

Project Finance Essentials

module 5, 2022/2023 academic year

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Course description

The course is aimed at decision-making and deal structuring skills development from both banker/bankability perspective and sponsor/investor sides of the table into projects in various industries including but not limited to Oil&Gas, Infrastructure, Energy Conventional & Renewable, etc.

The topics of the course cover common types of deals and best practice in asset-backed financings: trade finance-based, “classic” project finance with no/limited recourse, on-balance projects, Public-Private Partnerships, including an overview of respective financial and legal frameworks.

Course requirements, grading, and attendance policies

Prerequisites. No past course attendance is essential, however, familiarity with corporate finance concepts, financial modeling, financial products, and basic accounting skills is desired. A laptop to perform modeling exercises for most of the lessons in the course is required.

Grading. The course grade is based on the group project final exam (70%) and several take-home and in class assignments, attendance implied (30%).

Course contents

| Week | Dates | Topics |
|------|---------------------------|--|
| 2 | May 15 - 21 (L) | Introduction to project finance theory <ul style="list-style-type: none">- Project Finance vs Corporate Finance- deal types: by industry, by structure; participants – sponsors, financing parties, EPC-contractors, advisors;- deal flow/process |
| 3 | May 22 - 28 (L + S) | Debt structuring <ul style="list-style-type: none">- by deal type (asset-backed financing, trade finance – buyer’s credit, greenfield/brownfield project financing, etc.)- plain vanilla senior debt- sub-parts/interbank financing- subordinated debt/mezzanine- shareholder loans |
| 4 | May 29 - Jun 4 (L + S) | PF Financial model structure <ul style="list-style-type: none">- FAST standards vs reality- Operational model- Cash flow key drivers- Outputs- Simple Cash Waterfall- Modelling pain points- Solving circular references |

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|----------|--------------------------------|---|
| 5 | Jun 5 – 12 (L + S) | Project evaluation - credit ratings - key bankability metrics - key metrics for investment, debt & liquidity - maximum debt capacity, optimal debt sizing Risk analysis, classification, and importance - project risks - financial risks - political risks (+ optionally deeper ECA role overview) |
| 6 | Jun 12 – 18 (L + S) | Deal structuring and risk mitigation - Transaction Documents overview (IM, TS, CTA/FA, ICA, etc.) - Due Diligence Procedures (Technical, Legal, Financial, E&S, etc.) - Term Sheet analysis, typical covenants - Default concepts (EOD vs. Fundamental EOD & Cross-default) Credit enhancements mechanics - DSU (sponsor sub-loans) - DSRA - Cash sweep - LCs/Bills vs cash collateral |
| 7 | Jun 19 – 25 (S) | Group project exam preparation, exam advisory |
| 8 | Jun 26 – Jul 2 | Exam presentation |

Description of course methodology

Lectures, seminars, including mini-deal games, quizzes, preparation of deal supporting materials to gain hands-on experience, case discussions.

Case studies*:

- Solar Farm construction financing
- PPP educational infrastructure project development case (115-FZ/224-FZ on Concessions)
- Oil Upstream & Pipeline project case-study
- Laterite ore refinery plant case-study

**subject to change*

Course materials

Required textbooks and materials

Principles of Project Finance, E.R. Yescombe

Corporate and Project Finance Modeling: Theory and Practice (Wiley Finance) 1st Edition.

Edward Bodmer

Modern Project Finance: A Casebook, 1st Edition, Benjamin C. Esty

Additional materials

Web-sources: <https://www.ijglobal.com/data/index>

<https://www.pfie.com/>

<https://edbodmer.com/>

Academic integrity policy

Cheating, plagiarism, and any other violations of academic ethics at NES are not tolerated.