



Business Impact

"I think you can confidently predict that regulation won't be fragmented so nobody can see the whole system. Also, there won't be big unregulated sectors – hedge funds, credit default swaps, you name it. They'll be regulated and they'll have capital requirements." *

Challenges

- Growing pains.** Fund management continues to grow despite business cycles; keeping pace with the needs of the business – specifically the traders – is difficult, particularly where technology is concerned.
- Incompatible niche systems.** Typically, each type of fund – credit derivative, convertible bond arbitrage funds, long/short, etc. – is managed via a different niche solution, with considerable inconsistency among systems.
- Increasing regulation.** Concerns over the impact hedge funds can have on financial markets, as well as the growing influence of institutional investors, are sparking increased regulatory attention.
- Conflicting priorities.** Balancing the demands of traders with strategic risk management efforts often leads to such conflicts.
- Marketplace pressures.** Investors are more involved in their investment decisions. They are more likely to ask about a fund's risk return profile, and to monitor its management both before investing and while it's in their portfolio.

* Source: Michael Spence [Nobel Prize-winning economist], The Daily Telegraph, 13 October 2008.

How do we achieve greater transparency, full auditability and confident decision making across the firm?

YOUR GOAL: Put risk control at the centre of the firm to get a competitive edge, not just a cost burden, in volatile markets and a climate of increasing regulation.

The global credit crisis has receded but it's left a raft of challenges for capital markets firms. Losses from securitised and structured products continue to put pressure on liquidity. The search for alpha has been joined by the search for capital.

You and your customers seek the optimal business portfolio. How do you weather the storm in the face of increased market volatility? An ever-increasing regulatory climate has gone from possibility to reality.

Investment banks, asset managers and hedge funds must radically change operating principles. They need to increase their focus on several areas. Robust enterprise risk management, regulatory compliance and algorithmic trading are just some examples.

What if you could multiply the payoff from your non-optional investment in improved risk controls, and use them to differentiate your firm to potential clients? And what if this also enables you to understand better your most profitable client relationships, and to launch new offerings faster?

As you plan for 2009 and beyond, SAS can help you succeed in risky, volatile, and increasingly regulated markets. SAS enables you to obtain the right answers at the right time and in the right format. With SAS® Analytics, you can analyse the past, forecast the future and optimise your business decisions.

Why invest in risk without getting benefits elsewhere? And why streamline your business processes and client relationships, only to graft on risk management later? Worse, why use a separate risk system that represents a pure overhead cost?

With SAS, everything is in an integrated platform. You can add to legacy systems in a way that works with them. You can introduce new software in an evolutionary, not revolutionary way, and each part works smoothly with the others. And you can do it for less by doing everything only once.



■ Key Benefits of the SAS® Platform

- The ability to use analytics within a graphical design-driven environment using the same metadata as the business intelligence processing.
- SAS solutions are based on code generation so full customisation is achievable where needed.
- SAS applications can be implemented in a scalable server side environment, including grid provisioned rollouts.
- The power of server side applications is available through web portals and a full-featured reporting infrastructure.
- There is seamless integration into productivity tools, such as Microsoft Office.

WHAT CAN SAS PROVIDE?

- Specific **solutions** for buy side, sell side, execution vendors and regulators.
- Extensive capabilities in **risk management**. Either build systems yourself, or use 70-90% complete solution templates. Both approaches deliver rapid results tailored to your needs. SAS has the most complete and cost effective solution for Basel II Second Pillar. There are also market, credit, liquidity and operational risk capabilities.
- Solutions including **cost and profitability analysis**. These apply to all industries, but are more and more vital in finance. These SAS solutions are already in use in major financial institutions.
- The most complete integrated business analytics software platform. SAS is especially strong in areas such as **data governance and data quality**. These also deliver particular value in financial institutions, as they are the foundation for improved risk management. The same investment can support new product introduction and customer relationship management.
- Wide ranging **analytics** from matrix manipulation to statistical correlation. Advanced techniques include neural networks and pattern recognition. This adds a level of forward looking “radar” to your firm. By contrast, business intelligence alone is a rear-view mirror. These specialist statistical capabilities can be used in a graphical environment, without deep specialist training. Your analysts can spend more time applying quant techniques to make money, and less time debugging the basics.
- The only vendor that can do risk, data quality, data integration, reporting, business intelligence, dashboards, financial performance management and bespoke analytics in a **single platform**.

THE SAS® DIFFERENCE: A single, integrated system and transparent framework.

Only SAS provides a single system that integrates superior data management, unique analytics and self-service reporting. It's a transparent framework that lets you manage the whole process easily. There's no need to link different, complex technologies. No need for workarounds to get different niche systems to work together. And SAS is not a black-box technology. You are not limited to a predefined list of financial products or data sets. With SAS, you can:

- Develop a streamlined portfolio risk modeling process that will meet your needs today and can adapt to meet your evolving needs into the future.
- Better monitor and control your risk using the most advanced analytics available to perform stress testing and to view your risk from multiple levels.
- Invest in integrating and improving your transactional, market, counterparty and customer data to support regulatory risk management requirements – then gain value from the same investment to grow your revenue and margins.
- Move risk control from a pure cost sink to an engine of value across the firm, increasing profit and margins, and with value in customer relationship management, new product development and marketing.
- Get up and running quickly – in a matter of months – with SAS' proven implementation methodology.

APPROACH: Some real-life examples.

- **A wealth manager** can extend and market its house strengths in portfolio management. Dynamic reporting allows what-if presentations in Microsoft Excel, which the fund managers are already familiar with using.
- **A hedge fund** can control risk to suit its unique trading strategy. Traders use off-the-shelf risk methods, such as VaR, Monte Carlo, historical simulation and stress tests. These can also be tailored to meet specific requirements. The same system is at the centre of presenting new offerings to potential clients.
- **A fixed income broker** can identify its highest profit customers and map their individual appetites for risk, short or long dated issues and propensity to trade at particular times of year, based on actual order history.
- **A proprietary trading desk** can evaluate risk return strategies to optimise P&L. Traders use their own improved pricing models. They do not need to build an entire risk system from scratch.
- **A fund manager** can expand its multi asset class offerings without hitting the limits of silo applications. Data integration drives consistent information rapidly to the trading floor.
- **A trading desk in a Tier 1 investment bank** can give traders access to intraday VaR for their own portfolios. This allows them to anticipate risk limits that might otherwise get enforced next day as compulsory selling down of positions. A rapid build approach means customisation of the risk related structures replaces bespoke coding.
- **An institutional investment house** can produce pre-launch collateral and periodic reports. It can promote new fund launches without waiting for core IT system upgrades. Underlying data sources for web reports can be audited and traced with ease.

SAS FACTS

- More than 3,000 financial institutions worldwide are SAS customers.
- 96 percent of banks in the FORTUNE Global 500® use SAS®.
- SAS has more than three decades of experience working with financial institutions all over the world.

Some existing customers:

- JPMorgan Asset Management
- Citibank Singapore
- HSBC
- Millennium Global
- Generali Group
- HypoVereinsbank
- BMO Bank of Montreal
- Aletti Gestielle.

Learn more about SAS for capital markets at:

www.sas.com/industry/fsi



THE
POWER
TO KNOW.

SAS UK WITTINGTON HOUSE HENLEY ROAD MEDMENHAM

MARLOW BUCKS SL7 2EB +44 1628 486933 WWW.SAS.COM/UK

SAS and all other SAS Institute Inc. product or services names are registered trademarks or trademarks of SAS Institute Inc. in the USA and other countries.
® indicates USA registration. Other brand and product names are trademarks of their respective companies. Copyright © 2008, SAS Institute Inc. All rights reserved. 793UK0908