by Michael Klausner

when time isn't
money

Foundation Payouts and the Time Value of Money

BILL GATES HAS SAID THAT WHEN AN AIDS VACCINE IS produced, the Bill and Melinda Gates Foundation will fund the vaccine's distribution around the world even if the foundation has to spend down its $24 billion endowment. For now, and until the vaccine is found, however, the foundation is distributing funds at about the legally required rate of 5 percent per year.

In recent years, strong arguments have been made to foundation managers and the U.S. Congress that foundations should distribute their assets at a faster rate, beginning now. McKinsey & Company consultants Paul J. Jansen and David M. Katz, writing in "For Nonprofits, Time is Money," have argued that we should view foundation grants as an investor would view an investment.[1] Former New Jersey Senator Bill Bradley, now a consultant to McKinsey, joined Jansen in making the same argument in a *New York Times* op-ed entitled "Faster Charity."[2] They argue that, just as investors would choose to receive a dollar today rather than a dollar a year from now, so too is a dollar of charity given today worth more to society than a dollar of charity given in the future.

If the McKinsey authors are right, then the Gates Foundation may need to reassess its strategy. Under their approach, the Foundation should discount the social benefit of a future AIDS vaccine to a "present value," just as an investor would discount future investment returns to present value. This discounting exercise would reduce the vaccine's value to a fraction – very likely a small fraction – of the benefit that the vaccine will produce when it is actually distributed. Thus, more immediate grants to charity would appear

more socially valuable in comparison, and to that extent, the McKinsey authors argue that foundations should accelerate their payout rates.

But the McKinsey authors are wrong. The discounted cash flow approach they use is inapplicable to the foundation payout issue. There are good reasons for foundations to favor high payout rates under certain circumstances, and there may be reasons for the law to mandate minimum payout rates, but the time value of money is not one of them.

Current Versus Future Charity

The issue of foundation payout rates comes down to a tradeoff between charity for the current generation and charity for future generations.[3] The lower the payout rate, the greater the amount saved and invested, and hence the greater the amount that can be distributed to future generations.[4] Conversely, the higher the payout rate, the lower the amount available for future distribution. The arguments of those who advocate higher payout rates amount to arguments that foundations should provide more money to current charity and less to future charity. Foundations that resist higher payout rates are in effect arguing for more future charity at the expense of current charity.

The Discounted Cash Flow Approach

The McKinsey authors argue that a foundation dollar distributed to charity today is worth considerably more than a foundation dollar distributed in the future. Consequently, they say, founda-

tions can increase the value of their grant making by increasing their payout rates. They explain that they apply "a standard financial concept known as the 'time value of money'"[5] to reach this conclusion. This is the same "discounted cash flow" approach that corporations and investors use in deciding whether a current investment is justified by its projected returns. To evaluate a proposed investment, a company projects the investment's future cash flow and discounts it to present value using a discount rate that reflects the company's cost of funds or the rate of return the company can earn from an alternative investment. An individual investor would approach an investment the same way, but in addition, an individual would consider whether he prefers immediate consumption to the opportunity to consume more in the future when the investment pays off.

The McKinsey authors are not the first to apply the discounted cash flow approach to foundation payouts. The U.S. Treasury Department and Congress implicitly took this approach in the 1960s when the payout rate was initially enacted. They were troubled by the fact that a donor to a foundation takes a tax deduction at the time of the donation but the donated funds might not reach actual operating charities until many years later. Congress and Treasury believed that because of this delay, donors were getting a tax benefit worth more than the charitable benefit they produced. Other advocates for higher payout rates have referred to the time value of money as well. I focus on the McKinsey authors' analysis, however, because no one else has provided such a full explication of this argument.

The McKinsey authors begin their discounted cash flow analysis by constructing a hypothetical foundation that will exist for 50 years (Sidebar, facing page). Their foundation begins with assets of $1,000, it earns a 10 percent annual rate of return on its investment portfolio, it incurs administrative costs at the rate of 1 percent per year, and it distributes 5 percent of its assets per year in grants to charity. With these numbers, the foundation makes grants of $50 in its first year. In its 50th year, its assets will be more than $5,000 and it will make grants of $257. The foundation's grants over 50 years will total $6,355. (To make it all more realistic, it is helpful to assume six zeros attached to these numbers.)

HOW INVESTORS DISCOUNT

Discounting helps investors compare investment returns. Let's suppose that an investor looking for a return in five years has the choice of either putting $100 into an investment that is projected to return $15 (along with the $100 principal) in five years or putting the money in a five-year CD at a bank that pays 4 percent interest. To determine whether the investment is a better deal, the investor would use the 4 percent interest rate to discount the receipt of $115 in five years, and would discover that the present value of the $115 is about $95. If you invested $95 today at 4 percent, you would collect $115 in 5 years. The investment is thus a bad deal. It would be equivalent to trading $100 for $95 today. This is confirmed by the fact that if you invested $100 in the CD today, it would be worth $122 in five years – or $7 more.

Looking out to the 50th year, the 365 days of food is barely worth a breakfast today

Sounds like a valuable social institution to me, but the authors are not sanguine about this foundation. They calculate the present value of the foundation's grants to society by discounting the 50-year stream of grants at two alternative rates: the 10 percent rate that the foundation earns on its investment portfolio, and a 15 percent rate that they say the foundation could earn for society by making grants today.[6] Running these calculations, the authors find that the foundation's $6,355 in grants over 50 years is actually worth *less* to society than the $1,000 with which the foundation started. It is worth $830 using a 10 percent discount rate and $500 using a 15 percent rate. They run various scenarios through their spreadsheet to show that foundations that want to increase their value to society should increase their payout rates above 5 percent. They neglect to point out, however, that under their valuation approach, the best a foundation can do is break even in terms of creating social welfare, and that, with the 15 percent discount rate, the only way a foundation can do even that well is to distribute 100 percent of its assets immediately – and to do so without incurring any administrative costs. With a 10 percent discount rate, the foundation would break even over 50 years – or an infinite number of years – so long as it has no administrative costs. With administrative costs, the foundation is a money loser from the start. The McKinsey authors explain that skilled grant making can offset the ravages of time on a foundation's social worth, but holding the quality of grants constant, their point is simple: Future charity is worth less than present charity, and it is the time value of money that makes the difference.

The McKinsey authors' analysis is simply arithmetic. By assuming a social rate of return on a foundation's grants (15 percent) that is higher than the rate of return on its investments (10 percent), their calculations would lead the foundation to distribute all its funds immediately. But if a foundation's grants yield only a 9.9 percent return for society, then those same calculations would lead the foundation to invest its cash forever and *never* make a grant! Something must be wrong with this approach.

The Inapplicability of the Discounted Cash Flow Approach

The McKinsey authors' analysis is flawed, not merely because of the numbers they use, but most fundamentally because the discounted cash flow approach is not an appropriate method for measuring the value of foundation grants made in the future. When the McKinsey authors measure the present value of their foundation, the value of the grants that the foundation makes each year is divided by a discount factor. So, for example, the value of grants made at the beginning of the 48th year is measured by dividing the amount of money that will be distributed by 1.15^{47}, or 712. (Using the 10 percent discount rate the figure would be 1.10^{47},

THE HYPOTHETICAL MCKINSEY FOUNDATION

Year	Assets	Grants at 5 percent per year	Present Value of Grants at 10 percent Discount Rate*	Present Value of Grants at 15 percent Discount Rate*
1	$1,000	$50	$50	$50
2	1,034	52	47	45
3	1,069	53	44	40
.	.	.	.	.
.	.	.	.	.
.	.	.	.	.
48	4,814	241	2.73	.34
49	4,977	249	2.57	.30
50	5,164	257	2.41	.27
TOTAL		$6,355	$830**	$500**

McKinsey's hypothetical foundation begins with a $1,000 in total assets. It then assumes annual disbursement of 5 percent of assets through grants, administrative costs of 1 percent of assets, and a return on the remainder invested of 10 percent. While grants grow to $257 in year 50, the present value of the grants decline to $2.41 using a 10 percent discount rate and to 27 cents using a 15 percent discount rate. The present value of all disbursed grants and the remaining principal after 50 years is $830 at the 10 percent discount rate and $500 at the 15 percent discount rate.

* Assumes, as McKinsey authors do, that grants are made at the beginning of each year.
** Total includes net present value of remaining principal.

or 88.)[7] So, the $241 in grants that the foundation will make in year 48 is worth just 34 cents. Accordingly, if a grant will be made 48 years from now to fund a soup kitchen serving three meals a day for the full year (a total of 1,095 meals), the present value of that grant is just one and a half meals – brunch.[8] If the foundation had a choice of serving just brunch today or three meals a day for a full year in 48 years, the discounted cash flow approach would tell us it is a coin toss. This low valuation of the soup kitchen's services is based solely on the fact that its clients' hunger will occur in the somewhat distant future rather than today. There are several reasons why the discounted cash flow approach is irrelevant to the foundation payout issue.

Most fundamentally, by discounting future grants to present value, we would be saying that future grants are worth less to society than current grants. Using the soup kitchen example above,

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Foundation payout rates come down to a
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and charity for future generations.

a grant of $241 in 48 years is worth a lot less than a grant of $241 today; using a 15 percent discount rate, it is worth only 34 cents today. But why? In the private investment context, if investors can earn 15 percent on their money, they can convert the 34 cents into $241 in 48 years. To an investor, therefore, receiving 34 cents today and receiving $241 in 48 years are equivalent. But when we compare a grant to charity today with one made in 48 years, we are comparing the benefit of helping one group of people today with the benefit of helping another group in 48 years. There is no similar equivalence. Why would 34 cents worth of food to a group of hungry people be worth the same as $241 of food to a different group of hungry people simply because the two groups live at different times? By invoking the discounted cash flow approach, the McKinsey authors have adopted what economists refer to as a "pure time preference" in allocating resources over generations. Such a preference is difficult to justify as an ethical or economic matter. Frank Ramsey, who in 1928 was one of the first economists to analyze resource allocation over time, described the discounting of funds allocated to future generations as "ethically indefensible and aris[ing] merely from the weakness of the imagination."[9]

Secondly, there is no basis for discounting a future grant at the rate of return a foundation earns on its investment portfolio – the 10 percent rate the McKinsey authors use. In the private investment context, the projected cash flows of a proposed investment are discounted at the rate of return available on an alternative investment; by making the proposed investment, the company or the individual would forgo the alternative investment (Sidebar, p. 52). For foundations, however, when a grant is deferred to the future, there is no loss of an opportunity to earn a return on the foundation's investments. On the contrary, as the McKinsey authors recognize, the funds remain invested in the foundation's portfolio, earning a 10 percent return. This step in the authors' discounting exercise amounts to inflating and deflating the foundation's assets at the same rate, which results in a wash – there is *no* loss of value as a result of delay *regardless of the payout rate*. The reason the McKinsey authors find that the value of the foundation's grants is less than the $1,000 with which the foundation started is because their foundation incurs administrative costs in making grants.[10] Although they recognize that skilled grant making can produce social gains, their calculations include only the cost of grant making, not the benefit. In the McKinsey authors' calculations, even a penny of administrative costs would render the foundation a net loss to society. The presence of administrative costs, however, is not a *per se* reason to increase payout rates.

Third, the McKinsey authors are correct in recognizing that there is a social opportunity cost of forgoing earlier grant mak-

The discounted cash flow approach implicitly compares private return available in the financial market with the social return available from grants to charities, such as schools and soup kitchens.

ing. The cost of that lost opportunity is the "return" that society could have reaped if the foundation had made grants earlier. The authors recognize that social returns are hard to quantify and that selecting a discount rate is difficult as well, but they select a 15 percent social rate of return as "a conservative estimate for the upper end of our range of rates."[11] They base this claim on work done by the Roberts Enterprise Development Fund (REDF) to measure the impact seven nonprofit organizations had in running business enterprises that train and employ an inner city population.[12] If the authors mean to suggest that a significant number of grants to charities will yield this sort of return, this is a wild extrapolation from REDF's focused experience. There is no basis for concluding that the enterprises run by these seven organizations, or the social returns that they generate, are representative of the entire charitable sector, which includes art museums, prep schools, soup kitchens, hospices, universities, and innumerable other sorts of organizations. Indeed, there is no reason to believe that the enterprises REDF has funded and studied are even representative of organizations with similar missions.[13] Moreover, although foundations are commonly interested in making grants that will produce a return to society that continues for some period of time, many grants – to the opera, symphony, soup kitchen, and homeless shelter, for example – produce benefits that are better characterized as largely consumption rather than investment.

Fourth, even assuming that a grant yields a social return – of 15 percent or whatever – the McKinsey authors' application of

the discounted cash flow approach assumes that this return will be maintained over the long run – 50 years in their hypothetical foundation. When one applies a 1.15^{50} discount factor to a grant to be made 50 years from now, one says that the money could be invested today to generate a 15 percent return *for 50 years*. At that level of sustained social gain a grant of $100,000 – say, to fund a college scholarship for at-risk youth, or to support the local symphony – would yield $108 million worth of gains to society at the end of 50 years. This seems unlikely, and it certainly has no basis in REDF's experience.

Fifth, even if a current grant to charity does yield a long-term social return, unless the return continues *in perpetuity*, applying a discount rate to future charity gets us back to the problem with which I began this analysis: the favoring of one set of beneficiaries over another based simply on the period of time during which they live. As I discuss below, there may be justifications to such a preference, but they are not found in the discounted cash flow analysis.

Finally, if the discounted cash flow approach were applicable to the timing of grants, it would be applicable to the evaluation of grants themselves. The McKinsey authors do not extend their discounted cash flow approach this far, but let's see what would happen if we extend the approach to its logical conclusion. To evaluate a grant, a foundation manager would discount its projected social return. The discount rate, at a minimum, would have to equal the rate of return earned on the foundation's investment portfolio – 10 percent in the McKinsey authors' hypothetical. This would lead a foundation to forgo grants that are expected to yield social benefits, if those benefits are less than the expected financial return on the foundation's investments. In other words, if grants to a soup kitchen or an opera or a school are not expected to yield what the bank or the stock market will pay, the foundation should not make the grants. This surely is not a proper comparison. To compare the private return available in the market with the social return available in the charitable sector, which one implicitly does by using the former to discount the latter, is an error of the apples-and-oranges variety.

Similarly, if a foundation were to follow the discounted cash flow approach, it would have to discount the projected social returns from one grant by the social returns available on other grants. Foundations already do this implicitly when they compare two grants in the same field. But the discounted cash flow approach takes it a step further. If, for instance, a foundation funds research on the history of western civilization, the discounted cash flow approach would require the foundation to discount the projected social returns from that research by the social return it could achieve with a grant anywhere else in the charitable sector – a grant to an enterprise that REDF supports, for example.

This approach would maximize the social return to the foundation dollar. But efficiency is not the only value that guides foundation policy or public policy toward the nonprofit sector. Foundations support diverse activities in the charitable sector, some constituting valuable social investment and some providing valuable consumption, some providing goods that other sectors do not provide and some redistributing wealth. The application of the discounted cash flow approach to evaluate grants would sacrifice this diversity and with it values of equity, fairness, and community.

Balancing Current and Future Charity: A Fresh Start

So if the discounted cash flow approach is not useful, how should foundation managers think about the tradeoff between current and future charity? I will address this question in another article, but here are the basics.

The tradeoff between current and future charity is a version of a problem with which policymakers, economists, and philosophers grapple when considering very long-term public investments in energy production and environmental protection. How much sacrifice should the current generation make so that future generations can have a cleaner environment, cheaper energy, better health, and longer lives? The question for foundations is similar. How much charity should we withhold from the current generation in order to provide more charity for future generations?

The challenge of how to allocate resources among generations is fundamentally an ethical question, with economics helping to highlight the tradeoffs. One realization that has come out of the debate over long-term public investment is that the pure timing of a social benefit – whether this generation or a future generation enjoys the benefits – should be irrelevant to its social value from either an ethical or economic perspective. So, for instance, if greenhouse gas regulation today improves the lives of people living 100 years from now, the mere fact that the benefit will be enjoyed by people living so far in the future doesn't make its social value smaller.[14] The same is true of the future benefit that comes from a foundation's decision to adopt a low payout rate today in order to support charity in future generations. There may be a temptation to care more about the current generation than about faceless generations in the future. The economist Kenneth Arrow and his co-authors describe this temptation as discounting future generations for "empathetic distance (because we may feel greater affinity for generations closer to us)."[15] Others explain the inclination as "impatience" or "myopia."[16] No doubt this gut reaction exists among us, but it does not amount to an ethical principle or policy prescription. The philosopher John Rawls concludes that "the different temporal positions of persons and

generations does not in itself justify treating them differently."[17]

Those advocating higher payout rates legitimately point to a dire need for current charity. As a matter of advocacy, this approach is understandable. But as a matter of analysis, we need to recognize that current charity comes at the expense of future charity, and that the mere timing of a generation's presence on this planet is not relevant to the social value of charity provided to that generation. Moreover, because charity deferred to the future earns a return in the foundation's investment portfolio, a dollar withheld from the current generation can be expected to yield more dollars of charity for future generations. Ben Franklin appreciated this aspect of the tradeoff and chose to hold off giving a few thousand dollars to Boston and Philadelphia in 1790 so that his gift would amount to several million dollars in 1990 (Sidebar, below). This is surely not to say that we should sacrifice all current charity for the future – in perpetuity. That would make no sense. The challenge is to come up with an analytic approach that focuses on the factors relevant to the tradeoff to society between current and future charity.

That tradeoff presents three issues for a foundation to confront in determining how much to save and how much to give. Two issues reflect the goal of maximizing aggregate social welfare across generations.[18] The third reflects a goal of intergenerational equity – a notion that there is a limit to what we can ask one generation to give up in favor of another generation for the sake of maximizing total welfare.[19] For environmental policies,

A Penny Saved: Ben Franklin's Last Experiment

In 1785 a Frenchman named Charles-Joseph Mathon de la Cour wrote a parody mocking Benjamin Franklin's American optimism. In the story, a man leaves a small sum of money in his will and after collecting interest for 500 years, it becomes a fortune. Ben Franklin wrote back to the Frenchman and thanked him for the inspirational idea.

And so instead of leaving £2,000 to Pennsylvania to make the Schuylkill River navigable, which was his original plan, Franklin left £1,000 (about $4,500 at the time) each to Boston and Philadelphia with specific conditions that the money could only be paid out after accruing interest for 100 – then another 100 – years. He hoped that the people of those cities would see his plan as "a testimony of my earnest desire to be useful to them after my departure." The interest on the money would be earned from loans to "young married artificers, under the age of twenty-five year, as have served an apprenticeship in said town," to assist them in setting up their business. At the 100-year mark, each city was required to spend some of the money on public works and loan out the rest for 100 years. Two hundred years after his death, Franklin's legacy would, according to his projections, total £4,061,000 (or about $9 million for each city).

Franklin died in 1790, and his plan was subsequently put in motion, though not exactly as he had hoped. Because the loan program was not administered vigilantly and because the trade and apprentice systems waned with industrialization, neither city's fund grew to Franklin's expectations. After 100 years, Boston's fund

How much sacrifice should the current generation make so that future generations can have a cleaner environment, cheaper energy, better health, and longer lives?

federal policymakers set the balance of environmental benefits and burdens across generations. But the allocation of charity is decentralized. Each foundation, therefore, must consider these issues in the context of its own mission and the types of charity it supports.

Cost-Effectiveness

The first issue that a foundation should consider in setting a payout rate is how cost-effective a grant to current charity would be, compared to future charity, in providing a charitable service. Despite the fact that a dollar of today's charity comes at the price of many dollars of future charity, certain kinds of charity today will be more cost-effective; current *and* future generations will be better off if these charitable services are provided sooner rather than later. For example, if a foundation's goal is to preserve open space, doing so sooner may be better than doing so later, when the choice of open space to preserve will be more limited. Early preservation may mean better preservation for all generations. The same may be true of efforts to reduce population growth in an overpopulated region or to protect the environment (Sidebar, facing page), or to cure an infectious disease. It may be true as well of some educational programs, but only if one expects the benefits of current education to have indirect effects on the descendants of current students in perpetuity. If cur-
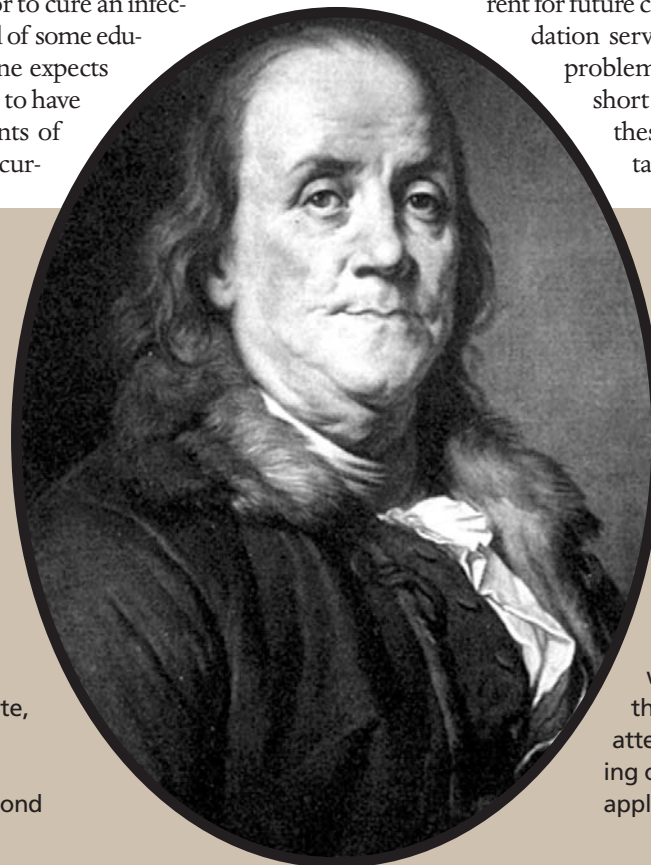
rent charity in areas such as these, and surely others, produces benefits that compound in perpetuity at a higher rate than assets in the foundation's portfolio, then not only will the current generation benefit from a grant today but future generations will be better off as well.

A Brighter Tomorrow?

Before salting its money away for future generations, a foundation should also ask itself whether future beneficiaries of its mission are likely to be better off than current beneficiaries.[20] For example, perhaps with continued economic growth over the generations, art aficionados of future generations will be wealthier than the art aficionados of today. If so, there is less reason to save today in order to support the arts in the future. In addition, economic growth over the generations is likely to mean more donations to the nonprofit sector in the future. More immediately, some expect a massive flow of funds to the nonprofit sector as the baby boomers pass on their wealth over the next 20 years. If the charity sector of the next generation will have more funds than the sector has today, then there is less need to sacrifice current for future charity. Or perhaps the needs that a foundation serves will be less severe in the future. A problem may be solved, or a service now in short supply may be abundant.[21] If, for any of these reasons, future generations of charitable beneficiaries are expected to be bet-

had grown to roughly $391,000, much of which was used to help establish what is now the Benjamin Franklin Institute of Technology in Boston; the remainder was reinvested for the next 100 years. Unlike Boston, Philadelphia's fund had stuck with the loan program rather than investments in the stock market and by 1907 had grown only to $172,000. The majority of that was given to the Franklin Institute, a hands-on science education museum in Philadelphia.

By 1990, at the end of the second

100 years, the roughly $100,000 reinvested in Boston a century earlier had grown to $5 million, and the $39,000 reinvested in Philadelphia had grown to $2.25 million. The Boston money was again given to the Benjamin Franklin Institute of Technology. The Philadelphia money was divided among city and community foundations throughout Pennsylvania, where it has funded, among other things, scholarships for students attending technical college and pursuing careers in trades, crafts, and applied sciences.

> There may be a temptation to care more about the current generation than about faceless generations in the future, but that temptation does not amount to an ethical conclusion or a policy prescription.

ter off than the current generation, then a foundation should put a thumb on the scales of the current generation. This does not amount to discounting the future generation because it will arrive on the scene in the future. Rather, it is a matter of giving resources to those who are worse off rather than those who will be better off.

Intergenerational Equity

Intergenerational equity provides a basis for a foundation choosing to give a dollar of charity today rather than more dollars in the future. In contrast to the first two issues, this issue is not a matter of maximizing welfare across generations. It is a potential reason to favor the current generation at the expense of future generations. This principle weighs against the goal of maximizing aggregate welfare in the charity sector over the generations. As an ethical matter, there must be a limit to the extent of sacrifice any generation can be asked to make for future generations, even if further sacrifice would lead to net gains in the future. In addition, there may be situations in which certain members of the current generation have a particularly strong ethical basis for deserving something more than members of future generations (and more than others in the current generation). Innocent victims of a war waged by the current generation, for example, may have an ethical claim to funds that the current generation has accumulated for charity. Ideally, each foundation would strike a balance between equity and wealth maximization as it deems appropriate for society as a whole. Just as foundations distribute their funds across the charitable sector as they choose – focusing on maximizing social returns or on other ethical considerations – they should do the same with their distributions over time.

So how does the Gates Foundation's AIDS strategy look under this approach? First, Gates should not worry about discounting the value of lives saved in the future as a result of an AIDS vaccine. The Foundation's strategy should be analyzed based on the cost-effectiveness of providing less now and more

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FOUNDATIONS THAT PAY OUT 5 PERCENT

Rockefeller Foundation
John D. and Catherine T. MacArthur Foundation
Pew Charitable Trusts

FOUNDATIONS THAT PAY OUT AT ACCELERATED RATES

Tides Foundation
Olin Foundation
Goldman Foundation

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later to combat the disease. Delivery of the vaccine, even to the next generation (or the one after that), may well be more beneficial to society over time than adding yet more Gates Foundation funds to the AIDS effort today. This is the type of judgment that individual foundation donors and executives must make. If there is a flaw in the Gates Foundation strategy, it is that there may be more philanthropic dollars available to support the delivery of an AIDS vaccine when it is developed. At the margin, Gates Foundation funds may better used sooner. That, however, is also the type of judgment that must be left to foundation donors and executives.

The Mandatory Payout Requirement

If there is not necessarily a downside to society for a foundation to favor future charity over current charity, then why do we need a mandatory payout rate? It is not because there is a mismatch, as Congress believed in 1969, between the value of the tax deduction and the value of charity given in the future. As explained above, there is no valid reason to conclude that future charity is necessarily worth less than current charity. Furthermore, since future charity benefits from compound growth, the tax deduction for a donation to a foundation is equal to the present value of the foundation's future grants.

So why not allow foundations to distribute less now and defer more resources to future generations? If foundation managers were guided entirely by social welfare considerations in setting their payout policies, then no minimum payout law would be needed. Foundation managers, however, seem to be influenced by the prestige associated with large endowments, and foundation donors seem to be influenced by notions of immortality associated with perpetual existence. Consequently, donors and managers seem to have a personal bias toward lower payout rates. The minimum payout requirement responds to this self-interest in a fairly moderate way. It basically allows a foundation to maintain its principal and to make grants in perpetuity at the 5 percent rate. This allows donors immortality and forces foundations to treat current generations at least equally with future generations. In the long run, the minimum payout requirement is expected to hold foundation endowments constant, so it inhibits foundation executives from vying for prestige by growing their endowments.[22]

Should the minimum payout requirement be increased as some advocates have urged? This is a difficult issue that goes beyond the scope of this article. If the personal biases of foundation executives play too strong a role in allocating funds between current and future charity, an increased payout requirement might be reasonable. Of the factors described above, the one that might push in favor of a higher payout requirement across the board is

the comparison between the resources and needs of charity today versus charity in the future. If, as some expect, there will be a large flow of funds to the charitable sector over the next 20 years, and if we expect society to grow wealthier and charitable donations to increase with wealth over the generations, then perhaps foundations should anticipate this new money and devote more funds to current charity. From a policy point of view, there is no problem with foundations spending themselves out of existence as new foundations take their place. On the other hand, increasing the payout requirement to a level that would place foundations' perpetual existence in substantial jeopardy could make the establishment of foundations less attractive to donors, which could result in less charity for present and future generations.

Conclusion

Discounted cash flow analysis is not helpful in thinking about foundation payout rates. That approach amounts to a pure preference for the current generation over future generations with no ethical or economic basis. The allocation of charity across generations is analogous to the allocation of environmental resources across generations and should be analyzed the same way. That analysis provides justification for favoring current charity over future charity in some situations, but not as an absolute matter. □

1 Jansen and Katz, *The McKinsey Quarterly*, no. 1 (2002).

2 Bradley, Bill and Jansen, Paul. "Faster Charity," The *New York Times* (May 15, 2002) p. 23.

3 The range of rates advocated – roughly 5 to 6.5 percent – would allow foundations to span generations. The only issue is how many generations.

4 I assume that once assets are transferred to a foundation, they will remain in the nonprofit sector and will be used only for permissible charitable purposes, and not expropriated by foundation executives or otherwise dissipated. The expropriation and dissipation of assets was one of Congress's concerns in 1969 when it enacted the first payout requirement. Other restrictions, however, were enacted in 1969 to address this concern. If those measures are insufficient, they should be buttressed. Since a payout requirement still leaves the bulk of the assets behind to be expropriated or dissipated, it is an ineffective response to this problem.

5 Jansen and Katz, p. 124. The time value of money does not refer to the effect of inflation on the value of a dollar. Businesses and investors would discount cash flows even if there were no inflation, and the McKinsey authors are not simply suggesting that foundations take inflation into account. Rather, the time value of money reflects the fact that in a growing economy investors can expect to earn positive returns (net of inflation) if they invest.

6 The discount rate should reflect the risk of a proposed investment. For simplicity, however, and since I believe this entire approach is fundamentally inapplicable, I will ignore this detail. The discount rate should also reflect expected inflation. The 10

percent rate of return on the foundation's investments presumably does, and it is hard to say whether the 15 percent social rate of return does. But as stated above, discounted cash flow analysis does not depend on inflation, nor does the McKinsey authors' analysis. Moreover, since the return on a foundation's investments would be expected to compensate for inflation, inflation is not relevant to the payout issue. For these reasons, I will ignore it.

7 The formula for discounting is the reverse of the formula for calculating what an investment today will be worth in n years. To calculate the future value of an investment in n years, we would multiply the amount invested by one plus the expected return of the investment and we would do that n times – once for every year. To discount a future return, we divide the expected future return by one plus the return available on an alternative investment, and we do that n times. The formula is present value equals expected future return divided by $(1+i)^n$, where i is the interest rate on an alternative investment. The McKinsey authors assume grants are made on the first day of each year, so that a grant made in the second year is actually made one year from the time of the foundation's formation, and a grant made in the 48th year is made 47 years from the time of formation.

8 That is, 1,095 meals divided by 712 equals 1.54 meals.

9 Ramsey, Frank. "A Mathematical Theory of Saving," *Economic Journal*, vol. 38, no. 152: 543.

10 The negative net present value of the foundation, when discounted at the 10 percent rate, is simply the present value of its administrative costs.

11 Jansen and Katz, p. 128.

12 http://www.redf.org/pub_sroi.htm. The REDF figures are actually estimates of these enterprises' capitalized value. It is unclear how the McKinsey authors inferred annual rates of return from these figures.

13 REDF itself warns against generalizing from its findings: "REDF's specific SROI [social return on investment] Framework and the metrics it generates are not applicable for all foundations or to all fields of practice. It has been designed for, and its research is based upon, our experience with social purpose enterprises run by nonprofit organizations to provide employment and training to disadvantaged people." SROI Methodology: http://redf.org/download/sroi/sroi_method_5.pdf.

14 Some economists advocate discounting public investments in the environment, using a "shadow cost of capital" approach in order to measure whether private investment would yield more for future generations than an investment in the environment. Other economists disagree with that approach. The shadow cost of capital approach, however, does not apply to the foundation payout context because funds used for future charity are invested in the capital markets. There is no opportunity cost of capital involved. For an excellent synthesis of the economic and philosophical literature on this issue, see Revesz, Richard L. "Environmental Regulation, Cost-Benefit Analysis, and the Discounting of Human Lives," *Columbia Law Review*, vol. 99, no. 4 (May 1999): 941.

15 Arrow et al, "Intertemporal Equity, Discounting, and Economic Efficiency," *Climate Change 1995: Economic and Social Dimensions of Climate Change* (James P. Bruce et al editors 1996): 125, 131.

16 See, for example, Cline, William R. *The Economics of Global Warming* (1992): 249.

17 Rawls, John. *A Theory of Justice* (1971): 294.

18 This approach is based on the concept of a social rate of time preference. See Arrow et al, Revesz.

19 For a discussion of this consideration in the environmental context, see Cowen, Tyler and Parfit, Michael, "Against the Social Discount rate," *Justice Between Age Groups and Generations* (Yale University Press, 1992).

20 In economic terms, the point here is that future generations of beneficiaries may derive a lower marginal utility from charitable services. If this is true, and all other factors are equal, then aggregate welfare over the generations will be maximized by favoring the current generation somewhat.

21 Of course, the foundation may change its mission over the generations, which suggests that this cross-generational comparison would have to span the entire charitable sector.

22 The run-up in the stock market during the 1990s, which increased foundation endowments considerably, has led some commentators to question whether the current payout requirement is lower than the rate of growth of foundation endowments. The burst of the bubble should now temper that concern, but I take no position on that issue.