

**Fulbright Economics Teaching Program  
Fall Semester, 2014**

**The Appraisal of Development Expenditures**

**Teaching Team**

Instructor:           Nguyen Xuan Thanh  
                              Huynh The Du  
Tutor:                   Hoang Van Thang  
                              Le Phuc Yen

**Class Meeting Time**

Monday               08:30 – 11:45  
Wednesday         08:30 – 11:45  
Friday                 08:30 – 10:00

**Office Hours**

	Monday	Tuesday	Wednesday	Thursday	Friday
Nguyen Xuan Thanh					14:00 – 17:00
Huynh The Du		15:00 – 16:30		15:00 – 16:30	
Hoang Van Thang	15:30 – 17:00		15:30 – 17:00		
Ngo Thanh Tuyen	15:00 – 16:30		15:00 – 16:30		

If the scheduled office hours are not convenient, please make specific appointments with members of the teaching team.

**Course Objectives**

The objective of the course is to expose students to both the theoretical principles and the practical applications of project appraisal. Upon completion of the course, students will have gained the knowledge and skills necessary for conducting the financial and economic appraisals. In addition, students are expected to build appraisal model by Excel for practical projects of public investment, evaluating the feasibility and analyzing risks based on the model.

**Course Description**

The course is divided into three major parts. In the first part of the course, we discuss the fundamentals of project financial appraisal, ranging from project structure to the financial cost of capital, the construction of cash flows, the application various appraisal criteria, and basic financial model. The second part of the course focuses on the advanced topics of financial appraisal applied to public investment such as capital raising, risk analysis and restructuring the project. The third part of the course is devoted to the social and economic appraisal of a public investment project, including the methods of estimating the economic costs and benefits of project inputs and outputs in different market structure and extortion, the economic values of

production factors such as capital, land, foreign currency and the evaluation of stakeholder impacts.

While there are formal lectures every week, more than half of class time will be devoted to case study discussion. Students will have to use the knowledge and skills acquired in formal lectures and readings to analyze real cases within the context of public investment in Vietnam and the world.

### Course Requirements

Students will have to complete four problem sets covering major technical and theoretical aspects of the course. The problem sets will include questions and policy memos relating to the case studies discussed in the class.

Problem Set	Topic	Date of Distribution	Date of Submission
Problem Set 1	Basic financial modeling for project appraisal	02 July 2014	09 July 2014
Problem Set 2	Financial feasibility policy memo	09 July 2014	16 July 2014
Problem Set 3	Comprehensive financial appraisal modeling	16 July 2014	23 July 2014
Problem Set 4	Economic Price in project appraisal	30 July 2014	08 Aug 2014
Problem Set 5	Modeling and economic analysis	11 Aug 2014	25 Aug 2014

In preparing answers to the problem sets, students are encouraged to discuss in groups. Students, however, should write their own answers after consultations within the group.

There will be a mid-term exam and a final exam, both of which are computer-based. The use of Microsoft Excel and other analytical software packages is expected in these exams.

### Grading

Problem Sets:	30%
Class Discussion:	15%
Mid-term Exam:	25%
Final Exam:	30%

Problem sets and other types of submission are due at 08:20 in both hard and soft copies unless otherwise instructed. Hard copies are submitted at the Computer Room, while electronic files are uploaded in the course webpage. See FETP Student Handbook for penalties against late submission of assignments.

### Readings

The main reading for the course is case studies written by FETP on public investment projects in Vietnam and case studies on public investment in the world written by Harvard Kennedy School and Harvard Business School.

The World Bank Institute, *Economic Analysis of Investment Operations: Analytical Tools and Practical Applications*, 2002 (Abv: WBI)

Glenn Jenkins and Arnold Harberger, *Manual on Cost-Benefit Analysis of Investment Decisions*, Harvard Institute for International Development, 1995. (Abv: SHD)

John D. Finnerty, *Project Financing: Asset-based Financial Engineering*, Wiley Finance, 2007.  
(Abv: Finnerty).

Richard Brealy, Stewart Myers & Franklin Allen, *Principles of Corporate Finance*, Mc Graw-Hill, 9<sup>th</sup> edition, 2008.

Robert Pindyck & Daniel Rubinfeld, *Microeconomics*, Prentice-Hall, 5<sup>th</sup> edition.

In addition, there are case studies and other readings assigned for each class.

## PART I – FINANCIAL ANALYSIS

<b>WEEK 1</b>		
<b>Lecture 01:</b>	<b>Monday, 30 June 2014</b>	Nguyen Xuan Thanh
Introduction to Project Appraisal and Project Cash Flow		
Readings:	WBI, Chapters 1 & 2. SHD, Chapter 1, 2 and 3: 3.1 & 3.2.	
<b>Case 01:</b>	<b>Monday, 30 June 2014</b>	Huynh The Du
Ha Noi - Ho Chi Minh City Express Railway Project		
Readings:	Vietnam Railway Corporation, Report on the Investment and Construction of Ha Noi - Ho Chi Minh City Express Railway, March 2010, Hanoi, Abstract and Chapter 10	
<b>Lecture 02:</b>	<b>Wednesday, 02 July 2014</b>	Huynh The Du
Cash Flows and Project Appraisal Criteria		
Readings:	SHD, Chapter 4. WBI, Technical Appendix, pp. 289-298. Finnerty, Chapter 9.	
<i>Distribution of Problem Set 1, due on Wednesday, 09 July 2014</i>		
<b>Case 02:</b>	<b>Wednesday, 02 July 2014</b>	Nguyen Xuan Thanh
Project appraisal based on cash flow method		
Readings:	Kho Son Cement project appraisal: similarities of different cash flow methods, FETP case study.  SHD, Chapter 3: 3.3	
<b>Review 01:</b>	<b>Friday, 04 July 2014</b>	Hoang Van Thang
Cash Flow and Present Values (optional)		

<b>WEEK 2</b>		
<b>Lecture 03:</b>	<b>Monday, 7 July 2014</b>	Nguyen Xuan Thanh
Financial modeling principles: Indicator tables, project life cycle, currency and price index		
Readings:	WBI, Chapter 5, "Financial Analysis and Inflation", pp. 54-56.  SHD, Chapter 6: 6.1-6.3	
<b>Case 03:</b>	<b>Monday, 07 July 2014</b>	Nguyen Xuan Thanh

Financial modeling for a bus project by Excel: Cho Lon – Go Vap Bus Project		
Readings: Cho Lon – Go Vap Bus Project, FETP case study		
<b>Lecture 04:</b>	<b>Wednesday, 9 July 2014</b>	Huynh The Du
Working Capital in Project Appraisal		
Readings: SHD, Chapter 6: 6.4.		
Aswath Damodaran, Damodaran on Valuation, Wiley Finance, 2 <sup>nd</sup> ed, 2006, Chapter 2: “Cost of Capital”		
Finnerty, Chapter 9		
<i>Submission of Problem Set 1. Distribution of Problem Set 2, due on Wednesday, 16 July 2014</i>		
<b>Case 04:</b>	<b>Wednesday, 09 July 2014</b>	Nguyen Xuan Thanh
Practical financial modeling: Tate & Lyle Nghe An Sugar Factory Project (1)		
Readings: Nghe An Tate & Lyle Sugar Company, HBS Case Study		
Finnerty, Chapter 10		
<b>Case 04:</b>	<b>Wednesday, 09 July 2014</b>	Nguyen Xuan Thanh
Practical financial modeling: Tate & Lyle Nghe An Sugar Factory Project (2)		
Readings: Nghe An Tate & Lyle Sugar Company, HBS Case Study		
Finnerty, Chapter 10		
<b>WEEK 3</b>		
<b>Lecture 05:</b>	<b>Monday, 14 July 2014</b>	Nguyen Xuan Thanh
Capital Raising and Analysis of Project Repayment		
Readings: Finnerty, Chapter 8 & 12		
<b>Case 05:</b>	<b>Monday, 14 July 2014</b>	Nguyen Xuan Thanh
Capital Raising for Binh An BOT Water Supply Project		
Readings: Binh An Water Plant, FETP case study		
<b>Lecture 06:</b>	<b>Wednesday, 16 July 2014</b>	Huynh The Du
Sensitivity Analysis		
Readings: WBI, Chapter 11		
<i>Submission of Problem Set 2. Distribution of Problem Set 3, due on Wednesday, 23</i>		

<i>July 2014</i>		
<b>Lecture 07:</b>	<b>Wednesday, 16 July 2014</b>	Huynh The Du
Risk Analysis and Monte Carlo Simulation		
Readings: Ho Chi Minh City – Long Thanh – Dau Giay Expressway , FETP case study		
<b>Review 02:</b>	<b>Friday, 18 July 2014</b>	Hoang Van Thang
Sensitivity analysis practice and Monte Carlo simulation		

<b>WEEK 4</b>		
<b>Case 06:</b>	<b>Monday, 21 July 2014</b>	Nguyen Xuan Thanh
Financial Appraisal of the HCMC-Long Thanh-Dau Giay Expressway		
Readings: HCMC-Long Thanh-Dau Giay Expressway, FETP Case Study.		
<b>Case 07:</b>	<b>Wednesday, 23 July 2014</b>	Nguyen Xuan Thanh
Restructuring Phu My Bridge BOT Project		
Readings: Restructuring Phu My Bridge BOT Project , FETP Case Study.		
<i>Submission of Problem Set 3</i>		
<b>Review 03:</b>	<b>Friday, 25 July 2014</b>	Huynh The Du
Mid-term review		

**WEEK 5**

**Mid-term exam: Monday, 28 July 2014**

**PART II – ECONOMIC ANALYSIS**

**WEEK 5**

**Lecture 08: Wednesday, 30 July 2014** Nguyen Xuan Thanh

Cost and Benefit Analysis in Undistorted Markets

Readings: SHD, Chapter 7&8

WBI, Technical Appendix, Conceptual Framework, pp. 299-302

*Distribution of Problem Set 4, due on Wednesday, 26 Aug 2015*

**Case 08: Friday, 01 Aug 2014** Nguyen Xuan Thanh

Economic Price Estimate of Water and Electricity

Readings: Thu Duc Water BOO Project

DPE Electricity Project, FETP case study

**WEEK 6**

**Lecture 09: Monday, 04 Aug 2014** Huynh The Du

Cost and Benefit Analysis in Distorted Markets

Readings: WBI, Technical Appendix, Conceptual Framework, pp. 302-304

SHD, Chapter 9

**Lecture 10: Wednesday, 06 Aug 2014** Huynh The Du

Economic Valuation of Foreign Trade Goods and Economic Exchange Rate

Readings: WBI, Technical Appendix, pp. 305 – 319

SHD, Chapter 10

**Lecture 11: Wednesday, 06 Aug 2014** Nguyen Xuan Thanh

Economic Valuation of Economic Exchange Rate

Readings: WBI, Technical Appendix, pp. 305 – 319

SHD, Chapter 10

**Review 04: Friday, 08 Aug 2014**

Huynh The Du

Economic Cost of Labor and Land

Readings: WBI, Chapter 5, pp. 70-73; Technical Appendix, pp. 324-328  
SHD, Chapter 13.

*Submission of Problem Set 4.*



<b>WEEK 7</b>		
<b>Case 09:</b>	<b>Monday, 11 Aug 2014</b>	Nguyen Xuan Thanh
Economic Modeling of the HCMC-Long Thanh-Dau Giay Expressway		
Readings: HCMC-Long Thanh-Dau Giay Expressway, FETP Case Study.		
<i>Distribution of Problem Set 5, due on Monday, 25 Aug 2014</i>		
<b>Case 09:</b>	<b>Monday, 11 Aug 2014</b>	Nguyen Xuan Thanh
Economic Analysis of the HCMC-Long Thanh-Dau Giay Expressway		
Readings: HCMC-Long Thanh-Dau Giay Expressway, FETP Case Study.		
<b>Lecture 12:</b>	<b>Wednesday, 13 Aug 2014</b>	Huynh The Du
Analysis of Stakeholders' impacts		
Readings: SHD, Chapter 14		
WBI, Chapter 12		
<b>Case 10:</b>	<b>Wednesday, 13 Aug 2014</b>	Nguyen Xuan Thanh
Evaluating the Impact of Stakeholders: Nghe An Sugar Project		
Readings: Nghe An Tate & Lyle Sugar Company, HBS Case Study.		
<b>Review 05:</b>	<b>Friday, 15 Aug 2014</b>	Nguyen Xuan Thanh
Analysis of Stakeholders' impacts		

<b>WEEK 8</b>		
<i>No classes</i>		

<b>WEEK 9</b>		
<b>Review 06:</b>	<b>Monday, 25 Aug 2014</b>	Nguyen Xuan Thanh
Final Exam Review		
<i>Submission of Problem Set 5.</i>		
<b>Final Exam:</b>	<b>Friday, 29 Aug 2014</b>	