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SPECIAL REPORT

POWERING HEDGE FUNDS

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HEDGENORDIC

INTRODUCTION

HedgeNordic is the leading media covering the Nordic alternative investment and hedge fund universe. The website brings daily news, research, analysis and background that is relevant to Nordic hedge fund professionals from the sell and buy side from all tiers.

HedgeNordic publishes monthly, quarterly and annual reports on recent developments in her core market as well as special, indepth reports on "hot topics".

HedgeNordic also calculates and publishes the Nordic Hedge Index (NHX) and is host to the Nordic Hedge Award and organizes round tables and seminars.

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Editor´s Note…

Passing the Batton

Setting up and operating a (hedge) fund company, as well as running strategies and funds with external capital, can be a complex task. Not seldom do hedge fund managers trade globally on multiple exchanges across various currencies and instruments, dealing with a broad, diversified number of international investors in a tight regulatory environment. This multifaceted process involves tasks such as renting office space, hiring staff, onboarding a bank, custodians, and brokers, as well as taking care of risk management, research, trading, legal and compliance, ESG, and many more.

In an era where financial markets operate at speed and complexities multiply exponentially, hedge fund managers often have to rely on an ecosystem of external service providers and partners. The contemporary hedge fund manager, therefore, is tasked not only with optimizing returns to run a successful business but also with harmonizing a network of partners and counterparties to allow them to operate and thrive.

There are many moving parts across various internal and external systems, tools, platforms and applications that are required to work in harmony and seamlessly. As the baton is handed over from one system to the next, collaboration is crucial at all times, with no room for glitches.

Through HedgeNordic's special report on "Powering Hedge Funds," we investigate the role that technology, solutions, and service providers play in powering and empowering hedge fund managers to operate and navigate in these complex landscapes. Lotte Tonsberg, Head of EMEA at Enfusion, a provider of software solutions for the global financial industry, starts off by presenting the "Enfusion Platform: An Integrated Front, Middle and Back Office Experience."

Following this introduction, Scott Rosen and Markus Gronlund from Visible Alpha share valuable insights on "Extracting Maximum Value from Sell-Side Equity Research." Sukh Bachal and Jarrett Sydell of Neovest, which provides an order and execution management system (OEMS) tailored to the intricate needs of hedge fund managers, go into the topic of "Empowering Hedge Fund Sophistication with Open-Platform OEMS."

Hannah Smith from Edgefolio contributes with "A Fund Marketer's Blueprint" guide about "Marketing to Diversified Hedge Fund Investors," while Levi Morin of SS&C Eze, a unit of SS&C Technologies, discusses "Asset Allocation Agility in an Evolving Landscape." In "Understanding and Mitigating Unintended Risks," Fredrik Gärdsfors and Mourad Essofi from Axioma, an investment technology provider currently undergoing a merger with Danish counterpart SimCorp, describe the need for a flexible and holistic approach to portfolio construction and risk management.

In "Expanding Investor Reach via a Third-Party ManCo," Helena Unander-Scharin, the CEO of ISEC Services, sheds light on the move by ISEC Services that allows local managers to launch Luxembourg-domiciled funds within the Reserved Alternative Investment Fund (RAIF) structure. Concluding the insightful contributions, DiligenceVault, which offers a comprehensive due diligence technology platform, talks about "Quantifying the Value of Operational Due Diligence (ODD)."

We hope you enjoy the read during the upcoming festive season.

HedgeNordic is sending our very best regards and wishes to you and yours.

Kamran Ghalitschi

PUBLISHER, HEDGENORDIC

Enfusion Platform: An Integrated Front, Middle and Back Office Experience

A new approach to investment management for the Nordics

By Hamlin Lovell – HedgeNordic

Lotte Tonsberg, Head of EMEA – Enfusion

"We work with new managers looking to build their target operating model as well as established managers aiming to simplify and renew their operating model."

Sweden is the third largest hedge fund hub in Europe, and the overall Nordic region is important for the Enfusion platform, which already has clients in Sweden, Finland and Norway. Enfusion is a leading provider of software solutions for the global financial industry, serving a diverse and impressive global client base of over 850 investment management firms, including hedge funds, family offices, and asset managers.

Enfusion's clients span a wide range of sizes and strategies, from multi-billion dollar hedge funds with hundreds of end users and portfolios, to smaller emerging funds and asset managers with less than $1 billion USD in assets under management. Regardless of their size or strategy, these clients trade in various asset classes, such as equities, currencies, and fixed income, both in listed and OTC markets. Some of the common strategies they employ are long/short equity, global macro, credit, emerging markets, and event-driven.

Furthermore, integrated into the Nordic ecosystem, Enfusion has fostered strong relationships with both local and global banks and service providers, such as SEB, BNP, Nordea, Swedbank, Goldman Sachs, State Street, and UBS. Additionally, Enfusion works with numerous ESG-focused managers who seamlessly incorporate ESG factors, such as scores and ratings, into their portfolio management processes and compliance controls.

Enfusion's single cloud-native system consolidates data and processes that are typically spread across multiple platforms into a unified database and toolset, enabling front, middle, and back office functions. Small, medium, and large managers rely on Enfusion to boost operational efficiencies.

"We work with new managers looking to build their target operating model as well as established managers aiming to simplify and renew their operating model," says Enfusion's Head of EMEA (Europe, Middle East, and Africa), Lotte Tonsberg, who works with Stephen Roberts on the Nordic

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market. They are based in the London office, and the global firm has nine other offices: Chicago, New York, Dublin, Hong Kong, Singapore, Sao Paolo, Bangalore, Mumbai, and Sydney.

Enfusion synchronizes data over multiple functions to give all teams complete oversight of trading, execution, positions, performance, portfolios, risk, liquidity, fees, etc. A unified platform is also helpful for risk management, regulatory compliance and associated monitoring, as well as reporting of liquidity, operational and regulatory risks.

AUTOMATION

"We achieve 90% automation for our clients through our front-to-back software on one single database," adds Tonsberg. Automation helps reduce manual errors, which allows investment managers to focus on delivering returns and supporting business development. One example of a manager that appreciates this feature is Sweden's Proxy P, a Stockholm-based manager focused on energy transition, who told HedgeNordic: "We needed an established, robust and well-renowned front-to-back solution. We decided to leverage the technology from Enfusion to minimize manual intervention, reduce operational risk and be able to scale the business".

OPERATIONAL EFFICIENCY

"The Enfusion platform is multi-tenant and was born in the cloud," says Tonsberg. "This means all clients are on the same version of the software and updates are released across the client base weekly. We also package the software with a security master managed by the Enfusion team," she points out. Pricing is mainly determined by the number of users and interfaces rather than assets under management.

NO UPGRADE COSTS

Cloud-native (since 2006) expedites the updating of the system for the benefit of all users. "Upgrades are a thing of the past. We release 300 enhancements per quarter, and our whole client base is on the latest version of the software through our weekly updates. Gone are the days of lengthy, expensive upgrades with entire consultancy teams working on upgrading the system with the client's technical team running testing and validation of the upgrades," says Tonsberg.

"The Enfusion platform is multi-tenant and was born in the cloud."

MODULAR POSSIBILITIES

Around 80% of the client base uses the complete front-to-back package, though some combine it with other in-house or vendor systems on a modular basis, using API for add-ons. For instance, some clients choose the Enfusion PMS, OMS, or post-trade system and integrate it with their own or other vendor systems. Onboarding times can range from 2 to 6 months, depending on the complexity of the offering.

Enfusion has evolved over many years since three developers started it as a technical consultancy. In 2006, it began as a portfolio management system (PMS) and progressed by adding building blocks such as a General Ledger, Execution, and Order Management System before adding more functionality.

MULTI-ASSET, CREDIT MARKET NORDIC HIGH-YIELD COVERAGE

Multi-asset class coverage includes a single security master dataset from Refinitiv datascope covering every publicly listed product, so there is no setup involved when trading a new security. This makes it easier to launch new products and strategies as managers diversify their offerings.

Credit managers, including one of the world's largest, welcome Enfusion's coverage of OTC markets such as bank loans (described as "best in class bank debt/ syndicated loans processing" by one client), and Tonsberg, a Norwegian who studied at UK universities but grew up in the US, had first-hand experience of data issues when she sold Nordic High Yield bonds at DNB: "We know that the Nordic corporate bond market is a nuanced market that often needs some customized pricing data, and the same can be true for mortgage bonds."

TESTIMONIALS

Readers should review detailed testimonial interviews on the Enfusion website coming from several leading hedge fund managers. Here, we highlight a few key takeaways from three of them.

A 2021 launch, Sparta Capital, was founded by Franck Tuil, formerly of Elliott Capital. The event-driven strategy invests across the whole capital structure in equity and credit, including listed and OTC derivatives such as CDS and TRS, as well as private credit. Sparta needed holistic coverage of all these asset classes and instruments. They also believe it is inefficient to have trading, accounting, PMS, and risk systems from different providers. Cost savings come from reduced reconciliation and fewer staff hours inside Sparta.

Melqart Asset Management, a hedge fund that trades complex alternative asset classes, streamlined its operations by switching from multiple vendors to Enfusion, a cloud-native SaaS platform that covers the entire investment lifecycle. Enfusion's Middle Office Managed Services enabled Melqart to launch a new macro fund and expand its business with ease and efficiency.

Event-driven launch, CastleKnight Management LP, whose founder, Aaron Weitman, featured in The Hedge Fund Journal's 2021 "Tomorrow's Titans" report, selected Enfusion for its versatility in handling multiple asset classes and instruments across the capital structure; its ability to handle trades over the full trade life cycle, globally and around the clock; smooth coordination with the administrator, and a strong middle and back office solution. Remote access was also appreciated during the COVID-19 pandemic.

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Extracting Maximum Value from Sell-Side Equity Research

By Hamlin Lovell – HedgeNordic

Scott Rosen, Founder and Chief Research & Innovation Officer – Visible Alpha

Markus Gronlund, Senior Sales Executive for Nordics – Visible Alpha

> "In a small region like the Nordics, local hedge fund managers may have an information edge over their international competitors, but many find that they really need tools such as Visible Alpha to digest data and intelligence when investing outside the Nordics."
>
> Markus Gronlund

Demand for equity research has reached record levels as the rapidly changing macro environment increases risk, uncertainty and opportunity. Interest rates have gone from zero to multi-year highs in just two years. Managers need the tools to harness vast volumes of information to their benefit.

EXPANDING BANDWIDTH AND COVERAGE

A growing network of over 200 brokers contribute spreadsheet models on more than 14,700 companies globally for Visible Alpha. "In a small region like the Nordics, local hedge fund managers may have an information edge over their international competitors, but many find that they really need tools such as Visible Alpha to digest data and intelligence when investing outside the Nordics, and most players have a significant majority of their investments outside the region," says London-based Markus Gronlund, who handles Visible Alpha's sales for the Nordic region.

In addition to collecting and distributing the analysts' spreadsheets, Visible Alpha process the models on over 6,900 companies, extracting all of the data and forecasts from each analyst and allowing investors to compare and contrast the views of the different analysts on not only financial metrics and key drivers, but all the way down to the most granular segment and product level assumptions. Visible Alpha also creates "consensus" data on all of these metrics, providing a highly detailed view of market expectations for each company.

Nordic managers can invest across a wide investable universe, and they need the tools to punch above their weight. Visible Alpha is a force multiplier in terms of leveraging content from research providers, broadening an analyst or portfolio manager's bandwidth so that they can efficiently and effectively handle the content from many more providers. Gaining a wider and deeper set of quantified views on companies allows managers to put their thesis into perspective: are they above or below consensus on business dynamics – and is their view an outlier? Visible Alpha acts as a yardstick to help investors understand where their own models fit into the range of opinions.

"While investors have always done their own research, the sheer scale of following markets today means that managers rely heavily on sell-side analysts to interview management, talk to competitors, pore through the financials and really get to know companies in detail," points out US-based Scott Rosen, founder of Visible Alpha and Chief Research and Innovation Officer.

DISCRETIONARY AND QUANT

Many asset managers, corporations and sell-side firms find the service indispensable and use Visible Alpha's data across their workflows. End users range from traditional fundamental discretionary managers to systematic investors using quantitative and data science approaches. "In business, and particularly in the markets, almost everyone's job involves trying to predict the future with the mosaic of information and insights you have available. The better you can collect, process and interpret that information, the better your forecasts," says Rosen.

SINGLE-COMPANY AND INDUSTRY-WIDE ANALYSIS

In recent years, Visible Alpha has expanded its offering from company-specific data to include analysis of business peer groups, examining a host

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> "In business, and particularly in the markets, almost everyone's job involves trying to predict the future with the mosaic of information and insights you have available. The better you can collect, process and interpret that information, the better your forecasts."
>
> Scott Rosen

of detailed comparable metrics across companies, with KPIs tailored to each industry. Users can focus on growth trends, competitive positioning, relative revisions or sentiment changes, surprise analysis or other comparisons of companies within the same industry or sub-industry. These screens can be further filtered by geography or company size.

INDUSTRY FOCUS: BIOPHARMA

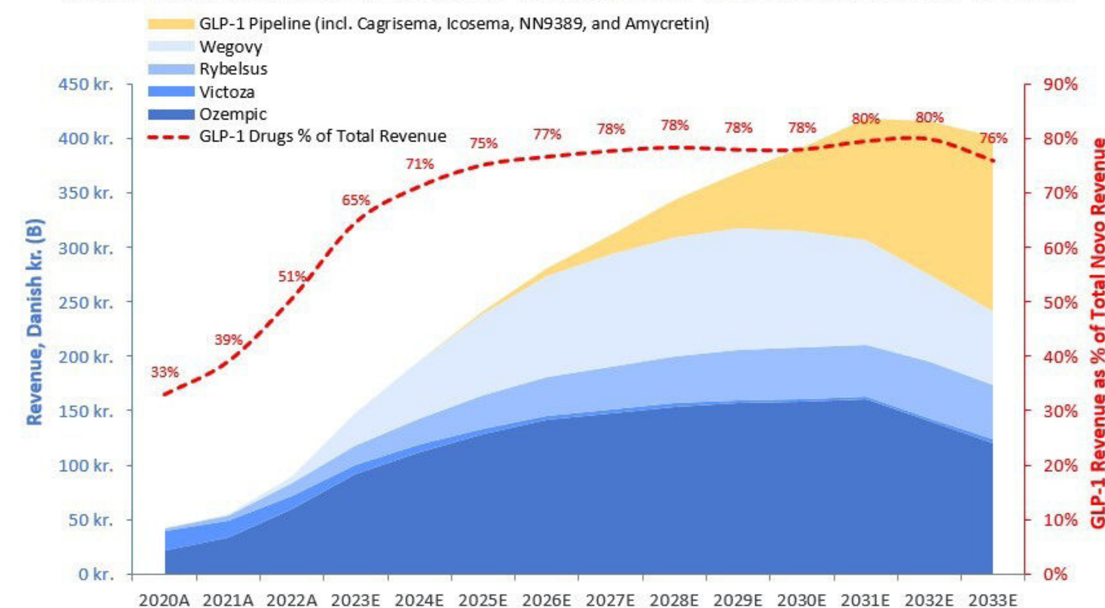
In October 2023, Visible Alpha launched a new pharma and biotech service, offering insights specific to the healthcare sector. Visible Alpha Biopharma provides granular breakdowns of drug revenue estimates, including sales forecasts, addressable number of patients, indication, therapeutic areas, clinical phase, and mechanism of action (MOA). The service covers 6,700 drugs that treat over 1,000 indicators and leveraging 1,200 Mechanisms of Action.

STOCK FOCUS: NOVO NORDISK

The largest stock by market capitalisation in the Nordics, Novo Nordisk, provides an interesting case study to highlight just a few key metrics. Visible Alpha can provide a granular breakdown of, for example, 2028 revenue forecasts for Nordisk's Ozempic, which range from a low of USD 115 billion to a high of USD 228 billion, and have a mean of USD 154 billion. Regional breakdowns can also be provided. Of 6,700 drugs tracked by Visible Alpha, Ozempic is now the third largest – up from number 25 two years ago, thanks to licensing the GLP-1 agonist for weight loss. See the sidebar for additional information on Novo Nordisk's GLP-1 portfolio.

GRANULARITY AND FIDELITY OF DATA

Users of Visible Alpha can drill down to the deepest assumptions in a model (up to 1,000 for some companies), and each can be cross referenced against other companies using standardized line items per sector and industry. These include some important items that companies themselves may not report, but which analysts estimate, such as geographic or product-specific breakdowns. Investors can gauge consensus and dispersion in estimates, and



Source: Visible Alpha consensus (November 2023)

[Top] As of November 2023, Novo Nordisk's GLP-1 drugs were projected by analysts to generate peak revenues of nearly Kr419 billion by 2031. The GLP-1 franchise accounted for only one third of Novo's revenue in 2020, and is expected to grow to three quarters of revenue by 2025.

[Right] Over the course of the last two years, analysts have dramatically increased their forecasts for 2023 Ozempic revenues, from around Kr50 billion to over Kr90 billion.

expand their coverage. "Clients focus on the fidelity and reliability of the data, which speaks to our methodology in collection and validation, allowing them to trust the numbers," says Gronlund. "We use maximum granularity to track analyst forecasts from the ground up, from the lowest assumption all the way through the revenue build and the financial statements. This provides much greater insight and detailed understanding than any other vendor. We understand the individual nuances. We do not just gather top line numbers," stresses Rosen.

EXAMPLES OF FUNCTIONALITY

Visualisation tools flag up anomalies. Investors can identify the most accurate forecasts and forecasters, and most importantly, which analysts are the outliers among the range of estimates.

All data can be exported into Excel and compared with in-house forecasts. Investors can also view an audit trail, tracing every forecast back to the actual location of that number in a model or filings document.

The revisions analysis feature tracks the trajectory of individual or consensus estimates, for all line items and data points. Users can also be alerted to revisions that exceed a minimum threshold if they want to focus on larger changes.

Testimonials reveal that VA has saved huge amounts of time for clients. The average time saving in one survey was 8 hours per month, plus five hours from the Excel add-in, but some clients claim to save much greater amounts of time.

Many clients say that freeing up energy and bandwidth allows them more time for creative thinking and wider ranging analysis. Analysis that is itself deeper and richer for having access to the Visible Alpha service.

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Sukh Bachal, Head of Business Development – Neovest

Empowering Hedge Fund Sophistication with Open-Platform OEMS

By Eugeniu Guzun – HedgeNordic

Hedge fund strategies tend to be sophisticated. They often rely on a complex mix of financial instruments and asset classes. Multi-broker Execution Management Systems (EMSs) have become indispensable tools for hedge funds, assisting their traders and portfolio managers in optimising valuable desktop space and minimising workflow inefficiencies. Neovest, a fully-owned – yet fully independent – subsidiary of JP Morgan, provides an order and execution management system (OEMS) tailored to the intricate needs of hedge fund managers.

"Neovest supports the ability for clients to access a variety of order and execution management products and functions including algos, synthetic baskets, pairs trading, multi-leg spreading in the futures market and routing to high-touch brokers," explains Jarrett Sydell, Head of Product at Neovest. "Our strengths include our diverse broker network, the intuitiveness of the platform, quick installations, our fully 'redundant infrastructure' and our customer support," he emphasises.

Neovest predominantly caters to hedge fund managers, with approximately three-fourths of Neovest's 600 clients falling into this category. Neovest's client base is global, while originating in the United States, Neovest have an established client base in EMEA, APAC and most recently the Middle East. The Nordic region, the second-largest European market for hedge funds, holds significant appeal for Neovest due to its platform's suitability for hedge funds.

OPEN STRUCTURE, ONE OF THE FOUR DEVELOPMENT PILLARS

In a fiercely competitive vendor landscape where numerous EMSs claim to be multi-broker and multi-asset, Neovest adopts a customer-first mindset with its Open Platform. This architecture allows users to integrate other platforms and systems seamlessly with Neovest's core product.

"If a customer requests integration with another platform that might have overlapping functionality

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with ours, we will facilitate it, provided it simplifies the customer's workflow and helps them achieve what they need," explains Sukh Bachal, Head of Business Development at Neovest. "We avoid creating barriers and dictating specific workflows; instead, we adapt to what works best for them," points out Bachal.

The open platform architecture represents one of four pillars in Neovest's development strategy, alongside expanding the asset palette, enhancing workflow management, and modernising technology. Sydell, who leads Neovest's product development, underscores the open platform strategy's role in enabling customers to access relevant portfolio information from other systems without the need for constant switching. "We are trying to ensure that our customers don't have to swivel chairs between one system and another. Our Neovest platform should allow them to pull up relevant information about their portfolio that they might have in another system, making it easier to send orders to brokers in the network."

The second product development pillar focuses on broadening the array of asset classes and instruments available for trading. Neovest currently allows clients to communicate their orders to over 340 brokers specialising in equities, futures, options, and FX. "We are continually discussing our offerings with customers and looking at the asset side to determine where to focus next," points out Sydell.

The third pillar centers on workflow management, representing the core of OEMS. "A lot of our development efforts focus on workflow efficiencies inside the Neovest product itself, not necessarily related to our open ecosystem," explains Sydell. This work may involve eliminating workflow outliers to enable customers to focus on the core tasks. "Workflow management is a significant part of our OEMS strategy," emphasises Neovest's Head of Product.

The fourth and final pillar in Neovest's development strategy entails the continuous search for new technologies. "We continually invest in modernising our technology and infrastructure, constantly exploring new technologies available to ensure our services can continue to grow with our growing user

> "Neovest supports the ability for clients to access a variety of order and execution management products and functions including algos, synthetic baskets, pairs trading, multi-leg spreading in the futures market and routing to high-touch brokers."
>
> Jarrett Sydell
> Head of Product at Neovest

base," says Sydell. "Part of that strategy right now is transitioning some of our monolithic infrastructure into microservices, leveraging the technology that can easily be spun up or spun down based on usage."

OPEN-CULTURE AND FAST ONBOARDING

"Alongside our open platform architecture, we also have a very open culture at Neovest," emphasises Sukh Bachal. Despite being under the umbrella of JP Morgan, Neovest maintains its own infrastructure and operates independently with broker neutrality, fostering a startup-like atmosphere. This culture is valuable as it enhances the understanding of market intricacies, a crucial aspect when providing support to hedge fund clients.

"Users should really feel confident that we understand the markets. Our support and account managers possess a lot of market experience, so they understand the trading landscape very well," says Bachal. "If a trader picks up the phone and contacts our customer support with an issue, the response should be 'I know exactly what you are saying.'" Bachal goes on to emphasise that "an open platform is really good, but that complemented with our open mindset is what really makes a difference to hedge funds."

In addition to its open architecture and breadth of asset classes, Neovest also seeks to offer a fast onboarding process. "From sales to the deployment phase, the whole journey can be as quick as five or six weeks," says Bachal. "When we first demo to a client, we have this approach of WYSIWYG, which means that 'what clients see today is what they are going to get' on day one," she emphasises. "There is not going to be any delta, there is not going to be any phase deployments. This is it." This streamlined onboarding process appeals to hedge fund clients who seek to go to market quickly.

Neovest garners a significant portion of its new business from individuals who previously used the platform. A former Neovest user from the United States recently launched a new fund and opted to use Neovest as its OEMS. "We don't need to see a demo, we were only using Neovest a few months ago, just get us up and running," Bachal recalls the conversation with the client. This trend underscores the positive experiences clients have had with Neovest's platform and services, a testament to the company's commitment to delivering efficient solutions to the hedge fund industry.

To learn more about Neovest and how it can benefit your business, visit www.neovest.com.

> "When we first demo to a client, we have this approach of WYSIWYG, which means that 'what clients see today is what they are going to get' on day one."
>
> Sukh Bachal

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Marketing to Diversified Hedge Fund Investors; a Fund Marketer's Blueprint

By Hannah Smith – Edgefolio

"Hedge fund marketers face a lot of complexity when building their marketing strategy."

Hannah Smith

The investor landscape for hedge funds has evolved in recent years. There has been a significant increase in allocations from a variety of institutional investors, in part driven by the search for higher returns in a low-yield environment.

Regulatory changes have increased transparency and reporting requirements for hedge funds, making them more attractive to these institutional investors, who may have previously been hesitant due to concerns about opacity.

At the same time, high-net-worth families and individuals are increasingly turning to hedge funds as a key component of their investment strategy.

These investors do not have the same risk appetites, communication preferences, decision-making processes, or underlying values. This article will consider how hedge fund marketers can tackle this diversification of potential investors when building their strategy.

THE CHARACTERISTICS OF DIFFERENT HEDGE FUND INVESTORS

Let's consider each investor type, what matters to them, and how this should be reflected in your marketing strategy.

PENSION FUNDS

Pension funds collect money to pay retirement benefits, so their primary goal is to generate stable long-term returns and protect their capital. Pension funds are focused on:

Risk management. Pension funds prefer a conservative approach, valuing commitment to stability, consistent performance, and rigorous risk management. Focus on these attributes, and make this information readily available.

Information and transparency. Pension funds make decisions through committees or boards that consume large amounts of fund information. Lean into stable returns with consistent Sharpe ratios and demonstrate risk management and long-term growth potential through historical cycles.

SOVEREIGN WEALTH FUNDS (SWFS)

SWFs are state-owned investment funds. They often invest in alternatives, including hedge funds, as they look to find a home for their (often substantial) portfolio balances. SWFs are focused on:

Innovation. They seek out unique investment strategies within alternative asset classes, and fund marketing should underscore the unique value proposition and innovative approach.

Analytical data. SWFs are sophisticated investors who appreciate a high volume of analytical data. This information should be available on demand, 24/7.

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ENDOWMENTS AND FOUNDATIONS

These organisations manage portfolios to support their non-profit activities and often seek a balance between immediate income needs and long-term sustainability. Endowments and foundations are focused on:

Environmental, Social, and Governance (ESG). They will want assurance that any fund they invest into is aligned with (or at least is not at odds with) their internal mission, strategy, and governance.

Values and brand. This includes the values of the leadership team, philanthropic and corporate social responsibility narratives, and the structure of the fund management organisation.

FAMILY OFFICES

Managing the wealth of ultra-high-net-worth individuals (UHNWIs) or families, these entities value tailored strategies that reflect their investors' specific wealth preservation and growth objectives. Family offices value:

Personalisation and customisation. This is true for both service and investment strategies, and they cannot be targeted with a "one-size-fits-all" model.

Relationships. They will want to know who runs the fund, and who will be managing their investments, and you need to build a strong rapport through personal engagement.

FUNDS OF HEDGE FUNDS

These are investment funds that hold a portfolio of other funds to diversify risk across multiple strategies. Funds of hedge funds are focused on:

Data. They want detailed data on past performance, risk management and the overall strategy as well as peer analysis reports.

Deep content. They value in-depth white papers, comprehensive podcasts, and presentations at industry conferences.

HIGH-NET-WORTH INDIVIDUALS (HNWIS)

These are wealthy individual investors looking to hedge funds for novel investment opportunities. HNWIs are focused on:

Innovation. HNWIs are open to taking on more risk for the potential of higher returns and are attracted by dynamic, forward-thinking investment strategies. They will be swayed by brand values and trends among their peers.

Exclusivity. They are excited by investment opportunities that are not widely available. HNWIs expect personal relationships and bespoke services.

Hedge fund marketers face a lot of complexity when building their marketing strategy. First, they have to cater to this diversity in values and requirements. On top of this, where regulations dictate that hedge funds cannot market themselves to the general public, they will need to find a secure way to distribute information to the right audience.

Tackling this requirement by reducing the volume of information made available will rule out some investors who value transparency and insight. As mentioned at the start of this paper, improvements in transparency and reporting have attracted many "new" investors to hedge funds, so funds would be wise to double down on this as a selling point, rather than shy away from it.

THE ROLE OF MARKETING TECHNOLOGY IN FUNDRAISING AND INVESTOR RELATIONS

Fortunately for fund marketers, technology is a huge enabler and is revolutionising how funds can market themselves. Specialised fund marketing systems are increasingly commonplace, and offer far greater compliance and personalisation with efficiency and automation.

First, a fund marketing system ensures that only the right audience can access the appropriate information. All sensitive or restricted information is held on an investor portal, which is fully gated. This enables a fund to broadly promote its existence and high-level brand, and share a link to the gated portal which also handles the requirements of different jurisdictions.

Second, the fund marketing system holds a large amount of data that most investor types will be interested in. Performance and thought leadership across newsletters, papers, articles, podcasts, and videos can be accessed on demand, letting the investor advance their journey independently and at a pace that suits them.

Third, the fund marketing system lets the fund manager target the right investor with the right message at the right moment. Using the integrated CRM and mailing tool, a fund manager can segment their audience to enable a high degree of personalisation. This means a variety of investors can be targeted with the right message for them without compromising scale and efficiency.

Finally, the fund marketing system provides detailed analytics letting the fund marketer identify what is working and with which investor segment(s). The team can see those specific individual investors who have engaged most to advance the relationship when the time is right. The engagement analytics coupled with the broader fund marketing system feature set delivers a powerful workflow for fund marketers.

CONCLUSION

Successful hedge fund marketing is a complex endeavour, demanding stringent adherence to regulatory requirements, and skillful management of a variety of investor relationships. Hedge fund marketers need to constantly maintain their knowledge of regulatory requirements and evolving investor expectations, and use these as a foundation for their marketing strategy.

Today's fund marketing involves effective branding, strategic and targeted messaging, and a variety of channels including tight personal connections. To try to pull this together manually puts hedge funds at an unnecessary disadvantage when the technology exists to do much of the heavy lifting. Fund marketers can then focus on developing a deep understanding of each investor's specific needs, objectives, and risk tolerance to develop messaging that resonates. They should take advantage of the right technology to execute this plan, deliver an excellent investor experience, bring in one-to-one communication as needed, and feed data back into the business to help further develop the overall marketing strategy.

> "Fortunately for fund marketers, technology is a huge enabler and is revolutionising how funds can market themselves."
>
> Hannah Smith

Asset Allocation Agility in an Evolving Landscape

By Levi Morin – SS&C Eze, a unit of SS&C Technologies

By Levi Morin – SS&C Eze, a unit of SS&C Technologies

I don't think it's an overstatement to say that the market environment over the past 3.5 years might be the most unprecedented we've seen this century. (And yes, I know The Great Recession happened.)

The world shut down, supply chains dried up, we cut interest rates and bought a lot of treasury and mortgage bonds, stocks went to an all-time high, and inflation to a level not seen since before I was born.

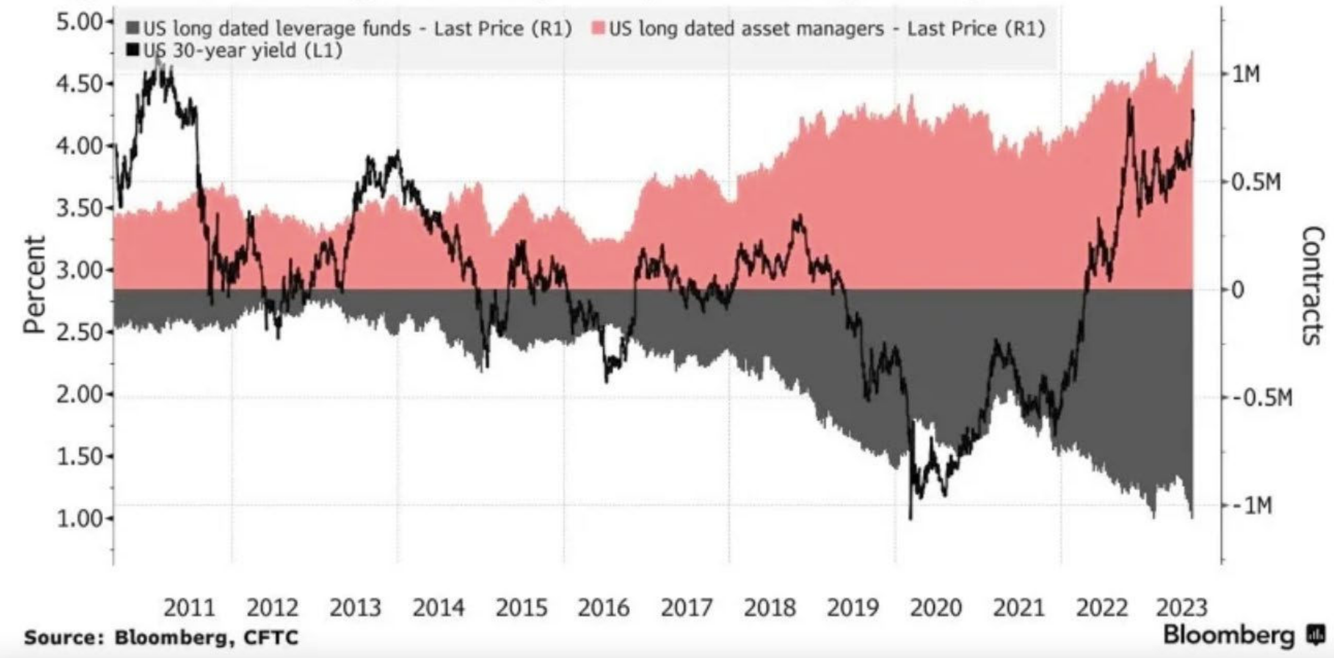
Inflation was 'transitory' until it wasn't. The Fed raised rates by 525 basis points in less than a year and a half, stocks cooled off, a couple of banks collapsed, and now we find ourselves here – still with more questions than answers.

Now, I'm not here to offer my take on where the markets or interest rates are going next. My guess is as good as yours. A year ago, I thought that we would have either entered a recession by now or declared a successful 'soft landing.' I was wrong on both accounts.

What I am here to say is that if the last 3.5 years have taught us anything, it's the importance of being nimble with your investment strategy. Having a system in place allowing your firm to execute on tactical and strategic asset allocation decisions with speed and accuracy is no longer a nice to have; it's a requirement.

With the risk-free rate sitting at ~5.25%, managers who may have been traditionally equity-focused are looking to allocate a portion of their strategy to various fixed-income products. Now more than ever, managers are making active bets on where rates are headed. Just look at the graph below. Recent history shows we've never seen more dispersed views on interest rates.

> "Having a system in place allowing your firm to execute on tactical and strategic asset allocation decisions with speed and accuracy is no longer a nice to have; it's a requirement."



Regardless of investment strategy today, asset allocation tomorrow could be vastly different as investors react to new information. Unfortunately, the front, middle, and back office requirements of onboarding and executing a new strategy or asset class can be manual and detract from time spent generating investment ideas.

In speaking with investment managers about bond workflows, I'll sometimes hear something like this: "We figure out the amount we want to trade based on calculations we have set up in Excel. Once we know what we want to trade, we'll call up our dealers and execute over the phone or on chat. When trade details have been confirmed, we'll swivel over to system X to book it, then export and email an Excel file to the necessary counterparties for clearing."

In terms of efficiency – it's not great.

And that was a simple cash bond example. Forget about the added steps and data points needed to trade derivatives, like an interest rate or credit default swap.

You get where I'm going with this. The more time spent on workflows like the one above, the higher the chance of error and the less time spent generating alpha. Having the right solution in place helps consolidate and streamline these workflows.

Here's what such a solution should offer:

- Real-time Views of Critical Data: Front office users need real-time analytics and risk metrics that allow them to view current exposures and what-if impacts of the trades they're proposing. This allows them to enact changes as simple as targeting or changing by a percent of NAV or proposing changes to target a specific risk metric like duration, DV01, or yield.

- Dynamic Compliance Functionality: Simultaneously, they'll need to ensure that their portfolios remain within the bounds of compliance and risk, regardless of any changes made throughout the trade lifecycle. Compliance rules and requirements typically need to address everything from regulatory requirements to specific investor mandates, as well as risk and exposure thresholds.

- Efficient Execution with Electronic Connectivity: When it comes to execution, firms are typically executing wherever they can source the best liquidity, whether that be over the phone or using a variety of RFQ providers. Electronic connectivity directly to these platforms allows users to easily execute orders and have all trades flow automatically to a single system. This helps eliminate any manual data entry or booking trades separately across different platforms.

- Reliable Allocation & Settlement Processes: Flexible allocation logic runs throughout the trade lifecycle and helps ensure blocks are correctly and fairly allocated across accounts based on firm requirements. Post-trade, the correct settlement information and net monies are seamlessly calculated, and allocations are then packaged up and securely sent to the necessary systems and third parties for settlement.

Everything I've just described is the bread and butter of a good OMS. Whether it's using treasury futures or interest rate swaps as a duration overlay, CDX to introduce a hedge to credit risk, or simply trying to capture additional yield with bonds or loans, having the right system in place can significantly reduce error, save time spent on manual workflows, and enhance your firm's agility.

"Whether it's using treasury futures or interest rate swaps as a duration overlay, CDX to introduce a hedge to credit risk, or simply trying to capture additional yield with bonds or loans, having the right system in place can significantly reduce error, save time spent on manual workflows, and enhance your firm's agility."

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Understanding and Mitigating Unintended Risks

By Eugeniu Guzun – HedgeNordic

Mourad Essofi, Managing Director, EMEA – Axioma

> "At the end of the day, Axioma's objective with Axioma Portfolio Optimizer is to enable hedge funds to make quicker and more informed decisions, as well as help mitigate risk."
>
> Mourad Essofi

Many hedge funds, particularly in the Nordics, operate as small boutique firms with relatively limited staffing. Despite their size, these hedge funds often employ complex investment strategies that may require some of the most advanced risk management systems. Axioma, a leading provider of factor risk models, portfolio construction tools, and multi-asset class enterprise risk solutions, currently merging with Danish investment management software provider SimCorp, aims to meet this need, supporting fund managers and investors to grasp the nuanced risks embedded in their portfolios.

"Hedge Funds are today facing a plethora of systematic risk to navigate, from heightened geopolitical risk to higher-for-longer interest rates and inflation," says Fredrik Gärdsfors, Client Executive for the EMEA region at Axioma. "In navigating this evolving investment landscape, a flexible and holistic approach to portfolio construction and risk management becomes imperative." Axioma seeks to address these needs with an analytics suite guiding managers throughout the entire investment process, covering strategy building and optimization, risk model customization, pre-trade compliance, arbitrage opportunities and regulatory reporting solutions.

AXIOMA PORTFOLIO OPTIMIZER

Axioma's Portfolio Optimizer is a purpose-built financial decision-making tool that can handle the most complex problems efficiently. This advanced portfolio construction tool is designed to work with a manager's given investment process (and not the other way around), supporting a wide range of investment management approaches, from quantitative to fundamental. "With virtually limitless objectives and an equally unlimited range of constraints, Axioma Portfolio Optimizer delivers maximum flexibility for more informed decision making," explains Gärdsfors. "Testing scenarios is quick and efficient at helping a user explore different trade-offs and frontiers, which can ultimately lead to the identification of alpha signals in the final portfolio."

Importantly, the optimizer accommodates long/short portfolios for short selling and efficient trade execution. By handling multiple constraints and inputs, the optimizer, in conjunction with analytics data, exemplifies how hedge funds can mitigate unintended risk. This enables hedge fund managers to take decisive action on how best to hedge the portfolio and generate alpha. "Performance, in this context, is also dependent on the overall cost structure, so it's important to consider market impact and total transaction costs within this process, to reach the right decision and optimize the trading strategy," emphasizes Mourad Essofi, Managing Director for the EMEA region at Axioma. "At the end of the day, Axioma's objective with Axioma Portfolio Optimizer is to enable hedge funds to make quicker and more informed decisions, as well as help mitigate risk."

AXIOMA RISK

Moving further along the investment process and leveraging the scale and cost efficiency of cloud technology, Axioma Risk steps in to offer managers greater visibility of risk. "At its core, Axioma Risk calculates and aggregates core risk measures to understand the risk profile of a given portfolio, with a broad range of configurable analytics, including

Fredrik Gärdsfors, Client Executive, EMEA – Axioma

"At its core, Axioma Risk calculates and aggregates core risk measures to understand the risk profile of a given portfolio, with a broad range of configurable analytics, including exposure and sensitivity analysis, scenario analysis, and risk analysis."

Fredrik Gärdsfors

exposure and sensitivity analysis, scenario analysis, and risk analysis," explains Gärdsfors. Each delivers a different insight. Each analytical aspect provides unique insights. For instance, one could use effective exposure and sensitivity analysis for profiling directional risk of the portfolio, while risk analysis (through VaR or volatility analysis) helps quantify variability, or losses in the profit-and-loss.

"Finally, scenario analysis allows risk managers to replay past events and model potential future events," says Gärdsfors. "All such analytics use true full revaluation. This allows risk managers to capture the true asymmetry that may arise with non-linear instruments, while our hedge fund-specific dashboards provide what-if analysis, so that managers can test hypothetical changes in the portfolios," he elaborates.

While Axioma Risk has a long history of tracking equity-related risk, natively integrated into the platform, it has also evolved to include fixed-income and multi-asset class investing. "From this foundation, we've built fixed income risk models using issuer spread curve modeling, followed by a credit spread factor model," notes Gärdsfors. "Naturally, these models combine with FX, volatility, and commodity models, to offer true multi-asset coverage."

TWO KEY CHALLENGES TO SOLVE

Axioma Risk addresses a number of challenges faced by hedge fund managers, including risk budgeting and effective scenario analysis. Risk budgeting allows risk managers to assess both fund-level risks but also wider strategy and trade-level risks. "Using Axioma Risk, risk managers can assess whether the levels are within their risk policies," explains Mourad Essofi. "When the risk levels fall out of line, they can understand the decomposition by trades and strategies, for faster resolution," he elaborates. "Finally, using the what-if analysis functionality through the user interface or API, managers can test adjustments to various allocations to see how such changes may impact the risk level of the total portfolio."

In today's evolving market environment, the use of risk models needs to be augmented with effective scenario analysis, argues Essofi. "Scenario analysis is a way for risk managers to impose their own views of the future and assess gains or potential losses in the portfolio," he explains. "Risk managers use Axioma Risk to build customized scenarios through the lens of predictive scenarios." The result is a more informed understanding of how portfolios might perform, following a change in factors, like equity indices, FX rates, interest rates, and commodity levels, among others. "This allows risk managers to truly stay uncorrelated to the market," says Essofi.

INTEGRATION

Recognizing the diverse applications used by hedge fund managers such as OEMS, Position and Risk, Market Data Terminals, Analytics, Chat, Excel, BI Tools, and more, Axioma emphasizes seamless integration. "We believe embedding our portfolio construction and risk analytics tools should not be onerous for hedge funds, which is why our solutions are built with end-to-end workflow consideration, painless integration, and automation capabilities," says Fredrik Gärdsfors. "Our technology is designed to empower clients to work with their chosen execution and order management system, enabled by our API and open architecture approach." This means that Axioma solutions can be easily integrated into existing hedge fund systems, like OMS and EMSs.

"Axioma leverages a native Rest API that has been adopted by hedge funds globally, to seamlessly integrate their position feeds and extract data from internal systems," further elaborates Gärdsfors. "The API lowers the cost of ownership of our solutions, while simplifying the upload of portfolios, terms for derivatives, the running of risk reports and exporting trade lists."

AXIOMA IN THE NORDICS

In September 2023, Axioma's parent company Deutsche Börse Group, an international exchange organization and market infrastructure provider, acquired SimCorp. Before the merger intended to combine Axioma's risk analytics and portfolio construction with SimCorp's investment management platform, Axioma had already established a presence in the Nordic region. Post-merger, Axioma is poised to gain an even stronger foothold in the Nordics.

"Axioma has already been adopted by a significant number of Nordic clients, across the financial industry, from asset owners to asset managers," according to Mourad Essofi. "All of whom leverage our solutions across a wide range of investments, from long only to hedge fund strategies, inclusive of CTA strategies and more," he elaborates.

Noteworthy regional use cases include Axioma Risk as a pre-trade compliance tool. "Using APIs, our solution provides the front office with a decision on whether a trade is within the risk budget and risk limits, in a matter of seconds, and directly to the OMS/EMS," says Essofi. Tailoring to bespoke strategies and in order to integrate a client's own IP in the process, Axioma offers risk model customization, a feature well-received by Nordic clients. In addition to supporting third-party data through its Portfolio Optimizer, Axioma has curated leading ESG and private markets data providers for clients to leverage. "This has resonated well in the Nordic region, with the more sophisticated clients looking to incorporate ESG and SDG data," concludes Essofi.

Expanding Investor Reach via a Third-Party ManCo

By Eugeniu Guzun – HedgeNordic

“The ManCo partnership format is an interesting way going forward due to higher barriers to starting a management company as a result of increasing regulations and compliance.”

The investment management industry has experienced a gradual increase in regulatory and compliance demands, driven by heightened requirements and expectations from both regulators and investors. To navigate this regulatory environment, some managers have turned to third-party management companies (ManCos) as a strategic lifeline, allowing them to focus on their core competency of managing money.

For nearly a decade, ISEC Services has been offering a comprehensive Swedish-domiciled fund solution, enabling investment managers to streamline their focus exclusively on portfolio management and marketing. In a move to expand their offerings, ISEC Services recently introduced a compelling opportunity for local managers: the ability to launch Luxembourg-domiciled funds within the Reserved Alternative Investment Fund (RAIF) structure. Nordic fund managers can leverage this opportunity by

Helena Unander-Scharin, CEO – ISEC Services

“This is like renting a subfund model with lower barriers, where you share the cost with other managers.”

establishing their RAIF-structured funds as sub-funds under ISEC's SICAV-RAIF umbrella.

“The Nordics is still quite an immature market for third-party ManCos even though this format is very familiar in the rest of Europe,” acknowledges Helena Unander-Scharin, the CEO of ISEC Services. “I believe the ManCo partnership format is an interesting way going forward due to higher barriers to starting a management company as a result of increasing regulations and compliance,” she elaborates. After nine years in the ManCo business with local fund structures and UCITS structure in Luxembourg, ISEC Services made one further step by offering Swedish and Nordic fund managers the opportunity to establish their RAIF-structured funds in Luxembourg.

Unander-Scharin emphasizes the symbiotic relationship this setup fosters – an advantageous collaboration with a local partner complemented by seamless coordination with service providers in Luxembourg. Outsourcing core alternative investment fund manager (AIFM) functions to a provider of third-party ManCo services such as ISEC Services can prove to be a swift, cost-effective, and compliant route to cross-border distribution. “By establishing ISEC's SICAV-RAIF umbrella fund in Luxembourg, we wanted to provide Nordic actors with a Luxembourg infrastructure for fund vehicles that are only possible to launch in Luxembourg,” Unander-Scharin explains the rationale behind ISEC's latest move. Fund managers can benefit from the relationship with a local partner while getting access to great service providers in Luxembourg,” explains Unander-Scharin.

THE RAIF

Luxembourg's RAIF investment vehicle, introduced in 2016, earned its reputation as a game-changer in the European funds landscape. This vehicle offers a flexible and efficient investment structure for alternative investment strategies, spanning equities, fixed income, real estate, private equity, infrastructure, and private debt. This structure offers a short time-to-market by eliminating the need for Luxembourg regulatory approval. Fund managers can, on short notice, launch a product that is not subject to supervision by the Commission de Surveillance du Secteur Financier (CSSF), with full flexibility.

The main advantages of the RAIF structure, according to Unander-Scharin, lie in its rapid time-to-market and flexibility. Fund managers can establish highly adaptable funds, free from limitations on investment focus, strategy, and the types of instruments employed. “Fast time-to-market and flexibility are the biggest advantages of the RAIF structure,” according to Unander-Scharin. “Fund managers can set up a very flexible fund, when it comes to investment focus, investment strategy and types of instruments one can use,” she elaborates.

The RAIF, therefore, benefits from a swift establishment process and offers high flexibility in terms of investment strategies. “When it comes to investing, there are no limitations within the fund vehicle. You can invest in physical oranges or cows or real estate or whatever you desire,” says Unander-Scharin. The only limitations, she notes, lie in finding a partner capable of facilitating and administering these diverse assets. “The limitations are the possibility to supervise and provide oversight, as well as finding an administrator and custody to hold the instruments.”

Unander-Scharin also underscores that while the fund itself operates without direct supervision from the Luxembourg regulator, there is effective oversight on the fund with ISEC Services being a supervised AIFM. “While the fund itself is not under supervision from the Luxembourg regulator, it is indirectly supervised because ISEC Services is a supervised AIFM,” emphasizes Unander-Scharin.

BEYOND THE NORDIC AUDIENCE WITH THIRD-PARTY MANCOS

The choice of fund domicile plays a pivotal role, aligning with the nature of target investors. While some Nordic managers opt for local setups, those eyeing foreign investors or future global outreach often choose Luxembourg as their domicile from the outset. For managers overseeing Swedish-domiciled funds aiming to attract a broader European and global investor base, ISEC Services now provides a reliable pathway through a master-feeder structure.

Managers running a Swedish-domiciled fund looking to attract European and more global investors and “have a ‘Made in Luxembourg’ stamp” can rely on ISEC Services to launch their Luxembourg-domiciled RAIF funds. “We can help managers set up from a simple structure like a master-feeder to a more complex structure, all under the same umbrella,” says Unander-Scharin. “This is like renting a subfund model with lower barriers, where you share the cost with other managers,” she elaborates. “If a fund grows to a sufficient size, managers have the flexibility to migrate it out from our umbrella by setting a SICAV (Société d'Investissement à Capital Variable) of their own, and subsequently appoint either ISEC or others as an AIFM.”

This is particularly relevant for managers seeking to broaden their investor base. “Some managers already have robust processes in place with Swedish-domiciled funds, but if they want to attract another type of investor, they can set up this as a side business without having to passport their license,” says the CEO of ISEC Services. While Unander-Scharin does not anticipate a significant surge in demand for this offering, she highlights that “the decision to set up a RAIF in Luxembourg represents a valuable avenue for reaching a wider spectrum of investors.”

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Quantifying the Value of Operational Due Diligence (ODD)

By DiligenceVault

About DiligenceVault

DiligenceVault is the investment industry leader in offering a comprehensive due diligence technology platform for asset owners, allocators, consultants, and fund managers. Today, over 50,000 users leverage DiligenceVault in digitizing and streamlining their due diligence framework, moving away from previously manually intensive, Word- and Excel-based, and error-prone diligence processes. Founded in 2014, the firm delivers a global support commitment with teams in New York, Australia, Singapore, India, and London.

WHAT IS OPERATIONAL DUE DILIGENCE (ODD)?

Operational due diligence helps identify and mitigate material business and operational risks associated with asset managers and funds that they manage. ODD generally include review of firm and fund structure, operating controls, regulatory compliance, technology and infrastructure, affiliate and 3rd party risks as well as staff expertise.

WHAT IS THE IMPORTANCE OF ODD IN FUND INVESTING?

ODD is a critical component of overall due diligence when allocating to external asset managers. A robust ODD framework for fund investing provides an assessment of over 10 non-investment areas via multiple channels:

- Sending out ODD questionnaire or reviewing manager's standard DDQ
- Background checks, and media monitoring
- Service provider review
- Onsite visits of the manager
- Document reviews, including the audited financial statements
- Regulatory reviews and reference checks

Synthesizing all of these information points into an internal dashboard

The complexities of ODD and required experience, skills, data sources and technologies are key drivers of how an operational due diligence teams structured and empowered at an allocator.

WHO IS RESPONSIBLE FOR ASSESSING ODD RISKS?

How an ODD team is structured varies across the allocator firms, but can be bucketed into four groups: (a) a team which is a generalist across investment and operational due diligence on one bookend (b) the other bookend being an independent internal team with veto rights that conducts ODD, (c) co-sourced solution with an external ODD specialist supporting the internal team structured in the first two ways, or (d) complete outsourcing of ODD to external specialists.

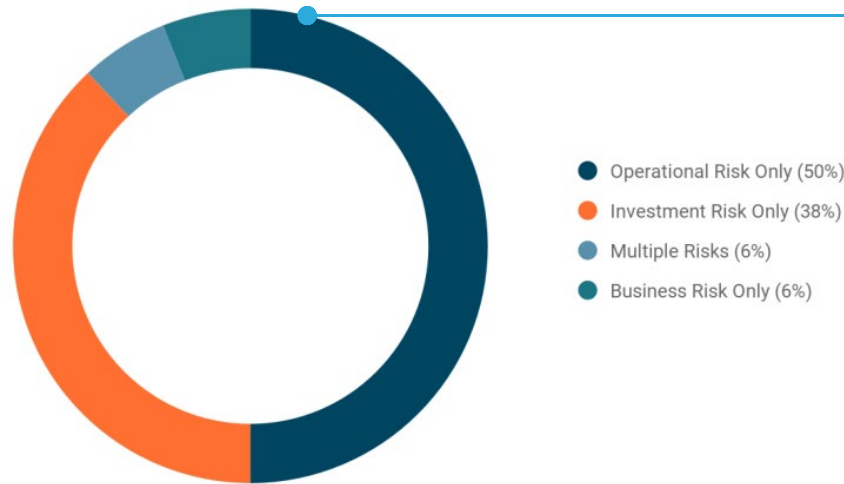
There are pros and cons to each of the four approaches above, and the ODD team structure employed by the asset allocator is driven by a combination of the fiduciary mandate, available expertise, and the complexity of the portfolio.

LESSONS LEARNED FROM FUND FAILURES

As we consider the evolving role and value of ODD, let us evaluate two sources. First, a 2003 Capco Study which lists the top causes of operational risk at hedge funds, and the top reason is a combination of operational issues.

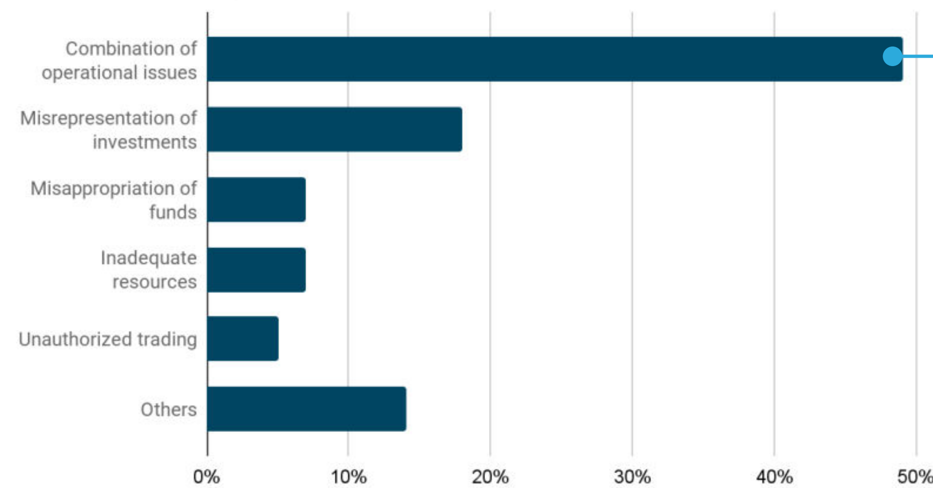
Capco Whitepaper: *Operational Risk in Hedge Funds*

Distribution of reasons for fund failures



Per Capco's research of 100 fund failures, **50%** of fund failures are attributed to operational risks only.

Fund failure - Operational risk attribution



Of those 50%, **combination of operational factors** is the leading cause of failure

Next, we look at 002 - 2023 to assess the frequency and nature of some of the key risk failures in fund investing:

Table 1: Operational and Risk Failures at Funds (2002 - 2023)

Year	GP / Firm Name	Nature of Risk / Failure
2002	Beacon Hill	Fraud
2004	Wood River Capital	Conflict of interest
2005	Bayou Group	Fraud
2006	Amaranth Advisors	Risk concentration
2008	Madoff	Fraud
2009	Weavering Capital	Fraud
2009	Galleon Group	Insider trading
2010	AXA Rosenberg	IT coding error
2010	SAC Capital	Insider trading
2013	Premium Point	Fraud
2016	Visium	Insider trading
2016	Contrarian Capital	Wire fraud
2016	Rothenberg Ventures	Governance and conflicts
2016	Platinum Partners	Fraud
2017	Binary Capital	Sexual harassment allegations
2018	Abraaj Group	Fraud
2019	Woodford	Liquidity mismatch with fund terms
2021	Archegos Capital	Market manipulation and fraud
2022	Three Arrows	Risk concentration
2023	Arciterra Companies	Fraud

Source: Adams Street Partners, DiligenceVault, Mercer, Securities Exchange Commission, and Stenham Asset Management

The Capco Study combined with the review of the 20 fund failures listed in Table 1 highlight three things:

1. The importance of conducting operational due diligence prior to making theallocation to an asset manager. A vast majority of funds listed in Table 1 representfund managers who were once successful until they failed because of the risk andoperational failures. The top three risks when reviewing the table are fraud, riskconcentration, and poor operational controls. While the analysis of these events maypoint us to a solution to focus on these risks during due diligence, allocators cannotbase their framework on just known failures to avoid survivorship bias.

In fact, the potential loss analysis should include

asset managers who never raised sufficient assets because of operational weaknesses, which can include many other factors.

2. The importance of a scalable due diligence program. There is never just one typeof risk, and often the fund failures are attributed to multiple major and minor riskfactors coming together. This requires a program which can identify and track risksacross each manager, as well as monitor concentration of risks across the portfolio

3. The importance of ongoing monitoring. The risks contributing to fund failuresmay develop overtime, or new risk factors may be introduced overtime.

- For example, data security and AI risks are new risks that ODD professionalshave to assess today, which was not a risk area two decades ago.
- In some cases, the risks were amplified by market movements, which is oftena risk which is masked in favorable market conditions.
- Another area where the fund managers may suffer from investment losseswould be from operational risks at the underlying portfolio company, whichwas an example at FTX.

HOW DO YOU QUANTIFY THE VALUE OF ODD?

ROI Approach: As an illustration, USD 1 billion equally weighted investment portfolio grows by 170mm in five years with a modest return of 17%. However this reduces to USD 90 million if the portfolio has one investment which has a significant ODD related loss. The delta of USD 80 million is significantly greater than the five year cost of an ODD program managed by an internal team or an external ODD service. In addition, having an ODD integration provides higher conviction in investing with winners, and also delivers greater peace of mind to all stakeholders and fiduciaries. While USD 80 million in this example is based on several assumptions, allocators must do a sensitivity analysis to evaluate range of outcomes.

Opportunity Loss Approach: The second approach is to quantify the total portfolio return required to breakeven from the operational risk loss. In the example where the allocators needs to make up the loss in one investment, they need the rest of the portfolio investments to deliver nearly 25% 5 year return which is pretty difficult to achieve even for the most astute allocator.

Benchmark Approach: As seen in Table 1, over 20 years, we have seen 20 operational risk events. However, over the same period S&P 500 has has negative total return 4 times.

Given the historical loss statistics and the positive impact of ODD, allocators are increasingly investing in operational due diligence programs.

According to the 2019 JP Morgan Institutional Investor Survey which collected responses from 227 allocators with a combined USD706 billion in capital invested across hedge funds globally, 33% of investors stated they had chosen not to allocate to a specific manager because that manager did not pass ODD.

Table 2: Loss Impact on the Portfolio of External Managers

Concentration → ; Operational Loss ↓

1%	2%	3%	6%	10%
1%	2%	5%	9%	15%
2%	3%	6%	12%	20%
2%	4%	8%	15%	25%
2%	5%	9%	18%	30%

THE EXPANDING ROLE OF ODD - NEVER BE THE SAME!

ODD initially gained traction with hedge fund allocators given the complexity of the structures and operations combined with increased occurrences of losses following failures in non-investment areas. Fast forward to 2023, ODD has become mainstream in the traditional as well as the private markets investing.

Another shift is in the frequency. ODD was largely focused on pre-investment diligence, and now has expanded to incorporate ongoing monitoring.

Lastly, the scope of ODD continues to expand as market dynamics and regulations are shifting with newer areas of focus in the past decade include:

- AI and issues around data privacy, responsible use and ethics
- Cyber risk given the increased frequency of breaches, including wire fraud
- ESG and greenwashing
- New asset classes - Crypto and DeFi
- Regulatory compliance
- Service provider diligence, exemplified by SVB and the banking crisis
- Valuations given the shifting market cycle

ODD PRIORITIES - 2023 AND BEYOND

Reflecting on the survey conducted by Goldman Sachs with 89 ODD professionals from allocators and consultants representing USD 1.2 trillion invested in hedge funds, we summarize some of the observations below:

The top three areas of allocators' ODD focus over the past year has been information security/cyber security, the cash wire processes, and valuation policies. Top of mind operational risk events in evaluating managers response ability include:

- A regulatory issue was clearly the primary area of concern, with 53% of allocators ranking it first.
- An issue/outage with a financing counterparty came in second with 19%
- A departure/change of a key member of the non-investment staff was thirdwith 15%.

Digital Adoption: 46% of allocators have implemented a system for the collection of manager data, however, only 36% are subsequently performing data analysis on the information they have collected. Given our expertise in diligence data collection and analysis at DiligenceVault, we are not surprised by the responses around limited analysis. From our experience this is resulting from fours factors: (a) allocators in the early inning of digital data collection, (b) poor response rates from the managers, (c) data collection is focused on qualitative information and documents and on less objective analysis friendly data, and (d) limited interoperability of data from their data collection systems into allocators data warehouses.

CONCLUSION

The components of ODD are well understood, the ODD processes are well established, operational risk losses are well publicized, which are all necessary ingredients to create a high functional and high ROI ODD function for allocators.

At the same time as the complexity and scope of ODD continues to expand, it is vital to have a trusted and experienced team with the knowledge of known and developing risk areas, robust risk-based processes, and technology to create a defensible ODD program.

Data focus in ODD, while in its infancy will also play a significant role in building a centralized, analysis rich operational due diligence programs of the future which will be the X factor in providing allocators the ability to invest with confidence.

Resources Referenced: Adams Street Partners, Capco, Goldman Sachs, JP Morgan, Mercer, SBAI, SEC, Stenham Asset Management

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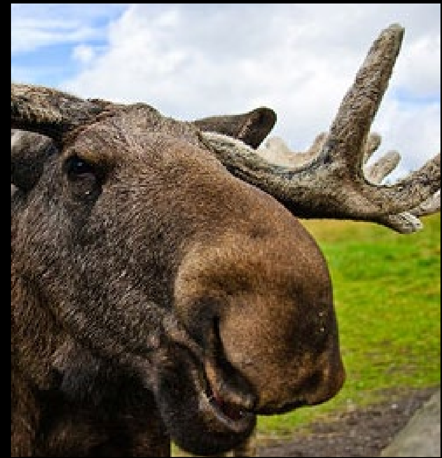

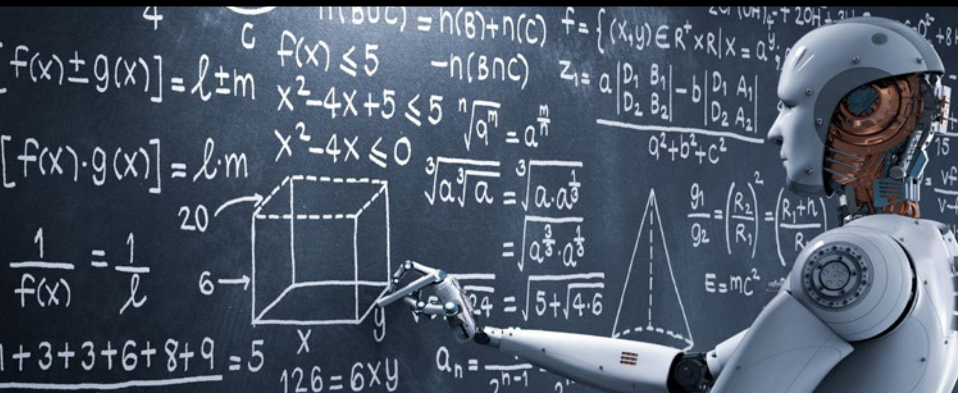

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