

POLICY FORUM

The “Buy One, Get One Free” Ethics of Investing Public and Philanthropic Funds in Health and Climate

Ali A. Zaidi

Abstract

This article applies various ethical frameworks to inform decision making about investment in two specific goods—strengthening public health and stabilizing the global climate. I begin by outlining how these goods traditionally competed for common and constrained resources. I then discuss how this view of competition has been rendered more problematic by emerging and compelling ethical justifications for investment in both goods based on utilitarian, Rawlsian, and communitarian analyses. I conclude by showing that these goods no longer compete head-to-head in a zero-sum way. Changes in science, technology, and society mean that investment in either good has the potential to advance both goods—that is, the goods have become synergistic. As a result, the case for investing in both is better.

Introduction

Public funds can buy public goods. But given finite public funds, we must ask: Which goods are better? Certainly, economics can support this inquiry. Ethics, too, plays a role—and a very central one. Seeking insights into this calculus, this article applies various ethical frameworks to inform decision making about investment in two specific public goods—strengthening public health and stabilizing the global climate. I begin by defining the goods and outlining the initial apparent conflict (i.e., competition) between them. I then explain that this conflict, or competition, only becomes more difficult to resolve because of the emerging and compelling ethical justifications for investment in both goods. With such compelling ethical explanations, how does one allocate the next incremental public or philanthropic dollar? I argue that changes in science, technology, and society mean that investment in either good now has the potential to advance both goods—that is, the goods have become synergistic. To be sure, investing in this synergistic overlap will not fully realize all of the objectives associated with either public health or global climate stabilization. And ethics-based evaluation of investment alone does not form a sufficient analytical basis for the allocation of funds. However, alongside other important tools such as rigorous, evidence-based assessment of comparative economic costs and benefits, the ethical calculus provides valuable input into allocation of public and philanthropic capital.

Two Goods Competing for Common and Constrained Resources

Strengthening public health. [Global public health](#) is a long-established public good [1]—and costly to procure. In 2016, development assistance supporting public health capacity worldwide was nearly \$37 billion, yet that amount remains insufficient [2]. In part, the funding gap is for emergencies; the World Health Organization identified shortfalls in the hundreds of millions of dollars [3]. But the gap extends beyond emergencies. A 2011 World Economic Forum report projected costs of \$30 trillion over the next 20 years associated with noncommunicable diseases alone [4]. Public health capacity is not designed to prevent all these costs, as it cannot prevent every endemic or epidemic. Rather, public health capacity encompasses the preventative and reactive capabilities of a society, including the infrastructure that shrinks, slows, or swells these costs.

One element of this infrastructure is energy. The ONE Campaign offers several tangible ways in which energy poverty adversely affects public health: “doctors struggle to provide clinical services after sunset”; “vaccines, blood work and medications are not stored in proper conditions”; and “health care facilities cannot power laboratory equipment such as ultrasound and X-ray machines as well as incubators” [5]. To avoid such issues, public funds have procured lowest-cost energy poverty reduction measures—as a means of strengthening public health capacity. In the past, the lowest-cost energy, when computed without accounting for externalities such as environmental degradation or the social cost of carbon, came from fossil fuels with limited or no control on emissions. Ironically, this meant that the energy poverty reduction came at some cost to public health—the public health costs associated with air pollution. Yet today, the reality is that the lowest-cost energy in many countries comes from renewable sources, like solar and wind [6], even if fossil fuels continue to be *promoted* as the “cheapest” solution to energy poverty reduction [7]. Energy poverty reduction, then, can finally be decoupled from increases in air pollution.

Stabilizing the global climate. Stabilizing the global climate is a public good with implications across geographic borders and time horizons for all people [8]. Costs associated with stabilizing the global climate primarily involve investments to reduce the pollution—emissions of greenhouse gases—associated with global productivity, principally by [changing the way productivity is powered](#). Hundreds of billions of dollars have been mobilized for this purpose [9], but far more will be required. The International Energy Agency anticipates that \$16.5 trillion, of which a nontrivial share will involve public funds, will be needed by 2030 in order to hit the target set in the Paris climate agreement of limiting the increase in global average temperature to below 2 degrees Celsius [9]. While not directly related to global climate *stabilization*, public funds will also be required to address the unavoidable impacts of climate change—potential agricultural losses associated with droughts, real property losses associated with floods

and storms, and human health losses associated with heat waves. In a way, these so-called adaptation or resilience expenditures are part and parcel of the same public good.

Failure to invest could undermine economies and create instability. An annual survey by the World Economic Forum found “failure of climate change mitigation and adaptation” to be at the top of perceived economic risks [10]. One study pegged the potential loss of global financial assets at \$24.2 trillion in the worst case [11]. The economic risk does not stand alone; geopolitical risk also flows from failure to act. Last year, the National Intelligence Council issued a paper titled “Implications for US National Security of Anticipated Climate Change” [12], which traces the potential pathways of this geopolitical risk over the next 20 years based on the best available science and climate modeling. The paper shows how climate change can affect geopolitics by increasing the risk of disputes between countries over resources like water, mass migrations “that exacerbate social and political tensions,” and economic shock to already vulnerable countries [13]. The conclusion is harsh: destabilization of the global climate destabilizes the global peace [12].

Competing for common and constrained resources. Limited public funds are available to secure these two public goods. Although these fiscal constraints have been partially ameliorated by public and private sector innovations—ranging from governments pioneering high-leverage funding mechanisms to corporations considering their environmental impacts—the magnitude of the fiscal constraints makes them unlikely to disappear altogether. To take one example: the United Nations projects a \$2.5 trillion annual investment gap between 2015 and 2030 for achievement of its sustainable development goals, which include health, sanitation, and climate change mitigation and adaptation [14].

An unavoidable tension flows from funding gaps of this size. Conventional wisdom set strengthening public health and global climate stabilization against each other. One was forced to evaluate the merits of each in relative terms in allocating funds. And the conflict extended beyond competition over funds to potential impacts of the activities funded. Specifically, where energy poverty reduction was achieved through deployment of polluting energy, any net public health gains—the residual benefit after subtracting the public health costs of polluting energy from the public health benefits of energy poverty reduction—came paired with global climate losses.

Assessment of the Emerging Ethical Justifications for Public Health and Climate Stabilization

The allocation of public funds involves “many values, competing and clashing over common currency” [15] and a calculus driven by ethical principles—named or unnamed, deliberately or inadvertently applied—as much as by economics. This section examines three philosophical frameworks—utilitarian, Rawlsian, and communitarian—to study

the ethical dimension of that calculus. I show that under each framework, strengthening public health and stabilizing global climate have powerful ethical justifications. This result makes the task of prioritizing one or other public good challenging.

Utilitarian analysis. At its simplest, the utilitarian framework demands *the best for the most* [16]. Bentham provides the core heuristic for comparing “pains” and “pleasures” or what might be called costs and benefits: applying this heuristic to the two public goods, we must compare them in terms of “intensity” (magnitude of costs or benefits), “duration” (period of time over which those costs or benefits will accumulate), “certainty or uncertainty” (likelihood of the costs or benefits materializing), and “propinquity or remoteness” (time until the costs or benefits manifest) [17]. Under this framework, public health has long possessed a compelling ethical justification for public funding; now, global climate stabilization is justified, too. We know that weak public health can entail suffering of great *intensity* for many people over a long *duration*—put starkly, public health can be a life or death issue for millions. Fortunately, the evidence base for public health interventions has grown along with epidemiological sophistication. Together, these developments have added *certainty* and *propinquity*: we know investment in X can reduce risk of Y over a time horizon of Z. By comparison, pain associated with global climate change has long been portrayed as *uncertain* and *remote*, creating a less compelling rationale for public funding under this framework. And even when it “arrives,” how harsh would be the effects? Our improved scientific understanding has shattered this conventional wisdom, given that the effects of climate change are being felt today—from more frequent drought to more intense hurricanes—and that climate change models are getting more sophisticated all the time. We know more greenhouse gas emissions lead to greater climate destabilization and worse outcomes for the environment and economy; and those worse results, as with public health, are now properly understood—that is, more *certain*—to be matters of life and death or very intense and long duration costs [10, 12]. As a result, the utilitarian argument for investments in global climate stabilization has become more compelling and achieved “categorical parity,” or equal footing as a generic investment purpose, with the argument for public health investment.

Rawlsian analysis. The next framework trades focus on ends for focus on means. Specifically, the “egalitarian liberalism” introduced by John Rawls gives primacy to autonomy and agency and their animating conditions [18]. The animating question is this: Behind Rawls’s “veil of ignorance” where we do not know our specific lot in life [19], what is just? Under this framework, moral value attaches to public action—including allocation of funds—aimed at reducing the threats to individuals’ autonomy and agency. Material to ethicists in the Rawlsian tradition is that weak public health capacity was long seen as posing such a threat. As Moskop details, building public health capacity was thus justified under the Rawlsian framework [20]. Given the now established science and modeling of global climate change [21-23], investment in climate stabilization, too,

should be seen as compelling under this framework. After all, we know now that similar to public health, global climate change threatens to limit severely and, in certain cases, existentially, individuals' autonomy and agency by threatening either their livelihoods or lives. Surely, if behind the veil of ignorance the world appears to be extensively—though not uniformly—vulnerable to climate catastrophe, we will shout for public action to secure a stable climate. Such public action, which we call for behind the veil of ignorance, carries moral weight and—as it did for public health earlier—provides a compelling, Rawlsian basis for investment in stabilizing the global climate.

Communitarian analysis. The communitarian framework finds moral value through moral dialogue [24]. This is a project that seeks “a good in common that we cannot know alone” [25]. Long before global climate change entered the dialogue, strengthening public health was established as such a good *in common*. Through institutions like the World Health Organization, the world's people—through their countries' representatives—had come together and concluded that public health was a virtue worth cherishing. The imperative for investment followed. Yet such a moral global consensus, borne from vigorous dialogue and understood unambiguously and ubiquitously, did not exist for stabilizing the global climate as a good in common—until the Paris climate agreement was reached in December 2015, with almost 200 countries committing to collective action to address global climate change [26]. At earlier points, even when global climate change entered the global dialogue, it provoked distributive conflicts—conflicts about how the costs of securing global climate stabilization would be borne—between north and south, developed and developing countries. Yet, by the date of the Paris climate agreement, the situation had changed: a moral consensus emerged, and the distributive conflicts were overwhelmed by the needs of the collective. Perhaps the consensus owed less to the two weeks of the Paris Conference of the Parties than the moral dialogue that took place in the run up [27]. Academics, businesses, religious leaders—the full breadth of civil society—had publicly voiced its desire to act, to attach moral value to climate action. As a result, the consensus that was reached defined not only the particulars of the agreement but also the position of the world's people—through their countries' representatives. This consensus now attaches moral value to the allocation of public funds for global climate stabilization. Thus, under yet another framework, the ethical basis for global climate investment has grown to be just as compelling as that for public health investment.

Changing Dynamic: From Competition to Synergy

Changes in science, technology, and society mean that both public health and global climate stabilization now command a compelling ethical justification under the utilitarian, Rawlsian, and communitarian frameworks; but those same changes also mean the dynamic between these goods is transformed: competition is surrendering to a new synergy—and this transformation adds urgency. Investment in one good can pay dividends towards the other.

Two types of synergies are surfacing. First, a positive synergy is forming as common solutions or opportunities for investment are able to promote both goods at once. This change is rooted in the dramatic cost declines associated with clean and distributed energy, which are rapidly becoming more competitive than polluting and centralized energy [6]. Strengthening public health through energy poverty reduction need not add costs to the climate change ledger. Second, a negative synergy is forming as common side effects arise from failure to invest in both goods at once. This change is rooted in improved understanding of the connection both between [polluting energy and public health](#) and between spread of infectious disease and global climate. We now know that polluting energy contributes trillions of dollars to the global health burden through illnesses like asthma and heart attack [28], and that infectious disease, especially vector-borne diseases like Zika, malaria, and Lyme disease, is dramatically worse under unmitigated climate change scenarios—increasing the risk exposure for hundreds of millions of people [29]. Together, these synergies are dismantling the old-world competition between these goods.

Conclusion

Competition between our public health and global climate aspirations has surrendered to synergy—that is, we have gone from zero-sum competition to “buy one, get one free.” To be sure, investment in this synergistic overlap will not fully realize these aspirations. But advisors to and administrators of public and philanthropic funds now find themselves able to advance both goods with common or complementary investments. Why does this matter? It matters for three reasons: First, we can lay to rest the myth that these goods are locked in a zero-sum competition for common and constrained resources. Second, we can focus on the increasing set of investments that advance both goods, as those likely form some substantial portion of the best potential investments. Finally, we can appreciate that the synergy between these goods means that the investment case for each has become more compelling—and more urgent.

References

1. Galea S. Public health as a public good. Boston University School of Public Health. <https://www.bu.edu/sph/2016/01/10/public-health-as-a-public-good/>. Published January 10, 2016. Accessed August 21, 2017.
2. Institute for Health Metrics and Evaluation. *Financing Global Health 2016: Development Assistance, Public and Private Health Spending for the Pursuit of Universal Health Coverage*. Seattle, WA: Institute for Health Metrics and Evaluation; 2017. http://www.healthdata.org/sites/default/files/files/policy_report/FGH/2017/IHME_FGH2016_Technical-Report.pdf. Accessed August 21, 2017.
3. Mezher M. WHO: new emergencies program faces \$200m funding gap. *Regulatory Focus*. October 31, 2016. <http://www.raps.org/Regulatory->

- Focus/News/2016/10/31/26103/WHO-New-Emergencies-Program-Faces-200M-Funding-Gap/. Accessed August 21, 2017.
4. Bloom DE, Cafiero ET, Jané-Llopis E, et al. The global economic burden of non-communicable diseases. Geneva, Switzerland: World Economic Forum; 2011. <http://apps.who.int/medicinedocs/documents/s18806en/s18806en.pdf>. Accessed August 30, 2017.
 5. Knoth G. 6 ways energy poverty impacts health. *ONE Blog*. June 30, 2015. <https://www.one.org/us/2015/06/30/six-ways-energy-poverty-threatens-health-care-for-the-poorest/>. Accessed August 21, 2017.
 6. Frankfurt School-UNEP Collaborating Centre for Climate & Sustainable Energy Finance. *Global Trends in Renewable Energy Investment 2017*. http://fs-unesp-centre.org/mwg-internal/de5fs23hu73ds/progress?id=DK0yvgxe4b_W_EYbmlylvpkLrgjNOFairUCjHtmLbVw,&dl. Accessed October 16, 2017.
 7. Goldenberg S. Coal giant exploited Ebola crisis for corporate gain, say health experts. *Guardian*. May 20, 2015. <https://www.theguardian.com/environment/2015/may/19/peabody-energy-exploited-ebola-crisis-for-corporate-gain-say-health-experts>. Accessed October 16, 2017.
 8. Nordhaus WD. Reflections on the economics of climate change. *J Econ Perspect*. 1993;7(4):11-25.
 9. Global investors mobilize action in wake of Paris climate agreement [news release]. Boston, MA: Ceres; January 27, 2016. <http://www.un.org/sustainabledevelopment/blog/2016/01/global-investors-mobilize-action-in-wake-of-paris-climate-agreement/>. Accessed August 21, 2017.
 10. More walls, more warming, less water: a world at risk in 2016 [news release]. Geneva, Switzerland: World Economic Forum; January 14, 2016. <http://reports.weforum.org/global-risks-2016/press-releases/>. Accessed August 21, 2017.
 11. Dietz S, Bowen A, Dixon C, Gradwell P. "Climate value at risk" of global financial assets. *Nat Clim Chang*. 2016;6:676-679.
 12. National Intelligence Council. Implications for US national security of anticipated climate change. <https://obamawhitehouse.archives.gov/sites/whitehouse.gov/files/documents/nic-white-paper-climate-change.pdf>. Published August 10, 2016. Accessed August 21, 2017.
 13. National Intelligence Council, 7.
 14. Developing countries face \$2.5 trillion annual investment gap in key sustainable development sectors, UNCTAD report estimates [news release]. Geneva, Switzerland: United Nations Conference on Trade and Development; June 23,

2014. <http://unctad.org/en/pages/PressRelease.aspx?OriginalVersionID=194>. Accessed August 21, 2017.
15. Zaidi AA. Optimizing OMB: response to the president's budget as a source of agency policy control. *Environ Law Report*. 2017;47(8):10708.
 16. Mill JS. *Utilitarianism*. Crisp R, ed. Oxford, England: Oxford University Press; 1998.
 17. Bentham J. *An Introduction to the Principles of Morals and Legislation*. Oxford, England: Clarendon Press; 1907.
<http://www.econlib.org/library/Bentham/bnthPML4.html>. Accessed August 21, 2017.
 18. Sandel MJ. *Public Philosophy: Essays on Morality in Politics*. Cambridge, MA: Harvard University Press; 2005:211.
 19. Rawls J. *A Theory of Justice*. Cambridge, MA: Belknap Press; 2005:chap 24.
 20. Moskop JC. Rawlsian justice and a human right to health care. *J Med Philos*. 1983;8(4):329-338.
 21. van der Linden SL, Leiserowitz AA, Feinberg GD, Maibach EW. The scientific consensus on climate change as a gateway belief: experimental evidence. *PLoS One*. 2015;10(2):e0118489.
<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0118489>. Accessed November 1, 2017.
 22. Stocker TF, Qin D, Plattner GK, et al, eds; Working Group I Technical Support Group. *Climate Change 2013: The Physical Science Basis. Working Group I Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. New York, NY: Cambridge University Press; 2013.
 23. Oreskes N. The scientific consensus on climate change. *Science*. 2004;306(5702):1686.
 24. Bell D. Communitarianism. *Stanford Encyclopedia of Philosophy*.
<https://plato.stanford.edu/archives/sum2016/entries/communitarianism/>.
Published October 4, 2001. Updated March 21, 2016. Accessed August 21, 2017.
 25. Sandel MJ. *Liberalism and the Limits of Justice*. 2nd ed. Cambridge, England: Cambridge University Press; 2007:183.
 26. Historic Paris agreement on climate change [news release]. Paris, France: United Nations Framework Convention on Climate Change; December 12, 2015.
<http://newsroom.unfccc.int/unfccc-newsroom/finale-cop21/>. Accessed October 24, 2017.
 27. Pope Francis. Encyclical letter: *laudato si* of the Holy Father Francis on care for our common home. Rome, Italy: Libreria Editrice Vaticana; May 24, 2015.
http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html. Accessed August 21, 2017.
 28. World Health Organization Regional Office for Europe; Organisation for Economic Co-operation and Development. *Economic cost of the health impact of air pollution in Europe: clean air, health and wealth*. Copenhagen, Denmark: World Health Organization Regional Office for Europe; 2015.

http://www.euro.who.int/_data/assets/pdf_file/0004/276772/Economic-cost-health-impact-air-pollution-en.pdf. Accessed August 21, 2017.

29. Climate Nexus. Climate risk and spread of vector-borne diseases.

<http://climatenexus.org/climate-issues/health/climate-change-and-vector-borne-diseases/>. Accessed August 21, 2017.

Ali A. Zaidi is a senior advisor to Morrison & Foerster, LLP, in Washington, DC, a Precourt Energy Scholar at Stanford University, and a nonresident fellow at Columbia University. Mr. Zaidi previously served as the associate director for Natural Resources, Energy, and Science in the White House Office of Management and Budget during the Obama administration.

Related in the *AMA Journal of Ethics*

[Caring for the Health of the Community Means Caring for the Health of the Environment](#), June 2009

[Climate Change and Human Health 101](#), June 2009

[Greener Clinics, Better Care](#), September 2014

[How Should Clinicians Weigh the Benefits and Harms of Discussing Politicized Topics that Influence Their Individual Patients' Health?](#), December 2017

[Why US Health Care Should Think Globally](#), July 2016

Disclaimer

The views expressed in this article are those of the author and are not necessarily representative of those of the United States government.

The viewpoints expressed in this article are those of the author(s) and do not necessarily reflect the views and policies of the AMA.

**Copyright 2017 American Medical Association. All rights reserved.
ISSN 2376-6980**