CFA L2 | Summary of Changes | 2024

Summary: Total Number of Chapters: *47*

	No. of LOS	% of Total
Same	378	96%
New	9	2%
Changes	7	2%
Total	394	100%
Deleted	28	7%

New
Changes
Deleted

Reading No.	Reading Name	No. of LOS		
		New	Changes	Deleted
34	Hedge Fund Strategies	9		
9	Employee Compensation-Post-Employment and Share-Based		5	3
24	Private Company Valuation		2	1
33	Real Estate Investments			5
-	Private Equity Investments			9
-	Trading Costs and Electronic Markets			10

Changes in Reading

New
Change
Deleted

Subject	Reading No 2024	Reading Name	Details of Changes 2023-24	Reading No 2023
Quantitative Methods	1	Multiple Regression		1
	2	Time-Series Analysis		2
	3	Machine Learning		3
	4	Big Data Projects		4
Economics	5	Currency Exchange Rates-Understanding Equilibrium Value		5
	6	Economic Growth		6
	7	Economics of Regulation		7
Financial Statement Analysis	8	Intercorporate Investments		8
	9	Employee Compensation-Post-Employment and Share-Based	5 LOS Changes, 3 LOS Deleted, hence do not do this now. Will share new Lectures for the entire Chapter	9
	10	Multinational Operations		10
	11	Analysis of Financial Institutions		11
	12	Evaluating Quality of Financial Reports		12
	13	Integration of Financial Statement Analysis Techniques		13
	14	Financial Statement Modeling		14
Corporate Issuers	15	Analysis of Dividends and Share Repurchases		15
	16	Environmental, Social, and Governance (ESG) Considerations in Investment Analysis		16
	17	Cost of Capital-Advanced Topics		17
	18	Corporate Restructuring		18
Equity	19	Equity Valuation-Applications and Processes		19
	20	Discounted Dividend Valuation		20
	21	Free Cash Flow Valuation		21
	22	Market-Based Valuation-Price and Enterprise Value Multiples		22
	23	Residual Income Valuation		23
	24	Private Company Valuation	1 LOS Deleted Debt financing, Levered Unlevered Beta added and Prior Transaction Method not in Schweser but there in Institute Material. New LOS A, B, C, D, E, F, G, H, I corresponds to old LOS A, B, C, E, F, (J+C), D, G, H with few changes.	24
Fixed Income	25	The Term Structure and Interest Rate Dynamics		25
	26	The Arbitrage-Free Valuation Framework		26
	27	Valuation and Analysis of Bonds with Embedded Options		27
	28	Credit Analysis Models		28
	29	Credit Default Swaps		29
Derivatives	30	Pricing and Valuation of Forward Commitments		30
	31	Valuation of Contingent Claims		31
Alternative Investments	32	Introduction to Commodities and Commodity Derivatives		34
	33	Real Estate Investments	5 LOS deleted	32
	34	Hedge Fund Strategies		-
	-	Private Equity Investments		33
Portfolio	35	Exchange-Traded Funds-Mechanics and Applications		35

Subject	Reading No 2024	Reading Name	Details of Changes 2023-24	Reading No 2023
Portfolio	36	Using Multifactor Models		36
	37	Measuring and Managing Market Risk		37
	38	Backtesting and Simulation		38
	39	Economics and Investment Markets		39
	40	Analysis of Active Portfolio Management		40
	-	Trading Costs and Electronic Markets		41
Ethics	41	Code of Ethics and Standards of Professional Conduct		42
	42	Guidance for Standards I–VII		43
	43	Application of the Code and Standards-Level II		44

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Changes in LOS

New
Change
Deleted

Reading No.	Reading Name	Learning Outcome	2024 LOS	2023 LOS	Changes
		Quantitative Methods			
1	Multiple Regression	Describe the types of investment problems addressed by multiple linear regression and the regression process	1a	1a	
		Formulate a multiple linear regression model, describe the relation between the dependent variable and several independent variables, and interpret estimated regression coefficients	1b	1b	
		Explain the assumptions underlying a multiple linear regression model and interpret residual plots indicating potential violations of these assumptions	1c	1c	
		Evaluate how well a multiple regression model explains the dependent variable by analyzing ANOVA table results and measures of goodness of fit	1d	1d	
		Formulate hypotheses on the significance of two or more coefficients in a multiple regression model and interpret the results of the joint hypothesis tests	1e	1e	
		Calculate and interpret a predicted value for the dependent variable, given the estimated regression model and assumed values for the independent variable	1f	1f	
		Describe how model misspecification affects the results of a regression analysis and how to avoid common forms of misspecification	1g	1g	
		Explain the types of heteroskedasticity and how it affects statistical inference	1h	1h	
		Explain serial correlation and how it affects statistical inference	1i	1i	
		Explain multicollinearity and how it affects regression analysis	1j	1j	
		Describe influence analysis and methods of detecting influential data points	1k	1k	
		Formulate and interpret a multiple regression model that includes qualitative independent variables	1l	1l	
		Formulate and interpret a logistic regression model	1m	1m	
2	Time-Series Analysis	Calculate and evaluate the predicted trend value for a time series, modeled as either a linear trend or a log-linear trend, given the estimated trend coefficients	2a	2a	
		Describe factors that determine whether a linear or a log-linear trend should be used with a particular time series and evaluate limitations of trend models	2b	2b	
		Explain the requirement for a time series to be covariance stationary and describe the significance of a series that is not stationary	2c	2c	
		Describe the structure of an autoregressive (AR) model of order p and calculate one- and two-period-ahead forecasts given the estimated coefficients	2d	2d	
		Explain how autocorrelations of the residuals can be used to test whether the autoregressive model fits the time series	2e	2e	
		Explain mean reversion and calculate a mean-reverting level	2f	2f	
		Contrast in-sample and out-of-sample forecasts and compare the forecasting accuracy of different time-series models based on the root mean squared error criterion	2g	2g	
		Explain the instability of coefficients of time-series models	2h	2h	
		Describe characteristics of random walk processes and contrast them to covariance stationary processes	2i	2i	
		Describe implications of unit roots for time-series analysis, explain when unit roots are likely to occur and how to test for them, and demonstrate how a time series with a unit root can be transformed so it can be analyzed with an AR model	2j	2j	
		Describe the steps of the unit root test for nonstationarity and explain the relation of the test to autoregressive time-series models	2k	2k	

Reading No.	Reading Name	Learning Outcome	2024 LOS	2023 LOS	Changes
2	Time-Series Analysis	Explain how to test and correct for seasonality in a time-series model and calculate and interpret a forecasted value using an AR model with a seasonal lag	2l	2l	
		Explain autoregressive conditional heteroskedasticity (ARCH) and describe how ARCH models can be applied to predict the variance of a time series	2m	2m	
		Explain how time-series variables should be analyzed for non stationarity and/or cointegration before use in a linear regression	2n	2n	
		Determine an appropriate time-series model to analyze a given investment problem and justify that choice	2o	2o	
3	Machine Learning	Describe supervised machine learning, unsupervised machine learning, and deep learning	3a	3a	
		Describe overfitting and identify methods of addressing it	3b	3b	
		Describe supervised machine learning algorithms—including penalized regression, support vector machine, k-nearest neighbor, classification and regression tree, ensemble learning, and random forest—and determine the problems for which they are best suited	3c	3c	
		Describe unsupervised machine learning algorithms—including principal components analysis, k-means clustering, and hierarchical clustering—and determine the problems for which they are best suited	3d	3d	
		Describe neural networks, deep learning nets, and reinforcement learning	3e	3e	
4	Big Data Projects	Identify and explain steps in a data analysis project	4a	4a	
		Describe objectives, steps, and examples of preparing and wrangling data	4b	4b	
		Evaluate the fit of a machine learning algorithm	4c	4c	
		Describe objectives, methods, and examples of data exploration	4d	4d	
		Describe methods for extracting, selecting and engineering features from textual data	4e	4e	
		Describe objectives, steps, and techniques in model training	4f	4f	
		Describe preparing, wrangling, and exploring text-based data for financial forecasting	4g	4g	
Economics					
5	Currency Exchange Rates- Understanding Equilibrium Value	Calculate and interpret the bid–offer spread on a spot or forward currency quotation and describe the factors that affect the bid–offer spread	5a	5a	
		Identify a triangular arbitrage opportunity and calculate its profit, given the bid–offer quotations for three currencies	5b	5b	
		Explain spot and forward rates and calculate the forward premium/discount for a given currency	5c	5c	
		Calculate the mark-to-market value of a forward contract	5d	5d	
		Explain international parity conditions (covered and uncovered interest rate parity, forward rate parity, purchasing power parity, and the international Fisher effect)	5e	5e	
		Describe relations among the international parity conditions	5f	5f	
		Evaluate the use of the current spot rate, the forward rate, purchasing power parity, and uncovered interest parity to forecast future spot exchange rates	5g	5g	
		Explain approaches to assessing the long-run fair value of an exchange rate	5h	5h	
		Describe the carry trade and its relation to uncovered interest rate parity and calculate the profit from a carry trade	5i	5i	
		Explain how flows in the balance of payment accounts affect currency exchange rates	5j	5j	
		Explain the potential effects of monetary and fiscal policy on exchange rates	5k	5k	
		Describe objectives of central bank or government intervention and capital controls and describe the effectiveness of intervention and capital controls	5l	5l	
		Describe warning signs of a currency crisis	5m	5m	
6	Economic Growth	Compare factors favoring and limiting economic growth in developed and developing economies	6a	6a	

Reading No.	Reading Name	Learning Outcome	2024 LOS	2023 LOS	Changes
6	Economic Growth	Describe the relation between the long-run rate of stock market appreciation and the sustainable growth rate of the economy	6b	6b	
		Explain why potential GDP and its growth rate matter for equity and fixed income investors	6c	6c	
		Contrast capital deepening investment and technological progress and explain how each affects economic growth and labor productivity	6d	6d	
		Demonstrate forecasting potential GDP based on growth accounting relations	6e	6e	
		Explain how natural resources affect economic growth and evaluate the argument that limited availability of natural resources constrains economic growth	6f	6f	
		Explain how demographics, immigration, and labor force participation affect the rate and sustainability of economic growth	6g	6g	
		Explain how investment in physical capital, human capital, and technological development affects economic growth	6h	6h	
		Compare classical growth theory, neoclassical growth theory, and endogenous growth theory	6i	6i	
		Explain and evaluate convergence hypotheses	6j	6j	
		Describe the economic rationale for governments to provide incentives to private investment in technology and knowledge	6k	6k	
		Describe the expected impact of removing trade barriers on capital investment and profits, employment and wages, and growth in the economies involved	6l	6l	
7	Economics of Regulation	Describe the economic rationale for regulatory intervention	7a	7a	
		Explain the purposes of regulating commerce and financial markets	7b	7b	
		Describe anticompetitive behaviors targeted by antitrust laws globally and evaluate the antitrust risk associated with a given business strategy	7c	7c	
		Describe classifications of regulations and regulators	7d	7d	
		Describe uses of self-regulation in financial markets	7e	7e	
		Describe regulatory interdependencies and their effects	7f	7f	
		Describe tools of regulatory intervention in markets	7g	7g	
		Describe benefits and costs of regulation	7h	7h	
		Describe the considerations when evaluating the effects of regulation on an industry	7i	7i	
Financial Statement Analysis					
8	Intercorporate Investments	Describe the classification, measurement, and disclosure under International Financial Reporting Standards (IFRS) for 1) investments in financial assets, 2) investments in associates, 3) joint ventures, 4) business combinations, and 5) special purpose and variable interest entities	8a	8a	
		Compare and contrast IFRS and US GAAP in their classification, measurement, and disclosure of investments in financial assets, investments in associates, joint ventures, business combinations, and special purpose and variable interest entities	8b	8b	
		Analyze how different methods used to account for intercorporate investments affect financial statements and ratios	8c	8c	
9	Employee Compensation-Post-Employment and Share-Based	Contrast types of employee compensation	9a	9a	
		Explain how share-based compensation affects the financial statements	9b	9a	
		Explain how to forecast share-based compensation expense and shares outstanding in a financial statement model and their use in valuation	9c	9g	
		Explain how post-employment benefits affect the financial statements	9d	9e+9f	
		Explain financial modeling and valuation considerations for post-employment benefits	9e	9h	
		explain and calculate measures of a defined benefit pension obligation (i.e., present value of the defined benefit obligation and projected benefit obligation) and net pension liability (or asset)		9b	
		describe the components of a company's defined benefit pension costs		9c	

Reading No.	Reading Name	Learning Outcome	2024 LOS	2023 LOS	Changes
9	Employee Compensation- Post- Employment and Share- Based	explain and calculate the effect of a defined benefit plan's assumptions on the defined benefit obligation and periodic pension cost		9d	
10	Multinational Operations	Compare and contrast presentation in (reporting) currency, functional currency, and local currency	10a	10a	
		Describe foreign currency transaction exposure, including accounting for and disclosures about foreign currency transaction gains and losses	10b	10b	
		Analyze how changes in exchange rates affect the translated sales of the subsidiary and parent company	10c	10c	
		Compare the current rate method and the temporal method, evaluate how each affects the parent company's balance sheet and income statement, and determine which method is appropriate in various scenarios	10d	10d	
		Calculate the translation effects and evaluate the translation of a subsidiary's balance sheet and income statement into the parent company's presentation currency	10e	10e	
		Analyze how the current rate method and the temporal method affect financial statements and ratios	10f	10f	
		Analyze how alternative translation methods for subsidiaries operating in hyperinflationary economies affect financial statements and ratios	10g	10g	
		Describe how multinational operations affect a company's effective tax rate	10h	10h	
		Explain how changes in the components of sales affect the sustainability of sales growth	10i	10i	
		Analyze how currency fluctuations potentially affect financial results, given a company's countries of operation	10j	10j	
11	Analysis of Financial Institutions	Describe how financial institutions differ from other companies	11a	11a	
		Describe key aspects of financial regulations of financial institutions	11b	11b	
		Explain the CAMELS (capital adequacy, asset quality, management, earnings, liquidity, and sensitivity) approach to analyzing a bank, including key ratios and its limitations	11c	11c	
		Analyze a bank based on financial statements and other factors	11d	11d	
		Describe other factors to consider in analyzing a bank	11e	11e	
		Describe key ratios and other factors to consider in analyzing an insurance company	11f	11f	
12	Evaluating Quality of Financial Reports	Demonstrate the use of a conceptual framework for assessing the quality of a company's financial reports	12a	12a	
		Explain potential problems that affect the quality of financial reports	12b	12b	
		Describe how to evaluate the quality of a company's financial reports	12c	12c	
		Evaluate the quality of a company's financial reports	12d	12d	
		Describe indicators of earnings quality	12e	12e	
		Describe the concept of sustainable (persistent) earnings	12f	12f	
		Explain mean reversion in earnings and how the accruals component of earnings affects the speed of mean reversion	12g	12g	
		Evaluate the earnings quality of a company	12h	12h	
		Evaluate the cash flow quality of a company	12i	12i	
		Describe indicators of balance sheet quality	12j	12j	
		Evaluate the balance sheet quality of a company	12k	12k	
		Describe indicators of cash flow quality	12l	12l	
		Describe sources of information about risk	12m	12m	
13	Integration of Financial Statement Analysis Techniques	Demonstrate the use of a framework for the analysis of financial statements, given a particular problem, question, or purpose (e.g., valuing equity based on comparables, critiquing a credit rating, obtaining a comprehensive picture of financial leverage, evaluating the perspectives given in management's discussion of financial results)	13a	13a	

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Reading No.	Reading Name	Learning Outcome	2024 LOS	2023 LOS	Changes
13	Integration of Financial Statement Analysis Techniques	Identify financial reporting choices and biases that affect the quality and comparability of companies' financial statements and explain how such biases may affect financial decisions	13b	13b	
		Evaluate the quality of a company's financial data and recommend appropriate adjustments to improve quality and comparability with similar companies, including adjustments for differences in accounting standards, methods, and assumptions	13c	13c	
		Evaluate how a given change in accounting standards, methods, or assumptions affects financial statements and ratios	13d	13d	
		Analyze and interpret how balance sheet modifications, earnings normalization, and cash flow statement related modifications affect a company's financial statements, financial ratios, and overall financial condition	13e	13e	
14	Financial Statement Modeling	compare top-down, bottom-up, and hybrid approaches for developing inputs to equity valuation models	14a	14a	
		compare "growth relative to GDP growth" and "market growth and market share" approaches to forecasting revenue	14b	14b	
		evaluate whether economies of scale are present in an industry by analyzing operating margins and sales levels	14c	14c	
		demonstrate methods to forecast cost of goods sold and operating expenses	14d	14d	
		demonstrate methods to forecast non-operating items, financing costs, and income taxes	14e	14e	
		describe approaches to balance sheet modeling	14f	14f	
		demonstrate the development of a sales-based pro forma company model	14g	14g	
		explain how behavioral factors affect analyst forecasts and recommend remedial actions for analyst biases	14h	14h	
		explain how competitive factors affect prices and costs	14i	14i	
		evaluate the competitive position of a company based on a Porter's five forces analysis	14j	14j	
		explain how to forecast industry and company sales and costs when they are subject to price inflation or deflation	14k	14k	
		evaluate the effects of technological developments on demand, selling prices, costs, and margins	14l	14l	
		explain considerations in the choice of an explicit forecast horizon	14m	14m	
		explain an analyst's choices in developing projections beyond the short-term forecast horizon	14n	14n	
Corporate Issuers					
15	Analysis of Dividends and Share Repurchases	describe the expected effect of regular cash dividends, extra dividends, liquidating dividends, stock dividends, stock splits, and reverse stock splits on shareholders' wealth and a company's financial ratios	15a	15a	
		compare theories of dividend policy and explain implications of each for share value given a description of a corporate dividend action	15b	15b	
		describe types of information (signals) that dividend initiations, increases, decreases, and omissions may convey	15c	15c	
		explain how agency costs may affect a company's payout policy	15d	15d	
		explain factors that affect dividend policy in practice	15e	15e	
		calculate and interpret the effective tax rate on a given currency unit of corporate earnings under double taxation, dividend imputation, and split-rate tax systems	15f	15f	
		compare stable dividend with constant dividend payout ratio, and calculate the dividend under each policy	15g	15g	
		describe broad trends in corporate payout policies	15h	15h	
		compare share repurchase methods	15i	15i	
		calculate and compare the effect of a share repurchase on earnings per share when 1) the repurchase is financed with the company's surplus cash and 2) the company uses debt to finance the repurchase	15j	15j	
		calculate the effect of a share repurchase on book value per share	15k	15k	
		explain the choice between paying cash dividends and repurchasing shares	15l	15l	

Reading No.	Reading Name	Learning Outcome	2024 LOS	2023 LOS	Changes
15	Analysis of Dividends and Share Repurchases	calculate and interpret dividend coverage ratios based on 1) net income and 2) free cash flow	15m	15m	
		identify characteristics of companies that may not be able to sustain their cash dividend	15n	15n	
16	Environmental, Social, and Governance (ESG) Considerations in Investment Analysis	describe global variations in ownership structures and the possible effects of these variations on corporate governance policies and practices	16a	16a	
		evaluate the effectiveness of a company's corporate governance policies and practices	16b	16b	
		describe how ESG-related risk exposures and investment opportunities may be identified and evaluated	16c	16c	
		evaluate ESG risk exposures and investment opportunities related to a company	16d	16d	
17	Cost of Capital- Advanced Topics	explain top-down and bottom-up factors that impact the cost of capital	17a	17a	
		Compare methods used to estimate the cost of debt.	17b	17b	
		explain historical and forward-looking approaches to estimating an equity risk premium	17c	17c	
		compare methods used to estimate the required return on equity	17d	17d	
		estimate the cost of debt or required return on equity for a public company and a private company	17e	17e	
		evaluate a company's capital structure and cost of capital relative to peers	17f	17f	
18	Corporate Restructuring	explain types of corporate restructurings and issuers' motivations for pursuing them	18a	18a	
		explain the initial evaluation of a corporate restructuring	18b	18b	
		demonstrate valuation methods for, and interpret valuations of, companies involved in corporate restructurings	18c	18c	
		demonstrate how corporate restructurings affect an issuer's EPS, net debt to EBITDA ratio, and weighted average cost of capital	18d	18d	
		evaluate corporate investment actions, including equity investments, joint ventures, and acquisitions	18e	18e	
		evaluate corporate divestment actions, including sales and spin offs	18f	18f	
		evaluate cost and balance sheet restructurings	18g	18g	
Equity					
19	Equity Valuation- Applications and Processes	define valuation and intrinsic value and explain sources of perceived mispricing	19a	19a	
		explain the going concern assumption and contrast a going concern value to a liquidation value	19b	19b	
		describe definitions of value and justify which definition of value is most relevant to public company valuation	19c	19c	
		describe applications of equity valuation	19d	19d	
		describe questions that should be addressed in conducting an industry and competitive analysis	19e	19e	
		contrast absolute and relative valuation models and describe examples of each type of model	19f	19f	
		describe sum-of-the-parts valuation and conglomerate discounts	19g	19g	
		explain broad criteria for choosing an appropriate approach for valuing a given company	19h	19h	
20	Discounted Dividend Valuation	compare dividends, free cash flow, and residual income as inputs to discounted cash flow models and identify investment situations for which each measure is suitable	20a	20a	
		calculate and interpret the value of a common stock using the dividend discount model (DDM) for single and multiple holding periods	20b	20b	
		calculate the value of a common stock using the Gordon growth model and explain the model's underlying assumptions	20c	20c	
		calculate the value of non-callable fixed-rate perpetual preferred stock	20d	20d	

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Reading No.	Reading Name	Learning Outcome	2024 LOS	2023 LOS	Changes
20	Discounted Dividend Valuation	describe strengths and limitations of the Gordon growth model and justify its selection to value a company's common shares	20e	20e	
		calculate and interpret the implied growth rate of dividends using the Gordon growth model and current stock price	20f	20f	
		calculate and interpret the present value of growth opportunities (PVGO) and the component of the leading price-to-earnings ratio (P/E) related to PVGO	20g	20g	
		calculate and interpret the justified leading and trailing P/Es using the Gordon growth model	20h	20h	
		estimate a required return based on any DDM, including the Gordon growth model and the H-model	20i	20i	
		evaluate whether a stock is overvalued, fairly valued, or undervalued by the market based on a DDM estimate of value	20j	20j	
		explain the growth phase, transition phase, and maturity phase of a business	20k	20k	
		explain the assumptions and justify the selection of the two-stage DDM, the H-model, the three-stage DDM, or spreadsheet modeling to value a company's common shares	20l	20l	
		describe terminal value and explain alternative approaches to determining the terminal value in a DDM	20m	20m	
		calculate and interpret the value of common shares using the two-stage DDM, the H-model, and the three-stage DDM	20n	20n	
		explain the use of spreadsheet modeling to forecast dividends and to value common shares	20o	20o	
		calculate and interpret the sustainable growth rate of a company and demonstrate the use of DuPont analysis to estimate a company's sustainable growth rate	20p	20p	
21	Free Cash Flow Valuation	compare the free cash flow to the firm (FCFF) and free cash flow to equity (FCFE) approaches to valuation	21a	21a	
		explain the ownership perspective implicit in the FCFE approach	21b	21b	
		explain the appropriate adjustments to net income, earnings before interest and taxes (EBIT), earnings before interest, taxes, depreciation, and amortization (EBITDA), and cash flow from operations (CFO) to calculate FCFF and FCFE	21c	21c	
		calculate FCFF and FCFE	21d	21d	
		describe approaches for forecasting FCFF and FCFE	21e	21e	
		explain how dividends, share repurchases, share issues, and changes in leverage may affect future FCFF and FCFE	21f	21f	
		compare the FCFE model and dividend discount models	21g	21g	
		evaluate the use of net income and EBITDA as proxies for cash flow in valuation	21h	21h	
		explain the use of sensitivity analysis in FCFF and FCFE valuations	21i	21i	
		explain the single-stage (stable-growth), two-stage, and three-stage FCFF and FCFE models and justify the selection of the appropriate model given a company's characteristics	21j	21j	
		estimate a company's value using the appropriate free cash flow model(s)	21k	21k	
		describe approaches for calculating the terminal value in a multistage valuation model	21l	21l	
		evaluate whether a stock is overvalued, fairly valued, or undervalued based on a free cash flow valuation model	21m	21m	
22	Market-Based Valuation- Price and Enterprise Value Multiples	contrast the method of comparables and the method based on forecasted fundamentals as approaches to using price multiples in valuation and explain economic rationales for each approach	22a	22a	
		calculate and interpret a justified price multiple	22b	22b	
		describe rationales for and possible drawbacks to using alternative price multiples and dividend yield in valuation	22c	22c	
		calculate and interpret alternative price multiples and dividend yield	22d	22d	

Reading No.	Reading Name	Learning Outcome	2024 LOS	2023 LOS	Changes
22	Market-Based Valuation-Price and Enterprise Value Multiples	calculate and interpret underlying earnings, explain methods of normalizing earnings per share (EPS), and calculate normalized EPS	22e	22e	
		explain and justify the use of earnings yield (E/P)	22f	22f	
		describe fundamental factors that influence alternative price multiples and dividend yield	22g	22g	
		calculate and interpret a predicted P/E, given a cross-sectional regression on fundamentals, and explain limitations to the cross-sectional regression methodology	22h	22h	
		calculate and interpret the justified price-to-earnings ratio (P/E), price-to-book ratio (P/B), and price-to-sales ratio (P/S) for a stock, based on forecasted fundamentals	22i	22i	
		calculate and interpret the P/E-to-growth (PEG) ratio and explain its use in relative valuation	22j	22j	
		calculate and explain the use of price multiples in determining terminal value in a multistage discounted cash flow (DCF) model	22k	22k	
		evaluate whether a stock is overvalued, fairly valued, or undervalued based on comparisons of multiples	22l	22l	
		evaluate a stock by the method of comparables and explain the importance of fundamentals in using the method of comparables	22m	22m	
		explain alternative definitions of cash flow used in price and enterprise value (EV) multiples and describe limitations of each definition	22n	22n	
		calculate and interpret EV multiples and evaluate the use of EV/EBITDA	22o	22o	
		explain sources of differences in cross-border valuation comparisons	22p	22p	
		describe momentum indicators and their use in valuation	22q	22q	
		explain the use of the arithmetic mean, the harmonic mean, the weighted harmonic mean, and the median to describe the central tendency of a group of multiples	22r	22r	
23	Residual Income Valuation	calculate and interpret residual income, economic value added, and market value added	23a	23a	
		describe the uses of residual income models	23b	23b	
		calculate the intrinsic value of a common stock using the residual income model and compare value recognition in residual income and other present value models	23c	23c	
		explain fundamental determinants of residual income	23d	23d	
		explain the relation between residual income valuation and the justified price-to-book ratio based on forecasted fundamentals	23e	23e	
		calculate and interpret the intrinsic value of a common stock using single-stage (constant-growth) and multistage residual income models	23f	23f	
		calculate the implied growth rate in residual income, given the market price-to-book ratio and an estimate of the required rate of return on equity	23g	23g	
		explain continuing residual income and justify an estimate of continuing residual income at the forecast horizon, given company and industry prospects	23h	23h	
		compare residual income models to dividend discount and free cash flow models	23i	23i	
		explain strengths and weaknesses of residual income models and justify the selection of a residual income model to value a company's common stock	23j	23j	
		describe accounting issues in applying residual income models	23k	23k	
24	Private Company Valuation	contrast important public and private company features for valuation purposes	24a	24a	
		describe uses of private business valuation and explain key areas of focus for financial analysts	24b	24b	
		explain cash flow estimation issues related to private companies and adjustments required to estimate normalized earnings	24c	24c	
		explain factors that require adjustment when estimating the discount rate for private companies	24d	24e	

ASWINI BAJAJ

Reading No.	Reading Name	Learning Outcome	2024 LOS	2023 LOS	Changes
24	Private Company Valuation	compare models used to estimate the required rate of return to private company equity (for example, the CAPM, the expanded CAPM, and the build-up approach)	24e	24f	
		explain and evaluate the effects on private company valuations of discounts and premiums based on control and marketability	24f	24j	
		explain the income, market, and asset-based approaches to private company valuation and factors relevant to the selection of each approach	24g	24d	
		calculate the value of a private company using income-based methods	24h	24g	
		calculate the value of a private company using market-based methods and describe the advantages and disadvantages of each method	24i	24h	
		describe the asset-based approach to private company valuation		24i	
Fixed Income					
25	The Term Structure and Interest Rate Dynamics	describe relationships among spot rates, forward rates, yield to maturity, expected and realized returns on bonds, and the shape of the yield curve	25a	25a	
		describe how zero-coupon rates (spot rates) may be obtained from the par curve by bootstrapping	25b	25b	
		describe the assumptions concerning the evolution of spot rates in relation to forward rates implicit in active bond portfolio management	25c	25c	
		describe the strategy of rolling down the yield curve	25d	25d	
		explain the swap rate curve and why and how market participants use it in valuation	25e	25e	
		calculate and interpret the swap spread for a given maturity	25f	25f	
		describe short-term interest rate spreads used to gauge economy-wide credit risk and liquidity risk	25g	25g	
		explain traditional theories of the term structure of interest rates and describe the implications of each theory for forward rates and the shape of the yield curve	25h	25h	
		explain how a bond's exposure to each of the factors driving the yield curve can be measured and how these exposures can be used to manage yield curve risks	25i	25i	
		explain the maturity structure of yield volatilities and their effect on price volatility	25j	25j	
		explain how key economic factors are used to establish a view on benchmark rates, spreads, and yield curve changes	25k	25k	
26	The Arbitrage-Free Valuation Framework	explain what is meant by arbitrage-free valuation of a fixed-income instrument	26a	26a	
		calculate the arbitrage-free value of an option-free, fixed-rate coupon bond	26b	26b	
		describe a binomial interest rate tree framework	26c	26c	
		describe the process of calibrating a binomial interest rate tree to match a specific term structure	26d	26d	
		describe the backward induction valuation methodology and calculate the value of a fixed-income instrument given its cash flow at each node	26e	26e	
		compare pricing using the zero-coupon yield curve with pricing using an arbitrage-free binomial lattice	26f	26f	
		describe pathwise valuation in a binomial interest rate framework and calculate the value of a fixed-income instrument given its cash flows along each path	26g	26g	
		describe a Monte Carlo forward-rate simulation and its application	26h	26h	
		describe term structure models and how they are used	26i	26i	
27	Valuation and Analysis of Bonds with Embedded Options	describe fixed-income securities with embedded options	27a	27a	
		explain the relationships between the values of a callable or putable bond, the underlying option-free (straight) bond, and the embedded option	27b	27b	
		describe how the arbitrage-free framework can be used to value a bond with embedded options	27c	27c	
		explain how interest rate volatility affects the value of a callable or putable bond	27d	27d	

Reading No.	Reading Name	Learning Outcome	2024 LOS	2023 LOS	Changes
27	Valuation and Analysis of Bonds with Embedded Options	explain how changes in the level and shape of the yield curve affect the value of a callable or putable bond	27e	27e	
		calculate the value of a callable or putable bond from an interest rate tree	27f	27f	
		explain the calculation and use of option-adjusted spreads	27g	27g	
		explain how interest rate volatility affects option-adjusted spreads	27h	27h	
		calculate and interpret effective duration of a callable or putable bond	27i	27i	
		compare effective durations of callable, putable, and straight bonds	27j	27j	
		describe the use of one-sided durations and key rate durations to evaluate the interest rate sensitivity of bonds with embedded options	27k	27k	
		compare effective convexities of callable, putable, and straight bonds	27l	27l	
		calculate the value of a capped or floored floating-rate bond	27m	27m	
		describe defining features of a convertible bond	27n	27n	
		calculate and interpret the components of a convertible bond's value	27o	27o	
		describe how a convertible bond is valued in an arbitrage-free framework	27p	27p	
		compare the risk–return characteristics of a convertible bond with the risk–return characteristics of a straight bond and of the underlying common stock	27q	27q	
28	Credit Analysis Models	explain expected exposure, the loss given default, the probability of default, and the credit valuation adjustment	28a	28a	
		explain credit scores and credit ratings	28b	28b	
		calculate the expected return on a bond given transition in its credit rating	28c	28c	
		explain structural and reduced-form models of corporate credit risk, including assumptions, strengths, and weaknesses	28d	28d	
		calculate the value of a bond and its credit spread, given assumptions about the credit risk parameters	28e	28e	
		interpret changes in a credit spread	28f	28f	
		explain the determinants of the term structure of credit spreads and interpret a term structure of credit spreads	28g	28g	
		compare the credit analysis required for securitized debt to the credit analysis of corporate debt	28h	28h	
29	Credit Default Swaps	describe credit default swaps (CDS), single-name and index CDS, and the parameters that define a given CDS product	29a	29a	
		describe credit events and settlement protocols with respect to CDS	29b	29b	
		explain the principles underlying and factors that influence the market's pricing of CDS	29c	29c	
		describe the use of CDS to manage credit exposures and to express views regarding changes in the shape and/or level of the credit curve	29d	29d	
		describe the use of CDS to take advantage of valuation disparities among separate markets, such as bonds, loans, equities, and equity-linked instruments	29e	29e	
Derivatives					
30	Pricing and Valuation of Forward Commitments	describe how equity forwards and futures are priced, and calculate and interpret their no-arbitrage value	30a	30a	
		describe the carry arbitrage model without underlying cashflows and with underlying cashflows	30b	30b	
		describe how interest rate forwards and futures are priced, and calculate and interpret their no-arbitrage value	30c	30c	
		describe how fixed-income forwards and futures are priced, and calculate and interpret their no-arbitrage value	30d	30d	
		describe how interest rate swaps are priced, and calculate and interpret their no-arbitrage value	30e	30e	
		describe how currency swaps are priced, and calculate and interpret their no-arbitrage value	30f	30f	
		describe how equity swaps are priced, and calculate and interpret their no-arbitrage value	30g	30g	

Reading No.	Reading Name	Learning Outcome	2024 LOS	2023 LOS	Changes
31	Valuation of Contingent Claims	describe and interpret the binomial option valuation model and its component terms	31a	31a	
		describe how the value of a European option can be analyzed as the present value of the option's expected payoff at expiration	31b	31b	
		identify an arbitrage opportunity involving options and describe the related arbitrage	31c	31c	
		calculate the no-arbitrage values of European and American options using a two-period binomial model	31d	31d	
		calculate and interpret the value of an interest rate option using a two-period binomial model	31e	31e	
		identify assumptions of the Black–Scholes–Merton option valuation model	31f	31f	
		interpret the components of the Black–Scholes–Merton model as applied to call options in terms of a leveraged position in the underlying	31g	31g	
		describe how the Black–Scholes–Merton model is used to value European options on equities and currencies	31h	31h	
		describe how the Black model is used to value European options on futures	31i	31i	
		describe how the Black model is used to value European interest rate options and European swaptions	31j	31j	
		interpret each of the option Greeks	31k	31k	
		describe how a delta hedge is executed	31l	31l	
		describe the role of gamma risk in options trading	31m	31m	
		define implied volatility and explain how it is used in options trading	31n	31n	
Alternative Investments					
32	Introduction to Commodities and Commodity Derivatives	compare characteristics of commodity sectors	32a	34a	
		compare the life cycle of commodity sectors from production through trading or consumption	32b	34b	
		contrast the valuation of commodities with the valuation of equities and bonds	32c	34c	
		describe types of participants in commodity futures markets	32d	34d	
		analyze the relationship between spot prices and futures prices in markets in contango and markets in backwardation	32e	34e	
		compare theories of commodity futures returns	32f	34f	
		describe, calculate, and interpret the components of total return for a fully collateralized commodity futures contract	32g	34g	
		contrast roll return in markets in contango and markets in backwardation	32h	34h	
		describe how commodity swaps are used to obtain or modify exposure to commodities	32i	34i	
		describe how the construction of commodity indexes affects index returns	32j	34j	
33	Real Estate Investments	compare the characteristics, classifications, principal risks, and basic forms of public and private real estate investments	33a	32a	
		explain portfolio roles and economic value determinants of real estate investments	33b	32b	
		discuss commercial property types, including their distinctive investment characteristics	33c	32c	
		explain the due diligence process for both private and public equity real estate investment	33d	32d	
		discuss real estate investment indexes, including their construction and potential biases	33e	32e	
		Discuss types of publicly traded real estate securities.	33f	32k	
		Justify the use of net asset value per share (NAVPS) in valuation of publicly traded real estate securities and estimate NAVPS based on forecasted cash net operating income.	33g	32l	
		describe the use of funds from operations (FFO) and adjusted funds from operations (AFFO) in REIT valuation	33h	32m	

Reading No.	Reading Name	Learning Outcome	2024 LOS	2023 LOS	Changes
33	Real Estate Investments	calculate and interpret the value of a REIT share using the net asset value, relative value (price-to-FFO and price-to-AFFO), and discounted cash flow approaches	33i	32n	
		explain advantages and disadvantages of investing in real estate through publicly traded securities compared to private vehicles	33j	32o	
		discuss the income, cost, and sales comparison approaches to valuing real estate properties		32f	
		compare the direct capitalization and discounted cash flow valuation methods		32g	
		estimate and interpret the inputs (for example, net operating income, capitalization rate, and discount rate) to the direct capitalization and discounted cash flow valuation methods		32h	
		calculate the value of a property using the direct capitalization and discounted cash flow valuation methods		32i	
		calculate and interpret financial ratios used to analyze and evaluate private real estate investments		32j	
34	Hedge Fund Strategies	discuss how hedge fund strategies may be classified	34a		
		discuss investment characteristics, strategy implementation, and role in a portfolio of equity-related hedge fund strategies	34b		
		discuss investment characteristics, strategy implementation, and role in a portfolio of event-driven hedge fund strategies	34c		
		discuss investment characteristics, strategy implementation, and role in a portfolio of relative value hedge fund strategies	34d		
		discuss investment characteristics, strategy implementation, and role in a portfolio of opportunistic hedge fund strategies	34e		
		discuss investment characteristics, strategy implementation, and role in a portfolio of specialist hedge fund strategies	34f		
		discuss investment characteristics, strategy implementation, and role in a portfolio of multi-manager hedge fund strategies	34g		
		describe how factor models may be used to understand hedge fund risk exposures	34h		
		evaluate the impact of an allocation to a hedge fund strategy in a traditional investment portfolio	34i		
	Private Equity Investments	explain sources of value creation in private equity		33a	
		explain how private equity firms align their interests with those of the managers of portfolio companies		33b	
		compare and contrast characteristics of buyout and venture capital investments		33c	
		interpret LBO model and VC method output		33d	
		explain alternative exit routes in private equity and their impact on value		33e	
		explain risks and costs of investing in private equity		33f	
		explain private equity fund structures, terms, due diligence, and valuation in the context of an analysis of private equity fund returns		33g	
		interpret and compare financial performance of private equity funds from the perspective of an investor		33h	
		calculate management fees, carried interest, net asset value, distributed to paid in (DPI), residual value to paid in (RVPI), and total value to paid in (TVPI) of a private equity fund		33i	
	Portfolio				
35	Exchange-Traded Funds-Mechanics and Applications	explain the creation/redemption process of ETFs and the function of authorized participants	35a	35a	
		describe how ETFs are traded in secondary markets	35b	35b	
		describe sources of tracking error for ETFs	35c	35c	
		describe factors affecting ETF bid–ask spreads	35d	35d	
		describe sources of ETF premiums and discounts to NAV	35e	35e	
		describe costs of owning an ETF	35f	35f	
		describe types of ETF risk	35g	35g	
		identify and describe portfolio uses of ETFs	35h	35h	

ASWINI BAJAJ

Reading No.	Reading Name	Learning Outcome	2024 LOS	2023 LOS	Changes
36	Using Multifactor Models	describe arbitrage pricing theory (APT), including its underlying assumptions and its relation to multifactor models	36a	36a	
		define arbitrage opportunity and determine whether an arbitrage opportunity exists	36b	36b	
		calculate the expected return on an asset given an asset's factor sensitivities and the factor risk premiums	36c	36c	
		describe and compare macroeconomic factor models, fundamental factor models, and statistical factor models	36d	36d	
		describe uses of multifactor models and interpret the output of analyses based on multifactor models	36e	36e	
		describe the potential benefits for investors in considering multiple risk dimensions when modeling asset returns	36f	36f	
		explain sources of active risk and interpret tracking risk and the information ratio	36g	36g	
37	Measuring and Managing Market Risk	explain the use of value at risk (VaR) in measuring portfolio risk	37a	37a	
		compare the parametric (variance–covariance), historical simulation, and Monte Carlo simulation methods for estimating VaR	37b	37b	
		estimate and interpret VaR under the parametric, historical simulation, and Monte Carlo simulation methods	37c	37c	
		describe advantages and limitations of VaR	37d	37d	
		describe extensions of VaR	37e	37e	
		describe sensitivity risk measures and scenario risk measures and compare these measures to VaR	37f	37f	
		demonstrate how equity, fixed-income, and options exposure measures may be used in measuring and managing market risk and volatility risk	37g	37g	
		describe the use of sensitivity risk measures and scenario risk measures	37h	37h	
		describe advantages and limitations of sensitivity risk measures and scenario risk measures	37i	37i	
		explain constraints used in managing market risks, including risk budgeting, position limits, scenario limits, and stop-loss limits	37j	37j	
		explain how risk measures may be used in capital allocation decisions	37k	37k	
		describe risk measures used by banks, asset managers, pension funds, and insurers	37l	37l	
38	Backtesting and Simulation	describe objectives in backtesting an investment strategy	38a	38a	
		describe and contrast steps and procedures in backtesting an investment strategy	38b	38b	
		interpret metrics and visuals reported in a backtest of an investment strategy	38c	38c	
		identify problems in a backtest of an investment strategy	38d	38d	
		evaluate and interpret a historical scenario analysis	38e	38e	
		contrast Monte Carlo and historical simulation approaches	38f	38f	
		explain inputs and decisions in simulation and interpret a simulation	38g	38g	
		demonstrate the use of sensitivity analysis	38h	38h	
39	Economics and Investment Markets	explain the notion that to affect market values, economic factors must affect one or more of the following: 1) default-free interest rates across maturities, 2) the timing and/or magnitude of expected cash flows, and 3) risk premiums	39a	39a	
		explain the role of expectations and changes in expectations in market valuation	39b	39b	
		explain the relationship between the long-term growth rate of the economy, the volatility of the growth rate, and the average level of real short-term interest rates	39c	39c	
		explain how the phase of the business cycle affects policy and short-term interest rates, the slope of the term structure of interest rates, and the relative performance of bonds of differing maturities	39d	39d	
		describe the factors that affect yield spreads between non-inflation-adjusted and inflation-indexed bonds	39e	39e	

Reading No.	Reading Name	Learning Outcome	2024 LOS	2023 LOS	Changes
39	Economics and Investment Markets	explain how the phase of the business cycle affects credit spreads and the performance of credit-sensitive fixed-income instruments	39f	39f	
		explain how the characteristics of the markets for a company's products affect the company's credit quality	39g	39g	
		explain the relationship between the consumption hedging properties of equity and the equity risk premium	39h	39h	
		explain how the phase of the business cycle affects short-term and long-term earnings growth expectations	39i	39i	
		describe cyclical effects on valuation multiples	39j	39j	
		describe the economic factors affecting investment in commercial real estate	39k	39k	
40	Analysis of Active Portfolio Management	describe how value added by active management is measured	40a	40a	
		calculate and interpret the information ratio (ex post and ex ante) and contrast it to the Sharpe ratio	40b	40b	
		describe and interpret the fundamental law of active portfolio management, including its component terms—transfer coefficient, information coefficient, breadth, and active risk (aggressiveness)	40c	40c	
		explain how the information ratio may be useful in investment manager selection and choosing the level of active portfolio risk	40d	40d	
		compare active management strategies, including market timing and security selection, and evaluate strategy changes in terms of the fundamental law of active management	40e	40e	
		describe the practical strengths and limitations of the fundamental law of active management	40f	40f	
	Trading Costs and Electronic Markets	explain the components of execution costs, including explicit and implicit costs		41a	
		calculate and interpret effective spreads and VWAP transaction cost estimates		41b	
		describe the implementation shortfall approach to transaction cost measurement		41c	
		describe factors driving the development of electronic trading systems		41d	
		describe market fragmentation		41e	
		identify and contrast the types of electronic traders		41f	
		describe characteristics and uses of electronic trading systems		41g	
		describe comparative advantages of low-latency traders		41h	
		describe the risks associated with electronic trading and how regulators mitigate them		41i	
		describe abusive trading practices that real-time surveillance of markets may detect		41j	
Ethics					
41	Code of Ethics and Standards of Professional	describe the six components of the Code of Ethics and the seven Standards of Professional Conduct	41a	42a	
		explain the ethical responsibilities required of CFA Institute members and candidates in the CFA Program by the Code and Standards	41b	42b	
42	Guidance for Standards I–VII	demonstrate a thorough knowledge of the CFA Institute Code of Ethics and Standards of Professional Conduct by applying the Code and Standards to specific situations	42a	43a	
		recommend practices and procedures designed to prevent violations of the Code of Ethics and Standards of Professional Conduct	42b	43b	
43	Application of the Code and Standards- Level II	evaluate practices, policies, and conduct relative to the CFA Institute Code of Ethics and Standards of Professional Conduct	43a	44a	
		explain how the practices, policies, and conduct do or do not violate the CFA Institute Code of Ethics and Standards of Professional Conduct	43b	44b	