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## CASE STUDIES

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“Case Studies” presents a case pertinent to contemporary issues and events in investment management. Insightful and provocative questions are posed at the end of each case to challenge the reader. Each case is an invitation to the critical thinking and pragmatic problem solving that are so fundamental to the practice of investment management.

*Jack L. Treynor, Senior Editor*



### **DEFAULT—SHAWNEE MANUFACTURING**

When he took the job as the loan officer at the Red River Bank, Franklin Shedd had promised himself to bring modern ideas to the lending function. In particular, he was uncomfortable with the bank’s traditional classification of loans in its portfolio into Performing and Non-performing.

Shawnee Manufacturing, for example, was the largest employer in Red River. It had never failed to pay the interest on its revolving line of credit. But, demand for Shawnee’s products—milking machines and related electrical equipment—was sensitive to the vicissitudes of the dairy industry.

The sensitivity was evident in Shawnee’s share price which, in recent years, had fluctuated widely between \$25 and last week’s close of \$2.10. (Using weekly quotes, Shedd estimated a standard deviation around share price change of \$10.00.) He recognized that the value of the two million shares outstanding would fluctuate less than the value of Shawnee’s assets. But, given even rough indicators

of the underlying asset risk, Shedd was troubled by the fact that Shawnee’s current borrowings had nearly exhausted its line of credit with the bank (\$10,000,000).

The line of credit was coming up for annual review next week. Masten Titus, Shawnee’s chairman, was an outspoken and influential member of the bank’s board of directors. He was proud of the fact that, although its line of credit had grown rapidly over the years, Shawnee had never defaulted.

### **Questions**

How much weight should Shedd give to the fact that Shawnee has never missed an interest payment?

That Shawnee has never defaulted?

How should risk factor into Shedd’s lending decisions?

Into the bank examiner’s determinations?

Into the bank's financial reporting?

If Titus asks for another increase in Shawnee's line of credit at the annual review, how should Shedd respond?

### Default Discussion-Q

*J. Peter Williamson, Discussion Leader,  
H. Russell Fogler, James H. Scott, Dave E. Tierney*

It is essential for the bank to go into next week's meeting with Titus with a clear-cut decision, presented by the bank's CEO. Shedd will have a busy weekend preparing him for that presentation.

Shedd needs to realize that the proper way to approach his recommendation is in three stages:

1. an analytical stage, considering all the available data;
2. a rounded consideration of the human implications of the decision to Shawnee's stakeholders, the bank and the town of Red River;
3. a creative stage, in which Shedd turns problems into opportunities that will intrigue even Titus.

Has the loan to Shawnee degenerated into a "workout?" Shedd should recognize that, if his recommendation is tough on Titus, the bank's CEO will probably identify Shedd as its author. If the boss does make him the goat, his job is probably in jeopardy.

But Shedd's first task is the analytical one. If Red River Bank is the only significant lender to Shawnee (apart from trade creditors) then he cannot look to others to determine whether it is in default. Instead, his analysis must begin with a clear understanding of the concept.

A loan has a value that reflects the borrower's option against the lender. The lender will not renew unless the value of his claim net of the option exceeds the new loan. Because the value of the option increases with time to maturity, a claim approaching maturity is worth more to the lender than the same claim after it is renewed (just before renewal, face value; after renewal, face value less the value of the borrower's new option). So, at renewal, the borrower will experience a cash loss equal to the difference.

Enlarging the borrower's line of credit can be a way of providing the needed cash. Alas, it also increases the value of the borrower's option, hence the size of the crisis at the next renewal. Shawnee can avoid the crisis if it has accumulated enough cash from operations between renewals. Otherwise ...

### Prudent Man (Third Quarter 2003) — Discussion Notes

Is the Prudent Man just a non-quantitative way of arguing for diversification? For emphasizing the passive part of the portfolio rather than the active? If so, it protects the principal from the agent who gets a reputation as an investment genius if an improbable bet succeeds, while losing someone else's money if it fails.

Nelson's problem is that he can't tell the passive part of the portfolio he is emulating from the active part. So when its active holdings change, he trades, incurring unnecessary costs.

On the other hand, Nelson's trading is improving the performance of the portfolio he is emulating. Over time, this improvement may attract other emulators. It may even persuade the portfolio manager to shift assets away from the passive part of his portfolio, which isn't benefiting from Nelson's trading, to the active part, which is. Ultimately, he may even acquire a reputation for being an investment genius. Then again ...