with a significant local distributor, for local/domestic asset gathering, as a more local look and feel alternative to a share class or generic sub-fund option
- Establishing a feeder in the same domicile as the master to deliberately create a slightly different product to the master by utilising the 15% of assets in the feeder that may be invested outside the master. This effectively creates a new product without the need for the substance and governance of a directly invested investment vehicle
- Establishing a corporate vehicle (e.g. a SICAV in Luxembourg) as a feeder in the same domicile as a long-established FCP, where the FCP lacks the appeal for genuine cross-border distribution. The SICAV is used to group cross-border assets and transforms the existing fund into a cross-border vehicle

A Cerulli survey\(^1\) earlier this year pointed to a reduction of as much as 30% in the number of European funds in 2013 alone
The master/feeder structure has a number of features which, to varying degrees, can contribute to the economic goal discussed earlier. Clearly, such a structure is easier to implement when the feeder is a new vehicle and not the conversion of an existing vehicle, but even the latter example will often involve less complexity than a [cross-border] merger. Share class functionality should always be exhausted before embarking on a master/feeder structure, but this will still leave significant scope to achieve restructuring savings. J.P. Morgan and Deloitte have joined forces to develop some very detailed thinking behind these structures—the content of which is too detailed for this paper—but part of that research identifies where savings should result, which is mainly where an existing vehicle is converted into a feeder.

The areas in which savings can be made include the following:

- The consolidated asset pool (one asset pool rather than two) means portfolio management, trading and custody costs are reduced.
- Fund administration costs are lower as valuation of a feeder is significantly less complex than for its previous form.
- Marketing and audit costs are reduced.
- A larger pool of assets is better positioned to lend securities and more attractive to institutional investors that may otherwise be prevented from considering a fund because of self-imposed limits on target investment fund size.

Our estimates indicate target net savings of around 10-20bps (before the potential contribution from securities lending and new institutional investors) in a typical conversion of a fund into a feeder, but this will vary depending on the size and complexity of the project.

Management company passport projects will also increase in popularity as some early pioneers demonstrate their feasibility and the resulting benefits. In particular, the advent of the Alternative Investment Fund Managers Directive (AIFMD) will act as a further catalyst to create ‘super ManCos’ which can manage both UCITS and non-UCITS across any EU domicile.

The only aspect to be fully tested is whether non-EU regulators in target distribution markets will accept the notion of a fund being managed from a jurisdiction different from the fund domicile. To mitigate this risk it would seem sensible to use a jurisdiction for your ManCo that is most likely to host your cross-border vehicle; Luxembourg or Ireland would therefore seem the most appropriate choices. Once this is accepted practice, there is little doubt that this method will contribute to the restructuring savings that fund managers need to make.

3. Shift in product mix and design

A possible response to the increased cost pressure on mutual funds may be a switch in emphasis towards lower-cost products, such as ETFs and index trackers. However, a low-cost product does not always mean good value for investors with a long-term savings horizon, or even those with a shorter-term horizon in a bear market. In addition, it is these lower-cost products that would be hardest hit by a transaction tax, if introduced, given the need for such products to trade with greater frequency than a buy-and-hold fund.

A second area to consider is whether there should be a more balanced sharing of the risk of the targeted outcome or performance of the fund being under- or over-achieved. There has been much debate about performance fees, but in their simplest form—from a consumer perspective—they are a construct that may allow for a fee to be paid when performance targets are reached or exceeded, provided there is a similar formula to return fees to the investor where the required performance is not achieved. If structured in a transparent manner and administered economically, such an arrangement could be very attractive to retail investors, who are increasingly questioning why a manager should collect full annual management charges if he has underperformed.
There is certainly room for innovation in the way that savings and investment products are packaged, especially at the ‘non-advice’ end of the market. Here, investors are looking for research, filters and selection tools that will help them make informed choices of packaged products designed for particular outcomes (further education, marriage, second home, etc.). Rather than presenting a fund as the product, retail investors in particular want a product that is ‘pre-packed’ and outcome-oriented.

Perhaps the industry could also consider a new standard for measuring ‘value for money’ relative to risk, to be assigned to funds and included in the Key Investor Information Document (KIID). The much maligned Synthetic Risk and Reward Indicator (SRRI) is considered confusing, and is limited in terms of the information provided to investors—what the consumer wants to know is ‘am I getting value for money from my investment’? Failing this, perhaps it should be a fiduciary obligation on the boards of funds to periodically (perhaps annually) certify that a fund offers ‘value for money’—something along the lines of the trustees of pension funds in Australia. Adding such responsibility to boards may help to focus attention on the fund’s performance, and hasten the closure of products that are not delivering a reasonable return to investors.

There is plenty of scope for product design and packaging to play a key role in rebalancing the economics of the European mutual fund. If the industry does not address this, one very unfortunate consequence may well be a ‘do-it-yourself’ approach, whereby retail investors conclude that they could compile their own portfolio through basic internet ‘stock-picking’ offerings. While they may be tempted by an apparently lower cost, there will almost inevitably be lower returns and higher risk, hence the converse of what policy makers set out to achieve.

Management company passport projects will also increase in popularity as some early pioneers demonstrate their feasibility and the resulting benefits.
4. Service provider contribution
While the cost of core services such as custody and administration collectively account for a very low percentage of the total, there is a lot a service provider focus can do to contribute to the rebalancing of the economics.

First and foremost, it is likely that the fund will pay less for its overall service bundle if it is procured from one provider rather than an unbundled approach across several service providers. Regulatory change that promotes greater oversight of the core administration elements also points to the virtues of a single, integrated service model where risks can be better managed.

As the role and responsibilities of the management company become ever more prescriptive, it is incumbent on the ManCo and custodian to work together to ensure that controls are not duplicated, but are performed effectively and in the most appropriate location. If this does not take place, there will be a proliferation of duplicate controls driven by a perceived need for one or the other party to believe it is his responsibility.

There is plenty of scope for product design and packaging to play a key role in rebalancing the economics of the European mutual fund
To the point:

- Inefficient legacy fund structures together with increasing cost and transparency pressures from new regulations requires new solutions to rebalance the economics of the European mutual fund
- The average European fund is 1/7th the size of its U.S. equivalent
- Four areas in particular may provide substantial benefits to the objective
  - Transformation of distribution remuneration arrangements and channels:
  - Fund restructuring and ‘super-sizing’
  - Innovation in product mix and packaging
  - Service provider leverage
- A ‘do nothing’ scenario risks driving retail investors into a self-service or ‘do-it-yourself’ approach, and therefore largely outside the protections EU policy makers have carefully constructed
- Solutions are available and being increasingly deployed as the pioneers and innovators of the fund management industry lead the way, and industry-wide competencies evolve around successful case studies

The biggest contribution, however, could come from an expansion of the traditional service bundle into elements designed to enhance the efficiency of portfolio management. This could consist of a range of services including clearing and collateral management, risk and margin solutions, cash and liquidity solutions, share class hedging and currency overlay, tailor-made synthetic positions, prime custody, asset class financing, securities lending and increasingly, outsourcing of middle office services.

The question for asset managers is: to what extent are they prepared to consolidate services with a single provider in pursuit of procurement efficiency and enhanced investor returns?

Conclusion

Legacy fund structures in Europe are in need of serious overhaul. The catalyst for action is the likely increase in additional costs required to achieve compliance with new regulations, on top of relatively high inflation rates which are further eroding returns, greater transparency on costs and the existing high-cost structures inherent in these legacy structures.

Fund managers may consider at least four areas of focus to transform the cost base, position their product for the future and reach the new distribution channels of tomorrow.

A ‘do nothing’ scenario is likely to result in severe margin dilution or a disenfranchised investor base. Solutions are available and the service providers are ready to support the pioneers and visionaries of the fund management industry as they look to rebalance the economics of the European mutual fund.
The positive contributions of small international financial centres
Informing the global debate

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Trillions of dollars flow annually through small International Financial Centres (IFCs), such as the Cayman Islands, Luxembourg, Jersey, the British Virgin Islands and Bermuda. The vast majority of these flows are not invested directly in these small IFCs, but rather are aggregated and channeled into investments across the globe.

Such flows exist in large part because these small IFCs, constrained by their small landmass as well as an absence of natural resources and other economic factors of production, have successfully focused on the development of efficient and responsive regulatory environments that best match the preferences of rational and sophisticated consumers of financial services.

These specific attributes of efficiency and responsiveness provided by such small IFCs incorporate legal and commercial certainty as well as relatively low-cost tax-neutral platforms designed to facilitate connections between and among sources of capital and entities which use capital. Such platforms serve to reduce the cost of credit intermediation and facilitate mechanisms for efficient capital structuring thereby lowering capital and risk mitigation costs. The reduced cost of capital along with less expensive risk mitigation, allows for more capital to be applied to innovation, entrepreneurship and job creation on a global basis. The allocative efficiency benefits provided by small IFCs ultimately serve the interests of all.

However, small IFCs have made relatively little effort to inform the global discussion on the important benefits they provide, and in this vacuum, periodically the policy narrative emanating from the G-20/EU jurisdictions has been critical of the role small IFCs play in facilitating the efficient cross-border flow of capital. This article is intended to provide an introduction to the ongoing contributions of small IFCs to the global financial architecture.

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Dr. Stoll-Davey is a CPA, Barrister (England and Wales) and Cayman Islands attorney. Dr. Stoll-Davey attended the University of Oxford as a Commonwealth Scholar. Her research at Oxford focussed on trade in financial services and regulatory competition. That research lead to her being awarded a doctorate in law by Oxford University for her thesis entitled ‘Global Comparison of Hedge Fund Regulation’.
The integration of small IFCs with G-20/EU jurisdictions

The evolution of small IFCs has been an iterative process with a critical role being played by private sector actors, including both professionals and multinational financial institutions. These private sector actors in small IFC jurisdictions are interconnected and integrated with, and in some cases identical to, those in the G-20/ EU jurisdictions. They include the Big 4 accounting firms as well as lawyers, bankers and other finance professionals. Indeed, the professionals in major IFCs are often pivotal in the identification of opportunities for regulatory symbiosis between small IFCs and G-20/EU jurisdictions. These professionals are also often instrumental in the development of the legal and regulatory frameworks required to provide an operational ‘coupling’ between small IFCs and G-20/EU jurisdictions.

Due to homogeneous regulatory preferences, private sector players may be expected to aggregate in the particular localities that best match their preferences. This observation may be viewed as a corollary of ‘path-dependence’ in the context of homogeneous regulatory choices, in which the actions of first movers increase the likelihood that later movers will make the same choices.1 By doing so, such actors bring an added element of economies of scale to the chosen locality, which may in turn strengthen such preferences.2

The proficiencies generated in small IFCs create the potential for global benefits in the form of greater access to capital, reduced risk and lower capital costs3

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2 Economies of scale may be attributed, in part, to the fixed cost of the regulators and service providers being spread over an increasing number of consumers, which generates market efficiencies for each consumer.
Accordingly, if it is assumed that these private sector actors have acted rationally, it then follows that in relation to the basket of factors, including laws and regulations which influenced the selection of such small IFCs, these small IFCs provide the closest match to the preferences of these actors.

By way of example, the Cayman Islands evolved as the jurisdiction of choice for domiciling hedge funds. Bermuda evolved as the jurisdiction of choice for reinsurance. The British Virgin Islands evolved as the jurisdiction for International Business Corporations (IBCs). Each jurisdiction developed a particular area of specialisation and therefore became proficient in that domain.

**The global benefits generated by small IFCs**

The proficiencies generated in small IFCs create the potential for global benefits in the form of greater access to capital, reduced risk and lower capital costs.3 By way of example only, hedge fund operators seeking to attract global investors and even the best managers may rationally seek to align the location of hedge fund activities with these preferences. The preference exhibited by hedge funds for jurisdictions such as the Cayman Islands perhaps provides evidence of a ‘race to the top’, best matching investors’ interests in terms of efficiency and return on investment. Indeed, the IMF assessment of small IFCs found that on average, small IFCs have been more favourably regulated.4 Along the same line, the research of Professor Liang from the University of Massachusetts Amherst indicates that offshore hedge funds provide a higher illiquidity premium.5

Similarly, a study by Professor Desai, Foley and Hines from the Universities of Harvard and Michigan, demonstrated that investors in hedge funds domiciled in offshore jurisdictions attained a higher return on investment, supporting the claim of the ‘offshore effect’.6 The latter research also indicated that there was an additional complementary relationship between small IFC entities and their major IFC affiliates in that the use of small IFCs stimulated 0.5% to 0.7% growth in investments and sales in nearby major IFCs.

By way of further example, the 2007 U.S. Senate hearings reported that the endowments of many high profile educational institutions in the U.S. have a significant portion of their portfolios in offshore hedge funds.7 More specifically, an average of 22% of American university endowment portfolios are invested in hedge funds, many of which are domiciled in small IFCs.8 The returns on these endowment portfolios have facilitated Ivy-league universities, such as Harvard, in providing more scholarships to academically capable students from economically poor backgrounds.

From the point of view of the student receiving the scholarship, small IFCs have undoubtedly provided a benefit. Furthermore, in the context of the EU, Professor Hertig from the Swiss Institute of Technology has observed, paying special attention to the domicile of collective investment funds, that the tax-saving resulting from registering such funds in Luxembourg rather than in the member state in which they are distributed, brings efficiency benefits to the EU.9
Why not in G-20/EU jurisdictions?

This raises the question of why these capacities and innovations are not implemented in the major IFCs and G-20/EU jurisdictions. The answer would appear to relate to the complexity and competing interests of the politics of G-20/EU jurisdictions. The Noble Laureate, Joseph Stiglitz, observed that all taxes either direct or indirect, distort economic behaviour and cause ‘deadweight’ losses.10 This distortion may become more pronounced when the same goods or activity are subject to such losses at different rates in different jurisdictions.11 This is perhaps best summarised by Professor Shaviro from the University of Chicago, who explains: “When there is trade across jurisdictional boundaries, each jurisdiction may be inclined to impose tariffs burdening imports. This tends to be generally inefficient; since it results in deadweight loss by inducing consumers to substitute locally produced goods for those they would have preferred if not for the differential tax treatment. Gains from trade across jurisdictional boundaries by people with different areas of comparative advantage are therefore lost […] the opportunity to create gains through trades without being impeded by tariffs is a kind of public good, the scale of provision of which is the entire trading area.”12

By way of example, U.S. tax-exempt investors such as pension funds, other retirement funds, university endowments and other private foundations are generally not subject to taxation. However, tax obligations may arise for an investor in this class if it invests in a hedge fund that has income classified for U.S. tax purposes as ‘Unrelated Business Taxable Income’ (UBTI).13 The unintended consequence of this rule is that now U.S. tax-exempt investors frequently choose to invest in offshore affiliates of U.S. hedge funds that are organised as corporations, which under US taxation rules are not pass-through structures and therefore do not create a risk of UBTI.14 In this regard, the interests between small IFCs and G-20/EU jurisdictions may be viewed as aligned and, relative to major IFCs, small IFCs may provide the regulatee with tax and regulatory products that are better matched to the particular activity, and consequently afford benefits, or at least the possibility of limiting ‘deadweight loss’. Moreover, given the many competing interests in large jurisdictions, legislators in major IFCs may be less concerned with limiting the unintended ‘deadweight’ economic losses of particular regulatees than they are with other issues.

Articulation and dissemination of the positive role of small IFCs

Notwithstanding, the evidence that the economic interests of small IFCs and those of G-20/EU countries are aligned, (as further illustrated by the fact that multilateral agencies controlled by G-20 governments, as well as large international businesses based in such jurisdictions, routinely make use of the available efficiencies afforded by small IFCs), from time to time policy narratives critical of small IFCs emerge particularly when scapegoats are thought to be expedient. Such narratives are generally supported by no academic basis or less than fully informed academic opinion which denies any contribution to economic efficiency or global welfare by small IFCs. The paucity of refuting academic and practitioner literature together with the lack of any effective communication of the evidence available permits an ongoing threat to the very existence of small IFCs and the business structures they facilitate.

10 This is generally applicable to all taxes other than lump sum taxes such as head taxes. JE Stiglitz, Economics of the Public Sector (Norton New York 1988) 478-479
12 D Shaviro, ‘Some Observations Concerning Multi-Jurisdictional Tax Competition’ in DC Esty and D Geradin Regulatory Competition and Economic Integration: Comparative Perspectives (International economic law series (Oxford University Press, Oxford 2001) 4
14 ibid; RS Zarin, and WP Zimmerman, ‘Overview of Hedge Fund Tax Structures’ (2006) 7 Journal of Investment Compliance 1
What then can be done by way of education? The limited academic literature has identified a number of underlying factors which may contribute to the economic efficiency provided by small IFCs, and has also identified a number of correlations that require greater research. However, such information has yet to be either confirmed by appropriate research or translated into professional literature and public awareness. Other areas of research, including research related to the benefits of cost of credit intermediation,15 simply have not been explored. Although some accounting, legal and finance professionals are aware, at least anecdotally, of the contributions of small IFCs to economic efficiency and global welfare, to date relatively little has been done to compile or disseminate the relevant information to the global accounting or other professional communities. Further, the research required to model how IFCs could maximise their contributions to the international community has not been carried out.

The collection of information on the positive role of small IFCs is critical both to small IFCs and to the professionals and clients which use them. In order for such information to contribute to the relevant debates and to de-bunk the ill-informed narratives against small IFCs, it is necessary for such information to be produced in a compelling format and distributed among those who inform the relevant debates. It is in this context that education, perhaps facilitated by an education trust focussed on fostering robust academic research on the global benefits of small IFCs, could make a significant contribution.

To the point:

- The roles and contributions of SIFCs in the global economy are not sufficiently understood
- SIFCs have focused their economic development on providing efficient and responsive financial services that both meet international standards and match the preferences of sophisticated users
- The trillions of dollars that flow through SIFCs are invested in developed and developing countries to the benefit of both the recipients of investments and the investors
- Research has demonstrated that SIFCs offer greater returns on certain classes of investments as a result of what has become known as the ‘offshore effect’
- SIFCs are known to offer lower cost credit intermediation, however further research is required to identify mechanisms for optimising such credit intermediation advantages
- Education is required to remedy misconceptions regarding the role and contributions of SIFCs that persist in some circles

15 Bernanke, B, ‘Non-Monetary Effects of the Financial Crisis in the propogation of the Great Depression’ (1983) 73 The American Economic Review 3, p 257-276. Bernanke argues that the increased cost of credit intermediation (CCI) serves as an explanatory factor for the unusual length and depth of the depression
The future of asset management
Davids and Goliaths?

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According to the U.S. Investment Company Institute, mutual fund assets at the end of the first quarter of this year increased 3.8% to US$27.86 trillion. Worldwide net cash flow to all funds was US$339 billion compared to US$447 billion in the last quarter of 2012. The improvement was said to be rooted in the prospect of an economic recovery and more positive sentiment on the financial markets. This is the result of an improving U.S. economy, a better control over the Euro crisis and improved data from China. In regional terms, Europe was the largest contributor of net sales in the first quarter with US$169 billion, followed by the Americas with US$150 billion and Asia with US$13 billion.

However, it is interesting to note that there are now more funds than stocks listed worldwide. According to EFAMA, there were 73,914 funds at the end of the first quarter of 2013 compared with 45,404 stocks (according to the World Federation of Exchanges in January 2013). In Europe, the number of funds from 3,200 asset management firms is close to 34,600.

To conclude, the top 25 leading master groups of asset managers hold around 50% of assets and accounted for 100% of sales in 2012 (the remaining groups had outflows on an aggregated basis). In 2012 the top five accounted for 55% of total sales while the top 25 funds by estimated net sales last year accounted for 38% of total sales.

Starting with the facts, 2013 looks like it will turn out to be a very good year for the asset management sector. Assets under Management (AuM) are growing once again and are in fact at an all-time high.

What do all of these facts and figures mean for asset managers?
When looking at global trends in asset growth, it seems that the crisis is only helping big asset managers. Numbers appear to be on their side and further industry consolidation could be perceived as inevitable. It is true that the first years of the crisis have helped big names, as many investors had numerous uncertainties while big brands—being a proxy for solvency—were key drivers of inflows.
However, despite recent trends, the industry is continuing to develop towards what an analyst at Morgan Stanley described in 2008 as the 'The Barbell Strategy' meaning the polarisation of the asset management world. In this world, big asset managers with a broad range of capabilities compete with small specialists, or boutiques, who focus on a smaller range of investment strategies. Furthermore, due to the rise of ETFs and passive investment strategies, it is also possible to identify an emerging trend in the industry which one journalist of the FT referred to as 'Cheap or Spicy'.

Although everybody recognises the big names in the asset management world, it is not easy to decipher the meaning of the term ‘Boutique Asset Manager’ (BAM), as there is no one-size-fits-all definition.

Some may argue that size or maybe ownership of the company are the determining factors, or that they are simply companies specialising in a small selection of capabilities. The truth is that most BAMs share a performance driven culture, talent, creativity and an entrepreneurial spirit that works very well in these difficult times.

For those who are in the middle of the ‘barbell’ and are neither a big company nor a BAM, they face very tough competition and the future ahead will be difficult.

**The top five performance drivers for boutique asset managers**

The old saying “nice things come in small packages” may be true, but it is also true that size is an issue for most Boutique Asset Managers.
Because at the end of the day people are what really matter in this business. It is not easy to recruit and retain the best talent out there, but creating a ‘virtuous cycle’ whereby employees enjoy what they do and work together as a team is more of an art than a management science. This shows the seeds of success for most companies and here the intimacy of smaller businesses gives BAMs a clear advantage over bigger firms.

Usually a consequence of putting the right people together and ensuring that the whole is worth more than the sum of its parts. In an industry with such a selection of products, good performance is not enough and top performance is a must. Luck also plays its part since markets can be in the wrong for very long before common sense prevails. Once the risk adjusted performance numbers are on your side, the focus moves to distribution.

Size was an issue at the beginning of the crisis and everyone thought that some companies were too big to fail but reality quickly changed this perception. Today reputation is a key performance driver in asset management. The Merriam-Webster dictionary defines ‘reputation’ as: a) Overall quality or character as seen or judged by people in general and b) Recognition by other people of some characteristic or ability. If you are a serious asset manager, and deliver what has been promised in an open and transparent manner to clients with whom you maintain healthy relationships, then it is possible to build a strong reputation over time. Communication (PR, marketing and client communications) is therefore central to the service offered by boutique asset managers.

After the crisis many investors still prefer to invest with those who are really committed, turning their backs on those who are not. For them, reputation is like an egg and bacon breakfast. They have to decide whether to leave their money with the chicken (who is involved) or to the pig (who is really committed). Your reputation will make you a chicken or a pig!

Many people think that distribution is the key to success, but this really all depends on how you define success. For big firms it is a question of countries, points of sale, reaching the top five in terms of market share, enormous expenses on marketing and sales staff, etc. For BAMs it is a question of approaching the issue intelligently; working with a selected number of distributors on which you can interchangeably rely on each other. Quality is more important than quantity and relationships really matter. To a certain extent this resembles a ‘supply side’ effect for big firms and a ‘demand side’ for BAMs, with all the implications for quantity and price with which every economist is intimately familiar. In this context, the UKs new RDR initiative is very good news for BAMS over the long term, although much more needs to be done in order to level the playing field.

Differentiation is probably more important today than performance. In Spain, there are over 700 Asian funds for sale. Even if a fund is ranked number 12, which is very good, what are the chances of capturing investors’ attention? Chances are slim unless there’s an interesting story to tell to clients. After more than 10 years running a top performing global equity fund we launched two specialised global equity funds (March Vini Catena, which invests in stocks related to the wine industry and the March Family Businesses Fund, which invests exclusively in family-owned listed companies) to capture investors’ attention and enhance our distribution capabilities in Europe and Latam. The two funds were run by the same team and had the same philosophy but boasted a higher level of differentiation compared to the original global equity fund.
In April, in Abadia Retuerta (Valladolid, Spain), a Group of Boutique Asset Managers (GBAM) decided to launch a self-help group to foster cooperation among similar BAMs all over the world as a mean to achieve the following goals:

- Private discussions about important business issues (strategy, products, markets, clients, etc.)
- Improvement via sharing experiences and best practices in all areas of asset management (research, portfolio management, risk management, marketing, etc.)
- Gain a better understanding of the respective markets or regions to enhance distribution

GBAM does not intend to become a lobby group or overlap with existing national or international organisations. Rather, it is a vehicle for a reliable network of peers to meet once or twice per year in order to discuss important issues for businesses, share ideas and learn from other colleagues’ experiences. Essentially, GBAM is a private club where members can openly express their doubts and ask questions to other CEOs. The goal of the association is to provide added value to its members through sharing information.

**What’s next for asset managers?**

Most reports about the future of the industry make reference to the importance of Emerging Markets, demographic changes, the impact of new technologies, new regulation, state intervention in the economy, etc. However, all these trends and developments are secondary to mastering the five performance drivers, putting special attention on talent. If talent is achieved, the other drivers will eventually follow... as long as you have the time and resources to afford the waiting.
To the point:

• The industry has picked up once again and at first sight it seems that the ‘Goliaths’ of the industry are taking advantage of the after-crisis situation.

• Asset management is a very dynamic industry and although funds outnumber equities, few actually beat the index.

• Five drivers push boutique success forward in comparison to other markets trends: talent, performance, reputation, distribution and differentiation.

• Boutiques fight back through the creation of the Group of Boutiques Asset Managers (GBAM), recently launched in Abadia Retuerta, Spain.

• At the end of the day, talent is what really matters.

The goal of the association is to provide added value to its members through sharing information.
Outlier gains and losses are the overriding determinants of investment performance.

Proponents of classical finance dismiss these supernormal events as freak accidents and simply discard them from theory. They seem unaware that fat tails also have a decisive influence on the central properties—variance, correlation—of return distributions. We investigate some of the consequences for portfolio diversification and risk management.

If you invested 100 years ago in the Dow Jones Industrial Average and you missed the best 100 days, you would have actually ended up with less than what you started with. If by uncanny foresight, you were able to avoid the ten worst days out of some 25,000 in that century, the terminal value of your wealth would have been three times as large as the return a passive investment in the Dow would have brought. The same findings essentially apply to any market or sample horizon. The impact of outliers on investment performance cannot be overestimated. Financial history truly is written by heroes—and villains.
Heuristics rather than formulas
Mean-variance optimised portfolio theory, Black-Scholes option valuation and the capital asset pricing model all rely on the assumption of normally distributed price changes. Its proponents readily acknowledge that classical finance cannot accommodate these fat tails of reality: 19 October 1987 was a 21-sigma event with an unfathomably small probability of occurring—normally. Outliers are cast out in fact as ‘acts of god’ or as anecdotes that can be rationalised ‘ex post’. What remains safely within the theory is nothing but white noise. Investors and risk managers alike need more realistic models.

Fifty years ago, Benoit Mandelbrot, the father of the fractal, introduced such models in finance. Prices still (more or less) follow a random walk, but just not in regular clock time. The relevant time dimension is ‘trading time’, a warped version of equably flowing time in which price action will take place rather mildly on one day and yet quite wildly on the next. These models do account for the salient characteristics of real financial prices: persistent trends punctured by sharp spikes or breaks that tend to cluster. The distribution of price changes follows a power law in which the probability of a gradually larger move falls off much more slowly than in the normal distribution. As a result, a disproportional part of the expected payoff is concentrated in a very limited number of outcomes.

The mathematics need not concern us here. In fact, beyond structurally identifying power laws as a much more appropriate model for financial prices than the normal distribution, there is not much one can definitively say. Calibrating the parameters of those distributions from historical samples is a hazardous venture. The estimated probability of very large moves, albeit very small, can easily range over multiple orders of magnitude. Investors and risk managers must resort to resilient heuristics rather than rigorous formulas.

1 Javier Estrada (2008), Black Swans and Market Timing: How Not to Generate Alpha, Journal of Investing (Fall), pp. 20-34. Estrada’s findings are based on data up to the end of 2006. Returns account for capital gains but not for dividends.
**Winner takes all**

Fat tails imply that probabilities do not decline fast enough to ignore when it comes to extremely adverse outcomes. Rather than engaging in a futile attempt to predict time and place of catastrophe, investors must manage their exposure to such events. Airport security does not seek to identify terrorists beforehand; it aims to avoid a blow-up in mid-air. Nobody knows when a storm tide will flood a coastal city but it pays to construct levees.

Conversely, venture capitalists will mostly refrain from trying to pick the elusive winner. The bulk of their gains typically derives from a single investment whose return vastly outstrips the gains—and losses—of the rest. In the textbook’s random walk, even the largest price increment contributes marginally to the overall dispersion in the sample. In a power law, the winner takes all, whether we consider the distribution of wealth in the population, bestseller rankings, or the ‘80/20’ rule in customer sales contribution.

In order not to miss out on those ‘tenbaggers’, the value drivers in a well-diversified portfolio ought to significantly outnumber the positions advised in classical finance. We typically do not know the winner in advance. In fact, the frequency of being right becomes largely irrelevant. The (biggest) part is of the same order of magnitude as the sum-of-the-parts, which is just another way of saying investment returns exhibit fat tails.
The tunnelling effect
Contrary to what many investors think, price series with heavy tails appear quieter than normally distributed changes. Stocks will spend more time in a tunnel of, say, one standard deviation around the mean than the Gaussian 68.3% would predict. The low volatility masks the fact that when break-outs from the classically defined tunnel occur, they may well be very dramatic. History cannot tell us whether things can never happen.

Proponents of classical finance rely on time diversification to paper over the impact of outliers: on a sufficiently long horizon, risk is reduced through averaging and long-term investment performance in the limit is normally distributed. The presence of fat tails does not necessarily invalidate the law of large numbers but it will make the sample mean converge much slower towards its expected value. The ‘large’ in the law’s name may be larger than most investors can tolerate or academics can find data for.

A similar disclaimer applies to the ‘limit’ of the central limit theorem. "Das Unendliche ist nur eine façon de parler", Carl Friedrich Gauss famously protested when a friend considered a limit to have been achieved as soon as the conditions were met for a limiting process to occur. In most power laws, the probability of extraordinary price changes simply decays too slowly in the tail to be able to rely on the asymptotic Gaussian limit.

The tail wagging the dog
Outlier gains or losses matter for performance. Hunting down these ‘black swans’ is a wild-goose chase as we have seen. But arguably the most insidious and least understood effect of fat tails is their impact on the overall properties of the return distribution. Sample estimates such as variance or correlation that are central to classical finance, are critically affected to the extent that established portfolio management techniques break down in reality.

First, typical users of Markowitz portfolio optimisation regard the estimated rate of return and covariance as constants, which in itself is a fatal flaw. Furthermore, these estimates are quite sensitive to what happens in the tail of the distribution. Regression studies based on the method of the least squares may not replicate. Variance and correlation—in fact any measure making use of squares of return variables that exhibit fat tails—will differ from sample to sample. In extreme cases, even the first-order sample mean is unstable.

Nobody knows when a storm tide will flood a coastal city but it pays to construct levees

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3 Technically, power laws with exponents below two feature infinite variance
The graph shows the convergence, or lack thereof, of the mean of gradually larger samples. In blue, a normally distributed variable with a zero expected value; in green, a Cauchy distributed variable for which characteristically the expected value does not exist.

It is the absence of concentration in the classical model that justifies the use of standard deviation as a measure of volatility. When a substantial portion of overall sample variance derives from a small number of large price changes, the use of standard deviation to measure risk is problematic. And with sample averages doggedly refusing to converge to their expected values, diversification becomes debatable.

R.U.R.

Risk management cannot do away with the unpredictable and the unmeasurable. Its mission is to ensure that investment performance falls within the range of what the investor can reasonably expect. Fat tails make that task even more daunting but that ought not to deter us. The keywords in our view are recognition, understanding and reward.
Each individual position exposes the investor to a complex of value and risk drivers that recombine on the portfolio level. Risk management then consists of recognising those exposures at the security and the portfolio level, and understanding how each individual instrument contributes to the aggregate risk exposure. The reader will note we did not say ‘identify’ nor ‘measure’. Conditional value-at-risk, extreme value theory, stress tests or even power law calibration, all venture into the realm of outliers where historical probabilities provide a flimsy foundation, and where recognising and understanding exposure should be the overriding consideration.

In the end, the trade-off to evaluate is whether the payoff profile is sufficiently rewarding for the investor to risk being exposed. Sometimes we take the leap, but the answer will be negative more often than follows from those pretty, polite techniques of classical finance.

To the point:

- Investment performance is overwhelmingly determined by one-day gains and losses which classical finance deems ‘de facto’ impossible
- Fat tails are not only important *per se*: they affect the central properties of return distributions too, to the extent that classical portfolio techniques break down in reality
- The probability of those outliers cannot be dependably determined from the limited historical samples we have
- Investors and risk managers must resort to resilient heuristics rather than rigorous formulas
Australian hedge funds
Why they are worth taking a look

Jarrod Brown
Chief Executive Officer
Bennelong Funds Management
Although the term 'hedge fund' has arguably meant a less than perfect experience for many northern hemisphere investors since the onset of the Global Financial Crisis (GFC), in Australia, the investor experience has been remarkably positive—not only in quantitative terms of performance and risk, but also in qualitative aspects such as accessibility, liquidity and fees. This is particularly so in the case of equity-based funds.
The research firm, Australian Fund Monitors (AFM) covers over 250 Australian absolute return and hedge funds. According to its independent data, the AFM Equity Fund Index, which tracks 208 Australian-offered funds, outperformed the S&P/ASX 200 Total Return Index over the period of January 2003 to June 2013, with a return of 11.53% per annum compared to 9.22% per annum respectively.

The universe of funds covered by the AFM Equity Fund Index covers a range of strategies, including market-neutral, long-only, income, long/short, buy/write, event-driven and 130/30.

**Beating the market—with less risk**

Importantly, equity-based funds have outperformed the market with less risk. The standard deviation for the AFM Equity Fund Index was 7.88 per annum, versus 13.41% per annum for the S&P/ASX 200 Total Return Index. In terms of the largest drawdown, the peak slump for the AFM Equity Fund Index, at -25.22%, was significantly less than for the S&P/ASX 200 Total Return Index, which came in at -47.19%.

Taking a more recent performance comparison, for the period of January 2008 to June 2013—and isolating the impact of the GFC—the performance of the AFM Equity Fund Index again exceeded that of the S&P/ASX 200 Total Return Index, with a return of 4.04% per annum compared to -0.53% per annum.

The risk comparison again favoured absolute return funds. The standard deviation for the AFM Equity Fund Index was 8.90% per annum versus 16.09% per annum for the S&P/ASX 200 Total Return Index; the largest drawdown being 23.97% compared to 44.13% respectively.

From this data, a conclusion can be made that over a long-term comparison comprising of a bull and bear market, and with the recent ‘GFC followed by recovery’ period, absolute return equity funds outperformed the market’s total return, and took on less risk doing so.
Tapping into the top skills

Performance data backs the proposition that hedge funds play a role in a diversified portfolio designed to generate and protect wealth. The diverse range of hedge funds available in Australia and worldwide may be relevant for superannuation fund members, pensioners and ordinary investors alike. The specific strategies help them meet their investment objectives by adapting to their specific risk/return profile.

One example may be the capacity of an absolute-return equity strategy to reduce volatility when combined with long-only equity strategies. Another may be the ability of a hedge fund strategy to provide exposure to stock-specific risk while remaining market neutral.

An example close to hand is our Bennelong Long-Short Equity Fund1, which has been closed to new money. It is a research-driven, market- and sector-neutral pairs trading strategy investing mainly in large cap stocks from the S&P/ASX 200 Index, with a 10-year track record and annualised net returns of more than 20%.

The fund’s portfolio manager, Richard Fish, has more than 25 years of market experience. Since inception in January 2002, the fund has earned yearly positive returns, including an 11.95% return in 2008 and 20.6% in 2011, both of which were negative years for the S&P/ASX 200.

A fund showing that calibre of consistent long-term outperformance across periods of positive returns as well as periods in which markets were volatile and negative, is also a very handy addition to any investor’s arsenal.

Part of the reason why hedge funds are underused by Australian investors is because of commonly held misconceptions in relation to their cost, risk, apparent illiquidity and supposed lack of transparency. These perceptions generally come from sensationalised overseas headlines. Once investors and their advisers open their minds to the potential strengths of hedge fund strategies and how they can enhance investment outcomes, allocation to these vehicles will surely become more popular.

Value, transparency and access

On the fees front, generally speaking, Australian funds are cheaper than their global counterparts. Generally, hedge funds are characterised by the notion of ‘2 plus 20’—a management fee of 2% per year and a 20% performance fee. While this is common, it is by no means the template for all hedge fund fee structures: according to AFM’s database, the average fee of funds is a management fee of 1.3% per year management fee, and a performance fee of 13%. This only improves the relative attractiveness of Australian absolute return funds compared to long only and indexed equity managed funds.

Performance data backs the proposition that hedge funds play a role in a diversified portfolio designed to generate and protect wealth

1 Similarly, Kardinia Capital manages Bennelong’s second hedge fund. The Bennelong Kardinia Absolute Return Fund has delivered investors 14% per annum over seven years. This ‘variable beta’ (which means the manager has the flexibility to adjust the Fund’s exposure to the underlying market) strategy has ensured a positive return in every calendar year since inception in 2006. This obviously includes the heart of the Global Financial Crisis in 2008 when the Fund returned positive 0.30% whilst the market fell close to 40%
When it comes to transparency, the characteristics of the Australian investment market are such that opaque hedge funds do not get supported. The channels in the Australian investment market by which money reaches fund managers are strongly intermediated; managers need to be able to articulate their value proposition (including process, performance and regulatory compliance) in an acceptable manner to both the institutional and retail value chains.

In the wholesale market, entities such as asset (or investment) consultants, professional research houses, and wholesale investors’ investment committees and trustee boards all represent ‘boxes that must be ticked’ in order for a fund manager to be awarded money. In the retail market, ‘gatekeepers’ include research houses and financial adviser dealer groups’ Approved Product Lists (APLs), which go hand in hand.

At no stage within these hierarchies are opacity nor ‘black box-style’ investment strategies rewarded—in fact, transparency is mandatory for managers to attract fund flows. This makes the Australian market different to the North American market, where there is a larger community of sophisticated investors such as limited partnerships and high net worth investors prepared to invest unadvised in funds solely on the basis of an information memorandum. The ‘retailisation’ of the Australian market effectively prioritises and rewards transparency, and is considered an essential requirement for managers.

The same is true for liquidity, which is effectively in-built as a requirement in the Australian marketplace. If you are offering a retail fund, you cannot have investors locked up for a significant length of time. There are a variety of methods managers use to manage liquidity and redemptions, but again, the market looks for—and rewards—greater liquidity. In particular, retail investors need daily liquidity.
To the point:

• Although hedge funds have been a less-than-perfect experience for many northern hemisphere investors, Australian investors have had a remarkably positive experience.

• Equity-based hedge funds have outperformed the market with less risk.

• Australia’s diverse range of hedge funds may be relevant for super fund members, pensioners and ordinary investors alike.

• Various commonly held misconceptions about hedge funds are some of the reasons why these strategies are under-used by Australian investors.

• Generally speaking, Australian funds’ fees are cheaper than that of their global counterparts.

• The ‘retailisation’ of the Australian market prioritises and rewards investment management transparency.

• The best hedge funds provide outstanding performance with significantly lower volatility than traditionally managed funds.

Hedge funds—a growing sector

In conclusion, strong performance achieved with less risk cannot go unnoticed, and absolute return funds are reaping much more interest than ever before. According to data gathered from research house Rainmaker Information, the Australian hedge fund sector now manages about AUS$37 billion of the Australian superannuation pool, compared to AUS$20 billion just prior to the GFC. Although it represents less than 3% of total assets, if we observe the growth rate rather than the total quantum of funds, we see that there is significant room for growth.

The ‘apex predator’ of the Australian funds management industry, the AUS$82 billion Future Fund (the Australian government’s quasi-sovereign wealth fund), is a big investor in what it calls ‘skill-based strategies’. It spreads across a variety of asset classes, using a combination of fund-of-funds and direct hedge fund investments. The Future Fund was established in 2006 and today it has become the biggest user of hedge funds in Australia. However, it recently lowered its alternatives allocation from 16.3% to 15.3%, according to its March 2013 quarterly fund update. Having an influential investor so committed to hedge funds cannot help but increase awareness of the sector.

So while hedge funds might not be suitable for everyone—considering their structures, strategies and risks which certainly require additional research and understanding on the part of the investor—the reality is that the best funds provide outstanding performance with significantly lower volatility than traditionally managed funds. It is unlikely that there is an investor in Australia who is not at least interested in this proposition.
Amid the current market uncertainty, a key challenge facing investors is how to protect their existing wealth while simultaneously taking advantage of the investment opportunities available.

It is well known that risk and return go hand in hand. Without risk, good returns are not feasible. However, clever diversification can reduce the risks without sacrificing the returns.

The concept of diversification goes back to 18th century English as indicated in the phrase, "Don’t put all your eggs in one basket". It is possible to trace diversification even further back in time, to the Jewish Talmud, over two thousand years ago: “Let every man divide his money into three parts; invest a third in land, a third in business and let him have a third in reserve.” According to economics Nobel-prize winner Harry Markowitz, diversification is the only free lunch available on Wall Street.

Many modern studies have shown that the correct asset allocation (i.e. investing your money into equities, bonds, real estate, commodities or cash) almost exclusively determines both the risk of your portfolio and the final return. The impact of market-timing and security selection on long-term risks and returns is negligible.
What is the correct asset allocation method?
This differs according to the investor’s personal circumstances, the goals being set, the time horizon and the attitude towards risk taken. Banks and asset managers spend considerable amounts of time determining each client’s personal risk profile and subsequently set certain diversification rules over the various asset classes.

However, is this enough in the current dynamic investment environment, where assets regarded as safe (for example, German 10-year bonds) are only delivering a 1.15% yield per year, and when bonds in general do not provide enough of a return to cover the current annual inflation rate of 2.2%? And what if the economic circumstances change, Europe begins to recover from its recession and inflation goes up again? Should we still invest in bonds?

There is a strong belief that if economic circumstances change, asset allocation should be changed accordingly. As the famous British economist John Maynard Keynes said, “When facts change, I change my mind. What do you do Sir?”

As a result, an in-house Investment Clock was developed to measure the growth and price developments on the markets, determining in which phase of the economy we stand. A typical economic cycle consists of four main phases, usually moving in a fixed consecutive order, like a clock.

They are as follows:
Recession (the phase Europe is currently experiencing): a business cycle contraction with a general slowdown in economic activity. Inflation and growth decline. Bonds benefit from the decline in interest rates and become the preferred asset class.

Recovery (the U.S. and Emerging Markets are currently in this phase): economic growth rises and productivity and corporate profits increase. Excess capacity in companies has not been eliminated; inflation remains low. Equities are the best investment.

Overheating: aggregate demand is increasing so fast that it cannot be met by the economy’s productive capacity and is thus liable to fuel inflation. Commodities do well in this environment.

Slowdown: an inflationary period accompanied by rising unemployment, lack of growth in consumer demand and business activity. The best investment here is a combination of bonds and cash.
The indicators used to determine where we are in the above cycle relate to the economic activity seen over previous periods in addition to expectations for future production, new orders, inventories, employment and factory deliveries.

The Investment Clock strategy significantly improves the risk-return profile of a typical balanced portfolio, as it is possible to deliver returns under all market conditions. A further benefit is that this system is 100% rules-based and is naturally easy to understand.

Besides changes in economic circumstances, ‘swings in sentiment’ are important to the overall risk and return of a portfolio. History shows that assets can experience sustained periods of underperformance relative to one another, due to the ‘fear and greed’ drifts in markets.

Relative Rotation Graphs
Relative Rotation Graphs (RRG) constitute a unique tool for visualising the relative strength of mood swings on the market. This tool is available on Bloomberg professional terminals and will soon be released on Thomson Reuters EIKON systems. Since its release in January 2011, the functionality has been used daily by 3,000 to 5,000 users. RRGs are used to visualise the relative strength of all elements in a universe vis-à-vis a benchmark. The example below shows the RRG of the ten economic equity sectors in the U.S. Rotation generally takes place in a clockwise direction, with the top right quadrant showing the leading sectors. The technology can be applied to all asset classes but also at an asset class level. This type of visualisation gives market professionals the big picture, in one picture and enables them to keep an eye on what is going on across their universe.

![Figure 1: Interest rate](image)

![Figure 2: Example of a Relative Rotation Graph (Index SPXL1 on the 31/07/2013)](image)

**Ten group constituents**

- SSFINL: S&P 500 FINANCIALS INDEX
- SSCOND: S&P 500 CONS DISCRET IDX
- SSMLTH: S&P 500 HEALTH CARE IDX
- SSINDU: S&P 500 INDUSTRIALS IDX
- SSMATR: S&P 500 MATERIALS INDEX
- SSCONS: S&P 500 CONS STAPLES IDX
- STELS: S&P 500 TELECOM SERV IDX
- SSUTIL: S&P 500 UTILITIES INDEX
- SSINF: S&P 500 INFO TECH INDEX
- SSENRS: S&P 500 ENERGY INDEX
Last but not least is the Equity Risk Premium (ERP), a valuable tool for analysing the relative value between stocks and bonds. The Equity Risk Premium can be calculated by adding the real earnings growth rate of the equity market to the dividend yield, giving you the expected real return of equities. If you subtract the real interest rate (the nominal interest rate minus inflation) from this figure, you end up with the implied Equity Risk Premium, which is normally between 0 and 6%.

When the ERP reaches the upper/lower levels of its historical range, it provides a powerful signal as to which asset class (bonds or equities) do better against each other. The ERP is currently towards the upper end of its range, suggesting investors should be overweight in equities versus bonds.

The traditional static approaches of risk profiling and market implementation between asset classes are becoming increasingly outdated. The main issue with traditional approaches is that they tend to be backward-looking and as such, could potentially increase investors’ exposure to potential market bubbles, e.g. historically safe assets such as sovereign bonds.

Relative Rotation Graphs (RRGs) are used to visualise the relative strength of all elements in a universe *vis-à-vis* a benchmark.
We therefore advise using the three asset class tools mentioned above:

1) Investment Clock—for determining where we are in the economic cycle
2) Relative Rotation Graphs—for pinpointing market sentiment
3) Equity Risk Premium—for calculating valuations

This approach significantly outperforms an equally weighted portfolio. It also gives investors peace of mind, knowing that the portfolio composition is changing seamlessly according to market circumstances.

To the point:

- Correct asset allocation is the key driver of investment risks and returns
- Historically safe assets such as government bonds could actually be risky
- It is very important to have a dynamic approach towards spreading wealth
- The winners are investors who use proven rules for protection and guidance through market movements
Linking the dots of the new regulatory framework for a better understanding of the new securities infrastructure landscape

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Introduction
The creation of a harmonised European asset servicing landscape has been a major objective for financial organisations for over ten years. In light of the market turmoil of 2008, a battery of regulatory measures and market events is shaping the future landscape of the European market infrastructure. Today, we would like to focus on the market infrastructure and post-trade related aspects, particularly collateral.

The Financial Collateral Arrangements (FCD) and Settlement Finality Directives (SFD) were two regulatory responses to the large increase in cross-border financial flows faced by a European market with a highly local structure. Welcomed by the market, these Directives proved to be in the right direction, but still needed improvement. The use of collateral has continuously increased leading to a strong demand from the industry to broaden the assets eligible to be used as collateral. On 13 June 2013, the European Central Bank announced greater flexibility in terms of assets accepted as collateral (e.g. asset-backed securities). In addition to collateral eligibility, the recent regulatory changes in terms of infrastructure will also lead to changes in collateral handling and management in Europe.

The regulatory challenge mainly consists in the appropriate understanding and implementation of the various regulations all aiming to improve market efficiency and investor protection but all having their own agenda, not necessarily facilitating a holistic approach towards a future optimised operating model for the industry. Our topic, collateral handling and management, will for example be impacted by, amongst others, EMIR, MiFIR, ESMA guidelines on UCITS and AIFMD. These regulations, however, have their own objectives, rationale and agenda. In this context of profitability pressure and cost cutting, asset servicing organisations have little alternative but to chase one regulatory hot topic after the other to ensure compliance as soon as the regulation enters into force. It is vital for the mid- and long-term strategy of the post-trade providers to keep a holistic view of the target operating model for the European post-trade industry.
We regularly observe that the opportunity to step down from the regulatory wave and take the time to have a global view of where the boat is finally sailing is a ‘must’ that unfortunately few institutions can afford. Despite the obvious need to adopt a staggered regulatory readiness implementation agenda in parallel to the regulator’s agenda, it is fair to believe that the winning financial institutions will be those that succeed in adapting their operating model using a holistic strategic approach in terms of asset servicing.

The evolving regulatory framework is totally reshaping the asset servicing landscape and is impacting the complete value chain from the initial trade to the post-trade and custodian services. Today, we propose to focus on AIFMD, EMIR, the Central Security Depository (CSD) Regulation (CSDR) and the future Target 2 Securities (T2S) platform which will reshape depositary’s roles, responsibilities and operating model in terms of collateral handling and management.

**What are the main changes?**

**T2S: A same level playing field for collateral management and handling**

In a nutshell, the European T2S platform will facilitate the consolidation of pocket ponds of collateral into a large EU pool of collateral. T2S clearly opens the gates of the local securities business garden to provide customers with a more harmonised European landscape in the securities collateral and settlement activities. This is a new strategic dimension that depositaries will need to take into account when considering their future EU custody network.
T2S will create a level playing field for European market infrastructure and stimulate competition among industry players. In terms of collateral management, this market event centralises all local market access through one hub, creating a major opportunity for asset servicing firms to build a pan-European and international open architecture via its European T2S hub. This hub is virtually a one-stop-shop for collateral handling and management without changing the physical street-side allocation of the assets used as collateral.

From OTC to a regulated market place: how to manage collateral
Besides the EU regulators’ and market’s objective to harmonise post-trade infrastructure, one of the other key objectives consists in shifting derivatives transactions from an OTC to a regulated market infrastructure.

The European Market Infrastructure Regulation (EMIR) aims to organise the derivatives markets respectively for trading and clearing on a recognised regulated platform such as the Organised Trading Facilities (OTF) and Central Counterparty (CCP). As a result, the market estimates that approximately 80% of financial derivatives products (currently, it is reasonable to expect that IRS and CDS will be subject to the CCP model) currently traded OTC will become subject to a streamlined trading environment.

OTFs and CCPs aim to reduce the risk and enhance the transparency related to these transactions. CCPs act as a single counterparty for market participants, thus minimising the risk related to defaulting derivatives counterparties.

EMIR will impose requirements in terms of reporting, risk mitigation and collateral management. As one of the results, participants will have to provide collateral under margin requirements (initial and variable margin) in order to access the CCP. While still in the process of definition, the technical standard for non-centrally cleared transactions will also impose additional requirements in terms of exchange of collateral. In both cases, collateral will need to be mobilised and segregated with no opportunities for rehypothecation or reuse.

T2S will create a level playing field for European market infrastructure and stimulate competition among industry players.
Asset servicing firms seeking an optimised T2S, CSD and CCP operating model will be well advised to adapt their collateral management capabilities in parallel to their infrastructure connectivity. In addition to timely trade confirmation, portfolio reconciliation or dispute resolution, managing collateral will become more than a competitive advantage in this context of centralisation of assets and collateral pools. Marked to market valuation, eligibility assessment or assistance in setting up the client’s intragroup exemption criteria will be essential to lock the asset managers’ client base looking for a post-trade one-stop-shop.

Safekeeping of collateral will also change under the new regulations of EMIR and AIFMD both impose requirements in terms of appropriate safekeeping of financial assets used as collateral. The general principle consists in the obligation for a depositary to keep all financial assets (i.e. including collateral) within its sub-custody network. As a result, keeping financial assets in custody generates an obligation of results for the depositor meaning that it will need to return without undue delay any loss of financial asset collateral. This strict liability for the depositary generates additional custody risk for the depositary bank.

It will be key to define a sound collateral safekeeping strategy in order to be in a position to control and mitigate the risk of financial losses on the financial assets held within the sub-custody network.

Depositaries must be aware that legal title transfer of financial collateral given by their AIF’s will remove the obligation to maintain the assets within their sub-custody network and hence the strict liability in terms of assets. On the contrary, financial collateral received by the fund with title transfer will become an asset to be kept within the network of the depositary with full liability in the event of loss of the asset.

As an illustrative example, when financial asset collateral belonging to the investment fund is held with a prime broker or a counterparty of the fund, the depositary is faced with major challenges. If the depositary bank appoints any counterparty as a sub-custodian to hold the fund’s financial assets, which is the direction the market is currently tending to take, the depositary will need to safe keep these financial assets with the same standard and care as with its traditional network. Considering the fact that prime brokers do not use the same network as the depositaries, it will be a major challenge for depositaries to prove due care and diligence in terms of safekeeping of financial assets given as collateral without title transfer. As an example, we can mention the obligation for the depositary to monitor the pre-agreed rehypothecation limits when the fund’s long assets are fully given as collateral to the prime broker. The prime broker then reuses these assets based on complex indebtedness calculations for which any further segregation and asset allocation reporting on their street side becomes a major challenge.
In addition, appropriate segregation of the collateral is also one of the key issues when dealing with a clearing member to access CCP. The counterparty may either choose to have omnibus or individual segregation of records and accounts for direct and indirect clients. As a result, reconciliation and day-to-day administration of collateral will become more complex due to the potential dichotomy of segregation between two counterparties.

Central Security Depository (CSD): the place to be?
The question of liability and segregation of collateral may take a different perspective when being addressed under the scope of a Securities Settlement System (SSS). The SSS concept is the current regulatory definition of the CSD and ICSD market infrastructure. The AIFMD and probably the forthcoming UCITS V and VI have provided a specific status for the asset in safekeeping under the SSS regime.

Indeed, as per the directive, safekeeping in a SSS is not considered a delegation of the custody function. Therefore, when assets are deposited with a SSS, the depository can envisage adapting a risk based on due diligence (as opposed to a fully-fledged due diligence). This consideration is less obvious when the SSS further sub-delegates the safekeeping of these financial assets to a non-SSS institution. In this latter case, fully-fledged due diligence could be considered. In the case of a full SSS safekeeping chain, the requirements on assets segregation as set out in AIFMD would not apply.

In the event of a loss of financial instruments held in custody at a level of a full SSS safekeeping chain, the normal liability regime of the depository (i.e. obligation to return lost financial instruments except in certain circumstances) applies as a matter of principle. However, the depository may rely on and allege that the loss at the level of a full SSS safekeeping chain is an external event beyond the depository’s control and equivalent to an obligation of means in terms of safekeeping.

Under EMIR, Central Counterparties (CCPs) are required to hold collateral assets posted as margin or as default fund contributions at an SSS level, where possible. The main rationale for these considerations relates to the fact that market infrastructure such as CSD but also CCP, Organised Trading Facilities are subject to a specific regulatory framework (EMIR, CSD, MiFIR) as well as national legislation, EU and global standards such as the ESCB/CESR and CPSS/IOSCO recommendations for SSSs) making an obligation for a depository to return lost financial assets or even settlement risks in general rather unlikely.

In the future, market infrastructure like CCPs and CSDs will be subject to specific regulatory framework
CSDs will also be subject to their own specific legislation which is being prepared by the Commission (CSDR). The regulation will provide the CSD with a European Passport and harmonisation with a common T+2 settlement cycle in Europe. The CSDR is key to preparing CSDs in view of the T2S platform.

The major global custodians have understood these new regulatory and market dynamics. The Bank of New York Mellon set up a new CSD earlier this year and has signed the T2S framework Agreement. J.P. Morgan has also chosen to be positioned on the CSD area but under a partnership agreement with the London Stock Exchange (Monte Titoli post-trade infrastructure) to set up a new CSD in Luxembourg.

The ability to centrally manage and mobilise collateral, currently divided up into multiple location pools, is probably one of the major challenges financial institutions will have to address in the next coming years.

The combination of custodian collateral services together with CSD and integrated CCP market infrastructures is probably a strategic orientation to address the collateral management challenge.

Is the new securities target model so simple to define?

Obviously and unfortunately not! The trend towards market infrastructures consolidation is clearly there and will be accentuated in the next coming years. The custody business will also be reshaped in line with the various market and regulatory trends. More competition and globalisation will also impact the number of EU sub-custodians. On the other hand, there are a series of financial, regulatory, fiscal and operational challenges such as day-to-day asset administration (e.g., corporate actions, tax reporting aspects) that will still require dedicated local sub-custodian expertise that not all CSDs can directly provide.

Linking the dots

What will the securities business look like in the next three years? As we have seen, several regulatory and market considerations are driving the new framework and the current business landscape will be different with a much more integrated EU market.

Efficiency of collateral management and handling will be particularly crucial in the coming years and will require a new business approach and services. Estimates are that the demand for collateral could increase by US$4 to US$5 trillion in the coming years as a result of the new regulatory framework.

An impact assessment of current and future collateral organisation and solutions should be conducted by financial institutions to evaluate their ability to address the new requirements as well as to benefit from a central and holistic view of their needs and assets in terms of collateral.
Leveraging from the new European post-trade environment and defining the future strategic business model for their depository network are also strategic topics on the ‘to do list’ of the EU financial institutions. As we have seen, this exercise is closely related and must be done together from a collateral management perspective.

All the players in the post-trade value chain are currently facing the question of their future business model in the new European environment. The answer to the question is far from trivial as it will probably drive these players’ business operations for the next decade.

It increasingly appears that the main global custodians are positioning themselves (via a CSD infrastructure) as a one-stop-shop in terms of asset servicing at the European level. Most of the others, financial institutions active in asset servicing have a unique opportunity today to leverage from this new landscape while anticipating the new regulatory requirements (collateral margin), achieving operational efficiencies and developing new business opportunities. In order to achieve this strategic objective, linking the dots of the regulatory framework is probably the right approach.

**To the point:**

- European market infrastructure will change dramatically in the coming years further to the regulatory (EMIR, AIFMD, CSDR, etc.) and market framework (T2S)
- The new post-trade landscape will move from a collection of 25 domestic markets into a common European level playing field in terms of settlement and collateral management
- Efficient collateral management will be required to anticipate and meet the future margin requirements as foreseen by the new regulations
- There will be a new opportunity to access different European domestic markets from one main counterparty (a CSD or a global custodian) under the new T2S environment
- This potential centralisation may also offer the opportunity to develop a central and consolidated view of the collateral capability and needs
- Global custodians are increasingly positioning themselves (via CSD infrastructure) as one-stop asset servicing providers with direct access to T2S (and EU domestic markets) and global collateral management services
- Financial institutions have a unique opportunity to revisit their current asset servicing business model to anticipate the new regulatory framework and leverage from the new European market infrastructure landscape
FATCA REPORTING: IRS registration portal opened and additional guidance published

As mentioned in Notice 2013-43 pushing back the FFI registration portal opening and extending most of the FATCA deadlines established by the final regulations, the FFI registration portal is now open.

The IRS has also provided additional guidance available on the IRS website¹, including a FATCA registration overview, a detailed 75-page FATCA registration online user guide, tips for logging into the FATCA registration system, instructions for the Form 8957 paper registration form and a document detailing the format of the Global Intermediary Identification Number (GIIN) used to identify FATCA compliant entities.

The IRS registration process will be in four stages which involve an FI creating an account, completing a registration form, signing and submitting the registration form and receiving approval from the IRS. The intention is that FIs can use the remainder of 2013 to become familiar with the FATCA registration website and input preliminary information. As of 1 January 2014, FIs will be expected to finalise their registration information and submit the information as final. Only once registrations are submitted as final will the IRS assign Global Intermediary Identification Numbers (GIINs). The website will also be used for renewal of the QI Agreement.

¹ http://www.irs.gov/Businesses/Corporations/FATCA-Registration
ECJ Case: C-26/12—Fiscale eenheid PPG Holdings BV (PPG)

Employers can recover VAT on the management and operation of their employee pension funds

Dispute

PPG set up a fund-based pension scheme for its employees and entered into contracts with suppliers for services relating to both the administration of the pension fund and the management of the assets of the fund. All of the services received by PPG (including administrative, management, consulting and auditing services) were paid for solely by PPG (and not passed on to the pension fund). PPG then claimed deduction of the VAT on those services as its input tax, on the basis that the costs represented general business or ‘overhead’ costs.

Decision

The CJEU’s conclusion is that an employer which has set up a separate pension fund for the benefit of its employees:

a. Can recover the VAT it incurs on services relating to the management and operation of that fund (subject to its own partial exemption position),

b. Provided that it can demonstrate the existence of a direct and immediate link between the services received and its taxable activities (based on all circumstances of the transaction).

This was the case even though PPG’s pension fund was legally and fiscally separate from the business.

Implications

The judgment indicates that an employer can recover VAT on pension scheme costs (subject to its own partial exemption position).

However, the exact ability of employers to do so will depend on a range of factors in each particular case. On this basis, all employers with fund-based pension schemes should review how VAT on pension scheme costs has been treated/recovered in previous periods and should consider the potential implications of the case in their respective EU country.

For instance:

• Which entity has contracted and paid for third-party services relating to the management and operation of the pension scheme (e.g. the employer or the pension fund itself)?
• Does this differ based on the type of service received (e.g. investment management vs. audit/actuarial services)?
• Which entity has received the VAT invoices for the relevant services?
• How have the costs of those services been allocated between the employer and the pension fund? Has there been any recharge of costs between the employer and fund?
German Investment Tax Act - Legislative process for AIFM implementation finally failed—former rules may remain applicable

On 3 September 2013, in its last conference before the parliamentary elections to be held on 22 September 2013, the German Bundestag (Lower House of Parliament) did not vote on outstanding amendments to the German Investment Tax Act (GITA) in order to adjust tax regulations to match with new provisions introduced by the capital investment law code (Kapitalanlagegesetzbuch), replacing the German Investment Act (GIA).

Therefore, the draft of the AIFM Tax Amendment Act will become invalid with the end of the current legislative period end of September 2013. At present, however, it is not foreseeable whether a potential new draft law might come into effect further to the parliamentary elections and the forming of a new government at the end of September 2013, nor how it will be structured.

For the time being, there is a lack of certainty for some investment vehicles to determine and publish the respective tax bases, as the old GITA to some extent refers to the outdated Investment Act.

On 18 July 2013, the German Federal Tax Office (BMF) issued a circular letter dealing with transitional rules stating that the tax authorities will not make any challenges if regulations of the currently outdated GITA are used for the taxation of investors in investment vehicles that comply with the requirements defined by the (former) GIA. This shall be valid as long as a replacement law has not been voted and is in place.

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**Link'n Learn 2013**

As previously announced, Deloitte has, since 2009, decided to open its knowledge resources to the professionals of the Investment Management community. We are happy to present to you the calendar of our new Link’n Learn season which, as usual, will be moderated by Deloitte’s leading industry experts. These sessions are specifically designed to provide you with valuable insight on today’s critical trends and the latest regulations impacting your business. An hour of your time is all you need to log on and tune in to each informative webinar. For access to the sessions do not hesitate to contact deloittelearn@deloitte.lu

**Agenda**

- **23-Sep**  Introduction and latest updates to ETFs and Index tracker funds
- **26-Sep**  Impacts of Basel II – III and Solvency II for the asset management
- **14-Oct**  Introduction to IFRS for funds
Managing the complexity of AIFMD reporting for you

The upcoming AIFMD reporting requirement constitutes a daunting operational burden, from the initial setup to the ongoing production cycles.

Deloitte provides efficient solutions to address these AIFMD reporting challenges and accompanies you from start to finish.

We would be happy to share our views on this subject with you. Give us the opportunity by contacting:

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