Grade Migration Tool

Modelling ratings migration in retail risk analysis

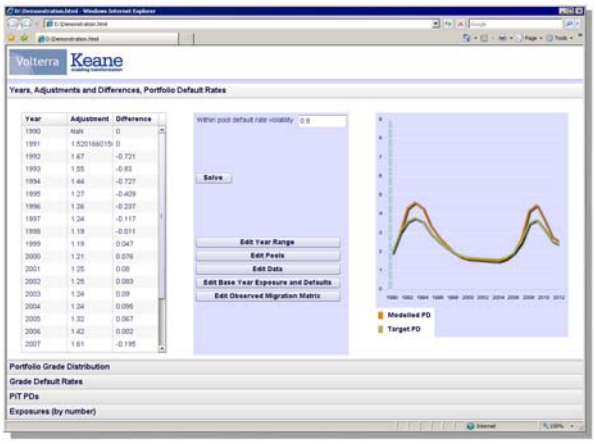
Summary

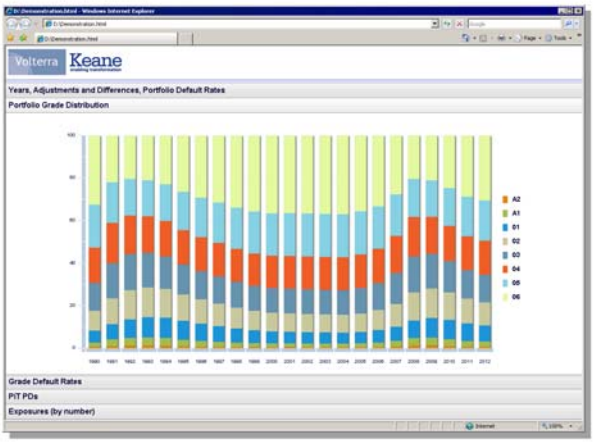
The Grade Migration Tool is a modelling solution which:

- Is customised to operate for the lender's own portfolio
- Provides 'Through the Cycle' calibration to 'Point in Time' rating systems
- Incorporate ratings migration into stress testing results

When the risk profile of a portfolio changes, this can manifest in two ways: as a movement of borrowers into higher risk grades, or via an increase in the within-grade default rates. The Volterra Grade Migration Tool uses detailed lender-specific inputs to model patterns of grade movement and default rate changes through the economic cycle and under specific economic scenarios.

The GMT provides a stronger basis for meeting Pillar I requirements under Basel II, by improving the accuracy of 'Through-the-Cycle' calibration of 'Point-in-Time' rating systems. It also helps lenders address Pillar II and ICAAP requirements by strengthening stress testing, as the impact of a downturn on both within grade default rates and grade migration can now be assessed.





GMT Features

The GMT provides a single, intuitive interface for assessing the relationship between portfolio level default rates and the two key sources of risk variation. Running as a stand alone application within a web browser, inputs can be taken directly from existing data with results viewable in graphical and tabulated formats, as well as being exportable to other software packages.

‘Through the Cycle’ Calibration of ‘Point in Time’ Rating Systems

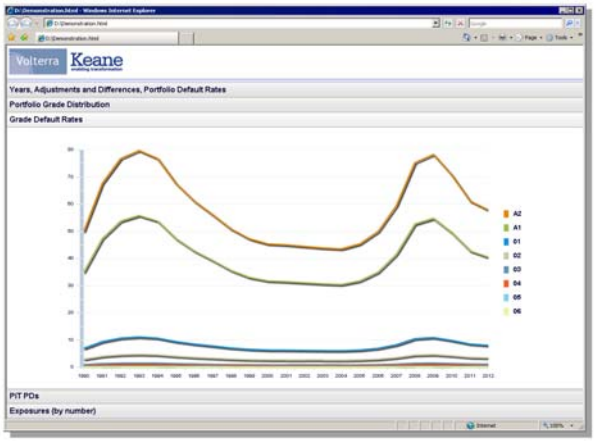
Once the split in risk variation has been specified, the GMT produces both the within grade default rate history for each grade and the historic migration across grades consistent with historic portfolio default experience. The resultant Portfolio Grade Distribution and Grade Default Rates can be viewed graphically, as well as numerically. Long run average default rates in each grade can then be observed, as well as the pattern of migration through the economic cycle, helping lenders to understand the likely cyclicality of their capital requirements.

Rolling Out Ratings Migration in Stress Testing Solutions

Looking forward, the tool can provide the same type of solution based on a portfolio level default rate forecast which relates to a ‘stressed’ credit environment. This functionality feeds straight into a lender’s ICAAP and bridges the gap between stress testing and capital management planning, as it allows capital needs due to fluctuating regulatory capital to be explicitly quantified. Understanding how borrowers are likely to migrate across grades is key to forecasting capital requirements through periods of stress, and the tool provides this functionality.

Fitting to Your Portfolio and giving you Intellectual Ownership

An essential part of the process of using the tool is calibrating it to the individual lender’s portfolio. We work with lenders to do this, addressing any specific issues that lenders may have and helping to solve common problems, such as lack of historic data and sourcing appropriate external data. Finally, we are committed to delivering a solution that is not a ‘black box’, meaning that we work with lenders to fully train internal staff on how the tool works, from the fundamental logic of the approach down to the nuts and bolts of the calculations run in the tool.



To Learn More

Volterra is now providing demonstrations of the Grade Migration Tool.

For further information or to arrange a demonstration, please contact William Cook, Head of Basel Solutions, on 020 8878 6333 or by email at wcook@volterra.co.uk.

The Grade Migration Tool has been developed by Volterra Consulting, a London based economics consultancy, in partnership with Keane, a global business and IT consulting firm. This partnership combines Volterra’s modelling and economic expertise with Keane’s skills and experience in robust application development.
Details on licensing and support arrangements are available upon request.