

## STUDY HINTS FOR THE LEVEL II CFA EXAM

The Level II CFA exam will be 50% item set (multiple choice) and 50% essay. Asset Valuation (Equity, Debt and Derivative Investments) and Portfolio Management will be essay questions and problems. These sections will be tested in the morning.

The afternoon session of the exam will cover Ethics, Economics, Quantitative Methods, and Financial Statement Analysis. These will be tested in the form of item sets (a "story" or data set, followed by several multiple-choice questions pertaining to the information given in the "story" or data set).

### **Read the exam rules on pages 14-15 of the AIMR CFA Level II Study Guide.**

Specifically, note that only two brands of calculators are permitted for the exam: the HP 12C and the TI BAII Plus. Answers to multiple choice questions will be recorded by darkening ovals on answer sheets. **No. 2 or HB pencils must be used to record multiple-choice answers.** Essay answers should be written using blue or black ink pens and you must write your answers in the space provided to answer each question. It is suggested that you bring several approved pencils and pens to the exam.

The Level II exam is expected to cover a *sampling* of the topics that are included in the reading assignments. The LOS's should be used as a guide to determine what topics are likely to be sampled for inclusion on the exam. New topics, assigned for the first time this year, and topics that have not been previously tested have an above-average probability of appearing on the exam. As a guide to final preparation for the exam, we suggest that you review the following materials in the *Stalla Review for the CFA Exam*:

### **Ethics (10% of the exam):**

The Ethics questions will be in the form of item set (multiple-choice questions) similar to those found in the Practice Exams book as well as in some of the Homework problems found in the Ethics section of *Stalla Review for the CFA Exam*.

At Level II, the exam tends to concentrate on Standards IV and V (L1-13 to L1-44). Also, pay special attention to the corporate governance article on L1-45 to L1-48 and the Professional Conduct Proceedings Rules, specifically sections B and C on pages L1-61 and L1-62.

Reviewing the pages indicated here and doing practice exams and homework problems provided in our materials should lead to a highly successful result in the Ethics portion of the exam.

### **Quantitative Methods (10% of the exam):**

Traditionally, multiple regression and correlation analysis has appeared on the Level II exam. In many instances, AIMR will provide the regression output, including an ANOVA table, and expect the candidate to use this data and perform hypothesis tests on

the output. This material is covered at L2-49 through L2-72. Be sure to understand what tests are used to determine if heteroskedasticity, serial correlation, and multicollinearity exist.

When reviewing Hypothesis Testing, place an emphasis on being able to formulate the null and alternative hypotheses, select and look-up the appropriate test statistic, and make the statistical decision. Do not memorize how to calculate the t or chi-square value, as they are commonly provided. The material covered on pages L2-1 to L2-14 has traditionally appeared on the Level II exam.

### **Economics (10% of the exam):**

The Economics portion of the exam should be relatively easy if you read the assigned material.

- The article on wealth accumulation and social choice (page L3-1 through L3-12) is new this year and is likely to have at least a couple of questions asked from it. The growth accounting equation is a probably topic, along with some of the theory.
- International currency markets, L3-13 to L3-30, is a review of Level I material. AIMR does test this material, although lightly, and it is critical to other sections of the curriculum (accounting and derivatives). Review this material only if you are uncomfortable with foreign exchange relationships.
- The parity relationships on pages L3-31 to L3-48 are extremely important and should be reviewed.
- The material on pages L3-49 to L3-59 is new and is likely to be tested, with questions on determining the change in the real exchange rate (L3-51) and calculating the expected exchange rate (L3-53).
- Finally, you should be familiar with the stages in a product's life cycle, as shown on L3-63.

### **Financial Statement Analysis (20% of the exam):**

Financial Statement Analysis traditionally has been the hardest part of the exam. At Level II the number of topics covered are not as wide, but in-depth knowledge is required. Major topics that are likely to be covered in this area are:

- Financial ratios are rarely tested as a stand-alone topic. It is more likely that you will have to calculate some ratios as a part of other problems. The emphasis is on more commonly found ratios, such as the interest coverage, debt-to-equity, current ratio, and return on equity.
- AIMR has added to its readings on intercorporate investments, with the new reading covering mark to market. Be sure to understand the cost or market method on L4-24, mark to market on L4-27 to L4-29, and the equity method at L4-30.
- You may have to do a proportionate consolidation, as shown at L4-36 and L4-37.

- AIMR has revised its assigned reading on business combinations, which allows the testing of the pooling and purchase methods. Be prepared to do a purchase/pooling problem similar to our example at L4-43 to L4-48. Also, be sure to understand the different treatment of goodwill between IASB and U.S. GAAP (L4-53).
- Accounting for foreign operations, all-current and temporal methods, is quite likely to be on the exam. Review the material on pages L5-1 to L5-13.
- The assigned reading on accounting for pension benefits is quite detailed. Focus on the LOS's and you will find this section easier than you may suspect. The LOS's emphasize how changes in assumptions (L6-8 to L6-10) affect the pension obligation and pension expense.
- The final accounting section is on how to adjust the financial statements. Be prepared to make a few adjustments to a balance sheet, income statement, and cash flow statement. Adjustments that are most likely will be to convert a LIFO balance sheet to FIFO and to adjust the balance sheet and income statement for operating leases or take-or-pay contracts.

### **Equity Analysis (20% of exam):**

AIMR adopted a new equity textbook this year. The material covered has expanded to include residual income valuation models. In the equity analysis section, the key points to review include:

- Porter's competitive analysis, or a variation of, is tested frequently. The testing is usually quite easy. Be sure to know the five basic competitive forces (L7-18 through L7-21), but do not memorize the subtopics under each. Also, be sure to know the three generic strategies, including their risks. This is covered on pages L7-22 to L7-25.
- Review EVA and MVA on pages L7-30 to L7-32.
- The material on finding the discount rate, pages L8-5 through L8-7, should be well understood.
- The material on modifying the Gordon growth model to find a justified leading and trailing price-to-earnings ratio is likely to be tested. This is covered at L8-19 to L8-20 and L10-11 to L10-12.
- AIMR often tests on the dividend discount model (DDM). Be sure to be able to find the value of a stock using a two-stage DDM, as shown in the example on L8-25 and L8-26.
- The sustainable growth rate equation and DuPont system are tested often (L8-37 to L8-38).
- You might have to write an essay comparing DDM with free cash flow valuation, as discussed at L9-1 to L9-3.
- Know how to calculate the free cash flow to the firm (FCFF) and free cash flow to equity (FCFE), as shown at L9-4 through L9-8.
- Be able to do a two-stage FCFF or FCFE valuation, similar to the examples at L9-22 to L9-23 and L9-26 to L9-27.

- The next section, L9-30 through L9-48, is on residual income valuation. This is new this year. Be sure to know how to calculate residual income (L9-30) and use the basic residual income model (L9-32 to L9-34). Also, for residual income valuation, know three advantages, two disadvantages, and its applicability (L9-48).
- Understand the LOS's regarding P/E, P/S, and P/B ratios (L10-4 through L10-21).
- For closely held valuations, understand the factors that determine the size of the marketability discount (L10-39 to L10-40) and the control premium (L10-45).
- A potential essay is on the venture capital process, L10-59 through L10-65. Keep your focus on the four LOS's associated with this reading.

### **Fixed Income Analysis (10% of the exam):**

Fixed income analysis may be one of the harder sections of the exam because the material is detailed and complicated. Topics that are likely to be covered on the exam include:

- Credit analysis is tested often, be sure to review the material at L11-1 to L11-14.
- Be sure to know how to calculate duration and convexity, and calculate the expected price change for a bond (L11-22 to L11-23).
- AIMR tests the theories on the term structure of interest rates (L12-5 to L12-8), so be prepared to write an essay explaining following theories: expectations (including pure expectations, liquidity, and preferred habitat theories) and market segmentation. Be able to calculate a spot and forward rates (L12-9 to L12-14).
- You might have to calculate or describe the use of key rate durations (L11-16 to L11-18).
- Binomial interest rate trees are very likely to be covered on the exam, since they were not on the exam the last two years. You will most likely be given a completed binomial interest rate tree (showing the forward rates, coupons and each nodal value) and then asked to modify the result assuming that the bond being valued is callable or puttable. The rule for whether the bond is called or put will be provided and the candidate will have to use this rule to recalculate some of the nodes and find the bond's value. Therefore, review the technique on pages L12-32 to L12-35. In addition, be able to calculate the embedded option's value, as shown at L12-40 and L12-41.
- Convertible bonds have been tested the past two years and are unlikely to be tested this year.
- Mortgage-backed (mortgage passthroughs and CMOs) and other asset-backed securities (L13-1 to L13-38) are traditionally on the exam, but not in great detail. Know the basics, especially prepayment risk.
- Be sure to understand spread analysis (L13-27 to L13-33), including why the binomial model cannot be used to value a mortgage-backed security (L13-30).
- Structured bonds and notes have not been tested in some time and have a reasonable probability of being on the exam. Be sure to understand the different types, as discussed on pages L13-39 to L13-42.

- **Derivative Instruments (10% of the exam):**

Traditionally, the derivative instruments portion of the Level II exam has been somewhat difficult. The emphasis has been on valuing various kinds of futures contracts, options, and swaps.

- Be prepared to value a futures contract using the cost-of-carry relationship.
- Understand the steps to do a cash-and-carry or reverse cash-and-carry arbitrage and be able to calculate the arbitrage profit.
- Know the definitions of backwardation (L14-13), normal backwardation (L14-15), and contango (L14-16).
- Expect a simple hedging problem (L14-40 to L14-53).
- Be able to discuss and calculate the cash flows for a plain vanilla interest rate, currency, or equity swap (L14-55 to L14-69).
- Review the economic analysis of swaps (L14-70 to L14-79), but do not emphasize the detailed calculations on pages L14-77 and L14-78. The alternative test solution on L14-78 should be sufficient.
- Understand the option “Greeks” on pages L15-9 through L15-13.
- If given the model’s formulas, be prepared to value a call and/or put option using one of the following models: the single or two-stage binomial, Black-Scholes, or Merton (L15-14 to L15-21)
- Be able to calculate annualized volatility based on daily, weekly, or monthly volatility (L15-22).
- Be prepared to analyze and draw the payoff diagram for an option strategy.
- Put-call parity, including synthetic positions, has not been tested in several years and is probable. Review pages L15-35 to L35-39 if you are uncomfortable with this topic.
- Know how to value a bond option using the binomial interest rate tree (L15-44 to L15-46).
- Understand how options on interest rate caps and floors work and be able to value an interest rate cap or floor (L15-50 to L15-57).

**Portfolio Management (10% of the exam):**

Much of the material in the Portfolio Management section is a repeat of what you had at Level I. This repeating material, L16-1 through L16-28, should be an easy review for you. Keep the focus of your efforts on answering the LOS’s.

AIMR did add a new reading on the portfolio management process (L16-29 to L16-44). This is likely to be tested. They may provide a story on a potential client and ask you to discuss the steps in the process.

Good Luck!!