## FINA 7A97 The Strategy of Project Finance

October 2014 Stephen V. Arbogast, Executive Professor of Finance

The Strategy of Project Finance seeks to introduce students to the fundamentals of project financing and how it is used in the energy industry. Students should emerge from this course with a basic understanding of how to undertake a project financing and when it a can aid energy firms in creating shareholder value.

Perhaps uniquely among financing techniques, project finance is intimately connected to how energy companies pursue their primary business strategy. For some firms this will mean overcoming financing constraints and being able to undertake more projects. For others who have no financing constraints, project finance will provide sophisticated answers to such questions as: "How do we work effectively with demanding government partners?" and "How do we mitigate risks that otherwise will kill a project."

This three day course will expose students to both the strategic uses of project financing and the practical aspects of executing a financing. **Day one** will provide an introduction to project finance; it also will offer an overview of the reasons why energy companies use project financing as part of their strategic plans. **Day two** will focus on the economics of project financing. More specifically it will describe how to adjust project economics when project finance is being employed. **Day three** will discuss the mechanics of executing a project financing. Students will be introduced to the issues of sizing and structuring a project loan, picking an adviser and negotiating final loan terms.

Case studies will be an important teaching tool in the course. A total of seven cases will be covered. Five cases will be small group projects. These will require students to meet, prepare and present a short PowerPoint analysis of the case. Two cases will be discussed in class. Students will be responsible for reading all cases – these are the primary reading assignments for the course. All cases were authored by the instructor and are based upon projects and situations he encountered during his career with ExxonMobil.

Problem sets will be used to illustrate project economics applications. These problems will be worked and discussed during class. The final exam will be a take-home case study distributed at the end of the third day.

The instructor will be available in the evening to discuss the assigned cases and problem sets. Discussion topics at the end of Days 1 and 2 will give students a chance to ask questions about project finance and the energy industry

## Good Luck and Enjoy the Course!

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<u>Time</u>		<u>Topic</u>	<u>Assignment</u>
Day 1	9:00 am	Introduction: What is Project Finance? How is it used in the Energy Business?	
	10:30 am	Credit Fundamentals of Project Finance Energy Projects suited to Project Finance	Problem Set: DSCR/LLCR
	1:00 pm	Energy Project Finance Models	Case Study: "Didn't You Used to be Project Finance?"
	2:30 pm	Non-Recourse Project Financing for Electric Power	Case Study: H.K. Genco
	4:00 pm	Funding Sources for Project Finance	
	5:30 pm	<b>Discussion Topic</b> : Which sectors of the "Energy Value Chain" are best suited for project finance, and why?	
Day 2	8:30 am	Funding an LNG Project in a Risky Location	Case Study: "Great Project, Risky Location"
	10:00 am	Project Finance & Leveraged Economics	
	11:00 am	Energy Projects and Use/Abuse of Leveraged Economics	Problem Set
	1:00 pm	Project Finance and Working with Partners: The Costs of Over-Financing	
	2:30 pm	Adjusting Project Economics for Over-financing	Problem Set
	3:30 pm	Project Finance & Government Partners	Case Study: "Ban Diego LNG"

<u>Time</u>		<u>Topic</u>	<u>Assignment</u>
Day 2	<b>cont.</b> 4:45 pm	Project Finance & Risk Mitigation	
	5:30 pm	Discussion Topic: <i>How Do Large</i> Energy Multi-nationals Use Project Finance?	
Day 3			
	8:30 am	Using Project Finance to Hedge Acute Political Risk	Case Study: "Chad-Cameroon Pipeline Project"
	10:00 am	Sizing Project Finance Loans	
	11:00 am	Structuring Project Finance Loans	Problem Sets
	1:00 pm	Picking Advisors & Negotiating Project Loans	Case Study Discussion: "Picking an Advisor for the Soro Dondar Project"
	2:30 pm	Advanced Uses of Project Finance Financing Biofuels & LBOs	Case Study Discussion: "Oso McMurtrey Ethanol"
	3:20 pm	Introduction to Take-Home Case Study Exam	
	3:30 pm	Adjourn	