

The Strategy of International Project Financing - Syllabus – Fall 2012

University of Houston MBA Program – FINA 7334
Stephen V. Arbogast, Executive Professor of Finance
220 D Melcher Hall (office hours: T, Th 4:30-6pm)
713 898-2636 (cell); svarbogast@comcast.net; svarbogast@uh.edu

This course is intended for future finance and legal professionals seeking a 'practitioner's' grasp of Project Financing (PF) and for future executives who wish to understand how PF can help in the execution of business strategy. As such, the course focuses on the reasons why borrowers employ PF and critically examines whether such uses create or destroy value.

The course is largely taught from the borrower's perspective. This viewpoint is fundamental because it is the borrower who must decide whether PF has a role to play in the execution of business strategy. Students interested in a Lender's perspective will benefit, however, from a deeper understanding of borrowers' motives, their ideas on how PF creates value, and from insight into how borrowers compute PF economics.

Course content consists of lecture material, readings and most importantly case studies of recent project financings. Students will form teams and present at least one case study to the class during the semester. In total, eleven cases will be read and ten cases presented for class discussion. Students will also be required to master the basic economics of project financing and their impacts on project economics. Some student teams will present solutions to problem sets as opposed to case studies.

The case studies are all written by the Professor and reflect transactions with which he is personally familiar. Nine cases are discussed in this course, eight of which will be analyzed and presented by the student teams. The case studies display dilemmas that arise when PF is employed as part of a broader business strategy. The cases also illustrate the multiple reasons why Project Sponsors make use of project financing and the dilemmas they face in assuring that project finance adds value. Finally, the cases introduce students to advanced ways of using project finance, such as for resolving partner issues and political risk mitigation.

The fall 2012 course will give special attention to the preparation and analysis of the case studies. Lecture material pertinent to each case study will be presented in class one week in advance. The instructor will also introduce the case study at the end of that class, emphasizing particular issues each team will need to address. Teams are encouraged to discuss the case with the instructor prior to their presentation. Case presentations will then be made at the beginning of class the following week.

Presentations should be no more than 8 PowerPoint slides, not including table of contents. Teams should minimize presenting background material as the class will have read the case. Teams should follow the methodology outlined by the instructor during the first class, and will be graded in part on how well they do so. Every student on a case study team should present part of the team's solution.

The instructor will then present an assessment of each teams' case presentation. He will also conclude each case discussion by highlighting other issues and teaching points of note. The second portion of each class will then cover material pertinent to the following week's case study.

The first part of the course will cover PF fundamentals and economics. Particular attention will be devoted to the legal and practical aspects of 'non-recourse' and 'limited recourse' financing. Specific topics will include the theory of project financing, the creditworthiness of project loans, sources of PF funding, how to compute 'leveraged economics', and the impact of PF on project economics.

Part 2 of the course will focus on the specific strategies that employ PF; it will examine cases which illustrate the factors which lead either to successful deployment of PF or to value destruction. Particular attention will be given to the role of PF in strategies involving joint ventures, its role in infrastructure projects involving 'public/private' partnerships, and to using PF to mitigate project risk.

The final class will feature a Capstone case, **Lessons of the Chad-Cameroon Pipeline**, for which we anticipate having a guest speaker from ExxonMobil to critique the student presentation. Another guest speaker from Societe Generale Bank will join us earlier in the semester.

The Strategy of International Project Financing is intended to be taken in conjunction with "*Tactics and Techniques of Project Financing*". This second course will focus on how to design a Project loan, negotiate its terms, and place the financing in the debt markets. While the two course sequence is recommended for those who seek a mastery of PF, each course is designed to stand on its own. It is recommended, but not essential to begin with the Strategy course and follow up with Tactics & Techniques.

Course Readings and Grading

Course readings will consist of selections from **Project Financing, Asset-Based Financial Engineering, (Abfe)**, and Teaching Notes provided by the Professor. These materials will be posted on Blackboard. In addition, students will be expected to read the assigned Case Studies, which must be purchased at the Bauer College Energy Case Study website: www.bauerenergycases.com. All nine cases are available as a "course pack." Log on, go to Course Packs, and follow the prompts. Lecture notes will be placed on Blackboard after each class, so that students can review the material in conjunction with the assigned case.

Students will be graded on their case study or problems set, which will count for 25% of the course grade. A mid-term (25%), final exam (40%) and class participation (10%) will compose the remainder of the student's grade. Depending upon the midterm exam results, the final exam may be a take-home case study.

Students may contact me via e-mail at svarbogast@comcast.net or svarbogast@uh.edu. In time critical situations, the home e-mail address is a better bet. Alternatively, I can be reached at 713 898-2636.

The course topics, readings and case studies are outlined below.

Class will begin at 6pm on Tuesday, August 28. Please note there will be no class on November 22.

Good Luck and Enjoy the Course!

The Strategy of Project Financing
Course Outline

Part 1

Date	Topic	Case Study Presentation	Readings
<p style="text-align: center;"><u>Class I</u> August 28</p>	<p style="text-align: center;"><u>Introduction & Overview</u></p> <ul style="list-style-type: none"> • Course Overview: 1) PF Fundamentals, 2) PF Strategy and Economics, 3) PF Strategies • Definition of Project Financing and Historical Development • Overview of Reasons Sponsors Consider PF • Lenders Objectives • PF Issues Borrowers and Lenders negotiate • Introduction to Case Study 1 - on changes in PF as the financing technique matured 		<p>Read:</p> <p>PF Abfe: pp. 394 - 397</p>
<p style="text-align: center;"><u>Class II</u> September 4</p>	<p style="text-align: center;"><u>The Project Finance Credit Problem</u></p> <ul style="list-style-type: none"> • How to attract financing for a Project that doesn't exist? • Types of Projects that are suitable • Completion credit risk and support • Operating period credit risk & support • Typical Lender Credit Benchmarks • Non-Recourse vs. Limited Recourse Financing • Introduction to Case Study 2 – on whether a PF is really 'non-recourse' 	<p style="text-align: center;"><u>Case Study 1</u> <u>Presentation</u></p> <p style="text-align: center;"><i>"Didn't You Used to Be Project Financing"</i></p>	<p>Read:</p> <p>PF Abfe: pp. 88-97 and</p> <p>Case Study 1</p>
<p style="text-align: center;"><u>Class III</u> September 11</p>	<p style="text-align: center;"><u>Sources of Project Finance Funding</u></p> <ul style="list-style-type: none"> • Commercial Bank Market • Private Placement Market • Rule 144A Bond Market • Export Credit Agencies • Multilateral Agencies • Comparison of Terms and Conditions • Islamic Finance • Implications for Borrowers • Introduction to Case Study 3 – on sourcing PF in different markets, including the bond market 	<p style="text-align: center;"><u>Case Study 2</u> <u>Presentation</u></p> <p style="text-align: center;"><i>H.K. Genco Ltd.</i></p>	<p>Read:</p> <p>PF Abfe: pp. 209-210, 214-226, 231-237 and</p> <p>Case Study 2</p>
<p style="text-align: center;"><u>Class IV</u> September 18</p>	<p style="text-align: center;"><u>Framing the Economics of PF</u></p> <ul style="list-style-type: none"> • Actual PF Objectives of Sponsors • Investment Economics & Financing Economics • How to do 'Leveraged Economics' • When to do financing economics vs. when to adjust Project Economics • Defining the Opportunity Cost of PF: Cost of Capital vs. Cost of Debt • Centralized Financing - the usual alternative; "Non-economic" costs of PF • Capturing PF costs in Project Economics (I) - the High Cost Financing Debit • PF economics as a Financing Strategy 	<p style="text-align: center;"><u>Case Study 3</u> <u>Presentation</u></p> <p style="text-align: center;"><i>Great Project, Primitive Country: Testing the Sovereign Ceiling</i></p>	<p>Read:</p> <p>Selections from Teaching Note I on PF Project Economics</p>

<p><u>Class V</u> September 25</p>	<p><u>When Does Project Financing Make Economic Sense?</u></p> <ul style="list-style-type: none"> • <i>Review of PF Economics and Problem Set 1</i> • Sponsor Economics if You Don't Have Money • Competing using 'Leveraged Economics' - Non-recourse and recourse financing • Economics of using PF to 'Stretch the Corporate Balance Sheet' • Economics when Political Risk discourages investment or interferes with operations • Economics when Partner Doesn't Have Money • Capturing PF costs in Project Economics (II) - the 'Cost of Carry' • Bank Economics of PF Lending 	<p>Do: Problem Set 1 provided by Professor</p>	<p>Read: Selections from Teaching Note II on PF Economics;</p>
<p><u>Class VI</u> October 2</p>	<p><u>Business Strategy & Project Financing</u></p> <ul style="list-style-type: none"> • <i>Review of Problem Set 2</i> • Introduction to Corporate Strategy • Investment Strategies that Often Employ PF <ul style="list-style-type: none"> - Growth in Capital Intensive industries; accessing scarce resources - High ROE in Regulated Industries & in Low Risk Assets - Speculative Acquisition; growth in High Risk businesses or locations • Contribution of PF to each Strategy <ul style="list-style-type: none"> - Map of actual PF rationales vs. contributions to Strategy • PF's critical success factors & economics; potential Pitfalls & Misuse of PF 	<p>Do: Problem Set 2</p>	<p>Read: PF Abfe: pp.22-28 and</p>
<p><u>Class VII</u> October 9</p>	<p><u>Introduction to Off- Balance Sheet Financing</u></p> <ul style="list-style-type: none"> • Introduction to the Theory of Off-Balance Sheet Financing and its role in Strategy • Accounting Treatment of Project Financing • Rating Agency Treatment of Project Financing • Introduction to Case Study 4 - on the attractions, challenges and economics of using PF to 'expand debt capacity' 		<p>Read: Excerpts from Rating Agencies & Accounting treatment</p>

Part 2

<p><u>Class VIII</u> October 16</p>	<p><u>Project Financing to Expand Debt Capacity</u></p> <ul style="list-style-type: none"> • Does “Off-Balance Sheet” PF exist? • “Limited Recourse” Financing and Debt Capacity • Allocation of risk & credit support among sponsors, suppliers, customers and lenders • Introduction to Case Study 5: promise and costs of using PF to stretch debt capacity 	<p><u>Case Study 4 Presentation</u></p> <p><i>Missol Petroleum Considers Investment Policy and Project Financing</i></p>	<p>Read: PF Abfe: 28-30 and Case Study 4</p>
<p><u>Class IX</u> October 23</p>	<p><u>Project Financing to maximize use of available capital, distribute risk and fund Growth</u></p> <ul style="list-style-type: none"> • Discussion of Leveraged Acquisition PF • Can high growth strategies using PF succeed? Critical roles of Business model & risk allocation • Case study: Calpine • Recognizing the limits of PF-based high growth • Midterm Review 	<p><u>Case Study 5 Presentation</u></p> <p><i>Terrasia Aromatics Project (A)</i></p>	<p>Read: PF Abfe: 288-296 and Case Study 5</p>
<p><u>Class X</u> October 30</p>	<p><u>Midterm Exam</u></p>		
<p><u>Class XI</u> November 6</p>	<p><u>PF and The Problems of Partners</u></p> <ul style="list-style-type: none"> • Partners w/o Money or unwilling to provide it • Forms of ‘Imposition’, Over-financing & ‘Carrying’ a Partner • The Risks of Carrying a Partner • How Project Financing Can Minimize ‘Carry’ • When Partners are not strategically aligned - PF terms as proxy for Partner disputes • How PF can overcome Partner non-alignment • Introduction to Case Study 6: on use of PF for resolving conflicts with Partners, especially government partners 		

<p><u>Class XII</u> November 13</p>	<p><u>Public/Private Infrastructure Partnerships (PPPs) and Introduction to Political Risk</u></p> <ul style="list-style-type: none"> • Reasons why Government prefer PPPs and PF • Infrastructure Projects that are suitable for PF • Forms of Public/Private Partnerships • Potential Pitfalls of PPPs & PF • Predicting & Quantifying Political Risk • Classical Use of PF to Hedge Political Risk • PF financing markets that will take political risk • Introduction to Case Study 7: on measuring and pricing Project Political Risk and targeting 	<p><u>Case Study 6</u> <u>Presentation</u></p> <p><i>Ban Diego LNG</i></p>	<p>Read: Case Study 6</p>
<p>November 20</p>	<p><u>No Class</u></p>		<p>Read: Abfe: pp. 278-283 and Case Study 7</p>
<p><u>Class XIII</u> November 27</p>	<p><u>Using Project Financing to Hedge Political Risk</u></p> <ul style="list-style-type: none"> • New Forms of Political Risk - Project in Very Poor Countries; Potentially Failed States • New Options for Hedging Political Risk: • ECA's, MLA's, Political Risk Insurance • PF and: 1) Stake Reduction; 2) Deterrence; & 3) Deal Term Definition/Clarification • PF Constraints on Host Government options • Integrated Strategy to Hedge Risk w/PF • Structuring for Islamic Financing • Introduction to Case Study 8: on using PF to mitigate catastrophic political risks 	<p><u>Case Study 7</u> <u>presentation</u></p> <p><i>Take Project and Political Risk in Dironda?</i></p>	<p>Read: Case Study 8</p>

<p>Class XIV December 4</p>	<p><u>Business Strategy, Acquisition and PF</u></p> <ul style="list-style-type: none"> • Role of Acquisition in Business Strategy: <ul style="list-style-type: none"> - for mature companies - for financial investors, e.g. private equity • How acquisition financial objectives and challenges vary by investor <ul style="list-style-type: none"> - use of financing to discipline existing businesses - valuing the crucial 'right to walk away' • Characteristics of PF in leveraged buyouts • Discussion of Case Study 9: on financing for Acquisitions <ul style="list-style-type: none"> • Final Exam Preview 	<p><u>Capstone Case Study 8</u> <u>Presentation</u></p> <p><i>Lessons of the Chad-Cameroon Pipeline</i></p> <p><i>(guest from ExxonMobil may critique presentation)</i></p>	<p>Read:</p> <p>PF Abfe: pp. 82-85, 273-277 and</p> <p>Case Study 9: Financing the Acquisition of Kemica Pty.</p>

Final Words:

Academic Honesty:

The University of Houston Academic Honesty Policy is strictly enforced by the C. T. Bauer College of Business. No violations of this policy will be tolerated in this course. A discussion of the policy is included in the University of Houston Student Handbook, <http://www.uh.edu/dos/hdbk/acad/achonpol.html>. Students are expected to be familiar with this policy.

Accommodations for Students with Disabilities:

The C. T. Bauer College of Business would like to help students who have disabilities achieve their highest potential. To this end, in order to receive academic accommodations, students must register with the Center for Students with Disabilities (CSD) (telephone 713-743-5400), and present approved accommodation documentation to their instructors in a timely manner.