

## Managing Risk in a Changing Environment

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Since becoming President of the Philadelphia Fed, I've had the pleasure three times of addressing New Jersey banking audiences. In my first presentation at the New Jersey Bankers Association convention in Orlando, I talked about the opportunities presented by financial modernization. In my second remarks to the South Jersey Bankers Association last month I spoke of the changing national economic environment. Today, I'm going to take these ideas a step further and address the issue of managing risk in this changing economic and financial environment.

All of us have heard that banking is a risky business, and we all know that lending involves the potential for loss. That is why banks invest heavily in credit analysis, credit scoring, and loan workout departments. It's also the reason bank examiners must invest heavily in the review of credit risk.

Of course, the level of risk varies over time. We are now in a period when risks have increased, and so has the need for vigilance. In periods of deregulation, competition increases and aggressive tactics are more prevalent. The additional powers granted by the Financial Modernization Act of 1999 have every participant in the financial services industry chasing the same customers, even as we have entered a period of slower economic growth. Such periods traditionally have increased the level of credit risk in the financial sector, and led to higher charge offs and lower recoveries. This combination of factors makes it even more urgent for banks to carefully manage credit risk.

Recent data support the view that these are critical times. Moody's default rates are on the rise. Forecasts from the rating agencies all suggest further deterioration and credit rating declines. Shared National Credits have already shown a remarkable increase in downgrades with growing concern over increasing defaults. Consumer bankruptcies seem to be reversing their recent decline, while credit card receivables are showing evidence of performance deterioration and increased losses. Finally, actual provisions and charge-offs in the banking industry are rising substantially.

Again, none of this should be surprising. In times of economic uncertainty and industry change, one expects loan losses to rise and loan quality to fall. It is the natural course of events. Yet times like this also bring out a positive aspect. For in periods of stress we discover the quality of bank credit analysis and the skill of bank management.

Over the last decade, there have been many advances in credit risk analysis. This once subjective field of loan review and soft analysis has given way to the rigors of economics, statistics, and mathematics. The investment bankers have led this transformation. They started in the corporate bond market and the rapidly growing asset-backed securities markets. Then they brought rigorous risk evaluation and analysis to the corporate and consumer loan markets. In each case, asset-pricing analytics transformed a qualitative market into a highly quantitative one. Using computer models and careful analysis, so-called rocket scientists have calculated required spreads and priced for risk, terms and covenants.

Where commercial bankers were overpricing, volumes quickly shifted to the investment bankers. In industry segments such as mortgage lending, car loans and leveraged leasing, commercial banks lost market share and large potential profits to new entrants with the ability to attract customers based solely on price. Meanwhile, where the commercial bankers have underpriced risk, the investment bankers and other selective market participants have been more than happy to cede loan volume to the banking industry. Sovereign debt and construction lending come to mind. And consider the substantial losses incurred by the commercial banks during the last cyclical downturn as a result of large loan concentrations.

In economics there is a powerful term for this problem--the winner's curse. The idea here is simple. In an intensely competitive market the firm that wins a prospective deal is the one who offers the lowest price, or in our terms, interest rate to an interested borrower. The winner either knows more about the customer's true value than his competitors or he has mispriced the deal. In the latter case, the winner is anything but happy after the error is made and the risk fully revealed. Observers of the modern financial world sometimes say commercial banking suffers all too often from this curse, underpricing and thereby landing some bad loans, while losing good loans because they were evaluated more rigorously and priced accordingly.

To prevent this outcome, commercial banking must strengthen its own capabilities to analyze and price risk. When times get tough, competitors get tougher. Bankers can no longer succeed in lending with imprecise tools and techniques.

What should be the standard for acceptable credit risk management procedures, particularly for regional and community banks? Appropriate banking practice includes the evaluation of loans for risk. But this is not the simple process used by many of our predecessors. In the old days of credit review the outcome was a simple pass/fail decision. Today, loan analysis must include a specific quantitative loan rating. For most credit risk management procedures there are several grades of passing loans, as, of course, all loans do not have the same probability of loss or default risk. And, this variation in credit quality or default probability must be included in the pricing decision. There is absolutely no substitute for appropriate risk-based pricing.

Indeed, financial market practice requires the lender to price all aspects of the credit. The credit's price or interest rate spread must include a margin relating to its risk rating. And in addition, the margin should include compensation for the terms and conditions, that is, the covenants and options the lender is providing.

It is also essential to evaluate and price the riskiness of loans consistently and uniformly throughout the organization. Multiple rating and pricing procedures offer no benefit. They only create confusion and obscure the institution's true risk exposure. Uniform rating procedures and risk-based pricing also offers management the advantage of understanding the quality of its loan portfolio at every point in time.

With this knowledge, the bank can prepare itself adequately for losses, by moving the proper amount of current earnings into reserves. Let's take a few minutes to step through the accounting.

Each period, the bank takes a portion of current income from the interest rate margin on the loan portfolio and allocates it to the "provision for loan loss," an expense item in its income statement. This, as you know, transfers some current interest income from the credit into the "loan loss reserve" on the bank's balance sheet. The exact amount allocated should be related to the portfolio's risk classification and is determined by looking at each credit outstanding.

If the margins have been set properly and this process is applied to all credits consistently, then **in a statistical sense** the bank's loan loss reserve will always be adequate. That is, the bank will have sufficient funds in its loan loss reserve to offset the losses it is likely to incur as a result of loan defaults. So, again in a statistical sense, loan losses should leave the bank's balance sheet undisturbed.

What's the point here? Simply that a coherent risk management strategy provides the stability necessary to protect the bank's balance sheet and its stockholder's equity.

Remember that the title of this talk today is managing risk in a **changing** environment. So I want to emphasize the value of good risk management practices for helping banks respond to the changes we are observing today.

Sound risk management calls for periodic re-evaluation of the loan portfolio's risk profile in light of changing conditions. The bank may need to adjust the loan loss reserve as the environment changes or new information is available about the prospects for borrower success.

Given our experience over the past several quarters, I need not dwell on the fact that economic conditions can change pretty quickly. Bankers are naturally asking themselves: Is this change in the economic climate likely to affect the quality of our loan portfolio and the prospects for repayment of our outstanding credits?

I would only emphasize that once this assessment is made, banks with good systems for risk management can follow through and adjust the share of interest rate margins allocated for loan loss provisions and over time increase the margin itself to reflect the current level of risk in the environment. This does not mean banks must individually analyze and recalibrate the provision for each and every credit. Loans can be pooled based on similarities in historical performance or in vulnerabilities to current conditions. But, again, the key is to do this analysis systematically and consistently across the organization.

Of course, banks can and should also make additional provisions for specific loans that are likely to result in a net loss. These reserves would supplement the statistically allocated loan loss reserves that I discussed before.

In the end, safeguarding the bank's balance sheet takes regular monitoring and adjustments to the bank's total loan loss reserve account, that is, the sum of its general reserves plus its specific reserves.

Speaking of the loan loss reserve account and the balance sheet, I want to emphasize an important difference between the loan loss reserve account and another balance sheet entry -- the capital account. Each has a different role in the bank's response to risk, and accordingly the marketplace sees each differently. Loan-loss reserves are there to cover the losses the bank can quantify and predict. Capital is the cushion against the losses that cannot be quantified or predicted, so called unexpected losses.

Some would argue that all loan losses are unexpected - a banker never makes a loan that he expects to default. But, a portfolio of loans has some statistically expected loan loss rate, which varies based on the bank's market, its credit standards and the state of the economy. This can be estimated from the bank's past history, or an analysis of similar loans made elsewhere. It is this amount that should be transferred to the reserve account.

Consider what happens to a bank that underfunds its loan loss reserve account, either because it has underestimated the risks to its credits, or because it is reluctant to reduce earnings by allocating an appropriate amount of interest income to the reserve account. As loans begin to default and the losses start to materialize, the bank's loan loss reserve account is insufficient to absorb them. Net earnings suffer as current income is diverted to replenish the reserve account. If losses are big enough, the bank's capital position may be impaired. The marketplace will read these as signals of lapses in management and board oversight.

If the situation is large or persistent enough it will attract the attention of the bank's regulator as well. One reason is that it is the regulator's responsibility to assure the integrity of the bank's financial statements and, in essence, an underfunded loan loss reserve results in an overstatement of both net income and the bank's capital position.

Perhaps more importantly, providing accurate information about a bank's credit quality goes to the heart of the regulators' new risk-based examination procedures. Regulators understand that in today's highly competitive financial service marketplace, banks are under ever-greater pressure to properly evaluate and manage the risks to their balance sheet. So, examiners must look for evidence that the bank has the capacity to do so.

In particular, they look to banks' implementation of credit procedures for evidence of management's capacity to navigate in the potentially dangerous waters of a changing economic and financial environment.

In summary, we are entering a period of somewhat higher risk for the banking industry from at least two distinct directions. First, the passage of the Financial Modernization Act of 1999 has introduced a whole new set of competitors into the banks' marketplace. While this new legislation expands the menu banks can offer, bankers are well aware that they are still not quite on a level playing field with non-banks. Second, and simultaneously, this added competition comes at a time when the industry itself is beginning to feel the pressures of an economic slowdown, with all its attendant credit risks.

The banking industry is, on the whole, prepared for these turbulent times. Banks are well capitalized and loan loss reserves appear adequate. Yet, the stress test for individual institutions is yet to come. It is

incumbent upon each bank's senior management to see that the bank is prepared for whatever the future brings. To prosper in this new less-regulated environment, a bank needs a strong risk management system. One that correctly evaluates risk. One that prices correctly for risk. One that reserves correctly for risk. And one in which the credit officers themselves see and understand the risks that inevitably exist in each and every credit decision.

I call on all of you to be sure that your credit risk management systems can protect your institution in this period of increased vulnerability. I believe the institutions that have taken all the precautions I've just described will weather today's turbulent times and will be successful and prosperous going forward.