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Reaping the Benefits of the Credit Risk Requirements of Basel II (while avoiding some of the costs)

A forward looking commentary by Peldec Decision Systems

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The Basel Committee for Banking Supervision (BCBS) has painstakingly constructed an accord that will revolutionize financial institutions. In particular, under Pillar 1, the committee has defined a very comprehensive set of formulas that will allow banks to calculate their minimal capital requirements in order to safeguard the financial institution against credit risk. What the committee has not done, and rightly so, is to define how banks should arrive at the inputs to those formulas. Every bank is left to define for itself what data to record and store and how to manipulate the data in order to "feed" those long formulas.

The regulators will observe, monitor and examine the bank's efforts, but at the end of the day it will be up to the bank to deliver numbers that can be corroborated. Initially the regulators will be patient, allowing banks to present their best calculated estimates of their minimal capital requirements. As time passes, those numbers will be compared (by the regulators and the markets) with the bad debt provisions disclosed in the banks' audited financial statements. Discrepancies between the forecast losses and those actually sustained, will subject the bank to a sharp dose of "Regulatory Supervision" (Pillar 2) and "Market Discipline" (Pillar 3). Recent research, including the 3rd Quantitative Impact Study (QIS3), indicates that most banks should not expect to see a reduction of their minimal capital requirements.

Does this mean that Basel II is a no-win situation for financial institutions, or can it still be turned to their advantage? A whole army of consultants, professional services firms and IT vendors will have banks believe that they have the sought-after solutions that will ensure Basel II compliance. Some of them can undoubtedly assist, but the real problem (and the solution) rests within the banks themselves – data, and the more the better. If banks realize early on what it is they need to collect, they will have made a major step on the road towards Basel II compliance and will have laid down the foundation for a safer and more profitable bank.

Modern risk management is based on the analysis of past events to forecast the future. The Basel II Accord stresses this fact and even makes recommendations as to the depth of historical data that is appropriate for different risk categories. What is needed now is a clear definition of the types of data that need to be accumulated. Taking credit risk as an example, let's take look at the major components that make up expected credit losses:

- Probability of Default (PD).
- Loss Given Default (LGD).
- Exposure at Default (EAD).

Most banks implement a rating system that assigns a rating or score to a customer before a credit decision is taken. If this rating is stored historically it might allow the bank to map it to a PD. But what happens if one day the bank finds out that the forecast PDs are inaccurate, i.e. the rating process is not performing as expected? At this point the historical ratings become largely obsolete and if the supporting data that was used to make the ratings was not stored as well, the bank is basically back to square one.

Developing a robust and efficient rating engine is an evolutionary process that seeks to make incremental improvements as experience is gained. Therefore, one of the most important decisions to be made early on is: what data inputs need to be systematically accumulated starting today to feed the rating engine that the bank will use tomorrow.

This sounds like a tall order, but it does not have to be so. Advanced rating engines use inputs such as: financial ratios, external agency ratings, demographics, relationship managers' subjective ratings, behavioral payment histories etc. By implementing systems that store these data inputs in central databases as part of the credit process, a bank ensures that it will have the necessary inputs when it comes to implement a more advanced rating engine. The purpose, after all, is to improve the ability to rate customers in real-time so as to make improved credit decisions that are priced appropriately. That should be the bank's major long-term objective. An improved rating capability will reward the bank with a competitive advantage, better management reporting and will also serve Basel II compliance.

Similarly, LGD and EAD require that all the influencing parameters are "data warehoused" so they can be analyzed later. Here again, identifying the required parameters is the root objective. Lapsed collateral insurance coverage or a market shift in commercial real-estate prices, are examples of events that will probably affect LGD, therefore it might we prudent to store them.

Undertaking an exercise to identify the data sources that need to be collated, stored and cleansed may lead to the conclusion that the bank is missing the means to acquire some or even many of the required inputs. Deciding to ignore this fact and moving on to implement a Basel II compliance solution (because time is short) will result in a mediocre but expensive solution that will have bank management and IT exchanging blame for a long time to come. Identifying the real risk drivers should serve to focus everyone's attention on those systems that are crucial for the successful implementation of an enterprise-wide credit risk management solution that will truly benefit the bank.

Peldec Decision Systems has been designing and developing commercial credit management systems since 1990. Our suite of products tackle all aspects of the credit approval process: loan review write-ups, financial statements spreading, credit rating and portfolio management. The systems define the recommended logical data structures that promote sound credit management practices. These tried and tested systems, which are on a par or surpass proprietary systems found only in global banks, allow banks of all sizes to implement best-of-breed solutions that will not only ensure Basel II compliance but will also allow them to realize a tangible return-on-investment (ROI) – something that seems to have been forgotten in the Basel II debate.

The following summarizes some of Peldec's solutions:

- **ProRisk: credit portfolio management and analysis software** - a credit risk repository that manages and enhances the financial institution's credit risk rating model. ProRisk enables calculation of PD, LGD and EAD for each customer and facility type, figures that are at the heart of the Basel II formulas. ProRisk also calculates the credit-risk related minimum capital requirements for the financial institution's entire credit portfolio and enables to "drill-down" into the credit portfolio, to identify which customers or segments require the highest levels of capital allocation.

- **ProFin: next-generation financial statements management and analysis software** - manages a central database of customers' financial statements and financial ratios. Financial ratios are critical for evaluating customers. Having a central database that stores the financials for all of the financial institutions' customers is a vital component of a customer risk rating system.

- **ProFile: end-to-end commercial credit management software** - manages a central database of customer risk-related data that offers a complete view of the relationship between the customer and the financial institution. ProFile manages qualitative ratings assigned by credit analysts and loan officers. ProFile also administers and enforces the credit approval workflow, observing credit approval limits and generating an audit trail.

For more information on how Peldec's solutions and services can help your bank to comply with Basel II, please contact us at info@peldec.com.

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