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USAID'S LEADERSHIP IN PUBLIC FINANCIAL MANAGEMENT 2013 Program on Investment Appraisal and Risk Analysis South Africa Course Final Report (Module 2)

18 June 2013



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Final Report

The design and implementation of the **2013 Program on Investment Appraisal and Risk Analysis** was awarded by the United States Agency for International Development (USAID) to Cambridge Resources International, Inc. (CRI) through Deloitte Consulting as the main contractor (FIXED PRICE SUBCONTRACT AGREEMENT: 3235-0001 SA13). The program was sponsored jointly by USAID and National Treasury, South Africa.

The second two-week module of the four-week training program **offered from June 3 to 14, 2013** at the ABSA Conference Center, covered the economic, stakeholder and cost-effectiveness analysis of development projects. The program's theoretical and practical parts were selected based on the Department of Treasury of South Africa areas of focus and the current challenges in project evaluation. CRI was able to complete the second module of the program as it was specified in the contract. The program second module's academic content, schedule, summary of case studies, and syllabus are attached as Appendix I. A binder is also sent along with this report, which contains the lecture notes and the program's CD.

A total of **29 participants** attended this training program. There was one officer from the USAID South Africa. The participants found the program academically challenging and in line with the nature of the work at South Africa Treasury Department. The complete profiles of participants and faculty members are attached as appendix II.

The participants submitted a detailed **Module II Program Evaluation** at the end of the module. The results of the evaluations were highly positive and the course was found to be very useful by all. All participants, who responded, suggested that their colleagues must also be given the opportunity to participate in this program. A number of useful recommendations were also included in the evaluations. The complete evaluation results, including the detailed comments by the participants, are attached to this report as appendix III.

Participants' performance in the course was evaluated based on both written test and case study submissions. One written quiz was taken at the end of the module. The table below summarizes the components of the total grade and their weights:

Component	Major Case I	Major Case II	Quiz
Weight	30%	30%	40%

Questionnaire of the quiz is included in the binder set sent along with this report.

A number of Recommendations for Future Programs; Based on the program evaluations results, it is clear that the design and implementation of the 2013 Program on Investment Appraisal and Risk Analysis has been successful. However, a number of changes/modifications

could improve the experience for future participants and the value of the program as a whole. These changes/modifications are summarized below:

1. Significant pressure during the last week to finish a major case and prepare for the exam need to be spread out better.
2. Too theoretical at times. Not enough advice is given on how to populate a spreadsheet model and what to look for.
3. More time should be allocated for the entire program in the future.

If there are any further questions concerning the design and delivery of the training program, please feel free to contact either myself at jenkins@cri-world.com, or Bahman Kashi at bahman.kashi@cri-world.com.

Sincerely Yours,



Glenn P Jenkins
President
Cambridge Resources International Inc.

Appendix I: Program Content

Academic Content

The Module II of the Program covered in detail a range of subjects in economic, stakeholder and cost-effectiveness analysis of projects. The performance of participants has been evaluated on their work through the quiz and the completion of two feasibility studies. As a part of the course work, each participant applied the knowledge and skills he/she acquired to prepare an integrated appraisal of a major investment project.

The total number of lecturing hours was 29 (twenty nine), plus 27 (twenty seven) hours of laboratory and case analysis. The topics covered in the program include:

1. Economic and Stakeholder Analysis
 - a. Role of Economic and Stakeholder Analysis in Investment Appraisal
 - b. Application of Microeconomic for project evaluation
 - c. Principles underlying the economic analysis of projects
 - d. Estimation of economic cost of foreign exchange
 - e. Estimation of economic prices and conversion factors for tradable and non-tradable goods and services
 - f. Stakeholder Analysis
 - g. Economic opportunity cost of foreign financing
 - h. Assessment of basic needs
 - i. Application of cost-benefit analysis to electricity investments
 - j. Estimation of opportunity cost of wind and solar investments in developing countries
 - k. Application of cost-benefit analysis to transportation investments
 - l. Assessing economic opportunity cost of capital and labor
 - m. Economic valuation of willingness to pay for water and telecommunication
2. Cost-effectiveness analysis
 - a. Cost-effectiveness analysis with application to health projects
 - b. Cost-effectiveness of budget allocation for education sector

The content, course requirements, level of instruction and classroom contact hours of the Program on Investment Appraisal and Risk Analysis are such that if it were offered during the regular academic year of many North American universities. it is comparable to a one-semester length graduate course.

Program Schedule – Week I

	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
8:30	Role of Economic and Stakeholder Analysis in Investment Appraisal	Principles Underlying the Economic Analysis of Projects	Measurement of Economic Prices and Conversion Factors for Tradable Goods and Services	Stakeholder Analysis	Costs and Benefits of Electricity Investments
10:00	Break	Break	Break	Break	Break
10:15	Micro-Economics I for Economic Valuation	Shadow Price of Foreign Exchange	Measurement of Economic Prices for Non-tradable Goods and Services	Economic Opportunity Cost of Foreign Financing & Basic Needs	Opportunity Cost of Investment in Wind and Solar Capacity in Developing Countries
12:00	Lunch	Lunch	Lunch	Lunch	Lunch
13:00	Micro-Economics II for Economic Valuation	Analysis of Major Case 1	Analysis of Major Case 1	Analysis of Major Case 1	Analysis of Major Case 1
15:00	Break	Break	Break	Break	Break
15:15 - 16:30	Distribution of Major Case I	Analysis of Major Case 1	Analysis of Major Case 1	Analysis of Major Case 1	Completion and Submission of Major Case 1

Program Schedule – Week II

	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
8:30	Costs and Benefits of Transportation Investment	The Economic Opportunity Cost of Capital	Economic Valuation of Willingness to Pay for Water and Telecommunication	Quiz II	Completion and Submission of Major Cases
10:00	Break	Break	Break	Break	Break
10:15	Costs and Benefits of Transportation Investment (cont.)	The Economic Opportunity Cost of Labour	Cost Effectiveness in Health	Cost Effectiveness Analysis in Education	Presentation of Major Cases
12:00	Lunch	Lunch	Lunch	Lunch	Lunch
13:00	Presentation of Major Case 1	Analysis and Submission of Major Case 2 (Financial)	Analysis and Submission of Major Case 2 (Economic)	Distribution and Analysis of Major Case 2 (Stakeholders)	Closing Ceremony
15:00	Break	Break	Break	Break	
15:15 - 16:30	Distribution and Analysis of Major Case 2 (Financial)	Distribution and Analysis of Major Case 2 (Economic)	Course Review	Analysis of Major Case 2 (Stakeholders)	

Summary of Case Studies

Participants spent most of the afternoons working on practical aspects of the course. The afternoon sessions of the first week were spent on a first major case designed to refresh the participants on the skills learned in the first module of the training program completed in March, 2013 as well as to apply new knowledge gained on the economic and stakeholder analysis aspects of the project evaluation. During the second week participants worked on the second major case that was designed to minimize amount of excel base effort required to complete the spreadsheet, hence, allowing the participants to focus on analytical aspects of the project appraisal.

Major Cases

Major Case I Provided by CRI

- Domestic Production of Ready to Use Therapeutic Food (RUTF) for Improved Nutrition
- Botswana Biodiesel Expressing Plant and Refinery Project
- Appraisal of Senegal Rural Water and Sanitation Program

Major Case II Provided by CRI

- Appraisal of Bright Light Electricity Generation Project
- M12 Highway Improvement Project
- Restructuring the Water and Sewer Utility in SAMZ

Program Syllabus

Week 1 - Day 1 - Monday, June 3

8:30 - 10:00	Role of Economic and Stakeholder Analysis in Investment Appraisal References/Readings: Jenkins, G.P., Kuo, C.Y., and Harberger, A.C., "Chapter 1: The Integrated Analysis", Cost - Benefit Analysis for Investment Decisions, (2012)
10:00 - 10:15	Coffee Break
10:15 - 12:00	Micro-Economics I for Economic Valuation Dhakal, D.N.S., Lecture Notes on "Foundations of Applied Microeconomics for Investment Appraisal," Cambridge Resources International, (2005) Boardman, A. et al., "Chapter 3: Basic Microeconomic Foundations of Cost-Benefit Analysis", Cost Benefit Analysis: Concepts and Practice, Prentice Hall; 3 edition (Dec 25, 2005)
12:00 - 13:00	Lunch
13:00 - 15:00	Micro-Economics II for Economic Valuation Dhakal, D.N.S., Lecture Notes on "Foundations of Applied Microeconomics for Investment Appraisal," Cambridge Resources International, (2005) Boardman, A. et al., "Chapter 3: Basic Microeconomic Foundations of Cost-Benefit Analysis", Cost Benefit Analysis: Concepts and Practice, Prentice Hall; 3 edition (Dec 25, 2005)
15:00 - 15:15	Coffee Break
15:15 - 16:30	Distribution of Major Case 1 References/Readings: Case Handouts

Week 1 - Day 2 - Tuesday, June 4

8:30 - 10:00

Principles Underlying Applied Economic Analysis of Projects

References/Readings: Jenkins, G.P., Kuo, C.Y., and Harberger, A.C., "Chapter 7: Principles Underlying the Economic Analysis of Projects", Cost - Benefit Analysis for Investment Decisions, (2012)

Boardman, A.E., Greenberg D.H., Vining A.R., Weimer D.L., "Chapter 4: Valuing Benefits and Costs in Primary Markets", Cost-Benefit Analysis Concepts and Practice, (2006)

10:00 - 10:15

Coffee Break

10:15 - 12:00

Economic Cost of Foreign Exchange

References/Readings: Jenkins, G.P., Kuo, C.Y., and Harberger, A.C., "Chapter 9: Shadow Price of Foreign Exchange and Non-tradable Outlays ", Cost - Benefit Analysis for Investment Decisions, (2012)

Jenkins, G.P., Harberger, A.C., Kuo, C. Y., and Mphahlele, M.P., "The Economic Cost of Foreign Exchange for South Africa," The South African Journal of Economics, Vol. 71:2, (June, 2003), pp. 298-324

12:00 - 13:00

Lunch

13:00 - 15:00

Analysis of Major Case 1

References/Readings: Handouts of Major Case 1

15:00 - 15:15

Coffee Break

15:15 - 16:30

Analysis of Major Case 1

References/Readings: Handouts of Major Case 1

Week 1 - Day 3 - Wednesday, June 5

8:30 - 10:00

Measurement of Economic Prices and Conversion Factors for Tradable Goods

References/Readings: Jenkins, G.P., Kuo, C.Y., and Harberger, A.C., "Chapter 10: Economic Prices for Tradable Goods and Services," Cost-Benefit Analysis for Investment Decisions, (2012).

Teaching Note: Estimation of Economic Prices for Traded Goods and Services, Queen's University, Canada, (March 2007).

10:00 - 10:15

Coffee Break

10:15 - 12:00

Measurement of Economic Prices for Non-Tradable Goods and Services

References/Readings: Jenkins, G.P., Kuo, C.Y., and Harberger, A.C., "Chapter 11: Economic Prices for Non-Tradable Goods and Services," Cost-Benefit Analysis for Investment Decisions, (2012)

12:00 - 13:00

Lunch

13:00 - 15:00

Analysis of Major Case 1

References/Readings: Handouts of Major Case 1

15:00 - 15:15

Coffee Break

15:15 - 16:30

Analysis of Major Case 1

References/Readings: Handouts of Major Case 1

Week 1 - Day 4 - Thursday, June 6

8:30 - 10:00

Stakeholder Analysis

References/Readings: Harberger, A.C., Jenkins, G.P. and Kuo, C.Y, "Chapter 13: Evaluation of Stakeholder Impacts," Cost-Benefit Analysis for Investment Decisions, (2012).

10:00 - 10:15

Coffee Break

10:15 - 12:00

Economic Opportunity Cost of Foreign Financing & Basic Needs

12:00 - 13:00

Lunch

13:00 - 15:00

Analysis of Major Case 1

References/Readings: Handouts of Major Case 1

15:00 - 15:15

Coffee Break

15:15 - 16:30

Analysis of Major Case 1

References/Readings: Handouts of Major Case 1

Week 1 - Day 5 - Friday, June 7

8:30 - 10:00

Costs and Benefits of Electricity Investments

References/Readings: Jenkins, G.P., Kuo, C.Y., and Harberger, A.C., "Chapter 18: The ABCs of Electricity Project Analysis", Cost-Benefit Analysis for Investment Decisions, (2012)

Jenkins, G.P., Kuo, C.Y., and Harberger, A.C., "Chapter 19: Applications to Electricity Projects: Combined versus Single Cycle Electricity Generation", Cost-Benefit Analysis for Investment Decisions, (2012)

Harberger, A.C., "Chapter 9: Marginal Cost Pricing and Social Investment Criteria for Electricity Undertakings," Project Evaluation: Collected Papers, University of Chicago Press, (1976)

10:00 - 10:15

Coffee Break

10:15 - 12:00

Opportunity Cost of Investment in Wind & Solar Capacity in Developing Countries

Baurzhan S., Jenkins, G. P., "Solar versus Combined Thermal Electricity Generation in Africa: Which is Greener?"

Salci S., Jenkins G.P., "An Integrated Investment Appraisal of an Onshore Wind Farm"

Borenstein, S., "The Private and Public Economics of Renewable Electricity Generation", Journal of Economic Perspectives" Volume 26, Number 1, (2012), Pages 67-92.

Ruth, L., "Electricity Costs: The folly of Wind Power", (2012).

12:00 - 13:00

Lunch

13:00 - 15:00

Analysis of Major Case 1

References/Readings: Handouts of Major Case 1

15:00 - 15:15

Coffee Break

15:15 - 16:30

Completion and Submission of Major Case 1

References/Readings: Handouts of Major Case 1

Week 2 - Day 1 - Monday, June 10

8:30 - 10:00

Costs and Benefits of Transportation Investments

References/Readings: Jenkins, G.P., Kuo, C.Y., and Harberger, A.C., "Chapter 16: Cost - Benefit Analysis of Transportation Projects", Cost-Benefit Analysis for Investment Decisions, (2012)

Capital Appraisal Handbook, Road Agency of Limpopo, Cambridge Resources International, MA, USA, 2004.

10:00 - 10:15

Coffee Break

10:15 - 12:00

Costs and Benefits of Transportation Investments (continued)

References/Readings: Jenkins, G.P., Kuo, C.Y., and Harberger, A.C., "Chapter 16: Cost - Benefit Analysis of Transportation Projects", Cost-Benefit Analysis for Investment Decisions, (2012)

Capital Appraisal Handbook, Road Agency of Limpopo, Cambridge Resources International, MA, USA, 2004.

12:00 - 13:00

Lunch

13:00 - 15:00

Presentation of Major Case 1

References/Readings: Handouts of Major Case 1

15:00 - 15:15

Coffee Break

15:15 - 16:30

Distribution and Analysis of Major Case 2: Financial

References/Readings: Major Case 2 Handouts

Week 2 - Day 2 - Tuesday, June 11

8:30 - 10:00

Economic Opportunity Cost of Capital

References/Readings: Jenkins, G.P., Kuo, C.Y., and Harberger, A.C., "Chapter 8: Economic Opportunity Cost of Capital", Cost - Benefit Analysis for Investment Decisions, (2012)

10:00 - 10:15

Coffee Break

10:15 - 12:00

Economic Opportunity Cost of Labor

References/Readings: Jenkins, G.P., Kuo, C.Y., and Harberger, A.C., "Chapter 12: The Economic Opportunity Cost of Labor," Cost-Benefit Analysis for Investment Decisions, (2012).

Bicak, H., Jenkins, G.P., Kuo, C. Y., and Mphahlele, M.P., "An Operational Guide to the Estimation of The Economic Opportunity Cost of Labour in South Africa, "The South African Journal of Economics, Vol. 72:5, (December, 2004).

12:00 - 13:00

Lunch

13:00 - 15:00

Analysis and Submission of Major Case 2: Financial

References/Readings: Major Case 2 Handouts

15:00 - 15:15

Coffee Break

15:15 - 16:30

Distribution and Analysis of Major Case 2: Economic

References/Readings: Major Case 2 Handouts

Week 2 - Day 3 - Wednesday, June 12

8:30 - 10:00	Economic Valuation of Willingness to Pay in Water and Telecommunication & Basic Needs Jenkins, G.P., Kuo, C.Y., and Harberger, A.C., "Chapter 20: Restructuring the Water and Sewer Utility in Panama," Cost-Benefit Analysis for Investment Decisions,(2012) Boardman, A.E., Greenberg D.H., Vining A.R., Weimer D.L., "Chapter 5: Valuing Benefits and Costs in Secondary Markets", Cost-Benefit Analysis Concepts and Practice, (2006)
10:00 - 10:15	Coffee Break
10:15 - 12:00	Cost Effectiveness with Application to Health Projects References/Readings: Jenkins, G.P., Kuo, C.Y., and Harberger, A.C., "Chapter 15: Cost – Effectiveness and Cost – Utility Analysis" Cost-Benefit Analysis for Investment Decisions, (2012) Belli, P., et.al, "Chapter 7: Cost Effectiveness", Economic Analysis of Investment Operations: Analytical Tools and Practical Applications, WBI Development Studies, World Bank Institute
12:00 - 13:00	Lunch
13:00 - 15:00	Analysis and Submission of Major Case 2: Economic References/Readings: Major Case 2 Handouts
15:00 - 15:15	Coffee Break
15:15 - 16:30	Course Review

Week 2 - Day 4 - Thursday, June 13

8:30 - 10:00

Quiz II

10:00 - 10:15

Coffee Break

10:15 - 12:00

Cost Effectiveness in Budget Allocation for School Building and Repair

Belli, P., et.al, "Chapter 7: Cost Effectiveness", Economic Analysis of Investment Operations: Analytical Tools and Practical Applications, WBI Development Studies, World Bank Institute

World Bank, (2001) Zeinali, A., "Infrastructure Choices in Education in South Africa: Location, Build or Repair", Department of Economics, Queen's University, Canada (2010)

12:00 - 13:00

Lunch

13:00 - 15:00

Distribution and Analysis of Major Case 2 (Stakeholders)

References/Readings: Major Case 2 Handouts

15:00 - 15:15

Coffee Break

15:15 - 16:30

Analysis of Major Case 2 (Stakeholders)

References/Readings: Major Case 2 Handouts

Week 2 - Day 5 - Friday, May 17

8:30 - 10:00	Completion and Submission of Major Cases
10:00 - 10:15	Coffee Break
10:15 - 12:00	Presentation of Major Cases
12:00 - 13:00	Lunch
13:00 - 15:00	Closing Ceremony

Appendix II: Participants Profiles

Program on Investment Appraisal and Risk Analysis

Pretoria, South Africa (Module II: June 3 – 14, 2013)

Participants Profile



The 2013 Program on Investment Appraisal and Risk Analysis
was designed and delivered by Cambridge Resources International, Inc.,
the program was sponsored by
U.S. Agency for International Development (USAID), and
The National Treasury, Republic of South Africa



2013 Program on Investment Appraisal and Risk Analysis Pretoria - South Africa (Module II: June 3 - 14)

- First Row (L-R):** Ms. Boipuso Modise, Ms. Nolwazi Dlungwane, Ms. Othelia Groenewald, Ms. Maropeng Phosa, Mr. Mikhail Miklyaev (Faculty)
- Second Row (L-R):** Mr. Boitumelo Mashilo, Mr. Joe Sekhobela, Mr. Ike Mokhele, Ms. Ellen Yolande Smit, Ms. Ntokozo N. Gumede, Ms. Lindiwe Tshabalala
- Third Row (L-R):** Mr. Piwe Tshonbe, Mr. Mostafa Shahee (Faculty), Mr. Thabang Mamaru, Mr. George Sepeng
- Fourth Row (L-R):** Mr. Thabo Tshabalala, Mr. Makgoka Lekganyane, Mr. Rashaad Amra, Ms. Shannon Kemp, Ms. Angelika Sylvia Golider, Ms. Mapule Mofokeng, Mr. Sherwin Narciso Mendoza Gabriel, Mr. Luis Paniagua, Mr. Isaac Kurasha
- Fifth Row (L-R):** Mr. Berkan Tokar (Faculty), Mr. Stephen Zhanje (Faculty), Mr. Hasan Ulas Altioek (Faculty), Mr. Ntlangula Luyolo, Mr. Matthew Townshend, Mr. Martin Odendaal

PARTICIPANTS

2013



Rashaad Amra
Senior Economist

National Treasury of the Republic of South Africa

240 Madiba street
Pretoria
South Africa

Tel: 0027123155266

Email: rashaad.amra@treasury.gov.za



Nolwazi Dlungwane
Senior Analyst

National Treasury

240 Madiba Street
Pretoria
South Africa

Tel: 0027123155021

Email: nolwazi.dlungwane@treasury.gov.za



Sherwin Narciso Mendoza Gabriel
Senior Economist

National Treasury

240 Madiba Street
Pretoria
South Africa

Tel: 0027848553215

Email: sherwin.gabriel@ treasury.gov.za



Angelika Sylvia Goliger

Senior Economist

National Treasury

240 Madiba Street

Pretoria

South Africa

Tel: 0027123155770

Email: angelika.goliger@treasury.gov.za



Othelia Groenewald

Analyst

National Treasury

240 church street

Pretoria

South Africa

Tel: 002712 315 6646

Email: othelia.groenewald@treasury.gov.za



Ntokozo N Gumede

Senior Economist

National Treasury

240 Madiba Street

Pretoria

South Africa

Tel: 0027123155871

Email: ntokozo.gumede@treasury.gov.za



Ayanda Valerie Hlatshwayo

Intern

National Treasury

240 Madiba Street
Pretoria
South Africa

Tel: 0027725569105

Email: ayanda.hlatshwayo@treasury.gov.za



Shannon Kemp

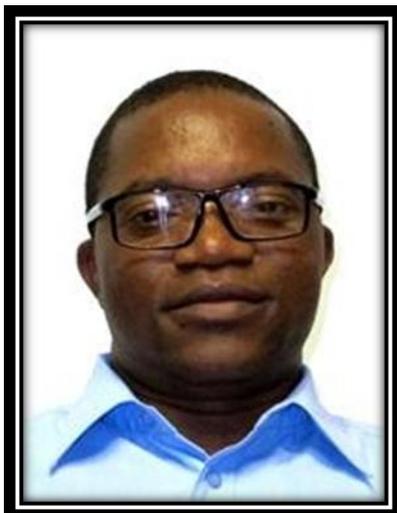
Economist

National Treasury

240 Madiba Street
Pretoria
South Africa

Tel: 0027123155660

Email: shannon.kemp@treasury.gov.za



Isaac Kurasha

Policy Analyst

National Treasury

240 Madiba Street
Pretoria
South Africa

Tel: 002727123155213

Email: isaac.kurasha@treasury.gov.za



Dineo Lekgeu

Intern

National Treasury of the Republic of South Africa

240 Madiba Street
Pretoria Central
South Africa

Tel: 002712315 5271

Email: d.clekgeu@gmail.com



Thabiso Macheli

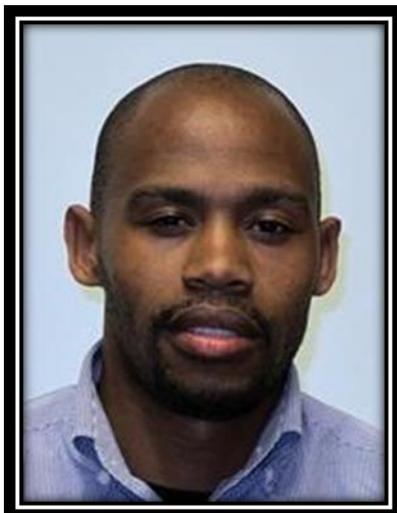
Analyst

National Treasury

240 Madiba Street
Pretoria
South Africa

Tel: 0027123155349

Email: thabiso.macheli@treasury.gov.za



Thabang Mamaru

Mineral Economist

Department of Mineral Resources

70 Meintjies
Travenna Campus
Sunnyside
South Africa

Tel: 002712 444 3808

Email: thabang.mamaru@dmr.gov.za



Boitumelo Mashilo

Senior Economist

National Treasury

240 Madiba Street

Pretoria

South Africa

Tel: 0027123155812

Email: boitumelo.mashilo@treasury.gov.za



Boipuso Modise

Senior Economist

National Treasury

240 Madiba Drive

Pretoria

South Africa

Tel: 002712 315 5387

Email: boipuso.modise@treasury.gov.za



Mapule Mofokeng

Economist

National Treasury

240 Madiba Street

Pretoria

South Africa

Tel: 0027123956571

Email: mapule.mofokeng@treasury.gov.za



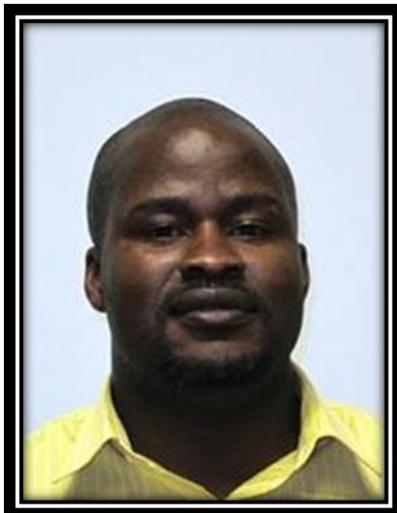
Ike Mokhele
Deputy Director

Higher Education

Department of Higher Education and Training
123 Francis Baart Street
Pretoria
South Africa

Tel: 002712 3125338

Email: ike0127@gmail.com



Makgoka Lekganyane Nda
Economist

Agriculture

503 Belvedere Street
Arcadia
South Africa

Tel: 0027123198103

Email: makgokal@nda.agric.za



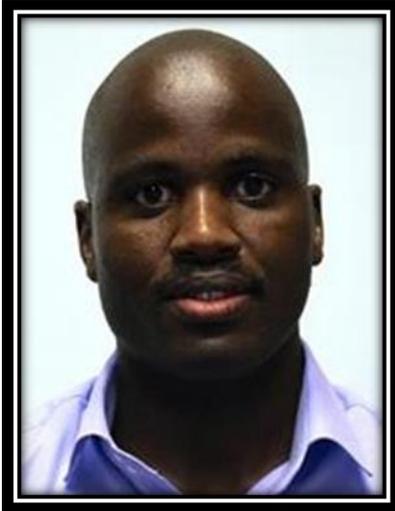
Hendrick Nkosi
Analyst

National Treasury

140 Madiba Drive
Pretoria
South Africa

Tel: 002712 315 5261

Email: Hendrick.nkosi@treasury.gov.za



Luyolo Ntlangula
Senior Financial Analyst

National Treasury
240 Madiba Street
Pretoria
South Africa

Tel: 0027123155571
Email: luyolo.ntlangula@treasury.gov.za



Martin Odendaal
Senior Economist

National Treasury
240 Madiba Street
Pretoria
South Africa

Tel: 0027123155440
Email: martin.odendaal@treasury.gov.za



Maropeng Phosa
Project Coordinator

Department of Agriculture, Forestry and Fisheries
20 Steve Biko Street
Agriculture Place Building Block X
Pretoria, South Africa

Tel: 002712 319 6642
Email: MaropengP@daff.gov.za



Paul Pleva

Economist

USAID/South Africa

100 Totius Street
Groenkloof
Pretoria, South Africa

Tel: 0027124522265

Email: ppleva@usaid.gov



Joe Sekhobela

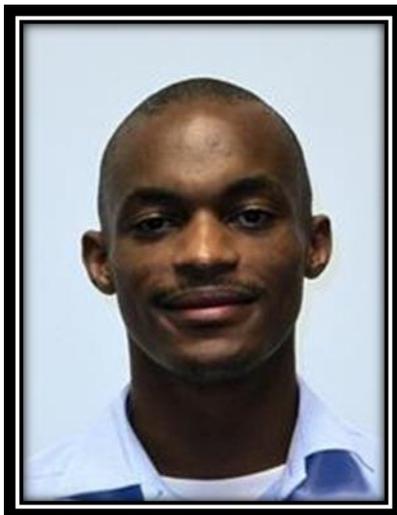
Economist

Department of Trade and Industry

77 Meintjies Street
Sunnyside
Pretoria, South Africa

Tel: 0027123941593

Email: msekhobela@thedti.gov.za



George Sepeng

Budget Analyst

National Treasury

240 Madiba street
Pretoria
South Africa

Tel: 0027123956781

Email: george.sepeng@treasury.gov.za



Ellen Yolande Smit

Director RIA

National Treasury

240 Madiba Street

Pretoria

South Africa

Tel: 002712 3155327

Email: yolande.smit@treasury.gov.za



Matthew Townshend

Policy Analyst

National Treasury

40 Church Square

Pretoria, South Africa

Tel: 0027123956591

Email: matthew.townshend@treasury.gov.za



Thabo Tshabalala

Financial Analyst

Department of Public Enterprises

1090 Arcadia street

Infotech Building, Hatfield

Pretoria, South Africa

Tel: 0027124311110

Email: thabo.tshabalala@dpe.gov.za



Lindiwe Tshabalala

Control Environmental Officer - Assistant Director

Department of Environmental Affairs

Fed-sure Forum Building
315 Pretorius Street
Pretoria, South Africa

Tel: 0027123103552

Email: ltshabalala@environment.gov.za



Piwe Tshombe

Senior Economist

National Treasury

240 Madiba Road
City of Tshwane
South Africa

Tel: 0027123956535

Email: piwe.tshombe@treasury.gov.za

FACULTY 2013



Glenn P. Jenkins

Faculty

President

Cambridge Resources International

Cambridge, MA

Tel: ___ +90 392 366 0012

Fax: +90 392 366 0005

E-mail: jenkins@cri-world.com



Hasan Altioek

Faculty

Cambridge Resources International

Cambridge, MA

Tel: ___ +90 533 836 40 00

Fax: +90 392 366 0005

E-mail: hasanulasaltioek@gmail.com



Mikhail Miklyaev

Faculty

Cambridge Resources International

Cambridge, MA

Tel: ___ +90 542 874 40 74

Fax: +90 392 366 0005

E-mail: mikhail.miklyaev@cri-world.com



Mostafa Shahee

Faculty

Cambridge Resources International

Cambridge, MA

Tel: +90 533 8757098

Fax: +90 392 366 0005

E-mail: mshahee@gmail.com



Berkan Mustafa Tokar

Faculty

Cambridge Resources International

Cambridge, MA

Tel: ___ +90 533 869 9779

Fax: +90 392 366 0005

E-mail: berkan.tokar@gmail.com



Stephen Zhanje

Faculty

Cambridge Resources International

Cambridge, MA

Tel: ___ +27 825 479 800

Fax: +27 866 369 196

E-mail: szhanje@gmail.com

Appendix III: Program Evaluation Results

Program Evaluation Results

*2013 Program on Investment Appraisal
and Risk Analysis*

Date: June 13, 2013

Summary

Instruction

Instructors overall performance along with the effectiveness of the section were rated by the participants on scale from 1 to 10 (1 - Poor, 5-Adequate, 10 - Excellent). The average of the collected results for each instructor is summarized below:

Economic Analysis

Instructor	Topics Covered	Average
Glenn P Jenkins	<ol style="list-style-type: none">1. Role of Economic and Stakeholder Analysis in Investment Appraisal2. Shadow Price of Foreign Exchange3. The Economic Opportunity Cost of Capital and Economic Opportunity Cost of Foreign Financing4. Cost and Benefits of Electricity Investments5. Opportunity Cost of Investment in Wind and Solar Capacity in Developing Countries	8.5
Hasan Ulas Altioek	<ol style="list-style-type: none">1. Principles Underlying the Economic Analysis of Projects2. Measurement of Economic Prices and Conversion Factors for Tradable Goods and Services3. Measurement of Economic Prices and Conversion Factors for Non-Tradable Goods and Services4. Costs and Benefits of Transportation Investment5. The Economic Opportunity Cost of Labor	9.1
Berkan Tokar	<ol style="list-style-type: none">1. Stakeholder Analysis and Basic Needs2. Cost Effectiveness in Health	8.4
Stephen Zhanje	<ol style="list-style-type: none">1. Micro-Economics for Economic Valuation2. Economic Valuation of Willingness to Pay for Water and Telecommunication	8.9

Practical Hours (Lab)

The performance of faculty members during the practical sessions was rated from 1 to 10 (1 - Poor, 10 Excellent). The summary of results is summarized below:

Faculty	Approachability and Responsiveness	Overall Effectiveness	Degree of preparation	Ability to explain material effectively	Average
Mikhail Miklyaev	9.4	9.4	9.3	9.3	9.4
Stephen Zhanje	9.6	9.5	9.5	9.3	9.5
Berkan Tokar	9.3	9.3	9.3	9.3	9.3
Mostafa Shahee	9.4	9.5	9.4	9.5	9.5

Assignments

On a scale of 1 - 10, the usefulness/appropriateness of the problem sets and major case were rated by the participants (1 - Poor, 10 - Excellent).

Assignment	Usefulness/appropriateness
Major Case I	8.7
Major case II	8.8

Program Design and Logistics

On a scale from 1 to 10, participants rated the timing and difficulty of the course (1 - Too Little/Easy, 5 - Just Right, 10 - Too Much/Difficult).

Timing		Difficulty	
Project Organization	4.2	Level of Course	6.3
Economic Analysis	4.2	Range of Topics covered	5.9
Major Cases	4.7	Overall length of course	7.1
		Amount of required reading	6.6
		Emphasis on quantitative skills	5.6
		Emphasis on case studies	6.2
		Emphasis on computers	5.8
		Emphasis on policy	4.7
		Emphasis on practical skills	5.6
		Opportunity for class discussion	5.4

Recommending the Program

All the participants indicated that they would definitely recommend that a colleague or staff member in their unit attend the program in the future.

Detailed Comments

Instruction

Financial Analysis

Glenn P Jenkins

1. Role of Economic and Stakeholder Analysis in Investment Appraisal
2. Shadow Price of Foreign Exchange
3. The Economic Opportunity Cost of Capital and Economic Opportunity Cost of Foreign Financing
4. Cost and Benefits of Electricity Investments
5. Opportunity Cost of Investment in Wind and Solar Capacity in Developing Countries

Overall Value of This Section and Effectiveness of Lecturer	8.5
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What did you like?

- I liked that we dealt with real life examples. Also liked the fact that Glenn shows examples of projects that we worked on. This helps to put everything into perspective.
- Glenn has the ability to link theory with relevant examples which make it easy for learners to follow.
- Economic opportunity cost of capital & foreign financing because makes you to understand the value foregone.
- The section was interesting showing us the hidden costs of using foreign exchange/relying on activities that require foreign exchange while the supply is not adequate.
- The wealth of experience that is shared by Prof.
- Practical examples and especially electricity. Shadow price and wealth of knowledge.
- The method of presentation and mentoring.
- The professor is very good and knowledgeable about the topics. Goes above to help you understand.
- How Prof. explained concepts and then applied to real life events. He is able to share experience from the past projects.
- Practical examples. Link the concepts to real life examples.
- Practical examples.
- I liked the use of examples in the electricity sector.
- Good mix of practical examples.
- I really liked that Glenn was able to easily deliver real life examples very relevant to the topic presented. When presenting with heavy theory it helped me tremendously.
- The course was very useful and relevant to assist in the kind of work we are doing in a daily basis.
- The section on opportunity cost of investment in wind and solar capacity.
- Cost and Benefits of Electricity investments, Opportunity cost of wind and solar.

What did you dislike?

- I did not clearly grasp everything.
- The pace at which the work, (lectures and case studies) was too high and the case studies are too long, repetitive and end up confusing.
- I struggle to hear professor sometimes.
- Some assumptions on calculating economic benefits and losses are too unreal and not practical in working world. Cannot use these in my working world.
- While highly valuable, some sections were too technical.
- Sometimes went too deep assuming that students have sufficient understanding of the theory.
- The lecture structure not always logical. Theory and concepts too intensive and difficult to distinguish between them.
- I struggled to understand the opportunity cost of foreign financing.
- The solar analysis appeared to be outdated and although an example still influences how people think. SA has some viable solar panels which are not too badly priced.

Hasan Ulas Altioik

1. Principles Underlying the Economic Analysis of Projects
2. Measurement of Economic Prices and Conversion Factors for Tradable Goods and Services
3. Measurement of Economic Prices and Conversion Factors for Non-Tradable Goods and Services
4. Costs and Benefits of Transportation Investment
5. The Economic Opportunity Cost of Labor

Overall Value of This Section and Effectiveness of Lecturer	9.1
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What did you like?

- He is very clear when he lectures; he is able to answer questions effectively.
- Very fluent and knowledgeable. Is a good teacher who knows the subject matter.
- Everything. Makes one understand why things are done that way.
- The section was interesting knowing that economic cost/benefit exists and that should not just focus on the financial analysis of the projects. Enjoyed the way of teaching.
- The detailed explanation.
- Explains concepts well. Good interaction with the class.
- Articulation and Pronunciation is very clear.
- He is very good. I enjoyed the lecture.
- He has an ability to simplify complex problems. He is patient and always willing to go to extra rule.
- Takes you through the basic concepts thoroughly and then applies principles in the examples.
- I enjoyed the analysis of transportation sector.
- Hasan is a great lecturer and simplifies concepts for us to understand.
- Hasan delivered some very heavy lectures excellently. Always make sure class is following and took care to answer questions carefully.
- Very interesting lecture that demonstrates experience in his area.
- He has an understanding of materials and makes practical examples.
- Cost and benefits of transportation investment.

What did you dislike?

- I think we could have spent more time on these sections.
- It was too fast so sometimes learners would lag behind.
- Does not answer questions promptly and accurately.
- Too many topics covered at once after you have assignments. Making time to prepare for lecture hard.
- I found some aspects very theoretical with not much applicability to real life.
- Teaching us PhD level material.

Berkan Tokar

1. Stakeholder Analysis and Basic Needs
2. Cost Effectiveness in Health

Overall Value of This Section and Effectiveness of Lecturer	8.4
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What did you like?

- I liked that he is very approachable and very clear when he lectures. I like that he is able to break down a difficult concept into components that are easy to understand.
- Berkan teaches in pace. It is so nice that he makes sure that learners are following.
- The importance of identifying the stakeholders and being able to determine how they are affected (positively, negatively).
- Enjoyed analysis and method of teaching, really understood the work.
- Good at explaining concepts.
- His personality and time pace of lecturing is ok for me.
- He is very good speaks slowly for you to understand clearly.
- He is knowledgeable.
- Goes through the material on the level that is understandable.
- Berkan was able to explain most concepts well.
- Cost Effectiveness Analysis was an important section that is useful to have a good grasp of.
- These sections are very relevant to our work and given the social demand in SA it was very useful.
- Berkan teaches very well. He takes care to ensure that class understood before moving on.
- Explaining the core material clearly.

What did you dislike?

- He is struggling with English and it becomes difficult to follow what he is saying. He is reluctant to answer the questions.
- Too many topics covered at once after you have assignments. Making time to prepare for lecture hard.
- He wasn't too complex.
- QALY and DALY were not explained enough I had to follow up with my own research to understand these concepts better.

Stephen Zhanje

1. Micro-Economics for Economic Valuation
2. Economic Valuation of Willingness to Pay for Water and Telecommunication

Overall Value of This Section and Effectiveness of Lecturer	8.9
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What did you like?

- I like that he is very clear when he lectures. He also makes a lot of reference, to the work he has done in the past.
- Very accommodative and knowledgeable about subject matters.
- Everything about the topic and how certain decisions are made (informed decisions).
- Really enjoyed the analysis and really liked the way of teaching.
- The detailed explanation and humor.
- Enjoying Lecturer.
- The logical way of presentation and the pace at which he lectures and ensures that everyone is on board. His explanations are clear.
- He is very good. I enjoyed the lecture.
- His way of teaching is excellent. He is able to break-down complex problems in such a way that is easy to understand.
- Very effective in linking theory to existing knowledge.
- I enjoyed revising micro-economic topics although I got a bit tedious at times.
- The water and telecommunication sections were good practical example.
- Excellent lecturer. Does a great job of involving class participation. Really enjoyed his lecture.
- He makes the concepts easy to understand and very friendly with his jokes.
- Economic valuation of the willingness to pay for water, he showed a different approach which was interesting.

What did you dislike?

- Spent too much time on basic micro. Meant we had less time on longer theory and practicality.
- Too many topics covered at once after you have assignments. Making time to prepare for lecture hard.
- I found the telecommunication section far too theoretical.
- The micro-economic section was far too basic & more value could be gained by focusing on more technical sections of the work.

Laboratory

Mikhail Miklyaev

Approachability and Responsiveness	9.4	Overall Effectiveness	9.4
Degree of preparation	9.3	Ability to explain material effectively	9.3

Suggestions for Improvements:

- Excellent work.
- Excellent team always willing to help.
- He is very good.
- Well Done.
- Provide great help.

Stephen Zhanje

Approachability and Responsiveness	9.6	Overall Effectiveness	9.5
Degree of preparation	9.5	Ability to explain material effectively	9.3

Suggestions for Improvements:

- Excellent work.
- Excellent team always willing to help.
- Keep up the good work.
- He is very good.
- Well Done.
- A few of explanations were too reliant on technical based eplanation rather than a layman application approach.

Berkan Tokar

Approachability and Responsiveness	9.3	Overall Effectiveness	9.3
Degree of preparation	9.3	Ability to explain material effectively	9.3

Suggestions for Improvements:

- Excellent work.
- A great help every time there was a question.
- Excellent team always willing to help.
- Improve language and temper.
- Well Done.
- Very willing to help, makes difficult concepts easier through taking us through and through process.

Mostafa Shahee

Approachability and Responsiveness	9.4	Overall Effectiveness	9.5
Degree of preparation	9.4	Ability to explain material effectively	9.5

Suggestions for Improvements:

- I think he should be more involved in assisting the group.
- Continuous participation in the program will help to improve his confidence.
- Mostafa is a great guy, effective as a tutor, however he did seem a bit shy.
- Excellent team always willing to help.
- Be more emphatic and stricter.
- Well Done.

Assignments

Major Case I

On a scale of 1 - 10, the usefulness/appropriateness of the major case I was rated as: **8.7**

What did you like?

- More time to complete the case.
- The case was relevant to situation being experienced in some countries. It gave me the opportunity to understand the approaches in daily evaluation for an economic perspective.
- Provokes thoughts and understanding of concepts.
- The case was interesting and insightful.
- Filling in the spreadsheet was useful to learn concepts.
- Good to see complete project. Also helped to remind concepts of the first Module.
- The case opened my mind and made sense to theory.
- I learnt a lot about electricity, road and water projects.
- I can use it in the future.
- It brought light on an existing project at work and I understood why financial and economic valuations of such projects always crucial.
- It reminded us of the first module of the course. It helped to link financial and economic statements.
- The revision of financial analysis-but then it gets too much. The economic analysis was useful in understanding how to apply CF's.
- Well developed with clear flow to properly show the process.
- Very interesting case, facilitators are very helpful.
- An interesting case to do.
- The Senegal water was an interesting and relevant project.
- It was good to see how financial and economic analysis fits together for a full analysis.
- Very interesting case study that improved my level on working on excel spreadsheet.
- The modeling and overall approach of the project.
- That formulas for calculations were given.

What did you dislike?

- I think it was an interesting case, but we didn't have enough time to complete. I think it would be better if it was broken down into parts like Case 2.
- Some of the assumptions made there were unrealistic.
- Long computing on the template.
- Ambiguous or repetitive questions.
- Calculation intensive.
- Time was too short to grasp properly and understand.
- The length of the course and the repetitive nature of calculations.
- It was long but everything was very useful.
- That we had to start with financial statements.
- Too much time was spent on the financial analysis, could possibly complete some lines or provide some formulas that more time and energy could be spent on economic analysis.
- Wasn't prepared to do much of the financial analysis again.
- Financial analysis was a little excessive, giving little time to fully comprehend difference between what we did in March vs. now.

- The financial analysis was extremely long, which took up too much time. Thus I had little time to actually try to understand the case.
- A lot of the value was lost because of the volume of excel rows. I found that I was hurrying through to complete on time rather than investigating the techniques and methods of analysis.
- Not enough time.

Major Case II

On a scale of 1 - 10, the usefulness/appropriateness of the major case II was rated as: **8.8**

What did you like?

- I like that it was broken down into parts, thus it did not feel like it was too long.
- The problem stated fitted well in live situation.
- Short spreadsheet computing.
- The case was interesting and insightful.
- Helps that it was less data intensive and split up.
- The case opened my mind and made sense to theory.
- The structure of only calculating the necessary tables and analyzing their after, Very good all cases must be like this.
- Real projects.
- Financial info already provided. Focused on economic parameters and statements.
- That it was broken up into pieces and only had to complete a few lines (made room for more understanding and interpretation).
- Less technical-more need to think about implications.
- Modular case (one day financial analysis, one day economic analysis and etc.)
- Interesting case and there was more time to do analysis and think about what I was doing.
- The road project was an interesting case.
- The case was very relevant to SA.
- Performing sensitivity analysis and interpreting it. Very interesting.
- Got good idea of sector inputs

What did you dislike?

- Repetition in questions.
- Time constraints meant that you did excel sheet without always understanding what you are doing. Questions could be answered without real understanding.
- Time was too short to grasp properly and understand.
- The time allocated for completion was too short.
- The stricter deadlines. Don't have enough time for breaks.
- Would have had to do one or two more conversion factors to understand them better.
- Tight deadline means I didn't think deeply enough about costs and benefits not captured in the model - focus was on rushing to complete on time. A little too easy (hints in the case write up gave entire formula. so it became mechanical to copy what was written on the sheet rather than think about what I was doing).
- I felt there was too little time to understand the case.
- Time.

Program Summary

Time Allocation

The participants as reported in front of each item rate the amount of time devoted to the following components of the program.

	1 - Too Little	5 - Just Right	10 - Too Much
1. Project Organization		4.2	
2. Economic Analysis		4.2	
3. Major Cases		4.7	

Suggestions and ideas for improvement:

- More time.
- Extend the program to three weeks session.
- Mini breaks in lectures. In an intensive course pushing for 1:30 min slots gets tiring and one loses focus at the end.
- More time is needed to grasp the content of this program, It is too much to take in, in just two weeks. Next time may be one additional week. No point of wasting such quality content. This is very useful and needs time.
- Stretch the period to one week per quarter per annum and arrange for students to sleep at the venue for the duration of the course.
- Two weeks is a short period.
- Reduce the work from previous financial course and concentrate on economic analysis than having to do financial NPVs, again filling the long spreadsheet and duplicating previous lessons.
- Open book quiz.
- One full example to be done in class as a lecture would be good.
- Sometimes the lectures feel rushed in order to accommodate more time for the major cases.
- Some of the basics could be dealt with quicker. Major case I needs more time Dealing with the spreadsheet is correct you just need more time to understand what you are doing.
- I think the course is one of the best i have ever attended. The lecturers are very knowledgeable and helpful. I do think however that the course is very demanding given other time demands on some of us, May be in future the case may be lengthened.

What did you dislike?

- It is too short.
- The program was very short I would suggest more time should be added.
- Course is intense (As I guess it supposed to be), but difficult to catch up an theory if you fall behind or don't understand something.
- Time constraints.
- The time allocation.
- Too many things to do within the short period.
- There was a lot cover within a short period of time.
- The time limits. Too little time to study so much material.
- Pressure in last week to finish a major case & exam need to be better spread out.
- Range of topics covered wasn't too difficult, rather too many over such a short period of time to fully grasp. Some of the lectures could have been more interactive, e.g. letting us try to graph economic benefits & costs of raising supply of importable goods on our own.
- Too much focus on financial aspects.
- Too theoretical at times. Not enough advice is given on how to populate the spreadsheet ourselves & what to look for.
- The program is very time demanding which is difficult when you have other pressure.

Would you recommend that a colleague or staff member in your unit attend the program in the future? (Please check one)

Definitely Yes: **X (All who responded)**

Probably No:

Definitely No:

Additional Comments

- The program is very time demanding which is difficult when you have other pressure.
- Good work to everyone.
- This has been a fantastic learning experience, subjects, course notes and faculty provide a great combination for CBA.
- Thank you
- I would recommend this course to both private and public sectors. It is a useful CBA tool. However, I would suggest more time.
- This is a good course and given sufficient time and right atmosphere it is a good course.
- This has to be a continuous course for the government employees. A way should be found to ensure that skills gained in this course are continuously applied in work environment; Opportunity for training of trainers should be introduced. Partnership should be formed with local universities to ensure that there is a knowledge transfer.
- Thanks for a great course and for sharing you knowledge and expertise with us. Keep up the good job.
- I would definitely recommend the program especially to the ones dealing with the projects like myself. We have Environmental program where they implement most of the environment related projects: working on water, land, fire and etc. We also have social responsibility program where they implement projects like installation of solar panels and etc.
- Good course. I found it very valuable. Thank you.
- The course is excellent I wish we could do the course in the normal time taken to do it.