

Capgemini's Comprehensive Capital Analysis and Review Services

Driving regulatory and compliance values to banking institutions



In 2011, the US Federal Reserve issued the Capital Plan Rule, which requires US bank holding companies (BHCs) with \$50 billion or more in total assets to comply with an annual capital planning review process. Known as the Comprehensive Capital Analysis and Review (CCAR), this stringent regulation includes a supervisory stress test designed to ensure that banks adequately assess the impact of adverse economic scenarios on their capital positions.

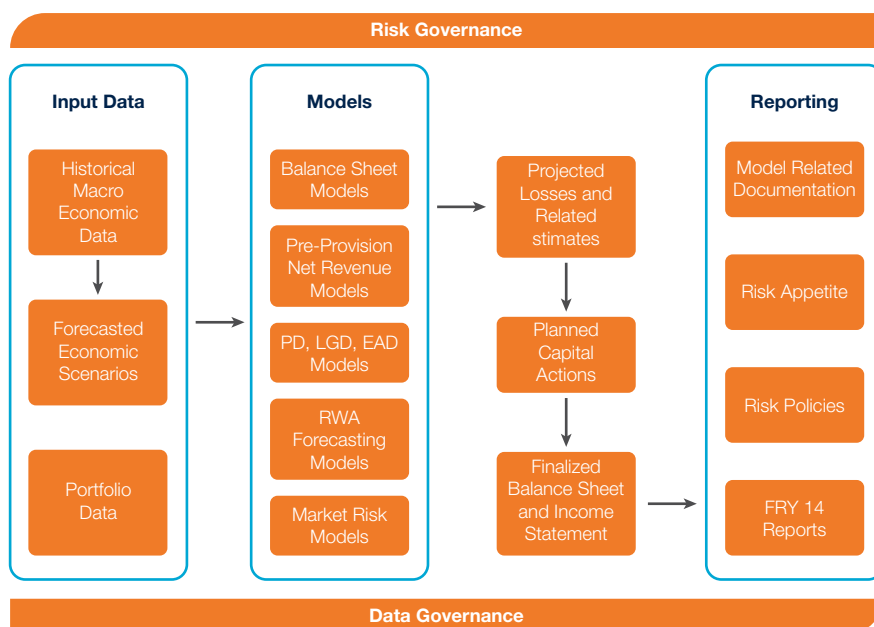
Key Implementation Requirements

A robust and comprehensive capital planning process requires a top-down approach to achieve a common management framework.

By implementing CCAR, the Federal Reserve's objective is to ensure that large, systemically important banking institutions have **forward-looking, institution-specific, risk-tailored capital planning processes**. These capital planning processes should provide reasonable assurance that banks will have sufficient funds to remain solvent during times of economic and financial distress. BHCs are required to submit to the Fed **annual, quarterly, and monthly capital plans** approved by their respective Boards of Directors. These capital plans must include detailed descriptions of each BHC's internal processes for assessing capital adequacy, the policies governing capital actions, and planned capital actions over a nine-quarter planning horizon.

When completing their annual CCAR filings, BHCs must report projected capital levels and capital ratios based upon the expected impact of stress scenarios. These scenarios include three which are provided by the Federal Reserve and two that are generated internally by participating banks. Additionally, the largest banks are subject to more stringent stress testing requirements including assessing the impact of a global market shock and/or the default of a large counterparty.

High-Level CCAR Process Flow



Our Integrated Approach to Capital Planning

Capgemini brings a wide breadth of experience to help your bank navigate the CCAR compliance journey

Working collaboratively with our banking clients to provide a range of advisory services, Capgemini takes a business view of CCAR regulations. Beyond pure compliance, Capgemini helps banking institutions:

- Improve business processes, so that each CCAR program delivers a forward-looking evaluation of internal capital adequacy
- Anticipate capital actions needed, such as dividend payment increases or stock redemptions or repurchases
- Evaluate whether a satisfactory process is in place to identify capital needs within the bank
- Appraise whether adequate capital is available to maintain ready access to funding, continue operations, and meet financial obligations
- Verify if the bank can continue to serve as a credit intermediary, even under stressful conditions

Our collaborative partnership approach is built on a commitment to help BHCs succeed in reaching critical program milestones. This proven framework helps ensure a sound risk measurement and management infrastructure, solid resource and loss estimation methodologies, sufficient reporting capabilities, robust internal controls, and effective governance over all aspects of the capital planning process.

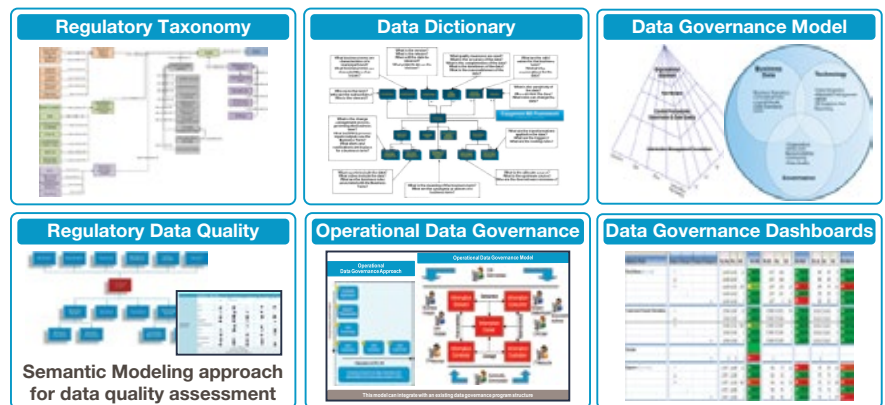
Integrating the Fed’s Capital Plan Rule and CCAR process into business as usual requires an enterprise-wide approach to capital planning. Capgemini’s detailed framework includes [fine-tuned methodologies](#) and [custom built, proprietary tools, accelerators, and templates](#) to help BHCs jumpstart CCAR initiatives.

Capgemini’s CCAR Expertise

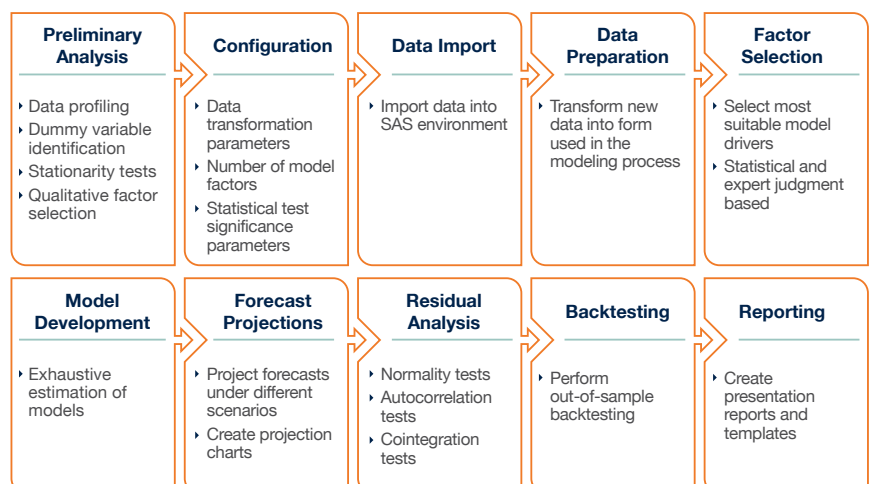
Data	Reporting
<ul style="list-style-type: none"> › Enterprise Information Maturity Model › Data Quality Framework & Rules › CCAR Business Glossary › Business Dictionary Design & Development › Architecture 	<ul style="list-style-type: none"> › Reporting Framework › Dashboard Design & Development Capabilities › Taxonomy Development & Hierarchy Management
Models	Governance
<ul style="list-style-type: none"> › Model Validation Services & Templates › CCAR Maturity Framework › Top-down and Bottom-up Models › Model Development & Documentation › Scenario Generation Accelerator 	<ul style="list-style-type: none"> › MRM Policies & Procedures › MRM Platform Requirements & Vendor Selection › MRM Platform Development › Model Risk Quantification

Accelerate Your Solution with Capgemini's Proprietary Tools and Frameworks

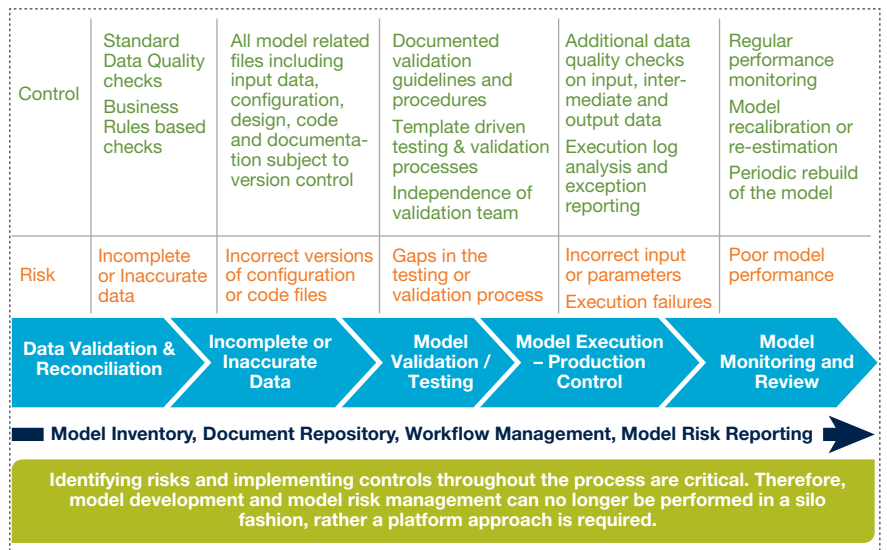
Capgemini's [Data Quality Engine](#) is a mature end-to-end data quality automation offering. Our Reference Architecture provides a data mart framework — not just a single data mart — which has already been implemented at numerous banks. It lowers the need for business involvement by using definitions which need to be validated rather than gathered. The framework provides clients with a proven data quality scoring methodology to measure and score key indicators.



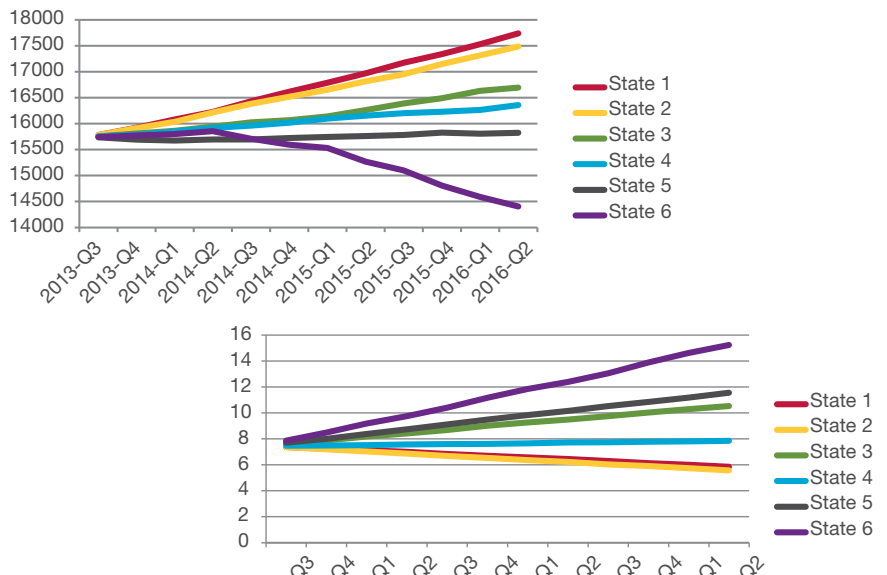
Our [CCAR Model Development](#) services include models for credit loss forecasting, PPNR, and balance sheets. These provide a quick and easy way for risk modelers and managers to build and implement analytical models. Our modeling framework incorporates leading analytical practices and enables banks to implement a cost effective, sustainable, transparent, and scalable stress-testing program that satisfies internal and regulatory requirements.





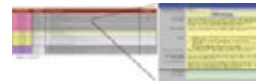



We built a [Model Risk Management \(MRM\)](#) platform in accordance with SR 11-7 regulatory guidelines to provide an end-to-end view linking models to their usages. This includes data validation/reconciliation, model development, version control, model validation and testing, model execution, production control, model monitoring and reporting. We not only address regulatory and senior management concerns regarding MRM processes, but also increase productivity of the MRM team, allowing them to spend more time on actual analysis and governance instead of manual tasks, hand-offs, and synchronization.



Our [Scenario Generator](#) helps BHCs generate multiple macroeconomic scenarios tailored to their unique circumstances. This enables richer analysis of loss forecasts under varying economic conditions. By creating intelligent scenarios designed to their individual risk-profile, BHCs avoid generic scenarios, and in the process, satisfy regulatory requirements. The banks are able to establish a consistent process to produce economically-intuitive scenarios with contextual clarity.

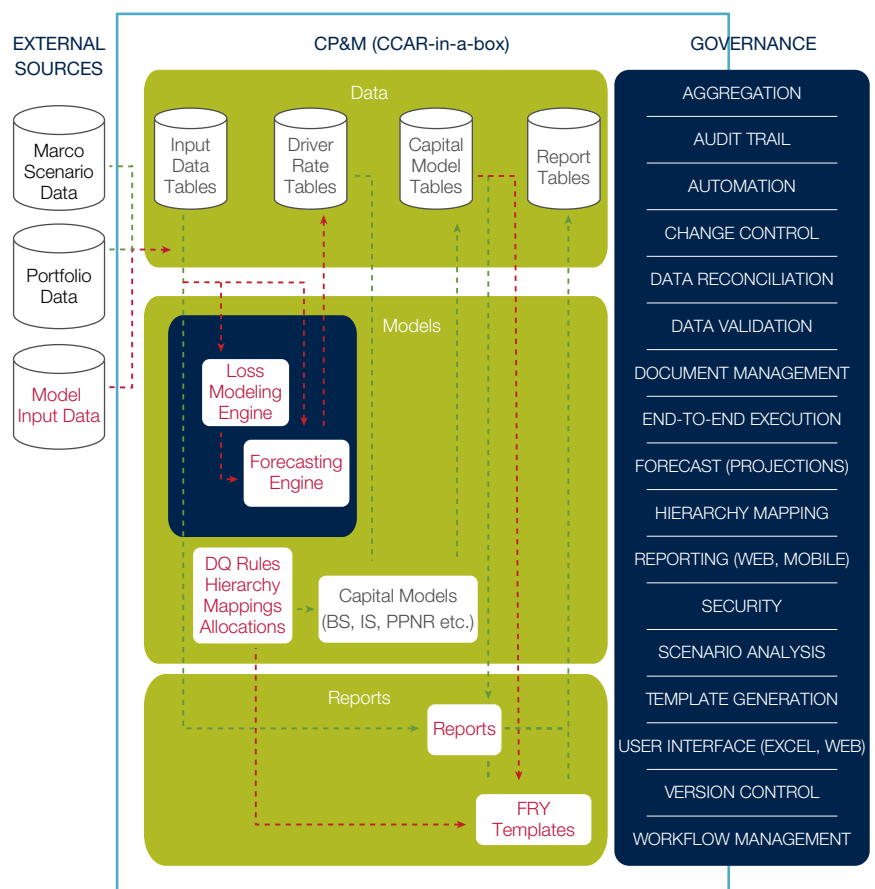


We have an extensive repository of [Reporting & Analytics Templates](#) that support access to real-time reports from many other implementations. Various reports needed as part of CCAR submissions include FR Y-14A (B/S, income statement, loss across macro scenarios) and FR Y-14Q (granular report on various asset classes and pre-provision net revenue), among others. Our one-stop reporting framework ensures that the reports produced are auditable, dynamic, agile, and can be built by cross-referencing other reports. This will enable adequate granularity as required by the CCAR process.

<p>Business Case Accelerator</p>  <p>A well defined methodology to accelerate the development of a business case for MDM Solutions including templates to capture cost and benefits analysis</p>	<p>Pre-built Tool Evaluation Framework</p>  <p>Pre-built evaluation criteria for product selection, and customize it for Client requirements</p>	<p>Pre-built Use Cases</p>  <p>Pre-built use cases for each MDM Component in the framework</p>
<p>Standardized Entity Specific Requirements</p>  <p>Leverage standardized requirements for customer, supplier and product master data requirements to expedite the process of requirements gathering</p>	<p>Technology Agnostic Architecture</p>  <p>Reference architecture is technology agnostic. We will use this as a starting point to build out a reference architecture in Client's technical ecosystem.</p>	<p>Reporting Roadmap Framework</p>  <p>Cappgemini will use our recent experiences with developing MDM roadmaps to identify and populate the key components of an effective roadmap</p>



CCAR-in-a-Box is a packaged solution developed by Capgemini and offered in partnership with SAS. The solution addresses key challenges encountered by BHCs through the aggregation and orchestration of data from various departments and lines of business. By integrating satellite models into a comprehensive framework, Capgemini is able to streamline the CCAR reporting process, thereby improving transparency and supporting regulatory compliance. CCAR-in-a-Box is a must-have tool that adds efficiency to stress testing programs and reduces program cost.



Capgemini’s proven [CCAR Governance framework](#) helps clients implement CCAR processes efficiently and effectively. Clients look to us to help:

- Identify and close gaps
- Define and build business processes
- Develop production schedules, projects, and communication plans
- Develop capital policies and capital plans

Capgemini’s approach to [capital planning](#) is a competitive differentiator that can transform the CCAR stress testing process from an exercise in regulatory compliance into a risk management capability that enhances shareholder value.

Capgemini Insights & Data

In a world of connected people and connected things, organizations need a better view of what's happening on the outside and a faster view of what's happening on the inside. Data must be the foundation of every decision, but more data simply creates more questions. With over 11,000 professionals across 40 countries, Capgemini's Insights & Data global practice can help you find the answers, by combining technology excellence, data science and business expertise. Together we leverage the new data landscape to create deep insights where it matters most - at the point of action.

To find out more on Fraud Analytics in general,
Contact us at insights@capgemini.com or
Visit us at www.capgemini.com/insights-data



To find out more on Fraud in the Financial Services,
Contact us at businessinfo@capgemini.com or
Visit us at www.capgemini.com/risk-management



About Capgemini

With more than 190,000 people, Capgemini is present in over 40 countries and celebrates its 50th Anniversary year in 2017. A global leader in consulting, technology and outsourcing services, the Group reported 2016 global revenues of EUR 12.5 billion.

Together with its clients, Capgemini creates and delivers business, technology and digital solutions that fit their needs, enabling them to achieve innovation and competitiveness.

A deeply multicultural organization, Capgemini has developed its own way of working, the Collaborative Business Experience™, and draws on Rightshore®, its worldwide delivery model.

Learn more about us at
www.capgemini.com

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