



SAS® Capital Planning and Management

Enabling more efficient capital planning and easier compliance

What does SAS® Capital Planning and Management do?

SAS Capital Planning and Management creates an integrated and interlinked capital planning environment for combining bankwide data from both risk and finance systems. The solution summarizes the data and provides custom-built forms to a variety of users involved in the capital planning process. As a result, banks can evaluate their long-term viability under different forward-looking strategies, including stress scenarios.

Why is SAS® Capital Planning and Management important?

The solution enables the tight integration of a bank's risk and finance functions, not only to facilitate compliance with growing regulatory stress testing requirements, but also to enable enterprise-wide risk management and capital planning practices that drive real business benefits.

For whom is SAS® Capital Planning and Management designed?

SAS Capital Planning and Management is designed for a bank's finance function, with participation, contribution and reviews from treasury, strategy, risk and lines of business.

The goal of regulations such as the US Federal Reserve's Comprehensive Capital Analysis and Review (CCAR) and the European Banking Authority's annual stress testing requirements is to ensure that large financial institutions have robust capital plans in place to remain adequately capitalized under adverse macroeconomic scenarios – for their own, as well as systemic, stability.

In order to comply with these regulations, most banks are finding it necessary to redesign their risk modeling and finance systems, as well as their data and technology infrastructures. Doing so requires a tighter integration between a bank's risk and finance departments. Banks also need to put in place solutions that will facilitate compliance with existing regulatory requirements, while being flexible enough to address future ones as well.

SAS Capital Planning and Management facilitates compliance by enabling you to estimate capital surpluses or deficits under both baseline and stress scenarios. A robust infrastructure enables more efficient capital planning that takes into account the projected balance sheets, income statements and risk-weighted assets (RWA) of various legal entities and business units involved in a bank's strategic planning activities. The solution enables:

- Forward-looking capital planning and management for a defined time horizon supported by detailed asset and liability planning under various adverse scenarios.
- Capital allocation and risk-based monitoring of capital at various levels.
- Risk-adjusted performance monitoring.

Key Benefits

- **Align strategies and goals across risk, capital, business and regulatory compliance functions.** Develop strategic plans at the appropriate hierarchy (i.e., corporate or business unit level), and then distribute plans to other levels – at both organizational and account dimensions – as needed for execution.
- **Ensure consistent information across all functions.** Aggregate and reconcile risk and finance data across all lines of business within the firm's market risk, credit risk, finance and treasury functions. And deliver consistent economic capital calculations for all portfolios.
- **Integrate your funding strategy into your capital reporting functions.** Quickly consolidate data for iterative scenario analysis and stress testing, and automatically generate pro forma financial statements.
- **Ensure ongoing consistency, transparency and auditability.** Regulatory reports are updated dynamically to ensure their ongoing accuracy and compliance.
- **Improve staff efficiency for capital planning and management.** A pre-configured capital planning framework includes predefined dimensions, form sets, formulas and templates. This enables your staff to produce regulatory reports for executives much more quickly.



Solution Overview

SAS Capital Planning and Management provides everything you need to engage in proactive capital planning by assessing and understanding the impact of your business portfolios on a wide range of measures.

The solution also enables you to change your portfolio risk profiles at an aggregated level. For example, changes made at a rating grade level can reveal what effect a lower-risk portfolio would have on capital and profitability.

Business Process Management

You can easily track and monitor all your capital planning business processes to identify bottlenecks that you can address immediately in order to reduce cycle times. As a result, you can boost efficiency throughout the organization and save valuable staff time.

The solution also facilitates communication among different functions, which enables better enterprise collaboration, while providing all necessary documentation for regulators.

To ensure enterprisewide consistency, form set templates for collecting inputs from various lines of business are designed centrally and then locked to prevent users from altering the layout, content or calculations.

Dynamic Consolidation

Capital planning processes typically require several iterations involving alternative strategies – which takes time. SAS Capital Planning and Management enables these iterations to happen more quickly. The solution's dynamic environment lets you see the impact of changes instantly; no need to run a consolidation in batch mode to see the effect of any data or business rule changes.

In addition, when data is entered from any source systems or data entry forms, it is automatically classified and tracked, providing complete transparency between source data and the final consolidated results.

Data Entry Validation Rules

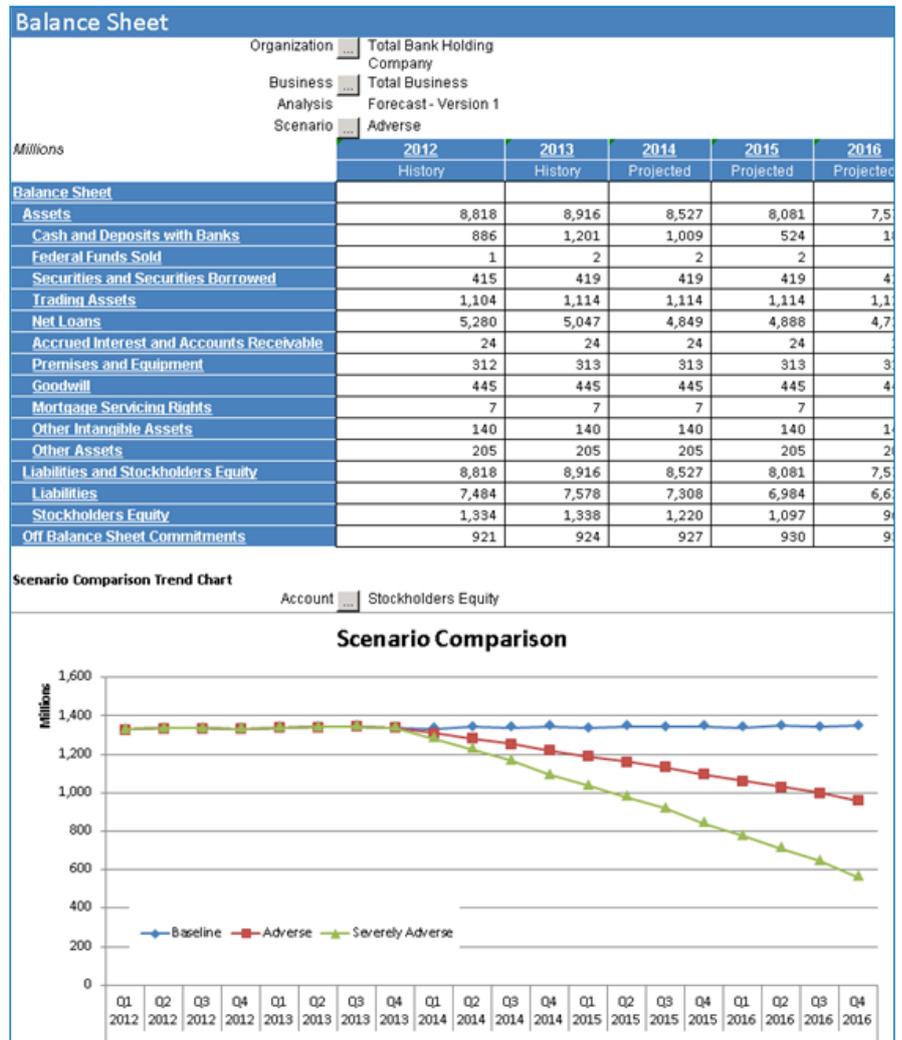
Data validation capabilities let you establish business rules to ensure that capital planning inputs are in line with management direction and your organization's risk appetite. The rules can be configured to fit your firm's needs. For example, you can customize specific warning messages.

When validation fails, specified users can receive alerts, or submissions can be automatically halted. And supporting comments can be made optional or mandatory.

Capital Planning Framework

The solution's framework includes sample inputs, outputs and process management workflows – in short, a complete, self-contained example of the various interactions required for proactive capital management, including:

- An extensive model of dimensions and formulas that describe the interactions among various elements.



Balance sheet scenario comparison trend chart.

For example, computation of future loan portfolio balances – and any impacts on monthly income statements – based on prepayment or charge-off rates.

- Predefined reports for reviewing ex ante balance sheets, income statements, cash flows and various capital measures.
- Various data collection and form sets for reviewing, overriding and collecting input from the many constituents involved in the process.

Embedded Business Forecasting

Business users can access SAS High-Performance Forecasting from within a data entry form. Using a process wizard, users can easily identify which items to forecast, as well as which items to test as predictor variables, such as macroeconomic factors. The SAS High-Performance Forecasting engine determines the best model, forecasts the results and surfaces results within the data entry form to allow for overrides or further commentary.

Net Interest Income (NII) and Pre-Provision Net Revenues (PPNR)

The solution computes NII and PPNR using user-provided rates – prepayment rates, pay-downs, utilization rates and decay rate averages – for each forecast scenario and horizon.

As a result, you can run what-if scenarios within a single environment without having to run a new ALM model outside of the capital planning tool. While the NII and PPNR results should be benchmarked with the internal ALM model, this gives you a very good working analysis tool for NII and PPNR during dialogue with management or various lines of business.

Key Features

Business Process Management

- Process creation – creating and sequencing tasks.
- Responsibility and deadline assignment.
- Mobile access to visualize and monitor status of tasks and also track progress.

Dynamic Planning and Consolidation

- Dynamic environment with on-demand calculation.
- Source dimension feature for tracking and classifying data whether from a supported data system or manual data entry form.
- Central repository for capturing comments to document and support regulatory communication.
- Centrally designed form set templates for consistent collection of inputs from lines of business.
- Data validation rules to ensure data is within acceptable business parameters.
- Ability to use SAS High-Performance Forecasting from within a data entry form.
- Ability to compute NII and PPNR using user-provided rates by scenario and time horizon:
 - Prepayment rates.
 - Pay-downs.
 - Utilization rates.
 - Decay rate averages.

Capital Planning Framework

- A self-contained example of the various interactions needed to proactively manage capital, incorporating the following elements:
 - An extensive model of dimensions and formulas describing interaction between various elements.
 - A set of predefined reports for reviewing ex ante balance sheets, income statements, cash flow and various capital measures.
 - Various data collection and form sets to review, override and collect input from the many constituents involved in the process.

Interoperability

- Integration with existing SAS models and processes.
- Data integration from virtually any data source, including ERP systems, third-party risk engines, RDBMS and Microsoft Excel.



Available capital projection.

Interoperability with SAS® Analytical Modeling

SAS Capital Planning and Management acts as a central point for combining and consolidating all external analytical models. Tight interoperability and integration with existing models enables greater efficiency and agility.

Many of the models rely on SAS routines for modeling, forecasting and optimizing particular areas of responsibility. And SAS provides an analytical framework for extending capital planning and management to include these necessary modeling functions. You can easily integrate models not from SAS using a defined set of staging (loading) tables and built-in integration routines.

SAS® Capital Planning and Management System Requirements

To learn more about SAS Capital Planning and Management system requirements, download white papers, view screenshots and see other related material, please visit sas.com/capitalplanning.



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