

COMMENTARY

A Report of TIFF EDUCATION FOUNDATION

2007 Edition 2

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HIGHLIGHTS

In late July 2007, the TIFF Education Foundation (TEF) hosted in Cambridge, MA the most recent edition of its highly idiosyncratic Endowment Management Seminar series. Modeled loosely after the broadcast series *Inside the Actors Studio*, the July event mimicked its predecessors in that it comprised interviews by TEF president David Salem – a suspect substitute indeed for James Lipton of *ITAS* fame – of five highly respected institutional investors. This *Commentary* comprises excerpted transcripts of three such interviews:

Bevis Longstreth, a leading authority on securities law and corporate governance and former head of the SEC, critiques the current regulatory regime under which public companies and professional investors are forced to operate, focusing an especially critical eye on Sarbanes Oxley;

Joanne Hill, a respected observer and shaper of best practices in institutional investing, sheds light on some of these, including the use and abuse of illiquid investments, portable alpha strategies and derivatives; and

Marty Leibowitz, a seminal thinker with multiple decades of both "buy" and "sell" side experience, serves up sage advice for endowment fiduciaries seeking to generate satisfactory net returns via the cost effective pursuit of beta or systemic risk.

ABOUT TIFF

Mission. In 1991, a network of foundations founded a cooperative-style investment organization whose structure and eligibility criteria have evolved over time but whose core mission has not. Known colloquially as TIFF, this organization seeks to improve the investment returns of endowed charities by making available to them a series of multi-manager investment vehicles plus resources aimed at enhancing fiduciaries' knowledge of investing.

Means. The organization comprises three regulated entities at present: a tax-exempt private operating foundation whose d/b/a (TIFF Education Foundation) is more descriptive of its focus on education than its formal legal name (The Investment Fund for Foundations); TIFF Investment Program (TIP), an SEC-regulated mutual fund family; and TIFF Advisory Services (TAS), a taxable non-stock corporation and SEC-registered investment advisor that administers all investment vehicles bearing the TIFF name. As noted at left, there is substantial but not complete overlap among these three entities' boards. The members of these three entities' boards (except Richard Flannery and David Salem) serve as volunteers who receive no salary for their service to such boards.

Inquiries. For more information, please call TIFF at 610-684-8200 or visit www.tiff.org.

BEVIS LONGSTRETH

Bevis Longstreth is a retired partner of the New York-based law firm Debevoise and Plimpton and former Commissioner of the Securities Exchange Commission (SEC). His capsule biography appears at www.tiff.org/TEF.

Fairness and Efficiency

David As some of you may know, I'm a bit of a baseball fan. Today I'll introduce each interview with a baseball quote germane to the particular interviewee. The one we picked out for Bevis is from a fellow who's known here in Boston as Nomah — that would be Nomar — Garciaparra. Reflecting on his youth, Nomah said, "Back then, my idol was Bugs Bunny, because I saw a cartoon of him playing ball. You know, the one where he plays every position himself with nobody else on the field. Now that I think of it, Bugs is still my idol. You have to love a ballplayer like that!"

Bevis, you've spent as much quality time as anyone on the planet thinking about two public policy issues central to our mission here today. First, how securities markets should be structured and regulated to make capitalism function as effectively as possible. And second, how institutional funds should be governed and regulated to optimize both their own returns and the vital role they play in the larger capitalist system. With those public policy issues in mind, let's discuss critically the current patchwork of laws and regulations governing securities markets with a particular focus on the agency that you played such a conspicuous role in leading back in the early '80s: the SEC.

Bevis That's a big topic! I think it's useful to look at the SEC's role and how it has evolved since it was created in 1934. The SEC's role, since its inception, has been twofold. One, to insist on financial accounting and auditing that make numbers reliable and comparable across periods, companies and industries, in order to protect investors and enhance the fairness and efficiency in markets. Two, enforcement — that is, to detect, punish and deter fraud. Those are the two great missions of the SEC.

The regulation of investable assets in their marketplaces and of the intermediaries who perform the functions necessary in those markets to make things work should have a pro-competitive bent. The SEC shouldn't regulate, restrict or mandate activity unless there's some kind of market failure.

And, you don't restrict private ordering unless you're highly confident that what you're going to do will work more good than harm.

Historically, the SEC has not been politically driven. Unfortunately, that's not the case today. Over the past 10 years, political influences have crept into the SEC, and they're now quite hurtful to the organization. Today, the SEC is really a microcosm of Congress, which seems to thrive on paralysis and ineffectiveness. Also, the SEC has been so successful in its chief tasks that it tends to be imprisoned by these past successes to the point where it won't change as times change and even sometimes persists, in my opinion, in going in the wrong direction. The mutual fund industry is a good example of where it's gone wrong from the outset.

David Elaborate, please.

Bevis Mutual funds are regulated by the Investment Company Act of 1940. In 1940, the dominant form of pooled capital available to the public for investment was the closed-end fund. The closed-end fund is like a normal corporation — it's listed, and the stock goes up and down as circumstances change, as supply and demand discover a clearing price. If David Salem were the CEO of a closed-end fund, the price might be very high, way above net asset value.

David Or the other way around!

Bevis

I doubt it! If he were fired, the price could drop, even though the underlying assets wouldn't change in value. So, a closed-end fund is like a corporation in that it can sell above or below net asset value. A mutual fund, on the other hand, redeems everyday; if the head of Fidelity were fired, the value of Fidelity's funds wouldn't change as a result. The '40 Act was adopted when assets in closed-end funds represented about 95 percent of all assets under the management of what were classified as investment companies. That's why you have corporate governance paraphernalia built into the Act. The problem today is that the '40 Act is addressing the wrong animal — mutual funds don't need corporate governance paraphernalia. No other civilized nation in the world employs the kind of elaborate governance that we do, and most that have pooled funds available to the public — such as the UK and Japan — have studied this

BEVIS LONGSTRETH continued

issue in great depth and have concluded that they don't want this corporate governance stuff because it's not needed to protect investors and it just adds costs.

So that's the situation. Yet, you have as sensible a person as Arthur Levitt [chairman of the SEC from 1993 to 2001] saying, "We need more independent directors." I ask any of you — unless, of course, you are one! — if you've ever picked a mutual fund on the basis of its independent directors? Is it even conceivable that you would look to see who they are? No! They're totally irrelevant — and costly at that. Independent directors are representing themselves only — not shareholders — and it's been shown that as their fees go up, the fees charged by management companies go up. There's a direct correlation. Maybe I've said enough!

David No, no! Please continue...

Dumbing Down

During the bubble, when there were P/E ratios of Bevis 45 times earnings and rising, the commissioners wrote a dumbed-down prospectus for the mutual fund industry that to my knowledge nobody has used — a classic comic of sorts. The SEC, instead of stressing that the stock market posed an increasing danger to inadequately educated and informed investors, was trying to get the public to pay attention to what would otherwise have been an unreadable prospectus by dumbing it down to the most simplistic level possible. Meanwhile, the Wall Street Journal was publishing on an almost daily basis either a story about a great security analyst who was fired because he didn't kowtow to the multi-line Wall Street firm that wanted him to take a dive for the benefit of an underwriting or the same story the other way 'round. The SEC missed all that. While focusing on the dumbed down prospectus for mutual funds, it ignored the absurd touting by security analysts of companies that their firms were underwriting. example of missing an important and nefarious practice that, if attacked by the SEC, might have modulated or even dampened the bubble and saved lots of shareholder wealth from destruction.

The record of the SEC over the past 30 years or so has been much more mixed than in its early days — and that's the point I'm trying to make. It's understandable, I guess. When the SEC was

formed in the 1930s, financial markets were a disaster, and there were no standards for financial reporting. Now, the low-hanging fruit is gone, and life is much more complex near the top of the tree. But I don't think we could do without the SEC; it simply needs to do fewer things better and have an eye toward the first two points I mentioned: be pro-competitive and have a higher threshold of certainty before regulating transactions between consenting adults!

Reform Ave

David I want to talk about some of the global implications of this, but before we do, given the way the SEC itself is structured and governed, it would seem that there are only two potential avenues to producing the kind of reform you've just alluded to. First and foremost, Congress gets its act together, because Congress regulates the SEC...

Bevis Right.

David Second, maybe a dynamic leader becomes chair of the SEC and, through charisma and talent and rhetoric, is able to effect change even if Congress is neutral or even slightly opposed.

Bevis A huge amount could be done within the existing structure because there's enormous exemptive power. The way to solve the prospectus problem, instead of going the comic book route literally a comic book prospectus, can you believe it?! — is to go to the leaders of the guild. Who are the leaders? Go to Vanguard and to Fidelity and to T. Rowe Price. Go to all the top firms and say, "Put together a committee and write a prospectus that you would be proud to offer to your clients, and we'll turn that into regulation." There is little valuable information in the hundreds of pages of these mutual funds' prospectuses compared to the one-page document written by Morningstar. No wonder Grantham thinks timber is going up in value! How could it not?! Much of the valuable information required by the SEC is permitted to be placed in what's called a supplemental information document that gets filed but not given to investors.

No Simple Answer

David You referred earlier to the UK and Japan in the context of the 1940 Act and their declination to take our laws and apply them abroad. I now want

BEVIS LONGSTRETH continued

to look at a different aspect of securities regulation because we're in a room full of fiduciaries and they're all debating among many other issues what fraction of their endowments should be invested overseas. Let's talk about the debate underway as to why non-US firms in general, particularly those that are domiciled in emerging markets, are listing outside the US, particularly in London. John Thain at the NYSE has a vested self-interest in this and says that it's a race to the bottom in a governance and disclosure sense. You agree?

Bevis There's no simple answer to your question. Foreign markets have become more competitive with the US market, which creates attractive alternatives for capital formation. Is our country's regulatory structure the best catalyst for capital formation, or are there better ones elsewhere? The London market has become very competitive with ours on many different levels. We have a heavy cost structure in this country — notably Wall Street underwriting fees, which are much higher than underwriting fees elsewhere. So, foreign markets start with this cost advantage and then add onto that the decreased risk of litigation — which is much higher in this country than elsewhere. We have more laws you can violate, and we have a plaintiff's bar that is actively pursuing clients to represent and claims to advance in court. Then there's the fact that once you get into our system, it's very tough to get out. It's very hard to de-list from the New York Stock Exchange, and even if you do, you won't escape the SEC's clutches until your US investors drop below a certain level! Then there's Sarbanes-Oxley....

Silver Bullet

David If you had one silver bullet and you could fire it at Sarbanes-Oxley, is there one provision more than any other at which you'd fire?

Bevis I served on a four-year panel appointed by the SEC and the Public Oversight Board (POB) to study audit effectiveness. The study resulted in a big report that had about 100 recommendations. The report studied, among many other things, whether or not internal controls of public corporations should be audited — something that in the end, we rejected. I felt strongly that requiring outside audits of internal controls was unnecessary. The outside auditors had challenge enough to vouch for the financials. However, the auditing lobby

somehow got the auditing of internal controls of public corporations into Sarbox, as Rule 404. This is the most contentious provision of Sarbox. The auditors want it there the most, of course, because the profit margins for this work are very large.

Another problem: the auditors were able to get into the statute [i.e., Sarbox] a legal requirement that stated that the audit reports created by the Public Company Accounting Oversight Board (PCAOB) — which was created as the entity to exercise oversight over the audit profession — may **not** be made public. What's the point of doing these audit reports if they remain in a dark room? Lots of people care about this. Jonathan Weil, for example, just wrote an article pointing out that the less sensitive, and less useful, part of the PCAOB report, which can be made public, doesn't name companies with which an auditor had trouble or companies that were found to have been audited improperly. Mr. Weil did lots of research recently and was able to identify one company that was having audit issues on which the PCAOB had reported privately, and he named this company publicly in an article. The company lost hundreds of millions of dollars for investors, which wouldn't have been lost if its name had been in the PCAOB report that came out a year ago. In any case, for those of you who have any influence over a company's audit committee, I'd encourage you to ask to see the confidential part of the PCAOB's report on your company's auditor as a condition to extending its engagement. As chair of two audit committees, I did just this. In one case the auditor wouldn't give me a copy, but sent the senior-most person from the firm — a waste of his time! — to watch me as I read it in a conference room! I succeeded in the other case. Maybe sooner or later these reports will become public if more people ask for them.

Grace under Pressure

David Before we wrap up, let's do a few personal questions. I'll start with my favorite, which I've used at virtually every one of these events.

Bevis I know nothing about baseball.

David No baseball questions, I promise. What's the most memorably impressive display of grace under pressure that you've witnessed in real time—either in person or on TV? Replays don't count.

BEVIS LONGSTRETH concluded

Revis When I was in college, I saw on television a lawyer — a rather humble kind of lawyer from Boston in the McCarthy hearings. After a particularly long and ugly exchange, this humble lawyer moved the nation by saying to Senator McCarthy, "In the end, Senator McCarthy, have you no sense of decency?" It was a great moment — totally unrehearsed. It gave to the word decency a new and illuminating meaning for me.

What's the one feat that more than any other you'd David like to accomplish in your lifetime, subject to the condition that you'd receive no public acclaim or even acknowledgement of it?

I would like to design or participate in the design of Revis a system for global dispute resolution so powerful and effective and universal that all weapons in the hands of armies and the armies themselves could be like nuclear waste: put somewhere to rust away. I don't need any credit for that.

Surely not. David

But you'll know when I do it! Bevis

One more question for you, Bevis. I'm sure there David are things about you that I and others gathered here would be surprised to learn. Of the potentially surprising things about you that you're willing to disclose publicly, which single thing would likely surprise us the most?

Well, I'm glad you didn't ask me how I stay so Bevis organized, because there's no correlation between productivity and organization! But to answer your question, since 2000, I have tried to turn myself into an historical novelist. I've published one novel, and I just finished the first draft of a second.

David You're welcome and encouraged to mention the name of the first book.

Bevis Along the way, I was turned down by 19 US publishers and was fired by my agent. I finally got the book published by a small press in London, called Hali. They don't have placement capabilities in the US, so the book is available in the States primarily via Amazon. It's called Spindle and Bow.

That ties into what we've been talking about for the last hour, which is that with all that's going on in this country, a lot of the talent is moving offshore!

Bevis It does!

David Thanks, Bevis.

JOANNE HILL

Joanne Hill is a managing director in the Securities Division of Goldman Sachs, where she advises institutions on a broad range of investment policy and strategy issues. Her capsule biography appears at www.tiff.org/TEF.

A disclaimer for Joanne: because she's at Goldman Sachs — a firm involved in just about every deal on the planet we're somewhat constrained in the topics she can address. Also, very importantly, what Joanne says here are her own views and not those of Goldman Sachs.

Zero Sum Game?

David As with today's other interviewees, we picked out a baseball quote that is germane to Joanne. It's from a ball player named Rube Bressler who said, "It's not a game of inches, like you hear people say. It's a game of hundredths of inches. Any time you have a bat only that big around and a ball that

small traveling at such tremendous rates of speed, an inch is too large a margin for error." Joanne, thanks for joining us.

Joanne My pleasure.

Lots of folks in this room think too much capital has shifted into the hands of hedge fund managers. One plausible counter to this commonly heard lament is that hedge funds have attracted and continue to attract the money management industry's best and brightest — talent that gives them a sufficiently large performance edge relative to more traditional modes of investing even after adjusting for the incremental fees that hedge funds tend to command. So my question is this: since alpha — or excess return generation — is ultimately, as many people allege, a zero-sum game, where are all the new patsies coming from?

JOANNE HILL continued

comment in a minute, but first I'll comment on hedge funds. In your question, you alluded to limits on performance given the large amount of capital flowing into the hedge fund industry. When you talk about capacity issues or limits on performance, you're usually talking about asset classes, and most people in this room would agree that hedge funds are not an asset class. Rather, they're a way of organizing an investment and compensation process. It was a natural evolution, coming from the restrictions imposed by the Investment Company Act of 1940, which set the template for traditional institutional fund management. The model set forth in the 1940 Act is challenging because it's subject to capacity constraints, as we've seen with small cap strategies recently and technology funds in 1999. We see lots of examples of capacity constraints in traditional investment models that are focused on asset classes that either do not have much liquidity or are attracting unusually large investor flows.

Joanne I'm going to take issue with the zero-sum game

I think hedge funds are going to become the preferred business model for fund management for many reasons. First, they have a better way of accessing a broad opportunity set. If you have the most skill, you're going to want to apply it to the most scope. Within hedge fund structures, there's a lot of room to exploit the opportunities you see today as well as to adapt to constantly changing markets. Hedge funds have the capacity to shift styles quickly based on market conditions. Second, hedge funds can apply more tools. Where we might question whether a traditional longonly active equity manager could use derivatives, many of us are more than willing to allow our hedge fund managers to use leverage, derivatives or other tools because we respect their skills and they've proven they can be successful with these instruments. Finally, hedge funds typically align compensation with performance, a structure now being adopted by many traditional money management organizations.

There are still some problems in the hedge fund industry, however. For example, it is growing rapidly to adapt to the scale demanded by pension funds and the ever-expanding endowment and foundation assets — or anyone, for that matter, who is looking to earn LIBOR plus 3%. More hedge funds than long-only managers have a survivorship problem. Talent can and does leave hedge funds to start new organizations if there is a major drawdown. Hedge funds are in the midst of addressing these tough issues by raising larger amounts of permanent capital or evolving toward better organizational processes.

Turning to the zero-sum problem, I don't make much of it. There are as many alphas out there as there are distinct benchmarks. I've had discussions about this with Bill Sharpe, and he and I agree that alphas do sum to zero if everyone is using the same horizon and the same global capital markets benchmark. God only knows what benchmark this is or if we could even measure it! Those are the only alphas that have a chance of summing to zero. They certainly aren't the alphas that most of us consider when we think about "excess" performance. Constrained or less sophisticated investors are more likely in the long run to have negative alphas. Therefore, the best means of winding up on the positive side of that zero-sum game is to have fewer constraints, more skill and compensation structures that are aligned with performance. Remember, investing is not a fixed capital game or a game like paintball where there's a definite beginning and end and one winner. Just in the past few years, we've seen lots of capital enter the markets from China, the Middle East and other sources. The flow of capital into risky assets is never-ending and dynamic.

Liquidity Management 101

If you do an objective analysis of the portfolios belonging to the endowments and foundations represented in this room, they're probably excessively liquid in relation to their spending needs. You've done lots of valuable thinking and writing about asset allocation. Do endowed charities maintain excessively liquid portfolios, in your judgment?

Joanne Over the course of my career, I've developed a respect for liquidity above all else. It's a very scarce commodity, much scarcer than we think. And we really tend to forget just how scarce it is when we go through a period of low volatility such as the one we've just experienced over the past five years. In our personal portfolios, for example, many of us carry a very large illiquid investment: real estate. The illiquidity of this portion of our portfolio dictates what we do with the rest of our assets — how much risk we take and how much

JOANNE HILL continued

cash we carry — because we know that real estate cannot be dumped quickly for cash in an emergency, which is certainly a feature of housing that we are acutely aware of today. Liquidity issues are most pronounced when an investor's horizon differs from the horizon of the security or investment opportunity. I've spent most of my career in equities, which is probably the segment of the financial market in which liquidity matters most because stocks have an infinite horizon — so you know upfront that your investment horizon is different from the company's! If you take the total market capitalization of publicly traded stocks across all global markets in 2006, a little more than a half of one percent trades in a typical day. When you add derivatives, that number rises to two percent — but lots of those derivatives trades are offsetting. So, you can see why an information event or a regime change could alter the demand for liquidity, given the large size of investment holdings relative to typical trading flows. This is what the people who run investment banks worry about. We're the market makers and the intermediaries, and we have to set the price.

Many of you in this room are in the best position to earn the alphas associated with returns to liquidity risk because you have long time horizons and access to cash. I expect that you would have a greater portion of illiquid investments than an individual or pension fund, and many of you say one of your concerns is that your illiquid ratio is higher than it's ever been. This investment strategy is a natural response to the recent low-volatility regime and to the opportunities that you're seeing today, but it definitely entails some risk. What you must figure out is not just how illiquid individual holdings are but also what other liquid holdings can be employed to complement these less liquid investments. You can move into lower-risk assets or use derivatives to provide access to liquidity. These things, however, should be used with restraint and oversight because you don't want to get into situations in which you've used too much leverage as a liquidity source.

Risk Management 201

Good segue to derivatives. You and I have talked about the growing tendency of institutions to use derivatives as a form of insurance. If you're going to buy insurance, several questions arise. Foremost among them is this: will the policy actually pay off if the events being insured against unfold? My question for you is this: are the derivatives being used by institutional investors certain to pay off under worst-case conditions?

Joanne When you're talking about insurance, you're talking about derivatives that have optionality as opposed to those — such as futures and swaps – that are used primarily for leverage or full hedges. There are two ways you can create a derivative or options payoff. The first is on a "best efforts" basis, which, for example, was how derivatives were being employed as portfolio insurance in 1987. On a "best efforts" basis, a derivative's payoff is dependent upon the volatility regime and the liquidity that's available when you try to replicate the option payoff by trading the delta. I'm quite skeptical about this because there are situations in which the insurance won't pay off when you need it to, and therefore it's very risky from a fiduciary perspective.

> On the other hand, when you're buying derivatives from a clearinghouse or a dealer, your major risks are credit risk and the dealer's business model. Has the dealer diversified the exposure it has created in selling you a hedge on your equity portfolio? Broadly speaking, investment banks typically should set limits on the capital they give to their derivative desks based on scenario analysis and judgments about correlation across assets. If they have to pay the options off that they have sold to investors, something else should be making them money, most likely the hedge of the derivatives book in which the trade sits. We have had a low volatility regime for an extended period, which has fostered the growth of the derivatives market.

> The supply and demand for risk transfer drives derivatives activity. Normally, when the demand for risk transfer increases in high-volatility regimes, you see derivative activity at its highest. What has been bizarre about the last few years is that we've seen growth in demand for risk transfer in a low-risk environment. In this environment, the only way you folks can deliver the return that your entities want is to increase risk through leverage and through the use of derivatives. This means that the desire to increase, not reduce, risk has been fueling the demand for risk transfer and derivatives.

JOANNE HILL continued

Having been through these cycles far too many times, our industry is notorious for having a very short memory. The time between regime changes is too long for people to remember the last one. At Goldman, we rotate our traders around the world because there's usually a volatile market somewhere in which they can gain experience. When you have a fertile environment and there's lots of innovation, new products and growth in derivatives, it's hard to tell how much volatility is out there. Of course, many of these innovations have been good because risk transfer is now more efficient and allows people who normally wouldn't get access to credit to get it. Innovations for intermediating risk are out there, but we must be cautious because we're very close to a regime shift. I think these innovations will be tested in the next one to two years, which is healthy because it will bring the derivatives market back to equilibrium capacity.

Guaranteed Real Return

My next question is one I'm going to pose to other interviewees later on. Those of you in the room will be familiar with it because we actually did a survey via email of the folks here today. We posed the following question: assume hypothetically you have unilateral control over an endowment and are offered the opportunity to swap the entire endowment for a contract from a risk-free creditor to lock in a guaranteed real return with no possibility of default. Assume further a 50year holding period. What would be the minimal guaranteed real return that would induce you to make the swap? I'll reveal for the first time that the median answer from the folks in the room was 7%. The arithmetic average, which by definition is unweighted, was 8.2%. So my question is obvious. Are these achievable numbers?

Joanne They may be achievable by those in this room in their investment funds, but I assure you that you're not going to find a contract with that pricing from a dealer or bank! I would've guessed the median would be 5% because that's likely the amount you'd want to take out per annum for funding. I'm shocked it's 7%. But I think people probably ignored the **risk-free** part of the question and thought more in terms of what they'd think their investment committees would accept if they walked in and said, "I can get you this." Our 30-year swap rate on real return assets is now 2.7%. It was 2%

just about seven or eight months ago. The highest it's been in the five or six years we've tracked it is probably 3.5%, so the risk-free — or close to risk-free — long-term real return is (according to your responses) half of what you all think you need.

Liberal Arts Extolled

David What's the best undergraduate degree to prepare someone to do what you now do for a living?

Joanne Well, I'm not so sure what I do now for a living will be something that will be done 10 or 20 years from now. I'm not going to say math or physics, which might be what you'd expect. I'm a big believer in liberal arts undergraduate degrees because I think they encourage critical thinking and teach the ability to evaluate situations and information. Economics and political science, along with statistics and econometrics, would be good choices. Today's young people are technologically fluent, but there's a shortage of creativity and critical thinking in the people we hire — more so than a shortage of analytical skills.

David Sticking with the notion of advice for younger people, the university across the street has a wonderfully talented woman now as its president. Her predecessor got into a heap of trouble when he said some things that were surely unnecessary and probably unwise as well to an audience over at MIT not long ago about gender barriers. I'm not going to take a kick from that mule because, as they say, there's no education in the second kick of a mule! Would you comment on gender barriers in your business, as a pioneer of sorts yourself? Where are we relative to the state of the industry when you entered it, and if you were advising young women, what would you say to them about this sensitive topic?

Joanne When I went to school it was a different time, with very few women in business schools or in quantitative fields. Why was that? Was it because of any inherent talent deficiency? Hell no! In my view, we had guidance counselors that were channeling us. You didn't pick your college from the top 100 schools in US News & World Report. Your guidance counselor told your parents where you should apply and what activities you should become involved in as preparation. The bright women students all belonged to Future Teachers of America. Women were channeled into "softer"

JOANNE HILL concluded

areas, and men were channeled into the sciences and engineering. It's been liberating for some men with whom I went to high school to change their careers — and liberating for women too.

In looking at organizations such as Goldman Sachs and Q-Group, the change has been dramatic. When I got my MBA, 10 percent of my class was women. The figure is higher now thankfully, but has peaked at about 40 percent. I believe that's because women have the sense and ability to think about the worklife balance a lot more than men. Men have the disadvantage that they don't get to think about it as the competitive pressure forces this more into the background! Many women try to think about their long-term career, allowing for the fact that they're

going to want to have children and spend time with family, which is very rewarding. So, when they look at investment banks, they are concerned about hours and the need for face time. It's great to see new models developing, even at investment banks, that adapt to the fact that women want to enter and exit the workforce at different times than men and function from home or the road. I'm optimistic because I know the talent is there. We're going to see more women get into this field because it's a great place to have an interesting and rewarding career.

David You're a great role model for young women today. Thanks, Joanne.

MARTY LEIBOWITZ

Marty Leibowitz is a managing director with Morgan Stanley Equity Research's global strategy team. His capsule biography appears at www.tiff.org/TEF.

Art, Science or Craft?

David Marty has had a very distinguished career on Wall Street and in many corners of the investment and financial markets, so we're very much looking forward to this conversation. Welcome, Marty.

Marty Thank you. When I speak, could you turn my mike up? Louder than his, please!

The baseball quote we picked out for you comes David from John Montgomery Ward: "Brains are as much a necessity in baseball as in any other profession. The best ball players are the most intelligent, though, of course, natural intelligence is here meant and not necessarily that derived from books." My first question for you focuses on the interesting and important work you've done in many disciplines that are germane to endowment management, from the most mathematical and quantitative to the most qualitative and intuitive. It's a question that underscores the eclectic character of your remarkable career, namely whether endowment management done the right way is an art, a science, a craft or perhaps a combination of all three? By craft, of course, I mean the ability to show up at work, day after day, and perform competently the same tasks over and over again.

Marty I think that it's a varying combination of the three. Science and analytics are used to get the essence of things and to find out if things work. There is art embedded in that work because in science there is art, and vice versa. The constant pursuit of finding things out is really a craft. However, people must recognize that the challenges and obstacles that arise in any field — in ours particularly — are always new and fresh. The old craft never works forever, and it takes art and science to understand when adjusting your craft is necessary in order to move forward and evolve with changing times.

B-E-T-A

David Let's drill down on something we've discussed offline: beta, B-E-T-A. What you've just said about art, science and craft brought to my mind the notion of standing on the shoulders of giants and essentially building on work that's been done over the years. When you look at beta, however, it has become largely discredited as a measure of statistical relevance to the management of institutional portfolios. I'd like you to comment on beta — its utility, its abuse and the extent to which you would use it if you were either a member of an investment committee or an institutional manager, as you were when you drove the investment bus so to speak at TIAA-CREF.

Marty There are so many places to start! First, let me take care of one quick point. For me, the early writers

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in this field such as Sharpe, Treynor, Markowitz, Fischer Black and Merton are all terrific both in terms of their thinking and their **rethinking** of investing generally. Each one has come to question his own early work. There's great art in that. They're remarkable individuals, even aside from having won Nobel Prizes. I told Bill Sharpe once, "Well, your Nobel Prize is a little old these days, but you're still fresh!" This is the truth, and I've been blessed with the chance to get to know these mentors as colleagues and learn at their feet over the years. The early writings of these people informed the craft of investing. Moving forward is art.

Back to beta: I think it's simple and underutilized and the single most important variable that people should look at in the management of endowment, foundation and pension fund portfolios. When I say beta, understand that I'm talking about simple beta — beta that describes a security's sensitivity to the movement of a relevant market, which for most US investors is the US equity market. If you do an analysis of even the most diversified endowments, you will find that over 90 percent of their total volatility comes from US equity market beta. Ninety percent! That has huge implications, and it raises questions about what diversification really means and doesn't mean.

What do you do with this knowledge? The first thing you do is recognize that anything that gives you a return **not** highly correlated with equities is valuable. There are free lunches out there... sort of. They're never as free as they look, but within the confines of narrow mathematical models, free lunches do exist whereby you get alpha from investing passively in an asset class not fully correlated with equities. This provides some return beyond that associated with the equity correlation that can be yours at the fund level for very little risk because when you move from the asset class level to the fund level, non-beta risk is totally dominated by beta risk. So there are implicit alphas and implicit betas out there: investors can capitalize on them with little additional risk by diversifying into certain areas, before their excess returns disappear.

David Let me just jump in with a clarifying question that seeks to avoid semantic confusion. You just used the term "alpha" in a sentence where you stated

that you can access it passively. Many people would say that's oxymoronic: alpha equals active management. Could you clarify that?

Sure. I'm defining passive alpha as anything that Marty gives you an incremental return with very little risk above your overall basic level of fund risk. For example, you probably would have created passive alpha by investing in timberland over the last 10 vears; even without active management, timber investors have seen very good returns given the low levels of risk involved. While timberland isn't a risk-free investment — you can't buy the worst timber and expect to do well — if you were essentially a passive investor, you would have received returns above those of the equity market without materially changing the volatility of your portfolio. If you had been clever and smart and had access to resources and lots of competitive advantages, you should have been able to do even better than that. That's the active alpha overlay. It's also worth remembering that alpha is not stable. As money pours into any area where there are free lunches, passive alpha tends to disappear very quickly.

Addictive Illusion

My next question starts with a quote from one of David my favorite journalists, Tom Boswell, who once wrote the following about one of my personal passions. He said: "More than any other American sport, baseball creates the magnetic, addictive illusion that it can be understood. Almost!" I quote Boswell because his comment about baseball encapsulates so well the so-called random walk view of financial markets. His words relate to the idea that securities prices move unpredictably enough to render foolish efforts to outperform relevant benchmarks, especially after taking active management fees into account. Now, mindful that you've written volumes about market efficiency or the lack thereof, I'll ask you to do the impossible and distill into a few minutes your thoughts on this deceptively complex issue of market efficiency.

Marty Are there any non-baseball fans here? Okay, good! Joanne, good! Hilda, good, good! I confess that I'm not a baseball fan, and in fact, my first visit to a ballpark was three weeks ago, when I was dragged to Yankee Stadium by my son-in-law.

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It's not my fault that you have a son-in-law who's a Yankees fan!

Marty Oh, I see how it's going to be! Now that we're talking baseball, I feel like I have to tell this story. Yogi Berra is a familiar name to most people, I assume, and I'm sure most baseball fans would die to have a chance to talk with him. Of all people, I did! It was a terrible waste but great fun. It happened at an event put on by Chase, and I ended up sitting next to Yogi, who was the keynote speaker. I couldn't resist asking him how it was that he became known for lines like, "It's déjà vu all over again," "That restaurant is so popular no one goes there anymore" and "When you come to a fork in the road, take it." He told me the answer. Yogi is a very sweet man, and when he speaks, he answers questions with the fewest number of words. He said, "I was having a barbeque, and I was telling some of my..." What do you call 'em ... ball club mates?

Teammates! David

Teammates! Thank you. Yogi said, "I was telling some of my teammates how to get to my house. I said, 'You go out on Northern Boulevard, and when you come to a fork in the road, take it.' That's what vou do. It makes sense to me because I drive it every day." He then said to me, "I have no idea why people picked up on that!" To which, if I were sharp, I would have replied, "Well, that's déjà vu all over again!" Anyway, back to your original question, which was about... market efficiency?

David Right: market efficiency.

Well, we all make our living through market inefficiency, so we've got to bless it. As Peter Bernstein once said, "The markets are efficient but not always so, and not completely so." We live in a sea of ambiguity, and we ply our way through it as best we can. That's the art and fun of being an investment professional. Market efficiency is not necessarily pretty. If there were total market efficiency, intermediary trading wouldn't exist. The market would stay at a certain point, changing only when information arrived. This would result in a very volatile market at times when new information is introduced and a deadly dull market when new information stops flowing. It would be like entropy. Speaking of entropy, one of my

favorite quotes is from Niels Bohr — I'm not sure what team he played for!

David Denmark.

That's right. He said, "If you think you think you understand quantum theory, you don't!"

Time Horizons

I'm going to throw you a fat pitch: do you want to David comment on institutional time horizons?

Yes, thank you. First, a word about pension funds. Martv A growing pension fund has the longest time horizon of all because its payments occur far in the future. Unfortunately, with the regulation and accounting changes that are coming down the pike, corporate pension funds are forced to be short-term investors. If you look at foundations, many operate with a certain amount of monetary outflow without significant monetary inflow. The question then is can you be a long-term investor when you have significant outflow needs that you can't easily cut without enduring organizational pain? The answer is no. You can try, but doing so will be painful.

> Real risk — the risk that really matters — is finding yourself in a position in which you have to interrupt what you think is the economically best allocation. This risk has to be considered for individuals, foundations, pension funds and any investment organization that has human beings involved. When markets move against you, when you can lose confidence in your ability, the system itself or in its recoverability, you feel that you must reduce the amount of risk in your portfolio — interrupting what you think is the economically best allocation. That is the ultimate investment risk. If you knew that the market was always going to bounce back like it has over the years and you could survive the interim periods, you'd take the highest risk returning positions and stick with them. You'd be the best investor around!

Policy Portfolios

That's a good segue to a question about policy portfolios. If you were managing a big endowment and were the sole decisionmaker forever, would you nonetheless put together a policy portfolio with the normal attributes — mins, norms and maxes?

MARTY LEIBOWITZ concluded

The assumption is that if the answer is yes, you're doing it as a form of self-discipline along the lines of what you just suggested because you doubt your ability to stay the course in a crisis. Again, no one's looking over your shoulder. I ask the question because there's ferment in the field. Our mutual friend Peter Bernstein advocated several years ago getting rid of policy portfolios because they do more harm than good.

I think policy portfolios are useful. Unlike Peter Marty — although he doesn't quite recommend forgetting about policy portfolios anymore — I wouldn't say throw them out. Like Peter, I'd suggest maintaining flexibility in the portfolio and leaving rigidity behind. Don't make a policy portfolio something that's subject to review **only** at three- or five-year periods. Don't let it be immune to what's happening in the market. We were just talking about timber, so let's use that as an example. If you had a large allocation to timber and it had worked well for you but you could see that the discount rate was falling, should you rethink your allocation? The answer is, "absolutely." I think policy portfolios are a useful discipline because we live in a world of such ambiguity that you don't want to make ad hoc judgments all the time. There are points in time where evidence to make a certain change is sufficient; you then must have enough confidence in both yourself and your committee to

Classy Fellow

David Let's turn to some personal questions. What's the best display of grace under pressure you've witnessed in real time?

make the necessary changes.

Marty I think I've done pretty well under the pressure you've created here today! This is a great question. What's interesting is that as I started going through the litany of people or instances where I thought grace was displayed, I realized that it wasn't really grace that was displayed but rather that the person had a vested interest in his or her response. It was interesting to see how many people I considered, but then dropped for reasons like this.

During the early 1980s, Paul Volcker was under the gun for very high interest rates he was maintaining and was receiving lots of criticism. During a congressional hearing about his policy, one member

of Congress said to him, "Well, we see where you stand, Mr. Volcker. What would it take to change your mind?" He chewed on his cheap cigar and thought about it for a few minutes after which he replied: "What would it take to change my mind? One word. Impeachment." That's classy.

David One more question — one I'm keen to pose, since we haven't talked about it offline. What's the single best undergraduate major in your judgment to prepare someone to do what you currently do?

Marty The one I've got — liberal arts! It's important that people have math skills as well. But the math skills they need are not high-level math skills, they're simple math skills — the ability to formulate simple models and think things through. When problems get too complex, it's important to be able to recognize it and pass them along to someone who can resolve the mathematics. Liberal arts educations are beautiful. Unfortunately, fewer and fewer people are pursuing them.

David I hope not. Thanks very much, Marty.

Marty My pleasure.



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