

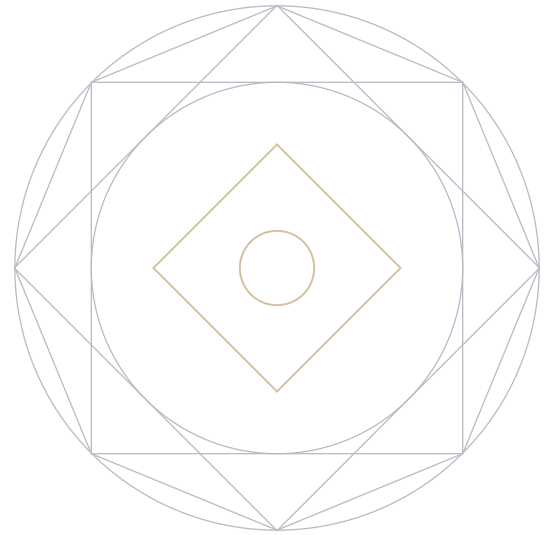
BIIRG

VOLUME I

EQUITIES RESEARCH

Analyst Training Manual

Business analysis, accounting, valuation,
modeling, industry research, portfolio thinking,
catalysts, risk, and investment writing.



Baruch Islamic Investment Research Group

TRAINING & RESEARCH SERIES · EQUITIES DIVISION

2026 EDITION

PUBLICATION INFORMATION

TITLE	Equities Research — Analyst Training Manual
SERIES	BIIRG Analyst Training Series, Volume I of V
PUBLISHER	Baruch Islamic Investment Research Group
DIVISION	Equities Division, Training & Research
EDITION	2026 Edition — August 2026
AUDIENCE	Incoming and continuing BIIRG equity research analysts

DISCLAIMER

Educational use only. This manual is analyst training material and does not constitute investment, legal, accounting, tax, or Shariah advice. Company examples are illustrative. Shariah screening thresholds, denominators, and purification procedures differ across standards and index providers; analysts must apply the methodology formally adopted by BIIRG rather than any figure recalled from this text.



BIIRG ANALYST TRAINING SERIES

A five-volume research curriculum

Volume I Equities Research THIS VOLUME	Volume II Fixed Income & Sukuk
Volume III Real Assets	Volume IV Macro Research
Volume V Quantitative Research	

The volumes are designed to be read in any order and used as reference throughout an analyst's tenure.

VOLUME I

Contents

FRONT MATTER

Publication information and disclaimer

The BIIRG Analyst Training Series

How to use this manual

Learning outcomes

PART I — FOUNDATIONS OF EQUITY RESEARCH

01	The Equity Research Process	9
02	Understanding the Business Model	10
03	Industry and Competitive Analysis	11
04	Competitive Advantage and Moats	12
05	Revenue Analysis and Unit Economics	13

PART II — FINANCIAL STATEMENT ANALYSIS

06	The Income Statement	15
07	The Balance Sheet	16
08	The Cash-Flow Statement	17
09	Accounting Quality and Earnings Quality	18

PART III — RETURNS, CAPITAL, AND STEWARDSHIP

10	Profitability, Returns, and Value Creation	20
11	Working Capital and Operating Efficiency	21
12	Capital Structure, Debt, and Dilution	22
13	Management, Governance, and Capital Allocation	23

PART IV — FORECASTING AND VALUATION

14	Forecasting and Financial Modeling	25
15	Valuation Foundations	26
16	Discounted Cash Flow Valuation	27

17	Relative Valuation and Trading Multiples	29
18	Dividend and Residual-Income Models	30
19	Sum-of-the-Parts and Special Situations	31

PART V — COMPANY TYPES, EXPECTATIONS, AND RISK

20	Growth Companies and Long-Duration Equities	32
21	Cyclicals, Commodities, and Financials	33
22	Quality, Value, Momentum, and Factor Context	34
23	Earnings Analysis and Expectations	34
24	Catalysts, Variant Perception, and Market Narrative	35
25	Risk Analysis and Scenario Construction	36

PART VI — PORTFOLIO, COMPLIANCE, AND PRACTICE

26	Portfolio Construction for Equity Analysts	38
27	Shariah Screening and BIIRG Equity Research	39
28	Research Sources, Data Hygiene, and Due Diligence	40
29	BIIRG Equity Research Workflow and Case Study	41
30	Formula Sheet, Glossary, and Analyst Checklist	42

REFERENCE MATERIAL

	Final analyst checklist	45
	Appendix A — Equity initiation template	46
	Appendix B — Earnings review template	47
	Appendix C — Suggested primary references	48

FRONT MATTER

How to Use This Manual

Equity research is the discipline of understanding a business well enough to estimate what its future cash flows, competitive position, capital requirements, and risk are likely to be, determine what those economics are worth, and compare that value with the market price.

A complete analyst must combine accounting, industry structure, competitive strategy, forecasting, valuation, market expectations, portfolio context, and disciplined written communication. This manual is organised so that those capabilities accumulate in the order an analyst actually needs them: the business first, then the statements that record it, then the returns it earns, then the value of those returns, and finally the portfolio and compliance decisions that follow.

BIIRG STANDARD – THE RESEARCH CHAIN

Business model → industry structure → competitive advantage → unit economics → financial statements → earnings and cash-flow drivers → forecast → valuation → expectations → catalysts → risks → position recommendation.

Every recommendation should make this chain explicit.

The component system

Recurring kinds of material are marked consistently throughout the manual.

DEFINITION

Formal definition of a concept or term.

CORE CONCEPT

Foundational theory the rest of a chapter rests on.

ANALYST NOTE

Practical interpretation and desk-level judgment.

EXAMPLE

Illustrative application of a method.

BIIRG STANDARD

Expected BIIRG methodology or research standard.

KEY TAKEAWAY

The central conclusion of a section.

FORMULA

Equation, variable definitions, interpretation, application.

WATCH FOR

Analytical mistakes, accounting issues, model weaknesses.

INVESTMENT IMPLICATION

Translation of theory into a portfolio or security-analysis decision.

Reading paths

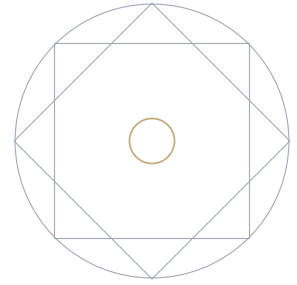
New analysts should read Parts I to III in sequence before attempting a model. Analysts with accounting training may begin at Part IV and use Parts II and III as reference. Chapter 27 and Chapter 28 apply to every mandate and should be read before an analyst publishes anything under the BIIRG name.

FRONT MATTER

Learning Outcomes

On completing this volume, a BIIRG equity analyst should be able to do each of the following without supervision.

-
- 01 Read and normalize the income statement, balance sheet, and cash-flow statement.
 - 02 Understand revenue drivers, margins, working capital, capital intensity, ROIC, and free cash flow.
 - 03 Analyze industries using market structure, competitive forces, supply and demand, and value-chain economics.
 - 04 Distinguish durable competitive advantage from temporary operating strength.
 - 05 Build integrated historical and forecast financial models.
 - 06 Use DCF, dividend, residual-income, precedent, transaction, and relative-valuation methods appropriately.
 - 07 Understand enterprise versus equity value, WACC, cost of equity, terminal value, multiples, dilution, and capital structure.
 - 08 Analyze earnings quality, accounting red flags, management incentives, and capital allocation.
 - 09 Frame variant perception, expectations, catalysts, bull/base/bear cases, and thesis invalidation.
 - 10 Translate single-stock research into portfolio decisions while respecting BIIRG's Shariah-compliance layer.
-



PART I

Foundations of Equity Research

The business, the industry it competes in, the advantage it holds, and the unit economics that advantage produces.

Chapters 1 to 5 establish what must be understood before any statement is normalized or any model is built.

- 01 The Equity Research Process
- 02 Understanding the Business Model
- 03 Industry and Competitive Analysis
- 04 Competitive Advantage and Moats
- 05 Revenue Analysis and Unit Economics

PART I · FOUNDATIONS OF EQUITY RESEARCH

CHAPTER 01

01 The Equity Research Process

What the analyst is actually paid to produce, the order in which the work must be done, and the discipline of separating fact from estimate from judgment.

1.1 The analyst's objective

The analyst is not paid — in an institutional context — or evaluated, in BIIRG, to restate company filings. The value-add is synthesis: identify the economic engine of the company, determine the variables that drive incremental value, assess what the market already discounts, and express where the analyst's view differs.

1.2 Research sequence

Begin with the business and industry before building a valuation. Modeling a company whose economics are not understood produces precise-looking but fragile output.

FIGURE 1.1 – THE BIIRG RESEARCH SEQUENCE

01 Define the question and mandate	02 Establish Shariah eligibility where relevant	03 Understand company and industry	04 Normalize historical financials	05 Identify key operating drivers
06 Build forecasts	07 Value the business using multiple methods	08 Compare with market expectations	09 Define catalysts, risks, and invalidation	10 Form recommendation and monitoring plan

Source: BIIRG Equities Division research standards.

1.3 Fact, estimate, judgment

Separate reported facts, analyst estimates, and subjective judgments. A strong research note makes the boundary visible.

1.4 Price versus value

Price is observable. Intrinsic value is an estimate contingent on assumptions. The relevant question is whether the expected distribution of value creates sufficient upside relative to downside and opportunity cost.

KEY TAKEAWAY

The output of equity research is not a price target. It is a defensible statement about the distribution of business outcomes and the difference between that distribution and what price already embeds.

02 Understanding the Business Model

How the company converts customers into revenue, revenue into profit, and profit into cash that reaches shareholders.

2.1 Business model map

Identify customers, product or service, pricing, distribution, suppliers, key resources, cost structure, reinvestment requirements, and how cash ultimately reaches shareholders.

2.2 Revenue model

Classify recurring versus transactional, subscription versus usage, volume versus price, product versus service, domestic versus international, direct versus channel, and organic versus acquired revenue.

2.3 Economic engine

Ask what one additional customer, store, unit, seat, shipment, loan, or dollar of assets contributes to revenue, gross profit, operating profit, and cash flow.

CORE CONCEPT – OPERATING LEVERAGE

Businesses with high fixed costs can experience large profit changes from modest revenue changes. Distinguish structural fixed costs from discretionary costs.

FIGURE 2.1 – FROM BUSINESS MODEL TO VALUATION

Business model → Moat → ROIC → Reinvestment → Growth → Valuation

Source: BIIRG Equities Division.

03 Industry and Competitive Analysis

Market structure, competitive forces, the migration of profit pools, and the supply-and-demand mechanics that dominate cyclical industries.

3.1 Industry structure

Estimate total addressable market, served market, growth, concentration, fragmentation, barriers to entry, substitution risk, regulation, cyclical, and bargaining power.

3.2 Porter's Five Forces

Use rivalry, entrants, substitutes, supplier power, and customer power as a structured diagnostic, not a checklist.

3.3 Value chain

Map where economics accrue from suppliers through producers, distributors, platforms, and customers. Profit pools can migrate even when end-market growth is strong.

WATCH FOR

A growing end market is not evidence that the company under review will capture the growth. Profit pools migrate across the value chain, and the segment that captures value today is frequently not the one that captured it in the prior cycle.

3.4 Supply and demand

Capacity additions, utilization, inventories, lead times, customer demand, and pricing discipline are especially important in cyclical industries.

04 Competitive Advantage and Moats

Where excess returns come from, what evidence proves they exist, and how long they are likely to persist.

4.1 Sources of advantage

Network effects, switching costs, scale economies, intangible assets, cost advantage, distribution, regulation, data, brand, and process know-how can create excess returns.

4.2 Moat evidence

A moat should appear in economics: sustained ROIC above cost of capital, stable or growing share, pricing power, retention, margins, or lower acquisition cost.

ANALYST NOTE

A narrative moat that cannot be located in the financial statements is a hypothesis, not a finding. Name the line item where the advantage should appear, then check whether it does.

4.3 Moat erosion

Technology, regulation, customer concentration, platform shifts, new capacity, commoditization, and management mistakes can weaken advantages.

4.4 Duration of advantage

Valuation depends heavily on how long excess returns persist. Competitive-advantage period is often more important than one-year EPS.

FIGURE 4.1 – COMPETITIVE-ADVANTAGE FRAMEWORK

SOURCE	Network effects, switching costs, scale, intangibles, cost position, distribution, regulation
OPERATING EVIDENCE	Share stability, pricing power, retention, acquisition cost, utilization
STATEMENT EFFECT	Gross and EBIT margin, asset turnover, working-capital intensity
RETURN EFFECT	ROIC sustained above the cost of capital
VALUATION EFFECT	Length of the competitive-advantage period, and therefore terminal value

Source: BIIRG Equities Division. A moat claim should be traceable through every stage.

INVESTMENT IMPLICATION

Because value is more sensitive to the competitive-advantage period than to the next twelve months of earnings, research effort should be weighted toward evidence about durability rather than precision about the next quarter.

05 Revenue Analysis and Unit Economics

Decomposing the top line into drivers that correspond to real economics, and testing whether each incremental unit is profitable.

5.1 Revenue bridge

Revenue can be decomposed into volume, price, and mix, or into customers, units per customer, and price per unit. Choose drivers that correspond to actual economics.

FORMULA — REVENUE DECOMPOSITION

$$\text{Revenue} = \text{Volume} \times \text{Price} \times \text{Mix}$$

WHERE

Volume is units, customers, seats, shipments, transactions, or the operating driver appropriate to the business; price is realized price per unit rather than list price; mix captures the shift between products, channels, and geographies with different price points.

ANALYST APPLICATION

Forecast each term separately. An equivalent alternative decomposition — customers × units per customer × price per unit — is preferable where customer counts and retention are disclosed.

5.2 Unit economics

Measure contribution margin, customer acquisition cost, lifetime value, retention and churn, payback period, average revenue per user, utilization, or store-level economics as appropriate.

5.3 Cohorts

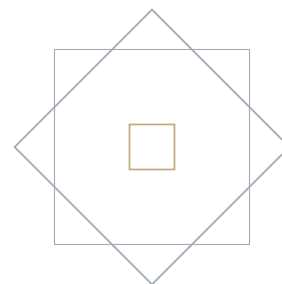
Cohort analysis distinguishes mature customer behavior from growth created by new cohorts and can reveal retention deterioration hidden by aggregate growth.

5.4 Organic growth

Separate organic growth from acquisitions, foreign exchange, accounting changes, and pass-through inflation.

KEY TAKEAWAY

Aggregate growth is a summary statistic, not an explanation. Until revenue has been separated into volume, price, mix, acquisition, and currency, the analyst does not know what is being forecast.



PART II

Financial Statement Analysis

The three statements as an integrated record of the business, and the accounting judgment required to read them honestly. Chapters 6 to 9 convert reported figures into analytical inputs.

- 06 The Income Statement
- 07 The Balance Sheet
- 08 The Cash-Flow Statement
- 09 Accounting Quality and Earnings Quality

PART II • FINANCIAL STATEMENT ANALYSIS

CHAPTER 06

06 The Income Statement

Reading the path from revenue to earnings per share, and knowing which margin genuinely describes operating performance.

6.1 Revenue to gross profit

Gross margin reflects pricing, mix, input costs, manufacturing or service economics, and accounting classification.

6.2 Operating expenses

Analyze research and development, sales and marketing, general and administrative expense, stock compensation, restructuring, and depreciation. Determine which costs are growth investments versus maintenance.

6.3 Operating income

EBIT isolates operating performance before financing and tax. EBITDA adds back depreciation and amortization but is not cash flow and can be misleading for capital-intensive businesses.

6.4 Net income and EPS

Understand interest, taxes, minority interests, preferred claims, discontinued operations, and diluted share count before interpreting earnings per share.

FIGURE 6.1 — FROM REVENUE TO FREE CASH FLOW

Revenue → Gross profit → EBIT → NOPAT → FCFF

Source: BIIRG Equities Division. See Chapter 16 for the full FCFF construction.

TABLE 6.1 — INCOME-STATEMENT DIAGNOSTIC QUESTIONS

METRIC	ANALYTICAL QUESTION
Revenue	What drives growth and how durable is it?
Gross margin	Pricing, mix, input costs, scale?
EBIT margin	Operating leverage or cost inflation?
EPS	Operating growth or below-the-line engineering?

Source: BIIRG Equities Division.

WATCH FOR

EBITDA used as a proxy for cash flow in a capital-intensive business. The add-back removes precisely the cost of the assets the business must keep replacing.

07 The Balance Sheet

Assets, liabilities, liquidity, capital structure, and financial resilience.

7.1 Assets

Cash, receivables, inventory, property, plant and equipment, goodwill, acquired intangibles, investments, and deferred tax assets have different economic qualities.

7.2 Liabilities

Payables, accrued expenses, deferred revenue, leases, debt, pensions, taxes, and contingent liabilities affect liquidity and enterprise value.

DEFINITION – GOODWILL

Goodwill is created in acquisitions and is not itself an operating asset that produces cash independently. Large impairments may reveal prior capital-allocation mistakes.

7.3 Balance-sheet strength

Assess liquidity, maturity profile, covenants, asset-liability matching, off-balance-sheet obligations, and refinancing sensitivity.

INVESTMENT IMPLICATION

Balance-sheet fragility converts a cyclical earnings decline into permanent capital loss.
Resilience should therefore be assessed before, not after, the downside scenario is valued.

08 The Cash-Flow Statement

Operating, investing, and financing flows, and the discipline of stating which definition of free cash flow is being used.

8.1 Operating cash flow

Start with cash generated by operations, but inspect working-capital movements and noncash add-backs.

8.2 Investing cash flow

Capital expenditure, acquisitions, asset sales, and investments reveal reinvestment intensity and strategic choices.

8.3 Financing cash flow

Debt issuance and repayment, dividends, repurchases, and equity issuance show how the company funds and distributes capital.

8.4 Free cash flow

Free cash flow definitions vary. FCFF is cash available to all capital providers; FCFE is cash available to equity after debt flows. State the definition.

BIIRG STANDARD

Every BIIRG note that cites free cash flow must state the definition used, the treatment of leases and stock compensation, and whether the figure is enterprise or equity free cash flow.

09 Accounting Quality and Earnings Quality

Why reported earnings and cash diverge, which adjustments improve comparability, and the patterns that warrant investigation.

9.1 Accruals

Earnings can diverge from cash because of accrual accounting. Persistent growth in receivables or inventory faster than sales warrants investigation.

9.2 Non-GAAP measures

Adjusted metrics can improve comparability or conceal recurring costs. Reconcile every material adjustment.

9.3 Capitalization versus expense

Capitalizing costs raises current earnings and assets relative to expensing. Understand software, development, commissions, and other policies.

9.4 Red flags

Frequent restructuring, aggressive revenue recognition, acquisition-driven adjustments, related parties, unexplained working-capital swings, auditor changes, and repeated guidance redefinitions deserve scrutiny.

WATCH FOR — THE RED-FLAG REGISTER

Frequent restructuring charges

Aggressive revenue recognition

Acquisition-driven adjustments

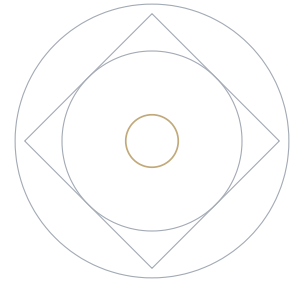
Repeated guidance redefinitions

Related-party transactions

Unexplained working-capital swings

Auditor changes

Receivables or inventory outgrowing sales



PART III

Returns, Capital, and Stewardship

Whether the business earns more than its cost of capital, how efficiently it employs working capital, what claims sit ahead of common equity, and whether management allocates capital rationally.

- 10 Profitability, Returns, and Value Creation
- 11 Working Capital and Operating Efficiency
- 12 Capital Structure, Debt, and Dilution
- 13 Management, Governance, and Capital Allocation

PART III · RETURNS, CAPITAL, AND STEWARDSHIP

CHAPTER 10

10 Profitability, Returns, and Value Creation

Returns on capital as the test of whether growth creates or destroys value, and the decompositions that reveal where returns come from.

10.1 Return on invested capital

ROIC is approximately NOPAT divided by invested capital. Economic value is created when sustainable ROIC exceeds the opportunity cost of capital.

FORMULA – RETURN ON INVESTED CAPITAL

$$\text{ROIC} = \text{NOPAT} \div \text{Average invested capital}$$

WHERE

NOPAT is after-tax operating profit before financing effects, calculated as $\text{EBIT} \times (1 - \text{tax rate})$; invested capital is the operating capital employed in the business, measured on an average rather than period-end basis.

INTERPRETATION

The spread between ROIC and the cost of capital is the rate at which each dollar of capital employed creates or destroys economic value.

ANALYST APPLICATION

Test whether the spread is positive, whether it is sustainable, and whether the company can reinvest at that spread. A positive spread that cannot be reinvested justifies distribution rather than growth.

10.2 Return on equity

ROE equals net income divided by average equity. High ROE can result from genuine profitability or from leverage and buybacks.

10.3 DuPont decomposition

ROE can be decomposed into margin, asset turnover, and financial leverage, helping identify the source of returns.

FIGURE 10.1 – DUPONT DECOMPOSITION OF ROE

RETURN	=	PROFITABILITY	×	EFFICIENCY	×	FINANCING
ROE		Net margin		Asset turnover		Financial leverage

Source: BIIRG Equities Division.

10.4 Incremental returns

For growth companies, return on incremental invested capital can be more informative than historical average ROIC.

CORE PRINCIPLE – VALUE CREATION

Growth creates shareholder value when incremental returns on invested capital exceed the required return and the advantage persists. Growth at sub-cost-of-capital returns can destroy value.

11 Working Capital and Operating Efficiency

How long cash is tied up in operations, and whether reported profit is converting into cash.

11.1 Cash conversion cycle

FORMULA – CASH CONVERSION CYCLE

$$CCC = DSO + DIO - DPO$$

WHERE

DSO is days sales outstanding, DIO is days inventory outstanding, and DPO is days payable outstanding.

INTERPRETATION

The cycle approximates how long cash is tied up in operations. A shorter cycle releases cash as the business grows; a lengthening cycle absorbs it.

11.2 Negative working capital

Some businesses receive cash before paying suppliers, creating structurally favorable financing.

11.3 Efficiency ratios

Receivable days, inventory turns, payable days, asset turns, utilization, and capacity metrics should be benchmarked against history and peers.

11.4 Cash conversion

Compare net income, EBITDA, and operating profit with operating and free cash flow over multiple years.

12 Capital Structure, Debt, and Dilution

The claims that sit between enterprise operations and common-equity value, and the per-share arithmetic that follows.

12.1 Enterprise versus equity claims

Debt, preferred stock, minority interests, leases, and other claims sit between enterprise operations and common-equity value.

12.2 Debt analysis

Map maturity, fixed and floating mix, secured and unsecured status, coupons, covenants, ratings, and refinancing needs.

12.3 Dilution

Options, restricted stock units, convertibles, warrants, and stock-based compensation can reduce per-share value. Model diluted shares consistently.

12.4 Buybacks

Repurchases create value when shares are bought below intrinsic value and can destroy value when used indiscriminately at excessive valuations.

ANALYST NOTE

A repurchase programme is a capital-allocation decision with a price attached. Evaluate it against the same intrinsic-value estimate used to justify the recommendation, not against the share count alone.

13 Management, Governance, and Capital Allocation

Assessing stewardship: the record, the incentives, the acquisitions, and the rights attached to the shares being bought.

13.1 Management quality

Assess strategic record, execution, candor, incentive alignment, succession, and treatment of shareholders.

13.2 Capital allocation hierarchy

Organic reinvestment, mergers and acquisitions, debt reduction, dividends, and repurchases should be evaluated by expected risk-adjusted return.

FIGURE 13.1 — CAPITAL-ALLOCATION OPTIONS, RANKED BY EXPECTED RISK-ADJUSTED RETURN

01	02	03	04	05
Organic reinvestment	Mergers and acquisitions	Debt reduction	Dividends	Repurchases

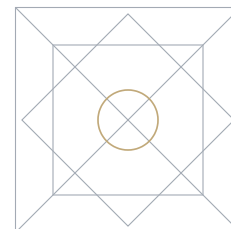
Source: BIIRG Equities Division. Ordering is a framework for comparison, not a fixed preference.

13.3 Mergers and acquisitions

Examine strategic fit, purchase multiple, synergies, integration risk, financing, goodwill, and post-deal ROIC.

13.4 Governance

Board independence, dual-class structures, related parties, compensation design, insider ownership, and shareholder rights affect risk.



PART IV

Forecasting and Valuation

Building the model, then converting forecast economics into value by intrinsic and relative methods. Chapters 14 to 19 are the technical core of the volume.

- 14 Forecasting and Financial Modeling
- 15 Valuation Foundations
- 16 Discounted Cash Flow Valuation
- 17 Relative Valuation and Trading Multiples
- 18 Dividend and Residual-Income Models
- 19 Sum-of-the-Parts and Special Situations

PART IV · FORECASTING AND VALUATION

CHAPTER 14

14 Forecasting and Financial Modeling

Model architecture, driver-based forecasting, three-statement integration, and the checks that make a model auditable.

14.1 Model architecture

A robust model separates assumptions, historical financials, operating schedules, statements, valuation, scenarios, and outputs.

14.2 Driver-based forecast

Forecast economic drivers first – units, price, customers, utilization, margins – rather than blindly extrapolating line items.

14.3 Three-statement integration

Net income links to retained earnings and cash flow; capital expenditure links property, plant and equipment to investing cash flow; debt links interest and financing cash flow; working capital links the statements.

14.4 Checks

The balance sheet must balance. The cash roll-forward must reconcile. Sources of historical data and forecast assumptions should be traceable.

BIIRG STANDARD – MODEL CONSTRUCTION

- 01 Use consistent historical periods and units.
- 02 Avoid hard-coded values inside formulas where assumptions belong in dedicated cells.
- 03 Build explicit debt, PP&E, working-capital, share-count, and tax schedules where material.
- 04 Create sensitivity tables around the variables that actually drive value.
- 05 Include error checks and model version and date.

15 Valuation Foundations

Intrinsic versus relative methods, the bridge from enterprise to equity value, and the conditional nature of every estimate.

15.1 Intrinsic versus relative valuation

Intrinsic methods estimate value from cash flows or economic profit. Relative methods infer value from comparable market prices.

15.2 Enterprise value

Enterprise value generally equals equity value plus net debt, preferred stock, minority interests and other claims, adjusted for non-operating assets as appropriate.

15.3 Equity value

Equity value belongs to common shareholders. Per-share value requires fully diluted shares.

FIGURE 15.1 – ENTERPRISE-TO-EQUITY BRIDGE

Enterprise value
– Net debt
– Preferred claims
– Minority interest
+ Non-operating assets
= Equity value

Source: BIIRG Equities Division. Per-share value divides equity value by fully diluted shares.

CORE CONCEPT – VALUATION IS CONDITIONAL

Every valuation embeds assumptions about growth, margins, reinvestment, competitive duration, risk, and terminal economics. A fair-value estimate reported without those conditions is not a finding.

TABLE 15.1 – VALUATION METHODS, APPLICATION, AND LIMITATION

METHOD	BEST SUITED FOR	PRIMARY WEAKNESS
DCF	Cash-generative businesses with explicit forecasts	Assumption sensitivity
P/E	Comparable profitable equities	Capital structure and accounting effects
EV/EBITDA	Operating comparison	Ignores capital expenditure
Residual income	Financials and book-value-relevant businesses	Accounting dependence
Sum-of-the-parts	Conglomerates with distinct segments	Segment assumptions

Source: BIIRG Equities Division.

16 Discounted Cash Flow Valuation

Free cash flow to the firm, the discount rate, terminal value, and the sensitivity work that must accompany every DCF.

16.1 Free cash flow to the firm

FORMULA – FREE CASH FLOW TO THE FIRM

$$\text{FCFF} = \text{EBIT}(1 - T) + \text{D\&A} - \text{Capex} - \Delta\text{NWC}$$

WHERE

T is the marginal tax rate; D&A is depreciation and amortization; capex is capital expenditure; ΔNWC is the increase in net working capital. Further adjustments apply as appropriate to the business.

INTERPRETATION

FCFF is the cash generated by operations that is available to all capital providers, before any distinction between debt and equity claims.

ANALYST APPLICATION

Discount forecast FCFF at WACC to obtain enterprise value, then bridge to equity value using the claims identified in Chapter 12.

16.2 Weighted average cost of capital

WACC combines the after-tax cost of debt and the cost of equity using target or economic capital weights. Do not use book weights mechanically.

16.3 Terminal value

Under the perpetuity-growth approach, terminal value equals the cash flow of the year after the explicit forecast divided by the discount rate less the growth rate. An exit multiple is an alternative, but it imports relative valuation into the DCF.

FORMULA – TERMINAL VALUE, PERPETUITY GROWTH

$$TV = FCF_{n+1} \div (WACC - g)$$

WHERE

FCF_{n+1} is the first cash flow beyond the explicit forecast horizon; g is the perpetual growth rate, which must be below WACC and consistent with long-run economic growth.

ANALYST APPLICATION

Terminal assumptions must converge toward economically sustainable growth, margins, and returns. Report the share of total value carried by the terminal period.

16.4 Sensitivity

DCF output is highly sensitive to terminal growth, discount rate, margins, and long-run reinvestment. Always show sensitivity and scenario ranges.

BIIRG STANDARD – DCF DISCIPLINE

The DCF should explain the economics of the thesis, not serve as a machine for producing the desired price target. Terminal assumptions must converge toward economically sustainable growth, margins, and returns.

17 Relative Valuation and Trading Multiples

What each multiple actually measures, where it breaks down, and why a multiple is never a substitute for explicit economics.

17.1 Price/earnings

Useful for equity earnings when capital structure and accounting are comparable. Distorted by leverage, taxes, and nonrecurring items.

17.2 EV/EBITDA

Useful for comparing operations before depreciation, amortization, and financing, but ignores capital expenditure and working-capital intensity.

17.3 EV/EBIT

Better incorporates depreciation for asset-intensive businesses, though accounting depreciation may differ from economic depreciation.

17.4 EV/Sales

Useful when profits are immature, but requires explicit margin context. A high-margin company deserves a different sales multiple from a structurally low-margin one.

17.5 PEG and growth-adjusted multiples

Growth-adjusted metrics can be shorthand but should never replace explicit economics.

WATCH FOR

A peer group assembled by sector label rather than by economics. Comparability requires similar capital intensity, accounting policy, growth durability, and margin structure — not a shared industry classification code.

18 Dividend and Residual-Income Models

Valuing distributions directly, and valuing earnings in excess of the required return on book capital.

18.1 Dividend discount model

Value equals the present value of expected dividends when dividends are a meaningful representation of distributable cash.

FORMULA – GORDON GROWTH

$$P_0 = D_1 \div (r - g)$$

WHERE

D_1 is the expected dividend one period forward; r is the required return on equity; g is the perpetual dividend growth rate.

ANALYST APPLICATION

Valid only when r exceeds g and the assumptions reflect a mature steady state. Use for stable distributors, not for companies whose payout policy is still forming.

18.2 Residual income

Equity value equals book value plus the present value of future residual income, where residual income is earnings above the required return on equity capital.

18.3 Use cases

Residual income can be useful for financial institutions and for companies where free cash flow is difficult to define.

19 Sum-of-the-Parts and Special Situations

Valuing businesses separately, and handling spin-offs, restructurings, and event-driven outcomes with scenario weights rather than a single multiple.

19.1 Sum-of-the-parts

Value distinct businesses separately using methods suited to each, then adjust for corporate costs, net debt, taxes, and holding-company discounts.

19.2 Spin-offs

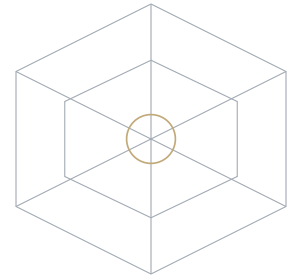
Analyze standalone economics, stranded costs, capital structure, forced selling, and management incentives.

19.3 Restructurings

Model cost savings, cash restructuring charges, revenue disruption, asset sales, and execution risk.

19.4 Event situations

Mergers and acquisitions, tender offers, recapitalizations, bankruptcy and reorganization, and activist campaigns require scenario-weighted outcomes rather than a single multiple.



PART V

Company Types, Expectations, and Risk

Adapting the framework to growth, cyclical, and financial businesses; measuring what price already embeds; and constructing scenarios that can be wrong in a specified way.

- 20 Growth Companies and Long-Duration Equities
- 21 Cyclical, Commodities, and Financials
- 22 Quality, Value, Momentum, and Factor Context
- 23 Earnings Analysis and Expectations
- 24 Catalysts, Variant Perception, and Market Narrative
- 25 Risk Analysis and Scenario Construction

PART V · COMPANY TYPES, EXPECTATIONS, AND RISK

CHAPTER 20

20 Growth Companies and Long-Duration Equities

Why distant cash flows dominate value, how to test the quality of growth, and the limits of sector heuristics.

20.1 Duration

A larger share of value from distant cash flows increases sensitivity to discount rates and terminal assumptions.

20.2 Growth quality

Separate total-addressable-market growth from company share gains, price increases, acquisitions, and unsustainable customer acquisition.

FIGURE 20.1 – WHERE GROWTH BECOMES VALUE



Source: BIIRG Equities Division. If any term is zero, growth adds no value.

20.3 Operating leverage

Early-stage companies can show strong incremental margins as fixed costs scale, but reinvestment may keep reported margins low.

20.4 Rule of 40 and other heuristics

Sector heuristics can be useful screens but are not substitutes for cash-flow economics, retention, margins, and competitive advantage.

21 Cyclical, Commodities, and Financials

Business types where the standard toolkit must be modified, and where the wrong multiple produces a confidently wrong answer.

21.1 Cyclical

Normalize earnings across a cycle. Peak earnings often coincide with apparently low price/earnings multiples.

FIGURE 21.1 – THE CYCLICAL CHAIN



Source: BIIRG Equities Division. The final stage feeds back into the first, which is why peak margins are self-correcting.

21.2 Commodity producers

Model volume, realized price, cost curve, reserves and resource life, sustaining capital expenditure, royalties, and balance-sheet sensitivity.

21.3 Banks

Focus on net interest income and margin, deposit beta, credit losses, capital, loan growth, asset quality, and regulatory constraints. EV/EBITDA is generally inappropriate.

21.4 Insurers

Analyze underwriting profitability, combined ratio, reserve adequacy, investment income, float, and capital.

WATCH FOR

A low multiple on peak-cycle earnings. In cyclical industries the multiple and the earnings base move in opposite directions, and the apparent discount is frequently the market pricing normalization the analyst has not yet modeled.

22 Quality, Value, Momentum, and Factor Context

Recognising the systematic exposures embedded in a single-stock thesis.

22.1 Factor awareness

A stock thesis can unknowingly be a factor bet. Measure beta, size, value, momentum, quality, and sector exposures.

22.2 Quality

Often associated with profitability, balance-sheet strength, earnings stability, and disciplined capital allocation.

22.3 Value

Cheapness must be measured relative to normalized fundamentals and future economics; low multiples can reflect genuine deterioration.

22.4 Momentum

Price and earnings momentum can persist, but reversals can be violent around regime changes.

23 Earnings Analysis and Expectations

Preparing for a print, judging the quality of a beat, and tracking the revisions that drive returns.

23.1 Earnings preview

Map consensus revenue, margins, earnings per share, key performance indicators, guidance, and the range of expectations.

23.2 Beat and miss quality

A headline EPS beat from tax, buybacks, or one-time items differs from an operating beat driven by revenue and margins.

23.3 Guidance

Management guidance affects the forward distribution. Compare with consensus and determine what assumptions changed.

23.4 Estimate revisions

Revisions can be powerful drivers of stock returns. Track direction, breadth, and magnitude rather than one estimate.

BIIRG STANDARD — EARNINGS REVIEW FIELDS

Reported versus consensus	Guidance delta
Reported versus BIIRG estimate	Estimate revision direction
Revenue quality	Immediate price and yield reaction
Margin quality	Thesis impact
Key KPI surprise	

24 Catalysts, Variant Perception, and Market Narrative

Stating what the market believes, why it may be wrong, and what evidence will close the gap.

24.1 Variant perception

A useful thesis identifies what the market appears to believe, why that belief may be wrong, and what evidence can close the gap.

24.2 Catalysts

Earnings, product launches, pricing, regulation, capital return, mergers and acquisitions, capacity changes, investor days, index inclusion, or macro inflections can cause expectations to reprice.

FIGURE 24.1 — CATALYST ASSESSMENT

CATALYST	The specific event or disclosure capable of changing expectations
TIMING	The window in which it is likely to occur, and what delays it
PROBABILITY	Likelihood of occurrence, assessed separately from desirability
IMPACT	Effect on earnings, on fair value, or on the multiple the market applies
RECOGNITION	How and when the market is likely to price the outcome

Source: BIIRG Equities Division. A catalyst without a timing and probability estimate is not yet analysis.

24.3 Narrative

Narratives coordinate market expectations but must be tied to measurable fundamentals.

24.4 Timing

Being correct eventually can still produce poor returns if the catalyst horizon, funding, or valuation path is misjudged.

INVESTMENT IMPLICATION

A thesis with no identifiable catalyst is a valuation opinion with an unbounded holding period. Size it accordingly.

25 Risk Analysis and Scenario Construction

A taxonomy of what can go wrong, scenarios built on coherent drivers, and the facts that would force a change of view.

25.1 Risk taxonomy

Business, competitive, execution, accounting, financial, regulatory, geopolitical, technological, valuation, liquidity, and key-person risks.

25.2 Scenario analysis

Bull, base, and bear cases should change coherent drivers, not simply apply arbitrary valuation multiples.

TABLE 25.1 — SCENARIO CONSTRUCTION

SCENARIO	OPERATIONAL ASSUMPTIONS	VALUATION IMPLICATION
Bull	Share gains, stronger pricing and margins, longer moat	Higher earnings and/or justified multiple
Base	Most probable normalized path	Central fair-value estimate
Bear	Demand, margin, and competitive deterioration	Lower earnings, higher risk premium

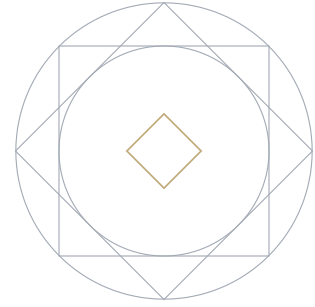
Source: BIIRG Equities Division.

25.3 Downside

Estimate permanent impairment as well as temporary mark-to-market drawdown. Balance-sheet fragility can turn cyclical weakness into permanent loss.

25.4 Thesis invalidation

Specify observable facts that would force a change in recommendation before initiating the idea.



PART VI

Portfolio, Compliance, and Practice

Turning a company view into a position, documenting Shariah eligibility under the approved methodology, and running the weekly research process to BIIRG standard.

- 26 Portfolio Construction for Equity Analysts
- 27 Shariah Screening and BIIRG Equity Research
- 28 Research Sources, Data Hygiene, and Due Diligence
- 29 BIIRG Equity Research Workflow and Case Study
- 30 Formula Sheet, Glossary, and Analyst Checklist

PART VI · PORTFOLIO, COMPLIANCE, AND PRACTICE

CHAPTER 26

26 Portfolio Construction for Equity Analysts

From company conclusion to position size, active risk, and a stated sell discipline.

26.1 Position context

A strong company can be a poor portfolio addition if valuation, correlation, concentration, or factor exposure are unfavorable.

26.2 Sizing

Position size should reflect expected return, downside, confidence, liquidity, covariance, and portfolio constraints.

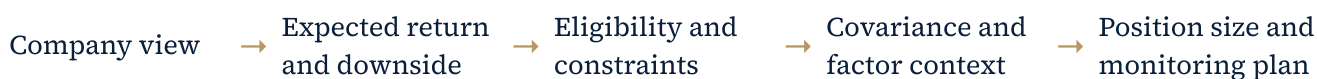
26.3 Active risk

Understand contribution to sector, country, factor, and single-name risk relative to benchmark or mandate.

26.4 Sell discipline

Sell when the thesis is invalidated, when valuation reaches or exceeds fair value without further upside, when a superior opportunity exists, when risk changes, or when mandate eligibility changes.

FIGURE 26.1 – FROM RESEARCH CONCLUSION TO PORTFOLIO DECISION



Source: BIIRG Equities Division.

27 Shariah Screening and BIIRG Equity Research

Eligibility as a documented, methodology-specific due-diligence layer — kept separate from the fundamental thesis.

27.1 Business-activity screen

Exclude businesses whose core activities are inconsistent with the applicable Shariah methodology. Screening standards can differ, so analysts must identify the methodology used.

27.2 Financial screens

Common methodologies apply thresholds to interest-bearing debt, interest-bearing securities and cash, receivables, and impermissible income using specified denominators. Thresholds differ across standards and index providers.

27.3 Purification

Some frameworks require purification of incidental non-permissible income. BIIRG analysts should follow the group's approved methodology rather than inventing thresholds.

27.4 Research integration

Shariah eligibility is a portfolio constraint and due-diligence layer. Analysts should document eligibility, methodology, date of screen, and any borderline issues separately from the fundamental thesis.

BIIRG STANDARD — METHODOLOGY CONTROL

Do not memorize one universal ratio and apply it to every security. AAOIFI, index providers, and institutional Shariah boards can use different definitions, thresholds, denominators, and purification procedures. BIIRG should publish the methodology used alongside each screen.

28 Research Sources, Data Hygiene, and Due Diligence

Where the primary record lives, how to record it so a colleague can reproduce the work, and what to ask management.

28.1 Primary sources

Annual reports on Form 10-K or 20-F, interim reports, current reports on Form 8-K, earnings releases, investor presentations, transcripts, proxy statements, regulatory filings, and company debt documents.

28.2 Secondary sources

Industry data, competitors, trade associations, regulators, academic research, expert commentary, and reputable financial databases can triangulate the primary record.

28.3 Data hygiene

Record source, period, currency, units, GAAP or non-GAAP basis, restatements, corporate actions, and publication date.

28.4 Management questions

Ask questions that reveal unit economics, capital allocation, competitive behavior, bottlenecks, customer decisions, and assumptions — not facts already printed in the deck.

SOURCE REGISTER — STANDING SET

SEC EDGAR or the relevant national regulator	Earnings transcripts
Company investor-relations materials	Competitor filings
Audited annual reports and footnotes	Industry and regulatory datasets
Proxy and governance filings	Price and consensus databases with timestamps

29 BIIRG Equity Research Workflow and Case Study

The weekly process, the structure of an initiation report, and a training case with defined deliverables.

29.1 Weekly workflow

Update company news and estimates; review thesis key performance indicators; update valuation and scenario tables; identify new catalysts and risks; document changes rather than silently overwriting the prior view.

29.2 Initiation report

Executive thesis, company overview, industry, moat, financial analysis, forecast, valuation, catalysts, risks, Shariah screen, scenarios, and recommendation.

29.3 Case study

EXAMPLE — TRAINING CASE

Analyze a hypothetical high-quality semiconductor infrastructure company with 18% revenue growth, 62% gross margin, 28% EBIT margin, net cash, high customer concentration, and a premium valuation. Determine whether AI-related demand creates durable incremental ROIC or whether expectations already capitalize the opportunity.

GROWTH

18%

revenue

GROSS

62%

margin

EBIT

28%

margin

BALANCE

Net cash

position

RISK

High

customer
concentration

Figures are hypothetical case parameters, not estimates for any actual issuer.

29.4 Case deliverables

Build a five-year driver-based model, a DCF, a peer-comparables table, bull/base/bear valuation, earnings sensitivity, a customer-concentration stress test, and a one-page investment committee recommendation.

30 Formula Sheet, Glossary, and Analyst Checklist

The reference layer: the relationships an analyst should be able to write from memory, the vocabulary of the desk, and the questions every recommendation must answer.

30.1 Formula sheet

CORE RELATIONSHIPS

Revenue = price $\times$ volume (or the relevant operating drivers)

Gross profit = revenue – COGS

EBIT = gross profit – operating expenses

NOPAT = EBIT $\times$ (1 – tax rate)

FCFF = NOPAT + D&A – capex – Δ NWC

RETURN METRICS

ROIC = NOPAT $\div$ average invested capital

ROE = net income $\div$ average equity

Gross margin = gross profit $\div$ revenue

EBIT margin = EBIT $\div$ revenue

FCF margin = FCF $\div$ revenue

VALUATION

EV $\approx$ equity value + debt + preferred + minority interest – excess cash and non-operating assets

P/E = price $\div$ EPS

EV/EBITDA = EV $\div$ EBITDA

FCF yield = FCF $\div$ equity value, or enterprise FCF $\div$ EV, depending on definition

DISCOUNTING

$PV = CF_t \div (1 + r)^t$

Gordon terminal value = $CF_{n+1} \div (r - g)$

CAPM cost of equity = $R_f + \beta \times ERP$, potentially adjusted where justified

30.2 Glossary

TERM	DEFINITION
Alpha	Return unexplained by the chosen benchmark or factor model.
Beta	Sensitivity to the market or to a specified factor.
Catalyst	Event or development capable of changing market expectations.
Dilution	Reduction in existing holders' per-share claim from new equity-linked claims.
Enterprise value	Value of operations attributable to all capital providers, subject to adjustments.
FCFE	Cash flow available to common equity after financing needs.
FCFF	Cash flow available to debt and equity capital providers.
Moat	Durable competitive advantage supporting excess returns.
NOPAT	After-tax operating profit before financing effects.
ROIC	After-tax operating return on invested operating capital.
Terminal value	Estimated value of cash flows beyond the explicit forecast.
Variant perception	Investment-relevant view that differs from what appears embedded in market expectations.
WACC	Blended required return of capital providers.
Working capital	Operating current assets minus operating current liabilities, under the chosen definition.

REFERENCE MATERIAL

Final Analyst Checklist

Sixteen questions. A recommendation that cannot answer all of them is not ready for the investment committee.

01 Can I explain how the company makes money in two minutes?

02 What are the three variables that drive most of intrinsic value?

03 What evidence supports the moat?

04 Are earnings converting to cash?

05 Is ROIC above the cost of capital, and why?

06 What must be reinvested to achieve my growth forecast?

07 What is normalized margin?

08 Is the balance sheet resilient?

09 Is management allocating capital rationally?

10 What is consensus assuming?

11 Where is my variant perception?

12 What are bull, base, and bear values?

13 What catalyzes repricing?

14 What invalidates the thesis?

15 Is Shariah eligibility documented under the approved methodology?

16 How does the position affect portfolio concentration and factor risk?

APPENDIX A

Equity Initiation Template

EXECUTIVE THESIS

Recommendation and conviction
Current price and fair-value range
Three to five thesis pillars
Variant perception
Catalysts
Primary risks

COMPANY & INDUSTRY

Business model
Segment economics
Industry structure
Competitive positioning
TAM and growth
Key KPIs

FINANCIAL ANALYSIS

Five-year history
Revenue bridge
Margin bridge
ROIC and ROE
Cash conversion
Balance-sheet analysis

FORECAST & VALUATION

Driver assumptions
Three-statement forecast
DCF
Comparable companies
Scenario valuation
Sensitivity

GOVERNANCE & ELIGIBILITY

Management and capital allocation · Governance · Shariah methodology and screen date ·
Controversies and monitoring items

APPENDIX B

Earnings Review Template

SECTION	QUESTIONS
Headline	Revenue and EPS versus consensus and versus BIIRG?
Quality	What drove the beat or miss? Organic? Margin? Tax? Buyback?
KPIs	Which operating indicators changed?
Guidance	Raised, maintained, or cut? Why?
Estimates	How should forward revenue, EPS, and FCF change?
Valuation	Does fair value change?
Thesis	Strengthened, weakened, or unchanged?
Action	Add, hold, trim, exit, or watch?

APPENDIX C

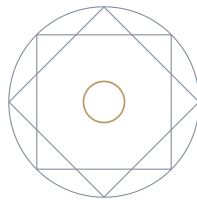
Suggested Primary References

U.S. SEC EDGAR and equivalent national securities regulators	Primary corporate filings.
FASB and the IFRS Foundation	Accounting standards and conceptual guidance.
CFA Institute	Financial statement analysis, equity investments, corporate issuers, portfolio management, and ethics.
Aswath Damodaran	Valuation frameworks, datasets, and corporate-finance research.
Michael Porter	Competitive strategy and industry-structure frameworks.
Benjamin Graham and David Dodd	Security analysis and the margin-of-safety tradition.
Philip Fisher	Qualitative business and management analysis.
Michael Mauboussin	Expectations investing, competitive advantage, base rates, and capital allocation.
AAOIFI and the BIIRG-adopted Shariah methodology	Security screening and purification as formally adopted by BIIRG.

FINAL STANDARD

An equity analyst should be able to defend the recommendation from both directions: explain why the business can create value and explain precisely what could make the thesis wrong. The model, valuation, narrative, and portfolio recommendation must tell the same economic story.

BIIRG



BIIRG ANALYST TRAINING SERIES

Volume I of V — Equities Research

Research standards for the next generation of
investment analysts.

Baruch Islamic Investment Research Group

2026 EDITION