CPI: The most widely used measure of inflation, the consumer price index.
Economic Rent: Payment to a factor of production in excess of the minimum required to induce
the owner of that factor to offer it to the market.
Excess Burden of Taxation: The loss in value when taxes move behavior away from social efficiency.
External Costs: Costs borne by those who do not control an economic transaction.
Factor of Production: An input that is not used up when it is used, such as labor, capital, or land.
Joint Cost: Cost that supports two activities, such as the cost of a direct mail solicitation that both
asks for funds and educates the public.
Nominal Interest Rate: The posted interest rate, which includes expected inflation.
Present Value or Present Discounted Value: The amount of money today that is equivalent to a
stream of money in the future.
Private Costs: Costs borne by those controlling an economic transaction.
Quasi-Fixed Cost: The discrete cost of operating a fixed factor of production, such as the cost of
turning on the lights in the headquarters building.
Real Interest Rate: The interest rate adjusted for inflation. Approximately equal to the nominal
interest rate minus expected inflation.
Shadow Price: The price that would be charged for a nontraded resource if it were for sale. Equal
to marginal willingness to pay.
Social Costs: The sum of private and external costs.
Sunk Costs: Costs that have been paid and cannot be recovered.
Transfer Payment: A shift of resources from one person or group to another that neither consumes
nor transforms the resources.
EXERCISES

1. Select a service program or initiative provided by a nonprofit organization or social enterprise with which you are familiar.

   (a) By talking to someone in charge of the program or reading reports, make a list of all the different kinds of costs associated with providing the program.
   (b) Which of these costs are well-measured by market prices?
   (c) Which of these costs require indirect estimates because they are not adequately represented by market prices? How would you make those estimates using the concept of opportunity cost?
   (d) What expenses, if any, are incurred that are really transfer payments rather than actual costs?

2. A nonprofit cemetery offers families of the deceased two options for maintenance of graves: (1) an annual fee of $25 per year; or (2) a one-time immediate charge of $500 for perpetual care.

   (a) If families are able to earn an interest rate of 10% on their savings, which plan is most economical for them?
   (b) What plan would be the most economical if the interest rate were 4%?

3. Ralph’s Pretty Good Charity decides to sell raffle tickets to raise funds. The winner of the raffle will receive a total of $1 million, payable in twenty annual installments of $50,000 each. Unfortunately, Ralph is only able to sell 900,000 raffle tickets at $1 each. Upon consulting his banker and learning that the nominal interest will remain at 10% over the next two decades, Ralph’s face breaks out in an enormous smile. Has he gone crazy or has Ralph’s raffle produced a financial bonus? Explain.

4. A nonprofit social service agency is trying to decide if it should put its resources into a residential treatment program rather than a day program for the elderly. It has a limited budget and can undertake only one of these options. In calculating the cost of the residential program should it count the benefits lost by not opening the day program? Explain.

5. Easy Ed is a talented volunteer. He is paid $1000/day at the Acme corporation, where he does quality control for roadrunner traps, but still volunteers one day a week to help Charity for Dummies, a registered 501(c)(3) organization dedicated to training crash-test dummies. Dummies could use him to help with fund-raising or to supervise the day-care center for Dummies employees. Both tasks are essential. Ed has passed the state-required training program for child day-care work and aced all his courses at The Fund Raising School®. Here is some other information you may (or may not) need to answer the questions below:

   - All the other volunteers cannot be assigned to either task, and Ed cannot do both tasks.
   - It would cost $300 to recruit and train a new talented volunteer.
   - The cost of supervising and insuring volunteers is $10/day.
• It would cost $800/day to employ a professional fund-raiser who is exactly as competent as Ed but gets paid.
• It would cost $80/day to employ a paid day-care worker who has the same qualifications as Ed.

(a) Is it rational for Ed to volunteer at Dummies? Why or why not?
(b) If Dummies does not choose to recruit a new talented volunteer, should it ask Ed to work in fund-raising or day care? Why?
(c) Should Dummies recruit and train a new talented volunteer? Why or why not?

6. Tony Teacher has a steady job as an instructor in a local public high school, but he is unhappy with the progress of his students and thinks he has a better way to educate them with the educational software he has developed and a new philosophy of fun-based learning. However, the school district won’t allow him the flexibility to implement his methods, so he contemplates establishing his own school as a for-profit social enterprise. To do this he must leave his position, raise venture capital, rent some space, hire teachers and secure state approval. All of this is costly but so is the option of staying put.

(a) What are the various explicit and implicit costs that Tony should consider in evaluating the option of undertaking the new venture?
(b) What are the costs associated with continuing as a public-school teacher?
(c) If Tony chooses to undertake the venture, how are his costs likely to change over time? What costs are short term, and which are long term?
(d) If Tony is able to secure a below market, low cost loan in the form of a program-related investment from a local foundation, how will this affect the valuation of his costs and his decision?