The Foundation Review

Volume 9 | Issue 2

6-30-2017

Why Some Perpetual Foundations Aren't (Perpetual): Observations on the Importance of Inflation Effects on the Economics of Foundations

John Riche Ettinger

Follow this and additional works at: <https://scholarworks.gvsu.edu/tfr>

Part of the [Nonprofit Administration and Management Commons](#), and the [Public Affairs, Public Policy and Public Administration Commons](#)

Recommended Citation

Ettinger, J. R. (2017). Why Some Perpetual Foundations Aren't (Perpetual): Observations on the Importance of Inflation Effects on the Economics of Foundations. *The Foundation Review*, 9(2). <https://doi.org/10.9707/1944-5660.1369>

Copyright © 2017 Dorothy A. Johnson Center for Philanthropy at Grand Valley State University. The Foundation Review is reproduced electronically by ScholarWorks@GVSU. <https://scholarworks.gvsu.edu/tfr>

Why Some Perpetual Foundations Aren't (Perpetual): Observations on the Importance of Inflation Effects on the Economics of Foundations

John Riche Ettinger, J.D.

Keywords: Purchasing power; endowment; labor-intensive

*Seven and a half cents doesn't mean a thing.
But give it to me every hour, forty hours every week,
That's enough for me to be living like a king.*

– The Pajama Game (1954)

Introduction

Lord Rothschild proclaimed compound interest to be the “eighth wonder of the world.” Warren Buffett reportedly often skipped haircuts as a young man because of his calculation of the future contribution to his retirement funds from the money saved given what he projected as investment returns on these savings compounding over several decades. These two highly sophisticated investors correctly appreciated the importance over time of compounding effects on future asset levels.

The effects of compounding are also quite relevant to foundations in, among other things, correctly accounting for inflation — for purposes including determining the appropriate return targets and levels of risk in managing endowment assets, analyzing the feasibility of perpetual versus spend-down strategies, and comparing amounts invested in program areas over time.

There is clearly a powerful compounding effect of inflation on a foundation's endowment. (See Figure 1.) Beginning with a hypothetical foundation's investment portfolio in 1985, after 30 years

Key Points

- This article demonstrates the relevance of correctly accounting for inflation to foundation structure and programs – including, for example, in analyzing perpetual versus spend-down strategies and in comparing the cost-effectiveness of programs over different time periods. Investment teams must also be provided with return targets, which are highly sensitive to inflation and which in turn determine a risk estimate that must be considered by foundation fiduciaries.
- Seemingly small differences in inflation estimates will become material over time. But at many foundations, systematic biases are frequently built into inflation estimates. These biases are often attributable to a failure to consider the nature of the costs specific to types of grantees and programs.
- This article presents data illustrating the potential magnitude of these differences, and suggests adjustments to better account for these attributes as well as how these adjustments should be applied in projecting future results and in interpreting prior period performance.

Sector

FIGURE 1 Effect of Inflation on Real Value of Endowment

— in 2015 — the effects of inflation at the average rate that has prevailed in the U.S. for the last 20 years (2.26 percent) would reduce the real value of that portfolio by approximately 50 percent. The reduction is even greater at the inflation rate that actually prevailed over the entire 30-year period: 2.7 percent.

Purchasing power is hopefully maintained, of course, by earning a return on the portfolio equal to or greater than the rate of inflation (plus earning enough to cover the effective 5 percent mandatory rate of distribution). Seemingly small mistakes in predicting inflation, if subjected to the effects of compounding over time, can become material.¹ Indeed, what may seem to be an inconsequential concern can have a considerable effect on the long-term view of how valuable philanthropic assets are best leveraged for grantees. Systematic biases built into a foundation's

estimate of inflation in considering the real purchasing power of its asset base can, over time, detract meaningfully from the accuracy of such estimates. Foundations that believe they are on a path to ensuring perpetual or long-term operations may be spending down without realizing it.

An error of only 50 basis points in predicting inflation would materially affect the important target that must be set in terms of the necessary return — and quite significantly, therefore, the amount of risk — on which investment strategies must be based to preserve purchasing power. After 15 years and 30 years, respectively, such an error — again using 1985 as the base year and the average inflation rate for that 30 years — would have caused the return necessary to offset the erosion of purchasing power due to inflation to be underestimated by more than 9 percent at the end of 15 years and approximately

¹Prez, the union leader in *The Pajama Game*, saw this clearly. He sought a 7-1/2-cent hourly increase, which by itself would have produced \$9,432 in additional earnings over the period from the week in May 1954, when the musical debuted on Broadway, through the end of December 2015 — a healthy accumulation, given this very modest salary increase, but somewhat limited in aggregate amount. But assuming a historically reasonable 6 percent equity rate of return on this small raise continuously compounded, that amount grows more than 10-fold, to \$105,245. Even taking inflation into account — assuming Prez neglected to negotiate an inflation-adjusted increase and using a 3 percent estimate of inflation for the period — that amount still grows to \$27,866 in real purchasing power (i.e., 1954 dollars), though the potent effect of accounting for even only a 3 percent inflation rate is obvious. As further discussed in this note, underestimating inflation by 50 basis points (i.e., if the costs experienced by Prez's union members actually increased annually by 3.5 percent rather than 3 percent) would reduce the constant dollar value of the deal Prez negotiated by 18 percent, to \$22,824.

FIGURE 2 Effect of Error in Prediction of Rate of Inflation

15 percent after 30 years. (See Figure 2.) There is reason to believe that such a 50-basis-point error is far less than the systematic biases that actually affect foundation predictions. Also, the calculation here does not take into account the 5 percent distribution requirement for all foundations, which further affects the pressure on investment returns as further discussed in the analysis below. Fortunately, however, a foundation can take relatively simple steps to incorporate important considerations into its analysis of inflation to reduce the likelihood of at least some of this inherent bias.

What Type of Grantee?

The common denominator among the simple steps suggested here is the introduction into a foundation's investment policies of certain considerations concerning the types of grantee organizations served by the foundation. For several reasons, the inflation confronted by many grantees can, and likely does, vary materially from general macroeconomic price indices. This is not to say, however, that a foundation needs to examine with great particularity the specific effects of inflation on each grantee. Several general factors can be incorporated into the foundation's inflation outlook to account for much of the

difference between inflation as it is relevant to the foundation's particular mission and price considerations which may apply for the economy as a whole but not for the grantee base in question.

This is also not to suggest that a foundation's aggregate annual grantmaking should somehow be tied to measures of inflation in the interests of the organizational sustainability of the nonprofits it supports, however desirable this might be. The reality is that most foundations, other than those in spend-down mode, focus first on meeting basic minimum distribution requirements with perhaps some adjustment on aggregate grantmaking based on actual investment results. But a step in every foundation's strategy is the construction of an investment portfolio to maintain real purchasing power if the foundation aims to exist in perpetuity or over an extended period.

This requires setting an investment returns target, which in turn determines a risk estimate that a foundation must consider in analyzing whether the return target is prudent as a matter of financial stewardship. This is unavoidable. Endowment managers cannot be left to "do the best they can"; they necessarily require return

Any underestimate of the long-term degradation of purchasing power due to inflation could materially add to the failure to reflect fully the difficult hurdles faced by a foundation's spending policy over extended periods.

targets, which turn in part on the degree of acceptable risk given the risk-reward alternatives that characterize portfolio management.

From all this follow two key points: First, a return target that systematically underestimates inflationary pressures each year, enhanced by the effect of compounding, will have material consequences on the ability to maintain purchasing power even if the annual underestimates appear to be small. Second, factoring into the analysis some measure of the general nature of differing inflation faced by categories of grantees is necessary to avoid such annual underestimates.

Now it is certainly the case that a given group of foundation stewards may review the level of return required to maintain purchasing power, as measured by their set of grantees, and the associated level of portfolio risk that would have to be assumed to achieve that level and conclude that it is imprudent to adopt such portfolio strategy. They may quite reasonably conclude to make fewer, smaller, and/or shorter grants as the dollar level of the endowment and grantmaking decline in real terms. But over the long term, for these stewards or their successors, this is a decision to accept a shrinking foundation with, at least in theory, an end-date to material grantmaking. There

is, of course, nothing wrong with such a conclusion and it may in many cases be the prudent course. But such a decision should at the very least be an explicit one. Because it is easy to overlook the compounding effect of seemingly small annual underestimates of inflation and/or to fail to account for the inflation which a foundation, given its mission, actually confronts, it is easy for foundation executives to fail to see that their market returns are “low” even if they exceed the 5 percent return roughly required to cover annual minimum distributions, and that their assets are therefore “shrinking” in real terms.

With respect to the compounding effect of systematically underestimating inflation, an annual inflation estimate that is, for example, too low by only 75 basis points — again less, as discussed below, than some of the built-in biases may suggest — would mean that at current historically low inflation rates, after 10 years the foundation's assets would be less than 93 percent of what is required to maintain purchasing power and after 20 years would be only 86 percent of that amount.² And this may go unrecognized, as such foundations rarely go back to reassess purchasing power in comparison with the real value of the endowment in prior periods.

Foundations, given minimum distribution requirements, will typically set an investment target in the form of 5 percent plus some long-term inflation projection. Such a calculation may already somewhat understate the task facing the investment team, as a portion of expenses — such as investment expenses and excise taxes (on net investment income) — do not count toward the foundation's 5 percent minimum distribution requirement, despite the fact that these are real, unavoidable costs depleting assets. Any underestimate of the long-term degradation of purchasing power due to inflation could materially add to the failure to reflect fully the difficult hurdles faced by a foundation's spending policy over extended periods.

²For purposes of this calculation, an inflation rate of 2.26 percent (the actual average U.S. rate for 1995-2015) was compared with an estimate that adjusted inflation by 75 basis points higher (3.61 percent). Adding these rates to the 5 percent required minimum distribution produced a difference in the amount necessary to preserve real purchasing power (and assuming that the 5 percent required distributions are made at the same rate over the course of the year as returns are earned on the asset base) of \$94,799 after 10 years on a \$1 million endowment, reflecting an underestimate of inflation by 27.5 percent (\$345,275 versus \$250,476).

What Measure of Inflation?

Many foundations, in adding an inflation component to their target returns, use some version of the projected Consumer Price Index (CPI), some long-term estimate of the gross domestic product (GDP)-deflator, or some other general macroeconomic measure, such as the spreads between market rates and inflation-protected market rates, all of which have strengths and weaknesses as a measure. The CPI, for example, is based on a specific basket of roughly 80 goods or services, which likely do not accurately reflect the costs grantees must face. Core inflation, CPI-based indices used by some philanthropic entities, exclude gas and food prices. While using a core inflation index is justifiable in terms of economic theory, grantees may well have to drive and eat. As suggested in an example below, however, the core index may be appropriate — for certain purposes, as long as it is not employed as the full inflation factor. Even GDP-deflator indices, which use all prices of goods and services throughout the economy, do not accurately reflect the specialized costs affecting many types of grantees. The same can be said of projecting inflation through market spreads, such as those between long-term Treasuries and those that are indexed to protect the holder against the effects of inflation — so-called Treasury Inflation Protected Securities.

The most general factor that needs to be (but rarely is) incorporated into a foundation's thinking about inflation is that many — likely most — grantees are labor-intensive enterprises. As such they do not enjoy the productivity increases accruing to capital-intensive (especially technology-intensive) enterprises. Thus, their costs can be expected to rise at a higher rate than the general level of inflation. As a general matter, then, foundations should consider adding some reasonable premium to traditional macroeconomic indices of inflation in order to model more accurately what is required to maintain purchasing power from the perspective of their grantees.

Beyond this broadly applicable characteristic of labor intensity, for some grantees there may be specialized indices that capture additional elements of the cost environment faced by a

foundation's grantees. To take a specific example, foundations funding projects associated with educational institutions may be well advised to consider the Higher Education Price Index (HEPI) rather than the CPI as a means of estimating long-term inflation. As David Swensen, the brilliantly successful manager of the Yale endowment, has noted, the HEPI

measures cost specific to educational institutions. Heavily weighted towards salaries and other personnel costs, over its 46-year history HEPI advanced at a rate approximately 1.4% per annum in excess of the GNP deflator. Lack of productivity gains in education account for the greater inflation and academic costs. (Swenson, 2000, p. 34)

Not surprisingly, Yale uses the HEPI as the basis for determining the investment returns necessary to produce constant purchasing power by its endowment. In some recent years, the HEPI has more closely approached the CPI. In fact, in 2011 the HEPI was lower than the CPI by more than 70 basis points. This historical anomaly was due to the structural endowment deficits produced by the 2008 economic crisis and the resulting response of educational institutions in the form of budget and hiring freezes. Over long periods, however, the pattern has been the one noted by Swenson of HEPI rates of inflation materially in excess of those measured by the CPI. For the five-year period ending in 2015, the HEPI was up a cumulative 11.2 percent versus 8 percent for CPI, notwithstanding the aforementioned abnormally low increases in the HEPI in some recent years. In 2014 and 2015, for example, the HEPI exceeded the CPI by more than the historical increment of 1.4 percent. A misestimate of 1.4 percent in the inflation estimate would mean that over the course of only 20 years a foundation would shrink by almost a quarter of its real asset value if it had been pursuing and achieving an investment return objective of 5 percent plus CPI.

Other examples are plentiful of foundations that, by virtue of the nature of their programs and the specific cost considerations faced by their grantees, should perhaps consider adding a further premium on general rates of inflation in their modeling of the long-term effects of inflation

FIGURE 3 Various Inflation Indices

on their purchasing power. One case would be foundations that make a significant investment in buildings or other items requiring major construction projects. Construction inflation indices, though volatile and perhaps cyclical, often run higher than regular CPI inflation, on the order of 75 to 100 basis points or more per year. Thus, for example, during the period of 2009–2015 the construction index has recorded compound inflation of 16.5 percent, or 700 basis points higher than the CPI (9.5 percent).

Another example might be foundations that fund scientific or medical research. The specific inflation-index calculated for research expenditures, the Biomedical Research and Development Price Index (BRDPI), tends to run consistently higher than traditional inflation indices. During the same 2009–2015 period, for example, this index has increased by 14.2 percent, more than 4 percent greater than the CPI. Such a differential, especially over an extended period, would cause a foundation that fails to account for the specific inflation environment faced by its grantees to underestimate seriously the investment returns required to preserve constant purchasing power. There are certain specific reasons why the BRDPI may not work well to capture a specific

foundation's inflation situation, but measurement problems do not justify entirely excluding such a consideration from long-term planning. As a general matter there is material variation in the compounding growth rates of different inflation indices over time. (See Figure 3.)

It should be noted that there are no well-established forecasts of the HEPI, biomedical cost indices, or construction costs. This is admittedly different from the CPI, where there are direct or inferred values for future expectations. This is not, however, a justification for reverting to the use of the CPI for forward-looking measures of the returns necessary to preserve actual purchasing power. (This is distinct from assessments looking back at whether purchasing power has been preserved or, as discussed below, to analyze amounts previously granted, where historical measures are readily available.) As a practical matter, then, although a foundation may be forced to start with CPI expectations to determine the desired endowment returns, a premium should be added to that calculated with reference to historical experience. Various academic institutions, for example, in budgeting for future construction costs, grow those costs to account for inflation at expected CPI plus a

FIGURE 4 Adjusted Rates of Inflation

specified number of basis points. Such academic institutions therefore should, in determining the investment returns necessary to preserve the purchasing power of their endowments, grow at least the pro rata portion of their required investment returns allocable to construction expenses by this higher level of inflation expectations.

A potentially very important consideration in grantee-specific inflationary pressures involves not the nature of the work, but instead the location of the grantee. This arises for foundations engaged in international grantmaking. Inflation rates outside the U.S., particularly in the developing world, often run several percentage points higher per year than in the U.S. To some extent, exchange-rate adjustments will offset the higher inflation rate. But the offset is far from perfect. Exchange rates vary for reasons other than just the comparative rates of inflation, including government and central bank policy, interest rate differentials, trade balances, and other economic considerations. To account for this the World

Bank calculates a Purchasing Power Parity Index by country in order to assist those in one country in budgeting their funding, with the goal of maintaining constant purchasing power for their projects when costs will be denominated in another currency.

The effects here can certainly be material. Take the hypothetical example of a U.S. foundation that makes grants in Ecuador, Israel, Bolivia, Nigeria, India, and Vietnam (selected for illustrative purposes both because of their geographical diversity and the diversity in their locally calculated rates of inflation). Assume grants were made in these jurisdictions between 2010 and 2014. During this period — and assuming, for simplicity, grants of equal amounts — the portion of the foundation's endowment supporting these grants had to cope with compound aggregate inflation of 71.24 percent during those years versus a CPI increase of only 8.5 percent.³ Adjusted annual average inflation rates for each of the six foreign countries ran from

³The calculation of the “real” inflation rate (net of exchange-rate adjustments) was derived by dividing the compounded cumulative CPI for 2010-2015 by the change in the relevant exchange rate (i.e., the number of units of local currency per US\$ on Dec. 31, 2015, divided by the same exchange rate value of Jan. 1, 2010). For Ecuador, whose local currency is the dollar, this meant that the real compounded inflation rate for the period was the full 16.8 percent experienced in the local economy. An alternative calculation could be derived using the World Bank's Purchasing Power Parity Index.

For a foundation adopting or considering a perpetual model, an awareness that returns of more than 8 percent might be required to maintain its purchasing power in perpetuity is only the beginning, not the end, of an important analysis and delicate balancing act.

a low of 1.64 percent to a high of 15.1 percent, again contrasted with the U.S. average of 1.52 percent. This reflects considerable pressure on the endowment not reflected in a U.S.-indexed model. (See Figure 4.)

Hedging options, which might be desirable from the grantee's perspective to ensure that it receives a constant amount denominated in local currency, would simply make the grantee subject entirely to the domestic inflation rate without the possibility of a potential partial offset from exchange-rate movements. Again, the point here is not that a foundation needs to attempt to grow its annual grantmaking capacity to hold grantees harmless from the effects of such inflation. Rather, the inevitable moral of this story is that given the true inflation faced by such grantees, their donors must either calibrate their endowment-management targets (and risk assumptions) to take this into account or accept that, given an international mission, the real value of their asset base will decline — perhaps sharply — over time.

Which Model – Perpetual or Spend-Down?

Beyond issues associated with the management of a foundation's endowment, the issue of compounding and inflation may also relate to a fundamental question of foundation existence. A growing number of foundations and sponsors are considering the relative merits of seeking to

remain in existence in perpetuity versus a spend-down model. Obviously, spending down over a short period of time may largely avoid the inflation issue. The possible higher inflation rates if one takes a grantee-specific approach to calculating anticipated inflation over time may therefore be a significant factor in tipping the balance of that analysis.

The current economic environment would not appear to offer a great degree of optimism for maintaining purchasing power over the long term for most foundations. A grantee-specific inflation rate of even only 75 basis points over the CPI, given the Federal Reserve inflation target of 2 percent and allowing for expenses and excise taxes not includable in the IRS's minimum distribution requirements plus the 5 percent minimum distribution, might suggest a return target of 8 percent or more. Of course, if anticipated rates of return on investment even approach the grantee-adjusted rate of anticipated inflation plus 5 percent (plus possibly some additional amount for expenses and taxes that are not includable), that might be an important factor arguing for continuing existence. While at times bull equity markets may have made 8 percent seem like a conceivable — although not likely — target, the consensus view now would almost certainly be to bet “the under” on achieving that target going forward (at an acceptable level of risk) given the fundamentals and growth issues being experienced by most developed and developing economies. Again, this analysis suggests that even foundations that, due to board decision or the requirements of founding documents, believe they are on the road to perpetuity may in fact be spending down without awareness of that fact.

For a foundation adopting or considering a perpetual model, an awareness that returns of more than 8 percent might be required to maintain its purchasing power in perpetuity is only the beginning, not the end, of an important analysis and delicate balancing act. It should trigger an iterative process of assessing endowment return targets, acceptable risk levels, and the structure and duration of program portfolios. What does an 8-plus percent target imply for expected endowment volatility, the ability to

comfortably meet commitments, and projected spending rates?

Higher return targets necessarily imply greater projected portfolio volatility. Although riskier portfolios can be constructed with an expected return at these higher levels, the price of these higher expected returns is higher volatility, i.e., less certainty that the target will be what is actually realized (otherwise, the portfolio would not be “riskier”). It is true that this volatility runs in both directions. It may be reasonable to assume that you are just as likely to beat your target as to fall short. But there is an important asymmetry here: It is always easier to spend more money without long-term commitments than it is to adapt, in a relatively short time frame, to a reduction in available funds when returns fall short. Foundation fiduciaries are well-advised to consider these possibilities in advance rather than when the storm has arrived. Stress testing can be useful here. What payout rates would follow from an x percent decline in endowment value? Are these rates acceptable? Program personnel need to be involved in these analyses. What would the program reaction be if funds available for grants declined by x percent for even a few years? Is the mix of short-term and longer-term commitments such that there is the flexibility to respond quickly to sub-target investment returns, or is the foundation effectively locked in and forced to accept a higher spend rate of, say, 6 percent, 7 percent, or more even for a few years? These questions all become of heightened importance for a foundation that is trying to exceed, after accounting for distributions, ordinary inflation rates in its investment returns due to grantee-specific cost considerations.

Such a foundation may be well advised to have some “swing” capacity in its programs, i.e., short-term commitments that could be rapidly reduced in the event endowment volatility requires decreased spending for a time. These could be either in the mix of initiatives within each program or separate programs recognized as providing the necessary swing capacity. Again, it is also possible that return targets that include a premium for cost increases actually

experienced by grantees simply imply too much risk and associated volatility. Foundation fiduciaries could quite sensibly and prudently reach that conclusion and set investment targets lower. But then a foundation adopting this view is in reality a spend-down organization, and must recognize that in its program strategy given the long-run legal mandates of spending at 5 percent plus uncovered expenses per year.

Inflation rates are, of course, not the sole criteria that comes into play in balancing the issues associated with the choice between the perpetual and the spend-down models. But reduction in purchasing power due to inflation is likely among the more potent factors if the decision is to be made solely on an economic basis of maximizing social utility. And the importance of an awareness of whether or not one is spending down on real purchasing power seems unquestionable.

What Type of Initiative?

Considering the inflation issue from a different direction, many foundations are now subjecting their programs to cost-benefit or cost-effectiveness analysis in comparing alternative initiatives. Although a wide range of approaches with significant variance in the degree of economic explicitness are used for these purposes, those analyses turn either analytically or conceptually on some sense of the amounts invested in the programs. Particularly for long-term programs, all invested amounts should be brought forward into current dollars in order to make consistent comparisons among alternative programs. The compounding effect of inflation rates (in this case, revaluing upwards previously invested amounts) potentially will make a material difference in the relative amounts invested if alternative initiatives are to be considered on a consistent basis.

In general, the adjustments called for by all of the above analysis can be quite simple in practice yet still add meaningfully to a foundation's ability to model the economic environment in which it functions. Consider, just as one example, a foundation based in a major metropolitan area whose programs are mostly in that urban area and are of the direct-services type. In accounting for inflation, such a foundation might wish to

use core CPI (that is, the CPI without energy and food), plus an amount reflecting recently prevailing HEPI premiums over general inflation. This would capture both that gas utilization is much lower in most major metropolitan areas than in the U.S. generally and that grantees of this nature are almost certainly labor intensive. (Alternatively, there are now a variety of urban indices which might merit consideration, but “core” versions of these indices — e.g., minus energy and food — may not be available.) To this should be added 25 to 50 basis points for taxes or expenses that are not includable. Keep in mind also that there is a difference between price levels, which may be higher in this metro area than in the nation as a whole, and percentage changes in price levels due to inflation. The base price level for this foundation should be thought of as reflecting these higher urban costs and, if the program focus should change to jurisdictions with different cost levels, the base in effect could be readjusted.

As this example illustrates, some relatively straightforward analysis of the grantee portfolio can be important. To begin, is that portfolio in fact characterized by greater labor intensity? Then, are there other factors, commodities, or specific costs of particular relevance? Construction or infrastructure costs, food prices, and costs associated with scientific research (which can swing widely, in both directions, from standard CPI measures) would all be examples here. Are considerations of location important, as in the different pricing environments faced by urban, suburban, or rural grantees? In particular, in the case of grantmaking in other countries, actual inflation in the relevant economy (after adjustment for exchange-rate changes) is what determines purchasing power parity.

These inflation considerations can also play a meaningful role in setting important strategic paths for a foundation. In considering the pros and cons of perpetual versus spend-down models, and in determining where one actually is on the spectrum defined by those two models, a realistic premium to the general level of inflation should, where appropriate, be incorporated into the thinking. At least in the current economic

environment, the return target (and the associated risk levels that would need to be accepted to, on average, achieve that target) may be an important factor. Further, in comparing alternative initiatives with respect to historical or projected outcome performance, constant dollar calculations should be used to provide a consistent method of comparison.

These points may all be, at least per year, relatively small, but they can amount to important effects. After all, a 7 1/2-cent raise was at the center of *The Pajama Game*, which ended up winning the 1954 Tony Award for Best Musical. Small amounts can tell an interesting story.

Acknowledgments

The author wishes to thank Paul Joskow, president of the Alfred P. Sloan Foundation and the Elizabeth and James Killian Professor of Economics, emeritus, at the Massachusetts Institute of Technology, for time generously spent discussing this topic in general and for specific invaluable comments. Also, Nathan Huttner of the Redstone Strategy Group graciously offered typically perceptive advice on this topic and its implications. Any errors or omissions in the analysis are however entirely the author's.

References

SWENSON, D. (2000). *Pioneering portfolio management: An unconventional approach to institutional investment*. New York: Free Press.

John Riche Ettinger, J.D., is currently a senior counsel at Davis Polk & Wardwell LLP, where he was managing partner 1999-2011. He is also the former CEO of the Helmsley Charitable Trust. Correspondence concerning this article should be addressed to John R. Ettinger, Davis Polk & Wardwell LLP, 450 Lexington Avenue, New York, NY 10017 (email: jrettinger4@gmail.com).