Control practices

The following control objectives provide a basis for strengthening your control environment for the process of managing financial resources. When you select an objective, you will access a list of the associated business risks and control practices. That information can serve as a checklist when you begin reviewing the strength of your current process controls.

This business risk and control information can help you assess your internal control environment and assist with the design and implementation of internal controls. Please note that this information is at the generic business process level and many companies will need to go beyond generic models to address the specific business processes that support the financial and nonfinancial disclosures being made. You can combine the insight of this business risk and control information with your industry-specific knowledge and understanding of your company's environment when conducting internal control assessments and designing and implementing recommendations.

Effectiveness and efficiency of operations

- A. Management at appropriate levels approves trades.
- B. Investments on hand are accurate and secure.
- C. Transactions are executed only with approved counterparties.
- D. Only authorized users may post to the sub-ledger or general ledger.
- E. Duties are segregated appropriately.

Reliability of financial reporting

- A. Trades are recorded accurately and in a timely manner (no later than trade date plus one).
- B. <u>Investments held by custodial accounts are recorded completely and accurately.</u>
- C. <u>Classification of sale of investment transactions as short-term or long-term gains or losses</u> is correct.
- D. Investments are valued properly.
- E. <u>Classification of investment transactions as either held to maturity, trading, or available</u> for sale is correct.
- F. Pricing sources used to value the investment portfolio are valid.
- G. Corporate actions are recorded completely and accurately.
- H. Approved general ledger adjustments are input for processing completely and accurately.
- I. Approved changes to standing data are input for processing completely and accurately.

Effectiveness and efficiency of operations

A. Management at appropriate levels approves trades.

Business risks

- Trade transactions lacking management approval will be executed.
- The company's trading activities will not be in its best interests.
- The company will be at a higher risk for investment fraud.

Control practices

- 1. Identify trade tickets through automated and sequential numbering.
- 2. Ensure that each trade ticket contains fields for all pertinent data and that the data is recorded in the fields prior to the appropriate level of management's review and approval.
- 3. Perform an independent one-to-one comparison of trade transactions approved with the trade transactions that are executed, covering items such as amounts, quantities, cost, maturity, and date. Research any significant discrepancies in a timely manner and make corrections as necessary.
- 4. Identify long outstanding trade transactions and resolve difficulties preventing completion.

B. Investments on hand are accurate and secure.

Business risks

- Investment documents will be lost or stolen.
- The company will be at a higher risk for investment fraud.
- Investment records will not accurately reflect securities on hand.

- 1. Physically count or otherwise verify investments on hand periodically and reconcile totals with the subsidiary custodial records.
- 2. Require personnel independent of the investment and treasury process to verify investments on hand.
- 3. Use safes and locked cabinets or off-site storage for investment documents such as shares of stock or bonds that are not held by a custodian.

C. Transactions are executed only with approved counterparties.

Business risks

- The company will be at a higher risk for investment fraud.
- The company will have to abide by bank or broker terms that are not in its best interest.

Control practices

- 1. Require that all bank and broker accounts, including terms such as commissions, be approved by management at an appropriate level before account establishment.
- 2. Ensure that management reviews periodically a list of all bank and broker accounts.
- 3. Ensure that management reviews periodically a list of company personnel approved to execute investment trades.
- 4. Ensure that management periodically reviews approval limits.
- 5. Provide all banks and brokers with up-to-date information specifying company personnel authorized to execute investment transactions in specific products or markets.

D. Only authorized users may post to the sub-ledger or general ledger.

Business risks

- The company will be at a higher risk for investment fraud.
- Inaccurate general ledger records will lead to inaccurate financial reports.

- 1. Prevent unauthorized access to the system.
- 2. Use access controls, such as user IDs and passwords, specific to each application.
- 3. Configure systems to invalidate a user ID after multiple failures to log on and to file an exception report for management investigation.
- 4. Require formal authorization by the person responsible for the payroll module of the system before allowing access to the application.
- 5. Require management to review access rights periodically to ensure that only authorized individuals have access and to investigate discrepancies and exceptions promptly.

E. Duties are segregated appropriately.

Business risks

• Inadequate segregation of duties will increase the risk of investment fraud.

Control practices

- 1. Maintain segregation of duties between functions such as 1. Trade execution, 2. Confirmation processing, 3. Settlement processing, 4. Payment processing, 5. Risk management and reconciliations, and 6. The accounting process.
- 2. Subject functions to regular review by management to identify any incompatible duties that should be segregated, and investigate discrepancies and exceptions promptly.

Reliability of financial reporting

A. Trades are recorded accurately and in a timely manner (no later than trade date plus one).

Business risks

- Trades will not be recorded properly.
- Company records will show an incomplete or inaccurate picture of the company's trading activities.

- 1. Enter executed trade transactions in the system each day.
- 2. Perform an independent one-to-one check (such as checking amounts, quantities, cost, and maturity date) of information from the executed trade transaction to broker confirm (fax, email, or letter) approving the trade and then to the information put into the system. Research any discrepancies, including long outstanding trade transactions, in a timely manner and make corrections as necessary.
- 3. Automatically forward executed trade tickets to independent pricing services and to custodians to ensure that changes in positions of securities are communicated in a timely manner.
- 4. Check transaction details such as amounts, quantities, maturity date, and cost in independent reconciliations comparing custodian records and information system entries on a one-to-one basis. Research any discrepancies in a timely manner and make corrections as necessary.
- 5. Reconcile trade tickets that have been completed but not approved.
- 6. Reconcile trade tickets that have been approved but not executed.

B. Investments held by custodial accounts are recorded completely and accurately.

Business risks

- Custodian trade records and general ledger records will not match, leading the company to question the reliability of both sets of records.
- General ledger records will show an incomplete or inaccurate picture of the company's trading activities.

Control practices

- 1. Review executed trade tickets to verify delivery or notice to the custodian.
- 2. Require the custodian to have procedures in place to ensure that a transaction is approved (for example, review of trade ticket) before acceptance, delivery, or release of a security.
- 3. In a one-to-one check, compare details in the custodial confirmation of the transaction with the executed trade documentation, including corporate actions. Research any discrepancies in a timely manner and make corrections as necessary.
- 4. In an independent monthly reconciliation, compare the custodian records to the general ledger. Research any discrepancies in a timely manner and make corrections as necessary.

C. Classification of sale of investment transactions as short-term or long-term gains or losses is correct.

Business risks

- The company's investment strategy will be based on inappropriate gain and loss classifications.
- The company's financial reports will be misleading.

- Compare custodian records and company records to assess the correct classification of investment transactions as short-term or long-term gains or losses for each reporting period.
- 2. Require management to review the final classification of transactions as gains or losses.

D. Investments are valued properly.

Business risks

- Company investments will be valued inaccurately.
- The company's investment strategy will be based on incomplete or inaccurate investment information.
- Incomplete or inaccurate posting of investment values to the general ledger will lead to inaccurate financial reports.

- 1. Reconcile the listing of investments held by the custodian to the general ledger each month. Research any discrepancies in a timely manner and make corrections as necessary.
- 2. Configure the system to produce a detailed report each quarter after valuations have been updated in the system, comparing the recorded value of investments in the current quarter to the value in the previous quarter.
- 3. Identify and investigate significant or unusual price changes or the complete absence of price changes.
- 4. Separate input documents into groups for batch totals before processing is complete and calculate numerical totals for the quantity of documents, dollar amount, and hash items. Compare these totals to reports following inputs and updates, and research and reenter all out-of-balance conditions in a timely manner.
- 5. Obtain mark-to-market valuations independently from third-party pricing sources for securities being traded or available for sale. For thinly traded investments or those lacking readily determined market prices, obtain valuations from sources skilled in pricing such securities or value the securities internally, using an established, theoretically sound, and consistent process.
- 6. Compare all investment value adjustments to third-party pricing source documentation before input to the system.
- 7. Require that personnel independent of the treasury and investment process compare adjustments to investment values to documentation provided by third-party pricing sources.
- 8. Ensure that management approves any manual override in the pricing valuation.
- 9. Require management to regularly compare the fair market valuation of held-to-maturity and available-for-sale securities to historical costs to identify any investments that are impaired more than temporarily. Ensure that any unusual items are researched and corrected as necessary.

E. Classification of investment transactions as either held to maturity, trading, or available for sale is correct.

Business risks

• The company's investment strategy will be based on inaccurate classifications of debt and equity.

Control practices

1. Assess the appropriate classification for all debt and equity securities as either "held to maturity," "trading," or "available for sale" at each reporting period and require management to review classifications with an understanding of the nature and purpose of the investment. Research any unusual items and make corrections as necessary.

F. Pricing sources used to value the investment portfolio are valid.

Business risks

- The company will make decisions based on an inaccurately valued investment portfolio.
- Inaccurate investment valuations will lead to inaccurate financial reports.

- Require management to periodically review and approve the list of agencies used to price investments to ensure the list represents well-known and widely accepted pricing agencies.
- 2. For investments held that are not listed on a public exchange, require management to discuss with the pricing agency the methods used to estimate fair value and determine if the methods used are appropriate.
- 3. Ensure that management obtains and reviews available reports related to the American Institute of Certified Public Accountants (AICPA) Statement on Auditing Standards (SAS) 70, Service Organizations, for the agencies used to price investments. The purpose of the reviews is to determine if any control issues have been identified at any of the agencies.
- 4. If pricing agencies do not have SAS 70 reports, require management to consider switching to agencies that do.

G. Corporate actions are recorded completely and accurately.

Business risks

- Corporate actions will not be reported in a timely manner, leading to incomplete general ledger accounts.
- Corporate actions will be reported inaccurately, leading to inaccurate general ledger accounts.
- Incomplete or inaccurate general ledger accounts will lead to inaccurate financial reports.

Control practices

- 1. Ensure that the custodian identifies and records corporate actions in a timely manner.
- 2. Ensure that the custodian communicates corporate actions to management at appropriate levels and that management updates the general ledger in a timely manner.
- 3. Use an independent party to validate the corporate actions involving both domestic and foreign investments that are reported by the custodian.
- 4. Compare the listing from the custodian to the listing from the outside reporting source in a one-to-one check. Identify and resolve any discrepancies in a timely manner.

H. Approved general ledger adjustments are input for processing completely and accurately.

Business risks

- General ledger adjustments will be made inaccurately, for instance, for the wrong amounts, to the wrong accounts, or in the wrong period.
- General ledger adjustments will not be approved properly, leading to higher risk of investment fraud.
- Incomplete or inaccurate adjustments to the general ledger will lead to inaccurate financial reports.

- 1. Compare reports following inputs and updates to the adjustment source documents, confirming completeness and accuracy in a one-to-one check of adjustments input into the system.
- 2. In using batch totals, separate input documents into groups. Calculate numerical totals for the quantity of documents, dollar amount, and hash items. Compare these totals to reports following inputs and updates and research and reenter all out-of-balance conditions in a timely manner.
- 3. Require management at an appropriate level to approve all adjustments.
- 4. Ensure that management's review of adjustments includes an examination of source documentation.
- 5. Ensure that discrepancies identified in management's review of adjustments are resolved.

I. Approved changes to standing data are input for processing completely and accurately.

Business risks

- Standing data will be incomplete or inaccurate.
- Changes to standing data will not be approved properly, increasing the risk of investment fraud.
- Incomplete or inaccurate changes to standing data will lead to inaccurate financial reports.

- 1. Require an appropriate official to approve changes to standing data before input.
- 2. Require sufficient documentation to support each change to standing data.
- 3. Compare reports following inputs and updates to the change source documents for completeness and accuracy in a one-to-one check of changes input to the system. Resolve discrepancies and subject the reentered data to the same control process.
- 4. Configure the accounting system to produce a report of changes in specified types of standing data or of changes falling outside defined parameters.
- 5. Ensure that the system requires management to review supporting documentation and approve the new information before accepting specified types of changes.
- 6. Require those responsible for standing data regularly review the data and enter any changes using the standard process for changing standing data.
- 7. In using batch totals, separate input documents into groups. Calculate numerical totals for the quantity of documents, dollar amount, and hash items. Compare these totals to reports following inputs and updates. Research and reenter all out-of-balance conditions in a timely manner.