



SOCIETY OF FINANCIAL EXAMINERS™

Supplemental Background Material

NAIC Examiner Project

CFE 1

Examination Methods and Management (Passing grade for this exam is 66)

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Examination Methods and Management

CFE Course #1

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Introduction

CFE Course #1-Examination Methods and Management focuses primarily on the financial examination process from initial examination planning through the issuance of the examination report. In addition, certain other topics are covered including risk-based capital, the interest maintenance reserve, the asset valuation reserve, collateralized mortgage obligations, derivative instruments, loss reserve discounting and unearned premiums.

The NAIC Examiners Handbook and this study guide are required reading for the CFE #1 course. **All of the questions on the test have been developed from information included in either the NAIC Examiners Handbook or the study guide.** The study guide has been developed to assist the examiner in focusing on the key topics included in the NAIC Examiners Handbook and to introduce additional information from other sources which may assist the examiner in preparing for the test.

A revised NAIC Examiners Handbook was issued in 2003. The NAIC Examiners Handbook focuses on designing an examination approach that is responsive to each insurer's specific risks and allocating examination resources toward those insurers, or those areas within insurers, that are more likely to result in a material error in surplus which would affect solvency.

In addition to the required reading for this course, it is recommended that the examiner also review the NAIC Accounting Practices and Procedures Manuals for Life and Health Insurers and for Property/Casualty Insurers for more information on collateralized mortgage obligations, derivative instruments, loss reserve discounting and unearned premiums. For more information on the interest maintenance reserve and the asset valuation reserve, it is recommended that the examiner review the Purposes and

Procedures of the Securities Valuation Office of the NAIC. For more information on risk-based capital, the examiner should review the NAIC Life Risk-Based Capital Report, the NAIC Property/Casualty Risk Based Capital Report and the NAIC Model Law on Risk-Based Capital.

It is further suggested that the examiner review, if available, guidance from the American Institute of Certified Public Accountants pertaining to risk and materiality, evidential matter and audit sampling which is included in the Statements of Auditing Standards.

The CFE Course #1 test has been designed to test the examiner's understanding of the examination concepts included in the NAIC Examiners Handbook rather than merely repeating key words and phrases. When taking the CFE Course #1 test, it is important that the examiner read the test questions carefully. More than one of the responses may be partially correct in some instances. However, the most correct response should be selected in all instances.

1. General Overview of the Examination System

The "Introduction" section of the NAIC Examiners Handbook ("the Handbook") provides a good overview of the examination system and introduces many of the examination topics that are addressed in more detail in later chapters of the Handbook. As noted in the Handbook, the fundamental purposes of an examination system are: 1) to detect as early as possible those insurers with potential financial trouble 2) to determine compliance with state statutes and regulations; and 3) to compile the information needed for timely, appropriate regulatory action.

An examination system should make effective and efficient use of examination resources, focusing those resources on insurers, or areas within insurers, which are most likely to result in significant actual or potential problems. This can be accomplished through a risk analysis methodology which focuses on the combined impact of the environment in which the insurer operates, the insurer's financial and operating results and the effectiveness of the insurer's internal controls to design an examination procedures program tailored to each insurer's unique circumstances.

In reviewing the "Introduction" section of the Handbook, the examiner should focus on the four key elements of an effective examination system: an early warning system, a system for scheduling examinations, a system for planning and conducting examinations and a proper determination of the necessary scope of examination.

2. Association Examinations

In addition to providing information regarding the criteria and procedures for calling Association examinations, the authority and responsibility of the examiner-in-charge and the duties and responsibilities of zone examiners, the "Association Examinations" section of the Handbook also addresses EDP assisted examinations and limited scope

examinations.

EDP Assisted Examinations

The NAIC requires that EDP assisted examinations be used for all zone examinations where audit software is compatible with the insurer's hardware. The Handbook defines an EDP assisted examination as an examination which uses an audit software package to facilitate the examination by providing: 1) the capability of direct retrieval of information from an insurer's electronic files to achieve reliability, efficiency and flexibility of information accumulation as well as expeditious and extensive analysis of data accumulations.

Limited Scope Examinations

Limited scope examinations can be an effective way to direct examination resources quickly to those insurers which require immediate attention. However, statutes in most states require that a full scope examination also be performed on all insurers periodically at regular intervals. The Handbook lists several circumstances under which a limited scope examination might likely be convened by an insurance department.

A limited scope examination report should, at a minimum, describe the limited objective of the examination, the scope of the procedures performed and the examination findings.

The limited scope examination report should be distributed to all states in which the insurer is licensed to transact business unless the examination was investigatory or preliminary in nature.

3. Examination Planning

The "Planning the Examination" section of the Handbook is perhaps the most important section in the whole Handbook. It introduces and discusses several key concepts and topics including materiality, risk, environmental considerations, analytical review procedures, the internal control structure and the specific risk analysis ("SRA") workpapers used to document the planning process. It is anticipated that there will be numerous questions on the CFE Course #1 test pertaining to examination planning. Therefore, the examiner should review this section of the Handbook very closely.

According to the Handbook, the objectives of examination planning are: 1) determine the scope of an examination and 2) to design examination procedures based upon the examiner's risk assessment of the company. In order to comply with this objective, the examiner is required to obtain a thorough understanding of an insurer's business operations, which includes assessing the company's internal control structure, lines of business, corporate hierarchy, risk management programs and any environmental conditions or factors that may affect the current or prospective solvency of the insurer.

Materiality and Risk

Materiality and risk are important concepts which should be considered when planning the nature and extent of examination procedures to be performed and again at the end of the examination when evaluating the results of those procedures. Materiality can be defined as the dollar amount above which the examiner's perspective of the insurer's financial position will be influenced. Risk can be defined as the probability that an examiner may unknowingly fail to modify an opinion on an annual statement that is materially misstated or on an insurer that has a high likelihood of becoming insolvent. Both materiality and risk are determined at an overall annual statement level and at an individual account level during the initial planning stage of the examination.

Overall examination risk, which is a matter of professional judgment, is the product of three components: inherent risk, control risk and detection risk. Inherent risk is the risk that factors in the insurer's internal or external environment will lead to a material error, assuming that there were no internal controls in place. Control risk is the risk that a material error will not be prevented or detected by the insurer's internal control structure.

Detection risk is the risk that an examiner's procedures will fail to detect a material error not detected by the insurer's internal control structure.

Environmental Considerations

Environmental considerations, which should be considered by the examiner in assessing inherent risk, include both insurer conditions and issues ("internal environmental considerations") and industry conditions ("external environmental considerations"). Examples of internal environmental considerations include: ownership influences; management philosophy; financial characteristics such as profitability, liquidity and capital adequacy; and operating characteristics such as key markets, product lines, customers and competitors. Examples of external environmental considerations include: business and economic trends; the competitive environment; and regulatory changes.

Analytical Review Procedures

Analytical review procedures are used throughout the examination process. Overall analytical review, which is directed toward overall financial condition and profitability rather than specific accounts, is performed during initial planning to help the examiner understand the impact of changes in environmental factors and to provide a preliminary indication of the insurer's overall financial condition, including the identification of areas that might require emphasis during the examination. Detail analytical review, which is more comprehensive than overall analytical review and which focuses on specific accounts, is generally performed during the program development phase of the examination to provide comfort to the examiner that the numbers "make sense" based on the examiner's understanding of the insurer's operations and evaluation of the insurer's accounting system. In the program execution phase of the examination, analytical review procedures may serve as the primary direct test of an account balance or may be used in combination with other procedures to support the reasonableness of an annual statement

amount. Finally, at or near the conclusion of the examination, analytical review is used to assess the overall reasonableness of the financial statements.

The extent to which analytical review procedures can be used as the primary direct test of an account balance or to reduce other procedures will depend on the quality of the evidence obtained from the analytical review procedures. Analytical review procedures can only serve as the primary direct test of an account balance if they provide persuasive evidence. However, analytical review procedures which provide corroborative evidence can serve to reduce the extent of other procedures performed. Evidence is considered to be persuasive if it generates an amount believed to be a reasonable estimate of the account balance and is consistent with the examiner's expectations. Evidence is considered to be corroborative if it confirms findings from other tests and supports the insurer's representations or otherwise decreases the level of skepticism. Relationships involving income statement accounts are generally the most predictable, and therefore would provide the most persuasive evidence, for purposes of analytical review procedures used as direct tests of balances.

Internal Control Structure

A preliminary assessment of the overall internal control structure should be made during the initial planning phase of the examination. In addition, an evaluation of internal controls relating to each transaction cycle is an important component of the risk assessment for each cycle. The focus of this evaluation should be to identify weaknesses in the internal control structure that may contribute to the risk of a material misstatement occurring and failing to be detected by the insurer (control risk). This evaluation should be performed whether or not reliance on internal controls is contemplated. In addition, an assessment of good internal controls based on this evaluation is not sufficient to establish reliance on the internal controls and thereby reduce the amount of substantive testing performed. If reliance on internal controls is planned, compliance testing must be performed.

Substantive tests are designed to obtain evidence as to the validity and propriety of accounting treatment of account balances (tests of balances) whereas compliance tests are designed to provide reasonable assurance that accounting control procedures are functioning as prescribed (tests of controls). If compliance testing is performed to test internal controls, the tests should be applied to transactions throughout the entire period under examination.

SRA Workpapers

The purpose of the SRA workpapers is to comprehensively and concisely detail the examination risk associated with each material financial statement caption and the related examination procedures required given the level of risk involved. The examiner should evaluate inherent risk based on observations from the review of internal and external environmental considerations and from the detail analytical review. Control risk should be evaluated based on the examiner's review of the

insurer's internal control structure. After inherent risk and control risk have been evaluated, the examiner will determine the overall risk for the financial statement caption and assign an overall risk rating of low, medium or high. This risk assessment is a matter of professional judgment and is not merely a summing or weighting of the inherent risk, control risk and detection risk. Based on the overall risk assessment, the examiner will then note in the SRA workpapers the significant specific work to be performed on each account during the examination. The examiner-in-charge should then utilize their assessment as a basis for developing detailed work programs that define examination procedures and assign work by experience levels.

4. Conducting an Examination

The "Conducting Examinations" section of the Handbook focuses on certain procedures and considerations which are important components of the examination process including general examination procedures, working with internal auditors, workpaper review responsibilities, examination of computer-based operations and using the work of an outside specialist.

General Examination Procedures

Certain general examination procedures, many of which do not result from the SRA workpapers, should be considered on all examinations. These procedures include the following: 1) review of the general ledger and nonstandard journal entries to identify any significant or unusual postings and entries that might not have been identified through other examination procedures; 2) review of minutes of all meetings of the Board of Directors, shareholders and important committees for the entire period under examination through the end of fieldwork; 3) review of subsequent events to identify events or transactions that occurred after the balance sheet date which may have an important bearing on the financial statements or the examination report; 4) review of affiliated transactions; 5) review of CPA workpapers; 6) working with internal auditors; 7) letters of representations; 8) other procedures; 9) consideration of fraud; and 10) examination review responsibilities

In addition to these general procedures, the examiner should obtain a letter of representations, dated on the same date as the examination report and signed by the insurer's chief executive, financial and accounting officers, which includes management's representations regarding areas of significance to the examination such as those set out in the sample letter of representations in the Handbook. Other officers and employees whose functions include significant responsibility for the financial reporting process also should be asked to sign the letter. The letter of representations should be obtained to provide evidence, avoid misunderstanding and to secure the active cooperation of the insurer in the performance of procedures. The letter of representations will generally be no more than a few pages in length, confirming in broad terms the significant representations of management. The Handbook includes a sample letter of

representations.

Working with Internal Auditors

Although there is considerable variation in the scope and objectives of internal audit functions from insurer to insurer, internal audit departments are normally responsible for one or more of the following: reviewing the internal control structure; examining financial and operating information; and reviewing the efficiency and effectiveness of operational controls. If the examiner intends to place reliance on the internal audit function or if internal audit is to provide direct assistance on the examination, the examiner should consider the objectivity and competence of the internal auditors.

Workpaper Review Responsibilities

The review of examination workpapers is an integral part of the examination process. Workpapers are reviewed to assure that the work performed and the examination report is appropriate and to allow the reviewer to assess the examiner's performance. As noted in the Handbook, the primary objectives of workpaper review are to determine whether: 1) the work has been properly planned; 2) the scope of the work is sufficient to support the findings or conclusions in the examination report; 3) the work has been performed in accordance with the standards of the insurance department and the NAIC; and 4) the examination report is supported by the work performed as documented in the examination workpapers.

In preparing for the CFE Course #1 test, the examiner should review the discussion of examination review responsibilities in the "Conducting Examinations" section of the Handbook closely. Important topics, which are included in the Handbook discussion of examination review responsibilities, include the scope of detailed workpaper reviews and general workpaper reviews, the summary review memorandum ("SRM") and the review and approval summary ("RAS"). The examiner should be familiar with each of these topics.

Before any significant work begins, someone at a higher level than the preparer should perform a detailed review of the SRAs and any other planning workpapers as well as the examination procedures program. If it is not practical for all areas to be reviewed before fieldwork begins, the SRA workpapers and examination procedures program sections applicable to the areas in which work is to commence should be reviewed before any examination procedures are performed in those areas.

All workpapers require a detailed supervisory review. The emphasis of the detailed review should be on the technical accuracy and completeness of the workpapers. A summary review memorandum ("SRM") should be prepared by the examiner-in-charge, which covers all important accounting, examination and reporting issues and all examination procedures program changes and other issues warranting attention by the chief examiner. Rather than repeating comments made in the examination report, the SRM should discuss interpretive analyses by the examiner relevant to significant

examination areas and issues.

In addition to the detailed review of examination workpapers, a general review should be performed by the chief examiner or designee, which focuses on the adequacy of the examination work as a whole. The general review should determine whether an adequate detailed review has been performed in all areas, whether the examination was performed in accordance with the Handbook, whether the statutory financial statements in the examination report have been prepared in accordance with statutory accounting principles prescribed or permitted by the insurance department and whether the SRM covers all important examination issues. In performing the general review, the reviewer might not review all examination workpapers in detail. Rather, the focus of the general review should be on the review of workpapers relating to significant examination accounts and issues.

Reviewers should document their review of the examination workpapers by signing or initialing and dating each workpaper reviewed. General reviewers should sign or initial and date each workpaper they have read but do not need to document their review of workpapers which were merely scanned. In addition, the completion of the review and approval summary ("RAS") further documents the review process of the examination.

Examination of Computer-Based Operations

A computer audit specialist can provide valuable assistance in the examination of computer-based operations. As noted in the Handbook, duties of the computer audit specialist include: 1) review of the insurer's computerized record keeping system; 2) review of the insurer's response to the Information System Questionnaire (ISQ); 3) interface of the computer audit software package with the insurer's system; 4) determination of the examiner's specific needs and arrange for production of the required computer printouts; 5) consultation with the examiner on computer-related problems throughout the examination; and 6) training the examiner in computer methods and techniques.

Using Outside Specialists

During an examination, an examiner may encounter matters potentially material to the fair presentation of financial statements that require special knowledge and that in the examiner's judgment require using the work of a specialist. Examples of such instances include computer applications, valuation (e.g., real estate, restricted securities and other investments), determination of amounts derived by using specialized techniques or methods (e.g., certain actuarial determinations and interpretations of technical requirements, regulations or agreements (e.g., the potential significance of reinsurance and other contracts or other legal documents, or legal title to property). When an outside specialist is used, an understanding should exist among the department, including the EIC, the company and the specialist about the nature of the work to be performed by the specialist. Although the appropriateness and reasonableness of the methods and assumptions used and their application are the

responsibility of the specialist, the examiner should obtain an understanding of the methods and assumptions used by the specialist to determine whether the findings are suitable for corroborating the representations in the financial statements. The examiner should also perform appropriate tests of the accounting data provided by the insurer to the specialist.

Other Considerations

In addition to the information included in the "Conducting Examinations" section of the Handbook, it is important to understand that the examiner is most concerned with the possible overstatement of assets and the possible understatement of liabilities when conducting an examination. When testing the existence of an asset, the examiner would generally work from the accounting records to the supporting evidence. To test liabilities, the examiner's procedures would likely include those designed to detect potential unrecorded liabilities.

5. Reporting of Examination Progress and Findings

Information regarding interim reporting of examination progress to the chief examiner, full scope and limited scope examination reports, discussion of findings with insurer officials and distribution of examination reports is included in the "Reporting Examination Progress and Findings" section of the Handbook.

Interim Reporting of Examination Progress

Periodically during an examination, at least monthly, the examiner-in-charge should prepare a memorandum to the chief examiner which discusses any significant issues which have been identified along with proposed resolutions and the current assignments of each examiner participating on the examination.

Examination Reports

As noted in the Handbook, the fundamental purposes of a financial condition examination report are to assess the financial condition of the insurer and to set forth findings of fact with regard to any material adverse findings identified during the examination. A full scope examination report should focus on problem areas. It should not refer to matters that are immaterial or not of regulatory concern, should not be directed to insurer management and should not include minor unenforceable "housekeeping" recommendations. Limited scope examination reports should be structured to communicate the specific areas reviewed, the background as to why the specific areas were reviewed, a brief description of the procedures performed and the examiner's findings. The Handbook provides guidance on the recommended format and content for a full scope examination report and a limited scope examination report as well as an alternate recommended format and content for Association examination

reports.

In addition to report comments that directly relate to the solvency of the insurer, examiners may also make performance audit comments, where appropriate. These comments, which should only involve significant matters, may be similar to management letter comments frequently made by CPA firms. Performance auditing is primarily directed toward future improvements which might be made by the insurer to accomplish its goals. As noted in the Handbook, performance audit comments should usually contain the following elements: the condition, the cause, the effect, the criteria and the recommendation. These are all discussed in more detail in the Handbook.

Discussion of Findings With Insurer Officials

Whenever an examiner doubts the accuracy of an examination finding, the examiner should give the insurer an opportunity to review the finding and the material supporting it. However, discussions with insurer officials, except regarding minor matters, should only be held with the knowledge of the examiner-in-charge. The purpose of discussions with insurer officials regarding report findings should be limited to ascertaining facts and verifying the accuracy of the findings.

Distribution of Examination Reports

All participating zone examiners should receive a draft of the examination report prior to leaving the examination. Immediately upon adoption, the domiciliary state insurance department should either directly mail or supervise the mailing of examination reports to all states in which the insurer is licensed to transact business. If an Association examination report has not been released within three months after completion and signature by a majority of participating states, the secretary of any zone participating in the examination may make the report available to the individual states within that zone. When an Association exam has been called which covers a group of insurers, the distribution of the examination report for any insurer should not be delayed solely because the examination of the remainder of the insurers in the group has not been completed.

6. Specific Risk Analysis (SRAs)

Part 2 of the Handbook includes a complete set of SRA workpapers. Separate SRA workpapers have been developed for life, property/casualty and health insurers for the premium, losses and benefits, and reinsurance cycles. In addition, there are SRA workpapers for the investment and operating cycles.

It is anticipated that there will be numerous questions on the CFE Course #1 test pertaining to the SRA workpapers. These questions are likely to be designed to test the examiner's understanding of the **concepts** involved in planning an examination and

completing the SRA workpapers including questions pertaining to analytical relationships, environmental considerations and internal controls for specific accounts and how analytical relationships, environmental considerations and internal controls are applied in the assessment of inherent and control risk for specific accounts. The examiner should review the "Planning the Examination" section of the Handbook (including the discussion of analytical review procedures and the examples of analytical review procedures) and the "Examples of Key Data and Relationships Related to Specific Audit Objectives" in Exhibit F of Part 1 of the Handbook as well as the SRA workpapers to prepare for these types of questions.

In addition, it is anticipated that there will be numerous questions on the CFE Course #1 test pertaining to examination procedures for specific accounts. These questions are likely to test the examiner's understanding of the **objectives** of certain examination procedures for specific accounts. The examiner should review the examination objectives and procedures in the preliminary examination approach section of the SRA workpapers to prepare for these types of questions. In addition, the examiner should have a good general understanding of statutory accounting principles.

7. Audit Sampling and Control and Substantive Testing Procedures

Part 3 of the Handbook (including Appendices A, B and C) discusses the use of both statistical audit sampling techniques and other non-sampling techniques during an examination to accomplish control testing (testing of internal controls) and substantive testing (testing of account balances).

Statistical Audit Sampling Techniques

Although there are several statistical audit sampling techniques available which can be used on an examination, the two statistical audit sampling techniques discussed in the Handbook are: 1) attribute sampling (used in the performance of control testing) which is discussed in the Control Testing section below and 2) probability-proportional-to-size ("PPS") sampling (used in the performance of substantive testing) which is discussed in the Substantive Testing section below.

Statistical audit sampling (attribute sampling for control testing and PPS sampling for substantive testing) allows information about a population to be inferred by examining the characteristics of a sample. The laws of probability provide the basis for statistical audit sampling and the actual techniques are derived through mathematical deduction. The proper application of statistical audit sampling techniques will, in many instances, result in improved examination efficiency and effectiveness. In addition, the use of statistical audit sampling techniques allows the examiner to mathematically evaluate any errors or misstatements found during the testing procedures.

Non-Sampling Techniques

The Handbook notes that statistical audit sampling may not always be appropriate. In those instances, non-sampling techniques may be used to accomplish the examination objectives. For example, a non-representative selection method (commonly known as judgmental selection) may be utilized to perform substantive testing. In using judgmental selection, professional judgment is used to judgmentally select certain items from a population for testing based on their characteristics or size. Because judgmental selection does not measure sampling risk (the risk that the conclusion based on a sample might be different from the conclusion which would be reached if each item in the population was examined) and the results of the judgmental sample cannot be used to make inferences to the population as a whole, judgmental selection is not considered to be a true "sampling" method. However, in certain instances, judgmental selection is a valid selection method and may provide sufficient examination evidence.

Other non-sampling techniques discussed in the Handbook are corroborative inquiry, observation and reperformance (used in the performance of control testing) and analytical review, 100% testing and non-representative selection (used in the performance of substantive testing).

Control Testing

Control testing (sometimes known as compliance testing) is performed to provide assurance that internal control procedures are operating as prescribed. Based on the evaluation of the control environment as documented in the SRAs (discussed in the previous chapter), those controls upon which reliance is intended to be placed will be tested. The results of the control testing are then used to determine the nature and extent of substantive testing. In general, if reliance is placed on a specific control and the control testing supports this reliance, the extent of substantive testing required to be performed relating to that account balance may be reduced. Although control testing may be performed for any accounting area, control testing is frequently performed in the areas of: 1) premium recording and collections and 2) claims expenses and cash disbursements.

Control testing is generally performed using one or more of the following methods: 1) corroborative inquiry; 2) observation; 3) reperformance; or 4) examination of documents.

These methods are discussed in detail in the Handbook. Control testing using corroborative inquiry, observation or reperformance usually does not provide a documentary trail of evidence and typically does not require the use of sampling methods. If reliance is to be placed on a control tested through corroborative inquiry, observation or reperformance, professional judgment must be used to determine the extent of testing which is considered appropriate. On the other hand, control testing performed through the examination of documents, which does leave a ready trail of documentary evidence, frequently lends itself to a sampling method known as attribute sampling.

Attribute sampling involves the examination of transaction documents for the presence or absence of specific attributes (testable characteristics relating to a specific control).

Attribute sampling allows a conclusion to be reached about a population in terms of the rate of occurrence of an attribute. Since control procedures are expected to be applied to all transactions subject to the control, the dollar value of the sample transactions selected for testing is irrelevant. The absence of an attribute indicates a deviation from a prescribed control policy or procedure. As a general rule, as deviations increase, the risk of material misstatement increases, and the reliance that may be placed on the control tested is reduced. If, as a result of the control testing performed, the number of actual deviations exceed the number of expected deviations in the sample, reliance may not be placed on the control and either the level of substantive testing to be performed must be increased accordingly or other controls must be identified which achieve the control reliance objectives.

There are six steps in the attribute sampling process: 1) definition of the attribute(s) to be tested; 2) definition of what constitutes a deviation; 3) definition of the population; 4) determination of the sample size; 5) selection of the sample; 6) examination of the evidence and evaluation of the results. These steps are discussed in detail in the Handbook and should be reviewed by the examiner.

Substantive Testing

Substantive testing is performed to provide assurance regarding examination objectives applicable to individual account balances. Substantive testing allows a conclusion to be made about the dollar value of an account balance. The nature and extent of substantive testing necessary to obtain the desired level of assurance is primarily dependent on the assessment of the insurer's inherent and control risk. Substantive testing is often accomplished through the use of sampling procedures. However, not all substantive testing need involve the use of sampling. For example, analytical procedures may be used to substantively test an account balance. In addition, in instances where the account balance is comprised of only a few items or where the entire balance is easily confirmed, 100% testing may be both effective and efficient. The nature and extent of substantive testing performed on an examination is dependent on: 1) the examiners test objective; 2) the nature of the account balance; 3) the degree of assurance desired; and 4) professional judgment. In addition to analytical procedures and 100% testing, two other substantive testing methods are discussed in detail in the Handbook. These are non-representative (or judgmental) selection and representative sampling.

Non-representative selection does not attempt to select a sample of items which are representative of the population as a whole. Rather, certain items are selected because they have certain characteristics (e.g., high dollar items). The results of substantive testing using non-representative selection cannot be used to make inferences to the population as a whole. Therefore, the remaining items in the population must be tested through some other substantive procedure unless the remaining items are insignificant. The number of items required to be tested using non-representative selection is based on professional judgment. However, in every instance, all individual items which exceed planned tolerable error for the account should be selected. The primary benefit of using non-representative selection over a representative sampling method like PPS sampling is

the time savings which may result from the elimination of the steps involved in developing and implementing a statistically-based sample. In addition, nonrepresentative sampling is more appropriate than a representative sampling method in instances where there is a high risk of material error in a specific group of items within an account balance or where some other uncertainty exists. This is due to the inherent nature and limitation of the representative sampling design.

The representative sampling method discussed in the Handbook is PPS sampling. As noted in the Handbook, PPS sampling utilizes attribute sampling theory to select and evaluate a sample based proportionately on the dollar value of the items comprising the population. In effect, PPS sampling breaks the account balance down into individual \$1 transactions for sampling purposes and the entire transaction balance containing the selected \$1 item is examined in total. Each individual item included in an account balance has a chance of selection proportionally equal to the size of the item. Accordingly, PPS sampling skews the sample selections to the large dollar items, which theoretically is where the examination efforts should be directed. Each individual item which exceeds the selection interval will automatically be selected. The determination of the PPS sample size is dependent in part on the materiality level determined during examination planning and the extent of control testing performed as a part of the examination fieldwork.

The PPS sampling process can generally be described as follows: 1) Determine the sample selection interval; 2) Determine sample size; 3) Select the sample; 4) Examine the evidence, evaluate the results and extrapolate any errors detected. These steps are discussed in detail in the Handbook and should be reviewed by the examiner.

It is not considered acceptable to use PPS sampling to sample directly from an account balance in order to test for potential understatement (e.g., to test a liability account balance where the examination objective is to test for what is not recorded rather than what is recorded). Instead, sample items should be selected from an independent or reciprocal population as a test of completeness which will indicate whether items have been properly recorded in the correct period. If the independent or reciprocal population is monetary in nature, PPS sampling is considered appropriate. For example, subsequent disbursements may be used to test the accounts payable balance. However, if the independent or reciprocal population is not monetary in nature (e.g., policy numbers issued after year-end), PPS sampling is not appropriate and some other form of substantive testing such as judgmental selection should be used.

Similar problems exist pertaining to zero and negative value items included in an asset account balance. The concern with the zero and negative value items is that these items may be understated, which indirectly results in an overstatement of the asset account balance. These items should be excluded from the sample population subjected to PPS sampling and should be evaluated separately. The scope of testing of the zero and negative value items should be determined based on the number and value of the items, the nature of the items and professional judgment.

Documentation of Errors

One of the primary objectives of an examination is to determine whether the company's surplus or solvency position is materially misstated. Adjustments for material errors detected as a result of substantive testing are reflected in the examination report. However, individually small misstatements which are not considered material to the insurer and are so insignificant as to not require adjustment within the examination report are also frequently detected as a result of the substantive testing performed. Such unadjusted errors should be summarized as a part of the examination. The Handbook includes an example of a Summary of Unadjusted Errors ("SUE") which separately identifies known errors (errors which are quantifiable as a result of the substantive testing performed) and likely errors (errors which are the result of the extrapolation of misstatements found in a statistical sample or are based on the judgment and opinion of the examiner-in-charge).

The net effects of the unadjusted errors should be compared to planned tolerable error at the conclusion of the examination. If the aggregate net known and likely unadjusted errors exceed, or are close to, planned tolerable error, the risk that surplus may be materially misstated is great. In such a situation, adjustments should be made and reflected in the examination report for some or all of the known misstatements and/or have the company assist the examiner in evaluating the likely errors noted to determine if the actual evidence supports the examiner's assessed likely error. Use of CPA Workpapers Relating to Control and Substantive Testing

An examiner may consider the work of the insurance company's independent auditor as a supplement, or substitute, to the work required to be performed by the examiner. The Handbook identifies the steps which should be performed in determining whether, and to what extent, the CPA workpapers may be used as a part of the examination.

8. Risk-Based Capital

State insurance laws have historically required insurers to maintain minimum levels of capital and surplus. However, these required minimums were generally based on fixed amounts for the lines of business written without considering the size of the insurer or the insurer's exposure to various types of risk. Believing that the existing minimum capital requirements were not adequate, the NAIC developed risk-based capital ("RBC") requirements which measure the adequacy of an insurer's capital and surplus based on each insurer's unique risk profile. These new RBC requirements became effective for life insurers beginning with the 1993 annual statement and for property/casualty insurers beginning with the 1994 annual statement. In addition to the RBC formulas and reporting requirements, the NAIC adopted the Risk-Based Capital (RBC) for Insurers Model Act which establishes duties for the insurer and the insurance regulators based on the level of the insurer's total adjusted capital compared to authorized control level RBC.

Life RBC Formula

Four major types of risk are included in the life RBC formula: 1) asset risk; 2) insurance risk; 3) interest rate risk; and 4) business risk. Each of these types of risk is summarized below.

Asset risk is the risk that an insurer's assets will default or will decline in market value. Each type of asset is assigned a risk factor that is based on the perceived riskiness of the asset. For example, NAIC/SVO category 1 bonds are assigned a very low risk factor whereas mortgage loans in foreclosure are assigned a high risk factor.

Insurance risk is the risk that the insurer's underwriting assumptions pertaining to mortality, morbidity, persistency and anticipated investment income may be unfavorable and/or improper based on actual experience. The risk factors target the amount of insurance at risk, net of reinsurance. Insurers with larger net amounts at risk have lower risk factors because of the greater predictability.

Interest rate risk is the risk of losses associated with asset and liability mismatches under a changing interest rate scenario. Annuity writers in particular can be impacted significantly by this type of risk. The risk factors vary based on the withdrawal provisions of the insurance product. For example, annuity products that are not subject to voluntary withdrawal by the annuity holder or that are subject to withdrawal with a market value adjustment are assigned a low risk factor whereas annuity products which are subject to discretionary withdrawal by the annuity holder with nominal or no surrender charge are assigned a high risk factor.

Business risk includes other general business risks that are not effectively covered by one of the other three types of risk. The primary risk included in the business risk category is premium income which is subject to guaranty fund assessments.

These four types of risk are combined in the life RBC formula to produce the insurer's authorized control level RBC which is then compared to the insurer's total adjusted capital (including the asset valuation reserve, 50% of the insurer's dividend liability and subsidiary company adjusted capital). For more information regarding the details of the life RBC formula and the computation of total adjusted capital, it is recommended that the examiner review the NAIC Life Risk-Based Capital Report.

Property/Casualty RBC Formula

Four major types of risk are included in the property/casualty RBC formula: 1) investment risk; 2) credit risk; 3) underwriting risk; and 4) off-balance sheet risk. Each of these types of risk is summarized below.

Investment risk, which is similar to asset risk in the life RBC formula, is the risk that an insurer's assets will default or decline in market value. Each type of asset is assigned a risk factor that is based on the perceived riskiness of the asset. For example, as noted in

the discussion of the life RBC formula above, NAIC/SVO category 1 bonds are assigned a very low risk factor whereas mortgage loans in foreclosure are assigned a high risk factor.

Credit risk is the risk of losses associated with unrecoverable reinsurance and defaults by agents and other creditors as well as due and accrued investment income. Some ceded reinsurance balances, such as recoverables from affiliates and from mandatory pools and associations, are exempt.

Underwriting risk, which is broken down into two components, is the risk of losses due to pricing or reserving errors. Pricing risk is the risk that business which will be written during the coming year will be sold at inadequate rates. Medium and long tail lines of business are generally more volatile and carry higher risk factors than short tail lines of business. Reserve risk is the risk of adverse development on loss reserves in excess of anticipated investment income. The risk factor is dependent on the development of overall industry loss reserves modified for the insurer's actual experience.

Off-balance sheet risk attempts to measure risks not reflected on the insurer's balance sheet and is comprised of four factors: 1) non-controlled assets (assets not exclusively under the control of the insurer, or assets that have been sold or transferred subject to a put option) ; 2) guarantees for affiliates; 3) contingent liabilities; and 4) risk of financial difficulty due to rapid growth in premiums and reserves (growth exceeding an average of 10% per year over the previous three years).

These four types of risk are combined in the property/casualty RBC formula to produce the insurer's authorized control level RBC which is then compared to the insurer's total adjusted capital. For more information regarding the details of the property/casualty RBC formula and the computation of total adjusted capital, it is recommended that the examiner review the NAIC Property/Casualty Risk Based Capital Report.

NAIC Risk-Based Capital (RBC) for Insurers Model Act

The NAIC Model Act requires a comparison total adjusted capital and authorized control level RBC for both life and property/casualty insurers. In addition, the NAIC Model Act defines several levels of RBC and discusses what should occur when an insurer's total adjusted capital falls within a particular level. The various levels, which are related by fixed percentages, are as follows:

If the Ratio of Total Adjusted Capital If the Ratio of Total Adjusted Capital If the Ratio of Total Adjusted Capital If the Ratio of Total Adjusted Capital If the Ratio of Total Adjusted Capital

Ratio of Total Adjusted Capital to Authorized Control Level RBC is:	RBC Level
200% and above	Adequate Level

150%-199%	Company Action Level
100%-149%	Regulatory Action Level
70%-99%	Authorized Control Level
Below 70%	Mandatory Control Level

Each insurer, regardless of the level in which it falls, must file an RBC report which shows the calculation of authorized control level RBC and total adjusted capital. Other than the filing of the RBC report, no further action is required by an insurer whose total adjusted capital falls within the adequate level. An insurer whose total adjusted capital falls within the company action level must submit to the insurance commissioner an "RBC plan" that identifies the conditions which contribute to the insurer's financial condition, contains proposals of corrective action and provides projections of future financial results, both with and without proposed corrective action. If an insurer's total adjusted capital falls within the regulatory action level, the insurance department will perform such examination or analysis as the insurance commissioner deems necessary and require appropriate corrective actions. If an insurer's total adjusted capital falls within the authorized control level, the insurance commissioner may seize the insurer if that step is deemed to be in the best interests of the insurer's policyholders and creditors and the general public. If an insurer's total adjusted capital falls within the mandatory control level, the insurance commissioner must seize the insurer unless there is a reasonable expectation that the circumstances causing the insurer to be in the mandatory control level will be eliminated within 90 days.

For more information regarding the RBC levels and the actions required for each level it is recommended that the examiner review the NAIC Risk-Based Capital (RBC) for Insurers Model Act.

9. Interest Maintenance Reserve

The interest maintenance reserve ("IMR"), which is required for life insurers but not for property/casualty insurers, applies to interest-related realized capital gains and losses, net of tax, on short-term and long-term fixed income investments (bonds, preferred stocks, mortgage loans and other fixed income investments included on annual statement Schedule BA). The IMR captures and defers the realized capital gains and losses resulting from changes in the general level of interest rates. These realized gains and losses are then amortized into investment income over the approximate remaining life of the investments sold. In addition, the IMR also applies to certain liability gains and losses related to changes in interest rates. These gains and losses are amortized into investment income over the approximate remaining life of the liability released. The current year's IMR is equal to:

The beginning IMR

Plus or minus the realized capital gains or losses, net of tax, pertaining to interest-related changes
Plus or minus the realized liability gains or losses, net of tax, pertaining to interest-related changes

Less an amortization amount on gains and losses which have been deferred

Interest-Related Realized Capital Gains and Losses

A realized capital gain or loss on a bond which did not have an NAIC/SVO rating classification of "6" at any time during the holding period is considered to be interest-related if the beginning NAIC/SVO rating classification on the bond did not change by more than one classification at the end of the holding period.

A realized capital gain or loss on a preferred stock which did not have an NAIC/SVO rating classification of "4", "5" or "6" at any time during the holding period is considered to be interest-related if the beginning NAIC/SVO rating classification on the preferred stock did not change by more than one classification at the end of the holding period.

A realized capital gain or loss on a mortgage loan is considered to be interest-related if interest is not more than 90 days past due, the mortgage loan is not in the process of foreclosure or in the course of voluntary conveyance and the terms of the mortgage loan have not been restructured during the prior two years.

Realized capital gains and losses on other fixed income investments included in annual statement Schedule BA should be considered interest-related if they are in the same nature as those defined for bonds and mortgage loans.

Interest-Related Liability Gains and Losses

Interest-related gains or losses pertaining to the sale, transfer or reinsurance of a block of liabilities should be credited or charged to the IMR and amortized into income if: 1) the portion of the block sold, transferred or reinsured represents more than 5% of the insurer's total general account liabilities; 2) the transaction is irrevocable and is to a non-affiliate; and 3) the transaction was completed in the current year.

Material gains or losses (in excess of both .01% of liabilities and \$1 million) resulting from market value adjustments on policies and contracts backed by assets that are valued at book value should be credited or charged to the IMR and amortized into income in the same manner as realized capital gains and losses on fixed income investments.

Exemption from IMR Treatment

All interest-related realized capital gains and losses arising from the sale of investments required to provide cash flow to meet "excess withdrawal activity" as defined in the

Purposes and Procedures of the Securities Valuation Office of the NAIC are excluded from the IMR and should be reflected in net income.

IMR Amortization

There are two acceptable methods for accumulating and amortizing the IMR: the seriatim method and the grouped method. Under the seriatim method, the amount of each capital gain or loss which should be amortized in a given year is the excess of the amount of income which would have been reported in that year, had the asset not been disposed of, over the amount of income which would have been reported had the asset been repurchased at its sale price. As noted in the Purposes and Procedures of the Securities Valuation Office of the NAIC, the seriatim calculation, on an asset by asset basis, is the desired approach. However, the insurer may use a standard simplified method in which capital gains and losses are grouped according to the number of years to expected maturity. These groupings should be in bands of five calendar years.

The expected maturity date for fixed income investments with fixed contractual repayment dates and amounts (including bonds, preferred stocks, and callable or convertible bonds and preferred stocks) is defined as the contractual retirement date which produces the lowest amortization value for annual statement purposes (lowest internal rate of return or "yield to worst"). The potential retirement dates which should be considered include all possible call dates as well as the contractual maturity date. For perpetual investments, the expected maturity date is defined as 30 years from the current date.

For liability gains and losses included in the IMR, the amortization should be determined in a manner consistent with the determination of the assets transferred or the associated market value adjustment.

Separate Accounts IMR

An IMR is required for those separate accounts which value their assets at book value. However, no IMR is required for those separate accounts with assets valued at market value. If an IMR is required, it must be established in the separate account.

Negative IMR

The IMR cannot be negative (less than zero). If a net negative IMR balance occurs, the amount should be recorded as a non-admitted asset. However, a negative IMR balance in either the general account statement or separate accounts statement may be offset by a positive IMR balance in the other statement.

Purposes and Procedures of the Securities Valuation Office of the NAIC

For more detailed information regarding the IMR and its calculation, it is recommended that the examiner review the Purposes and Procedures of the Securities Valuation Office

of the NAIC and the annual statement form for calculating the IMR.

10. Asset Valuation Reserve

The asset valuation reserve ("AVR"), which is required for life insurers but not for property/casualty insurers, is designed to address the default and equity risks of an insurer's invested assets by establishing a reserve liability and controlling the flow of the reserve from/into surplus. The AVR applies to the specific risk characteristics of all invested asset categories except for cash, policy loans, premium notes, collateral loans and income receivables.

The AVR is comprised of two major components: the default component (which includes the bond and preferred stock subcomponent and the mortgage loan subcomponent) and the equity component (which includes the common stock subcomponent and the real estate and other invested asset subcomponent). The current year's AVR, by subcomponent, is equal to:

The beginning AVR Plus or minus the credit-related and equity realized capital gains or losses, net of tax, on assets corresponding to the subcomponent Plus or minus unrealized capital gains or losses on assets corresponding to the subcomponent Plus or minus any transfers between subcomponents Plus an annual contribution Plus any voluntary contribution Plus or minus an adjustment up to zero or down to the maximum, if applicable

Realized Capital Gains and Losses

All realized credit-related (default) and equity capital gains and losses, net of capital gains tax, should be reported in the appropriate subcomponent of AVR. Interest-related realized capital gains and losses should be excluded from the AVR since they are included in the IMR.

A realized capital gain or loss on a bond is considered to be credit-related if the bond had an NAIC/SVO rating classification of "6" at any time during the holding period or if the beginning NAIC/SVO rating classification changed by more than one classification at the end of the holding period. However, realized capital gains and losses resulting from the sale of U.S. Government securities and the direct or guaranteed securities of agencies which are backed by the full faith and credit of the U.S. Government are exempt from the AVR.

A realized gain or loss on a preferred stock is considered to be credit-related if the preferred stock had an NAIC/SVO rating classification of "4", "5" or "6" at any time during the holding period.

A realized gain or loss on a mortgage loan is considered to be credit-related if interest is more than 90 days past due, the mortgage loan is in the process of foreclosure or in the course of voluntary conveyance or the terms of the mortgage loan have been restructured

during the prior two years. Permanent impairment write downs are also treated as credit-related losses.

Unrealized Capital Gains and Losses

Unrealized gains and losses are summarized by subcomponent and included in the reserve computation. If the equity method of accounting is used to account for the operating results of affiliated companies, the amount of the undistributed income or loss less the amount of any dividends received is to be included as an unrealized capital gain or loss when computing the common stock subcomponent. However, unrealized gains or losses for affiliated life insurers should be excluded if the affiliated life insurers maintain their own AVR.

Transfers Between Subcomponents

If the sum of a subcomponent's beginning AVR balance, realized gains and losses and unrealized gains and losses is greater than the subcomponent maximum and the balance of its "sister" subcomponent within the same component is less than its subcomponent maximum, the excess must be transferred to the other subcomponent of the default or equity component up to that subcomponent's maximum. If, after these transfers, the default or equity component is greater than the total maximum for the component, the excess may either be transferred to the other component or released to surplus.

If the balance before transfers of any of the subcomponents is negative and the balance of its "sister" subcomponent within the same component is positive, the negative amount should be transferred to the "sister" subcomponent to the extent that the transfer does not reduce the positive balance before transfers of the "sister" subcomponent by more than 50%.

Any other transfers between subcomponents require the approval of the insurance commissioner.

Annual Contribution

The formula for the annual contribution to a subcomponent is as follows: $20\% \times (\text{the subcomponent maximum reserve} - \text{the accumulated balance for the subcomponent})$. The subcomponent maximum reserve amount is calculated by multiplying the ending statement value for each type of assets by the maximum reserve factor. The maximum reserve factor for each type of asset is included in the Purposes and Procedures of the Securities Valuation Office of the NAIC.

Voluntary Contributions

Insurers may make voluntary contributions to any of the subcomponents. However, once made, they become a permanent part of the AVR and may not be removed in subsequent years.

Separate Accounts AVR

Whether or not an AVR is required for separate account assets is primarily dependent on who suffers the loss in the event of asset default or market value loss. An AVR is required for separate account assets unless: 1) the asset default or market value risk is essentially borne directly by the policyholders/contractholders or 2) the regulatory authority for such separate account already explicitly provides for the establishment of a reserve for asset default risk where such reserves are essentially equivalent to the AVR.

If an AVR is required for a separate account, the separate account AVR should be combined with the general account AVR and accounted for in the general account annual statement. Worksheets supporting the separate account portion of the reserve should be included in the separate account annual statement.

Purposes and Procedures of the Securities Valuation Office of the NAIC

For more detailed information regarding the AVR and its calculation, it is recommended that the examiner review the Purposes and Procedures of the Securities Valuation Office of the NAIC and the annual statement forms for calculating the AVR.

11. Loan-Backed and Structured Securities

Loan-backed securities include mortgage pass-through certificates; collateralized mortgage obligations ("CMOs") and other "securitized" loans to the extent that these types of securities are not included in the definition of structured securities below. For loan-backed securities, the payment of principal and/or interest is directly proportional to the principal and/or interest received by the issuer from the mortgage pool or other underlying assets supporting the loan-backed securities.

Structured securities are loan-backed securities that have been divided into two or more classes or "tranches" such that the payment of principal and/or interest for any tranche is allocated in a manner that is not proportional to the principal and/or interest received by the issuer from the mortgage pool or other underlying assets supporting the structured securities. For annual statement purposes, structured securities have been further divided into CMOs and Other Structured Securities.

CMOs

Most CMOs are either issued or backed by the U.S. Government. Therefore, there is very little credit risk associated with the investment and the insurer will most likely receive the par value of the CMO. As a result, most CMOs receive an NAIC/SVO rating classification of "1". However, the NAIC/SVO rating classification does not consider prepayment risk or extension risk. Prepayment risk is the risk that falling interest rates will cause faster prepayment of the underlying mortgages, thus shortening the CMO's duration which causes the insurer to reinvest assets sooner than anticipated at potentially less advantageous rates. Conversely, extension risk is the risk that rising interest rates

will slow repayment of the underlying mortgages, thus lengthening the duration of the CMO. As a result, cash flows are much more unpredictable for CMOs than for traditional bonds.

FLUX Analysis

FLUX analysis, which is available to the examiner through the NAIC State Data Network, has been designed to evaluate the variability of cash flows on CMOs. While high FLUX scores are not necessarily indicative of concerns, they do signify CMOs with potential for highly variable cash flows, and the examiner should consider further analysis in those instances where an insurer holds a significant amount of CMOs with high FLUX scores. This additional analysis might include having the CMOs modeled by an actuary as a part of a cash flow analysis.

Revaluing CMOs

Since CMOs are highly sensitive to prepayment rates, assumptions should be reviewed at least annually for all CMOs and at least quarterly for those CMOs which have the potential for loss of a portion of the original investment due to changes in interest rates or prepayments. Any changes in prepayment assumptions and the resulting cash flows should be considered when determining the carrying value of the CMO in periods after purchase.

Securities should be revalued using the new prepayment assumptions resulting from the annual or quarterly reviews. The effective yield is determined based on the anticipated cash flows of the CMO resulting from the assumed prepayment rates of the underlying loans. For variable rate CMOs or "floaters", the insurer should use a constant rate of interest determined as of the date of the calculation.

Both the prospective and retrospective adjustment methodologies are acceptable when revaluing CMOs. These methods each require that the effective yield be recalculated at each reporting date if there has been a change in the underlying assumptions. An insurer must choose one of these methods and apply it consistently for each type of CMO.

The prospective method recognizes, through the recalculation of the effective yield to be applied to future periods, the effects of all past cash flows whose amounts differ from those estimated earlier and the effects of changes in projected cash flows. Under the prospective method, the recalculated effective yield will cause the carrying value of the CMO to equal the present value of anticipated future cash flows. No change in the carrying value of the CMO is required under this method unless the undiscounted expected future cash flows are less than the carrying value of the CMO.

The retrospective method changes both the yield and the carrying value so that expected future cash flows produce a return on the CMO equal to the return now expected over the life of the CMO as measured from the date of acquisition. Under the retrospective method, the recalculated effective yield will equate the present value of the actual and

anticipated cash flows to the original cost of the CMO. Accordingly, the carrying value of the CMO is increased or decreased to the amount that would have resulted had the revised yield been applied since inception.

For more information regarding the revaluation of CMOs, it is recommended that the examiner review the NAIC Accounting Practices and Procedures Manual for Life and Health Insurers or for Property/Casualty Insurers.

12. Derivative Instruments

Derivative instruments are financial market instruments which have a price, performance, value or cash flow that is based primarily on the actual or expected price, performance, value or cash flow of one or more underlying interests. Some insurers use derivative instruments (which include options, caps, floors, collars, swaps, forwards and futures) to hedge against the risk of change in value, yield, price, cash flow or quantity or degree of exposure with respect to the insurer's assets, liabilities or expected future cash flows. Derivative instruments should only be acquired by sophisticated insurers because they are very complex investments. If an insurer has significant investments in derivative instruments, it is important for the examiner to understand the impact that these derivative instruments have on the risk return profile of the insurer's cash market investment portfolio under different scenarios. This will probably require the examiner to obtain the assistance of an actuary.

Definitions

As noted in the NAIC Accounting Practices and Procedures Manuals for Life and Health Insurers and for Property/Casualty Insurers, the following definitions are used to report derivative instruments in Schedule DB of the annual statement.

An underlying interest is the asset(s), liability (ies) or other interest(s) underlying a derivative instrument, including, but not limited to, any one or more securities, currencies, rates, indices, commodities, derivative instruments or other financial market instruments.

An option is an agreement giving the buyer the right to buy or receive, sell or deliver, enter into, extend or terminate, or effect a cash settlement based on the actual or expected price level, performance or value of, one or more underlying interests.

A cap is an agreement obligating the seller to make payments to the buyer, each payment under which is based on the amount, if any, that a reference price, level, performance or value of one or more underlying interests exceeds a predetermined number.

A floor is an agreement obligating the seller to make payments to the buyer, each payment under which is based on the amount, if any, that a predetermined number exceeds a reference price, level, performance or value of one or more underlying interests.

A collar is an agreement to receive payments as the buyer of an option, cap or floor and to make payments as the seller of a different option, cap or floor.

A swap is an agreement to exchange or net payments at one or more times based on the actual or expected price, level, performance or value of one or more underlying interests.

A forward is an agreement, not traded on an exchange, board of trade or contract market, to make or take delivery of, or effect a cash settlement based on the actual or expected price, level, performance or value of, one or more underlying interests.

A futures is an agreement, traded on an exchange, board of trade or contract market, to make or take delivery of, or effect a cash settlement based on the actual or expected price, level, performance or value of, one or more underlying interests.

Hedging

For a derivative instrument to qualify as a hedge the item to be hedged must expose the insurer to a risk and the designated derivative transaction must reduce that exposure. For example, an insurer may hedge assets, liabilities or future cash flows which have been acquired or incurred, or which the insurer anticipates acquiring or incurring, because of a risk of change in value, yield, price, cash flow, quantity or exposure.

Prior to termination of derivative instruments used in hedging transactions, the derivative instruments should be accounted for by the insurer in a manner consistent with the item being hedged. Upon termination, the gains and losses from the derivative instrument should be used to adjust the basis of the hedged item. An alternative to this treatment is to mark the derivative instruments to market value from inception to termination recognizing gains and losses currently. This alternative is generally used in instances where it is difficult or impractical to allocate gains and losses to specific hedged assets or liabilities.

Insurers should establish specific criteria at the inception of a hedge to determine whether or not the hedge is effective and apply the criteria based on actual hedge results on an ongoing basis. If a derivative instrument ceases to be an effective hedge, the insurer should mark the derivative instrument to market value and recognize any gain or loss currently to the extent that it has not been offset by the effects of changes on the item hedged.

For more information regarding specific accounting guidance for each type of derivative instrument and documentation requirements for insurers with derivative instruments, it is recommended that the examiner review the NAIC Accounting Practices and Procedures Manual for Life and Health Insurers or for Property/Casualty Insurers.

13. Loss Reserve Discounting

Statutory accounting principles generally require property/casualty insurers to reserve a

whole dollar currently for the future payment of every dollar of unpaid losses (both reported and incurred but not reported). However, as noted in the NAIC Accounting Practices and Procedures Manual for Property/Casualty Insurers, present value discounting of property/casualty loss reserves is a prescribed statutory accounting practice in instances of fixed and determinable payments such as those resulting from workers' compensation tabular indemnity reserves and long-term disability claims. In addition, some state insurance departments may permit insurers to discount certain other long-tail liability lines of business, such as medical malpractice, on a non-tabular basis. All discounting, other than tabular discounting, must be approved by the domiciliary state insurance department and must be disclosed in Schedule P of the annual statement.

Tabular reserves are defined as indemnity reserves calculated using discounts determined with reference to actuarial tables which incorporate interest and contingencies such as mortality, inflation or recovery from disability applied to a reasonably determinable stream of payments.

Schedule P-Part 1 is required to be completed gross of non-tabular discounting and Schedule P-Parts 2 through 6 are required to be completed gross of all discounting. In addition, if loss reserves are discounted, the Underwriting and Expense Exhibit is to be completed net of discount and the use of discounting is required to be disclosed in the Notes to Financial Statements, including a discussion of the discount rates used and the basis for using those rates.

14. Unearned Premiums

Statutory accounting principles require that premiums be earned over the life of the insurance contract or policy. At any point prior to expiration, the insurer is required to establish a pro rata portion of the premium as a liability to cover the remaining policy term. The unearned premium reserve represents the insurer's unearned premium liability for all policies in-force.

One of the more common methods used by insurers to compute the unearned premium reserve is the monthly pro rata method. Under a pro rata method, premium writings are assumed to occur evenly throughout the period. The monthly pro rata method assumes that, on average, the same amount of business is written each day of the month. Therefore, the mean will be the middle of the month. As a result, one-year premiums written in any month will be considered to be $1/24$ earned in that month, regardless of whether an individual policy was written on the first, middle or last day of the month. In each of the succeeding months, $1/12$ of the premium will be earned until the last month when the remaining $1/24$ of the premium will be earned. For example, as noted in the NAIC Accounting Practices and Procedures Manual for Property/Casualty Insurers, one-year premiums written during the first three months of a year have the following amounts

unearned at the end of the year: premiums written in January are 1/24 unearned; premiums written in February are 3/24 unearned; and premiums written in March are 5/24 unearned.

For more information regarding unearned premiums including special situations involving: 1) retrospective rated policies; 2) claims made extended reporting coverage options relating to death, disability or retirement; and 3) warranty insurance reserves, it is recommended that the examiner review the NAIC Accounting Practices and Procedures Manual for Property/Casualty Insurers.

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Additional Explanatory Material:

1. Accounting Practices and Procedures Manual for Property/Casualty Insurance Companies, NAIC, 2003.
2. Accounting Practices and Procedures Manual for Life, Accident and Health Insurance Companies, NAIC, 2003.
3. Annual Statement Instructions for Property/Casualty Insurance Companies, NAIC, 2003.
4. Annual Statement Instructions for Life, Accident and Health Insurance Companies, NAIC, 2003.
5. Purposes and Procedures of the Securities Valuation Office of the National Association of Insurance Commissioners, NAIC, December 31, 2002.
6. NAIC Property/Casualty Risk-Based Capital Report, NAIC, 2002.
- 7.

Section 8: Risk-Based Capital: Life RBC Formula:

Analyst Reference Guide-F. RBC pg 75, 2nd paragraph

Section 8: Risk-Based Capital: PC RBC Formula:

Analyst Reference Guide-E. RBC pg 75-76, 2nd paragraph

Section 8: NAIC RBC for Insurers Model Act

Analyst Reference Guide-E. RBC pg 75-76, 2nd paragraph

8. Risk-Based Capital (RBC) for Insurers Model Act, NAIC, 2002.
9. AICPA Professional Standards, Volume 1-U.S. Auditing Standards, AICPA, 1994.

10: Loan-Backed and Structured Securities

NAIC Securities Valuation Manual, Section 2. SSAP 43 & 27 and the Analyst Reference Guide, section B. Investments under Procedures 9 & 11 discuss Mortgage Backed Securities or the MultiClass Residential Mortgage Backed Securities.

11: Derivative Instruments:

Accounting Practices and Procedures: SSAP 31: 31-3 through 31-5

12: Loss Reserve Discounting:

Accounting Practices and Procedures: SSAP 65: 65-4

13: Unearned Premiums

Accounting Practices and Procedures: SSAP 53: 53-4