BLACKBIRD FOR TRAINING

Project Appraisal and Infrastructure Finance Course



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Project appraisal and infrastructure finance is the work of testing whether a capital project creates value, using measures such as NPV, and then arranging the debt, equity or PPP public-private partnership funding that pays for it. This 1-week course is a condensed edition for finance, investment and project professionals, and delegates finish with an investment appraisal note and presentation on an infrastructure case.

Introduction

Three frameworks anchor the course. Discounted cash flow appraisal values a project by converting future cash flows into today's money, producing net present value NPV and internal rate of return IRR. Social cost-benefit analysis extends the test to costs and benefits borne by society, using shadow prices. The public-private partnership PPP model shares the financing, building and operation of infrastructure between government and private investors. The level is practitioner, compressed into one week, and teaching combines Excel modelling builds with a group capstone simulation drawn from energy and transport projects.

Course Objectives

- Distinguish project finance from corporate finance and select the funding route that suits a capital project
- Apply NPV, IRR, MIRR, payback and real options to rank competing investment proposals
- Compare economic and financial appraisal results and interpret what each says about social outcomes
- Interpret sensitivity and scenario results from a cash flow model to judge how robust a project is
- Justify a PPP structure, covenant package and risk allocation to lenders and public partners
- Apply hedging instruments and credit enhancement tools to reduce identified project risks

Target Audience

- Finance and investment analysts evaluating capital projects who must judge whether a project's returns justify approval
- Public sector project and planning staff preparing infrastructure cases who must decide when a PPP route is suitable
- Project managers responsible for large capital schemes who must judge which risks to transfer and which to retain
- Banking and lending staff reviewing project loans who must decide which covenants and structures make a project bankable
- Consultants and advisers supporting infrastructure deals who must select the appraisal measures a client should rely on



Course Outline

Day 1: Investment Appraisal Tools and Sources of Capital

- Project Finance vs Corporate Finance: Ring-Fenced Cash Flows Compared With Balance-Sheet Borrowing
- Sources of Capital: Equity, Debt, PPP and Hybrid Funding Models Explained
- NPV and IRR: Discounted Cash Flow Measures for Accepting or Rejecting Projects
- MIRR, Payback and Real Options: Supplementary Measures for Timing and Flexibility
- Economic vs Financial Appraisal: Society-Wide Outcomes Compared With Investor Returns

Day 2: Cost-Benefit Analysis, Uncertainty and Risk Allocation

- Cost-Benefit Analysis: Valuing the Social Costs and Benefits of Public Infrastructure
- Shadow Pricing: Adjusting Market Prices to Reflect True Economic Value
- Macroeconomic Assumptions: Inflation, Exchange Rate and Growth Inputs in Long-Term Projections
- Risk Identification, Assessment and Allocation: Assigning Each Risk to the Best-Placed Party
- Sensitivity vs Scenario Analysis: One Variable at a Time Compared With Combined Cases

Day 3: PPP Deal Structuring and Lender Requirements

- Special Purpose Vehicle: Legal Entity Holding Project Assets, Contracts and Debt
- PPA vs EPC vs O&M Agreements: Revenue, Construction and Operating Contracts Compared
- Financial Covenants and Capital Structure: Debt-to-Equity Levels and Lender Protection Terms
- Basel Rules and Development Finance Institutions: Lender Expectations for Infrastructure Lending
- Government Credit Enhancement: Guarantees and Support Tools That Improve Project Bankability

Day 4: Financial Modelling, Cash Flow Forecasting and Hedging

- CapEx vs OpEx Forecasting: Upfront Investment Compared With Running Cost Projections
- Revenue and Working Capital Forecasting: Projecting Income, Receivables and Payables Timing
- Excel Cash Flow Model: Linking Assumptions, Cash Flows, NPV and IRR Calculations
- Derivatives for Hedging: Forwards, Swaps and Options Against Interest and Currency Risk
- Risk-Adjusted Modelling: Building Sensitivity Switches and Scenario Cases Into the Model

Day 5: Capstone Practice: Appraising and Presenting an Infrastructure Investment

- Capstone Project Simulation: Applying Appraisal Tools to an Infrastructure Investment Case
- Group Project Analysis: Applying Risk Allocation and Structuring Choices to the Case
- Debt vs Equity Financing Strategy: Selecting the Capital Mix for the Capstone Case
- Investment Appraisal Note: Summarising Viability, Risks and the Recommended Financing Structure
- Final Investment Presentation: Delivering the Appraisal Note With Instructor Feedback



Skills You Will Gain

- Discounted Cash Flow Appraisal
- Social Cost-Benefit Analysis
- Shadow Pricing
- PPP Deal Structuring
- Risk Allocation Matrices
- Infrastructure Cash Flow Modelling
- Financial Risk Hedging
- Appraisal Note Writing

Why Attend This Course

- From judging projects on payback alone to ranking them with NPV, IRR and real options together
- From single-point forecasts to models that show how inflation, exchange rates and costs move the result
- From viewing PPP contracts as legal paperwork to reading how PPA, EPC and O&M terms shift risk
- From fragmented spreadsheets to an investment appraisal note and presentation ready for decision-makers

Conclusion

Infrastructure appraisal and finance asks two linked questions: is the project worth doing, and can it be funded on terms that lenders and governments will accept. The course makes three distinctions clear: economic versus financial appraisal, project versus corporate finance, and sensitivity versus scenario analysis. It is the right choice for professionals who need the core tools in one week; a two-week edition covering valuation, working capital and institutional frameworks in more depth suits those who can commit a longer period.

Course FAQs

What is project appraisal and infrastructure finance?

It is the combined discipline of testing whether a capital project creates value, using measures such as NPV, IRR and cost-benefit analysis, and of structuring the equity, debt or PPP funding that pays for building and operating it.

What is the difference between economic and financial appraisal in project appraisal?

Financial appraisal measures returns to the investor from actual cash flows; economic appraisal measures net benefit to society, valuing inputs and outputs at shadow prices. A road can fail the first test yet pass the second, which is often why public support is offered.



Which methods does the project appraisal and infrastructure finance essentials course follow?

It follows discounted cash flow appraisal for NPV and IRR, social cost-benefit analysis with shadow pricing for economic value, and the PPP model with special purpose vehicles, covenants and risk allocation for structuring, all tested through an Excel cash flow model.

Is project appraisal and infrastructure finance essentials right for a public sector planner?

Yes. Public sector planners learn when cost-benefit results justify a project, how a PPP shares risk with private investors and what lenders require, giving them a basis to prepare or review an infrastructure business case.

What do delegates produce on the project appraisal and infrastructure finance essentials course?

Delegates produce an Excel cash flow model for a capstone infrastructure case, an investment appraisal note stating viability, risks and the recommended financing structure, and a group presentation of that recommendation.

