6% Real or Bust
Council on Foundations
Chicago
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Good morning. I'm reliably told that one reason that the Council keeps inviting me back as a speaker is because I have strongly held opinions on just about every aspect of investment management — opinions that I'm not afraid to share publicly. To make maximum use of the time allotted to me today, and to make sure that I don't run into the same problems that Chicago's late mayor Richard Daley used to run into, I've actually written out the main part of the talk I've prepared for today. As some of you know, Daley had a habit of saying things he shouldn't have, especially during news conferences. Indeed, some of his remarks during one news conference produced such embarassing headlines the next day that Daley forced his press secretary to call reporters back to city hall for a scolding. "You guys printed what the mayor **said,"** the press secretary complained, "instead of what he **meant** to say."

I'm going to say exactly what I mean here today, and I'm going to say it rather rapidly, the session's organizers having asked me to cover a number of topics in a limited amount of time. To make sure that I say at least a few words about all of these topics -- the most important of which is how all of you can take steps that give you a decent chance of achieving the elusive goal of maintaining the purchasing power of your foundation's corpus while spending 5% if not 6% every year — I've had to limit my comments on certain aspects of this challenge to just a few sentences. I make no apologies for this, because you're an audience made up of folks with varying degrees of investment expertise, and it's better to leave some of you begging for more on a given topic than bore any of you by talking too much about topics you already know lots about.

A few more comments by way of preface:

First, by design, some of the thoughts I'm about to share with you are **unoriginal**. They're unoriginal because my ongoing review of the literature on asset allocation confirms what the Bible teaches about human affairs, namely that "There's nothing new under the sun." [Bet you didn't know that came from the Bible. *Ecclesiastes 1:9*.] This doesn't mean that tired topics don't merit revisiting, of course. As the German poet Goethe once observed, quote, "Everything has been thought of before. The problem is to think of it again." In fact, knowing that some of us at TIFF spend almost as much time thinking about asset allocation as Yankee manager Joe Torre spends thinking about baseball, a number of investment committees for whom TIFF manages money have asked us to keep them apprised of our quote, "best thinking" on this topic. Our latest effort to do so takes the form of the material I'm about to share with you — a modified version of which has been posted on TIFF's Website. I mention this so that none of you will feel compelled to take detailed notes as I'm speaking. If you want a copy of my talk, just go to our Website and search for the keyword "Goethe," spelled G-O-E-T-H-E.

As the front side of the handout indicates, my talk today is divided into two parts, each covering a crucial aspect of the challenge I alluded a minute ago – how to earn real returns high enough to support a spending rate of five if not six percent. The first part of my talk focuses on the most daunting aspect of this challenge, which is to avoid the many pitfalls that confront trustee groups engaged in investment policymaking. As you'll see and hear, to give you a concrete sense of what **to** do as well as what **not** to do with respect to asset allocation, the first and larger part of my talk includes a summary of my **current** best thinking with respect to an appropriate policy portfolio for foundations seeking to maintain purchasing power while spending 5-6% percent per year. The second part of my talk focuses on what's hot and what's not in alternative assets.

Turning to part one of my talk, you can see that it comprises the 10 most important things that, in my opinion, investment committees need to keep in mind as they go about their work.

Point #1. There's no such thing as an "ideal" asset mix or policy portfolio, even for endowed charities with identical spending rules. Why? Because the true test of the appropriateness of a given mix for a given endowment is whether it will produce the maximum return for whatever level of risk the endowment's trustees are willing to bear. But few if any trustee groups can accurately gauge their tolerance for poor results until those results actually roll in.

Point #2. Most endowed charities pursue investment policies that are best described as conventional rather than conservative, the latter defined literally as conducive to the maintenance of endowment purchasing power in the face of reasonable annual withdrawals. Conventional policies differ from conservative policies because comfort and expected return are inversely related, a point underscored by the table entitled "Changing Fashions" on the front side of the handout. The plain truth is that the more comfortable an asset class or investment strategy becomes, the lower its prospective returns get pushed, often into negative territory.

Point #3. Although institutions are accused of being hopelessly myopic in their decisionmaking, especially with respect to manager selection, they're actually too far-sighted in other respects, especially when investing in so-called "alternative assets", a term that is defined unhelpfully but most commonly as anything other than publicly traded US stocks or bonds. The basic problem is that people tend to forget that the current price of an asset is always more important than historical averages. Indeed, studies extolling the virtues of specific "alternative assets" have a nasty tendency of appearing close to secular peaks in the returns on such investments. This is one reason why, on average and over time, most institutions have earned far less than they've expected to earn from "alternative assets."

Point #4. "The beginning of wisdom," Socrates observed, "is the definition of terms." Many institutions employ policy portfolios comprising, quote, "asset classes" that aren't truly worthy of the name. The most common offenders these days? One, "hedge funds." Two, "alternative assets." To merit treatment as an "asset class" by endowment trustees, an asset type or strategy must (a) embody a distinct, homogenous, and consistently conspicuous set of return "drivers" and risks and (b) be sufficiently scalable (that is, susceptible of absorbing meaningful inflows without undermining its capacity to generate competitive risk-adjusted returns to tax-exempt investors). Grouping such disparate strategies as fixed income arbitrage, distressed debt, and — God help us — macro investing into a fund segment labeled "hedge funds" is really silly. Lumping "hedge funds" with such non-traditional but potentially non-correlated strategies as venture capital or emerging markets into a segment labeled "alternative assets" is even worse. When determining how best to parse the ever-expanding universe of investment choices available to them, trustees should focus rigorously on how each asset type or strategy under consideration will perform under worst case conditions, including a major inflation or deflation. As we'll see in a few minutes, their rigorous use of this test is one reason that cutting-edge investors are increasingly replacing separate allocations to US and foreign stocks with a unified allocation to global equities.

Point #5. Most institutional investment programs are logically inconsistent in at least one important sense: the targeted weights for each asset class typically are based on the indexed or passive return that each asset class is expected to produce, but the bulk of money invested in each asset class is actively managed. For this and other reasons discussed in a long commentary on asset allocation that TIFF published a few years back and that I'd be pleased to furnish upon request, computer-based asset allocation models tend to be highly flawed: they tilt toward asset classes and strategies whose superior risk-adjusted expected returns necessarily ignore the fact that big future inflows into a given investment niche will reduce its expected returns. To give you a concrete example, consider how foolish it would be for the $140 billion California state employees' pension fund to assume that allocating 15% of its assets to private equity will produce

the same percentage return as a $1 billion endowment's allocation of 15% of its assets to the same niche. To avoid such foolishness, the expected returns from **size-constrained** investment niches — including most of those that will be discussed at this conference — have to be adjusted to reflect the actual dollars that would be allocated to them pursuant to any "model" portfolios being considered. These niches merit such special handling for two reasons: one, they can't be accessed on an indexed or passive basis; two, individual manager results within them tend to be distressingly dispersed. Indeed, you're often better off shunning such niches altogether than accessing them via second-rate managers.

Point #6. In practice, few if any investors are both able and willing to do what's needed to actually realize the returns that "efficient" asset mixes theoretically produce. "Efficient" asset mixes presuppose rebalancing moves that are (a) uncomfortably contrarian and (b) difficult if not impossible to implement with respect to illiquid assets. That said, most institutions could enhance their long-term returns by adopting more sensible "rebalancing" disciplines, even if the application of such rules is limited primarily to the marketable portions of their portfolios.

Point #7. The longer and more detailed an endowment's asset allocation guidelines are, the **less** useful they tend to be. The reason is clear, and was clearly demonstrated by Bill Clinton's shockingly long State of the Union speeches: excessively windy policy statements typically mask a failure to perform the first duty of effective leaders, which is to make intelligent and well-informed tradeoffs among competing policy aims. In my opinion, investment policy statements should consist of two things and two things only: first, quantified return expectations and allocation ranges for each of the asset classes or strategies that a fund is permitted to employ; second, a succinct rationale for why each asset class or strategy is included in the policy mix. As you can see from the tables on the back side of the handout, with not much effort, you can easily fit all of the necessary information on a single page.

We'll come back to these tables later in my talk, because they address directly the central question I was asked to address here today – how can we structure our funds in a manner that gives them a decent chance of earning a 5-6% real return over time horizons appropriate to perpetual life charities? But before you flip back to the front side of the handout, let me walk you through item number eight (**Point #8)** in my list of 10 do's and don't's with respect to asset allocation. Item eight anticipates a question that I'm sure many of you would ask about the policy portfolio I've put together if given the chance. The question is this: why doesn't the table in the handout include estimates or should I say guesstimates of the recommended portfolio's risk or volatility, if not in the absolute sense then relative to competing alternatives? After all, one of the alleged virtues of combining non-correlated assets in the manner I've recommended is that doing so makes overall fund results less volatile than they would be otherwise.

The reason I've deliberately omitted guesstimates of volatility or standard deviation is because they tend to be misleading at best and useless at worst. They're misleading because the way most computer-based approaches to asset allocation work, the volatility or risk measures they spit out reflect assumed correlations under normal as distinct from extreme market conditions. Forgive me, but I don't really care about my portfolio's volatility under so-called normal conditions, whatever the heck that means. I care about its volatility under worst case conditions — conditions that almost always cause correlations to soar way above forecasted levels.

The second reason I don't like to place much weight on risk estimates is that they tend to be useless, by which I mean something quite precise: if — as we've already discussed — liquidity as well as behavioral constraints prevent foundations from making the rebalancing moves needed to make so-called efficient asset mixes efficient in the first place, well, it doesn't seem very useful to choose among competing policy mixes based on wholly unrealistic estimates of risk-adjusted expected returns.

Speaking as we just were of rebalancing, **Point #9** addresses a fundamentally important question that most investment committees don't spend nearly enough time thinking about. The question is, "How often should we rebalance?" Interestingly, and I think importantly, my preferred answer to this question is identical to my preferred answer to the related question of how often committees should review their policy portfolios. The only valid answer to both of these questions is easily stated: on an as-needed basis. What do I mean by that? Well, with respect to rebalancing, it ought to be done as frequently as possible consistent with sensible and sober assumptions about trading costs. In general, most foundations don't do nearly enough rebalancing, due in part to the unavoidable liquidity constraints we've already discussed but perhaps in larger part to a combination of understaffing and unfortunate if not irresponsible reporting delays. As for policy reviews, these too should be done not on a preprogrammed basis as is usually the case — every few years being the norm among institutional funds supervised by volunteer committees — but rather on an as-needed basis, with the triggers or catalysts being **not** big market movements but rather material changes in the number or fundamental character of asset classes available for investment.

Point #10. My tenth and final point about asset allocation hearkens back to the first. Just because there isn't an ideal asset mix for all endowed charities — or even a universally approved method for identifying an appropriate mix for a specific fund — doesn't mean that one person's opinion on such matters is as good as the next. Precisely because effective asset allocation requires as much art as it does science — by which I mean intuition and experience — you need to make sure that the right people perform it in the right settings. With respect to the types of people best suited to investment policymaking, I've found that the most effective contributors display at least two common attributes: one, they're experienced and successful investors in their own rights; two, due largely if not solely to the experience I've just mentioned, the most effective policy-makers approach investment planning issues from an owner's rather than an agent's perspective. With respect to the proper setting for investment policymaking, the smaller the group that bears responsibility for this task the better, subject to a minimum of three. Indeed, if you asked me to identify the ideal size for an investment committee, I'd tell you it's three people, provided of course that they display the attributes I described a moment ago.

There's a second and arguably more important reason why it's important to keep the number of folks involved in investment decisionmaking to a reasonable minimum — a reason rooted in some of the hard truths about investing that we've already discussed. Given the fact that some of the most important work that investment committees do is best done on an as-needed rather than pre-programmed basis, it logically follows that investment committees should **meet** on an as-needed basis also. Most committees don't do this, of course, for reasons that are understandable but regrettable: they meet on a regularly scheduled rather than as-needed basis because there are usually too many people on them — so many people that it's virtually impossible to get all of them together on short or even not so short notice. This is not good, because regularly scheduled investment committee meetings often do more harm than good. Why? Because when they assemble infrequently, on dates set far in advance, committees tend to want to **do** something, even when inaction would be the wiser course. As I've already mentioned twice in connection with rebalancing, committees that only take up important business on a regularly scheduled basis also tend to miss opportunities to act when action is in fact called for.

Enough about asset allocation. Before turning the microphone back to Lyn Hutton for her comments on what I've said plus a Q&A session with all of you, I'm going to do as I was asked and comment briefly on some of the alternative or non-traditional asset classes and strategies that I've included in the policy portfolio described in the handout, starting with foreign stocks. I know that most folks don't view foreign stocks as alternative assets any longer, although they were certainly viewed as such when I began working with endowments and foundations 20 years ago. Ironically, if foreign stocks keep performing like they have the last few years they may wind up making a full circle in a policymaking sense, going from forbidden fruit in the 1970s, to the height

of sexiness as **the** alternative asset of choice when Japan was soaring in the 1980s, to forbidden fruit once again. As many of you know, 2001 was the fifth year in the last six in which the average foreign stock underperformed the average US stock. Given this dismal performance, and the steadily increasing correlation of US and foreign stock returns under extreme market conditions, a lot of trustee groups are questioning why they should have anything invested in publicly-traded foreign stocks on a more or less permanent basis.

Let me give you at least two reasons why they should. First, investment policymaking should be based on long-term considerations — like the fact that foreign stocks have more than held their own against US stocks over multi-decade holding periods — rather than on recent and potentially non-recurring trends — like the fact that Japan has imploded in recent years. Or the fact that the US dollar has moved sharply higher against most foreign currencies, including the yen. These recent trends could persist for a while longer, but they're not going to persist over time horizons appropriate to the foundations represented in this room.

The second reason trustees should stay the course with foreign stocks is because the broader an institution's opportunity set is, the higher its expected return, all else equal. To arguments that all else is **not** equal — that American ways of doing business are and will remain forever superior — I have a ready rebuttal: arguments that one nation's "system" is permanently superior to others' tend to be good contrary market indicators, as we all recall from the late 1980s, when the land underneath the emperor's palace in Japan had an implied market value greater than all of the privately-held real estate in California. Just as there are differences between good companies and good stocks, so too are there differences between sound economic systems and attractively-priced means of owning a piece of the action in them. Investing in stocks on a global basis enables US-based charities to exploit these differences to a greater extent than if they confine their investing to US shares only.

Next on the list of assets included in my recommended portfolio mix is private equity, which — along with most of the other so-called alternative assets included in my mix — have begun showing up in so many institutional portfolios that they arguably don't deserve the label "alternative" any longer. Given this fact, I'm going to comment only very briefly on each of these asset classes, with two simple aims in mind as I comment on each: first, to give you an approximate sense of where in their own never-ending valuation cycles each asset class seems to be poised at the present time; second, to do this in a manner that enables me to use some favorite quotes from my favorite sport, namely baseball.

With respect to private equity, the baseball quote that seems most apt comes from an eminently forgettable and indeed forgotten player named Mike Smith, who played for several National League teams in the 1980s. Responding to reporters' jabs at his unreliable readiness to play, Smith had this to say: "I've been healthy my **entire** career, except for nagging injuries the last few years." The same could be said for most top quartile PE managers operating today, and for the PE industry as a whole, although not for all of its individual players. Indeed, the reason that the industry as a whole has produced satisfactory long-term results (on a dollar-weighted basis) is because its most skilled players have performed exceptionally well, thereby offsetting the subpar returns generated by its lesser lights. Of course, most top quartile performers active today accumulated their winning records in environments characterized by falling interest rates and rising stock valuations, i.e., during the late bull market in financial assets.

Because private equity returns were so high during the closing stages of this bull market in the late 1990s, investors committed vast sums to PE partnerships formed around that time. Most of this money (literally tens of billions of dollars) remains uninvested. If and when this mound of capital gets put to work, its sheer size makes it probable that, **on average**, deals will get funded at prices that will cause the **average** returns produced by the partnerships in question to fall well short of their limited partners' (LPs) *ex ante* hopes. Why? Because VCs as a group are unlikely to uncover

enough opportunities to put more than a modest fraction of this vast mound of capital to work in ventures displaying all three prerequisites for very high returns: (1) a **proven management team** possessing (2) a **sound business plan** for capturing (3) meaningful and defensible shares of **large and addressable markets**. Moreover, even if VCs as a group attract enough deals of this sort, they're unlikely to fulfill their LPs' hopes without a full re-flowering of the equity culture that prevailed in the late 1990s. I'd bet a tidy sum that this won't happen during the stated lives of PE partnerships formed in recent years. Indeed, as you can see, my policy mix assumes that global stocks will produce a real return of just 4.5% on an indexed basis over the 15 year planning horizon that this mix presupposes. That's much lower than the double digit real returns that stock investors pocketed during the great bull market in stocks that in my mind ended decisively in March 2000. The key question for all of you is whether you can get money into the hands of private equity managers who can deliver a sufficient return premium relative to whatever return you expect from marketable stocks moving forward. As you can see, my policy mix assumes a 4% or 400 basis point premium from private equity, an expectation rooted in the all-important assumption referenced in the third bullet above the table, namely that the hypothetical foundation adopting this mix will have access to top-tier managers in all of the markets in which it's investing.

I'm going to say very little about the next so-called asset class on my list, absolute return, because it's red hot at the moment and I don't want to add fuel to the fire by spending undue time on strategies that as a group may have attracted too much capital already. As the handout indicates, the company line is that — as with any asset class in which individual manager returns tend to be very highly dispersed — you need to be very, very careful putting money to work in the absolute return arena. Searching through my vast collection of baseball quotes for one that's relevant to the challenges confronting absolute return specialists today, I came across a memorable line from Hall of Fame pitcher Nolan Ryan. "One of the beautiful things about [my line of work]," Ryan once said, "is that every once in a while you come into a situation where you want to, and where you **have** to, reach down and prove something." What absolute return-oriented managers as a group have to prove over the next several years is that their form of investing constitutes an exception to one of investing's most important rules, namely that when too much money flows into a given niche, its returns get pushed way down, often into negative territory.

To be clear, I don't think the average institutional investor is going to **lose** lots of money investing in absolute return-oriented hedge funds over the next several years, although some are going to get embarrassed when the managers they select don't prove as absolute return-oriented as they've advertised, meaning: adept at controlling downside risk. Given the fact that a lot of the hedge funds we're talking about run on awfully tight leashes — meaning that they seek to avoid even modest short-term losses while simultaneously investing only within narrowly defined market niches — given this fact, my chief concern about the vast sums flowing into absolute return strategies is that it will cause them to deliver over the next several years net returns that, while positive, are actually below what investors could get by investing in money market funds.

Very quickly, let me share with you the baseball quote that I came up with that best describes the current environment for the other so-called alternative assets I've included in my recommended policy mix. In 1966, Yankees manager Casey Stengel was asked about a ballpayer he'd competed against 50 years earlier. "Larry Gilbert?" Casey replied. "He's dead **at the present time**." As most of you know, real estate, oil and gas, timber and other so-called hard or real assets are generally out of favor at the present time. I have no idea precisely when they'll come back into favor, and I wouldn't trust anyone who claimed that they could accurately and consistently forecast the near-term direction of any asset class. What I **am** confident in stating is that if the economy does indeed remain sluggish for an extended period, causing the prices of both real and financial assets to move sideways over a multi-year period, then you're far better off holding real assets than you are holding financial assets, including especially stocks. The reason I say this is because the spread between income yields on real assets on the one hand and those on comparable quality stocks and bonds on the other is very wide by historical standards. This doesn't mean that real

assets are poised to soar while financial assets crumble. It means simply that with real assets you get paid a nice yield to wait for the tide to come back in — and you have the opportunity to enhance this yield by putting your money into the hands of managers who typically can do much more to shape your bottom line returns than can managers of publicly traded stocks or bonds. The policy portfolio outlined in your handout doesn't make this immediately clear, because it doesn't contain a specific guesstimate of the value-added that managers of real or hard assets are expected to deliver. But that's the whole point: there really is no way to own real estate or oil and gas properties on a truly passive or indexed basis. That's why the column labeled value-added shows the word "Subsumed" in the rows for real estate and resources: the value-added is subsumed in each of these asset classes' expected real return.

One more thing before I turn things back to Lyn. I said a moment ago that there's really no way to own real estate or oil and gas properties on a truly passive or indexed basis. Unfortunately, in the current environment, even though these asset classes are out of favor — indeed, perhaps precisely because they're out of favor — it's actually surprisingly tough to put serious money to work in them at prevailing prices. This is a pretty esoteric point for this audience and I wouldn't have mentioned it except that doing so lets me close my prepared remarks with a particularly memorable baseball quote. The quote is apt because some of the first-rate real estate and resource managers that TIFF is privileged to employ are having trouble putting money to work even though they're willing to pay the full asking prices on properties being offered to them. Evidently, the current owners are earning a decent enough yield on their properties that they're not **forced** to sell, and they're so intent on selling at prices close to what their properties would have commanded if they'd sold at the peak a year or two ago that they can't bring themselves to accept even full price offers, by which I mean offers that reflect today's valuations as opposed to earlier peaks. This rather stubborn mindset is reminiscent of the strategy that All-Star catcher Gary Carter pursued prior to returning to the Montreal Expos for the closing season of his very successful 19-year career. As Carter explained to some reporters just before he re-signed with Montreal: "If the Expos come up with an offer I can't refuse, I wouldn't turn it down." ■

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Asset Allocation
The 10 Most Important Things to Keep in Mind

1 — Mimicry Decried. There's no such thing as an ideal asset mix or policy portfolio, even for endowments with identical spending rates.

2 — Conservatism Defined. Most endowed charities pursue investment policies that are best described as conventional rather than conservative. See "Changing Fashions" on reverse side.

3 — Myopia Defended. Institutions tend to be too short-sighted with respect to manager selection yet too far-sighted with respect to asset allocation, paying too much attention to asset classes' long-term historical returns and too little to their current prices.

4 — Colloquialisms Deflated. Many institutions employ policy portfolios comprising "asset classes" that aren't worthy of the name. The most common offenders: "hedge funds" and "alternative assets."

5 — Consistency Demanded. Most institutional investment programs are logically inconsistent in at least one important sense: the targeted weights for each asset class typically are based on indexed or passive returns but the bulk of money invested in each asset class is actively managed.

6 — Rebalancing Deified. Few if any institutions are both able and willing to do what's needed to actually realize the returns that make "efficient" asset mixes efficient in the first place.

7 — Prolixity Deplored. The utility of asset allocation guidelines is inversely related to their prolixity. The best guidelines comprise (a) quantified return expectations and ranges for permissible asset classes and subclasses and (b) a succinct rationale for why each class or subclass is included in the policy mix. See "Illustrative Policy Portfolio" on reverse side.

8 — Alchemy Denied. Choosing among alternate policy portfolios based on guesstimates [sic] of their risk-adjusted expected returns is perilous because (a) correlations tend to soar under extreme market conditions and (b) liquidity and behavioral constraints tend to inhibit the rebalancing that the most conspicuously "efficient" mixes presuppose.

9 — Torpor Derided. Policy-making, like rebalancing, should be done on an as-needed basis, meaning frequently with respect to rebalancing, infrequently with respect to policy-making.

10 — Dilettantism Devalued. Policy-making is best performed by (a) seasoned investors (b) meeting in small numbers (c) on an as-needed basis and (d) thinking like owners rather than agents.

Alternative Assets
What's Hot, What's Not

Hot *Be Careful*	**Lukewarm** *Be Patient*	**Cold** *Be Bold*
Absolute Return	Private Equity	Real Estate
	Inflation-Linked Bonds	Resource-Related Assets

Changing Fashions

	Traditional *no privates*	**Neo-Traditional** *some privates*	**Modern** *some privates*	**Neo-Modern** *generous privates*
Fashionable in:	Dark Ages	1980s	1990s	2000s
Total Return Segment	**60%**	**60%**	**70%**	**75%**
US Stocks	60%	40%	40%	} 45%
Non-US Stocks	0%	15%	15%	
Private Equity	0%	5%	10%	15%
Absolute Return	0%	0%	5%	15%
Inflation Hedging Segment	**0%**	**10%**	**15%**	**15%**
Real Estate	0%	10%	10%	5%
Resource-Related Assets	0%	0%	5%	5%
Inflation-Linked Bonds	0%	0%	0%	5%
Deflation Hedging Segment	**35%**	**25%**	**15%**	**10%**
Conventional Bonds*	35%	25%	15%	10%
Cash	**5%**	**5%**	**0%**	**0%**
Total	**100%**	**100%**	**100%**	**100%**
Riskiness				
Short-Term Principal Loss	High	Moderate	Moderate	Low
Illiquidity	Very Low	Low	Moderate	High
Reputational Risk (circa 2002)	High	Moderate	Low	We'll See
Long-Term Return Shortfall**	Very High	High	Moderate	Low

* Deflation-hedging bonds should be high quality, long-term, and non-callable.
** Probability of earning annualized real returns below 6% over the very long term.

TIFF Membership Summary

	Number of Members	**Assets under Management**
TIFF Membership	**348**	**$2,400 mm**
■ Private Foundations	165	$1,277 mm
■ Community Foundations	33	$293 mm
■ Educational Organizations	19	$192 mm
■ Other 501(c)(3) Organizations	131	$638 mm

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Illustrative Policy Portfolio

- Primary goal = 6% gross real return (5% spending plus 1% investment-related expenses).
- Secondary goal = avoid peak-to-trough declines in endowment unit values exceeding 25%.
- Assumes a 15-year investment horizon (2002–2016) and access to top-tier managers in all markets.
- Assumes ILBs purchased near or below par to maintain their utility as deflation (and inflation!) hedges. See TIFF *Commentary* for June 30, 2000.
- Normal allocations for this policy portfolio differ from the “Neo-Modern” mix on page 1 by design.

Segment / Eligible Assets	Allocation Ranges*			Expected Gross Returns			Reason(s) Held	Benchmark
	Minimum	Normal	Maximum	Real Return	Value Added**	Real Total Return		
Total Return Segment	**55%**	**70%**	**80%**	**5.8%**	**0.6%**	**6.4%**	Preserve and enhance	MSCI All Country World
US Stocks / Non-US Stocks	36%	40%	64%	4.5%	1.0%	5.5%	purchasing power in non-extreme market	Free Stock Index (currently roughly 50% non-US)
Private Equity	11%	18%	25%	8.5%	subsumed	8.5%	environments	
Absolute Return	5%	12%	19%	6.5%	subsumed	6.5%		
Inflation Hedging Segment	**8%**	**16%**	**24%**	**7.8%**	subsumed	**7.8%**	Preserve capital	10-year US Treasury
Real Estate	7%	12%	17%	8.0%	subsumed	8.0%	values during	Inflation Protected
Resource-Related Assets	1%	4%	7%	7.0%	subsumed	7.0%	periods of high inflation	Securities (TIPS) plus 4%
Deflation Hedging Segment	**4%**	**7%**	**15%**	**3.0%**	negligible	**3.0%**	Preserve capital	10-year US Treasury notes
US$ High Grade Bonds	4%	7%	15%	3.0%	indexed	3.0%	values during	
Non-US$ High Grade Bonds	0%	0%	5%	3.0%	indexed	3.0%	deflations	
All-Purpose Hedging Segment	**2%**	**7%**	**12%**	**3.4%**	negligible	**3.4%**	Avoid forced sale of	10-year US Treasury
Inflation-Linked Bonds	2%	7%	12%	3.4%	indexed	3.4%	other assets to meet	Inflation Protected
Cash Equivalents	?***	?***	10%	1.5%	negligible	1.5%	cash flow needs	Securities (TIPS)
Total		**100%**		**5.6%**	**0.4%**	**6.0%**		**Weighted average of segment benchmarks**

TIFF has revisited this table in order to answer an important question posed in the TIFF *Commentary* for 1Q 2002: “What if Peter Bernstein is right?” Mr. Bernstein is a respected economist and market historian who has argued that the assumed real return of 4.5% on marketable stocks embodied in illustrative policy portfolio above is too high. **If** Mr. Bernstein is right, then at least two conclusions follow: first, the expected returns of asset classes and strategies whose performance is dependent (even in part) on global stocks' return must be adjusted downward; second, the overall portfolio's expected return must be adjusted downward also. The following table reflects revised assumptions for certain asset classes and for the portfolio as a whole. (Figures through which horizontal lines appear are those that appear in the table above.) TIFF members seeking to understand the logic (or lack thereof) underlying the adjustments shown below should direct inquiries to info@tiff.org.

Segment / Eligible Assets	Allocation Ranges*			Expected Gross Returns			Reason(s) Held	Benchmark
	Minimum	Normal	Maximum	Real Return	Value Added**	Real Total Return		
Total Return Segment	**55%**	**70%**	**80%**	**3.8%** ~~5.8%~~	**0.4%**	~~6.4%~~ **4.2%**	Preserve and enhance	MSCI All Country
US Stocks / Non-US Stocks	36%	40%	64%	3.0% ~~4.5%~~	0.8%	~~5.5%~~ 3.8%	purchasing power in non-extreme market	World Free Stock Index (currently
Private Equity	11%	18%	25%	4.8% ~~8.5%~~	subsumed	~~8.5%~~ 4.8%	environments	roughly 50% non-US)
Absolute Return	5%	12%	19%	5.0% ~~6.5%~~	subsumed	~~6.5%~~ 5.0%		
Inflation Hedging Segment	**8%**	**16%**	**24%**	**5.6%** ~~7.8%~~	subsumed	~~7.8%~~ **5.6%**	Preserve capital	10-year US Treasury
Real Estate	7%	12%	17%	6.0% ~~8.0%~~	subsumed	~~8.0%~~ 6.0%	values during	Inflation Protected
Resource-Related Assets	1%	4%	7%	4.5% ~~7.0%~~	subsumed	~~7.0%~~ 4.5%	periods of high inflation	Securities (TIPS) plus 4%
Deflation Hedging Segment	**4%**	**7%**	**15%**	**2.5%** ~~3.0%~~	negligible	~~3.0%~~ **2.5%**	Preserve capital	10-year US Treasury
US$ High Grade Bonds	4%	7%	15%	2.5% ~~3.0%~~	indexed	~~3.0%~~ 2.5%	values during	notes
Non-US$ High Grade Bonds	0%	0%	5%	2.5% ~~3.0%~~	indexed	~~3.0%~~ 2.5%	deflations	
All-Purpose Hedging Segment	**2%**	**7%**	**12%**	**3.3%** ~~3.4%~~	negligible	~~3.4%~~ **3.3%**	Avoid forced sale of	10-year US Treasury
Inflation-Linked Bonds	2%	7%	12%	3.3% ~~3.4%~~	indexed	~~3.4%~~ 3.3%	other assets to meet	Inflation Protected
Cash Equivalents	?***	?***	10%	2.0% ~~1.5%~~	negligible	~~1.5%~~ 2.0%	cash flow needs	Securities (TIPS)
Total		**100%**		**3.7%** ~~5.6%~~	**0.3%**	~~6.0%~~ **4.0%**		**Weighted average of segment benchmarks**

* Minimums and maximums for sub-segments may not sum to minimums and maximums for each segment because sub-segments serve as partial substitutes for each other.

** Expected value added from the use of assets or strategies that could cause a sub-segment's returns to deviate from the returns of its parent segment's benchmark.

*** Minimum and normal cash positions could be negative, subject to trustee discussion of appropriate leverage ratios. Endowed charities can lever their portfolios without incurring unrelated business taxable income — if they're clever about it. Of course, if leverage is permitted, non-cash ranges must be tweaked accordingly.

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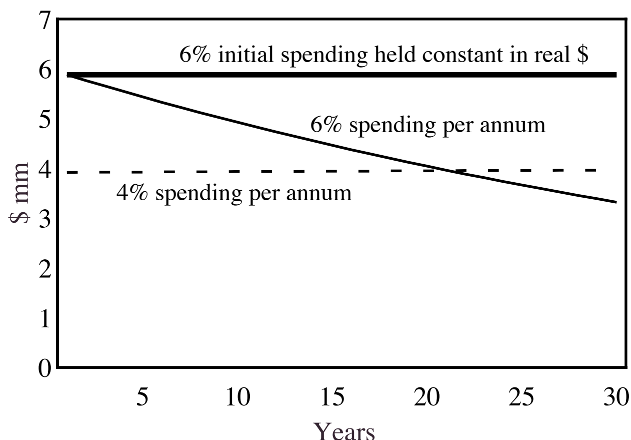
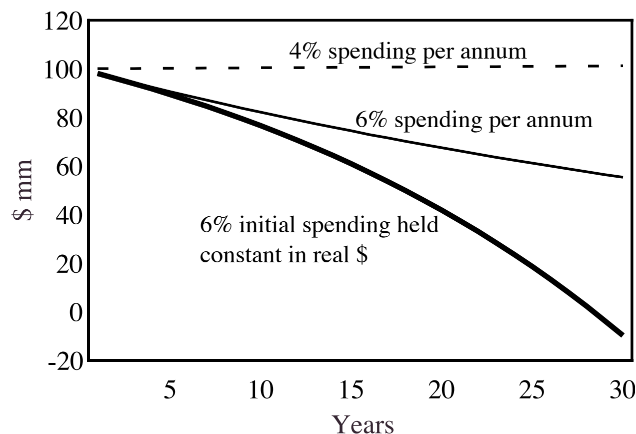
Impact of Spending Policies on Endowment Value
4% Real Return Scenario

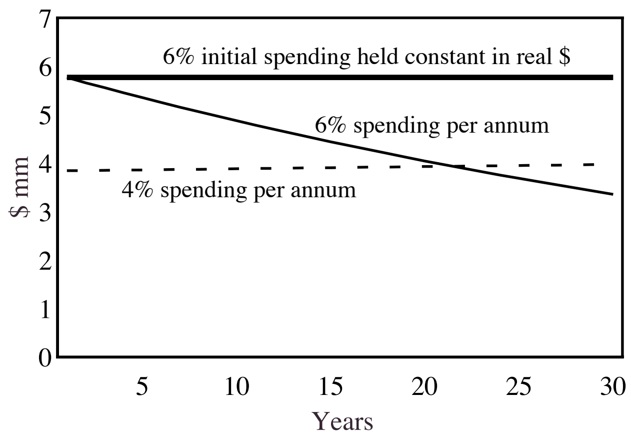
Spending in Real Dollars | **Endowment Value in Real Dollars**

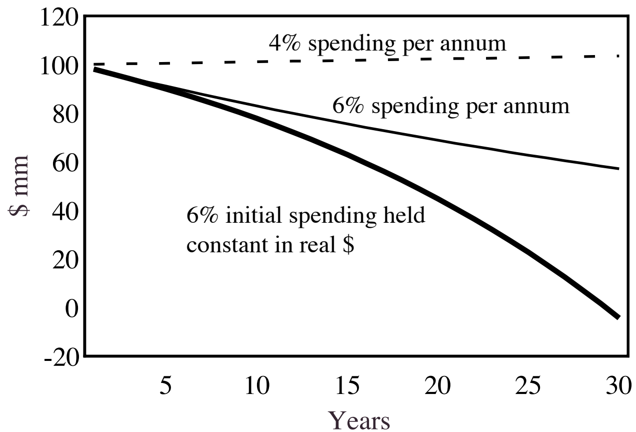
2% Inflation



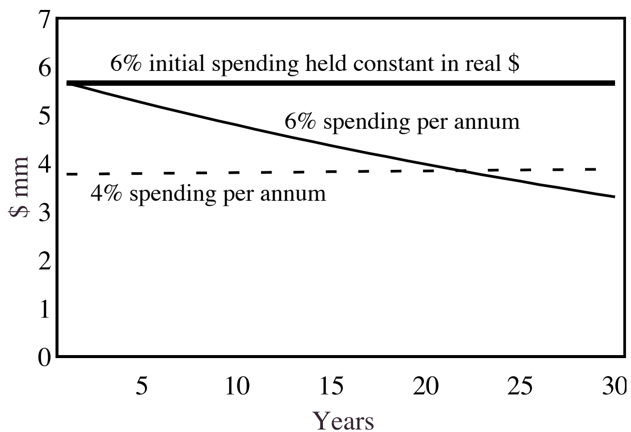


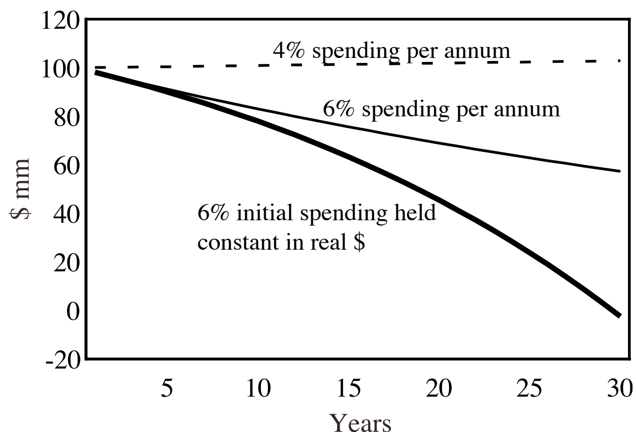
4% Inflation





6% Inflation





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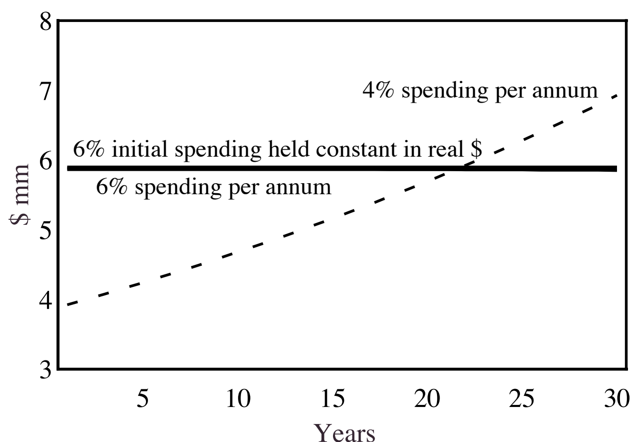
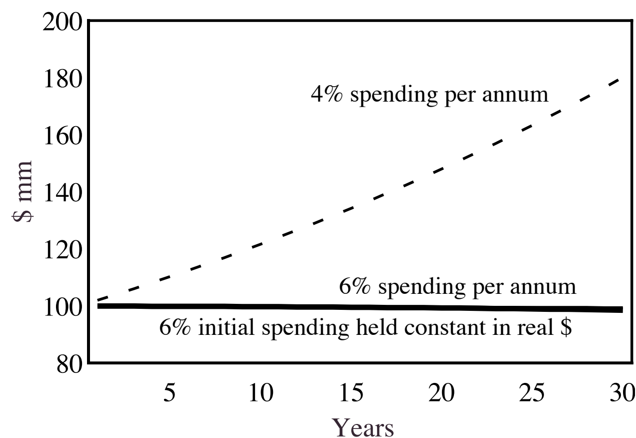
Impact of Spending Policies on Endowment Value
6% Real Return Scenario

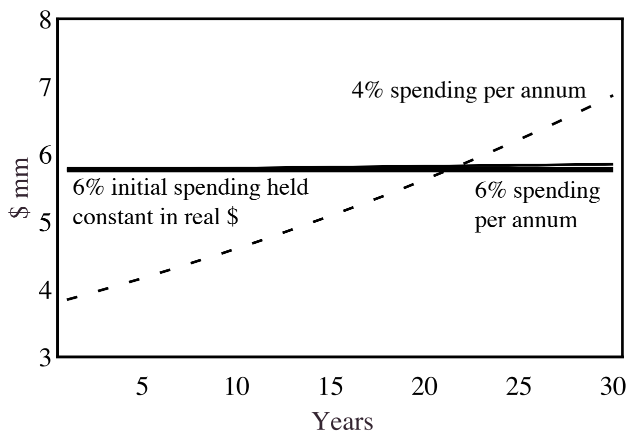
Spending in Real Dollars | **Endowment Value in Real Dollars**

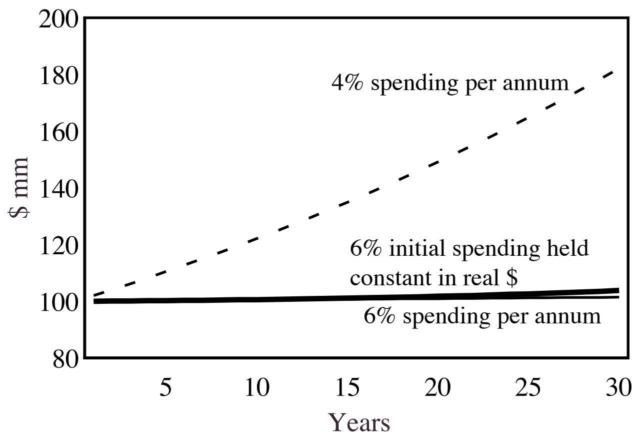
2% Inflation



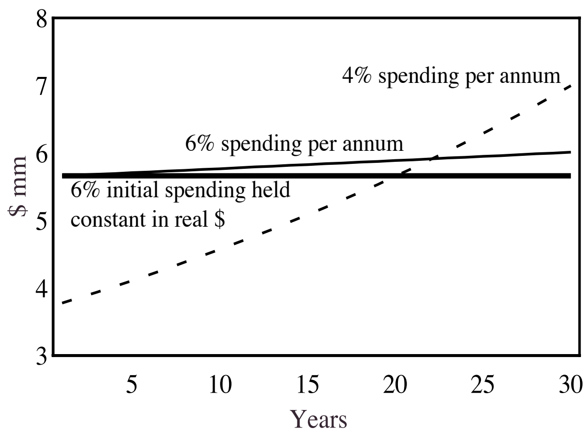


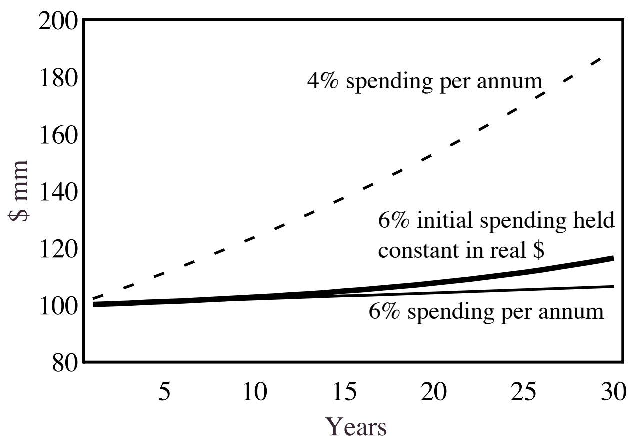
4% Inflation





6% Inflation





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