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# **Tabletop Exercises: Allowance for Loan and Lease Losses and Troubled Debt Restructurings**

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## **Index**

<b><u>Measuring Impairment</u></b>	<b><u>Page</u></b>
Example 1: Present Value of Expected Future Cash Flows Method (Unsecured Loan).....	- 1 -
Example 2: Fair Value Method (Operation of Collateral).....	- 2 -
<b><u>Troubled Debt Restructuring (TDR)</u></b>	
Example 3: Accrual Treatment.....	- 4 -
Example 4: Accrual Status and Classification.....	- 5 -
<b><u>Identifying a TDR and Measuring Impairment</u></b>	
Example 5: Present Value of Expected Future Cash Flows Method (Real Estate Loan).....	- 7 -
Example 6: Present Value of Expected Future Cash Flows Method (Working Capital Line)..	- 11 -
Example 7: Fair Value Method (Operation of Collateral).....	- 15 -
<b><u>A/B Note Structure</u></b>	
Example 8: A/B Note Structure.....	- 19 -

## **Notes:**

The following are intended to be simplified examples to illustrate key concepts in the allowance for loan and lease losses (ALLL) and TDR guidance. The facts and circumstances related to an individual loan are unique and likely will not match the scenarios presented in this document. As each bank evaluates the appropriate reporting and classification treatment of the loans in its loan portfolio, management should refer to the relevant accounting standards and regulatory guidance for details and direction.

In this document, one method for completing a cash flow analysis is demonstrated. The method presented here is not a regulatory mandate. Neither accounting standards nor regulatory guidance prescribe how to estimate future cash flows, but they do specify that the “best estimate” based on reasonable and supportable assumptions and projections should be used. Other methods for determining the best estimate of expected future cash flows are acceptable. Management can use other future cash flow estimation methods, but the method chosen should be consistently applied and the underlying assumptions and projections must be reasonable, supportable, and properly documented.

Some generic terms are used in these tabletop exercises. For example, the terms “loan balance” or “loan amount” are used rather than “recorded investment in the loan” since these are the terms commonly used by community bankers when discussing the ALLL, impairment, and TDRs.

The following is a list of acronyms used throughout this document:

ALLL	Allowance for Loan and Lease Losses	P	Prime Rate
ASC	Accounting Standards Codification	PV	Present Value
ASC-310	ASC 310-10-35	TDR	Troubled Debt Restructuring
DCR	Debt Service Coverage Ratio	UCC	Uniform Commercial Code
LTV	Loan-to-Value	WC	Working Capital
MV	Market Value		

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## Example 1

### Measuring Impairment: Present Value of Expected Future Cash Flows Method (Unsecured Loan)

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Management terms out an annually renewing, unsecured revolving line of credit due to the borrower's financial difficulties. The loan will now amortize and mature in 5 years because this produces a payment the borrower can afford based on current financial information. The original note rate of 6%, which is the loan's effective interest rate, was not changed. Management has determined that the loan modification constitutes a TDR. The bank's loss experience on unsecured loans classified Substandard is 25%.

**Since there is no collateral, what cash flows and discount rate should be used to calculate the present value of expected future cash flows used to measure impairment?**

- A. Expected future cash flows: 5 years of monthly payments at the modified contractual amount.  
Discount rate: 6%
- B. Expected future cash flows: 5 years of monthly payments at the modified contractual amount.  
Discount rate: The market rate for debt of similar risk, estimated at 20%
- C. Expected future cash flows: 5 years of monthly payments at the modified contractual amount reduced by 25%. Discount rate: 6%

**The best answer is C.**

Answer C is the best answer because the estimate of expected future cash flows takes default assumptions into consideration. The resulting present value is subtracted from the loan balance to derive the impairment amount. The allocated impairment amount is included in the ALLL and reviewed quarterly to determine the need for any adjustments.

Answer A does not consider default assumptions in the estimate of expected future cash flows on the loan; therefore, it would result in no impairment despite the loan being unsecured and the borrower being in financial distress.

Answer B uses an incorrect discount rate. ASC 310 requires the discount rate to be the loan's original effective interest rate, not the market rate of interest. Additionally, the expected future cash flows have not been adjusted for default assumptions.

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## Example 2

### Measuring Impairment: Fair Value Method (Operation of Collateral)

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A \$4,200,000 loan is collateralized by an apartment building. At origination, an appraisal supported a \$6,700,000 “as stabilized” MV for the building. However, the current appraisal notes an “as stabilized” MV of only \$4,000,000 and an “as is” MV of approximately \$2,400,000 due to a significantly increased vacancy rate and a decline in rental rates. A review of the appraisal found all assumptions and conclusions to be reasonable. Management concluded that, due to the recent date of the current appraisal and the absence of changes in market conditions and property use since the appraisal date, the “as is” MV conclusion is considered an appropriate estimate of the fair value of the collateral for financial reporting purposes.

Management determines a loan workout would be in the best interests of the bank and the borrower. However, the terms of the modification do not provide reasonable assurance of repayment of principal and interest due to an extended interest-only payment period at a reduced interest rate. The resulting payment during the interest-only period is the amount the borrower’s cash flow currently supports. The economy is beginning to improve, and management reasonably believes that the property will reach the “as stabilized” MV within the next 2 years.

The borrower has no other assets and no ability to service the debt from other sources; therefore, the loan is collateral dependent. After a thorough analysis of the borrower’s financial condition, management concludes the best way to mitigate credit loss is through the borrower continuing the operation of the collateral, rather than foreclosure or the borrower selling the collateral to repay the debt.

#### How should this loan be accounted for in the ALLL?

A. Loan balance	\$4,200,000
Less: Fair value of collateral (“As Is” MV)	<u>\$2,400,000</u>
Initial valuation allowance for impairment	\$1,800,000
Loan balance	\$4,200,000
Less: “As Stabilized” MV	<u>\$4,000,000</u>
Amount classified Loss and charged to ALLL	\$ 200,000
Valuation allowance for impairment after charge-off	\$1,600,000
B. Loan balance	\$4,200,000
Less: Fair value of collateral (“As Is” MV)	<u>\$2,400,000</u>
Valuation allowance for impairment	\$1,800,000
C. Loan balance	\$4,200,000
Less: “As Stabilized” MV	<u>\$4,000,000</u>
Valuation allowance for impairment	\$ 200,000

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## (Example 2 Continued)

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**The best answer is A.**

Answer A is the best answer. The difference between the loan balance and the “as is” MV, which is most reflective of fair value, should be established as the impairment amount within the ALLL. This results in management allocating \$1,800,000 to the ALLL before considering the need for any charge-off. In this case, because the modified terms do not provide reasonable assurance of collection of all principal, the shortfall between the loan balance and the prospective “as stabilized” MV does not appear collectible, resulting in management charging off the \$200,000 shortfall against the ALLL. The \$1,600,000 impairment amount after the charge-off remains in the ALLL and should be reevaluated for appropriateness each quarter.

The fair value of the collateral will need to be periodically re-estimated to ensure the impairment amount is properly stated in regulatory reports. If property occupancy improves as expected and the “as stabilized” MV is achieved, no additional charge-offs would be necessary. If occupancy does not improve or worsens, it may be necessary to re-estimate the “as stabilized” MV of the collateral to determine whether additional charge-offs are required.

Answer B fails to reflect a charge-off of the shortfall between the loan balance and the prospective “as stabilized” MV.

Answer C incorrectly uses the “as stabilized” MV rather than the “as is” MV to measure the impairment on the loan.

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## Example 3

### TDR: Accrual Treatment

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Management originated a term loan to finance a commercial office building. The loan was amortized over 20 years and due in 10 years. One of the major tenants vacated the building when its lease expired, which lowered the occupancy level and resulted in a DCR of 0.75x. A new tenant has not been found. The borrower has demonstrated sustained payment performance for the last several years, which includes the period since the loss of the major tenant. The cash flow shortage has been covered by the guarantor. The loan has paid as agreed and been on accrual status since inception. However, the guarantor approached the bank, indicating that he would no longer be able to fully pay the cash flow shortfall.

Management obtained current financial information on the business (borrower) and guarantor. After carefully analyzing the financial information, management determined that amortizing payments with the interest rate reduced from the original rate of 7% to 5% for one year would improve the loan's DCR to 0.90x. When the guarantor's excess cash flow from other sources is included, the global DCR would be 1.10x. Based on the latest "as-is" appraisal performed shortly before the restructuring, the LTV is 85%. Management agreed to a 12-month modification in order to provide adequate time for the borrower to improve occupancy and cash flow for the remaining term of the loan. The loan modification is supported by a current, well-documented credit evaluation of the financial condition of both the borrower and the guarantor. Prospects for repayment under the revised terms appear reasonable.

The modification is a TDR because both prongs of the TDR test have been met. The borrower is in financial difficulty because payment default is probable without a modification and management granted a concession by lowering the interest rate for 12 months to a rate below the market rate for a new loan with comparable risk.

#### **What is the appropriate accrual treatment after restructuring?**

The loan was on accrual prior to the restructuring. An accruing loan that is modified in a TDR can remain in accrual status if, based on a current, well-documented credit analysis, collection of principal and interest in accordance with the modified terms is reasonably assured, and the borrower has demonstrated sustained historical repayment performance for a reasonable period before the modification. The loan in this example can continue to accrue interest based on the loan's prior performance, given that the borrower and the guarantor together had performed in a timely manner under the original contractual terms, the payments made during the past six months are consistent with the modified terms, and management reasonably expects repayment of principal and interest under the modified terms as detailed in their well-documented credit evaluation. Also, the bank has sufficient collateral or other sources of repayment that reasonably support the ultimate collection of principal and interest.

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## Example 4

### TDR: Accrual Status and Classification

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A \$2,000,000 loan to a manufacturing company is secured by the industrial building it occupies. The company's financial condition deteriorated due to losing contracts to a competitor with superior product innovations. The loan is 90 days past due. The current LTV is 91%.

The loan is classified Substandard and was placed on nonaccrual status with all previously accrued but uncollected interest reversed against appropriate income statement and balance sheet accounts. Management granted a modification to give the borrower time to develop and deploy new products. The modification agreement changed the monthly payment to interest only at the note's original interest rate for one year with a return to the original contractual payment thereafter. The DCR improved from 0.7x prior to the modification to 1.20x after the modification based on the interest-only payments. The agreement states that the past due interest is now due at maturity, but it was not capitalized into the loan balance on the bank's books. The modified loan is a TDR due to the financial difficulty of the business and the concession granted.

With its new products, the company obtained new sales contracts, and its financial condition is significantly improving. Accounts receivable, inventory, and accounts payable are approaching normal levels. The Current Ratio (current assets divided by current liabilities) has improved from 0.6:1 to 1.65:1 since the modification. Following the year of interest-only payments, the borrower has returned to making the original amortizing payments for the last 6 months. Based on a current, well-documented credit analysis of the borrower's financial condition, the DCR is now 1.30x based on the amortizing payment. Interest payments have been applied to the loan balance since the loan was placed on nonaccrual. The current loan balance is \$1,802,684, resulting in an improved LTV of 82%.

#### 1. May this loan be returned to accrual status, and if so, when?

- A. No, TDRs are impaired loans and must be kept on nonaccrual because payment in full of principal and interest is not expected according to the original terms.
- B. Yes, 6 months after the date of the modification.
- C. Yes, 18 months after the date of the modification.

#### **The best answer is C.**

Answer C is the best answer because the TDR loan meets all 3 conditions for returning a nonaccrual TDR loan to accrual status 18 months after the modification, including demonstrating 6 months of sustained historical repayment performance based on a reasonable repayment schedule. In this case, the reasonable repayment schedule is the return to the original amortizing payment structure one year after the modification. After month 12, the borrower began to make reasonable amortizing payments and has performed in accordance with the contractual terms for 6 months; therefore, at month 18, the loan could be considered for return to accrual status.

As a reminder, the 3 conditions for returning a nonaccrual TDR loan to accrual status are:

- Management has completed a current, well-documented credit analysis of the borrower's financial condition and prospects for repayment under the modified terms;
- Management must be reasonably assured of repayment of all principal and interest contractually due according to the modified terms; and
- The loan must show sustained historical repayment performance, which generally means 6 months of principal and interest payments.

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## (Example 4 Continued)

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Answer A incorrectly assumes that TDR loans must always be on nonaccrual. Even a loan that has been formally restructured can return to accrual status once management is reasonably assured of repayment of all principal and interest in accordance with a reasonable repayment schedule; the decision is supported by a current, well-documented credit analysis of the borrower's financial condition and prospects for repayment; and a reasonable period of sustained historical repayment performance has occurred.

Answer B does not conform to the requirements to return a nonaccrual TDR loan to accrual. Although the loan could eventually return to accrual status if certain conditions are met, at 6 months after the modification, the borrower is still in the interest-only period of the restructuring. A 6-month period of sustained interest-only performance does not demonstrate the collectability of the loan because it does not provide for repayment of principal. Therefore, the borrower has not yet demonstrated an ability to make amortizing payments for a sustained period.

### **2. Can this loan be upgraded from Substandard to Pass?**

- A. Yes, upon the date of the restructuring.
- B. Yes, when the loan is returned to accrual status.
- C. No, because the loan did not yield a market rate of interest at the date of restructuring.

#### **The best answer is B.**

Answer B is the best answer because the requirements for upgrading a loan to Pass and returning a loan to accrual status are very similar. Assuming the loan met the requirements for returning to accrual status, the loan can be upgraded to Pass with proper analysis and complete documentation to support the decision. Prudently restructured loans should not be adversely classified or criticized unless well-defined weaknesses exist that jeopardize repayment. In this example, the DCR and LTV are reasonable, and borrower trends, including the repayment performance after the loan returns to amortizing payments, are favorable, which indicate that an upgrade to Pass may be appropriate.

Answer A incorrectly assumes that TDR loans can be upgraded while well-defined weaknesses exist. On the date of restructuring, there are still well-defined weaknesses in the credit; specifically, the borrower's financial condition had deteriorated and it had not yet demonstrated that new products could be successfully developed and deployed to gain new sales contracts, and it has not demonstrated a sustained period of repayment performance.

Answer C incorrectly assumes that a loan must yield a market rate of interest at the date of restructuring to be upgraded later to Pass.

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## Example 5

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

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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.

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**(Example 5 Continued)**

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

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

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

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## (Example 5 Continued)

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### **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.

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## (Example 5 Continued)

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### **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.

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## Example 6

### Identifying a TDR & Measuring Impairment: Present Value of Expected Future Cash Flows Method (Working Capital Line)

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Management originated an \$800,000 revolving working capital line of credit to support a medical device manufacturer. The repayment source of the loan is business cash flow. Terms call for interest-only payments due monthly at a rate of P+1% with a current rate of 7.5% (which is the loan's effective interest rate), a 25% clean-up of principal for 30 days each year, and annual renewal. The loan is secured by a UCC-1 filing on business assets. Management does not have a valuation of the business assets but estimates that the assets have only nominal value.

Revenues declined 30%, and liquid assets have declined to \$77,000 from the company's year-end high of \$825,000. As a result of poor operating performance, the borrower became past due with vendors and was unable to meet payroll. The decline in the company's operating income has led to a net loss and insufficient cash flow to cover operating expenses and the \$200,000 clean-up per the terms of the line of credit. The line has not revolved as intended and is now fully extended.

In response, management termed out the loan with a 7-year amortization and reduced the interest rate from 7.5% variable to 6.5% fixed. By reducing the interest rate and waiving partial clean-up, the borrower's DCR improved from 0.75x to 1.10x. For loans that have undergone similar modifications, the bank's loss experience is 20% on Substandard working capital lines of credit and 30% on Substandard unsecured loans. Management estimates that the market rate for a borrower of similar risk is 12%.

#### **1. Is the loan a TDR?**

Yes. The borrower is experiencing financial difficulties, and the lender has granted concessions by waiving the clean-up, terming out the loan, and reducing the interest rate to a below market rate.

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

When relying on the income stream from business operations to repay the term loan, the loan would not be considered collateral dependent. Therefore, the present value of expected future cash flows method is appropriate. Furthermore, the collateral for the loan consists of business assets estimated to be of nominal value.

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**(Example 6 Continued)**

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

<b>Loan Amount</b>	<b>\$800,000</b>
<b>Interest Rate</b>	<b>6.50%</b>
<b>Term</b>	<b>7 Years</b>
<b>New Monthly Payment</b>	<b>\$11,880</b>
<b>Loss Experience on Substandard WC Lines of Credit that Have Undergone Similar Modifications</b>	<b>20%</b>
<b>Loss Experience on Substandard Unsecured Loans that Have Undergone Similar Modifications</b>	<b>30%</b>
A. <u>Discounted Cash Flow Analysis</u>	
Payment Less 30%	\$8,316
Discount Rate (Original Effective Interest Rate)	7.50%
Term	7 Years
PV of Payments	\$542,000
Less: Loan Amount	<u>\$800,000</u>
Impairment Amount	\$258,000
B. <u>Discounted Cash Flow Analysis</u>	
Payment	\$11,880
Discount Rate (Original Effective Interest Rate)	7.50%
Term	7 Years
PV of Payments	\$775,000
Less: Loan Amount	<u>\$800,000</u>
Impairment Amount	\$25,000
C. <u>Discounted Cash Flow Analysis</u>	
Payment Less 20%	\$9,504
Discount Rate (Market Rate)	12.00%
Term	7 Years
PV of Payments	\$538,000
Less: Loan Amount	<u>\$800,000</u>
Impairment Amount	\$262,000

**The best answer is A.**

Answer A is the best answer because it uses the correct discount rate (the original effective interest rate) and takes default assumptions into consideration when estimating the expected future cash flows. Because management estimates the collateral has only nominal value, management concludes that using the loss experience on Substandard unsecured loans that have undergone similar modifications is more appropriate than the working capital line loss experience for default assumption purposes.

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## (Example 6 Continued)

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Answer B does not adjust the expected future cash flows for estimated default assumption. However, it uses the correct discount rate (the original effective interest rate).

Answer C uses a default assumption that does not reflect the lack of collateral protection on this loan. Although the answer adjusts the cash flows to estimate the default risk, it uses the working capital line loss experience, which is inconsistent with management's conclusion regarding the nominal value of the collateral available for repaying the loan. This answer also uses an incorrect discount rate. ASC 310 requires the discount rate to be the original effective interest rate, not the market rate of interest.

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

The impairment amount remains 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. The impairment amount would be re-evaluated quarterly, and adjusted, if necessary, based on the borrower's demonstrated ability to repay the loan. In addition, the loan would need to be evaluated quarterly to determine whether a charge-off should be taken. When available information confirms that the loan, or a portion thereof, is uncollectible, this amount should be promptly charged off against the ALLL.

#### **5. Should the loan be on nonaccrual at the time of the restructuring?**

Yes. If the loan was not already on nonaccrual prior to the restructuring, it should be placed on nonaccrual at the time of the restructuring. The general rule for nonaccrual status in the Call Report instructions includes placing a loan on nonaccrual when "payment in full of principal or interest is not expected." The borrower's operating performance has declined significantly, resulting in a net loss and insufficient cash flow to cover operating expenses and the 25% annual clean-up of principal on the working capital line. Thus, management's credit analysis of the borrower's financial condition in conjunction with the restructuring indicates that full collection of principal and interest on the working capital line is not expected, which supports placing the loan in nonaccrual status not later than at the time of the restructuring. A loan cannot be modified as a way to avoid placing the loan on nonaccrual when such treatment would otherwise be warranted.

In order to return a nonaccrual TDR loan to accrual status, the following conditions must be met:

- Management must complete a current, well-documented credit evaluation of the borrower's financial condition and prospects for repayment under the modified terms;
- Management should be reasonably assured of repayment of all principal and interest under the modified terms; and
- The borrower must demonstrate a sustained period of repayment performance (typically at least 6 months).

Sustained payment performance may include payments made in the months prior to the restructuring. However, in this instance, the borrower was unable to make the required partial clean-up payment prior to the restructuring, so the borrower's past performance would not count toward the sustained period of repayment performance.

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## (Example 6 Continued)

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

Substandard. The loan has well-defined weaknesses due to the borrower's inadequate cash flow, illiquidity, and lack of profitability, and there is a distinct possibility that the bank will sustain some loss if the deficiencies are not corrected. The loan would need to be evaluated quarterly to determine whether a charge-off should be taken. When available information confirms that the loan, or a portion thereof, is uncollectible, this amount should be promptly charged off against the ALLL.

**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 at the date of restructuring the 6.5% modified interest rate was below the 12% market rate for new debt with similar risk characteristics.

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## Example 7

### Identifying a TDR & Measuring Impairment: Fair Value Method (Operation of Collateral)

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Management makes a commercial loan for \$3,000,000 bearing a contractual interest rate of 8% and secured by a multi-tenant retail building. The loan is amortizing over 20 years and is due in 5 years. The monthly payment amount is \$25,093. At origination, an appraisal of the collateral reflected an “as is” MV of \$4,000,000.

After 18 months, the borrower is 60 days delinquent on the loan. Vacancy increased to 55%, and rent concessions were granted to some tenants, resulting in a decreased cash flow. The guarantor has limited liquidity. There are no other available and reliable repayment sources other than the collateral’s cash flow. The current appraisal notes a prospective “as stabilized” MV of only \$2,600,000 and an “as is” MV of \$2,030,000 due to a significantly higher vacancy rate and a decline in rental rates. An appraisal review found the assumptions and conclusions to be reasonable. After carefully analyzing the borrower’s personal and business financial information and credit reports, and after discussions with the borrower, management determines that the collateral is able to generate cash flow of \$18,000 per month to service the loan.

Management determines that a prudent workout would be in the best interest of the bank. In order to collect as much of the loan as reasonably possible, management negotiates a reduced payment amount the borrower can meet and both parties agree to the restructure. The economy is beginning to improve, and management reasonably believes that the property will reach the “as stabilized” MV within the next 2 years. The workout plan provides management with reasonable assurance that the cash flow will be sufficient to pay all principal and interest.

Management decides to extend the amortization period of the remaining principal balance of \$2,900,000 to 25 years from the restructuring date, with the balance due in 5 years, although the bank’s loan policy limits the amortization period for new loans of this type to 20 years. Based on the borrower’s expected cash flow from the collateral, management lowers the contractual interest rate to 5%, which is below market for a new loan with similar risk characteristics. The new monthly payments under the modified loan terms are \$16,953.

#### **1. Is the loan a TDR?**

Yes. The modification constitutes a TDR because it meets both prongs of the TDR test. The borrower is experiencing financial difficulties as evidenced by the debtor’s payment default, negative equity, and significantly lower cash flow from the property. Foreclosure was imminent due to cash flow problems. Management also granted several significant concessions:

- The 5% interest rate is below market because it is less than the rate management would charge at the time of the restructuring for a new loan with similar risk characteristics (delinquency status, limited capacity to repay, collateral shortfall).
- The modified payments last for 5 years and are based on a longer amortization period than permitted under the bank’s loan policy.
- Management did not require additional collateral or guarantors despite the collateral shortfall and the borrower’s limited repayment capacity.

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## (Example 7 Continued)

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

For regulatory reporting purposes, any collateral dependent TDR loan must be measured based on the fair value of the collateral method. In this example, the loan is collateral dependent because the sole source of repayment is the operating cash flow generated from the collateral; the borrower has no other available and reliable means of repayment outside of the retail building to contribute to the amortization of the loan.

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

<b>Loan Amount</b>	<b>\$2,900,000</b>	
<b>Interest Rate</b>	<b>5.00%</b>	
<b>Term</b>	<b>5 Years</b>	
<b>Amortization</b>	<b>25 Years</b>	
<b>New Monthly Payment</b>	<b>16,953</b>	
<b>Balloon Payment</b>	<b>\$2,585,779</b>	
<b>Default Probability</b>	<b>10%</b>	
<b>“As Stabilized” MV</b>	<b>\$2,600,000</b>	
<b>“As Is” MV</b>	<b>\$2,030,000</b>	
<b>Costs to Sell</b>	<b>8.00%</b>	
A.	“As Stabilized” MV net of Costs to Sell	\$2,392,000
	Less: Loan Amount	<u>2,900,000</u>
	Impairment Amount	\$508,000
B.	“As Is” MV (Fair Value)	\$2,030,000
	Less: Loan Amount	<u>2,900,000</u>
	Impairment Amount	\$870,000
C.	<u>Discounted Cash Flow Analysis</u>	
	Payment Less 10% default assumption	\$15,258
	Discount Rate (Original Rate)	8.00%
	Term	5 Years
	PV of Payments	\$752,000
	PV of Terminal Cash Flow	\$1,562,000
	(“As Stabilized” MV net of Costs to Sell)	
	Total PV of Cash Flows	\$2,304,000
	Less: Loan Amount	<u>2,900,000</u>
	Impairment Amount	\$596,000

#### The best answer is B.

Answer B is the best answer. The impairment measurement for an impaired collateral dependent loan for which repayment is from the operation of the collateral is always the difference between the collateral’s fair value and the loan balance. The “as is” MV is most reflective of fair value. Costs to sell are not deducted from the fair value because the sale of the collateral is not part of the workout strategy.

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## (Example 7 Continued)

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Answer A incorrectly uses the “as stabilized” MV. The “as stabilized” MV should not be used to measure impairment because it is a prospective value. Rather, the fair value of the collateral as of the measurement date should be used. Additionally, as noted above, costs to sell are not deducted when determining the impairment amount for impaired collateral dependent loans for which repayment is from the operation of the collateral.

Answer C incorrectly uses the present value of expected future cash flows method to calculate impairment. The regulatory agencies require banks to use the fair value of the collateral method for calculating impairment on all impaired collateral dependent loans.

#### **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. The modification is reasonably structured, and management reasonably believes that the property will reach the “as stabilized” MV within the next 2 years. The workout plan provides management with reasonable assurance that the cash flow will be sufficient to pay all principal and interest at the below-market rate. Based on all of these factors, no charge-off is required at present; however, the impairment amount will need to be reviewed quarterly and adjusted, if necessary, based on ongoing performance and conditions. In addition, the loan would need to be evaluated quarterly to determine whether a charge-off should be taken. When available information confirms that the loan, or a portion thereof, is uncollectible, this amount should be promptly charged off against the ALLL.

#### **5. What is the appropriate loan classification at the time of the restructuring?**

- A. Substandard - \$2,900,000
- B. Substandard - \$2,600,000; Loss - \$300,000
- C. Substandard - \$2,030,000; Loss - \$870,000

**The best answer is A.**

The loan has well-defined weaknesses, such as delinquency, reduced cash flow, and a collateral shortfall, which warrant a Substandard classification. However, as noted in the answer to question #4, no charge-off is required since the property is stabilizing and management expects that cash flows will be sufficient to liquidate the debt according to its modified terms. Since no confirmed loss has been identified at the time of the restructuring, Answers B and C are not the best answer.

#### **6. Should the loan be on nonaccrual at the time of the restructuring?**

Yes. If the loan was not already on nonaccrual prior to the restructuring, it should be placed on nonaccrual at the time of the restructuring. The general rule for nonaccrual status in the Call Report instructions includes placing a loan on nonaccrual when “payment in full of principal or interest is not expected.” Management’s analysis of the borrower’s financial information when the loan is 60 days past due reveals that, due to the borrower’s decreased cash flow, the borrower cannot service the loan with its \$25,100 monthly payment and 8% interest rate. Thus, management’s credit analysis in conjunction with the modification indicates that full collection of principal and interest is not expected according to the original contractual terms, which supports placing the loan in nonaccrual status not later than at the time of the restructuring. A loan cannot be modified as a way to avoid placing the loan on nonaccrual when such treatment would otherwise be warranted.

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## (Example 7 Continued)

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A loan that is on nonaccrual at the time it undergoes a TDR need not be maintained for its remaining life in nonaccrual status. The loan can be restored to accrual status if it subsequently meets the return-to-accrual conditions set forth in the Call Report instructions.

**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 5% modified interest rate was below the market rate for new debt with similar risk characteristics at the date of restructuring.

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## Example 8

### A/B Note Structure

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Management originated a \$10,000,000 loan secured by a shopping mall with expected lease up in 12 months. Due to weak economic conditions, the shopping mall only achieved a 58% occupancy level with an “as is” MV of \$9,000,000, yielding a 111% LTV. Costs to sell are estimated to be 11% of the “as is” MV. The borrower was unable to service the debt with a DCR of 0.80x. Current financial information indicates the borrower and the guarantor have limited resources available to support this credit. The loan was placed on nonaccrual after it became 90 days delinquent.

If the bank were to foreclose on and sell the property, management would expect to receive proceeds of \$8,010,000 net costs to sell based on the property’s “as is” MV. After carefully analyzing the financial condition of the business, management determines that the collateral is able to generate cash flow sufficient to service an \$8,000,000 loan at the current market rate of interest for new debt with similar risk characteristics. As its workout strategy to mitigate credit loss, management restructures the loan by splitting the original note into 2 separate notes, one of which is supported by a current, well-documented credit evaluation of the borrower's financial condition and prospects for repayment under the revised terms.

The A Note is for \$8,000,000 and carries a current market rate of interest for new debt with similar risk characteristics. The A Note’s characteristics include an adequate DCR and LTV. The B Note is for \$2,000,000 and carries a below-market rate of interest. Management charges off the B Note as uncollectible due to the borrower’s lack of repayment capacity. The terms of the B Note do not call for any interim payments; principal and interest are due at the maturity of the B Note, which is not until after the maturity of the A Note.

**1. In this situation, where management splits the loan into an A/B note structure, does the B Note have to be charged off in order for the A Note to potentially receive favorable examination treatment?**

Yes. Because the restructured loans are supported by the same source of repayment, the uncollectible portion of the \$10,000,000 loan, which is represented by the B Note, must be charged off before potentially favorable examination treatment can be considered for the A Note. In addition, the B Note has been structured to defer all required payments until maturity in order to strengthen the ability of the borrower to service the A Note and ensure the latter is at market terms. After charging off the B Note, which could be viewed as a contingent receivable, the A Note is reasonably assured of repayment and performance according to reasonable modified terms.

**2. Assume that the B Note was not charged off. How would that affect the A Note’s accrual status and Call Report treatment?**

It would be unlikely that the A Note could return to accrual status, and the A Note would need to be reported indefinitely as a TDR on the Call Report.

The A Note could not return to accrual status because the repayment of the aggregate debt would not be reasonably assured since both notes would be reported as on-balance-sheet assets and are supported by the same source of repayment. Likewise, the A Note would still be reported as a TDR on the Call Report. For the A Note not to be reported as a TDR in calendar years after the year of the restructuring, the A Note must yield a market rate at the time of the restructuring and be in compliance with its modified terms. To be considered in compliance with its modified terms for Call Report purposes, the TDR must be in accrual status and must be current, or less than 30 days past due under the modified terms. Therefore, by not charging off the B Note, the A Note cannot return to accrual and must continue to be reported as a TDR on the Call Report.

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## (Example 8 Continued)

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**3. Since the loan was delinquent before the restructuring, can the A Note return to accrual status if the B Note has been charged off?**

Yes. After a period of sustained payment performance, the A Note may be returned to accrual status provided the following conditions are met:

- Management has completed a current, well-documented credit analysis of the borrower's financial condition and prospects for repayment of the A Note under the revised terms;
- Management must be reasonably assured of repayment of all principal and interest contractually due on the A Note according to the modified terms; and
- The A Note must show sustained historical repayment performance, which generally means 6 months of principal and interest payments.

As long as any of these conditions has not been met, or if the terms of the restructuring lack economic substance, the A Note should continue to be reported as a nonaccrual loan.

**4. Can the bank discontinue reporting the A Note as a TDR in the Call Report in the calendar years following the year of restructuring if the B Note has been charged off?**

Yes, given that the A Note bears a market interest rate at the date of the restructuring, if the A Note is in compliance with its modified terms (as described in the response to Question 2 above), which includes having been returned to accrual status, the loan would no longer be required to be reported as a TDR in the Call Report in calendar years after the year in which the restructuring took place. However, the A Note should continue to be measured for impairment under ASC 310.