

# NOTES

## 1. Overview of Relentless Monetization

1. When benefits and costs are generated well into the future, proper economic accounting calls for estimating present discounted values. This topic is dealt with in chapter 5.

2. Our simple formulation assumes that philanthropists can expand and contract the size of their grant at will—a technical issue that does not distort matters at this stage of the argument. This issue is dealt with at length in chapters 8 and 9.

3. May 15, 2011 interview with Caroline Preston; e-mail from Herbert Sturz, May 20, 2011, 10:07 A.M.

4. New York University–Stern Conference on Social Entrepreneurship, February 2008.

## 2. Translating Mission Into Mission-Relevant Outcomes

1. See Lane Kenworthy, Jessica Epstein, and Daniel Duerr, “Rising Tides, Redistribution, and the Material Well-being of the Poor,” September 15, 2007, <http://www.golden.polisci.ucla.edu/wgwpis/kenworthy.pdf>.

2. Nothing prevents an environment oriented nonprofit and a poverty fighting nonprofit to jointly fund interventions that accomplish each mission better than the nonprofits could do on their own.

### 3. Basics of Monetizing Outcomes

1. Cynthia E. Lamy, manager of metrics at Robin Hood, developed some of the figures cited in this chapter.

2. To provide a flavor of how QALY weights are assigned, here are sample values from one often-cited system, known as EQ-5D (as reported in Phillips, C., and G. Thompson. 2009. *What Is a QALY?* London: Hayward Medical Communications).

Health state 11111. No problems. Valuation = 1.0 perfect health.

Health state 22222. Some problems walking about; some problems washing or dressing self; some problems with performing usual activities; moderate pain or discomfort; moderately anxious or depressed. Valuation = 0.516 perfect health.

Health state 23322. Some problems walking about; unable to wash or dress self; unable to perform usual activities; moderate pain or discomfort; moderately anxious or depressed. Valuation = 0.079 perfect health.

3. Lawrence, Bryan R. 2012. "Health Care: Spend Less, Live Longer," *The Washington Post*, July 27, 2012; Brent, Robert J. 2003. *Cost-Benefit Analysis and Health Care Evaluations*. Cheltenham, UK: Edward Elgar Publishing.

4. The previously discussed example of grants that affect high school graduation rates is the exception. There, as we noted, there is high quality research that carefully distinguishes the impact of earnings from that on health. The research community has solved the problem of double counting in this instance, but for many other grants, the research literature is not nearly as accommodating.

### 4. Those Pesky Counterfactuals

1. In this example, we're counting as a benefit only earnings gains for graduates of the job training programs. In a complete analysis, the funder would need to estimate whether training women to set up day care programs generates long-term poverty-related benefits for the enrolled children.

2. Greenberg, D., V. Deitch, and G. Hamilton. 2010. "A Synthesis of Random Assignment Benefit-Cost Studies of Welfare-to-Work Programs." *Journal of Benefit-Cost Analysis* 1 (1): 1–28; MacGuire, S., J., Freely, C., Clymer, M. Conway, and D. Schwartz. 2010. *Findings from the Sectoral Employment Impact Study*. Philadelphia: Public/Private Ventures; MDRC. 2007. *Welfare-to-Work Program Benefits and Costs: A Synthesis of Research*. New York: MDRC; Schochet, P., and J. Burghardt. 2008. "Do Job Corps Performance Measures Track Program Impacts?" *Journal of Policy Analysis and Management* 27 (3): 556–576.

## 6. Examples of Metrics by Outcome

1. Cynthia E. Lamy, manager of metrics at Robin Hood, researched many of the figures cited in this Chapter 7 has the notation. chapter.
2. Deming, David, and Susan Dynarski. 2009. "College Aid." In *Targeting Investments in Children: Fighting Poverty When Resources Are Limited*, edited by Phillip B. Levine and David J. Zimmerman, 283–302. Chicago: University of Chicago Press.
3. "Getting Serious About the GED: How New York Can Build a Bridge from High School Drop-out to Postsecondary Success," Albany, New York: Schuyler Center for Analysis and Advocacy, 2009. Also, "College Readiness of New York City's GED Recipients," CUNY Office of Institutional Research and Assessment, Table 10, 2008. Jacobsen, L. and C. Mokher 2009. *Pathways to Boosting the Earnings of Low-Income Students by Increasing Their Educational Attainment*. Prepared for the Bill & Melinda Gates Foundation by the Hudson Institute and CAN Analysis & Solutions.
4. Levin, H., C. Belfied, P. Muennig, and C. Rouse 2007. "The Costs and Benefits of an Excellent Education for All of America's Children," Teachers College, Columbia University, Table 3.1. Also, Baum, S., J. Ma, and K. Payea 2010. "Education Pays 2010. The Benefits of Higher Education for Individuals and Society, Trends in Higher Education Series. CollegeBoard Advocacy and Policy Center".

## 7. Examples of Metrics by Grant: Multi-Outcome Interventions

1. Cynthia E. Lamy, manager of metrics at Robin Hood, researched many of the figures cited in this chapter.

## 11. Prominent Metrics Systems

1. Tuan, M. T. 2008. *Profiles of Eight Integrated Cost Approaches to Measuring and/or Estimating Social Value Creation*. Seattle, WA: Bill & Melinda Gates Foundation.
2. Tuan, M. T. 2008. *Profiles of Eight Integrated Cost Approaches to Measuring and/or Estimating Social Value Creation*. Seattle, WA: Bill & Melinda Gates Foundation. Brest, P., and H. Harvey. 2008. *Money Well Spent: A Strategic Plan for Smart Philanthropy*. New York: Bloomberg Press. 2008. *Making Every Dollar Count (How Expected Return Can Transform Philanthropy)*. Menlo Park, CA: William and Flora Hewlett Foundation.
3. We won't go into great detail on every aspect of what Charity Navigator does, but that information is readily available on its Web site.

## 12. Reflections on Risk

1. We define the “expected benefit” of a project in more detail in the next section, but loosely, if we think of the project as an experiment for which there are many trials, each with an uncertain outcome, then the expected benefit is the average benefit obtained over many trials.

2. Strictly speaking there is a distinction between “risk” and “uncertainty.” “Risk” applies to situations in which we know the probability that attaches to each possible outcome, and “uncertainty” to situations in which we do not have enough information even to do that. We are going to keep it simple and use the term “risk” even when a formalist might argue that the true situation is actually one characterized by uncertainty.

3. Formally, the expected benefit of a project is a sum of terms, each of which consists of a possible outcome of the project multiplied by the probability that the particular outcome occurs. So, the expected benefit of a project with a 40 percent probability of yielding a \$1,000 benefit and a 60 percent probability of yielding a \$2,000 benefit is \$1,600 ( $= 0.4 \times \$1,000 + 0.6 \times \$2,000$ ).

4. This question is discussed in the more general context of “policy making” in Harrison, G. 2011. “Experimental Methods and the Welfare Evaluation of Policy Lotteries.” Paper presented at the plenary address at the Congress of the European Association of Agricultural Economists, Zurich, August 30 to September 2, 2011: *Change and Uncertainty—Challenges for Agriculture, Food and Natural Resources*.

5. A corollary worth mentioning: If a funder’s mission is such that there is no easily defined target population for example, if the funder’s chosen mission is to fund basic research into disease prevention—then there are no target population risk preferences to take into account, and the appropriate approach is to allocate resources so as to maximize the expected gain. We thank an anonymous reader of a draft of the book for bringing this issue to our attention.

6. We recognize that penguins and protozoa don’t earn dollar incomes. In cases like this, the appropriate rule might be in terms of territorial range, rate of population growth, habitat area, and so on.

7. The level of an individual’s aversion to risk is a reflection of the relationship between the level of income and the level of well-being for that individual.

8. See for example, Harrison, G. (2011), and sources cited therein.

9. It’s also worth reiterating here that allocating resources to riskier philanthropic initiatives might not reduce the resources available for other, reliably successful ones at all, and indeed might even increase those resources, if taking on some high-risk projects serves to substantially increase overall donor support. Needless to say, this excuse for taking risks can be abused, but it can also be an entirely legitimate consideration.

10. Appendix B works through four examples that should help funders know when their impact per capita on target individuals is small enough to safely ignore risk exposure issues. (Full disclosure: The appendix goes into some detail, and not everyone will find it thrilling reading, but we think it provides a very useful guide for those who actually have to make the hard choices.)

11. Dollar benefits here would include the monetized value of health improvements and other, similar, mission-relevant outcomes.

12. Having more possible outcomes complicates the arithmetic but doesn't change the technique for calculating the expected value, which is to multiply each possible program outcome by the probability that it will occur and then take the sum of the values obtained. The following table shows that calculation for the nutrition program.

Probability	B/C Ratio	Probability $\times$ B/C Ratio
10%	2	0.2
40%	6	2.4
40%	21	8.4
10%	30	3
SUM		14

13. Our discussion of this topic has benefited greatly from insights provided in Borison, A. 2002. "Real Options Analysis: Where are the Emperor's Clothes?" *Journal of Applied Corporate Finance* 2005 17(2): 17–31; Dixit, A. and R. Pindyck. 1994. *Investment Under Uncertainty*, Princeton, NJ: Princeton University Press; Fortunato M. 1989. "Strategic Options." Paper presented at the International Symposium of Professional Financial Consultants, Dallas, TX, March, 1989; Luehrman, T. A. 1998. "Investment Opportunities as Real Options: Getting Started on the Numbers." *Harvard Business Review* July–August, 3–15; Luehrman, T. A. 1998. "Strategy as a Portfolio of Real Options." *Harvard Business Review*, September–October, 89–99.

14. ROV is also referred to ROA (real options analysis). Same thing.

15. A caveat: There is no such thing as a free lunch. Adopting the ROV approach to evaluate risky initiatives is not a trivial exercise. Doing what is necessary to make the right path at each decision juncture requires planning and both organizational and financial resources. If the gap between the best and the worst possible outcomes of most of a funder's initiatives is not that great to begin with, the benefit of trying to apply an ROV approach is not likely to justify its cost.

16. This applies both to resources relating to program scale and resources dedicated to program evaluation. As we mentioned earlier in this book, operating "lean and mean" is fine, but there is no benefit to being too malnourished to think straight.

17. In fact, the combined activities of government, higher educational institutions, and other funders accounted for more than 80 percent of all basic research expenditures in 2008. See "The Pivotal Role of Government Investment in Basic Research," Report by the U.S. Congress Joint Economic Committee, Representative Carolyn B. Maloney, Chair, Senator Charles E. Schumer, Vice Chair, Prepared by the Majority Staff of the Joint Economic Committee, May 2010.

18. DARPA is the Defense Advanced Research Projects Agency, an agency whose purpose is to support basic scientific research that might contribute to US military capabilities. DARPA-financed basic research has proved to have great value beyond the

military sphere, including the research that led to the development of the Internet. See <http://www.darpa.mil/About/History/History.aspx>.

19. See Richard Marker's comments at <http://wisephilanthropy.blogspot.com/2007/07/societys-risk-capital-or-safety-net.html>.

20. Prelec, D. 1998. "The Probability Weighting Function." *Econometrica*, 66, 3: 497-527.

21. Donors, the people who fund funders and who not infrequently sit on their boards, may well be particularly optimistic in their views of risk taking. Those who have made their own fortunes have almost certainly done so by taking risks. The fact that their own risk taking has worked out well is likely to have left them with a positive view of risk taking in general.

## Appendix B

1. The \$164 figure =  $(14/8) \times \$94$ ; the \$47 =  $(4/8) \times \$94$ .

2. The expected B/C ratio comes from weighting each of the two outcomes by the probability of it occurring. In this case, the two weights are equal to 0.5.

$$0.5 \times 4 + 0.5 \times 14 = 2 + 7 = 9$$

3. We have done this by increasing the funder's total spending. We could have accomplished the same thing by reducing the target population from 10,000 to 2,000.

4. Imagine that we are in year 10 of operation under the second assumption. If under the assumption that all benefits accrue within the spending year, the annual income increment per member of the target population under Program X would be \$6,000 ( $= 12 \times \$500$ ), then under the assumption that the benefits of each year's spending accrue evenly over a ten year period, then in year 10 it will be 10 times  $\$6,000/10 = \$6,000$  as well because the benefit in year 10 will be the sum of all the benefits still accruing from each of the annual expenditures made over the previous 10 years.

## Appendix C

1. Note that the index numbers are not meant to be some observable measure of well-being. It is the rate at which well-being per dollar falls with income that matters, not the absolute numbers. Indeed, nothing changes in our example if all the index numbers are scaled up or down by some common multiple.

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