

A 3D bar chart with four blue bars of increasing height from left to right. An orange arrow points upwards and to the right, starting from the left side of the chart. The background is a light gray grid.

SPREADSHEET RISK in Stress Testing



KNOWCO
Governance, Risk & Compliance

Introduction

In April 2016 a financial penalty of £1,384,950 was imposed on a UK bank by the Prudential Regulatory Authority (PRA). The penalty, reduced from nearly £2m following a settlement agreement, was imposed on the basis that the firm had failed to identify the need to comply with requirements relating to the assessment and maintenance of financial resources. In addition, it had failed to properly report and aggregate its exposures to a group of connected clients.

Once again, it has been demonstrated that when it comes to compliance and ensuring the integrity of your data, the cost of getting it wrong is much greater than the cost of getting it right.

Why KnowCo

KnowCo is a specialist bank support resource used by more than 35 UK-incorporated banking institutions, with balance sheets ranging from £150m to £20bn. Through both consultation and software products, the company offers a modular solution to support compliance. KnowCo's Asset & Liability Management (ALM) software is often implemented as a necessary upgrade where clients have come to depend on the use of spreadsheets to manage sensitive data. Spreadsheets can be made secure and can be properly maintained and audited but, generally, they're not!

"Highly configurable, simple to model and comfortable in design, KST from KnowCo has added robustness and credibility to our liquidity stress testing," says a Treasurer from a UK retail bank. "Its detailed reporting and forecast capabilities allow filter and drill down, across range of parameters, and support (setup and ongoing) has been first class."

Data Quality

The key to avoiding these potentially expensive mistakes is quite simple – maintaining high quality data. To that end, KnowCo employs a templated data mapping process, which helps to raise questions around the stability and credibility of data sources and data governance. The process will typically uncover instances of data degradation, and additional data sources that are only known of and accessed by one person within the organisation. It will also often expose manually constructed files (typically in Excel) which have changed over time, with formulae that have been misunderstood or improperly updated.

The types of data issues encountered during this process are myriad, and have included:

In Excel Spreadsheets:

- Multiplication instead of division when applying the USD conversion rate
- Formulae referring to the Euro instead of USD rate, and vice versa

- A new deal that was not picked up by formula, resulting in an incorrect funding concentration report
- A new product introduced with a new regulatory report line which was not set up in the spreadsheet, resulting in an incorrect daily ILG (individual liquidity guidance) report

In Data Source Files:

- Maturity Dates not updated to reflect loan rescheduling
- Cash or security flow being given the wrong regulatory report column number
- New portfolios not being assigned with any regulatory report line number
- Accounts with interest rates specified in two different ways for the same account

KnowCo ALM System

The KnowCo ALM system offers a secure, consistent and proportionate approach to regulatory and bank-specific stress scenarios for capital, liquidity and viability, as well as business planning scenarios. The software can be fed automatically from multiple data sources, and supports PRA-CRDIV-CRR standards for credit risk capital, liquidity risk management and IRRBB.

KnowCo ALM incorporates many data integrity tools designed to highlight anomalies before they become part of regulatory or management reporting; just a few are given as examples below:

Regulatory Reports Reconciliation

- Uncovers errors in regulatory reports in many cases
- Data capture is at the most granular level – individual cash-flows
- Provides transparency in stress testing approach
- Auditable stress test inputs, scenarios and outcomes
- Evidence of integrity to senior management and regulators

System and Data Controls

- Secure environment, without the need to store 'personal' data, as defined in the Data Protection Act
- User access control
- Integral part of IT department's system management; users can focus on setting the business scenario parameters
- Scenarios nominated by ALCO/BRC locked down by an authorised administrator, password-protected
- Helps to remove dependency on individual users

The database contains detailed cash-flow, account and portfolio data with multiple dimensions, allowing users to consolidate and present the information in a format that provides answers to all of the risk management questions that a CEO or Board might ask, including for example:

- Which of my businesses are making/losing money, over time, in this scenario?
- What are their respective risk-adjusted returns on capital?
- How much capital will I need in n years' time?
- What effect will margin compression have on my net income and capital?
- What happens to my earnings if interest rates rise/decrease in the short term?
- What is the effect on liquidity, capital and earnings if I introduce this new deal?
- What is the pricing to apply to my new product?
- How are my key performance indicators trending?
- Is my liquidity survival horizon within my risk appetite?
- How viable is this business model under stress?
- In this scenario, what happens to my LCR?

Contact Us

KnowCo is a specialist bank support resource for:

- ICAAP, ILAAP and RRP
- Risk Appetite Statement development and enhancement
- Regulatory Disclosure
- Business Planning and Modelling and
- Governance Policies, Processes and Assurance

Our intuitive and transparent stress-testing and business modelling software facilitates compliance with regulatory requirements for:

- Credit risk capital stress-testing and management (Pillars 1 and 2A)
- IRRBB stress-testing and management
- Liquidity risk stress-testing and management
- Funds Transfer Pricing
- Strategic business modelling
- Regulatory Metrics such as LCR, HHI and ALMM

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