

Mini Project Final Reports: Comments

1 Chennai Metro: Instructor Evaluation: 8.0; Students Average: 8.1

(Evans Maka, Mizan Khanduker, Suman Dahal)

Comments:

- This study is a challenging one because it is bound to be compared with CBA reports that real professionals with a sizable budget produce for transportation projects. Considering the difficulty, the three students have done quite well. Furthermore, they estimated the benefits additional to the commonly estimated user benefits, such as pollution reduction, foreign exchange saving, etc.
- The result in the financial evaluation that the net present value is negative even though the internal rate of return is 9.885% cannot be true. It appears that there is an error in the last part of Table 4. {Net Benefit = Total Revenue – Total Cost = 10198.81} is correct, but NPV is obtained by further subtracting Total Cost from Net Benefit. It makes no sense to subtract Total Cost twice.
- Road transport is taken as part of the primary market in addition to the Chennai Metro. This is not quite right because there is no exogenous policy change in the road transport sector.
- More information is necessary to be able to assess the validity of the analysis. For example, the relationship between Table 3 on the internal rate of return and Table 4 on NPV and BCR is not clear; I could not understand how the Change in Gross Consumer Surplus in Table 9 is obtained; and there is no explanation on the Residual value in Table 10.

Students Comments:

- (+) They included a summary table (+) They were able to compute the benefits of Chennai Metro (i.e., time saved, accidents reduced) (-) Monetary units could have been converted to yen or dollars. (-) There is no clear basis for changing the social discount rate and economic cost.
- The quality of the paper is a lot better than their presentation. However, they missed to put a table of contents on beginning of the paper so they get minus point on that. Adding the summary table is a good idea. Too many tables are from other research papers (-).
- I think just for three people they did much. Their project entirely was quite understandable. Their own economic analysis was not so much, but for this big project, doing own analysis is very hard.
- Since the Chennai Metro is a very complicated project, this report could have been a bit more impactful if the analysis had been more targeted. The presentation of costs and how they were calculated is not clear. The analysis includes several original calculation of benefits. The comparison between financial and economic analyses made it clear that even financially unprofitable transportation projects can be socially beneficial.
- The presentation was clear but was one man talk. They tried to make the study diverge however, the wide prevalence of data and studies make the study less valid.
- The team neatly outlined several cost and benefit components. How did the team resolve the issue about negative financial evaluation and positive economic evaluation?
- The comparison between the financial analysis and the economic analysis of the project is interesting because it proves just how many important cost and benefit components are left out of the financial analysis such as social costs and benefits.
- The analysis itself was straightforward enough to understand project. However, more detailed breakdown for both financial and economic analyses would have been more informative. In addition, poor time-

management for the presentation led to a failure to fully convey their contents.

- This is the actual project which has a lot of available data for the CBA. Hence, the level of expectation (or requirement) for the quality of CBA should be high. Generally, it covers all important discussion points and much improved in details such as the definition of discount rate (p14) etc. Although they specified the target of this CBA (focused on the phase 1st which consists of two corridors with 45.1 km of length), given the transportation system is a fundamental infrastructure in the society, more comprehensive analysis or further extension of this study would be crucial for the entire society. I personally believe their conclusion that “no producer surplus is estimated” in this project (p20) is a quite rough analysis.
- Would have been nice to incorporate the costs associated with the delay of construction of the project. Don't quite understand the correlation being made with STDs and HIV/Aids and the relocation of households. Economic Analysis section was detailed and understandable.
- In a transportation project, ridership is everything. Your source for these numbers is RITES, a government enterprise, and the numbers used were nearly 20 years old. Further, your sensitivity analysis did not provide for differing ridership scenarios.
- Somehow the paper was short. However, using concrete data (ex. Number of passengers) strengthens this CBA's reliability.

Skytree: Instructor Evaluation: 8.7; Students Average: 8.8

(Jongwon Lee, Xu Yuncheng, Yu Takagi, Ronald Dizon Margallo)

Comments:

- This report is a good showcase of many different aspects and techniques of CBA.
- The biggest weakness is the use of the travel cost method in a manner that cannot be justified theoretically. The average travel cost of 1,000 yen per trip is taken as the consumer surplus. Why this cannot be justified can be seen easily by considering the case where all visitors have the same travel cost of 1,000 yen and their willingness to pay is the fee plus the travel cost. Then, everyone is actually paying the travel cost of 1,000 yen in addition to the admission fee so there will be no surplus left for a visitor. Those with zero travel cost obtain the consumer surplus of 1,000 yen, but those who are actually incurring the cost get none.
- Other minor problems. The corporate tax revenue might have been included in the producer surplus. The treatment of the consumption tax has a theoretically subtle problem, which I avoided discussing in the class in order not to confuse students. One way of understanding this problem without getting into rigorous mathematics is to note that an increase in the consumption tax revenue from the Skytree might be offset by a decrease in the tax revenue from other goods and services.
- The interpretation of an attitude survey requires caution. Q2 shows that the average willingness to pay is much lower than the actual price of 3,000 yen. This does not contradict the fact that there are a lot of people who are willing to pay more than 3,000yen. You have to look at the distribution of WTP's.
- The wording of benefit-cost ratio in the financial analysis is confusing. It is less confusing to use “revenue” instead of “benefit”.

Students Comments:

- In the executive summary they mentioned that the project is beneficial, but an executive may expect an explanation with figures. They have done CBA nicely considering all aspects such as externalities of the project, Negative demand shock, Acts of GOD etc. However, acknowledgement part is absent in the report. Otherwise this is a very good report of CBA in term of presentation and quantitative analysis.
- Well organized paper. They missed to put acknowledgement so I give them a minus point on that. It is very good to see well-organized charts on the right positions so it makes readers easy to understand.
- In their analysis, this project is profitable but evaluating the side effect of project such as electromagnetic wave is quite important topic. I think they have done quite well job and used different methodologies.

- Not quite clear on the use of non-monetized parameters such as A for the SB and A-7.5 for SS. The goal of CBA is to evaluate all impacts in monetary units. The insertion of the demand curve added no value to the report since it was not used for any estimation. It can be seen as a mere “window dressing” of the report. It could have been explained in the limitations rather. They did a good job with good presentation style
- Different from others, this group has placed necessary appendices and graphical presentation but fail to place Acknowledgement, summary table etc.
- This team applied different techniques from throughout the class to undertake a well-organized comprehensive analysis of the Skytree. I wondered if it wouldn't have been okay to actually include electromagnetic wave danger and construction CO2 emission costs in the CBA. In particular, the sensitivity analysis was designed well because it provided clear economic analysis of three events that could indeed occur.
- The presentation was clear and well coordinated. The content of the report seems valid because it is said that there are limited related studies.
- The group was able to identify a variety of benefit and cost components for the various markets they outlined. Report was well organized.
- The qualitative analysis is a unique aspect that was not explored by other groups.
- Very interesting report and despite the lack of available data (short project period) the group has managed to conduct a comprehensible report applying many of the theoretical concepts covered in class.
- Though there is no IRR figure, the ‘partial’ sensitivity analysis allowed readers to easily put the benefits in context; even with an act of god that necessitates a complete reconstruction, the project is still viable. On the issue of non-use vs. passive use, you could have used sales figures of keychains or models of TS outside of Tokyo. On a recent trip to Tohoku I saw that these were quite popular! These people do not get broadcast benefits from TS and many have not climbed yet (your “attitude” table reports 0.0 climbers from this region). Still, people in Tohoku still value its existence. As far as it being a public good and your reference to national security, I would be interested in looking into how the government could or currently uses TS to that end.
- Attitude survey is the new one in this paper. I think it is very interesting.

California High Speed Rail: Instructor Evaluation: 9.0; Students Average 8.5

(Joshua Weeks, Shaun Ketch, Enkbaatar Tsenguun, Xiaoyu Liu, Zhui Zhu)

Comments:

- Using analogous markets and WTP surveys to double check a standard CBA conducted by professionals is an interesting idea and appears effective.
- The discussions on the speed problem can be improved by more detailed comparisons with French and Japanese data.
- On page 20, it is assumed that the reduction of air congestion is significant (In the case after HSR operates, we assume that delayed time equals zero because the reduction of air congestion). You have to check the shares of the relevant routes (such as LA-San Francisco route) in the airport traffic. If the shares are small, then the effect on air congestion will be small.
- Need a sensitivity analysis.

Students Comments:

- (+) It is difficult to come up with a paper when there are several sources but they were able to write a paper with good cohesion. (+) They adjusted their paper to include suggestions by the class (i.e., measuring costs using the CHSRA's methodology). (-) The paper focused too much on criticizing CHSRA's BCA such that there was no room for sensitivity analysis. (-) Most tables and figures do not have proper citation of sources.

- The report is well organized, but they did not write the Acknowledgement part which is a weak point for the report. They clearly calculated the cost benefit ratio which reflects the feasibility of the project. They mentioned some limitations such as availability of data, Yet, it's an excellent report.
- Well organized paper. But they also missed to put acknowledgement so I give them a minus point on that. Some of the charts and tables they are using seems like they took those from other papers because those are blurry, so it is hard to look at. Too many words are not always good (-).
- Much reference was made to existing CBA without much attention of identifying impacts in the work. High criticism and comparison of existing professional reports could have been limited and focus clearly on the steps taught in class. Economic projections are always not precise since most economic variables follow a stochastic and a random walk process. It made the presentation of the report quite clumsy. They did a good job on data organisation
- This group worked a unique job that is the survey and also they mentioned alternative markets and social surplus which I think is the best efforts.
- The presentation was good but not participatory. They tried to make the report different then existing reports but the high prevalence of such reports diminishes their validity of the study.
- The comparison between the existing CBA and the group's own CBA was well presented. The final report was comprehensive.
- The detailed critique of the official CBA helped to prove the importance of conducting their independent analysis.
- It was great that they actually calibrated the demand curves and conducted a survey, which has less validity, however, due to a lack of random sampling. Although I understand that the project is too huge to cover all of the items regarded to their analysis, more detailed analysis on various aspects would have been better. In addition, there was no sensitivity analysis.
- This is a challenging CBA which seeks to examine some of the key potential weaknesses in the official business plans and benefit cost analyses (BCA). In addition to the existing data including other CBAs, they conducted the original survey to clarify the demand for the high speed railway between Los Angeles and San Francisco. This is quite unique and positive attitude to establish their own standpoint with various data necessary for CBA.
- Reads more like a critique of the existing CBA conducted by CHSRA. Not well-structured – was confusing at times to follow the analysis.
- Formula is clearly presented. Using 2 methodologies, official BCA methodology and Gross Consumer Surplus, strengthens reliability and objectivity of the CBA.

U-health: Instructor Evaluation: 8.5; Students Average 8.2

(Suin Chang, Bed Raj Phuyel, Renan Raimundus, Shu Wada)

Comments:

- This report challenges a difficult task of evaluating a “policy” that is much more difficult than the evaluation of a project, and succeeds in conducting CBA.
- The weakness of the study, which is common in most of the evaluations of “policies”, is that the without case is not clear. For example, the use of IT in health industries will spread even without the U-Health policy. It is not easy to separate the effects of the policy from technological progress that will occur anyway.
- The value of time for the elderly tends to be lower than younger people. We see in Japan many elderly people frequent medical clinics because that is a good pastime for them.
- Are the benefits of increased efficiency of hospital and health care practitioners already reflected in reduced health care costs for patients and health insurance? Please check if there is no double counting.

- More careful wording is necessary in several places. For example, “population growth rate of 3.7%” appears often but this means the growth rate of old age population.
- The labor market impact of 2209 more jobs appears much too small for a policy that produces large benefits.
- You have to take into account the possibility that the job increase in the medical industry might be offset by a decrease in other industries.
- Too many digits like 127,658,464,137,246 won that far exceeds significant digit should be avoided. People might think that you are not professional.
- In the sensitivity analysis part, you have to discuss first which elements are most unreliable in your CBA and evaluate the magnitudes of uncertainty associated with them.

Students Comments:

- (+) The discussion of the objective of U-Health is clear. (+) They included formulas for easy reference. (-) There is no financial appraisal. (-) For Table 1, they could have included additional columns to identify for each cost and benefit the parties affected/involved. (-) There is no proper citation of sources for some graphs and figures. (-) The sensitivity analysis was just a mathematical exercise. There should have justified why they changed the rates and time frame.
- The report is not well organized, because in the contents 'Introduction' part is mentioned two times. There is no heading for executive summary. Serial number in contents and in the body of the report is not consistent, because in the content introduction is given serial number 2 but in report it is given serial number 1. Cost benefit ratio is not mentioned clearly. In the acknowledgement part there are some spelling mistake (such as Tank, andfriendly). Otherwise it's a good report.
- Meet the all requirements that professor asked students to include their paper. Not a perfect but can see their efforts.
- This project analyzed very new service of health. They did not have any other comparable services. They are concluding this new service will have significant impact on labor market but I think this conclusion does not have much solid background. Finally, this project was quite interesting.
- Economic benefits were clearly identified and monetized. However, how some social cost identified were included in the estimation of the total social cost not quite clear
- They described sensitivity analysis as well as secondary market which seems improved comparing to previous presentation.
- Like Birthing Homes, this was a good project to work on in this class because it was just the right size to provide a good comprehensive analysis using the tools and methods studied over the semester. The sensitivity analysis could have included a qualitative analysis explaining under which circumstances the program could potentially run into trouble.
- Group was able to present a variety of benefit and cost components, with valid references and methodology.
- The report was well organized and clear.
- They touched various aspects of the project with straightforward tables, and they helped to follow the logic of the presentation. Especially, the detailed sensitivity analysis and comprehensive analysis on secondary markets were effective. Also, presentators were successful to deliver their contents in general.
- Aging population is a common issue in East Asia. Given a variety of nationalities of group members, the further comparative study which analysis on CBA of U-health in different countries might have more meanings. For example, the comparative CBA with Japanese or other countries' cases would deepen the discussion about the application of U-health. If they can take advantage of “strong point” of MPP/IP, their CBA would have much potential impacts on the process of policy making of social welfare in Asia.
- Interesting topic and a comprehensive analysis of the U-Health system although the executive summary was a bit long. Appears to have taken into consideration the comments from the presentation and incorporated them into their report.

- In addition to the initial investment, campaign, and rental costs, there are many costs associated with new policy that lead to costs overruns. One potential overlooked cost, for example, could be the costs of standardization. I have read that government ministries and medical institutions have implemented U-health projects differently and with few standards. You could also consider the risk and costs of having sensitive personal information broadcasted through IT networks, which would then allow this private data exist as ubiquitously as u-health. There are also costs of honing this system, which is far less developed than traditional healthcare.
- Analysis was done comprehensively. Some improvements have been done after presentations to respond comments.

Birthing Homes: Instructor Evaluation: 8.5; Students Average 8.3

(Mari Aoyagi, Midori Nozaki, Ida Pantig, Suteera Sitong)

Comments:

- The topic is interesting and the analysis is well organized.
- You need better arguments for ignoring maternal mortality. The reason given (This is to reflect the objective of the project to lower the maternal mortality rate.) does not make sense. Even if the objective is to lower the maternal mortality, the policy can fail and increase mortality.
- The VSL is held constant for 25 years, but it will change when economic growth and inflation occur.
- The construction cost is spread out over 25 years. We usually do not do this. We can compute the net present value without doing this.
- When estimating social costs, you have to compare the With case and the Without case. For example, the delivery hours should not be different between the two cases.
- Are you applying the 15% social discount rate to nominal values or real values? The usual practice is to use the real values, but the real values reflect economic growth.
- The executive summary is much too short.

Students Comments:

- (+) The paper is concise and straight to the point. (+) The discussion on VSL under sensitivity analysis was good. (-) However, the change in the social discount rate lacks justification. (-) Tables and graphs could have been used for easy reference. (-) Section 3 is entitled Financial and Economic Analysis but there is no clear discussion on financial analysis.
- Generally the 'Executive summary' gives a clear idea about the output and outcome of the project. But the executive summary of the report based on text only which gives a verbal idea about the project, no figures are used in the summary which is a big weak point of the report. Even in the conclusion, they did not mention the figure of NPV, CBR etc. Moreover, they did not write the 'Acknowledgement' part which is also a necessary part of a report.
- Very well organized. It was easy to understand because they only used useful information. The only minus point is from missing of acknowledgement. They made most of the things very clear (+).
- I also thought from the beginning this is very beneficial project because its cost is not much comparing to impact on the decrease of death in Philippine. I think that deciding the value of statistical life was the biggest problem in this project.
- Executive summary made limited use of summary tables to clearly give a precise summary of entire report. Proxy for monetizing some impacts not quite clear. Report clearly identified economic impacts from project objectives. Good and orderly presentation of report.
- They did a good job incorporating cost effectiveness ratio, sensitivity analysis, secondary market etc.
- Like U-Health, this was a good project to work on in this class because it was just the right size to provide a

good comprehensive analysis using the tools and methods studied over the semester. It was good that social costs of travel were updated from the presentation and included in the report.

- Presentation was good and well coordinated. The ex-post analysis is relatively less valid and relevant, may be due to its smaller coverage of study.
- The structure and presentation of the analysis were effectively conducted, and it was great that they employed a shadow pricing method in their analysis. However, adding their original future projection would have made the analysis much more informative and unique, even though their primary goal was ex post cost-benefit analysis.
- This is a well-organized CBA with highly emotional and controversial topic which might be related with value of life and implementing quantitative analysis. However, more extensive study could be possible even though they face the problem of data scarcity. The CBA final project is a good opportunity for students to practice the theories and principles learned from class. Hence, even under the certain premise, they should have tried to describe the analysis on the secondary market.
- Good job in adding varying VSLs to your sensitivity analysis and establishing differing figures for the children and adults in the project. Your use of WTP for improved air quality is interesting, but I wonder how closely it would reflect any real value of life to those in the village. How would a village, in dire need of birthing homes, have the capacity to improve their air quality even though they were willing? The source from which you derived these figures came from government spending on improving air quality at Manila airport. If you were to use govt numbers for VSL for this project, why not just use the costs of the birthing homes themselves and their patronage, as this spending more accurately reflects the value of improving health in rural areas. All of this may be moot, as pushing the VSL higher would make the project even more beneficial, but reporting a stronger potential benefit under differing VSL considerations could be important when deciding whether to give this project the go-ahead.
- Since monetizing the value of life is difficult and it depends on country or parents' value, using Cost effective analysis is a good attempt, I think.