



■ Business impact

A 2006 survey of bank executives revealed:

- 89 percent believe that **banks with well-developed risk infrastructures will gain a competitive advantage.**
- More than 90 percent agree that **Basel II will result in a better understanding of risk** within their organizations.*

■ Challenges

- **Board-level understanding of risk.** Board members must understand what major risks the bank is facing and how those risks are being managed.
- **Data development and maintenance.** Due to volume and complexity, data organization and planning are typically 60 percent to 80 percent of a risk project's cost.
- **Operational integration.** Regulatory risk systems must be an integral part of a bank's daily management apparatus.
- **System accuracy and control.** Banks must "prove" numbers to regulators and demonstrate control over system security, change management capabilities and audit trails.
- **Multiple jurisdictions.** Different languages, currencies and regulatory interpretations can present problems.
- **System and information reuse.** Banks interested in achieving a risk-aware culture are wary of investing in a system that can't be integrated into other areas, such as marketing and finance.

*Ernst & Young's 2006 Global Basel II Survey conducted by the Economist Intelligence Unit.

How can we manage our risk and meet regulatory requirements across multiple jurisdictions?

YOUR GOAL: Achieve Basel II compliance

While risk management has always been a core banking function, regulators in the past have permitted individual banks to develop their own risk methodologies. Basel II is changing this by imposing minimum methodology standards and increasing the breadth of regulatory supervision.

In many cases, the requirements necessitate a fundamental restructuring and expansion of a bank's risk measurement and management capabilities. Improved risk management and heightened market discipline must become a part of "business as usual." However, many banks lack a unified framework and associated systems that can support the complexity and transparency that Basel II requires, let alone take them beyond compliance by extending good risk management practices as a way to achieve competitive advantage.

OUR APPROACH

Basel II compliance isn't just about generating regulatory risk estimates. It's about fully understanding your bank's risk and integrating risk management processes into the daily workflow. We approach the problem by delivering software and services to help you:

- **Implement a self-documenting risk data infrastructure** that automates the entire data management process—from extracting data from any source regardless of format, to finding and fixing bad data, to storing data in a repository specifically designed for Basel II analysis and reporting.
- **Adopt a consistent credit risk methodology**—standardized, IRB-F, IRB-A or mixed—across all portfolios.
- **Create a consolidated, groupwide view of risk**, regardless of language, currency, aggregation hierarchy or local regulatory interpretations.
- **Employ interactive regulatory and management reporting** to get information to whoever needs it, in the form and level of detail they require.
- **Provide transparency and traceability** across the entire process so you can track down anomalies and answer regulator inquiries on demand.

With more than 2,900 financial services customers globally, SAS has a long track record of successful installations and the expertise to take the guesswork out of Basel II compliance. We will guide you through the implementation process to get you up and running quickly—in a matter of months, not years.

In addition, SAS may be installed alongside existing risk software in a phased implementation approach that can bridge any disconnects between legacy systems, data stores and data models. And because the solution is modular, you can implement those components that address your most pressing concerns first and, if needed, expand the solution over time.

THE SAS® DIFFERENCE: Implement an open, Basel II-ready framework

SAS handles both regulatory and nonregulatory credit risk management across multiple jurisdictions, with built-in methodologies and preconfigured capabilities, including:

- A data profiler that **identifies and fixes data quality issues** automatically.
- Hundreds of **predefined data transformation routines**.
- A data repository that includes **the most comprehensive data dictionary available** and is **specifically designed for Basel II** analysis and reporting.
- **Support for all Basel II credit risk approaches**—standardized, IRB-F, IRB-A, mixed.
- **Flexible reporting capabilities** and **complete transparency**, so even non-risk experts can view, validate and audit every step of the analysis quickly and easily.

Unlike other solutions, SAS' single, integrated risk platform supports the entire Basel II compliance process—from source data extraction all the way through to analysis and reporting. In addition, you can save money and stay on the forefront competitively by leveraging the same SAS solution for more advanced, nonregulatory measures—such as economic capital and risk-adjusted pricing—and fully integrating the solution into other areas, such as financial and marketing systems.

CASE STUDY: One of the world's largest international banks based in the UK

Situation

Multijurisdictional operations, disparate legacy systems and decentralized risk management made groupwide risk estimation difficult. Scattered data management, parameter modeling and reporting systems limited transparency and responsiveness. And there was general confusion over the data required for Basel II compliance.

Solution

SAS helped the bank:

- Implement a risk framework that preserves business units' autonomy while enabling the parent bank to roll up risk reports into an integrated, groupwide view.
- Establish an easy-to-use, self-service reporting environment that lets risk analysts respond quickly to inquiries from management and regulators.
- Leverage their new groupwide risk management platform for other business purposes, such as managing portfolio-specific risk concentrations.

Results

- Integration of risk management into daily business activities, while satisfying a complex mix of Basel II requirements across global operations.
- Better identification and management of nonperforming assets.
- Assessment of current and future risks by simulating and stress testing portfolio and balance sheet performance.
- Development of proprietary and market differentiating risk measures.



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The vision

A self-documenting risk data management environment

What if all of the data elements and data flows needed for Basel II compliance were identified for you, so you could develop, deploy and change models as needed, rather than spending excessive time determining which data elements are required?

A consistent credit risk methodology

What if you could lower your capital requirements by using the same Basel II approach for calculating credit risk—such as IRB-A—across all portfolios?

A groupwide view of risk

What if, from a single system, you could consolidate, manage and report risks for multiple jurisdictions (regardless of language or currency) on both a scheduled and ad hoc basis?

Interactive reporting

What if your standard regulatory reports were produced automatically from a scheduled process and your risk analysts could generate further reports, make changes and rerun reports as needed for faster response to requests without undue burden on IT?

Transparency and traceability

What if you could reduce the time you spend with regulators and auditors by providing them with a complete audit trail that traces risk measures from final reports back to the core system, with the ability to drill down interactively for more detail?

SAS FACTS

- More than 2,900 financial institutions worldwide are SAS customers.
- 96 percent of banks in the 2006 FORTUNE Global 500® use SAS®.
- SAS has more than three decades of experience working with financial institutions all over the world.

Learn more about SAS® software and services for banking at:
www.sas.com/industry/fsi/