ASSIGNMENT SHEET  
LIR 809  
Spring 2005  
Professor Karen Roberts

REQUIREMENTS FOR ALL WRITTEN ASSIGNMENTS
The SLIR master’s program trains professionals, and I expect professionalism in the assignments I receive. If you are in doubt about what constitutes a professional presentation of work, ask yourself if you would give your work to your boss in a work setting. All assignments must be type written, double spaced with 1 – 1.25” margins, numbered pages, and stapled or otherwise securely fastened together (no paperclips). Adhere to the page limit for each assignment: It is more difficult to write a short and coherent analysis than one that rambles and includes irrelevant information. Writing quality is one of the criteria that will be used to evaluate your paper. Your paper should be well organized, with an introduction, conclusion, and transitions between sections. Any attached figures or tables should be explicitly cited in the text. The purpose of all of the assignments is to for you to practice analytic skills needed to do labor market analyses. Your work should demonstrate your ability to perform the required analyses; therefore, you should explain your thinking, not just present conclusions. For assignments that require reference citations, use a recognized reference style. No assignments will be accepted electronically.

I. RATIONAL DECISION-MAKING FOR TRAINING INVESTMENTS. (100 Points) (DUE February 24)
In class, we have discussed the concept of human capital investment decisions, where firms and individuals choose the level of education and training that will bring them the greatest rate of return. While it is rare to literally sit down and calculate the rate of return in considering an education or training decision, most people at least informally have considered whether more education is a financially beneficial move. In this step, you are going to formally evaluate your decision to get a master’s degree.
You will use EXCEL for your calculations. I recommend that you adapt the spreadsheet used in the in-class practice session. To do this step, you will need to go through the following steps:

a. Calculate the cost of training. To keep this simple, assume the cost of your education all occurs in the present. Consider both direct and indirect costs (i.e., tuition and fees, materials, time costs, and any other costs you think of that occur because you are in school). One of the biggest costs will be foregone productivity, what you would be earning if you were working instead of being in school. Use your estimated salary rate as a proxy for foregone productivity. There may also be psychic costs associated with the type of training (fear of change, frustration over making mistakes, leaving family and friends, etc.). List all of the costs in the spreadsheet and sum them. I am not trying to pry into your personal lives so feel free to fictionalize any information you want.

b. Determine the benefits. The benefits will be your increased productivity and thus earnings due to your education. To proxy the increased productivity, estimate a higher wage rate you will earn as a result of your degree. You must also estimate how long you think the benefits will last. Also consider any psychic benefits that may accrue from this degree.

c. Calculate the present value of the benefits. The next step is to quantify the benefits in a form that will allow you to compare them to the costs. In other words, you need to calculate the present value of the benefits of your master’s degree.
For this assignment, you will be using the excel function, NPV(). NPV has this syntax:

\[ \text{@NPV(rate, value 1, value 2,...)} \]

where rate is the discount rate and value 1, value 2, etc. are the cell addresses for the benefits for each period. The syntax for the benefits values in Excel is starting address: ending address. The formula is already entered in your spreadsheet but you will have to enter the discount rate and the nominal value of benefits for each period over which you expect to enjoy benefits, and adjust the range in the formula so that it captures all of the benefit periods you have entered.

Justify your choice of both the discount rate and the benefit stream. Once you have calculated the costs and the present value of your master’s degree, calculate the benefit cost ratio. Finally, write a summary of your calculations, including all the assumptions you made in both the cost and benefit calculations, and your conclusion about the quality of this investment. Maximum assignment length is 5 pages, plus worksheet.

Evaluation criteria:

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<tr>
<th>Points</th>
<th>Requirement</th>
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<tbody>
<tr>
<td>35</td>
<td>Completeness in estimates of costs and benefits including specification of underlying assumptions</td>
</tr>
<tr>
<td>35</td>
<td>Understanding and accuracy in use of present value analysis</td>
</tr>
<tr>
<td>20</td>
<td>Writing quality</td>
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<tr>
<td>10</td>
<td>Professionalism of presentation</td>
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II. STAFFING DECISIONS: CORE OR CONTINGENT EMPLOYEES (100 points) (DUE March 31)

To do this assignment, read the required reading by Roberts and Gleason. It will provide you with useful information. You will be provided with a spreadsheet to do this analysis. Choose an organization with a labor market you would like to analyze. It may be one where you have worked or where a friend or family member has worked or one where you would like to work eventually. It can be private, public, or not-for-profit. Select one where you have some familiarity with the major production processes. Select one occupation from your organization. Assume that your organization has an unexpected need for work that might ordinarily be done by employees in the selected occupation -- it may be a special project, a surge in workload, or due to a loss or absence of core workers. The three broad types of information you will need are costs of core workers, costs of contingent workers, and productivity of core workers. Consult the Roberts and Gleason reading to find out what data you will need to either collect or estimate (You do not have to generate alternative scenarios as suggested in that article).

Costs of Core Workers: Either find out from your firm or estimate using BLS or other secondary data sources the wage rate (prorate salaried workers) and some estimate for non-wage benefits. Be sure to document the sources and steps used to make your estimates, using accepted footnoting and bibliographic styles, where applicable.

Costs of Contingent Workers: Here you will need to determine the hourly cost to the firm to use a temporary worker. If feasible, contact a temp agency located near the firm find out what the temp firm would charge employers to provide a temporary worker to do the job you are analyzing. If you cannot get information from a temp firm, look for this information using secondary data sources. Again, be clear about the assumptions you have made and the steps needed in constructing your estimates.
Productivity of Core Workers: Productivity is the most difficult information to obtain. If possible, you should consult with your firm as to how they measure productivity and obtain their estimates of how much they think their workers accomplish in a specified time period. If you can get absolutely no guidance from the firm, you will have to consult BLS data on productivity and construct estimates from that (Look at: stats.bls.gov for productivity estimates). Be clear about the assumptions you have made and the steps needed in constructing your estimates.

Expected Productivity of Contingent Workers: You should use the same metric for contingent workers that you used for core workers. If you are able to get information from the temp firm, also ask them for an estimate of their workers' productivity using the metric you have decided to use as your measure. If you cannot get an estimate, you will have to make your own estimate. Justify this estimate in terms of the likely skill levels of contingent workers in the particular occupation you are analyzing.

Enter this information into the spreadsheet. Once the information for the core worker costs and productivity and contingent worker costs is entered, the spreadsheet will calculate the breakeven productivity for contingent workers. Using this information and your estimate of contingent productivity, determine how you would staff the organization. Justify your conclusion.

The next objective of this assignment is to determine whether or not the firm should train the contingent workers. Consider the nature of the short-term need that prompted the firm to want to use contingent workers in the first place and the skills needed to perform that task. Consider both general and firm-specific skills. Assume at a minimum that the temporary workers would need some orientation to the firm. Evaluate whether or not the contingent workers are likely to have the needed skills and in those cases where skills are lacking, estimate the costs of the training needed to bring the temporary workers up to speed. Then estimate the length of time the temporaries would need to stay with the firm for the firm to recover its investment and draw a conclusion as to the likelihood that the temps would stay. Draw a conclusion about whether the firm should provide training. Justify your conclusion. Maximum assignment length is 5 pages plus spreadsheet.

There will be an in-class session on using the software.

Evaluation criteria:
20 points Completeness in estimates of wages, productivity, and training needs
20 points Specification of underlying assumptions
35 points Understanding and accuracy in use of benefit cost analysis and training decision logic
20 points Writing quality
5 points Professionalism of presentation

III. DECISION-MAKING IN THE GLOBAL ECONOMY (Presentation and slides: 75 points; response: 25 points) (Due April 21)

Much has been written recently about “off-shoring”, where U.S. firms subcontract part of their production process to foreign firms. In the assignment on alternative staffing, you evaluated the relative costs and benefits of using temporary workers. This assignment will qualitatively extend that type of analysis to the international level.

Assignment overview: In this assignment, the class will analyze off-shoring decisions of two fictitious companies, Never-Below-the-Horizon Airline (NBH) and Information Barn (IB). NBH is considering locating a call center. IB is locating a software development facility. The class will be divided into teams. Each team will play two roles. In Role 1, each team will research a particular country as a possible off-shore site for one of the fictitious firms and
present their analysis in the first class session. In Role 2, each team will be select which country the other company should off-shore part of its operations to based on the presentations made during the previous week. By playing both roles, students will get an opportunity to assemble the information they think is relevant to this sort of decision as well as evaluate that sort of information when it is presented to them.

Team Assignments: For Role 1, each team will be assigned to a different region/culture of the world. The divisions are based on those proposed and mapped in:


The attached map shows the divisions. Attached to this assignment sheet is a form for you to select the region of the world you would like to study. The Western region has been excluded deliberately to give you an opportunity to investigate a country with a culture quite different from that of the United States. Please list your first three choices and return the form to me in class on January 20. If you have special knowledge of a country within a region, please indicate that on the form. I will assign students to teams of 3-4 by January 27. Each team will select a country within their region to study. Please email me your choice of target country by February 10. Aside from student interest, the primary criterion for selection should be the availability of data and information required to complete the assignment. Therefore, please investigate that before giving me your choice.

The factors you should consider in evaluating the cost effectiveness of sending part of production to a particular location include: the cost and quality of the labor supply, the industrial relations climate, both informal and formal constraints on the use of labor, important cultural differences that might impede or facilitate operation in the target country, and any other factors you think relevant. You do not need to consider factors of production other than those associated with labor unless they affect the productivity of labor. Evaluate the advantages and disadvantages to operating in the target country and draw a conclusion as to whether your fictional firm should locate there. Keep the relative benefit and cost framework in mind in your investigation and analysis. You will be using the same criteria in both roles.

Assignment Format

Each team will give a fifteen minute presentation itemizing the advantages and disadvantages of off-shoring jobs to a firm in your target country. Your presentation should include a basic overview of the relevant factors in the country, discussion of what you think your U.S. company’s needs will be, and how well a firm in the target country could meet those needs. Be clear about any assumptions you made, any labor market concepts you employed, and the logic behind your conclusions.

You should use power point handouts for your presentation. In the “Notes” section of the handouts, please provide background details to the slide as well as the references for the sources you used to construct the slide. Use a recognized bibliographic style for your references. Both a hard copy and electronic copy of the slide notes is due the day before the presentation, April 20, by 5:00 p.m.. I will post the slides for all of the presentations that evening. Your group should plan to download a copy of each of the presentations for the other company in time to bring to class on April 21. You will need it for Role 2.

In Role 2, each team will be required to give a 5 minute discussion of which country the company other than the one they analyzed should go to. Each team will be given 20-30 minutes of class time to prepare their response. Be clear about any assumptions you are making and criteria you are using. A two-page memo to me itemizing the team’s reasoning behind its decision should be emailed to me by April 25 (Monday) at 9 a.m..

Evaluation Criteria

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<th>Points</th>
<th>Description</th>
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<tbody>
<tr>
<td>20</td>
<td>Clarity and organization of presentation</td>
</tr>
<tr>
<td>25</td>
<td>Coverage of relevant economic and labor market data</td>
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<tr>
<td>15</td>
<td>Professionalism of presentation</td>
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</table>
15 Points  Clarity of notes and use of professional bibliographic style
20 Points  Clarity and logic of memo on choice for other company (Role 2)
5  Points  Clarity and Professionalism Presentation of reasoning for choice for other company

V. TESTS
Mid-semester test (100 Points) (ON March 3)
The mid-semester test will cover the Basic Labor Market and Pay Determination sections of the course. The test will be a short-answer, closed book. The test will be quite similar to the study questions posted on the web for each class.

End of semester test: (100 points) (April 28 or May 4)
There will be a test at the end of the semester covering the material since the mid-semester test plus one question pulling together several of the overarching concepts presented throughout the course. The format is yet to be decided.