Chapter 23

Audit of Cash and Financial Instruments

■ **Concept Checks**

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1. The appropriate tests for the ending balance in the cash accounts depend heavily on the initial assessment of control risk, tests of controls, and substantive tests of transactions for cash disbursements. The company's controls over cash disbursements assist the auditor in determining that cash disbursed is for approved company purposes, that cash disbursements are promptly recorded in the proper amount, and that cash cutoff at year-end is proper. If the results of the evaluation of internal control, the tests of controls, and the substantive tests of transactions are adequate, it is appropriate to reduce the tests of details of balances for cash, especially for the detailed tests of bank reconciliations. On the other hand, if the tests indicate that the client's controls are inadequate, extensive year-end testing may be necessary.

   An example in which the conclusions reached about the controls in cash disbursements would affect the tests of cash balances would be:

   If controls over the issuance of blank checks, the review of payees, amounts, and supporting documentation, the signing of checks, and the reconciliation of bank statements and vendors' statements are adequate, the auditor's review of outstanding checks on the year-end bank reconciliation may be greatly reduced. The year-end outstanding checks can be verified by testing a sample of checks returned with the cutoff bank statement rather than tracing all paid outstanding checks and the final monthly checks in the cash disbursements journal to the last month's cleared checks and the bank reconciliation.

2. The monthly reconciliation of bank accounts by an independent person is an important internal control over cash balances because it provides an opportunity for an internal verification of the cash receipts and cash disbursements transactions, investigation of reconciling items on the bank reconciliation, and the verification of the ending cash balance. Anyone responsible for the following duties would not be considered independent for the purposes of preparing monthly bank reconciliations:

   - Issuance of checks
   - Receipt and deposit of cash
   - Other handling of cash
   - Record keeping

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1. An auditor compares the "date of deposit according to the books" to the "date of disbursement according to the books" to detect kiting carried out by recording the deposit from an interbank transfer prior to year-end, but not recording the disbursement transaction until following year-end. For example, a client may write a check on December 31 from the general checking account to a payroll account. If the client records the deposit into the payroll account on December 31, but does not record the disbursement out of the general checking account until January 1, the cash will be counted in both accounts at December 31. This is typically carried out by first crediting another account such as revenue for the first journal entry to record the cash deposit, and then debiting an account such as an expense (or reversing the first entry) for the second journal entry to record the cash disbursement. When comparing the dates of deposit and disbursement, the auditor is looking to ensure both were recorded in the same fiscal period. The auditor will also verify the dates of deposit and disbursement according to the bank when testing the interbank transfer schedule.

2. Accounting standards related to fair value estimates make the audit of these estimates difficult due to the significant amount of management judgment involved. Management first applies judgment to determine whether the fair value estimate will be a level 1, 2, or 3 estimate. If the fair value estimate is level 2 or level 3, there is significant judgment involved in estimating the fair value. Level 3 fair value estimates may have several unobservable inputs used to determine fair value. Management may have incentives to classify an asset or liability as level 2 or level 3, and will also likely have incentives to overstate or understate the fair value.

■ Review Questions

23-1 The appropriate tests for the ending balance in the cash accounts depend heavily on the initial assessment of control risk, tests of controls, and substantive tests of transactions for cash receipts. The company's controls over cash receipts assist the auditor in determining that cash received is promptly deposited, that receipts recorded are proper, that customer accounts are promptly updated, and that the cash cutoff at year-end is proper. If the results of the evaluation of internal control, the tests of controls, and the substantive tests of transactions are adequate, it is appropriate to reduce the tests of details of balances for cash, especially for the detailed tests of bank reconciliations. On the other hand, if the tests indicate that the client's controls are deficient, extensive year-end testing may be necessary.

23-2 An imprest bank account for a branch operation is one in which a fixed balance is maintained. After authorized branch personnel use the funds for proper disbursements, they make an accounting to the home office. After the expenditures have been approved by the home office, a reimbursement is made to the branch account from the home office's general account for the total of the cash disbursements. The purpose of using this type of account is to provide controls over cash receipts and cash disbursements by preventing the branch operators from disbursing their cash receipts directly, and by providing review and approval of cash disbursements before more cash is made available.

23-3 The controller's approach is to reconcile until the balance agrees. The shortcoming of this approach is that it does not include a review of the items that flow through the account and it opens the door for the processing of improper items. Such items as checks payable to improper parties, reissuance of outstanding checks to improper parties, and kiting of funds would not be discovered with the controller's approach. The controller's procedures should include the following:

a. Examination of all checks clearing with the statement (including those on the previous month's outstanding check list) and comparison of payee and amount to the cash disbursements journal.
b. Test of cash receipts to determine that they are deposited within a reasonable amount of time.
c. Follow-up on old outstanding checks to determine why they are still outstanding.

23-4 Bank confirmations differ from positive confirmations of accounts receivable in that bank confirmations request several specific items of information:

1. The balances in all bank accounts.
2. Restrictions on withdrawals.
3. The interest rate on interest-bearing accounts.
4. Information on liabilities to the bank for notes, mortgages, or other debt.

Positive confirmations of accounts receivable request the customer to confirm an account balance stated on the confirmation form or designate a different amount with an explanation. The auditor anticipates few exceptions to accounts receivable confirmations, whereas with bank confirmations he expects differences between the balance per bank and balance per the books that the client must reconcile. Bank confirmations should be requested for all bank accounts, but positive confirmations of accounts receivable are normally requested only for a sample of accounts. If bank confirmations are not returned, they must be pursued until the auditor is satisfied as to what the requested information is. If positive confirmations of accounts receivable are not returned, second and maybe third requests may be made, but thereafter, follow-ups are not likely to be pursued. Alternative procedures, such as examination of subsequent payments or other support of customers' accounts may then be used.

23-4 (continued)

The reason why more importance is placed on bank confirmations than accounts receivable confirmations is that cash, being the most liquid of assets, must be more closely controlled than accounts receivable. In addition, other information—such as liabilities to the bank must be known for purposes of the financial statements. Finally, there are usually only a few bank accounts and most bank accounts have a large volume of transactions during the year.

23-5 This is a good auditing procedure that attempts to discover if any accounts that should have been closed are still being used, such as by a company employee to deposit customer remittances. The procedure may also discover unrecorded and contingent liabilities.

23-6 A cutoff bank statement is a partial period bank statement with the related cancelled checks, duplicate deposit slips, and other documents included in bank statements, which is mailed by the bank directly to the auditor. Rather than mailing the cutoff statement, the bank may provide direct electronic access to the auditor to allow the auditor to review transactions through a certain date. The purpose of the cutoff bank statement is to verify the reconciling items on the client's year-end reconciliation with evidence that is inaccessible to the client.

23-7 Auditors are usually less concerned about the client's cash receipts cutoff than the cutoff for sales, because the cutoff of cash receipts affects only cash and accounts receivable and not the income statement, whereas a misstatement in the cutoff of sales affects accounts receivable and the income statement.

For the purpose of detecting a cash receipt cutoff misstatement, there are two useful audit procedures. The first is to trace the deposits in transit to the cutoff bank statement to determine the date they were deposited in the bank account. Because the recorded cash will have to be included as deposits in transit on the bank reconciliation, the auditor can test for the number of days it took for the in-transit items to be deposited. If there is more than a two- or three-day delay between the balance sheet date and the subsequent deposit of all deposits in transit, there is an indication of a cutoff misstatement. The second audit procedure requires being on the premises at the balance sheet date and counting all cash and checks on hand and recording the amount in the audit files. When the bank reconciliation is tested, the auditor can then check whether the deposits in transit equal the amount recorded.

23-8 The misstatements that are of the greatest concern to auditors in bank reconciliations are intentional ones to cover up a cash shortage, usually resulting from a defalcation. A fraudulent deposit in transit or an omitted outstanding check will both cover up a cash shortage. Omitted deposits in transit or inclusion of a nonexistent outstanding check are likely misstatements only when the bank balance, after reconciling items are accounted for, is greater than the book balance, a highly unlikely occurrence.

23-9 This question deals with a situation where a company's bank received an electronic deposit of cash from credit card agencies making payments on behalf of customers purchasing products from the company's online Web site. The company does not have the electronic deposit recorded in the general ledger. The company's bank reconciliation should include an adjustment for this transaction, which would increase the book balance of cash and decrease accounts receivable from credit card agencies.

23-10 The purpose of the four-column proof of cash is to verify:

- Whether all recorded cash receipts were deposited.
- Whether all deposits in the bank were recorded in the accounting records.
- Whether all recorded cash disbursements were paid by the bank.
- Whether all amounts that were paid by the bank were recorded as cash disbursements in the accounting records.

Two types of misstatements that the four-column proof of cash is meant to uncover are:

- Cash received that was not recorded in the cash receipts journal.
- Checks that cleared the bank but have not been recorded in the cash disbursements journal.

23-11 Lapping is a defalcation in which a cash shortage is concealed by delaying the crediting of cash receipts to the proper accounts receivable. The first step in the fraud is to withhold cash remitted by a customer from a bank deposit. A few days later, because the customer must receive credit for the remittance, the first customer's account is credited with an amount from a remittance made by a second customer. The process requires the continuous shifting of shortages from account to account and the crediting of subsequent receipts to the wrong accounts receivable.

Kiting is a procedure used to conceal cash shortages from employers and auditors, to conceal bank overdrafts from the bank or banks affected, or to pad a cash position. All kiting procedures are designed to take advantage of the "float" period during which a check is in transit between banks.

A shortage in the cash in bank account may be concealed by depositing in the bank a transfer check drawn on another bank. The transfer check, not recorded as a deposit or a cash disbursement, brings the bank account into agreement with the books of account. The check is recorded a few days later and the shortage "reappears" unless the process is repeated.

If a depositor desires to write a check for which he does not have funds on deposit, he can deposit a transfer check large enough to cover the payment, even though the transfer check itself creates an overdraft. The transfer process may be repeated indefinitely or may be terminated by a deposit of sufficient funds to cover the overdraft. Because the purpose of this procedure is to conceal an overdraft from the bank, the transfer check may or may not be recorded on the books on the date that it was drawn.

23-11 (continued)

Kiting to pad a cash position typically occurs at the end of a fiscal period; a check transferring funds from one bank to another is deposited and recorded on the date drawn but is not recorded as a cash disbursement until the following period. In this case, the credit on the books would probably be made to a revenue account and the subsequent debit to an expense account.

The following audit procedures would be used to uncover lapping:

- Confirm accounts receivable and give close attention to exceptions made by customers about payment dates. The confirmation procedure is better applied as a surprise at an interim date so that if a person is engaged in lapping, he or she will not have been able to bring the "lapped" accounts up to date. If the confirmations are always prepared at year-end, the audit step may be anticipated by the person doing the lapping and the shortage given a different form such as kiting of checks.
- Make a surprise count of the cash and customers checks on hand. The deposit of these funds should be made under the auditor's control, and the details of the deposit should later be compared with the cash receipts book and the accounts receivable records.
- Compare the details of remittance lists (if prepared), stamped duplicate deposit slips, and entries in the cash receipts book. Because deposit slips are easily altered, some auditors prepare duplicate deposit slips for deposits made a few days before and after the audit date and have these slips authenticated by the bank. These authenticated duplicate deposit slips are compared to remittance lists and to entries in the cash book.
- Compare the check vouchers received with the customers' checks with stamped duplicate deposit slips, the entries in the cash book, and postings to the accounts receivable records. If the client stamps the voucher with the date it was received, the auditor should make careful comparisons of the stamped dates to the dates recorded in the cash receipts journal.

Kiting might be uncovered by the following audit procedures:

- As a surprise count of cash and customers' checks on hand is made as a test for lapping, determine that checks representing transfers of funds are properly recorded on the books.
- Prepare a schedule of the interbank transfers made for a few days before and after the audit date. The schedule should show, for each check, the date that the cash disbursement was recorded on the books, and the dates of withdrawal and deposit shown on the bank statements.

23-11 (continued)

- Obtain cutoff bank statements directly from the bank covering the seven- to ten-day period after the balance sheet date. Examine the checks returned with the cutoff statements and pay attention to dates of the transactions stamped by the banks on the backs of the checks. These stamped dates should not be earlier than the dates of the checks or the dates of cash disbursements recorded on the books. Protested (N.S.F.) checks should be investigated to determine they are not fictitious checks deposited temporarily to cover a shortage.

23-12 There is a greater emphasis on the detection of fraud in tests of details of cash balances than for other balance sheet accounts because the amount of cash flowing into and out of the cash account is frequently larger than for any other account in the financial statements. Furthermore, the susceptibility of cash to misappropriation is greater than other types of assets because most other assets must be converted to cash to make them usable.

This emphasis affects the auditor's evidence accumulation in auditing year-end cash as in these examples:

- Verifying whether cash transactions are properly recorded
- Testing of bank reconciliations
- Obtaining bank confirmations

23-13 A level 3 fair value estimate is based on unobservable inputs and requires significant management judgment. The fair value may be determined using pricing models or cash flow projections. The auditor needs to understand the method used to develop the fair value estimate. If the financial instrument is valued by management using a valuation model, the auditor should obtain evidence by performing procedures such as assessing the appropriateness of the model used and the reasonableness of estimates. This will require judgment on the auditor's part as well as knowledge of valuation techniques and the market factors that affect assumptions used (e.g., liquidity risk, credit risk, interest rate risk). The auditor can develop an independent estimate to corroborate the reasonableness of management's estimate and also use the benefit of hindsight to compare the fair value estimate to transactions subsequent to year-end. If management uses a specialist to develop their fair value estimate, the auditor must also ensure the specialist is objective and qualified and the auditor must understand the methods used by the specialist to develop the estimate. The auditor may choose to use their own specialist to develop a fair value estimate and compare this to management's estimate.

If the fair value of the financial instrument has declined, the auditor must consider whether the financial instrument is other-than-temporarily impaired, which would require recognition of an impairment loss. This assessment is also subjective and requires significant judgment by management and the auditors.

■ Multiple Choice Questions From CPA Examinations

23-14 a. (4) b. (3) c. (2)

23-15 a. (2) b. (4) c. (2)

■ Multiple Choice Questions From Becker CPA Exam Review

23-16 a. (3) b. (2) c. (2)

■ Discussion Questions and Problems

23-17

a. MOTIVATION	b. INTERNAL CONTROL	c. AUDIT PROCEDURE
1. Original check was unauthorized and illegal. Outstanding check made the bank reconcile.	Independent bank reconciliation that includes accounting for all cash disbursement transactions.	Verify the bank reconciliation, including cash disbursements for all material outstanding checks.
2. To cover a shortage.	Internal verification of bank reconciliation, including accounting for all checks recorded in the cash disbursements journal as cleared or still outstanding.	Verify the bank reconciliation by tracing checks dated on or before June 30 in the cash disbursements journal to checks clearing with the June 30 bank statement. Any checks not clearing should be included on the June 30 outstanding check list.
3. To cover a shortage.	Internal verification of bank reconciliation.	Foot outstanding check list.
4. To cover a cash shortage or to improve the current ratio.	Independent bank reconciliation.	Obtain bank confirmation.
5. To cover a shortage.	Internal verification of bank reconciliation, including accounting for all checks recorded in the cash disbursements journal as cleared or still outstanding.	Trace all checks dated on or before June 30 that cleared with the cutoff bank statement to the June 30 outstanding check list.

23-17 (continued)

6. Hold open books to improve cash position.	Independent bank reconciliation.	Trace deposits in transit to cutoff bank statements to determine deposit date.
7. Kiting-covering a defalcation or padding a cash position.	Independent bank reconciliation.	Trace all interbank transfers to accounting records.

23-18 The objectives of each of the audit procedures are:

1. To ascertain all cash balances and liabilities to banks that might exist. The verification includes amounts and descriptions.
2. To assure that the client is using the correct balance from the bank in preparing its reconciliation.
3. To create a list of outstanding checks for follow-up to determine why they have not cleared and to investigate the possibility of a misstatement of cash and accounts payable.
4. To assure that all loans, terms, and arrangements with the bank were properly authorized by the board of directors and are disclosed in the financial statements.
5. To reconcile the recording of cash receipts and cash disbursements between the bank and the client's books and to prepare a bank reconciliation at the same time. This may disclose existence, completeness, accuracy, cutoff, or posting and summarization misstatements.
6. To determine if there is a cutoff misstatement in cash disbursements.
7. To make sure the cash receipts were recorded by the bank shortly after the beginning of the new year *and* recorded in the current year's cash receipts journal. A misstatement in either of these could indicate the cover-up of a cash shortage or a cash receipts cutoff misstatement.
8. To verify the valuation of the equity investment.
9. To test the existence and accuracy of the financial instruments balance with an independent source.

23-19 a. Bank reconciliation:

Balance per bank		$ 1,522
Add:		
Deposits in transit		2,000
Check erroneously charged to Pittsburgh Supply		646
Less: outstanding checks		(2,218)
Adjusted bank balance		$ 1,950
Balance per books before adjustments	$10,103	
Adjustments to books:		
July bank service charge	(107)	
Note payment (6,000 principal, 400 interest)	(6,400)	
NSF check	(516)	
Unrecorded check	(1,130)	
Balance per books after adjustments	$ 1,950	

(1)	6/30 DIT	600
	July deposits per books	26,874
	July deposits per bank	(25,474)
	7/31 DIT	$ 2,000
(2)	6/30 O/S checks	$ 2,578
	July checks per books	23,171
	July checks clear	(25,307)
	Erroneous check charged	646
	Unrecorded check	$ 1130
	7/31 O/S checks	$ 2,218

b. Adjusting entry:

Miscellaneous expense	$ 107	
Interest expense	400	
Note payable	6,000	
Allowance for doubtful accounts	516	
Purchases	1,130 *	
Cash in bank		$ 8,153

To record adjustments arising from 7/31/16 bank reconciliation.

* Will require reversal on August 1 because of recording in cash disbursements journal.

23-19 (continued)

c.

RECONCILING ITEM	AUDIT PROCEDURE
1. Deposits in transit	Trace to duplicate deposit slip and entry on cutoff bank statement.
2. Erroneous check	Examine correction notice in August charge received from bank.
3. Outstanding checks	Obtain cutoff bank statement. Trace enclosed checks to outstanding check list. Trace uncleared items to supporting documentation.
4. Bank service charge	Examine advice returned with July bank statement.
5. Note payment	Examine cancelled note. Recompute interest. Check for absence of note on 7/31 bank confirmation.
6. NSF check	Examine advice returned with July bank statement. Examine other related evidence from credit manager to determine if account is uncollectible.
7. Unrecorded check	Examine check returned with July bank statement. Trace number to absence in July cash disbursements journal and recording in August. Examine supporting documentation. Investigate why unrecorded.

d. The correct cash balance for the financial statements is $1,950.

23-20 a. In verifying the interbank transfers, the following audit procedures should be performed:

1. List interbank transfers made a few days before and after the balance sheet date (already done).
2. Trace these interbank transfers to the appropriate accounting records, bank reconciliations, and bank records to verify proper recording.

b. **For December 2016**

Cash in bank	$16,000	
Branch bank clearing account		$16,000
Cash in bank	21,000	
Branch bank clearing account		21,000

23-20 (continued)

Cash in bank	22,000	
Branch bank clearing account		22,000

Only the first entry is essential because the same entry is also being made on the branch bank for the other two entries.

For January 2017

Eliminate corresponding entries already made for the above.

c. **For December 2016**

Home office clearing account	$28,000	
Cash in bank		$28,000
Home office clearing account	21,000	
Cash in bank		21,000
Home office clearing account	22,000	
Cash in bank		22,000

For January 2017

Eliminate corresponding entries already made for the above.

d. and e.

HOME OFFICE RECORDS		BRANCH ACCOUNT RECORDS
17,000	No DIT*	No OC**
28,000	No DIT	No OC
16,000	No DIT	No OC
10,000	No DIT	OC
21,000	No DIT	No OC
22,000	No DIT	OC
39,000	No DIT	No OC

* DIT = Deposit in transit
** OC = Outstanding check

23-21

	POSSIBLE MISSTATEMENTS DUE TO ERRORS OR FRAUD	AUDIT PROCEDURE TO PROVIDE EVIDENCE
1.	The auditor suspects that a lapping scheme exists because an accounting department employee who has access to cash receipts also maintains the accounts receivable ledger and refuses to take any vacation or sick days.	a. Compare the details of the cash receipts journal entries with the details of the corresponding daily deposit slips.
2.	The auditor suspects that the entity is inappropriately increasing the cash reported on its balance sheet by drawing a check on one account and not recording it as an outstanding check on that account and simultaneously recording it as a deposit in a second account.	h. Prepare a bank transfer schedule.
3.	The entity's cash receipts of the first few days of the subsequent year were properly deposited in its general operating account after the year-end. However, the auditor suspects that the entity recorded the cash receipts in its books during the last week of the year under audit.	a. Compare the details of the cash receipts journal entries with the details of the corresponding daily deposit slips.
4.	The auditor noticed a significant increase in the number of times that petty cash was reimbursed during the year and suspects that the custodian is stealing from the petty cash fund.	e. Examine invoices, receipts, and other documentation supporting reimbursement of petty cash.
5.	The auditor suspects that a kiting scheme exists because an accounting department employee who can issue and record checks seems to be leading an unusually luxurious lifestyle.	d. Obtain the cutoff bank statement and compare the cleared checks to the year-end reconciliation.[1]
6.	During tests of the reconciliation of the payroll bank account, the auditor notices that a check to an employee is significantly larger than other payroll checks.	c. Agree gross amount on payroll checks to approved hours and pay rates.
7.	The auditor suspects that the controller wrote several checks and recorded the cash disbursements just before year-end but did not mail the checks until after the first week of the subsequent year.	d. Obtain the cutoff bank statement and compare the cleared checks to the year-end reconciliation.

[1] An alternative answer would be to prepare a bank transfer schedule. In this case the kiting is related to apparent issuance of fraudulent checks which may be better detected by comparing cleared checks to the reconciliation.

23-22 a.

	Cash 9/30/16	Receipts	Disburse-ments	Cash 10/31/16
Balance per bank	$6,915	$28,792	$27,431	$8,276
Deposits in transit				
9/30/16	5,621	(5,621)		
10/31/16		996		996
Outstanding checks				
9/30/16	(1,811)		(1,811)	
10/31/16			2,615	(2,615)
Bank error — check charged to wrong account			(1,144)	1,144
NSF checks		(600)	(1,335)	735
Balance per bank — adjusted	$10,725	$23,567	$25,756	$8,536
Balance per books — unadjusted	$10,725	$20,271	$25,160	$5,836
Adjustments to be made				
Interest charged			596	(596)
Note proceed		3,296		3,296
Balance per books — adjusted	$10,725	$23,567	$25,756	$8,536

b. Adjusting journal entries:

Dr. Cash in bank	$ 3,296	
Cr. Notes receivable		$2,900
Cr. Interest income		396
Dr. Interest expense	596	
Cr. Cash in Bank		596

To record adjustments resulting from Oct. 31, 2016, reconciliation of bank account.

23-23 a. A substitute check is a special paper copy of the front and back of an original check, and is specially formatted so it can be processed as if it were an original check. The front of a substitute check should state: "This is a legal copy of your check. You can use it the same way you would use the original check."

b. Because of Check 21 and other check-system improvements, checks may be processed faster. The majority of consumers do not receive their canceled checks with their account statements, but instead may receive "pictures" (known as digital images), a list of paid checks, or a combination of these items. Check 21 will have little or no effect on these practices.

Individuals who do receive canceled checks back in their account statements may notice some changes under Check 21. For example, the bank may send a combination of original checks and substitute checks. A canceled substitute check can be used as proof of payment just like a canceled original check.

23-23 (continued)

The account agreement with the bank governs whether the customer receives canceled checks with their account statements. If they currently receive canceled checks back with their statements, they will continue to receive the checks unless the bank notifies the customer it is changing the account agreement.

c. No. In general, the law does not require the bank to return original checks. Many banks destroy original paper checks. Other banks may store original checks for some period of time and then destroy them. Check 21 ensures that customers have the same legal protections when they receive a substitute check from the bank as when they receive an original check.

23-24 a. Inherent risk is increased by the investment in speculative derivative financial instruments due to the potential complexity of the derivative contracts, the complexity of the relevant accounting standards, and the potential volatility of the fair value. In addition, the CEO has been given an incentive bonus based on return on assets, which provides an incentive to generate a profit. This is important given that McNeil has recorded significant gains on sales of financial instruments. The fact that the CEO does not have prior experience investing in such complex financial instruments also increases inherent risk. Exposure to risk is significant because the financial instruments account represents approximately 15% of total assets, which is a material amount, and many of the equity investments are considered high risk stocks.

Control risk is increased by the fact that the CEO is making investment decisions without any monitoring. He is discussing his strategy with the board of directors and using a brokerage firm to execute trades, but the board does not approve the investments in advance. There do not appear to be any limits set on his ability to enter into investment transactions. This also increases the pressure on the CEO to show a profit from the investment strategy. The use of a brokerage firm to execute trades lowers the control risk assuming internal controls at the brokerage firm have been tested and are considered effective.

b. The auditor would test the existence balance-related audit objective by confirming with the broker any equity investments held at year end. For the derivative financial instruments, the auditor would review the underlying agreements.

c. It is difficult to test for completeness of derivative contracts as they often do not involve an exchange of cash up front but represent a commitment to perform in the future. To test completeness of the derivative financial instruments, the auditor would request the counterparty to existing derivatives to provide information related

23-24 (continued)

to the terms and whether there are any side agreements. To search for unrecorded derivative contracts, the auditor could request information from all counterparties the company has transacted with during the year even if the records do not indicate any agreements outstanding at the end of the fiscal year. The auditor would read other financial instruments contracts to search for embedded derivatives and would read board of director meeting minutes for discussion of derivative contracts that are not recorded. The auditor would also search following year-end for settlement of any contracts that should have been recorded at year-end.

d. To test the fair value of the equity securities, the auditor will verify the ending market value as listed on the client's schedule of equity investment activity by referring to quoted market prices from a source such as a financial publication or the stock exchange. To test the fair value of the level 3 estimates for the derivative financial instruments, the auditor must first understand the method used by management to develop the fair value estimate. If the derivative instrument is valued by management using a valuation model, the auditor should obtain evidence by performing procedures such as assessing the appropriateness of the model used and the reasonableness of estimates. This will require judgment on the auditor's part as well as knowledge of valuation techniques and the market factors that affect assumptions used (e.g., liquidity risk, credit risk, interest rate risk). The auditor can develop an independent estimate to corroborate the reasonableness of management's estimate and also use the benefit of hindsight to compare the fair value estimate to transactions subsequent to year-end.

e. It is highly likely the auditor would use a valuation specialist for the audit of financial instruments when level 3 fair value estimates are involved. It is unlikely the auditor will have the valuation expertise necessary to develop an independent estimate. If management uses a specialist to develop their fair value estimate, the auditor must ensure the specialist is objective and qualified and the auditor must understand the methods used by the specialist to develop the estimate. The auditor may choose to use their own valuation specialist to develop an estimate in order to corroborate the estimates developed by management or their specialists.

23-25 a. The PCAOB reorganized their auditing standards effective December 31, 2016. Before the reorganization, the relevant guidance was located in PCAOB AU Section 328*, Auditing Fair Value Measurements and Disclosures*. That guidance is identified in the reorganized standards as AS 2502.

23-25 (continued)

b. According to paragraph .12 of AS 2502, the auditor should consider the following when obtaining an understanding of the entity's process for determining fair value measurements and disclosures:

- Controls over the process used to determine fair value measurements, including, for example, controls over data and the segregation of duties between those committing the entity to the underlying transactions and those responsible for undertaking the valuations.
- The expertise and experience of those persons determining the fair value measurements.
- The role that information technology has in the process.
- The types of accounts or transactions requiring fair value measurements or disclosures (for example, whether the accounts arise from the recording of routine and recurring transactions or whether they arise from nonroutine or unusual transactions).
- The extent to which the entity's process relies on a service organization to provide fair value measurements or the data that supports the measurement. When an entity uses a service organization, the auditor considers the requirements of AS 2601, *Consideration of an Entity's Use of a Service Organization*, as amended.
- The extent to which the entity engages or employs specialists in determining fair value measurements and disclosures.
- The significant management assumptions used in determining fair value.
- The documentation supporting management's assumptions.
- The process used to develop and apply management assumptions, including whether management used available market information to develop the assumptions.
- The process used to monitor changes in management's assumptions.
- The integrity of change controls and security procedures for valuation models and relevant information systems, including approval processes.
- The controls over the consistency, timeliness, and reliability of the data used in valuation models.

c. According to paragraphs .21 and .22 of AS 2502, when planning to use the work of a specialist in auditing fair value measurements, the auditor should consider “whether the specialist's understanding of the definition of fair value and the method that the specialist will use to determine fair value are consistent with those of management and with GAAP. For example, the method used by a

23-25 (continued)

specialist for estimating the fair value of real estate or a complex derivative may not be consistent with the measurement principles specified in GAAP. Accordingly, the auditor considers such matters, often through discussions with the specialist or by reading the report of the specialist.

AS 1210, *Using the Work of a Specialist*, provides that, "while the reasonableness of assumptions and the appropriateness of the methods used and their application are the responsibility of the specialist, the auditor obtains an understanding of the assumptions and methods used. However, if the auditor believes the findings are unreasonable, he or she applies additional procedures as required in AS 1210."

d. According to paragraph .23 of AS 2502, the auditor's substantive tests of the fair value measurements may involve:

(i) **testing management's significant assumptions, the valuation model, and the underlying data.** The auditor's understanding of the reliability of the process used by management to determine fair value is an important element in support of the resulting amounts and therefore affects the nature, timing, and extent of audit procedures. When testing the entity's fair value measurements and disclosures, the auditor evaluates whether:

a. Management's assumptions are reasonable and reflect, or are not inconsistent with, market information.
b. The fair value measurement was determined using an appropriate model, if applicable.
c. Management used relevant information that was reasonably available at the time.

(ii) **developing independent fair value estimates for corroborative purposes**. The auditor may make an independent estimate of fair value (for example, by using an auditor-developed model) to corroborate the entity's fair value measurement. When developing an independent estimate using management's assumptions, the auditor evaluates those assumptions. Instead of using management's assumptions, the auditor may develop his or her own assumptions to make a comparison with management's fair value measurements.

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(iii) **reviewing subsequent events and transactions.** Events and transactions that occur after the balance-sheet date but before the date of the auditor's report (for example, a sale of an investment shortly after the balance-sheet date), may provide audit evidence regarding management's fair value measurements as of the balance-sheet date. In such circumstances, the audit procedures may be minimized or unnecessary because the subsequent event or transaction can be used to substantiate the fair value measurement.