

ESTABLISHING A STRONG FOUNDATION FOR RISK MANAGEMENT

Algo Risk Service enables better management of BT Pension Scheme

BT Pension Scheme Management, a division of Hermes Fund Managers Limited, oversees the UK's largest private sector pension scheme. To manage its risk analysis and attribution across an aggregated and diverse set of assets and liabilities, the firm chose Algo Risk Service.

AT A GLANCE

ORGANIZATION:

BT Pension Scheme
Management
www.btpensions.net

INDUSTRY:

BT Pension Scheme Management (BTPSM) acts as the executive arm of the BT Pension Scheme. With assets of over £33.9 billion and more than 340,000 members, BTPSM manages a diversified fund covering all asset classes.

BUSINESS CHALLENGE:

Aggregate risk across both assets and liabilities, and construct appropriate overlay strategies more easily.

PRODUCT:

Algo Risk Service

WHY ALGORITHMICS:

BT Pension Scheme Management adopts Algo Risk Service to support and strengthen its approach to risk management across both pension assets and liabilities.

Algorithmics



an IBM Company

A CLOSER LOOK AT: MANAGED SERVICES

OVERVIEW

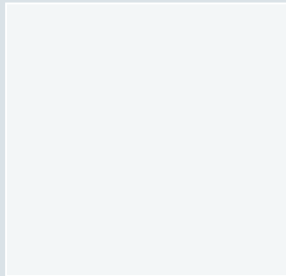
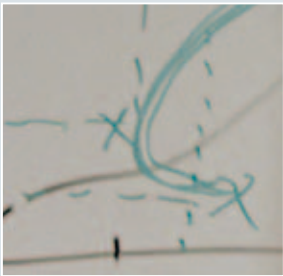
Algo Risk Service is a web-based managed service that provides access to sophisticated risk and portfolio analytics. Aimed primarily at asset managers, asset owners, and supporting organizations providing risk-related services, Algo Risk Service delivers state-of-the-art risk measurement and investment support tools, without the costs or challenges associated with in-house deployment.

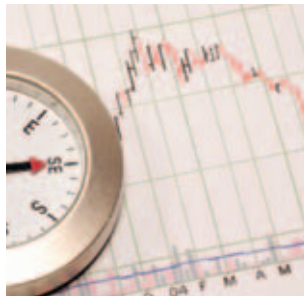
ALGORITHMICS AND MANAGED SERVICES:

As a managed service, Algo Risk Service is hosted by Algorithmics and delivered online, configured to address each client's specific business requirements. Algorithmics dedicates a client engagement manager to each client, providing a single point of contact to understand and support a firm's unique needs.

FOR MORE INFORMATION

www.algoriskservice.com or sales@algorithmics.com

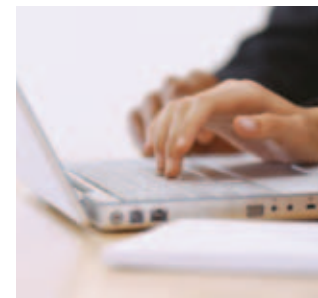
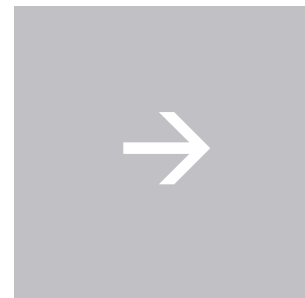
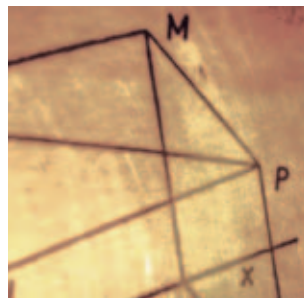




BT Pension Scheme Management

(BTPSM) acts as the executive arm of the pension scheme for British Telecommunications (BT) plc.

The BT Pension Scheme is the U.K.'s largest private sector pension scheme, with assets of over £33.9 billion and more than 340,000 members as of June 2010. It is a closed scheme with pensioners, active, and deferred members. As a diversified fund covering all asset classes, the BT Pension Scheme is split between equities, fixed income, private equity, property, commodities, and absolute return categories.



STRUGGLING TO AGGREGATE RISK AND CONSTRUCT OVERLAY STRATEGIES

Because the most important risk that BTPSM manages is scheme funding, it needs to consider risks to both the asset base and liabilities. Wyn Francis, Head of Investment Risk for BTPSM explains, "We must be aware of the risk we incur if we're unable to pay pensions when they fall due, so we need to consider the combined risk across assets and liabilities. Viewing assets in isolation is missing half the balance sheet."

However, BTPSM found it challenging to look at the overall risk across a diverse spread of assets within the context of liabilities. In fact, many pension schemes find it daunting to perform cash flow analyses on their liabilities. "It's a messy exercise to run the actuarial numbers based on all member data and to look at the market factors impacting liabilities, but a significant portion of risk lies in liabilities," continues Francis.

BTPSM had previously been using a number of legacy systems made up of third-party applications, together with proprietary tools, to look at some of its hedge fund exposure. However, these systems were limited in their ability to aggregate risk. Francis notes, "When you're using different systems or approaches, it invariably means that risk is being estimated on an inconsistent basis. None of the approaches we were using took into account the correlation between assets and liabilities when it came to risk exposure."

As well, the firm struggled to construct the appropriate overlay strategies to execute tactical and scheme-wide objectives. The process had involved aggregating outputs from various systems and manipulating data in a large number of spreadsheets. Because this procedure was performed inconsistently, the scheme was exposed to increased levels of operational risk as a result. "Assuming the consistency of your source data is a significant issue for pension schemes. If you're using multiple data sources, your allocation might not be accurate," says Francis.

Francis knew BTPSM had to implement a risk management system that would allow it to manage its overall risk scheme and overlay strategies, understand the performance of external asset managers, and monitor investments at various levels.

ALGORITHMICS UNDERSTANDS RISK MANAGEMENT ACROSS PENSION ASSETS AND LIABILITIES

BTPSM entertained the possibility of building a custom system to address its requirements, but quickly dismissed the option. "We are focused on streamlining our operations, and coding our own solution would have required us to expand our IT and support organization," explains Francis.

With a goal of outsourcing whenever practical to do so, BTPSM considered a number of solutions on the market. During this course of evaluation, there was a sense of surprise that most vendors couldn't grasp its requirements. "Many of these vendors wanted to sell us an asset manager risk system. Algorithmics was the only provider that understood we needed to manage our risk analysis and attribution across an aggregated and diverse set of assets and liabilities – all in the context of a pension fund," continues Francis.

In addition to appreciating the company's pension risk issues, Algorithmics offered a managed web service that eliminated complexity from BTPSM's environment, enabling it to easily keep pace with technological advances. Moreover, BTPSM was pleased to have the opportunity to influence the Algo Risk Service product roadmap. "Algorithmics was interested in our input since we were an early pension scheme customer," explains Francis.

TAPPING INTO EXPERTISE

BTPSM benefited from Algorithmics' extensive expertise during implementation. "Based on its experience in the insurance space where portfolio replication is common, Algorithmics' Risk Consultants shared their insights and validated our proposed approach to aggregating assets and liabilities in a pensions environment," says Francis.

The company feeds data from Ortec Finance's PALM, which is used for liability modeling into Algo Risk Service. The output from Algo Risk Service is then fed into a data store where BTPSM maintains economic data, allowing the firm to conduct detailed analysis and reporting across a number of data feeds.

ENHANCING SCHEME MANAGEMENT

The risk group and overlay strategies desk uses Algo Risk Service for day-to-day risk management, and for the asset and liability management process. On a daily basis, BTPSM uses the Algorithmics platform to run risk reports that provide a view into the Value at Risk (VaR) on the scheme and its overlay portfolios, interest rate and inflation sensitivities of liabilities, and the firm's funding risk. Senior management then reviews the reports for risk management purposes, while the product control group assesses them to ensure that various compliance criteria are met, for instance that tactical asset allocation is within the discretionary limits set by the pension scheme trustees.



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“At the press of a button, we could determine our exact exposures in relation to sovereign risk and country exposure on both equities and bonds, and monitor the likely impact of various outcomes on that exposure.”

Tactical asset managers also work with the investment risk team to determine whether or not there are areas of risk that BTPSM should enter or limit their exposure. In addition, the asset manager selection team uses Algo Risk Service to gain a complete view into underlying holdings of asset managers and determine if the characteristic of certain portfolios is as expected. Algo Risk Service is increasingly used as part of the portfolio design process. Francis goes on to explain, “When we select asset managers, we need to choose the asset class with an eye on aggregate exposure in that class as well as the relationship to the rest of the pension scheme. The Algorithmics platform gives us the basis to discuss that relationship.” Additionally, the firm uses the service to see how asset managers are performing against the risk budget it sets for them.

RESPONDING DYNAMICALLY TO RISK

BTPSM also uses Algo Risk Service to support its ex-ante approach to risk management. With insight into aggregated risk, the firm can transfer risk or shape the scheme returns, such that they fall within an acceptable risk corridor. According to Francis, “If we’re considering a change to the risk profile of the scheme, we can use Algo Risk Service to get a sense of the potential impact or sensitivity. We can also use that information to design transactions, structures, or strategies that will mitigate or transfer risk.”

Once BTPSM has designed a risk mitigation solution, such as applying a hedge, Algo Risk Service provides a view into how effectively the approach is working over time. BTPSM also uses the service to monitor relationships more effectively and understand when assumptions start to break down, enabling it to change its risk strategy accordingly.

MAINTAINING A STRONG RELATIONSHIP WITH BT

Using Algo Risk Service, BTPSM can view high-level risk both at the primary and granular levels. This allows them to express risks around different parts of its scheme, and in different asset classes.

Knowing the VaR on the scheme or an asset class gives the firm a “feel” for expected behavior under certain conditions. Added benefits include allowing BTPSM to carefully manage and monitor its risk budget with VaR. Francis explains, “If we don’t use our risk budget expediently, the funding position of the scheme could have a significant adverse impact on the sponsor’s (BT’s) business model. With Algo Risk Service, we can be mindful of how the scheme is running relative to the capital value of the sponsor.”

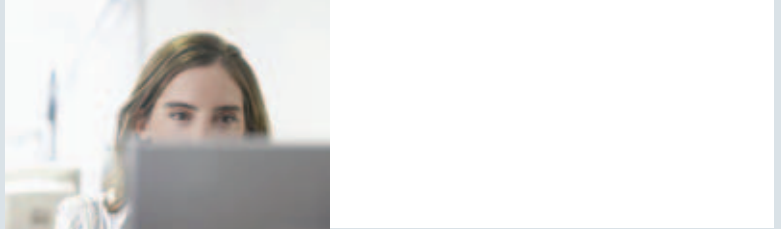
Algo Risk Service even empowered BTPSM to monitor its entire balance sheet during the financial crisis in early 2010. At that time, some European sovereign debt markets were shaky. “At the press of a button, we could determine our exact exposures in relation to sovereign risk and country exposure on both equities and bonds, and monitor the likely impact of various outcomes on that exposure,” continues Francis.

FORMALIZING RISK MANAGEMENT

With Algo Risk Service, BTPSM has been able to formalize and evolve the risk management processes used to manage exposures in the BT Pension Scheme. “Algo Risk Service has forced us to be more formal about how we assess and manage risk. Without a doubt, the service has provided a far more effective risk management framework for the scheme, challenging the way we look at risk across our portfolio,” concludes Francis.

About Algorithmics, an IBM Company

Algorithmics is a leading provider of risk solutions. Financial organizations from around the world use Algorithmics' software to help them make risk-aware business decisions. Algorithmics' analytics and advisory services assist firms in taking steps towards maximizing shareholder value and meeting regulatory requirements. Supported by a global team of risk experts based in all major financial centers, Algorithmics offers award-winning solutions for market, credit and operational risk, as well as collateral and capital management.



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