

Chapter 201

INVESTMENTS

Introduction

The continued development of new security types and the complexity of instrument structures make comprehension and analysis of investments increasingly difficult. While financial risks borne by corporate credit unions (corporates) are monitored and controlled at the balance sheet level through a formal ALM process, risks inherent in individual investment assets must be understood in order to have sufficient intuition to identify sources of risk and test appropriateness of the measure of risk for a particular instrument.

Prudent investment portfolio management practices, such as managing concentration risk and maintaining diversification, are as important for corporates as for other investors.

Concentration risk is the risk associated with having excessive exposure to securities that have related market and/or credit risk. Concentration in market risk could include, but is not limited to, excessive exposure to interest rate, basis, embedded option and/or liquidity risks. Concentration in credit risk may also include excessive exposure to certain industries, groups, or individuals.

Diversification is an investment management technique used to reduce risk without reducing expected return. Diversification theory holds that price volatility can be reduced while achieving a given return by distributing assets among a variety of asset classes, geographic regions, and issuers. Diversification usually reduces the portfolio risk because returns on various types of securities are not perfectly correlated.

Failure to manage concentration risk or adequately diversify the portfolio may give rise to excessive liquidity risk. Corporates must be especially mindful of liquidity when making investment decisions since investment portfolio(s) are the primary source of funds to meet ongoing and contingent liquidity demands.

While it is true the interest rate risk (IRR) of an asset should be viewed in the context of the entire portfolio or balance sheet, an examiner's professional judgment about the source, magnitude and impact of risk begins with an understanding of the risk inherent in individual investment structures. To measure concentrations of interest rate, liquidity, and credit risk, individual investments must be measured accurately and aggregated across all transaction types.

Examiners should ensure corporates "have programs and processes to manage the market, credit, liquidity, legal, operational, and other risks" of investment securities and, where authorized, end-user derivative activities. To this end, Interpretive Ruling and Policy Statement 98-2 (IRPS 98-2) provides guidance covering the broad range of investment instruments permissible for corporate credit unions.

Investment Policies and Procedures

Corporate investment portfolios vary considerably in size and complexity. Similarly, the expertise of corporates' investment staff and related internal controls varies considerably from corporate to corporate, largely as a function of the size and complexity of the investment portfolio and the corporate's asset size. However, certain minimum infrastructure must exist, dependent upon the risks associated with the type of investment transactions the corporate undertakes. Corporates engaged in the same type of investment transaction(s) must perform similar pre- and post-purchase credit and/or IRR analysis, regardless of the corporate's asset size or the size and complexity of the investment portfolio. The existence of compensating internal controls (i.e., ALCO meetings, periodic internal audits of credit and IRR) should not be accepted as a substitute for comprehensive, timely, and professional due diligence and sound internal controls.

Investment policies, procedures, and limits provide the structure for the board to control and the staff to manage investment activities. Section 704.5(a) states: "A corporate credit union must operate according to an investment policy that is consistent with its other risk management policies, including, but not limited to, those related to credit risk management, asset and liability management, and liquidity management."

An effective investment policy should clearly define the risks and cash flow characteristics of authorized investment types. This is particularly important for products that have unusual, leveraged, or highly variable cash flows. A corporate should not acquire a position in a particular type of instrument until the board has a general understanding of the instrument and its impact on the corporate's financial condition. The board must also ensure it attracts and retains qualified senior management and staff, with adequate understanding of the instruments and their associated risks.

Policies should clearly outline the approach for managing investments, including financial derivatives. These policies should be consistent with the corporate's broader business strategies, capital adequacy, technical expertise, and general tolerance for market, liquidity, and credit risk.

Policies must identify relevant objectives, constraints, and guidelines for both acquiring investments and managing portfolios. Policies should establish a logical framework for identifying, measuring, monitoring, reporting and controlling the various risks involved in the corporate's investment portfolios, including any financial derivatives.

Policies must clearly articulate the types of permissible investments and derivative contracts. Permissible investments and derivatives should be consistent with the corporate's objectives and strategies. Benchmarks must be established to facilitate the periodic evaluation of the performance and effectiveness of investment holdings, strategies, and programs. Whenever multiple objectives are involved, management should prioritize objectives in light of actual or potential conflicts.

Section 704.5(a) requires an investment policy address, at a minimum:

1. Appropriate tests and criteria for evaluating investments and investment transactions before purchase; and
2. Reasonable and supportable concentration limits for limited liquidity investments in relation to capital. (Limited liquidity investments are defined as a "private placement or funding agreement.")

Procedures developed by investment personnel typically identify the specific tests, risk analysis processes, and selection criteria for evaluating potential investment positions.

Should a corporate lack sufficient infrastructure for engaging in investments of a particular type (ABS, private placements, etc.), examiners should develop a Documents of Resolution requiring the board of directors to balance the corporate's investment activities with its infrastructure. This may require cessation of certain investment activities until an adequate infrastructure is implemented. Regardless of the corporate's current asset size or operating authority level, infrastructure should be reasonably adequate to manage unanticipated increases in the level of credit, IRR, and liquidity risk due to changing economic conditions.

It is normal practice for the board to delegate investment authority to senior management. Consequently, the board and senior management are responsible for hiring qualified personnel and ensuring adequate procedures are in place for conducting investment activities on both a long-range and day-to-day basis, in accordance with the board's approved investment policy.

There should be clear lines of authority and responsibility in the following areas:

Board responsibilities (authorized through policy):

1. Purchase and sale of investments;
2. Enactment of appropriate limits on risk taking (limits on transaction types and on authorized personnel);
3. Establishment of effective internal controls (both board, management, and internal audit functions); and
4. Enactment of comprehensive risk-reporting and risk-management review processes commensurate with the corporate's risk profile.

Staff responsibilities (implemented through procedures):

1. Establishment of adequate systems for measuring risk; and
2. Development and implementation of acceptable standards for valuing positions and measuring performance.

Investment Portfolio Strategies

An examiner's evaluation of portfolio risk and return must be coordinated with the ALM review. Specific portfolio management measures are discussed in Chapter 202 (see Setting Financial Goals: The Risk/Return Profile) of this Guide.

The framework for a corporate's investment portfolio risk management process includes:

1. The board establishes risk tolerance thresholds (e.g., Net Economic Value (NEV) and credit limits);
2. The board and ALCO periodically approve a risk target (a benchmark) for management to meet that is within the risk limits; and
3. Management optimizes portfolio performance consistent with risk target levels, in light of current market conditions.

The traditional perspective is spreads must be sufficient to cover the cost of operations and provide capital enhancement. Value-based measures of performance, like NEV, have gained increasing acceptance in recent years. By focusing on total return, institutions manage for long-term value, rather than managing to short-term accounting results.

Many institutions historically focused on earnings-oriented measures of return without adjusting for risk. For example, it was common for corporate portfolios to be managed and evaluated *only* by current net interest spread without relating the risk to equity -- that portion of capital required to support risk between the funding source and the portfolio's assets. Best practice requires all portfolios to have specific capital allocated in light of the portfolio's NEV. A summary of the measures of return performance discussed in Chapter 202 are included in Table 1.

Table 1

Measures of Return Performance:	
A. Earnings-oriented measures	
a.	Net interest margin
b.	Core Income
c.	Net Income
d.	Return on assets
e.	Return on equity
B. Market value-oriented measures	
a.	Market capitalization
b.	Liquidation value
c.	Going-concern value
d.	Net economic value
C. Both – Total Return	

Book of Business Approach

Consistent with an earnings-oriented measure, many corporates allocate investments into discreet portfolios and target net interest spreads. These portfolios will usually have defined parameters for maturity and/or cash-flow behavior and are commonly referred to as “books of business.”

The typical strategy focuses on acquiring a discrete pool of investment assets with similar maturity and/or payment characteristics to those of a discrete pool of liabilities.

The terms “matched” and “managed” are used to further describe these portfolios. The term “matched” generally means a portfolio’s assets and liabilities have virtually the same cash flow characteristics and maturity. The term “managed” generally means a portfolio’s assets and liabilities are not required to have identical cash flow characteristics or maturities.

Corporates calculate the net interest margin, or “spread,” associated with these books of business by measuring the accounting income

from interest bearing assets and subtracting the cost of interest bearing liabilities. This calculation is usually computed for each book and reconciled to total net interest income.

Common books of business may include:

1. **Overnight (or Liquidity) Book.** Overnight and core shares are used to fund primarily overnight assets. It is not unusual for a corporate to run an intentional maturity mismatch on a portion of the overnight portfolio by including term assets with floating rate coupons or fixed-rate money market transactions of about 90 days or less.
2. **Term Book.** Term share certificates are used to fund term investments of substantially similar maturity and payment characteristics. A term book is generally comprised of fully matched transactions with little or no risk to the book's net interest margin.
3. **Variable Rate Book.** Adjustable-rate share certificates (term) are used to fund a combination of floating and/or adjustable rate assets. The rate paid on the shares is adjustable on a daily, monthly or other periodic setting and is typically set on an ability-to-pay basis. Many variable rate certificates may be linked to a specific index (e.g., LIBOR, Fed Funds Effective, or T-Bills) rather than an administratively determined payout rate. A variable rate book is not necessarily a matched portfolio. Portfolio parameters may permit material basis, embedded option and/or maturity mismatches.
4. **Membership Capital Book.** Member contributed capital is typically a non-maturity instrument. Assets allocated to this book of business vary, reflecting the risk tolerance of the corporate, and often have a combination of short to intermediate maturities. The rate paid on membership shares is generally administered and set on an ability-to-pay basis.
5. **Capital Book.** The reserves of the corporate are matched against all interest bearing assets not allocated to other books of business. Since reserves and undivided earnings are not interest bearing, the

spread on the capital book is typically expressed as the dollar weighted yield on the assets. Corporates are also permitted to issue paid-in capital shares (PIC) as a supplemental source of capital. The terms and conditions of PIC are unique factors determined at the time of issuance.

A book of business approach can provide an intuitive way to segment total net interest income into individual portfolios and meet regulatory requirements. It does not; however, provide a market value or future-earnings-at-risk perspective unless NEV is incorporated.

Best practice for performance measurement is on a risk-adjusted basis. Examiners need to encourage performance reports for spread management strategies include risk adjustments that reflect NEV exposure. This will permit senior management and officials to comprehend the risk-reward tradeoff that has been achieved.

Balance Sheet Risk Measurement

The IRR associated with individual investments and the aggregate IRR associated with an entire portfolio are captured in NEV. It is essential portfolio risk be adequately modeled and monitored against pre-established NEV limits to avoid Section 704.8 violations and an unsafe and unsound IRR position. Best practices require investment policies and procedures include limits and performance standards for each portfolio, in addition to aggregate limits.

Examiners should review the established risk targets (NEV and liquidity parameters) for each portfolio and determine whether funds are invested accordingly. If portfolio risk significantly varies from the target, it implies the board has granted management the discretionary authority to establish its own benchmark. This makes relative performance an increasingly subjective measure for the board to evaluate. Therefore it is prudent for the board to:

1. Establish the maximum level of risk with which it is comfortable (limits which ideally are more restrictive than the regulatory requirements);
2. Approve periodically management's risk target(s) within those board established limits; and

3. Evaluate the portfolio's performance in light of those targets.

Regardless of the portfolio management approach taken, corporate staff should periodically review the performance and effectiveness of investment portfolio strategies. The review should be conducted no less than quarterly. Corporates with large or highly complex investment portfolios should conduct this review more frequently. The review should evaluate the extent to which the corporate's investments and derivatives are meeting the various objectives, risk tolerance, and guidelines established by corporate policies. Investment reporting prepared for ALCO and the board should include periodic results (risk and return) compared to established performance benchmarks.

Risks Associated With Investment Transactions

The three basic risks assumed by corporates in the investment portfolio are market, liquidity and credit. Interest rate and liquidity risk are defined and discussed in the section of Chapter 202 entitled "Measuring Risk Exposure".

The board of directors has the ultimate responsibility for the level of risk taken by the corporate. Accordingly, the board should approve overall business strategies and significant policies that govern risk taking, including those involving investment and derivative contracts. In addition, the board should periodically reevaluate the corporate's business strategies and significant risk management policies and procedures, placing special emphasis on the corporate's financial objectives and risk tolerances.

The process of measuring, monitoring, and controlling risk within a corporate should be reasonably independent from those individuals having investment transaction authority.

The nature and degree of this independence should be scaled to the size and complexity of a corporate's investment and derivative activities. Corporates with large and complex balance sheets, or with significant portfolios of complex investments, are expected to have risk managers or risk management functions fully independent of individuals who have the authority to conduct transactions. Conversely, corporates with less complex investments (base/base plus

authorities) should ensure there is a mechanism for independently reviewing both the level of risk exposures created by investment holdings and the adequacy of the process used in managing those exposures. Depending on the size and nature of the corporate, this review function may be carried out by either management or a board committee.

Regardless of size and sophistication, corporates should ensure back office, settlement, and transaction reconciliation responsibilities are conducted and managed by personnel who are truly independent of those initiating risk taking positions. Where it is truly impractical to fully segregate these functions, risk mitigating procedures must be in place.

Credit risk is discussed below. These risks must be evaluated on-going to establish and maintain a sound risk management system.

Credit Risk of Investments

Corporates are somewhat unique as depository institutions because their assets are predominately comprised of investments and they generally have only nominal amounts of loans outstanding. Part 704 restricts rated investments to those that are investment grade and significantly limits the amount of credit risk exposure a corporate can assume according to each corporate's expanded authority level. Regardless, credit risk requires formal consideration in the risk management process.

Definition of Credit Risk¹

(1) Exposure to loss as a result of default on a debt, swap or some other counterparty instrument. (2) Exposure to loss as a result of a decline in market value stemming from a credit downgrade of an issuer or counterparty. (3) A component of return variability resulting from the possibility of an event of default. (4) A change in the market's perception of the probability of an event of default (affecting spreads).

¹ The Dictionary of Financial Risk Management, Gary L. Gastineau and Mark P. Kritzman, Frank J. Fabozzi Associates, 1996.

NCUA Interpretive Ruling and Policy Statement (IRPS) 98-2²

NCUA adopted key elements of the Federal Financial Institution Examination Council (FFIEC) proposed supervisory policy statement on investment securities and derivatives. Key elements of IRPS 98-2 are:

1. The institution should not acquire investments or enter into derivative controls without assessing the creditworthiness of the issuer or counterparty.
2. The credit risk arising from these positions should be incorporated into the overall credit risk profile of the institution as comprehensively as practicable.
3. Institutions should be legally required to meet certain quality standards (i.e., investment grade) for security purchases.
4. Institutions should maintain and update ratings reports from at least one nationally recognized statistical rating organization (NRSRO).
5. Institutions should be required to establish limits on individual counterparty exposures. Such limits should define concentrations relating to a single or related issuer or counterparty, a geographical area, or obligations with similar characteristics.
6. In managing credit risk, institutions should consider settlement and pre-settlement risk. It includes the risk a counterparty will fail to honor its obligation at or before the time of settlement. The selection of dealers, investment bankers, and brokers is particularly important in effectively managing these risks.
7. The approval process for banks, broker/dealers, and other counterparties should include a review of each firm's

² The NCUA Board passed IRPS 98-2 on April 7, 1998 with an effective date of October 1, 1998.

financial statements and an evaluation of its ability to honor its commitments.

8. An inquiry into the general reputation of the broker/dealer is also appropriate. This includes review of information from state or federal securities regulators and industry self-regulatory organizations such as the National Association of Securities Dealers concerning any formal enforcement actions against the dealer, its affiliates, or associated personnel.
9. The board of directors is responsible for supervision and oversight of the investment portfolio and end-user derivative activities, including the approval and periodic review of policies that govern relations with securities dealers.
10. Sound credit risk management requires credit limits be developed by personnel who are as independent as practicable of the acquisition function.
11. In authorizing issuer and counterparty credit lines, these personnel should use standards consistent with those used for other activities conducted within the institution and with the organization's overall risk management policies and consolidated exposures.

Effective risk management addresses risks across all types of instruments on an investment portfolio basis and ideally, across the entire institution. Corporates need to recognize the inherent credit risk associated with investment and lending activities and integrate credit risk management with that of market and liquidity risk management. The basic steps set forth by this FFIEC policy statement will help to promote a more effective identification, measurement, monitoring, reporting, and controlling of the institutions' credit risk.

Sources of Credit Risk

Investments have varying degrees of credit risk depending upon:

1. The risk of the obligor/counterparty; and
2. The structure of the transaction (quality of the underlying collateral, level of subordination and/or credit enhancements).

Corporates should devote credit analysis resources proportional to the amount of credit risk inherent in the activities authorized by the board. For example, when assessing the risk of default, an unsecured transaction with a lower potential collection rate (like bank time deposits, corporate debt, commercial paper or federal funds) should receive more timely credit reviews than a highly secured transaction (like repurchase agreements or asset-backed securities). However, a clear understanding of the quality of the collateral in structured securities and how they behave in adverse market conditions is critical to controlling risk. Collateral performance should be reviewed as often as the servicer provides the appropriate report. Transactions with lower credit risk should still receive appropriate attention from the standpoint of market and liquidity risk.

The frequency and depth of credit reviews done by corporates should be driven by the relative degree and magnitude of credit risk. Credit risk exposure has traditionally been measured by the face or par amount of a transaction since that often is viewed as the total potential loss. However, the actual recovery rate in the event of default will vary from one instrument to the next based upon the priority of the holder's claim and the amount of credit support (enhancements) in the structure. For example, a \$10 million repurchase agreement fully secured by U.S. Treasury securities has less credit risk than a \$10 million bank time deposit (\$100,000 FDIC insurance notwithstanding).

Corporates need to make sure each source of credit risk is properly measured, monitored, reported and controlled. Complex investment structures, such as mortgage-backed and asset-backed securities (MBS and ABS), may involve numerous components of credit exposure that need to be tracked on a global basis to ensure all concentrations are identified.

Corporates must have a clear and consistent methodology for measuring the relative amounts of credit risk inherent in each transaction and make sure these risk measures are aggregated across all transaction types for each entity concerned. Some forms of credit

enhancement provided by a single entity, such as private insurance or a letter of credit, may exist in various different securities within the same portfolio.

For example, at the base and base-plus levels, concentration limits are established in Part 704. Part I and Part II authorities (prescribed in Appendix B of Part 704) permit the corporate to set its own limits on certain transactions. In establishing expanded authority limits that exceed base and base-plus authorities, it is particularly important increasingly sophisticated methodologies be used for credit risk measurement.

Table 2 details instruments, obligors and relative quality (degree of enhancement).

Table 2

Instrument	Obligor/ Counterparty	Maturity	Quality
Sale of Fed Funds	Banks, credit unions, some Government Sponsored Enterprises (GSEs) (i.e., FHLB)	Typically 1 day	Unsecured obligations of financial institutions
Negotiable CDs	Banks	Typically 1-6 months, minimum 14 days	Deposits up to \$100,000 insured by FDIC
Deposit Notes	Banks	Typically 18 months to 5 years	Deposits up to \$100,000 insured by FDIC
Eurodollars Non-negotiable time deposits Negotiable CDs	Banks: Foreign branches of U.S. banks or foreign banks	Overnight to 5 years 1 year or less	Unsecured obligations of banks
Securities Purchased under Agreement to Resell and Securities Sold under Agreement to Repurchase	Broker/dealers, banks	Majority is overnight, typically 1 day to 1 month; terms may exceed 1 year	Secured by securities and cash; securities "sold" typically exceed value of cash received
Securities Lending	Broker/dealers, banks	Typically 1 day to 1 month	Secured by securities and cash
Commercial Paper and Asset-backed Commercial Paper	Corporations, including bank holding companies, and broker/dealers.	Typically 270 days or less	Unsecured obligations of corporations
Corporate Debentures Notes, Bonds	Corporations	Range from 1 to 30+ years	Unsecured obligations of corporations
MBS and ABS	Trust or special purpose vehicle (SPV) generally sponsored by corporations, including GSEs, finance companies, bank holding companies, broker/ dealers, bankruptcy remote trusts, and special purpose entities	Original maturities of 1 to 30 years (amortizing assets have WAL < than stated maturity)	Secured by underlying assets including mortgages, real property and various types of receivables
Mutual Funds	Investment company	Open-ended	Pro rata interest in the assets of the fund (all investments permitted by the fund must be permissible by regulation)
U.S. Treasury Securities Bills, Notes, & Bonds	U.S. Government obligation	Up to 1 year 2 to 10 years Over 10 to 30 years	Regarded to be free of default risk
Sovereign Debt	Foreign government obligations	Typically 3 months to 10 years	Highly rated sovereign debt has little or no default risk; very remote cross-border risk (balance of payment problems)
Foreign Bank Deposits	Non-domestic banks	see Eurodollars	Unsecured obligations of banks; also includes cross-border and center risk (economic/political)

Additional types of instruments, obligors and relative quality (degree of enhancement) are included in Table 3.

Table 3

Instrument	Obligor/ Counterparty	Maturity	Quality
Swaps, Options, Forwards	Typically broker/dealer or bank; may be a special purpose company	Typically 1 month to 5 years (longer expirations exist)	Can be collateralized, credit risk is to a counterparty
Exchange Traded Futures	Organized exchange	1 month to 10 years	Performance bond (margin) and daily mark-to-market; credit risk is to the exchange
Transaction Risk Purchases/Sales	Broker/dealers, banks	Exposed between trade & settlement	Potential market risk (replacement cost)
Extension of Credit to Members	Natural Person Credit Unions, CUSOs, and trade associations	Typically short-term	Can be collateralized by securities or cash
Settlement Risk	Broker/dealers, banks	Short, not delivery vs. payment (DVP)	Exposed to possibility counterparty may declare bankruptcy prior to completing payment

Credit Risk, NEV, and Liquidity

There is a danger corporates may focus upon high credit ratings and simply consider the probability of default (i.e., the higher the rating the less the probability of default). This view relates to the first definition of credit risk previously addressed under the heading of Credit Risk of Investments. Failing to recognize the impact on NEV of credit events other than an event of default ignores a major component of risk. This concept relates to the second and fourth definitions under the same aforementioned heading.

Corporates need to consider credit risk in a mark-to-market framework in order to understand the implications for NEV and liquidity. The volatility of value due to market events (i.e., defaults, downgrades, or other negative news) can have an adverse affect on a corporate's NEV. As NEV declines, the ability to meet potential liquidity demands diminishes.

Regardless of the accounting treatment, corporates should be cognizant of the effect a change in obligor credit quality (also termed a "migration") will have on fair value. Since corporates have a substantial obligation to address contingent liquidity demands, the impact a change in value has upon liquidity is significant (Section 704.9). This is true whether the change in value is driven by either market or credit events (or both).

The integral relationship between market and credit risk makes it difficult to fully separate these into independently managed components. As securities migrate down the ratings scale (one rating downgrade followed by another), the tendency is for price volatility to geometrically increase. Prudent risk managers seek to monitor this potential in order to timely immunize or rebalance the portfolio when credit and market risk exposures exceed acceptable targets or limits.

Corporates need to consider how they will quantify and control concentrations (i.e., obligor, originator, industry, type of instrument, etc.) of credit risk and how the risk will change when market and/or credit conditions change. Thus, understanding how changes in credit quality affect value is an important part of managing the corporate's targeted NEV and liquidity levels.

Credit Risk Management

Credit Risk Policies

Credit risk policies may be integrated with a corporate's overall ALM and investment policies. It is not imperative credit risk policies be stand-alone, but corporates with increasing levels of expanded authority are likely to establish more elaborate guidelines. Section 704.6(a) requires policy to address, at a minimum:

1. The approval process associated with credit limits. This implies a formal management process is adopted to develop and ratify any appropriate limits incorporated into policy. The approval process need not be elaborate, but it should be supported by written procedures. Furthermore, the process should be addressed in the scope of the audit and periodically evaluated for compliance purposes.
2. Due diligence analysis requirements. Different transactions represent different levels of complexity as well as varying degrees of risk. Corporates should develop standards and requirements commensurate with exposures. Resource allocation should ensure credit risk evaluations are sufficiently in-depth and timely for each type of material credit risk exposure taken.
3. Maximum credit limits with each obligor and transaction counterparty, set as a percentage of capital. The selection and establishment of lines to

broker/dealers, banks, and counterparties is particularly important in effectively managing credit risk. A corporate's policy should identify criteria for selecting these organizations and should list all approved firms. The approval process, at a minimum, should include a documented review of each firm's financial statement and an evaluation of its ability to honor its commitments. These reviews should be periodically updated.

4. Concentrations of credit risk (e.g., originator of receivables, insurer, industry type, sector type, and geographic). Section 704.6 requires the establishment of maximum concentration limits per obligor and counterparty. The corporate should establish and maintain its own limits (within the regulatory parameters) based upon the preferences and risk tolerance of its board, the corporate's operational infrastructure, and overall financial and managerial soundness. A corporate's credit policy should also include guidelines on the quality and quantity of each type of investment that may be held. It should provide credit risk diversification and concentration limits. Such limits may define concentrations as those of a single or related issuer or counterparty, in a geographical area, or obligations with analogous characteristics. Policies should include procedures for addressing deterioration in credit quality, such as increased monitoring and stop-loss limits.

The policies of the corporate should recognize credit risk as a risk posed by investment and derivative activities. As such, the corporate must operate under a credit risk management policy commensurate with the investment risks and activities it undertakes.

Sound credit-risk management requires credit analysis be conducted by personnel who are independent of the acquisition function.

Analysis and Approval

The process of evaluating credit instruments should be guided by caution. The cost of approving a mistake may outweigh the opportunity loss of rejecting a "good" credit. The introduction of credit risk to the balance sheet should be undertaken with the same care and diligence as all other portfolio risks (commensurate with the exposure).

The credit analysis and approval process should involve substantive and timely information. Prudent due diligence requires sufficient, in-depth analysis be conducted for obligors and counterparties ("credits") considered

for approval. The minimum credit ratings and maximum concentration limits set for base and base-plus corporates in Section 704.6 reflect recognition of existing resource constraints within some corporates. Where best practices cannot or will not be employed, exposure to credit risk should be limited to an immaterial percentage of capital.

The more complex the credit or the greater the potential exposure, the more analysis required. Common sources of information an analyst may utilize include financial statements, press releases, rating agency analyses, discussions with company officers and/or rating agency analysts, fixed income and equity research from securities firms and articles in trade publications. Most of these resources will be maintained in the credit file. Section 704.6 requires information remain in a corporate's possession for at least as long as an instrument is in portfolio and until the next examination (if matured or sold between examination reviews).

Examiners should sample credit files to determine the resources utilized. Information should be reasonably current. There should be evidence the analyst(s) is keeping abreast of new developments and critical developments are shared in the reporting process. Reaction to credit news (also termed "credit events") should be evidenced in the minutes of ALCO discussion and included in management's risk reports.

The content of credit analysis documentation does not necessarily need to be formal or elaborate. Many analysts make notes directly on the resource materials held in file. Best practice requires an analyst prepare a formal summarization of a credit, with a rationale for its initial approval or reaffirmation, which is signed by the personnel or committee which makes the approval/disapproval decision.

Approval authority should not be superficial. Some institutions simply adopt regulatory limits on types, ratings, and concentrations, and make little effort to consider the appropriateness of establishing different limits. A good manager will set limits tighter than regulatory constraints if such limits express the preference and risk tolerance adopted by the board. This recognizes legality is not an automatic acceptance criterion. Examiners should encourage management not to automatically approve counterparties, obligors, and limits based solely upon prevailing minimum regulatory requirements.

Credit Ratings

A credit rating is an opinion of the general creditworthiness of an obligor, or the creditworthiness of an obligor with respect to a particular debt security or other debt obligation, based upon certain risk factors. Rating agencies provide ratings and research that serve as a valuable tool for investors. However, ratings are not a substitute for prudent due diligence and should only be considered as one factor in an investment decision.

NRSROs are rating agencies recognized by the U.S. Securities and Exchange Commission. Section 704.6 requires that all debt instruments have a credit rating from at least one NRSRO. The NRSRO used at the time of purchase serves as the source to verify any change in rating (compliance with the minimum regulatory ratings). If management decides to change the NRSRO(s) it uses for monitoring its ratings, it should document this decision and report it to the ALCO. Should a corporate use multiple NRSRO ratings to qualify an investment at the time of purchase, Corporate Credit Union Guidance Letter 1999-2 provides guidance regarding regulatory compliance reporting.

NRSROs typically issue different ratings for short-term instruments than for long-term instruments. The long-term ratings are the measure of credit quality that is emphasized by most risk managers. Table 4 includes some rating agencies and their description of long-term ratings.

Table 4: Long-Term Issue Credit Ratings

Rating Agency			Description of S&P Rating*
S&P	Fitch	Moody's	
AAA	AAA	Aaa	(S&P) "An obligation rated 'AAA' has the highest rating assigned by Standard & Poor's. The obligor's capacity to meet its financial commitment on the obligation is EXTREMELY STRONG."
AA	AA	Aa	(S&P) "An obligation rated 'AA' differs from the highest rated obligations only in small degree. The obligor's capacity to meet its financial commitment on the obligation is VERY STRONG."
A	A	A	(S&P) "An obligation rated 'A' is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher rated categories. However, the obligor's capacity to meet its financial commitment on the obligation is still STRONG."
BBB	BBB	Baa	(S&P) "An obligation rated 'BBB' exhibits ADEQUATE protection parameters. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitment on the obligation."
Gradation Quality			
+	+	1	These symbols are used to provide more detailed gradation of quality.
		2	
-	-	3	
AA CCC	AA CCC	Aa Caa	Range of ratings for which quality gradations are provided.

**BBB-
represents the
bottom of
"investment
grade"**

* Descriptions related to Standard & Poor's Rating. While agencies tend to use similar definitions, examiners should consult the particular rating agency's description for a precise description of the investment's rating.

The long-term ratings described in Table 5 are below the minimum ratings permitted in Part 704 for any level of authority for all corporates.

Table 5: Long-Term Issue Credit Ratings

Rating Agency				Description S&P Rating*
S&P	Fitch	Moody's		
Speculative grade begins with BB+	“Obligations rated ‘BB’, ‘B’, ‘CCC’, ‘CC’, and ‘C’ are regarded as having significant speculative characteristics. ‘BB’ indicates the least degree of speculation and ‘C’ the highest. While such obligations will likely have some quality and protective characteristics, these may be outweighed by large uncertainties or major exposures to adverse conditions.”			
	BB	BB	Ba	(S&P) ”An obligation rated ‘BB’ is LESS VULNERABLE to nonpayment than other speculative issues. However, it faces major ongoing uncertainties or exposure to adverse business, financial, or economic conditions which could lead to the obligor’s inadequate capacity to meet its financial commitment on the obligation.”
	B	B	B	(S&P) ”An obligation rated ‘B’ is MORE VULNERABLE to nonpayment than obligations rated ‘BB’, but the obligor currently has the capacity to meet its financial commitment on the obligation. Adverse business, financial, or economic conditions will likely impair the obligor’s capacity or willingness to meet its financial commitment on the obligation.”
	CCC	CCC	Caa	(S&P) ”An obligation rated ‘CCC’ is CURRENTLY VULNERABLE to nonpayment, and is dependent upon favorable business, financial, and economic conditions for the obligor to meet its financial commitment on the obligation. In the event of adverse business, financial, or economic conditions, the obligor is not likely to have the capacity to meet its financial commitment on the obligation.”
	CC	CC	Ca	(S&P) “An obligation rated ‘CC’ is CURRENTLY HIGHLY VULNERABLE to nonpayment.”
	C	C	C	(S&P) “The ‘C’ rating may be used to cover a situation where a bankruptcy petition has been filed or similar action has been taken, but payments on this obligation are being continued.”
	D	DDD	WR	(S&P) ”An obligation rated ‘D’ is in payment default. The ‘D’ rating category is used when payments on an obligation are not made on the date due even if the applicable grace period has not expired, unless Standard & Poor’s believes that such payments will be made during such grace period. The ‘D’ rating also will be used upon the filing of a bankruptcy petition or the taking of a similar action if payments on an obligation are jeopardized.”

**Speculative
grade begins
with BB+**

* Descriptions related to Standard & Poor’s Rating. While agencies tend to use similar definitions, examiners should consult the particular rating agency’s description for a precise description of the investment’s rating.

Short term ratings are described in Table 6.

Table 6: Short-Term Issue Ratings

	Rating Agency			Description of Short-term Rating*
	S&P	Fitch	Moody's	
Permissible minimum investment grade (Part 704) (See Expanded Authorities)	A-1	F-1	P-1	“A short-term obligation rated ‘A-1’ is rated in the highest category by Standard & Poor’s. The obligor’s capacity to meet its financial commitment on the obligation is strong. Within this category, certain obligations are designated with a plus sign (+). This indicates that the obligor’s capacity to meet its financial commitment on the obligation is extremely strong.”
	A-2	F-2	P-2	“A short-term obligation rated ‘A-2’ is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher rating categories. However, the obligor’s capacity to meet its financial commitment on the obligation is satisfactory.”
Not permissible	A-3	F-3	P-3	A short-term obligation rated ‘A-3’ exhibits adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitment on the obligation.”
	B	B	NP (not prime)	“A short-term obligation rated ‘B’ is regarded as having significant speculative characteristics. The obligor currently has the capacity to meet its financial commitment on the obligation; however, it faces major ongoing uncertainties which could lead to the obligor’s inadequate capacity to meet its financial commitment on the obligation.”
	C	C		“A short-term obligation rated ‘C’ is currently vulnerable to nonpayment and is dependent upon favorable business, financial, and economic conditions for the obligor to meet its financial commitment on the obligation.”
	D	D		A short-term obligation rated ‘D’ is in payment default. The ‘D’ rating is used when payments on an obligation are not made on the date due even if the applicable grace period has not expired, unless Standard & Poor’s believes that such payments will be made during such grace period. The ‘D’ rating also will be used upon the filing of a bankruptcy petition or the taking of a similar action if payments on an obligation are jeopardized.”

* Descriptions related to Standard & Poor’s Rating. While agencies tend to use similar definitions, examiners should consult the particular rating agency’s description for a precise description of the investment’s rating.

Corporates should maintain updated ratings reports from one of the major rating services. Individual ratings are usually publicly available, but research reports and news releases are generally obtained through a paid subscription. A paid subscription usually enables the corporate to receive e-mail notification of ratings action on securities in its portfolio once they establish it with the NRSRO. It is critical information be obtained as timely as practical. The ratings and other opinions issued by ratings agencies are not recommendations to buy securities and there is not a warranty on the accuracy, timeliness, completeness, or fitness of the information provided. It is simply one tool to assist an investor in making investment decisions.

Management may (but is not required to) use multiple rating agencies. As noted earlier, corporates should refer to Corporate Credit Union Guidance Letter 1999-2 for guidance when electing to use multiple NRSRO ratings. Management should have procedures in place addressing instruments that receive different credit quality ratings from different NRSROs ("split ratings"). Good credit managers will seek to discover reasons behind split ratings on instruments they hold or consider for purchase. If ratings become split after purchase, many corporates consider this an appropriate criterion for placing it on the credit watchlist. It can signal either a warning (possible deterioration) or an opportunity (possible improvement). Experienced portfolio managers know both circumstances are significant.

Examiners should be alert to whether a corporate is subscribing to multiple rating agencies as a means of "shopping" for a favorable rating. If the corporate's designated NRSRO is different for each bond being purchased, "cherry picking" may be indicated. A review of the supporting analysis should help determine if the analyst is mimicking the most favorable research or if independent judgment is really exercised. Analysts are not expected to possess greater insights than rating agencies, but they are expected to understand the implications and conclusions of the research and form an independent judgment.

Some rating agencies have been slow to alter their credit outlook on an issuer, industry, or region which eventually resulted in substantial credit quality changes (more than one gradation change in credit ratings at one time). Because corporates are limited to the top investment grade scale, large changes in credit quality are a concern

since they generally trigger regulatory requirements (Section 704.10 – Investment action plan). Credit risk managers must be mindful credit ratings are generally a “lagging” indicator.

Measuring and Monitoring Risk

The credit exposures inherent in corporates’ investment activities have multiplied and become more complex as new instruments and debt structures have come to market. Financial products are increasingly complex in part because of the proliferation of credit enhancement mechanisms supporting these instruments. These include, but are not necessarily limited to, third-party guarantees, posted collateral, margin arrangements, credit derivatives, and netting. Additionally, new mortgage products such as interest only, option arms, and negative amortization loans have been widely securitized. These new loan types present additional challenges when evaluating the credit risk of a structured security.

With this growth there is an increasing need for more sophisticated risk measurement techniques. The name of an instrument and the par amount of a transaction do not provide a quantitative measure of inherent credit risk. Credit analysts and portfolio managers alike must track the credit features on both a transactional and portfolio basis in order to aggregate and control the various levels of credit exposure to any one obligor, counterparty, insurer, and/or guarantor.

In order for corporates to properly ensure policies and regulations governing credit risk are adhered to, quantitative measures of exposure must be established, measured, monitored, and enforced. Prudent practice dictates this process must be as independent from the personnel initiating the investment transactions as practical.

Reporting and Documentation

The reporting of credit risk exposures and the supporting documentation (for approvals and monitoring) are key elements of credit risk management. The board, senior management, and other oversight authorities depend upon the quality of reporting to make determinations about the magnitude, compliance, and appropriateness of credit risk exposure. Management and the board cannot fulfill their

respective control and oversight responsibilities absent meaningful risk reporting.

The more clear and valid the documentation, the more timely board and senior management can assess the risk and make strategic decisions. The methodologies for measuring credit risk and the formats for reporting credit risk information should be clearly documented in policies and procedures.

Personnel reporting lines are also important. The credit analyst is responsible for tracking the exposures of the corporate, monitoring limits, and reacting to changes in creditworthiness. Senior management is responsible for managing the overall risk posture of the institution; this includes management of aggregate risk exposures. The ALCO and board of directors have a fiduciary responsibility to be aware of the risk assumed by management and be assured management is actively managing the risk.

The corporate should have strong internal control procedures that ensure the integrity of credit risk information. The extent of automated information and the ability of an analyst to maintain current evaluations are other factors that may affect the quality of credit risk information.

Reacting to Change

One of the reasons a corporate should develop its methodologies for measuring credit risk exposures and setting consistent risk-based limits is to engender a risk management culture that appropriately reacts to change. In order for corporates to best manage credit risk exposure, management should be predisposed to take rational and timely steps towards rebalancing or reducing credit risk in the portfolio as needed. To this end, the chief risk officer and/or credit analysts should have delegated authority to take action to reduce credit exposure as deemed necessary.

Credit downgrades result in volatility in instruments' value and liquidity. Management must be able and willing to take corrective action when adverse developments occur. To provide this flexibility, most corporates classify large portions of their securities portfolios as

available-for-sale (AFS). Other than divestiture, there are few alternatives available to mitigate deterioration in credit quality once it becomes known to the market. Corporates with Part IV authority, where specifically authorized may utilize credit derivatives to mitigate risks. However, this may be cost prohibitive if the market has already recognized the credit deterioration.

Administration

Minimum regulatory limits on permissible investments (permissible to buy or hold as collateral) are restricted to those with high credit quality. A number of these transactions have high credit ratings only because they are supported by collateral or other credit enhancements.

In some cases, the counterparty risk would not be acceptable without added credit enhancement. This means managers must closely evaluate and monitor the aspects of the transaction that provide the credit support. Typical credit enhancements such as collateral, performance margin, or a third-party guarantee are features that should be monitored as part of standard operating procedures. An ongoing review of these enhancements is necessary to identify, measure, monitor and control credit risk.

Collateral administration involves checking the market value, legality and control (perfected security interest) of securities accepted as collateral in investment and borrowing transactions. The integrity of the credit risk measurement process rests, in part, on determining the mark-to-market value of collateral and repurchase securities.

Securities accepted in a repurchase or securities lending transaction should be independently valued by the corporate or an agent separate from the counterparty. Collateral should be checked on an ongoing basis to confirm it meets policy and repurchase agreement requirements. (Note: This could be required as often as daily depending on agreements and degree of risk to the portfolio.)

Additionally, monitoring of securities that have inherent credit enhancements is important. For example, surveillance of the underlying receivables on MBS and ABS investments is the responsibility of the credit risk management function. Credit

personnel should not view collateral or other structural enhancements as an excuse to ignore the amount of inherent credit risk in a transaction. Despite the fact credit enhancements increase the potential for a higher rate of collection in an event of default, it also requires more sophisticated measurement and monitoring processes.

An increasingly diverse array of methods are available to enhance credit quality. Credit managers must actively track these enhancements across the entire portfolio and regularly monitor the amount of exposure to ensure the credit risk policies of the board are followed.

Investment Products and Practices

Section 704.5(c) outlines various investment activities in which corporates may engage. Those investments must be U.S. dollar denominated and subject to the credit policy restrictions set forth in Section 704.6.

In a quality oriented investment culture, investment managers typically view the portfolio selection process as one of exclusion and rejection rather than search and acceptance. These investment managers realize the penalty for mistakenly rejecting an investment offering probably would not be significant. However, the acceptance of an unsound investment risk could be costly and possibly devastating.

Investment managers with quality oriented investment cultures typically have programs for obtaining and evaluating current information on potential/existing securities in their investment portfolios. Also, these managers only purchase securities from reputable and financially secure dealers.

Table 7: Minimum Credit Ratings at Time of Purchase

Type Investment ¹	Base & Base Plus		Part I		Part II	
	Short	Long	Short	Long	Short	Long
Investments with Long-Term Ratings		AA-		A-		BBB (flat)
Investments with Short-Term Ratings	A-1		A-2		A-2*	

¹ Assets must be 704-permissible.

*Provided that the issuer has a long-term rating no lower than BBB (flat) (or equivalent) or the investment is a domestically issued asset-backed security.

Authorized investment activities are listed in Part 704. Allowable investment products are discussed in reference 11, Comptroller of the Currency's Examiner's Guide to Investment Products and Practices.

Financial Derivatives (Expanded Authority)

Financial Derivatives are broadly defined as instruments that derive their value from the performance of underlying assets, interest or currency exchange rates, or indices.

Since managing financial risks (e.g., market, liquidity, credit, etc.) has become more important to corporates due to the advent of more sophisticated investment products, the use of off-balance sheet products will continue to grow. This section outlines some commonly known off-balance sheet derivative products.

Options

The owner of an option contract has the right to buy or sell a specific asset, at a specific price, on or before a specified date. The party granting the right is referred to as the option seller, or writer, and the party receiving the option is called the option buyer or holder. The seller is obligated to perform on the contract, whereas the purchaser has a right, but not an obligation, to perform on the contract.

A call option gives the buyer the right to purchase the underlying instrument. A put option gives the buyer the right to sell the

underlying instrument. Purchasing an option is considered a long position, since the buyer holds the right to exercise. The seller of an option holds a short option position, since the right to exercise has been sold. (See Table 8)

The purchaser of a call option expects to profit from the price of the underlying instrument exceeding the strike price, or exercise price, within the life of the contract. The purchase of a put option expects to profit from the price of the underlying instrument declining below the exercise price of the contract just as the short-seller of the underlying benefits from a price decline. The exercise price (or strike price) is the price at which the contract owner has the right to buy or sell the underlying instrument.

Table 8

	Buyer/ Purchaser	Seller/ Writer
CALL	Long Call = Long exposure to the underlying security	Short Call = Short exposure to the underlying security
PUT	Long Put = Short exposure to underlying security	Short Put = Long exposure to the underlying security

Swaps

A swap generally is a contract between two counterparties to exchange net cash flows on agreed upon dates, for a specific period of time, on an established notional principal. The payment to one or the other counterparty is the difference between the two cash flows. The contracts are generally entered into by a swap dealer and a customer (corporate), rather than two customers. However, since these are over-the-counter transactions, two counterparties could enter into a swap agreement without going through a broker/dealer.

Although swaps are over-the-counter instruments (not traded on the organized exchange), there is a degree of standardization in the contracts since the advent of the International Swap and Derivatives Association (ISDA). The master swap agreement establishes the basic language governing all swap transactions between the two counterparties. However, counterparties may change the master agreement as needed. The standard ISDA agreement may be customized to some degree by attached schedules and credit annexes.

The most common type of swap used by corporates is the interest-rate swap. This swap can be broken down into two categories: coupon swap and basis swap. A coupon swap exchanges an interest payment stream of one configuration for another on the same notional principal (e.g., fixed rate for floating rate). A basis swap figures payments on two floating rate indices (e.g., LIBOR for Prime). An interest-rate swap also can be used to lower the corporate's cost of funds by taking advantage of the credit spreads between the fixed and floating rate markets. While it may reduce interest rate risk, a measure of credit and liquidity risk is introduced (it's not likely to be a riskless transaction). The credit risk in a swap transaction centers on the counterparty receiving the net payment.

Futures

A futures contract is an obligation to deliver or receive a specified amount of a commodity or financial instrument at a specified price on a specific date in the future. No cash is passed between the buyer and seller at the inception of the contract. Also, futures contracts rarely settle by actual delivery of the underlying; instead, they are offset or cash settled.

Futures contracts are traded on several exchanges in the U.S. and abroad and are available on financial instruments such as government securities and Eurodollar time deposits. The typical use of a futures contract is to hedge the risk of a particular security, portfolio of securities, or as an asset/liability tool to hedge overall balance sheet exposure. Since futures are exchange traded, the credit risk concern is failure of the exchange, not an individual counterparty. The exchange guarantees the settlement of the contracts. To protect itself, the exchange requires participants keep a margin account that may be called in the event a counterparty fails to perform.

Forwards

A forward contract is a customized obligation to receive or deliver a specified amount of a commodity or security, at a specified price, on a specific date in the future. The terms of the contract are negotiated directly by the counterparties and can be terminated only with the

consent of both parties. The contract is sold or bought immediately, but not paid until some future date. This feature, along with the lack of an exchange acting as an intermediary, gives forward contracts credit risk which is not evident in futures contracts.

The most common types of forwards are interest rate forwards and forward rate agreements (FRAs). These are contracts to pay or receive a specified interest rate, at a specified date in the future. An FRA is a single period interest rate swap.

Financial derivatives are discussed in greater detail in Chapter 202, Appendix B, entitled "Derivative Instruments."

Investment and Risk Management Reporting

An accurate, informative, and timely management information system is essential. Examiners should evaluate the adequacy of a corporate's monitoring and reporting of risks, returns, and overall performance of investment and derivative activities to senior management and the board of directors.

Investment reports are typically an integral part of the ALM reporting process since investments represent the majority of a corporate's assets.

The frequency of reporting should provide responsible individuals with adequate information to judge the changing nature of the corporate's risk profile, and to evaluate compliance with stated policy objectives and restraints.

A clear, concise executive summary format is the best means for communicating complex information in a compressed time setting. Management reports should translate measured risk from technical and quantitative formats to those that can be easily read and understood by senior managers and directors.

The corporate should have a common conceptual framework for measuring and limiting risks in reports to senior managers and directors. These reports should concisely assess and report the

performance of investments and portfolios in meeting the corporate's stated objectives.

Security Safekeeping

Listed below are the assignment programs currently in use by corporate credit unions. These programs periodically change. Therefore, the list should not be considered all-inclusive.

The Security Safekeeping Program (SSP):

1. Provides safekeeping services to participating credit unions holding United States Government and Federal Agency Securities.
2. Covers traditional custodial services such as monthly safekeeping reports, coupon and principal collection, and other maintenance services.

Security Liquidity Program (SLP):

Provides participating credit unions a line of credit in an amount, which approximates the market value of eligible securities available to the program.

The Reverse Repurchase Transactions (RRT) Program:

1. Involves a reverse repurchase transaction which represents the sale of a security for a "price" with a simultaneous commitment by the seller to repurchase the security at a future date at a specified "price."
2. Invests the interest earned from the proceeds in a corporate or certificate account of equal amount and maturity.
3. Requires Generally Accepted Accounting Principles (GAAP) presentation of income and expense transactions at gross amounts (netting is not permitted).

The Collateral Investments (CI) Program:

1. Allows credit unions to secure their investments in the corporate with United States Government and Federal Agency Securities.
2. "Sells" securities to the investing credit union via a repurchase transaction.

Security Safekeeping Policy: The corporate's investment policy should explicitly detail all authorized methods for safekeeping securities in-house or with other institutions. Safekeeping controls should be strengthened by the presence of specific procedures which have been designed and implemented to ensure adequate separation of duties and controls. Access control limitations should be similar to systems employed in the wire transfers area.

Safekeeping policies and procedures should be written with risk assessment in mind. "Prevention control" rather than "discovery" should be the underlying theme and objective.

Security Safekeeping Environment: Corporates safekeep their own investments, as well as those of member credit unions, through various service programs.

The "liability limitations" specified in the safekeeping contract and the qualifications of the safekeeping institution (such as its safekeeping experience, financial strength, and internal control strength) are key elements considered when assessing a safekeeping arrangement. Corporates typically safekeep investments through U.S. Central Federal Credit Union (U.S. Central). However, they often have other arrangements with banks, other safekeeping facilities, or the Federal Reserve. While assessing the internal controls of the safekeeping institution is important, evaluating the corporate's assessment of its safekeeping institutions is equally as critical. The impact of an unauthorized security transfer could be similar to that of an unauthorized wire transfer by exposing the corporate to financial and credibility losses. The examiner should ensure compliance with Part 703, NCUA Rules and Regulations.

Internal Risk: Corporates typically attempt to minimize their risk by acting as a "pass through" to outside safekeeping institutions. Contracts, bailment for hire agreements, and procedures for member credit unions are often utilized to control the risk of potential legal liability or loss from a breach of security occurring outside the corporate's walls.

Securities held in street name are more easily transferred and converted to cash. Controls surrounding access to these securities need to be functionally equivalent to wire transfers. Similar to cash, many investments can be transferred using wire transfers or through correspondent banking arrangements.

Other Programs

In addition to corporate network developed programs, the examiner may encounter "non-network" developed programs. Such programs may be developed in-house, by other corporates, or other outside financial entities.

Separation of Duties: Written procedures should describe the securities transfer process and individual responsibilities. Segregation of duties in the movement of securities is a key internal control element. Examiners should ensure adequate segregation of duties is in place over the transfer of corporate and member securities.

The majority of security transfers are affected via U.S. Central. The controls over this system should be reviewed to ensure they are adequate to prevent unauthorized transfers. Like the Federal Reserve's system, requests for securities movement are initiated by electronic means. Access to the U.S. Central system and its input/transfer screen (DCHT) is password controlled. The examiner should determine that the verification function is not disabled.

A corporate utilizing security safekeeping systems should perform ongoing reconciliations (routine and random) throughout the day.

Account Reconciliation: At any time during the day, the corporate should have the ability to identify and document the location of its securities (as well as those of its participating members). The corporate should have the capability of reconciling its position (i.e., inventory/activity, including updated input from the custodian) at any point during the day. Safekeeping policies and procedures should require a reconciliation of the safekeeping account be performed daily and all securities in safekeeping (both corporate and member) be reconciled at least monthly to a master data base.

Re-establishment of Controls: The potential risk associated with the lack of control in the safekeeping process is material and immediate. The priority of establishing or reestablishing control of this area must also be immediate.

Summary

The growth and complexity of investment and financial products continually change the risk characteristics within the corporate credit union system. As a result, examiners and credit union personnel must

have a thorough understanding and knowledge of the risks within a corporate's investment portfolio. To meet this objective, corporates must have a sound investment portfolio management process in place. This process must include, but not be limited to, sound investment policies and procedures to guide the process, strong management information systems for measuring, monitoring and reporting risk, adequately trained staff, and an independent testing of the overall process for compliance.

**Examination
Objectives**

Investment Review Objectives:

1. Determine if policies, procedures, practices, and internal controls are appropriate for the corporate's level of operating authority and practices.
2. Assess the level of competency/qualifications of staff/management in relation to the level of complexity of the securities purchased.
3. Determine if corporate staff is operating according to established policies and procedures.
4. Determine the scope and adequacy of the internal and external audit functions.
5. Determine the overall quality and appropriateness of the investment portfolio and how it affects the soundness of the corporate.
6. Determine if the corporate is in compliance with applicable laws and regulations.
7. Determine if investments are properly recorded and classified.
8. Initiate corrective action when policies, procedures, practices, and internal controls are deficient, the investment portfolio represents an unacceptable risk to the corporate and/or the National Credit Union Share Insurance Fund, or when violations of laws and/or regulations have been noted.

**Examination
Procedures**

See Corporate Examination Procedures - Investments (OCCU 201P and 201.1P).

**Examination
Questionnaire**

See Corporate Examination Questionnaire - Investments (OCCU 201Q and 201.1Q).

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