

# Strength through diversity

**Recognition of the impact of diversification effects is imperative for good portfolio management. David Rowe argues that regulatory capital rules should pay greater attention to this aspect of credit risk measurement**

**C**redit risk management has traditionally meant meticulous attention to careful underwriting standards. Thirty years ago, "spreading financial statements" was typically a new credit analyst's first introduction to the field. This meant translating the official statements of clients into a bank's standard categories and formats. Several software companies built good businesses based on packages designed to facilitate this process.

Credit quality is evaluated based on a variety of balance sheet and income statement ratios. These include the current ratio [current assets/current liabilities], the quick-asset ratio [(cash + marketable securities + receivables)/current liabilities], the coverage ratio [earnings before interest and taxes/annual interest charges], and turnover ratios [sales/receivables and cost of sales/inventories] among others.

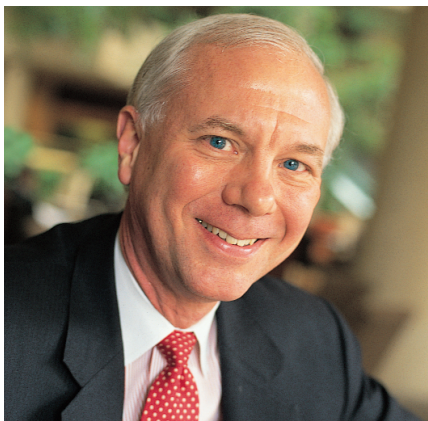
Trend analysis is also important in this exercise. A company may be within traditional benchmark values for all ratios, but the trend may be deteriorating over time. Such changes are often effective early warning signals of future problems. At a minimum, adverse trends indicate issues that warrant further investigation.

Obviously, this type of company-specific financial analysis is combined with industry and regional trends. To this is added less easily quantified information, such as the quality and stability of management, the life-cycle status of a company's key products, customer satisfaction indicators and sources of sustained competitive advantage. From this array of both quantitative and qualitative indicators, the analyst arrives at short-term and long-term credit scores. While many different scales are used, these credit scores are effectively comparable to publicly issued bond ratings. They are intended to reflect the short-term and long-term likelihood of default.

I do not intend to denigrate the type of analysis just described as it is essential for effective underwriting and pricing of loans. However, a key characteristic of the process is its exclusively micro focus. All the information generated is designed to yield a more accurate estimate of the potential for future financial problems at the individual company in question.

## Concentration risk

Despite the micro focus of most credit analysis, portfolio concentration risk has been a widely recognised problem in the banking industry. This was especially true in the US where, until recently, legal obstacles prevented widespread bank consolidation across state lines, and even within many states. Business relationships naturally developed within the local market. This tended to foster deeper and more reliable insights into the financial status of local, rather than more distant,



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companies. Moreover, a common philosophical view says that a local bank, funded by local deposits, has a moral obligation to concentrate most of its lending in that same community. It is no surprise, therefore, that resulting loan portfolios consistently reflected the regional and industry characteristics of a bank's service market.

From a risk and stability viewpoint, this concentration can be a serious problem. If a local market and/or its dominant industries experience economic hardships, this can be life-threatening to a local financial institution. Also, when companies and individuals in the local economy need added liquidity to weather the hard times, a local bank is often least able to provide it.

The problem, of course, is that traditionally there have been few alternatives available to address such concentration risk. Remote loan origination offices have been used, although limited brand recognition can make competing against local institutions difficult. Moreover, lending outside the local market often involves exposures to unfamiliar industries with which the senior management of a bank is uncomfortable.

Loan syndications are an alternative both to reduce on-balance-sheet concentrations and to increase exposure to under-represented sectors. But they do tend to be cumbersome, and may have undesirable relationship effects. It is no surprise, therefore, that credit risk management continued into the 1990s to be dominated by micro analysis aimed at effective underwriting of new loans and early remediation of deteriorating assets.

Credit derivatives represent a revolutionary change in the banking industry. They permit banks to short the credit of one or more obligors

efficiently and anonymously. This makes it possible to separate management of the credit portfolio from the pattern of loan origination. In effect, a substantial improvement in diversification can be achieved without changing a bank's fundamental business relationships. Assessing and reflecting the risk-reducing impact of improved diversification is an important component of an effective system for allocating economic capital. In general, individual business units within a larger whole do not need as much capital to achieve a given credit rating as they would if each operated as a stand-alone entity. The reason is that dissimilar businesses tend to have problems at different times. Fluctuations in the value of the combined business are reduced by this diversification effect. The result is a corresponding reduction in the capital required to support any given credit rating.

## Basel's faults

Despite the importance of diversification in determining appropriate capital levels, the proposed Basel II Capital Accord gives it little consideration. It does acknowledge the principle of "granularity adjustment" for loan exposures. This is intended to recognise that the volatility of credit losses on many small loans tends to be smaller than that on a few large loans. Regarding guarantees and credit derivatives, the committee recognises that the requirement of a default by both the underlying obligor and the guarantor reduces the credit risk to less than that of a direct obligation of the guarantor. Nevertheless, it refuses to allow recognition of this effect, arguing that no acceptable method exists for reliably estimating the default correlation between the two entities.

In effect, it argues that since the recognised risk reduction cannot be quantified precisely it should be ignored completely. This seems a triumph of conservatism of common sense. From a social welfare standpoint, capital rules that ignore legitimate risk reduction techniques create adverse incentives. First, institutions are discouraged from using such approaches. Second, they may even be encouraged to take more risk to achieve higher returns as compensation for the cost of the capital they will be required to hold. Surely some recognition of this effect, perhaps subject to a regulatory floor on the allowable correlation or an alternative minimum capital charge, is preferable to ignoring it all together.

In another 10 years, active management of the credit portfolio at a macro level, including the effects of default correlations, will be recognised as essential to sound banking administration. I am confident that correlation analysis and diversification will also then play a much larger role in determining regulatory capital requirements. ■