

## **Policy Portfolio Redux**

Source: 2003 4Q *Commentary*

### **Familiar Faces**

Like baseball fans tuning into the World Series — six of the last eight editions of which have featured the same American League team (the New York Yankees, a/k/a The Evil Empire) — fiduciaries who read regularly TIFF's reports have grown very familiar with an investment committee whose deliberations, though no less fictional than the committee itself, have proven entertaining to not a few TIFF members and useful to some. By popular demand, the committee returns to the TIFF stage this quarter, continuing a conversation about investment policy formulation that kicked off in the TIFF Alternative Investments report for 3Q 2000 and progressed materially in the TIFF Commentary for 4Q 2002. (Since multiple readers cracked its code, we can now reveal that the latter Commentary focused on the asset allocation policies of the TIFF Multi-Asset Fund, the evolving performance of which is discussed in a separate quarterly report entitled TIFF Marketable Investments. As the dialog below implies, this fund delivered results in 2003 that were as satisfying to its holders as was Game 7 of the 2003 American League Championship Series to **Yankees** fans.) Consistent with the distinctive governance policies extolled by TIFF, the committee in question comprises just three members and displays abnormally low turnover. Indeed, its composition remains unchanged since its first appearance in these pages: the ever-cautious Graham Bell chairs a committee that comprises the ever-thoughtful Thomas More and the ever-avant garde Victoria Woodhull. The committee is joined, as per usual, by its sagacious and seasoned consultant Abigail Adams.

### **Win Some, Lose Some**

Bell: As you never cease to remind us, Abby, investment committees such as this need to look forward rather than backward as we go about our work. But I'm not going to permit discussion today of what lies ahead without first acknowledging how well our portfolio performed in 2003, due in part to the policy changes you recommended in December 2002. [See Exhibit 1.]

More: I bet you wish your favorite ball club performed as well relative to the Yankees in 2003 as our revised policy portfolio performed relative to the one it replaced, Abby.

Adams: Don't remind me, Tom. One reason baseball is my favorite spectator sport is because it combines art, science, and craftsmanship in such intriguing ways. The Red Sox displayed lots of artistry and craftsmanship last season but their manager proved too unscientific when it really counted, letting Pedro Martinez pitch deep into the eighth inning of the Sox's final playoff game against the Yankees, despite having pitched more than seven innings in just five of his 31 starts in '03. Of course, I too could have done a better job in '03, by encouraging you to implement fully the allocation to real estate

investment trusts [REITs] that I pushed you to initiate during your December 2002 policy review.

Bell: You're being too hard on yourself, Abby, because REITs went from expensive to very expensive in 2003, for reasons you forewarned us about last December. [See TIFF Commentary for 4Q 2002.] Plus, you deserve credit for getting us into high yield bonds a year ago. You also pushed us to jettison separate allocations to US and foreign stocks in favor of a unified commitment to global equities and —

More: — and foreign stocks served us very well last year, due in part to the falling dollar. But it was Vicky as much as Abby who pushed us to adopt a less US-centric asset mix, Graham. I'm sure of it because I remember thinking Vicky was off her rocker, pushing us to stay the course with foreign stocks in general and Japanese stocks in particular as 2002 drew to a close.

Woodhull: Chalk one up for us contrarians, among which I would include Abby, who's always supported fully my arguments in favor of a less US-centric asset mix, even though foreign stocks have underperformed US stocks for much of the time period I've served on this committee. Of course, it was Abby rather than me who persuaded the committee to adopt a truly global approach to marketable stock investing —

Bell: — after six months of stalling by yours truly! I'm sorry I delayed that move until mid-year [see Exhibit 2], but it took me a while to get comfortable with the notion of managers investing for us on a truly global basis. In fact, I still can't fathom how any given firm can research effectively all stocks trading in all markets around the world.

Woodhull: Nor can I, Graham. But our own results prove that relatively small teams of investment pros whose economic interests are truly aligned with ours can help us beat the market on a global basis, even if they ignore many stocks comprising their benchmark in order to research intensively a relatively small number of purchase or sale candidates. I'd certainly rather entrust money to a small team of pros who focus almost exclusively on investing than entrust it to a much larger team whose very size enables it to flirt with a larger number of stocks but which also compels the team's members to spend undue fractions of their working hours on non-investment related tasks such as administration, marketing, and client relations. But the chief advantage of our new globalized approach to marketable stocks is that it enables us to shift responsibility for our US versus foreign stock mix from a committee of part-time volunteers to full-time investment pros. I wish we could do the same respecting our marketable versus private investment mix, but there aren't many vendors willing to shoulder such responsibility that have access to first-rate opportunities in private investment arenas such as venture capital, buyouts, real estate, natural resources, and the like.

More: And even if there **were** a ready supply of such vendors, our guidelines don't permit private investments (PIs) — although we did have an extended discussion about adding them to our asset mix during last year's policy review. Do you plan to renew today your push to add PIs to our policy mix, Abby?

Adams: I'd like to, Tom, because the arguments I made a year ago favoring the inclusion of private investments in your policy portfolio remain compelling, despite —

### **Plausible Chance**

Woodhull: — despite much banter among institutional investors of late suggesting that committees such as this should discard policy portfolios of the sort we've used for many years in favor of, well, I'm not sure I can describe let alone defend the proposed alternative, but I'm sure Abby can.

Adams: Describe, yes. Defend, perhaps not. What Vicky's referring to is a method of stewarding institutional assets that focuses more heavily than our current approach on **liabilities**, which is to say grants plus administrative expenses in a foundation context, contributions to operating or capital budgets in an endowment context, or payments to retirees in a pension context.

Bell: I'm confused. The method we've used for some time — using a policy portfolio as a means of both allocating funds across asset classes and measuring interim results — this method is founded explicitly on the assumption that our policy mix will in fact defray the liability we've assigned to our endowment, namely to support in perpetuity annual withdrawals whose real or inflation-adjusted value will approximate what we've been spending in recent years — about 5% of the endowment's market value. That's the only liability that really matters in this context, isn't it?

Adams: I agree. Interestingly, so too do the advocates of the new paradigm we're discussing. In fairness to them, the method they espouse doesn't eliminate policy portfolios altogether. Rather, it entails the construction of policy portfolios whose behavior will resemble more closely the liabilities being defrayed than the policy portfolios they're designed to replace.

More: What if **no** combination of assets that correlates closely with the liabilities in question has a plausible chance of defraying them? I imagine we could achieve a pretty close match of our portfolio with the liability Graham just mentioned if we ratcheted our annual spending down to two percent because we could buy inflation-linked treasuries [Treasury Inflation-Protected Securities or "TIPS"] that'll guarantee a two percent real return. But I don't know of any asset class or **combination** of assets that'll provide a five percent real return on a reliable or even semi-reliable basis, and I know of no such combos whose market value will fluctuate with even vague synchronicity with the liability we're referring to. After all, the liability we're truly seeking to defray is our current spend stated in 2003 dollars growing at an inflation rate relevant to the bundle of goods and services that our endowment helps underwrite. Plot the future path of this liability if you will on graph paper and you'll see that it fluctuates very little: it's essentially a straight line, moving upward inexorably and forever.

Woodhull: Clever, Tom — trying to sneak yet another slurve past us.

More: Slurve?

Woodhull: As I learned when Abby took me to a ball game last summer, a slurve is a very sly combo of a slider and a curve ball. My point is that you've been trying for years to get us to jettison our current spending rule — five percent of a rolling three-year average of our endowment's market values — in favor of a more linear approach, such as six percent of a smoothed or average value at the date of adoption that would then grow at five percent per annum. I can understand why you favor such a rule in a college setting, where big fluctuations in endowment spending caused by changing endowment values can be hugely disruptive and disturbing to many constituencies — faculty, staff, students ... even donors witnessing from afar the occasional budget crisis and wondering why on earth their alma maters aren't better managed — but I don't know how you square your preferred linear approach to endowment spending with our legal duty as private foundation trustees to distribute five percent of our assets annually.

More: I doubt that our chair wants us to spend all afternoon discussing sensible spending policies, so I'll simply repeat the argument I've made over the years that a private foundation like ours would benefit on balance from greater stability in the actual dollars withdrawn from our endowment each year, even if we had to pay more in excise taxes (due to average spending rates fluctuating in ways frowned upon by Congress) from time to time. The real problem for us and indeed for trustees of **public** charities such as colleges and museums also is that we're unwilling to adopt spending policies that would in fact enable us to match closely our endowments assets with the associated liabilities. And we're unwilling to do this because we know from a study of capital market history that spending policies which would facilitate such matching would be suboptimal, the clearest example being a policy that would replace my preferred "6% growing at 5%" approach with a "2.2% growing at 2.2%" rule.

Bell: 2.2%? Where does that come from?

More: 2.2% is the current real yield [as of 12/31/2003] on long-term inflation-linked US treasuries. My point being that we and indeed the trustees of any endowed charity could essentially immunize our annual budgets against involuntary fluctuations caused by gyrating capital markets by adopting spending policies pegged to the most reliable immunizing asset available to us, namely inflation-linked treasuries. But it would be feckless for us to pursue such a path, because history teaches us that we can do better than 2.2%. More specifically, we ought to be able to deploy our endowment in a manner that enables us to spend more than 2.2% of it per year without causing the purchasing power of annual withdrawals to erode over time.

Bell: Agreed, but wouldn't the six percent rate you advocate be too high? Why not an initial spend of five percent growing at five percent per annum rather than six growing at five?

## More's Law

More: Gosh, it would take me all day to furnish a complete answer to that question. In the interest of time, let me tick off the reasons as succinctly as I can: first, as a private foundation, six growing at five has a better chance than five growing at five of minimizing the excise taxes we must pay on our investment income; second, I think it's better to aim high and fail than aim low and succeed because aiming high will keep us on our toes as investors; third, and perhaps most controversially, I think it's OK from a public policy perspective for individual grantmaking foundations to spend perhaps a bit more than they should if they were truly trying to achieve perpetual life in purchasing power terms. Doing so helps them avoid running afoul of More's Law, which is not to be confused with Moore's Law respecting computing costs.

Bell: You have your own law?!

More: Yes: that grantmaking effectiveness halves as the stewardship torch gets passed from one generation of trustees to the next, making the third generation — for example — roughly one-fourth as effective as the first.

Bell: I don't know whether that's a compliment to my grandfather, who started this foundation, or an insult to me! But it sounds a bit extreme because many endowed charities established some time ago have become demonstrably more effective over time. Look at this country's great museums, universities, and performing arts organizations.

More: No argument from me on that, Graham. I never suggested that my "law" applies to publicly supported charities, as distinct from private foundations. There's a world of difference between the two, including the fact that most operating charities are engaged in fundraising on a more or less continual basis, which assumedly keeps them on their toes in multiple respects. That said, if it were up to me, I'd shift almost all of them to the same "six growing at five" rule I'm advocating here because a modest gap between their spending rates on the one hand and their real returns on the other could in fact force them to continually raise funds to maintain endowment purchasing power. That's a good thing, just as it's good for managements of for-profit companies to remain beholden to their shareholders through the disciplinary forces exerted by share price movements. Also, a six-by-five rule would assumedly reduce if not negate complaints by faculty, curators, tuition-paying parents, and the like that the charities we're discussing are hoarding their wealth.

Bell: Dream on, Tom. I can't think of many non-profits, private **or** public, that are prepared to adopt the linear approach to spending that you advocate. Sure, it would reduce if not eliminate big fluctuations in endowment spending. But it would also exacerbate balance sheet as opposed to income statement instability, by which I mean the very sort of mismatch between our endowment's market value and its associated liabilities that evidently has caused some folks to advocate a wholly new approach to investment policy formulation.

Adams: Well put, Graham, although the alternate approach to policy formulation that Vicky asked me to describe isn't **aptly** characterized as wholly new, nor does it represent the Holy Grail for trustees of endowed charities. But I sense that Graham wants to respond to what Tom just said about spending so let me postpone further comment on grails, holy or otherwise, until after he's done so ...

Bell: Thanks, Abby. I simply wanted to confess that I myself was sorely tempted to ratchet down our spending rate rather materially when we pondered the expected returns on various asset classes comprising our policy portfolio back in December 1999. [See TIFF Commentaries for 4Q 1999 and 1Q 2000.] Given how highly priced risky assets were at the time, especially stocks, it was virtually impossible to construct a policy portfolio capable of generating five-plus percent expected real returns, unless of course one assumed incredibly high excess returns or alphas from our active managers. I'm sure you all recall how many hours we spent playing around with Abby's policy matrix during our policy review in December 1999, trying to "solve" for five percent.

Woodhull: I do indeed, Graham, and I remember well the lengthy debate we had at the time about excess returns or alphas. I also remember well that none of us were bold enough to predict alphas as high as those that our managers have in fact delivered on average since the end of 1999.

More: True. On the other hand, some of us aren't at all surprised that our single best-performing asset class over the last four years has been our so-called pure alpha play, absolute return. Of course, the key reason our absolute return managers have generated such large alphas is because many of the risky assets to which Graham alluded a minute ago have fallen sharply in price over the last four years.

### **Risky Business**

Woodhull: Not exactly, Tom. Risky assets generally fell sharply in 2000, 2001, and 2002, but they rallied hugely in 2003, causing many absolute return managers to underperform conventional stock managers by almost as large an annualized margin in 2003 as they outperformed them during the prior three years. In other words, abnormally large alphas were our sole engine of growth during the three lean years immediately following 1999 whereas our great results in 2003 are attributable to a happy combo of abnormally large alphas **and** betas.

Bell: What precisely do you mean by betas in this context? I recall Abby teaching us that beta means the return that all risky assets provide over and above the risk-free rate — for example, the margin by which the broad US stock market outperforms treasury bills. Is that what you mean by beta?

Woodhull: Sort of. I was actually using beta in its more colloquial sense to describe 100% of the return that a risky asset like the broad US stock market generates. Of course, in an environment where T-bills yield almost nothing, there's not much difference between the stock market's total return on the one hand and its total return less the risk-

free rate on the other. But my main point is this: deploy all of your dough using passive or indexed strategies and you'll pocket betas only, no alphas. Of course, betas as I've used the term here, like alphas, can be negative, as the first few years of the current decade made clear: even though the market's long-term direction is up, there are years and indeed multi-year periods when folks who incur market or systemic risks —known colloquially as betas — get hammered.

Bell: Help us out here, Abby. You were about to renew your battle to get us to include private investments in our policy mix when Vicky alluded to a new or at least improved method of allocating assets. That got us into a discussion of liabilities, which is to say spending rates, and now we're talking about mixing alphas and betas in order to achieve the goal we've been pursuing all along, namely to spend as much as our changing investment fortunes will permit while also ensuring that our endowment's purchasing power does not erode over time. Do you have a magical thread tying all of these disparate ideas together, Abby?

Adams: Magical, no. Logical, perhaps. As I mentioned earlier, the liability-oriented approach to policy formulation that has gained popularity of late among institutional investors is hardly a panacea for them — or us. Nor is a related concept that's gained credence since stock prices peaked in 2000, and for the same reason: the notion that policy portfolios of the sort I've been extolling for as long as I've been advising this committee do more harm than good. The reason these two concepts gained credence during the opening years of this decade is because the dominant asset in most institutional policy portfolios — equities broadly defined — fell sharply, as did current yields on high quality bonds. As bond yields fell, the present value of the liabilities that institutional funds exist to defray rose sharply, producing a yawning imbalance on most institutional investors' balance sheets: shrinking assets and soaring liabilities.

Bell: I can see immediately how pension funds could have been squeezed in the manner you just described, because their liabilities reflect pension promises discounted at prevailing high grade bond yields. The lower such yields go, the more such promises are worth in present value terms. But the typical endowment doesn't have known liabilities of that sort, or at least our fund doesn't. As we discussed earlier, we simply want to pay out as much as possible every year in the form of grants without impairing the fund's long-term purchasing power.

### **Peer Envy**

Adams: That's one reason why the newfangled approaches to asset allocation we've been discussing tend not to work well in an endowment setting. I don't want to sound too judgmental, but most trustee groups — indeed, most investors, individual as well as institutional —aren't content to accept merely what the markets give them. This is especially true when (a) expected returns on equity-oriented portfolios are abnormally low, i.e., stock prices are abnormally high, as they were when the current decade commenced, **and** (b) other investors' portfolios are performing much better than their own. Of course, at any given time, any given trustee group can look around and identify

peer institutions whose portfolios are performing better. This fact alone makes it impossible in a practical as distinct from theoretical sense for the typical investment committee to adopt a purely inward-looking approach to asset management, or rather to asset-liability matching. The peer envy problem to which I just alluded also underscores the extreme peril of having **no** policy portfolio to guide a committee's decisionmaking. Committees unwilling to adopt such lodestars tend to get whipsawed, shifting funds from one overheated form of investing to another with a rapidity resembling —

More: — resembling the rate at which Wesley Clark changes his stated positions on important public policy issues.

Woodhull: Save your politicking for cocktails, Tom. Turning back to Abby's critique of alternate ways of formulating investment policy, I agree that the approach we've been using for some time may represent the least-worst method for this committee to use in fashioning sensible long-term asset allocation guidelines. But I assume that Abby would agree in turn that this committee would derive at least **some** utility from focusing more rigorously on potential **mismatches**, by which I mean potential shortfalls in real returns relative to our long-term goal of about five percent annualized. As Graham has reminded us, sometimes the betas or market risks we incur aren't themselves sufficient to goose our real returns to the five percent level, even when measured over multi-year periods.

Adams: I agree. In fact, if you look at the handout I've distributed [Exhibit 3] you'll see that I myself don't think your **current** policy portfolio is certain to get the job done moving forward, with the job defined as maintaining endowment purchasing power while distributing five percent for the indefinite future. Certainly the betas or indexed exposures alone won't get you even close to a five percent real return.

Bell: Of course, there **are** no alphas per se respecting several of the asset classes included in your recommended mix, Abby, the private strategies — private equity and private real estate — being two conspicuous examples. You explained why during last year's policy review [see TIFF Commentary for 4Q 2002] — because neither we nor anyone else can access these asset classes on an indexed or passive basis — so I understand why "subsumed" pops up so many times in your handout. I also recognize that we could derive implied alphas from your handout, by for example subtracting your assumed total return on marketable stocks from your assumed total return on private equity. The resulting spread presumably reflects your guesstimate of the return premium we'd derive from shifting a portion of our endowment from liquid forms of stock ownership to illiquid forms — an illiquidity premium if you will.

Woodhull: An illiquidity premium, for sure, Graham, but more than that also, as Abby explained during our policy review in December 2002. We'd also profit from our private equity managers' presumed skills at nudging in sensible directions the enterprises in which they'd invest on our behalf, something they're certainly more **able** to do than our marketable securities managers and something they're arguably more **incentivized** to do given the carry- as opposed to fee-driven compensation schemes under which they labor.



Bell: This is all fine and well, ladies, but can we really count on pocketing the excess returns reflected in Abby's recommended mix? I can understand how very big endowments and foundations might realistically hope to pocket such lofty alphas — whether explicit as with Abby's assumed returns on marketable stocks or implied as with her assumed returns on private holdings — but I fear that our fund would have to be much larger than it is in order to play **and win** the private investment game. I don't have much experience with private investments but from what little I do know about the PI game, the bigger a fund is, the more likely it is to gain access to the best PI managers, and the more clout it's likely to have in negotiating fees and terms with them. Of course, the same rules probably apply in the marketable arena, albeit perhaps not to the same extent.

Woodhull: Tell Graham about your recent survey, Abby!

Bell: Survey?

More: Let me guess: Abby surveyed the regulars at the bar where she likes to watch Red Sox games to learn whether they'd prefer to have Manny Ramirez or Alex Rodriguez on the roster when the Sox open their '04 campaign in April. I bet everyone voted for A-Rod, which makes it all the more sad that Abby's beloved Bosox couldn't work out a deal to move him to Boston and Manny to Texas.

Woodhull: Be nice to Abby, Tom. She's still hurtin' from the Sox's closing defeat in '03 — and she has some intriguing data to share with us.

More: Baseball anecdotes too, I presume.

Adams: In the interest of time, I'll share just one such anecdote with you Tom, one that's germane to the survey Vicky mentioned.

Woodhull: I hope it's the one about the cigar box.

Adams: No, although the tale you just mentioned is relevant too, because — like my recent survey of institutional investors respecting two issues this committee is wrestling with today — the cigar box in question produced a surprise. In fact, let me tell that tale, briefly, then my other little baseball tale, before turning to the survey itself.

Bell: Be our guest ...

### **Surprising Results**

Adams: While on a team road trip during his tenure as manager of the Washington Senators, Gil Hodges learned that four players were violating the team's midnight curfew. Hodges summoned his players to a clubhouse meeting and announced: "I know who's misbehaving. You're each fined a hundred bucks. But a lot of you guys are married and I don't want to embarrass anyone. So I'm going to leave a cigar box in my locker and I

want to find four hundred dollars in it when I reach the ballpark tomorrow. Then the matter will be closed." The next day, Hodges opened the cigar box and found ... \$700.

More: Maybe the team's trainer converted one of the \$100 fines into \$400 by plunking it into a private equity fund just before it flipped one of its holdings to the public in an IPO!

Adams: Clever, Tom, but unlikely: the Senators axed Hodges several years before the IPO market turned red-hot in the late 1960s. 'Tis true that at the height of the Internet craze of the late 1990s some private equity mavens amassed large fortunes seemingly overnight, but those days are gone — and are unlikely to return in our lifetimes. This brings me to my other baseball tale for today, which is germane to Graham's question about the plausibility of the return assumptions reflected in my recommended policy mix [see Exhibit 3]. When Graham posed this question a few minutes ago, Vicky jumped into the fray and encouraged me to discuss my recent survey of leading investment pros, which anticipated Graham's question by exploring two aspects of the alpha generation challenge: first, the optimal size of an endowment from an investment as distinct from budgetary perspective ...

Woodhull: Obviously, no endowed charity would decline a gift that would quadruple its endowment even if such expansion threatened to undermine the fund's annualized return potential in percentage as distinct from dollar terms.

Adams: Correct. My second survey question sought to identify the dollar threshold at which leading institutional investors would feel compelled to index or manage passively at least a portion of their marketable stock holdings, i.e., the point past which they would accept —

Woodhull: — of necessity rather than choice —

Adams: Correct — the point past which they would resign themselves to earning zero alpha on at least a portion of their marketable stock holdings.

Bell: And you have a **baseball** tale that's germane to the problem of changing boundary conditions to which you just alluded?

Adams: Yes, and a mercifully brief one at that, involving a journeyman infielder by the name of Pryor who spent 10 years [1976?1986] in the big leagues. One reason this fellow Pryor never achieved stardom is because he had trouble shifting between two vastly different playing environments: artificial turf — which is generally a godsend to infielders — and natural grass, which ain't. "On turf," Pryor complained to a sportswriter, "the ball comes straight at me saying, 'Catch me, catch me.'" "On grass," he went on, "it bounces wildly in my general direction saying, 'Look out, sucker.'"

Bell: Unless this fellow Pryor now runs a big endowment, I'm not sure that I see how his lament about fielding relates to my question about the alpha assumptions reflected in your recommended policy mix.

Woodhull: It's relevant because whatever alpha assumptions we employ — Abby's or our own — must reflect all factors germane to such guesstimates, including both inward-looking factors such as our own asset size and risk tolerance plus outward-looking factors such as the fierce competition among institutions for the best external managers. Like the best infielders, the best endowment stewards adjust their games if you will to suit the conditions under which they're competing. Happily, the conditions under which this committee is operating are more hospitable to alpha generation than you might be supposing, Graham. At least that's what I infer from Abby's survey, which —

Bell: — which Abby had better summarize briefly lest we resolve precisely nothing before our allotted meeting time for today expires.

Adams: Will do. My first survey question asked each respondent to assume three things: one, that his or her full-time job for the next 30 years would be to serve as chief investment officer for a non-profit that seeks to preserve the purchasing power of its endowment assets while distributing 5% of such assets per annum; two, that the endowment will experience zero future gift inflows; and three, that interim volatility is of no consequence, although the endowment does have to maintain enough liquidity to finance a 5% annual withdrawal rate. The specific question I posed was this: "what is the dollar amount that you'd ideally like to manage on 'day one' — defined as 12/31/2003 — such that you'd be able to generate the highest annualized return over the following three decades?"

Bell: And the answers are going to surprise me as much as Gil Hodges was surprised to find \$700 in his cigar box?

Adams: Quite possibly, especially in light of the fact that the roughly two dozen investment pros whom I surveyed tend to make their livings as money jockeys for or consultants to institutional funds much larger than yours. Indeed, whereas you worry that your endowment is too **small** to pursue effectively certain forms of investing, many of the leading lights I surveyed expressed the opposite concern. As for their specific responses to my first question — about optimal asset size — these ranged from \$300 million to \$7.5 billion, with virtually all of the answers falling between two and five billion and the mean and median answers falling just shy of three billion. Importantly, most of the respondents who took the time to comment on their answers emphasized that the chief consideration underlying their numerical responses was to avoid having to put too **much** money to work in private investments, the assumption being that these would represent a material fraction of the hypothetical endowment's holdings over the 30-year span contemplated by my question.

Bell: Makes sense, although I **am** surprised that the pros you surveyed view five billion as the threshold above which returns might degrade —

Woodhull: Or three billion depending on how you interpret the data.

Bell: Five, three ... makes little difference to me because both numbers are a lot lower than I would have surmised. If you assume (a) that the pros Abby surveyed themselves assumed something like a 25% allocation to private equity (PE) for a fund that truly has a 30-year time horizon and (b) a seven-year average life for PE partnerships ... then the implied optimum amount for Abby's savvy pros to put to work in the PE arena each year falls somewhere between about \$105 and \$180 million per year in current dollars. [Editor: 25% of \$3 billion ? \$5 billion equals \$750 million ? \$1.25 billion; dividing the latter two figures by seven yields \$107 million ? \$178 million.] That is shockingly low to me because I've always assumed that one needs to put lots more than \$180 million per year to work in the PE arena in order to capture the PE returns or rather alphas implied by Abby's recommended policy mix. More to the point, \$180 million is a lot less than what many institutions and funds of funds active in the PE arena put to work each year.

### **Practice versus Preaching**

Adams: That's because many of the entities to which you're alluding have failed to adjust adequately to changed conditions for PE investing, including two all-important facts. First, the conditions that made the 1980s and '90s great decades for equities in general and leveraged forms of equity investment in particular — secular disinflation, rising price/earnings ratios, and lots of low-hanging fruit for cost-cutting managements to prune — these conditions no longer exist and show no signs of recurring soon, at least not in the US. Second, due to their conspicuous success during the great bull market just mentioned, some PE niches became horribly overcrowded by the end of the '90s — and they remain that way. It's as if some PE managers — those pursuing very large buyouts, for example, whether in the US or abroad — are infielders who don't recognize they've moved from artificial turf to natural grass.

More: But Graham may be ascribing too much importance to PE deal flow when deducing **why** the pros Abby surveyed wouldn't want to manage more than three to five billion in current dollars. I'd like to know whether Abby asked her pals to specify the optimal amount of freight they'd like to pull with their assumed main engine of growth — marketable stocks.

Adams: I didn't, for this reason. Just as there is no practical minimum — below some very small amount such as \$1 million — to the portion of an endowment that can be invested in private equity, there is no practical minimum to the portion of an endowment's marketable stocks segment that can be managed on an indexed or passive basis. Not wanting to pester my survey respondents with an endless series of questions plumbing the depths of their views about stock market efficiency, I posed just one question to them about marketable stock management, as follows: how large would the marketable stocks segment of an endowment supervised by you have to become in order for you to employ indexed or passive approaches within it? Interestingly, the survey participants who replied with specific dollar amounts furnished answers that weren't materially different — on average or at the extremes — from the answers they furnished to my first question, suggesting —

More: Suggesting that the business model being pursued by many mutual fund vendors is hopelessly flawed from a client perspective.

Bell: That can't be where you were headed before Tom interrupted, was it Abby?

Adams: No, although Tom makes a good and important point that we should return to if time permits. I was merely going to observe that if the pros I surveyed would eschew passive strategies even if saddled with a marketable stock segment as large on average as the mean response to first my question about overall fund size — about three to five billion — then concerns about generating satisfactory alphas on marketable stocks aren't the primary or even secondary factors driving the overall fund optima. All of which is to say that, yes Graham, I **do** believe the alpha assumptions reflected in my recommended policy mix [see Exhibit 3] are realistic and achievable over the long term so long as the mix is applied to an institutional fund **small** enough to maintain very high standards in selecting managers, especially in the private arena.

Bell: Duly noted. But what of Tom's broadside at mutual fund vendors?

Adams: He's right, in the following sense: if even the most skilled managers of managers would rely partly if not heavily on passive strategies once a marketable stock portfolio entrusted to their care exceeds the three to five billion level, then how on earth can mutual fund vendors with 10 if not 50 times such sums under management in stock mutual funds charge active management fees on the whole kit and caboodle? As some commentators have observed [see TIFF Commentary for 3Q 2003], the true scandal in the mutual fund business is not that a few scoundrels profited illegally by violating prospectus strictures respecting trading hours but that many mutual fund firms and indeed most large ones charge prespecified fractions of the dollar amounts they manage — asset-based fees that bear no relation whatsoever to their actual or potential value-added or alphas.

Bell: I suspect you're right, but isn't it possible that some mutual fund firms in fact practice what your survey participants preach by essentially indexing a portion of their actively managed funds? "Closet indexing," I believe it's called.

Adams: That's one name for it. "Controlling benchmark risk" is another less pejorative name for the same endeavor, which is perfectly legal, sensible in light of most clients' limited tolerance for negative excess returns or alphas, and indeed essential for mega-funds like Fidelity Magellan that would incur disastrously high trading costs if they held a narrow rather than broad list of stocks. My chief beef, which is evidently shared by Tom, is this. Separate the aggregate stock portfolios of mega-managers such as Fidelity, Putnam, Alliance, and the like into two components — stocks held purely for diversification reasons (especially stocks held in proportions below their weights in funds' specified benchmarks) versus stocks held purely for alpha purposes (all of which are presumably held in proportions **exceeding** their benchmark weights). Then apply a reasonable fee for indexed or passive management — perhaps 15 or 20 basis points [0.15% ? 0.20% per annum] — to the first subportfolio. Subtract this aggregate fee from

the total fees pocketed by the mega-vendors in question and you'll discover that the fees charged on the second subportfolio —stocks held for alpha generation rather than diversification purposes — border on the obscene. Indeed they make the fees charged by private equity managers — one or two percent per year in base fees plus 20% ? 30% of gross profits — pale in comparison.

Woodhull: Speaking of private equity investing, Graham, well, we've been discussing it rather than **doing** it for some time, starting with our rather comprehensive discussion of private equity's pros and cons during last year's policy review. [See TIFF Commentary for 4Q 2002.] We've also been pondering private as opposed to more liquid forms of realty investing for at least a year, during which time the latter have become increasingly **unattractive** due to the tidal wave of money that's flowed into publicly traded REITs. If it wouldn't be out of order, I'd like to move that we adopt Abby's recommended policy mix, under one condition.

Bell: What's that?

Woodhull: If this committee at long last approves Abby's longstanding recommendation that we invest in privately traded as well as marketable assets, I want to mark the occasion by telling a baseball tale that even an avid fan like Abby is unlikely to have heard.

More: I second the motion. After all, if General Motors can state publicly that it expects to earn a 6.8% real return on its \$74 billion in pension assets, I think it's reasonable to suppose that we can earn the 5.3% real return that Abby's mix presupposes.

Bell: GM is targeting a 6.8% real return? Where you'd get that?

More: I subtracted the bond market's implied forecast of future inflation, which you can derive by comparing yields on conventional treasuries to yields on inflation-linked treasuries, from GM's published actuarial rate of 9%. The difference is 6.8%.

Woodhull: Still ridiculously high, methinks, especially in light of today's discussion about alphas. I don't know of a single perpetual life charity that's made a permanent commitment to spending in excess of six percent of its endowment per annum. That tells you something about the rationality of GM's pension assumptions, just as the ridiculously **low** actuarial rates used by its Japanese competitors suggest that Japanese corporate assets may remain undervalued despite a big rally in the Japanese market in 2003.

Bell: You whistled that tune throughout our policy review last year Vicky [see TIFF *Commentary* for 4Q 2002], you were right to do so in light of subsequent events, and I give you credit for having done so. But we've since shifted discretion for determining our actual mix of US versus foreign stocks to outside managers so I see little reason to talk about US versus Japanese pension policies when there's a motion on the table respecting a wholly different issue. In fact, it's **your** motion! Further discussion of it?

More: I'm good with it, although Abby might want to note for the record why she's encouraging us to tilt our policy portfolio away from financial assets and toward real or hard assets.

Adams: Two reasons, Tom. First, now that you're prepared to give the green light to private investments, you open up some interesting alpha opportunities in the hard asset arena — realty, resources, and so forth. I recognize that it seems like the tail's wagging the dog to alter the fundamental characteristics of your policy portfolio in order to access alpha opportunities in certain markets; it would be a fine and dandy thing if we could segregate completely decisions about the market or systemic risks we want to incur — decisions about beta, if you will — from decisions respecting our pursuit of alphas in certain markets, but the world doesn't work that way. Savvy investors can and in fact **do** routinely engage in what's called "alpha transport," using derivatives among other means to exploit excess return opportunities in certain relatively inefficient markets without incurring undue exposure to such markets' systemic risks or betas. And I'm committed to helping you identify opportunities to do precisely this, as "alpha transport" represents perhaps the most useful aspect of the newfangled approach to asset allocation that we've been discussing here today. But it remains difficult if not impossible to engage in "alpha transport" respecting certain markets in which alpha opportunities tend to be especially juicy, so the tail will likely continue wagging the dog for several years if not indefinitely. As for the question of whether it makes sense to continue shifting funds on the margin toward asset classes that tend to perform relatively well when actual inflation exceeds the consensus expectations to which you, Tom, referred a minute ago in your discussion of treasury bond yields, the committee discussed this question at length a year ago and nothing that's happened since causes me to doubt the consensus that emerged [see *TIFF Commentary* for 4Q 2002]. To be sure, the dollar fell sharply in foreign exchange terms in 2003, causing Uncle Sam's foreign creditors to worry lots about the future value of their massive holdings of dollar-denominated debt. But it would be unwise to assume that this trend has run its course, because the twin deficits we discussed at length a year ago — the federal budget deficit and this nation's current account deficit — remain worrisomely large.

More: I agree, which is one reason among many that I support your recommendation. I especially like the fact that you're sticking to your view that we should, under normal circumstances, have a larger fraction of our portfolio invested in inflation-linked bonds than in conventional bonds — while also making sure that we have at least some of the latter. I take it that you also favor our continued use of asymmetric policy **ranges**, on grounds that our normal allocations to certain hedging assets such as conventional bonds should be much closer to our minimums than our maximums for them?

Adams: Great question. Yes, the ranges should remain asymmetric, as indicated in another handout you have before you, with sufficient latitude to adjust quite materially your actual exposure to certain non-essential or substitute asset classes such as private equity to reflect the potential difficulty of finding first-rate opportunities within them. [See Exhibit 4.]

Bell: Further discussion of Vicky's motion? There being none, I'll make it unanimous by joining Vicky and Tom in approving Abby's recommendation. We have a new policy portfolio, and Vicky —

Woodhull: And Vicky has a new arrow for Abby to add to her quiver of baseball anecdotes. It's relevant to today's discussion because the changes we've just approved underscore our capacity to adapt our approach to the ever-changing environment in which this committee unavoidably goes about its work **without** jettisoning tools that have served us well over time. Not everyone can respond so rationally when the heat is on. Take Duane Kuiper, for example, the fellow who played second base for the Indians and Giants for about a dozen years starting in the mid-70s. In one unlucky at-bat, Kuiper took three called strikes from the crafty pitcher Catfish Hunter, all three of which just nipped the outside corner of the plate. Kuiper swung his bat at none of them. After umpire Ron Luciano called him out, Kuiper turned to Luciano, shook his head and said, "That's the problem with bats today. They're just not makin' 'em the way they used to."

**Endnote**

An especially clear written exposition of the liability-oriented approach to policy portfolio construction referenced in the foregoing dialogue appears in an essay entitled **Solving the Investor's Problem** (436K SolvingInvProb.pdf) by Kevin Kneafsey, Volume 6, Issue 5 (August 2003) of Investment Insights, a publication of Barclays Global Investors.

**Exhibits**

<b>Exhibit 1 — Impact of 12/31/2002 Policy Changes</b>				
	Pre 12/31/02	Post 12/31/02	Change in Weight	2003 Benchmark Return
US Stocks	25%	23%	-2%	31.6%
Foreign Stocks	25%	23%	-2%	40.8%
Absolute Return	20%	20%	—	6.2%
High Yield Bonds	—	3%	+3%	28.0%
REITs	—	3%	+3%	36.7%
Resource-Related Stocks	5%	7%	+2%	38.9%
Conventional Bonds	10%	8%	-2%	1.3%
Inflation-Linked Bonds	15%	13%	-2%	7.3%
Total	100%	100%	NA	



<b>Exhibit 2 - 6/30/2003 Policy Changes</b>			
	Pre 6/30/03	Post 6/30/03	Change in Weight
US Stocks	23%	—	-23%
Foreign Stocks	23%	—	-23%
Global Stocks	—	46%	+46%
Absolute Return	20%	20%	—
High Yield Bonds	3%	3%	—
REITs	3%	3%	—
Resource-Related Stocks	7%	7%	—
Conventional Bonds	8%	8%	—
Inflation-Linked Bonds	13%	13%	—
Total	100%	100%	NA

### Exhibit 3 — Illustrative Policy Portfolio

- \* Primary goal = maintain purchasing power in face of maximum sustainable withdrawals.
  - \* Secondary goal = avoid peak-to-trough declines in endowment unit values exceeding 25%.
  - \* Assumes a 30-year investment horizon 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 4Q 2002.

	Expected Gross Returns			Allocation		
	Real Return	Value Added [a]	Real Total Return	Current	Proposed	Benchmark
<b>Segment / Eligible Assets</b>						
Total Return Assets				<b>69%</b>	<b>71%</b>	
Marketable Equities	3.5%	1.5%	5.0%	46%	33%	MSCI All Country World Free
Private Equity	10.0%	subsumed	10.0%	0%	15%	MSCI All Country World Free + 5% per annum
Absolute Return	6.0%	subsumed	6.0%	20%	20%	Treasury Bill + 5% per annum
High Yield Bonds	3.0%	2.0%	5.0%	3%	3%	Merril Lynch US High Yield Master II Constrained
<b>Inflation Hedges</b>				<b>10%</b>	<b>12%</b>	
Resource-Related Assets [b]	6.0%	subsumed	6.0%	7%	5%	Global Index of Resource-Related Stocks
Marketable Real Estate (REITs)	3.0%	3.0%	6.0%	3%	0%	Morgan Stanley REIT Index
Private Real Estate	6.0%	subsumed	6.0%	0%	7%	CPI + 5% per annum
<b>Deflation Hedges</b>				<b>8%</b>	<b>8%</b>	
Conventional Treasuries	1.0%	0.0%	1.0%	8%	8%	10-year Treasury Bond
<b>All Purpose Hedges</b>				13%	9%	
Inflation-Linked Treasuries	2.3%	0.0%	2.3%	13%	9%	10-year Treasury Inflation-Protected Security
Cash Equivalents	1.0%	0.0%	1.0%	0%	0%	
<b>Totals</b>						
Percent Allocated				100%	100%	Weighted average of segment benchmarks
Expected Real Total Return				<b>4.6%</b>	<b>5.5%</b>	
Estimated Probability of Producing Less than 5% Real Return [d]						
• Over 3 years				>50%	>75%	
• Over 30 Years				>60%	>35%	

[a] 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. [b] Public and private. [c] 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.[d] Shortfall probabilities are expressed imprecisely to underscore the inherent limitations of computerized approaches to policy formulation. These limitations are catalogued in the TIFF *Commentary* for 1Q 1999. Proposed mix has higher probability of shortfall over three years due to private investments' tendency to perform poorly during the initial years following their acquisition.

<b>Exhibit 4 - Illustrative Policy Ranges</b>			
	Minimum	Normal	Maximum
<b>Total Return Assets</b>		<b>71%</b>	
Marketable Equities	25%	33%	60%
Private Equity	0%	15%	35%
Absolute Return	10%	20%	35%
High Yield Bonds	0%	3%	10%
<b>Inflation Hedges</b>		<b>12%</b>	
Resource-Related Assets	3%	5%	10%
Marketable Real Estate (REITs)	0%	0%	10%
Private Real Estate	3%	7%	15%
<b>Deflation Hedges</b>		<b>8%</b>	
Conventional Treasuries	8%	8%	20%
<b>All Purpose Hedges</b>		<b>9%</b>	
Inflation-Linked Treasuries	9%	9%	20%
Cash Equivalents	0%	0%	10%
<b>Total</b>		<b>100%</b>	