
Example 5

Identifying a TDR & Measuring Impairment: Present Value of Expected Future Cash Flows Method (Real Estate Loan)

Management makes a \$5,000,000 commercial loan to a small wholesale business. The loan bears a contractual interest rate of 7%, which is also its effective interest rate. The loan is amortizing over 20 years and due in 5 years. The monthly payment amount is approximately \$38,765. The collateral consists of business assets and a warehouse, which had an “as is” MV of \$6,700,000 when the loan was originated.

After 2 years, the borrower is delinquent on 3 of his 5 debts, including the bank’s commercial loan, which is 90 days delinquent. After carefully analyzing the borrower’s personal and business financial information and credit reports, and after discussions with the borrower, management determines that the borrower’s business may be able to generate cash flow of \$30,100 per month to service the loan. The current “as is” MV of the real property is \$3,600,000. Based on current inventory levels and other information, management estimates the borrower’s other available business assets would generate an additional \$600,000 if sold. The combined collateral less costs to sell of 8%, which is based on the bank’s prior experience, equals \$3,864,000.

Management decides to amortize the remaining principal balance of \$4,800,000 over 20 years from the restructure date, but with the balance due in 5 years. Although the current market rate for new debt with similar risk characteristics is 6.25%, management lowers the contractual interest rate to 4.35% based on the borrower’s actual cash flows from the business. The required monthly payments are \$29,980, with the payments expected to come from business operations. The balloon payment at the end of the fifth year equals \$3,958,529.

Based on its experience with similar modified loans, management determines that 90% of the contractual cash flows or \$26,982 is their best estimate of the expected monthly cash flows based on reasonable and supportable assumptions and projections, taking default assumptions into account. Management believes the most likely scenario for the borrower to satisfy the balloon payment at maturity is to sell the collateral.

1. Is the loan a TDR?

Yes. The borrower is in financial difficulty as evidenced by payment default on the debts, and the lender has granted a concession because the interest rate has been reduced to a below-market rate. Consequently, the two requirements for a TDR have been met.

2. What is the appropriate impairment measurement method, the present value of cash flows method or the fair value of collateral method?

The loan is not collateral dependent because the underlying collateral is not the sole source of repayment; rather, the primary source of repayment is cash flows from the borrower’s business. Therefore, the appropriate method for measuring impairment is the present value of expected future cash flows.

(Example 5 Continued)

3. What is the impairment amount based on the following modified terms?

Loan Amount	\$4,800,000
Interest Rate	4.35%
Term	5 years
Amortization	20 years
Default Probability	10%
New Monthly Payment	\$29,980
Principal at Maturity	\$3,958,529
Collateral Less 8% Costs to Sell	\$3,864,000

A. Discounted Cash Flow Analysis

Payment	\$29,980
Discount Rate (Modified Rate)	4.35%
Term	20 Years
PV of Payments	\$4,800,000
Less: Loan Amount	<u>\$4,800,000</u>
Impairment Amount	\$0

B. Discounted Cash Flow Analysis

Payment Less 10%	\$26,982
Discount Rate (Original Rate)	7.00%
Term	5 Years
PV of Payments	\$1,363,000
PV of Collateral Less Costs to Sell	<u>\$2,725,000</u>
Total PV of Cash Flows	\$4,088,000
Less: Loan Amount	<u>\$4,800,000</u>
Impairment Amount	\$712,000

C. Discounted Cash Flow Analysis

Payment Less 10%	\$26,982
Discount Rate (Original Rate)	7.00%
Term	5 Years
PV of Payments	\$1,363,000
PV of Balloon Payment	<u>\$2,792,000</u>
Total PV of Cash Flows	\$4,155,000
Less: Loan Amount	<u>\$4,800,000</u>
Impairment Amount	\$645,000

(Example 5 Continued)

The best answer is B.

Answer B is the best answer because it adjusts the estimate of cash flows to reflect the loan's default risk and uses the correct discount rate - the original effective interest rate. The term used for the discounting period matches the most likely scenario stated in the example. Management replaced the contractual balloon payment with the collateral value since the cash flow from the sale of the collateral is the most likely scenario for satisfying the balloon payment. Additionally, it is appropriate to deduct costs to sell from the collateral value scheduled as the final cash flow as the costs to sell will reduce the sale proceeds available to repay the debt. The most likely scenarios are the basis for management's best estimate of future expected cash flows. Management should allocate \$712,000 as the impaired amount of the loan.

Answer A uses the contractual cash flows under the modified terms without adjusting for payment default risk with respect to the modified contract and it uses the wrong discount rate - the modified note rate instead of the original effective interest rate. It is acceptable to model cash flows for the full amortization period if that period is reasonable for the collateral type and management believes it is the most likely scenario for the borrower to satisfy the debt. However, in this example, the most likely scenario is the borrower's sale of the collateral to pay the balloon payment at the end of the 5-year term.

Answer C incorrectly uses the balloon payment, which is not expected to be collected in full, as the final cash flow rather than the net realizable value of the collateral, discounted to present value. The example does not identify any assets other than the collateral to satisfy the balloon payment, and management believes the most likely scenario for satisfying the balloon payment is the sale of the collateral. Therefore, the balloon payment should be replaced with the collateral value, less costs to sell, in the estimate of the expected discounted cash flows. However, this answer does adjust the cash flows to estimate the default risk and uses the correct discount rate and discounting period.

4. Does the impairment amount stay in the ALLL, is there a confirmed loss to charge off, or is it a combination of both?

The impairment amount stays in the ALLL. When the appropriate impairment measurement method is the present value of expected future cash flows, the resulting impairment amount stays in the ALLL unless a confirmed loss is identified and this amount must be charged off. The impairment amount would be re-evaluated quarterly and adjusted for the passage of time and to reflect changes in management's forecast of expected future cash flows.

5. Should the loan be on nonaccrual after restructuring?

Yes. The loan probably should have been placed on nonaccrual no later than when it became 90 days delinquent. To restore a nonaccrual loan that has been restructured in a TDR to accrual status, an institution must perform a current, well-documented credit analysis supporting a return to accrual status based on the borrower's financial condition and prospects for repayment under the revised terms. Otherwise, the TDR loan must remain in nonaccrual status. The analysis must consider the borrower's sustained historical repayment performance for a reasonable period prior to the return-to-accrual date, but may take into account payments made for a reasonable period prior to the restructuring, if the prior payments equaled or exceeded the payments required by the modified terms. A sustained period of repayment performance generally would be a minimum of 6 months.

(Example 5 Continued)

6. What is the appropriate loan classification at the time of the restructuring?

Substandard. The business generates insufficient cash flow to service the original debt, and the loan was 90-days past due and in payment default.

Although management may believe some weaknesses have been corrected with the modification, the borrower must demonstrate sustained payment performance before the loan can be upgraded. The loan would remain adversely classified until a well-documented assessment of the cash flows available to service the modified loan and the extent of any collateral protection and guarantor support is performed that demonstrates the absence of well-defined weaknesses that jeopardize the liquidation of the debt. Conversely, if it is probable that the borrower will be unable to perform according to the modified terms and the loan deteriorates to being collateral dependent, then it would be appropriate to recognize impairment based on the fair value, or “as is” MV, of the collateral, less costs to sell.

7. Can the bank discontinue reporting the loan as a TDR in the Call Report in calendar years following the year of the restructuring?

No. The loan would continue to be reported as a TDR because the 4.35% modified interest rate was below market rate at the date of restructuring.