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FOREWORD

Martin Capital Management, a limited liability partnership, is an investment advisor registered with the U.S. Securities and Exchange Commission. After years of preparation, its founder began formally dispensing his brand of investment counsel, which this and earlier missives have recorded, in the months before the memorable autumn of 1987. (All firm publications, as well as the SEC filings, including form ADV Part II, are available upon request.) Since then, Martin Capital has grown to serve 118 clients whose combined assets total approximately \$643 million. From its beginnings as a one-man, one-assistant operation, with less than \$25 million in assets, Martin Capital is now headquarters for 13 people, including six investment professionals and seven persons in supporting roles. See end of report for thumbnail biographies.

We at Martin Capital Management hope that in the course of conducting our business we might occasionally encounter other investors with whom we share common values and expectations. If you know of someone for whom the fit appears mutually beneficial, please mention our name. While our \$5 million minimum family account size prevents us from helping some people whom we would very much like to serve, we feel we must keep our roster of clients small in order to maximize the time we spend on research.

Our abiding duty is to those who have entrusted their assets to our care, and we will forgo any growth opportunity that may detract from our ability to serve them as they have become accustomed. Careful selection and controlled growth are really about doing a good job and having fun along the way. We never expect to be among the biggest, but our intention to be among the best is not subject to compromise.

Informational and educational materials that seek to highlight the primary tenets of Martin Capital Management's investment philosophy and overall business model are available apart from this annual report. We hope these concise writings will help you gain a deeper understanding of how we conduct the business of managing wealth. Please feel free to call or write

***us if you would like to receive more information.
You can also visit us at www.mcmadvisors.com.***

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MARTIN CAPITAL MANAGEMENT, LLP

PRIVACY NOTICE

Martin Capital Management, LLP (“MCM”) recognizes and respects the privacy expectations of its clients. MCM considers clients’ data to be private and confidential, and holds itself to the highest standards of trust and fiduciary duty in their safekeeping and use. MCM has not and will not sell personal information to anyone.

MCM collects nonpublic personal information about clients from the following sources:

- *Account Applications and Other Forms*, which may include a client’s name, address, telephone number, Social Security number, and information about a client’s investment goals and risk tolerance.
- *A Client’s Professional Advisors, such as consultants, attorneys, and accountants*, who may provide financial history, investment history, and tax information about a client.
- *Account History*, including information about the transactions MCM has ordered and balances in various accounts.
- *Correspondence*, written, electronic, or telephonic, between a client and MCM or a client’s broker or custodian and MCM.

MCM will not release client account information to any third party unless one of the following conditions is met:

- MCM receives prior client consent.
- MCM believes the recipient to be the client or the client’s authorized representative, including the client’s attorney or accountant.
- The recipient is a broker, custodian or other service provider with whom MCM must share information in order to manage or service a client’s accounts properly.
- MCM is permitted or required by law to release the information to the recipient.

MCM will use only information about a client and a client’s account(s) to:

- Help MCM better serve the client’s investment and financial needs.

- Suggest services or other materials that may be of interest to the client.
- Fulfill our regulatory obligations.
- Administer MCM's business.

MCM maintains physical, electronic, and procedural safeguards that comply with federal standards to guard the privacy of clients' nonpublic personal information.

MCM applies the policies and practices described in this notice to both current and former clients.

BUSINESS PRINCIPLES

- Our practice of ethics is quite uncomplicated. We simply conduct ourselves in our relationship with you as if the roles could be reversed at any time. If you would like something more formal, we can send you the Code of Ethics of the CFA Institute of which the members of your management team, as Chartered Financial Analysts, are full participants. It is well thought out and inclusive.
- We strive to be candid and forthright in our reporting to you. You have placed your trust in us, and we know of no other way to be worthy of that trust. Despite this policy of openness, we will publicly discuss our transactions in marketable securities only when we believe such disclosure will be to your advantage. Good ideas are scarce, and the output of our research efforts is your exclusive property.
- Our portfolio management style is “participatory.” We consider it very important for you to be actively involved in the review of our recommended portfolio policy, in mapping out intermediate-term strategies, and in major asset-allocation decisions. Your involvement should not take a great deal of your time, however. The better we get to know you, the more likely we are to appreciate your unique (and sometimes changing) goals, objectives, preferences, biases, and fears, both spoken and unspoken. With your indulgence, we will continue our practice of encouraging frequent face-to-face get-togethers. We also will persevere in communicating our thoughts to you in writing to make it easier for you to get to know us.
- To the extent that security laws and regulations permit, my own portfolio and that of our firm are invested in the same securities as yours, varying only to the extent that our goals and objectives differ. In other words, “We eat our own cooking.” It probably goes without saying that such a policy demonstrates the sincerity of our position—not necessarily the soundness of it.
- We are a small organization and intend to remain so. A compact organization makes it possible for us to spend our time managing our business rather than each other. Because everyone has much

to do, much gets done. Our design appeals to those for whom form is secondary to substance.

INVESTMENT PRINCIPLES

- Our implicit quantitative performance goal is to maximize long-term portfolio returns.
- The universe of marketable securities from which we select most investments is generally limited to: (1) long-term, common-stock holdings; (2) medium-term, fixed-income securities; (3) long-term, fixed-income securities; and (4) short-term cash equivalents. Beyond respecting the investment-policy guidelines established for you, we are not partial to any one of the above categories. We simply search among them for securities that offer the highest after-tax, risk-adjusted returns as determined by “mathematical expectation.”
- We strenuously avoid assuming risks that might result in “permanent” capital loss. We will forgo an outstanding investment opportunity if the flip side of that coin is the risk of an irreversible capital loss. We do expect frequent shorter-term quotational losses as we rarely, if ever, are able to buy a common stock or any other security at its absolute lowest price. So long as we feel our business analysis is sound, further weakness in the market price of a company simply gives us an additional opportunity to purchase shares at an even greater discount relative to its intrinsic value.
- Consistent with our attitude toward catastrophic risk, we have little interest in the use of leverage. We do not margin portfolios and usually avoid making investments in businesses that themselves labor under a heavy burden of debt.
- When we purchase common stocks, we approach the transaction as if we are buying into a private business. We insist on a purchase price that represents a “compelling discount” from intrinsic value. Once a purchase is made, we focus the bulk of our attention on tracking the business itself and ignoring short-term price fluctuations. We are quite content to hold onto our investment in a good business so long as (1) the prospective return on equity capital is expected to be satisfactory, (2) the management continues to conduct itself with competence and honesty, and (3)

the market does not become excessively enthusiastic about the future outlook for the business.

- We believe that intrinsic value is in essence the central tendency in the price of an asset. It is the investment concept at the core of our analytical methodology. While intrinsic value is an elusive notion, “earnings power” has become the driving force in fixing a range for intrinsic value. Earnings power allows for the existence of an intangible asset known as “economic goodwill” that can be aggregated with tangible assets to arrive at intrinsic business value. Without such a fundamental benchmark, however vague, one is at risk of becoming awash in the occasional tides of euphoria and pessimism that flood the security markets.
- We generally limit the number of companies we own in any individual portfolio to fewer than 20. Contrary to popular opinion, exceptional investment ideas are uncommon indeed. We do not want to dilute the performance of outstanding investments with potentially mediocre ones purchased solely for the sake of additional, and often redundant, diversification. Despite the intuitive appeal of the broad spreading of your risks, extensive computer-backed testing has demonstrated that 90–95% of all the benefits to be gained from diversification can be achieved with a well-selected portfolio of fewer than 20 businesses.

INTRODUCTION

There is a common and occasionally abrading thread running through most of the MCM annual reports. It seems to be related to the writer's sesquipedalian inclinations and his attempts, often pathetically inexcusable, to explain why such loquacious verbosity is justified. By this time I'm sure many of you feel like the teacher who wonders what lame pretext Johnny will give today for why his homework is not in his backpack. What will be particularly mystifying to some is that this report comes on the heels of the just-published book *Speculative Contagion*. Surely some of you are moaning to yourselves, enough already!

As always, I continue to take poetic license, unrepentantly deviating from conventional form to achieve the intended effect of occasionally making you smile and shake your head in disbelief—or simply to offer you a change of pace. The various lyrics from songs that punctuate the report serve a secondary purpose, expressing subjective thoughts and feelings of the times more poignantly than straightforward narrative is generally able to.

As for the main essay of this report, it *was* to be about five pages when I prepared the outline in early November. But as I began what evolved into more research than I have ever completed previously for an annual report (sound familiar?), the individual pieces began to form a most disquieting mosaic as I read everything I could get my hands on. I found myself turning back to page 201 in *Speculative Contagion*¹ and pondering the foreboding phrase found there, “The Perfect Storm?”

From there my mind leapt to another story of the sea, in many respects running a parallel course to the present. So set in the mythology of the imperviousness to danger were the passengers on the Titanic that, by virtue of their reckless denial of an improbable risk they inadvertently elevated the implausible to the state of being probable, as indeed it was. The year was 1912, the beginning of the 20th century, and most people had absolute faith in new science and technology. They believed that science in the new century could and

¹ In order to conserve space, all future references to *Speculative Contagion*, of which there are many, will follow the same, simple format. Enclosed in parentheses will be an abbreviation for the name of the book, *SC*, followed by the page(s) being referenced, i.e., (*SC*, 201).

would provide answers to solve virtually every problem. Risk of calamity was on the minds of almost no one as the travelers embarked on the historic voyage known by all readers. In applying the object lesson to today, I think of the purveyors of financial services as the ship's crew, busily tending to the needs of the unsuspecting, who were themselves assured by Captain Greenspan that the ship was "unsinkable." Let there be no doubt, we have no idea whether we shall encounter icebergs. What we *do* know is that it's better to forgo an opportunity than to underestimate a risk and put ourselves in jeopardy of losing something that may not be recoverable. Sometimes when everyone else is scrambling for the most desirable deck chairs, wisdom calls for quietly and unobtrusively checking out the lifeboats.

The reader is encouraged to question every opinion or conclusion he or she encounters henceforth. While reading the book *The Fifth Discipline—the Art and Practice of the Learning Organization*, I encountered a quotation from Albert Einstein in the chapter on "The Mental Models": "Our theories determine what we measure." Whether the writer has a logical inkling and *knows* that he knows the limits of such conjecture is open to debate, most pointedly when the subject is the future. Psychologist Robert Merton, to whom I have referred in another context, is credited with identifying the phenomenon of the "self-fulfilling prophecy," of which I could be guilty. In the same vein, the Danish fairy tale by Hans Christian Andersen, *The Emperor's New Clothes*, offers a metaphor wherein the overwhelming majority of observers willingly share in collective obliviousness to an obvious fact, despite individually recognizing the absurdity. The reader will be left to make the judgment as to whether the writer has the independence of the innocent little boy who saw things as they were when he shouted, "The emperor has no clothes!"—or is as deluded as the emperor and his minions. In any event, history will render its verdict in the fullness of time.

If it's any consolation, I didn't exactly relish the prospect—so soon after putting my aforementioned book to bed—of diving immediately back into the icy waters of highly time-sensitive and equally laborious research and writing. However, we're here to serve, not to be served. As befits the nature of the beast we're attempting to wrestle into submission, we don't pick the times, the times pick us. Nothing more will be said at this point about the "Storm" since all

(and I mean *all*) will be covered in the subsequent section that will test the outer limits of your tolerance.² ☺

The other sections of the report are not so time-sensitive but still essential to understanding the way we do business. We want to be transparent so that you can know who we are—as well as who we are not. Every high value-added activity in which we engage is “easily” replicated ... if one has the talent, temperament, time, tenacity, temerity, even testosterone to get the job done. Not too surprisingly (on reflection), we’ve learned there are few folks who aspire to imitate us! What we’re looking for won’t be served up on a silver platter. Think of us as the ones spending much of our time ferreting through the landfill looking for something delectable amidst the rank remains. It’s certainly odoriferous, but someone has to do it.

The annual report format has gone through a long-overdue change this year, as is rather obvious. Please don’t think it’s a sleight-of-hand attempt to take your attention away from the number of words. In the spirit of candor, the last five years worth of annual reports have averaged 28,000 words. This year’s report did get a little out of hand at 35,000 words. I once again ask for your forbearance, hoping the end justifies the means. Because the MCM annual report is one of the few you’ll read that doesn’t include page-space consuming

² Because of the complex and intertwined nature of the “The Perfect Storm?” essay, I sent draft copies to the following fellows—who will be introduced as we go along—Doug Noland, Fred Sheehan, Marc Faber, Peter Bernstein, Mike Stout, and several others for their critical review. The feedback was far more positive than I would’ve anticipated, no doubt because the reviewers had, to one extent or another, conducted similar research and had reached conclusions that were not materially different from the author’s. It’s difficult to find a protagonist, being swept along with and supported by the momentum of the majority, with a compelling urge to seek out disconfirming evidence. On the flip side, the antagonists must dig deeper to substantively support their dissenting views. No reader is to infer that any of the persons above gave his personal endorsement of the essay, even though many did. They are listed that I might acknowledge their contribution ... and no more. Finally, I owe a debt of gratitude to Aaron Kindig, who took the lead in assisting me with the research, helped by Tom Dugan. Kristen Smith and my old sidekick Dan Shenk, proprietor of CopyProof, provided their highly recognizable and invaluable assistance. Stephanie Malcom has, for five years, taken the rough manuscript, formatted it, and overseen its printing and distribution. My partners read a draft of the report and, as always, offered their helpful insights and suggestions.

audited financial statements and required explanatory notes, there's no need to mimic the standard annual report size format. Voila! You have in your hands a more compact, much more portable, book-like report that can sit on your bookshelf beside *Speculative Contagion*. All our foibles, flops, and vocational good fortunes since 1998, therefore, will be front and center in *SC* and this report for your inspection.

INVESTMENT PERFORMANCE

Period Ending December 31, 2005	MCM Equities *	S&P 500 *
Ten Years	15.0%	9.1%
Five Years	8.2%	0.6%
Three Years	11.8%	14.4%
One Year	-0.2%	4.9%

* Compounded annually, MCM data net of fees

Year	MCM Equities *	S&P 500
1994	-7.5%	1.3%
1995	19.1%	37.6%
1996	31.8%	23.0%
1997	45.1%	33.4%
1998	-7.4%	28.6%
1999	18.8%	21.0%
2000	29.3%	-9.1%
2001	22.7%	-11.9%
2002	-13.6%	-22.1%
2003	33.9%	28.7%
2004	4.7%	10.9%
2005	-0.2%	4.9%

* Net of fees

As you examine the S&P 500 data in the accompanying table, you will notice that its performance for the last three years looks like a train going up an ever-steeper mountain grade. Turning to MCM's comparative results, while outpacing the S&P in the early and easier

going (33.9% versus 28.7%, a relative gain of 5.2% in 2003), our equities trailed by almost the same margin in 2004 as the rate of gain of the S&P withered to slightly more than one-third of that in the snap-back year of 2003—10.9%—versus 4.7% for MCM's equities. Continuing to decelerate in 2005, the S&P 500 eked out a wobbly 4.9%, including dividends, while our equities trailed by 5.1%, recording a -0.2%. Fueled by the exogenous benefit of rising oil prices, the top-performing energy sector (up 29.1%) and the utilities sector (plus 12.8%) helped push the increasingly sluggish S&P up the mountainside. While the shortfall was modest, MCM equity portfolios did not quite keep pace with the S&P 500 for two years running.

Those familiar with our record will recall that the last time we trailed the S&P 500 for two consecutive years was during 1998–99, as major sectors of the market were peaking; most conspicuously, technology and telecom. Given what followed, it would be patently unwise to infer any causal relationship going forward—and if one occurs it will be mere coincidence. As also discussed elsewhere, our focus has always been in doing those things that will likely result in us outpacing the averages by an impressive margin on a long-term, moving-average basis. You doubtless realize, from reviewing your portfolio appraisals, that we are more than willing to give up what we believe are (relatively few) modest opportunities in order to first protect and preserve your capital. Sometimes one wins by not losing. On rare occasions, as noted metaphorically on pages 9 and 10, we must shake free of the madding crowd, averting our gaze from the deck chairs to the distant horizon, and turn our thoughts to the ship and whether it is indeed impervious to risk on the high seas under any and all circumstances. The consequences are so grave that the assurance that the ship is “unsinkable” is itself cause for concern. He who forgets that the only certainty in life is uncertainty will someday find himself in harm's way. We have chosen not to reveal the strategies employed as the means to that end with anyone but our clients. Therefore, the means will not be discussed in this report nor will they appear in our 13-F filings. Because the distribution of this report extends beyond our clients, we draw the line on disclosures at the point of not talking about specific investments.

As was the case last year, we believe the business performance of most of our companies outperformed the prices of their stocks. In a perfect world, stock prices would always reflect the trend in business value. In reality, such occurrences are rare. We don't get anxious when

stock prices don't keep up with the increase in the aggregate business value of the portfolio over relatively short periods of time any more than we celebrate the inevitable periods when stock prices increase at a faster rate than business values. We encourage you to take the same sanguine view. While the corporate performance of our holdings was not without a disappointment or two, earnings grew at a low double-digit rate, well within the range that we deem reasonable for the portfolio. It is worth repeating the old Benjamin Graham adage, "In the short run the stock market is a voting machine, but in the long run it is a weighing machine." The weighing machine, of course, measures earnings growth, one of two primary determinants of the growth of intrinsic value (interest rates being the other). We know that stock prices will fluctuate around intrinsic value in an unpredictable manner, which creates a good deal of short-term variability in both absolute and relative returns. We're quite content to buy good companies at reasonable prices, confident in the knowledge that, as time passes, stock prices always meander in their own inimitable way in the general direction of the growing trend in intrinsic value.

We once again applaud our clients for embracing our strategy as long-term, value-oriented investors. Thanks to you, we enjoy a significant competitive advantage by being able to view the investment landscape from that perspective. If we, like many other managers, were goaded by our clients, or their intermediaries, to focus on short-term performance as the end, rather than on the means to achieve well-above-average performance over the long haul, we would be looking back 10 years at results that would be ... well, average. We aspire to be many things, but mediocre is not among them. As for the future, which is of great interest to us, we strongly believe that of the means we have chosen to cope with, if not capitalize on, uncertainty will make the experience of looking back on today—in 2016—quite satisfactory for all of us. Not exactly your traditional investment strategy ...!

Our portfolio of companies is filled with relatively large, high-quality companies with comparatively "steady Eddie" earnings growth. In our view there is nothing at all boring about low double-digit earnings growth. We view the upsurge in corporate profits as making up for ground lost in the earnings slump of 2001–02. However, our portfolio companies are far less dependent on continuing fair winds than American business as a whole. Furthermore, as noted below, corporate profits of American businesses cannot forever grow faster

than GDP, particularly from record levels of profit margins. The businesses in your portfolios have a long history of double-digit earnings growth, have excellent business models (as evidenced by an above-average weighted aggregate return on equity), strong balance sheets, and a weighted price-earnings ratio that is comfortably (but not conspicuously) below the market multiple. We believe that our portfolio has a lower-risk and higher-opportunity profile than the benchmark index. As the rest of the report makes abundantly clear, we also believe that a better opportunity set lies out there somewhere 'round the bend.

THE MEANS TO THE END

In a few pages begins a lengthy, but we hope proportionately valuable, section, “The Perfect Storm?” In it we emphasize, as we have in the past, that if one focuses on managing the risks, the returns will take care of themselves. When it comes to orienting ourselves so that we can reasonably expect to earn above-average returns over time, we approach the solution with the same mindset: We turn our attention to the means by which we think this goal can be achieved and let the outcomes, indeed, take care of themselves. The seemingly simple statement about the preoccupation with the means, as opposed to the ends, is such an essential tenant of how we practice our profession that to leave it dangling, unexplained, would give the reader short shrift.

I have been deeply influenced by existentialist and eminent psychiatrist Viktor Frankl, who wrote the perennial bestseller *Man’s Search for Meaning* (and one of the most influential books I’ve ever read and reread) after being imprisoned in Auschwitz and other concentration camps for three years during World War II. It was while immersed in unimaginable suffering and loss that he came to believe that the most basic human motivation is the “will to meaning.” Friedrich Nietzsche, the German philosopher who died five years before Frankl was born, put it rather succinctly: “He who has a *why* to live for can bear almost any *how*.” Here’s Frankl’s take on success:

Don’t aim at success—the more you aim at it and make it a target, the more you are going to miss it. For success ... cannot be pursued; it must ensue, and it only does so as the unintended side effect of one’s dedication to a cause greater than oneself ... You have to let [success] happen by not caring about it. I want you to listen to what your conscience commands you to do and go on to carry it out to the best of your knowledge. Then you will live to see that in the long run—in the long run, I say!—success will follow you precisely because you had forgotten to think about it.

This might be called the “means mindset.” It requires a rational, and entirely independent, assessment of the relationship between risk and opportunity. It does not preclude listening to others, so long as you are confident that their attitude toward success parallels yours. It unequivocally rules out “mindlessly imitating the crowd” at

the other end of the behavioral spectrum. Following the majority, fixated as it is on success itself (while at the same time being indifferent to or unaware of the means) is a sure ticket to disappointment. It almost goes without saying that an investor who focuses on the means invariably finds himself detached from the teeming multitude of believers feverishly pursuing the illusion of easy money. The “means mindset” is not analogous to the trembling basketball player who stands at the free-throw line with seconds remaining in the game that has gone down to the wire, gesticulating by making the sign of the cross, hoping for divine intervention to make up for his lack of discipline and determination during the months of practice time wasted leading up to this moment. The “means mindset” is, by contrast, personified by Larry Bird, standing at that same line 15 feet from the basket, calm and serene—not because he knows he’ll make the game-winning shot, but confident in the knowledge that having lofted the ball at the hoop 1,000 times a day for years (many of the shots from the charity stripe), he has *earned the right* to expect to make the shot.

Perfecting the Research Process for Investment Ideas

Our equivalent of shooting 1,000 shots a day is to prepare ourselves by working all year long like Santa’s elves, building and refining our inventory of ideas, attempting to add new ones that are better than the ones they replace. The research team evaluates every success and, more importantly, every failure as we constantly recalibrate our thinking, systematically and sometimes painfully, attempting to rid ourselves of biases and other impediments to rational thinking. In MCM’s relatively uncommon protocol, ideas migrate through a process that culminates in full-fledged published research reports—assuming no discoveries are made along the way that would disqualify the company from further consideration—distributed exclusively to those who pay our rent. There’s nothing like reducing your thoughts to the written word to force clarity and accountability that comes from casting your record in stone. The Ten Commandments were not scribbled on the back of an envelope. Accountability is at the heart of our “culture of discipline.” Bobby Knight has his own spin on the old sports axiom “Practice makes perfect.” Knight adds the word “Perfect” before the word “practice.” All this readies us so that when opportunity presents itself, we can

stand there on the line with the equanimity and serenity of a Larry Bird.

Keep the Number of Companies Owned Small, but Not Too Small

The subject of diversification had so intrigued me since my undergraduate days that I received permission to do an independent research project on the subject in graduate school in the 1970s. In 1952, when I was 10 years old, Harry Markowitz, the father of modern portfolio theory, mathematized portfolio management. Concerned with “random risks associated with concentrated portfolios,” he proposed that investors select portfolios based on their collective risk/reward characteristics rather than compiling portfolios of individual companies based on their individual risk/reward profiles. Our reasoning behind taking issue with this co-recipient of the Nobel Prize is discussed in detail in *Speculative Contagion* (page 247). Computer back-testing was not as effective when Markowitz proposed his theories on diversification as when we tested them some 30 years later. What we (and others) found was that just 10–12 truly dissimilar companies were sufficient to reduce the “random risks associated with concentrated portfolios” to about 90–95% of what a portfolio consisting of hundreds of companies was able to accomplish. By adding scores of additional companies to a 10- to 12-company portfolio, solely for the sake of what in actuality is almost entirely redundant diversification, the investor has doomed the portfolio to average performance, good markets and bad. Since we were searching for the decision-making models that might reasonably be the means to above-average, long-term results, broad diversification would have left us smack dab in the middle of the pack.

What was particularly perplexing to me when I began my independent study was that the concept of broad diversification seemed to run counter to how people acquired wealth in the first place. In all my years in the profession I’ve known almost no one who entered the ranks of the wealthy as a diversified investor. Most wealthy investors built or inherited a business that was eventually sold for a price that capitalized its earnings power. Broad diversification was not even considered until the business, which often had been a big part of the owner’s life for years, was reduced at the stroke of a pen to a small piece of paper with big numbers on it. The immediate reaction: fear of loss. The irrational response: redundant diversification.

Admittedly, the imponderable unknown in this equation is the “survivorship bias”—i.e., all we count are the survivors, excluding from our calculus the many who never made it out of the incubator stage or lost their way for a thousand reasons before reaching critical mass, even if there is such a state of being. (Some of you may recall a company that I founded in the early 1980s, Symteq, which exhausted its predetermined amount of capital before its PC-based brokerage office automation system finally gained traction. I seem to have a habit of being too early! While the tuition was expensive, my degree from the school of hard knocks was worth every penny.) Even acknowledging the skewing effect of the survivorship bias in evaluating how wealth is accumulated, “cover the earth” diversification seems to be an extreme overreaction on the part of those who come into large amounts of cash.

Superior Businesses and the Acceptance of Volatility Are Part of the Means

After making the decision to concentrate the assets we manage among a relatively small number of companies to avoid the unpalatable mediocrity trap, several consequences naturally followed. First, we felt the necessity of focusing on superior companies, to the exclusion of all others. In effect, we have consigned ourselves to life in a fishbowl. The good news is that the really great, well-capitalized companies rarely fail as businesses. The bad news is that they often command premium prices, making them susceptible to disappointment as investments should valuations compress because the company falls short of the high earnings-growth expectations implicit in its price. Another natural consequence of a concentrated portfolio is that its aggregate market value will invariably be more volatile than a broadly diversified portfolio. Advocates of MPT quantify risk (called *beta*, the second letter in the Greek alphabet) so it can be incorporated in their mathematical models. For them, high *betas* correlate positively with high risks. For us, high volatility often means greater opportunities for those with the temperament to act on their convictions.

The Means to a Rewarding Experience

Although as much a means to a successful end, a concentrated portfolio is also the means to a rewarding journey. The amorphous conglomeration of stocks in a highly diversified mutual-fund portfolio

lacks personality and is devoid of uniqueness. Once you come to appreciate and feel secure with the safety dynamics of a concentrated portfolio, there is real joy in the journey. It is very satisfying to observe a great company over the span of time. Much can be learned in the process. People talk with affection about a company that has served them well over the years. They identify with the business and the people who run it. Those feelings aren't experienced by someone who owns a little bit of everything.

By All Means, 'Buy Low, Sell High'

Then, there is the matter of buying and selling. Benjamin Graham wisely noted that at one price the same company can be a conservative investment and at another a rank speculation (*SC*, 271). He was referring to the price paid in relation to the underlying intrinsic worth of the business, implying (as we would agree) that on occasion they are not one and the same. The onus, in my judgment, is on making a sound purchase, one that implies an ample margin of safety. Relevant here is the sage advice I received years ago: "Make your purchase so attractive that even a mediocre sale gives good results." One of the important means that will likely result in above-average, long-term returns is expressed in that simple, yet profoundly difficult to execute, maxim.

'The Greater the Uncertainty, the Greater the Value of Procrastination'

I have often referred to a quote from Blaise Pascal, the brilliant 17th-century French mathematician, who identified an elemental human truism: "I have discovered that all human evil comes from this—man's inability to sit still in a room" (*SC*, 194). The lack of patience in this contest of wills, the inability to stick to one's convictions about what a business is worth in the face of the relentlessness of a ticker tape that incessantly says "You're wrong!" is the downfall of many an investor. Investment is one of the activities in our lives where future uncertainty plays an important role. It's one of the few where you have much to say—by your disciplined thinking, self-control, and calculated and circumspect actions—whether the odds are for or against you. There is something perverse in our psychological makeup that renders the average investor incapable of sitting passively while the stock he is desirous of buying is flashing across the bottom of the CNBC television monitor right in front of his

nose. It's akin to so-called Chinese water torture, in which water is dripped ever so slowly onto a person's forehead, gradually driving the victim insane. Supposedly the torture in dripping water is the slow rate at which the water flows. The victim can almost predict when the next drop will fall, and a sense of tension builds. When the drop finally does fall, a sense of shock and relief follows, only to be replaced with more tension about the next drop. The release of tension (no matter how small it is) prevents the victim from withdrawing inside himself. As this does not require interaction on the part of the torturer, it can be done continuously. Since the investor has at his disposal the capacity to find immediate relief from the anguish, he often takes the path of least resistance.³ Buy the stock! Ah, but the respite from anxiety, alas, is often only temporary. Soon the hapless investor must confront the ancient adage, "Act in haste, repent at leisure." Sorry folks, no free lunches are served on Wall Street ...!

Might Makes Fright

The battle lines are often drawn as a tug of war between the investor (think David) and the **MARKET** (think Goliath). Despite Graham's warnings about the absurdity of following the lead of "Mr. Market" (*SC*, 218), most investors are simply no psychological match for the power and the might of the market. One can feel pretty small, finding it difficult not to yield to the pressure of public and seemingly superior financial opinion that today's price is "the right price." It is, after all, the price, as efficient market theorists would contend, that reflects the sum of all information and insights that investors, big or small, have regarding the worth of that business today. To have the audacity to suggest that today's price is more than the business is worth or more than what is necessary to provide an adequate margin of safety is to commit an act of financial blasphemy, to question the supremacy of the **MARKET** itself. Besides (perhaps out of a deep-seated sense of insecurity), in rising markets investors appear loath to be left behind. In falling markets ... we'll handle that one next year!

³ The same impulse affects the novice chess player. Instead of letting the tension build as multiple pieces focus their energy on one sector of the board, he has an overpowering need to *trade* pieces and relieve the tension, often to his own detriment. Perhaps the "trade" impulse also applies to the amateur investor!

Buying and selling smartly is one of the most demanding of *means* to successful investing!

Estimating Intrinsic Value—No Mean Feat

Finally, understanding the importance of intrinsic value and the ways by which it's estimated is one of the most important means that might lead to a successful end. As to its calculation, please refer to *Speculative Contagion* (page 269). The margin of safety (“Make your purchase so attractive ...”) and other means for which successful investing is the logical end require that you have some sense of what a business is worth, apart from the market's sometimes fickle appraisal. You simply cannot know whether you are making an attractive purchase, with an adequate margin of safety, unless you can compare the asking price to what you have determined the business to be worth. You must have enough confidence in your evaluation of the business to believe with conviction that five years from now it will be the seller, and not you the buyer, who will look the fool. Many businesses have competitive and other characteristics that make it impossible to derive an intrinsic-value estimate. It's almost always best to *pass* on those “opportunities.”

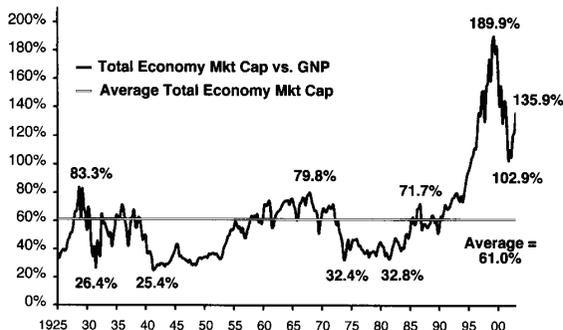
THE PERFECT STORM?

Viewing the Vista Through the Lens of History

The panorama from the top of a mountain, a mental picture of a series of often seemingly random and disconnected events, is so much more clear and comprehensible than when one tries to gain a worldview amidst the dense foliage in the valley below. The challenge in getting to the summit is not losing one's way as one negotiates the endless switchbacks on the winding road to the peak. Without the roadmap of history, one would certainly lose sight of the summit for the trees. The circuitous and painstaking route is necessary because the slope is simply too steep for a straight-up-the-mountain ascent. Likewise, the story that is about to be told has so many interdependent elements that a straight shot to the conclusion borders on the impossible. The climb will be arduous. A friend of mine once said, "Before one can have a mountaintop experience, one must first decide to climb the mountain." Candidly assessing the temperament of the masses is philosopher Johann Wolfgang von Goethe (1749–1832): "The heights charm us, but the steps do not; with the mountain in our view we love to walk the plains." The good news is that the charts below reveal the view we see from the mountain peak.

Chart 1

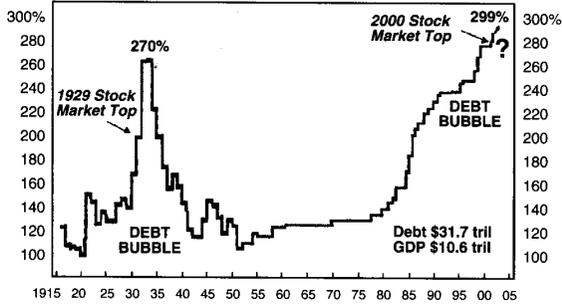
Market Cap vs. GNP 12/31/24 – 12/31/03
Consensus Forecast for 12/31/2003



Source: Blue Chip Econometric Detail Consensus Forecast, NYSE, NASDAQ, AMEX, BEA

Chart 2

**Total Credit Market Debt
(All Sectors) as % of U.S. GDP**

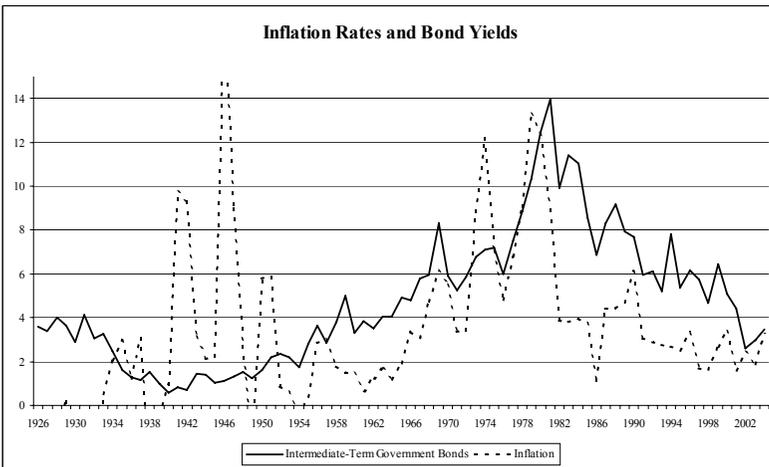


*“When we are living on this much borrowed money,
we are also living on borrowed time.” — Paul Volcker,
Federal Reserve Chairman, 1979-1986*

Source: St. Louis Federal Reserve, FRED II, BEA

Source: *Outstanding Investors Digest*, April 30, 2004

Chart 3



Source: *Martin Capital Management, LLP*

Intense storms often rage and swirl atop mountains, most often above the timberline. More on such storms—and the seagoing variety as well—presently.

Many readers will recall the first two charts above. In fact, for those who take seriously this annual foray into the facts and how they might play out in the future, the charts must seem like a recurring nightmare. The top chart, Chart 1, first appeared in our communiqués to you in the 2001 annual report, having been lifted from a November 1999 article in *Fortune* magazine written by Warren Buffett (*SC*, 103). He offered the graphic as a “simple quantitative antidote that investors can administer to neutralize their often emotional ‘availability bias’ assessment of the future.” Applied to an individual company, the chart would equate to the market-price-to-sales-per-share ratio, a rough and ragged secondary valuation technique.

By adding Chart 2, which we believe to be complementary, in the 2004 report, along with using the same denominator, gross domestic product (GDP), we are able to examine the association between total debt outstanding to the economy’s capacity to service it and the aggregate market value of all U.S. equity securities relative to the same denominator (*SC*, 197). Finally, the third chart, new this year, depicts the cost of money, as well as the annual rate of increase in the consumer price index (CPI) for the same 80 years. Notice the symmetry between the movement in interest rates and consumer prices. To be sure, correlation is not causation, so, as the story unfolds, I’ll let you decide whether the relationship of Chart 3 is (take your pick) causal, complementary, parallel, reciprocal, or mere coincidence. Intrigued? I am. Then cast your eyes back at the first chart and observe the generally inverse relationship between interest rates and stock prices (and later, you will learn, real estate prices).⁴ When you read the words of Alan Greenspan below, the juxtaposition of these factors and the confusion at the Fed (a likely occurrence at the changing of the guard) as to whether it needn’t worry about asset inflation when its presumed primary obligation is consumer-price stability, will become quite apparent. Combined, the charts make a bold statement about

⁴ Andrew Smithers, who heads Smithers & Co., a London-based firm that provides advice to 80 of the world’s largest fund money-management companies (*SC*, 29), notes that interest rates and the stock prices rose during the postwar expansion between 1948 and 1968. While interest rates tripled to 6%, economic growth trumped the escalating cost of money, in this writer’s opinion.

what appears to be an “inexplicable complacency” toward risk by so many—those words from an ever-more-incredulous and equally astute observer, Jim Grant (*SC*, 206), in the January 13, 2006, issue of *Grant’s Interest Rate Observer*.

For those who would like a thumbnail refresher on the denominator, the statistics for GDP are computed as part of the National Income and Product Accounts. Like business accounting, national-income accounting uses a double-entry approach. Because each transaction has two sides, involving both a sale and a purchase, there are two ways to divide GDP. One can look at the expenditures for output, or one can look at the incomes that the production of output generates.

Updated information on both charts is calculated as follows. The aggregate-market-cap-to-GDP ratio uses the Wilshire 5000 index (actually 6,300 publicly traded, domestically domiciled companies) as the numerator and the trendline estimate of GDP for 2005 based on reported 2004 data. The numerator is \$15.8 trillion and the denominator \$12.5 trillion, indicating a ratio of 126%.⁵ We consider this information to have a high degree of accuracy.⁶

More problematic is the ratio of total debt to GDP. We don’t believe that a precise number can be provided because of the existence of the double counting of real estate-related debt when viewed at a point in time. For example, a homebuyer mortgages his new home at

⁵ If the ratio eventually regresses to the mean, or less, a variety of combinations could bring about that end. The reader is encouraged to think about what they might be. The index market value reached its peak in the spring of 2000 at \$16.6 trillion and fell to a low of \$9.7 trillion just before the latest Gulf War in the spring of 2003. Over half its stellar recovery to \$15.8 trillion, only \$0.8 trillion short of its all-time peak, occurred in 2003. In the meantime, GDP increased from \$9.8 trillion in 2000 to \$12.4 trillion (estimated) in 2005. Don’t get too comfortable.

⁶ To accommodate index funds, the Wilshire 5000 (owned by the Dow Jones Company), like the S&P 500, has reduced the number of shares used in calculating the market capitalization. Those shares not likely to be traded—like Warren Buffett’s 32% holding of the Class A shares of Berkshire Hathaway—will be excluded. The so-called “float,” those shares always theoretically available for sale, will be multiplied by the price to get the index value. As of December 31, 2005, the float-only index value was \$1.4 trillion less than the total outstanding shares index. While I understand the practical aspects, I think this reasoning is cockeyed, and the end result will never be precise. We’ve encouraged them to continue publishing the aggregate data.

the local bank. The bank sells the mortgage to, say, Fannie Mae, a GSE (government-sponsored enterprise) commissioned to make more credit available for housing, which issues an equivalent amount on bonds to finance the purchase. The result is that there's one home creating two debt instruments: first, the homeowner's mortgage, which is counted in the total of household debt, and second, the amount of bonds Fannie Mae sells to finance the purchase of the mortgage from the originating financial institution, which is also counted in total debt outstanding.

Returning to the home-mortgage example and carrying this thought full circle: When the bank sells a mortgage to Fannie Mae it's then free to make another loan, having sold the mortgage loan that was on its books. One gets a different perspective when viewing the goings-on as a time series. Commercial bank assets have continued to grow in spite of selling loans, such as the one mentioned above—and, as discussed in detail below, their quality is deteriorating. Likewise, Fannie Mae's (and other GSEs, such as Freddie Mac) assets grew unabated until recently, and their quality has become sufficiently suspect that the company hasn't filed a 10-K since 2003. Fannie Mae owns \$1 trillion of these mortgages as assets, financed largely with borrowings and only a sliver of equity. If the Fannie Mae folks choose not to hold a loan, they can pool mortgage loans together into a mortgage-backed security (MBS); put a guarantee on it; and sell it to a third party—such as a mutual fund, a pension fund, or an insurance company. These pass-through securities can become quite esoteric. A “CMO” or “CDO” is more “derivatives like,” just as a “jump Z,” heavy structured finance, is much more mysterious than the GNMA (Government National Mortgage Association). (I don't speak of these instruments firsthand. My friend Mike Stout,⁷ mentioned earlier, is a virtual fountain of information on the inner workings of this arcane branch of finance.) In the latter case, the institutional investors end up

⁷ Mike Stout, a 17-year Wall Street veteran, was a managing director with Donaldson, Lufkin and Jenrette, 1991–97. In '95 Stout oversaw DLJ's Residential Real Estate Group, which included sub-prime mortgage originations, structured finance, and securitization, among other related activities. Stout also created and managed a sub-prime default servicing operation that sub-serviced \$3.5 billion of sub-prime mortgages. He was a Baker Scholar at DePauw University and earned his MBA in finance at Indiana University where he was inducted into *Beta Gamma Sigma*.

owning the MBS, which gives them a claim on the underlying principal and interest stream of the mortgage. Thus, it's the cash from the pension fund, mutual fund, etc., which is going into the housing market, having been drawn into that market by Fannie Mae and Freddie Mac as issuers of MBS securities.

Approaching the debt issue from a different angle, think about what the rising debt-to-GDP ratio implies in terms of the uses to which that debt is put. It would appear that increasing amounts of debt are being incurred to finance activities that don't have the same economic impact as they did in the years leading up to the 1980s. Economists call the bang you get from the economic buck the "economic multiplier."⁸ This debt-financed spending doesn't become a problem until the debt-service requirements (the combination of interest expense and principal amortization) overwhelm the economy's capacity to meet that obligation. Using an example that might not be as extreme as you might think, imagine if debt service rose to 10% of debt outstanding. At the current debt-to-GDP ratio, a crippling 30% of national income (the other side of the GDP equation mentioned above) would be dedicated to debt service. If we were a closed economy, we would claim "no harm, no foul"—it's merely internal wealth redistribution among American lenders and borrowers. Unfortunately, more and more of those claims are being held by foreign entities—IOWs piling up around the world. It is reasonable to ask, "How, exactly, will these chickens come home to roost?"⁹ As for

⁸ Those interested in the theoretical "economic multiplier" may want to refer to a basic economics textbook. Assuming the reader has some rudimentary understanding of the concept, we will argue that different types of investment spending have different multiplier effects on overall economic activity and, ultimately, national wealth. To use a simple if not silly example, assume an individual borrows \$100 against his home equity. He walks out of his bank with a crisp \$100 bill, rolls it into a cigar-like shape, puts a match to it and enjoys an expensive smoke. Total debt outstanding increases by \$100, with absolutely no offsetting asset being created to eventually retire it. Lest you think that example absurd, the massive overspending by the telecommunications industry in the late 1990s on, for example, utterly redundant transoceanic fiber-optic cable, led to massive asset write-downs and eventually to the bankruptcies of WorldCom and Global Crossing. In this case we're talking billions of dollars going up in smoke. As for the unfortunate investors, let's just say they are "underwater."

⁹ Not long before this report went to the printer, *The Reno Gazette* (AP) reported on a talk Warren Buffett gave to the students and faculty at the

those who are still concerned about double counting, would a debt-service ratio of 20% be that much more tolerable?

No matter how you slice it, there is an incredible amount of debt outstanding in this financial economy. I shamelessly resurrect a favorite quote from Benjamin Graham to conclude the point with a simple analogy: “If you see that a man is very fat, it makes little difference that you are able to precisely calculate his exact weight to enhance your conclusion.”

Using both tools, Marc Faber¹⁰ has pointed out the fundamental difference between what he describes as a “real” economy, e.g., 1982, and what he sees as the “financial” economy of recent years. Paraphrasing Faber in *Speculative Contagion* (page 198), I wrote:

In a real economy, the debt and equity markets as a percentage of GDP are small and their principal

University of Nevada at Reno on January 16. Obviously, the forum was also a bully pulpit. Addressing my rhetorical question about IOUs, Buffett got right to the truth and the consequences: “Right now, the rest of the world owns \$3 trillion more of us than we own of them ... In my view, it will create political turmoil at some point ... Pretty soon, I think there will be a big adjustment,” he said without elaborating. He went on to observe that the trade deficit is running at \$2 billion per day. “We are like a super-rich family that owns a farm the size of Texas. You sell off a little bit of the farm and you don’t see it,” he said. Without specifying a time frame, Buffett warned, “If we don’t change the course, the rest of the world could own \$15 trillion of us. That’s pretty substantial. That’s equal to the value of all American stock,” as is mentioned earlier in this report. Buffett said he expects the trade deficit to top \$700 billion this year. That compares to a federal budget deficit that’s been running at about a \$400 billion rate, a burden that is not so threatening, says Buffett. While it’s theoretically possible that foreign interests will eventually own all U.S. corporations, I consider it a political impossibility. At some point Congress would impose limitations on foreign ownership of U.S. equities. If all of that comes to pass, the end game seems obvious ...

¹⁰ Dr. Marc Faber was born in Zurich, Switzerland. He was schooled in Geneva and Zurich and finished high school with the *Matura* (a small group that tested as gifted). He studied economics at the University of Zurich and, at age 24, obtained his PhD in economics *magna cum laude*. Since 1973 he has lived in Hong Kong. From 1978 to February 1990, he was managing director of Drexel Burnham Lambert (HK) Ltd. In June 1990 he set up his own business, Marc Faber Limited, which acts as an investment advisor, fund manager, and broker/dealer. He is well-known for his *Gloom, Boom & Doom Report*.

function is to serve as the conduit through which savings flow into investments. In a financial or easy-money economy (often encouraged by both low-cost equity and debt capital), the total market value of the equity market is far larger than GDP—and not only channels financial resources into economic investments, but the massive overflow gives rise to colossal speculative bubbles.¹¹

Please refer to the two sources listed above for a more complete explanation of the historical significance of the charts. And examine them carefully at the outset and turn back to them frequently as you make your way up to the peak where the view is unobstructed.

My Bostonian friend, Frederick J. Sheehan, in his bold and brash “An Investor’s Manifesto” (April 2003), pointedly presents the perfect-storm scenario. “We are living at the long end—if ‘end’ it is—of gross financial imbalances. Most people don’t understand this, or won’t acknowledge it. This fog of extremity and perplexity is a financial maelstrom that has been building for a generation.” We don’t attempt to forecast the unknowable, nor should we discount it offhandedly as though it were not a possibility, however remote. Will we look back 10 years from now and call this the “perfect storm”?

The primary force behind secular cycles that can (and, as you can see, often do) last for years seems always to be the same: how the human mind works. Secular bull and bear cycles begin slowly because there’s always a predisposition in people’s minds to think the existing conditions will be permanent. It is thus without apology that I patiently reinforce the point through repetition. It was the Dalai Lama

¹¹ The powerfully deflationary entry of China full-scale into the global economy has helped to put a lid on the prices of many consumer goods. How quickly, you might ask? The title of Sam Walton’s best-selling biography, published in 1992, was *Made in America*. For years that was the slogan prominently posted on the side of company trucks. Today, according to one source, roughly half of the non-food items sold in Wal-Mart stores are made in China; Wal-Mart is China’s seventh-biggest trading partner; the others are *countries*. As Adam Smith correctly predicted, where there is free trade, there will be no (consumer) inflation. Yet with relatively tame consumer prices, with so much money sloshing around in the financial economy, far more than was needed in the normal course of business, the price of something had to rise. See Alan Greenspan’s comments below on “asset price inflation.”

who displayed his wisdom of the way the world works when he observed, “I learn as much from a turtle as from a religious text.”

The Boys Who Cried Wolf—and How Our Fiduciary Duty Trumped Antipathy

Before we begin this journey, I must confess to finding my uncomfortable self in a state of dynamic tension as I began this essay, caught in a tug of war between antipathy on the one hand and fiduciary duty on the other. As for the antipathy, it reflects a natural aversion to dealing with things or events unpleasant. The consequences of *The Perfect Storm*, as vividly portrayed in the gripping 1996 novel (and less evocative movie) by Sebastian Junger, are almost too terrifying to recount. The recent swamping of New Orleans as powerful Hurricane Katrina overwhelmed the levees that stood as the fragile fortress between the city beneath the sea and the Gulf’s waters, was far greater in its consequences—and equally powerful in the emotions it has been eliciting as the media, almost like an IV drip, steadily pumps the disquieting images into our subconscious.

Regarding fiduciary duty, as wealth managers for people we know as friends, it is our obligation and mission to keep our eyes on the barometer and scan the horizon for storm clouds, however far away, whose potential for widespread financial and economic damage may not be commonly understood. Moreover, we must stand vigilant, knowing that even if they hit our shores the probability is low that they will overcome embankments that the Federal Reserve and a host of other agencies have erected. Remember “Pascal’s Wager” ... Recently bowing to Pascal, obfuscatory Alan Greenspan, who recently departed as the world’s most widely recognized and least understood central banker, appeared somewhat out of his precise probabilistic paradigm when he stated a year or so ago that the consequences of certain risks, despite their low probability of occurring, are so dire as to require disproportionate diligence on the part of those who might prevent their occurrence. Greenspan should know, since his actions (or inactions) contributed to the consequences about which he expresses his typically oblique apprehensions.

If not us, who? As for *ex ante* warnings, sometimes of catastrophic risks, where the uncertainty is resolved only during the course of events, the track record of the economics profession and so-called financial experts has been abysmal. Even worse, those who write laws ... almost without exception close the legal barn door long after

the miscreants are out. Government, in short, is the consummate lagging indicator; the legislative record speaks unequivocally for itself. Remember that the Depression hit rock bottom in 1932, yet Glass-Steagall (1933), the Securities Act (1933), the Securities & Exchange Act (1934), the Investment Company Act (1940), and the Investment Advisers Act (1940) became law to prevent financial and economic trauma *ex post facto* that (as is the nature of such events) would likely not recur for decades. After years of egregious corporate misconduct, the onerous tax imposed largely on the good guys, the Sarbanes-Oxley Act of 2002, made its celebrated debut. One cynical but sound CEO summed it up succinctly: “As a general rule of thumb, any bill that passes the United States Senate 97–0 is probably a horrible idea.” A host of new SEC rules and regulations followed mutual-fund and investment-advisor malfeasance. The long arm of ludicrous law reaches all the way to MCM. If we took the advice of advisors, we would hire a lawyer as our compliance officer. Maybe we could do society a favor by recruiting a tort attorney, as these individuals seem to be in ample supply (and demand!). Compliance with the laws and the rules is an Adam Smith-type cultural imperative: It’s hardwired into the way we think about things. Will an in-house policeman make us any more vigilant? It’s a no-brainer to forecast that there will be a host of new regulations and/or laws restricting the behavior of the 10,000-plus hedge funds and funds of funds, the largely unregulated repackaged replicas of the investment trusts of the ’20s (a virtual invitation to fraud and deception), once competition drives more of them over the ethical and, eventually, legal edge.

In 1998 and 1999 I found scant company among economists, the financial media (most particularly tout television), and market strategists as I sought the company of like-minded thinkers. It should be noted that Edward Chancellor, Marc Faber, Jim Grant, Fred Sheehan, Robert Shiller, and Andrew Smithers were among the notable exceptions. To the contrary, the vast majority of those who were in positions where they could have made a difference maintained a shameful silence, either because they didn’t know or were too conflicted between doing what was right and what was larcenously lucrative to speak. Brings to mind the question about the difference between ignorance and apathy, along with its riposte: “I don’t know, and I don’t care!” How trite and irrelevant to speak up at such a time—as the lyrics of Neil Diamond’s “Forever in Blue Jeans” must have sounded at the time.

Money talks
But it don't sing and dance
And it don't walk
And long as I can have you here with me
I'd much rather be
Forever in blue jeans.

A post-Enron *Time* magazine cover story by Daniel Kadlec, “You’re On Your Own, Baby,” advised, “[C]hoice [in this wobbly-kneed experimental age in self-determinism] now means personal responsibility for everything from retirement funds to health care ...” The risks of inaction or unwise action are rising, even as many of the *professionals* on whom we would like to rely for guidance are proving silent, untrustworthy, and even corrupt.” Those are fightin’ words, a challenge to redouble our resolve to be worthy of your trust. At MCM we’ll continue wearing shirt and tie, but in terms of ethical tenor, our reputation and your financial future rest on your assessment of our commitment to be “forever in blue jeans.”

A Pundit in Bear’s Skin?

Before continuing, I must attempt to dispel a commonly held myth: financial market or economic “bears” are @#%+* ... people (replace the symbols with the first and most disparaging word that comes to mind!). John Kenneth Galbraith had the following to say about those who had the temerity to utter *caveats* when the “wonderful process of enrichment” was under a full head of steam (*SC*, 202). “There are, however, few matters on which such a warning is less welcomed,” he wrote. “In the short run, it will be said to be an attack, motivated by either deficient understanding or uncontrolled envy, on the wonderful process of enrichment. More durably, it will be thought to demonstrate a lack of faith in the inherent wisdom of the market itself.” The 19th-century philosopher Arthur Schopenhauer, who contended that the world was not a rational place, said that all truth passes through three stages. “First, it is ridiculed; second, it is violently opposed; and third, it is accepted as self-evident.” Of course, truth must be proven or at least accepted, possessing the quality of being in accord with fact or reality. As for falsehoods, before they are disproved they are subjected to the first two stages of which Schopenhauer writes. Duty leaves us no choice. If the future proves us

misguided, we will have cost you opportunity. If we are closer to the truth than even we would like to be, we may have protected your capital and, more importantly, your capacity to venture forth into an always uncertain investment world in the future, perhaps when low hanging fruit is begging to be picked ... Those with whom I maintain regular contact—folks who sometimes carry an umbrella to work on sunny days as I did in 1998 and 1999—are almost without exception superbly intelligent, curious, and independent thinkers; quiet and levelheaded; and affable, almost apologetic for the news they “bear.” None, I might add, have growled (although several have groaned) in my presence! As for the zealots, who may better fit the commonly held characterization of “bears,” they bear no resemblance to the enlightened folks with whom I collaborate.

‘The Perfect Storm?’ Why Such a Provocative Title?

Perhaps it’s to shock all of us out of our lethargy, to put us on alert for the possible confluence of disparate forces that *could* put the unprepared in harm’s way. Most of us have a vested interest in the *status quo*; our anchors are set firmly in the present, and we don’t typically like to be disturbed by (and seek to avoid or even deny) uncertainty or change. Furthermore, very few, if any, of us are wholly rational, that capacity compromised by mental shortcuts and biases—many subconscious—that impede the faculty for reasoning through to purely logical conclusions. If there is hope, it comes from knowing the enemy that lies within, so that, thus fortified, we can face the enemy from without untrammelled by such emotions as greed or (later) fear. It’s a rare world, lest we forget, where you can have your Kate and Edith too—the country song of that title notwithstanding.

The Blossoming of the Financial Economy

The Cataclysm in the Creation of Credit

Before we launch into our examination of the causes and effects of the tidal wave of domestic (and global) credit expansion, during which the “real” economy morphed ever so insidiously into the “financial” economy (as stated previously) and its possible (if not probable) end, let’s begin our trek up the mountain by trying to define the nature and scope of the perceptions of the genie now outside the bottle. I use the plural—not because all perceptions are identical,

despite the same, reasonable evidence, but because different interpreters are often intellectually and experientially ethnocentric.

Three Wise Men Opining and a Partridge in Therapy ...

As this Old World game bird stands astride the ever-widening “parted ridge” wondering just how far this metaphorical body’s legs can stretch, let’s turn to the Three Wise Men in this “fowl” parody on the Twelve Days of Christmas. In point of fact, there’s more truth to that farcical statement than meets the non-liturgical eye. The Twelve Days of Christmas in the Western church tradition begin on December 25 and end with Epiphany 12 days later, when the Three Wise Men present gifts to the young Jesus. In secular terms, let’s hope there is an epiphany (lower-case), a sudden manifestation of the essence or meaning of what in the world is going on, couched in the words that follow.

From the relatively lowly trenches, U.S. Comptroller of the Currency John Dugan, who attempts to contain the conduct of all national banks within the confines of prudent behavior (who seem quite incapable of circumspection themselves), calls this the “peak of the credit cycle.” It’s the disregard—or at least the lack of appreciation for the consequences of unchecked risk, a potentially dangerous mindset by both the lender and borrower alike (and not the flood of credit itself)—that causes Dugan to point to what’s going on as “the peak.”

Next, we look up at the ivory towers. Dr. Ben Bernanke, 52, hailing from the tenured cloister of Ivy League Princeton in the New Jersey city by that name, 185 miles from the Beltway where he is still a certifiable wet-behind-the-ears new kid on the block, by a stroke of George W’s pen, now occupies what has become the office of the second-most powerful person in the world. Bernanke wrote recently that a “global savings glut” is not worrisome in and of itself, nor are its consequences for those who are glut-tonous, although he would prefer that the roles of the mature industrialized countries and the emerging countries be reversed. In an August 2005 speech, outgoing (now that’s a stretch) veteran Fed Chairman Alan Greenspan revealed the uneasiness born of long experience¹² where visions of the future are

¹² Despite the perils of forecasting, Greenspan remains unrepentant. In a public speech on March 6, 2000—four days before the all-time peak in the Nasdaq index and the subsequent meltdown—he was extolling the virtues of

regularly compromised away. He lamented that Fed forecasts and policies regarding global economic activity were increasingly driven by asset price changes and the liabilities that finance them. An apparent *non sequitur* to his successor, Greenspan continued his reasoning, noting that hyper-inflating asset prices often have unavoidable attendant risks. Should the newly abundant liquidity (the fuel for asset price inflation) disappear as “readily” as it materialized, “any onset of increased investor caution elevates risk premiums and, as a consequence, lowers asset values and promotes the liquidation of the debt that supported higher asset prices. *This is the reason that history has not dealt kindly with the aftermath of protracted periods of low-risk premiums*” [italics added]. “Risk premiums” will be dissected and discussed below.

So there you have it: cameos from the trenches to the towers of the high and the mighty. The Fed chairman designee, perhaps no student of behavioral economics, is disinclined to factor non-quantifiable human inclinations into his forecasting calculus. The gatekeeper of a herd of recalcitrant bankers is trying to rein in an almost predictably episodic indulgence in risky behaviors for which there is no rational justification in terms of the end game. The ex-Fed chair is saying farewell by cryptically pointing out the not insignificant consequences of a change in the highly unpredictable propensity of investors to assume or avoid taking a flyer. More to follow below from this same cast ...

‘Easy Money’

Money (and its use/abuse) is one of the most ubiquitous topics in the Bible. Not surprisingly, it also appears regularly in the lyrics of country western and blues music. While Billy Joel’s “Easy Money” is better known, I think the chorus from singer/songwriter Todd Snider’s ditty by the same name strikes closer home.

*He wants that easy money
It's sad but it's true
Everybody wants the most they can possibly get
For the least they could possibly do
They want that easy money
I don't understand*

the new era in technology. In 2004 he sang the praises of adjustable-rate mortgages three months before the Fed began jacking up the Fed funds rate.

*If you scream and you plan you can't get your hands
On no easy money.*

Way back in September 1999, Doug Noland¹³, who writes “The Credit Bubble Bulletin” weekly for David Tice & Associates, gave a speech at the Credit Bubble Symposium. Having been a fan of Doug’s writing, as well discussing the state of affairs with him on the phone on a number of occasions, I find him to be extremely well-read, astute, rational, and thus justifiably firm in his convictions. In that speech he made a statement with which I fully agree: “The Federal Reserve ... has lost control of the financial system.” As a result, we are experiencing an “unprecedented explosion of credit, particularly financial credit—or borrowings made to finance the holdings of securities—leading to endemic distortions throughout both the financial asset markets and, importantly, the almost forgotten real economy.”

Excessive credit creation, beyond what the economy needs to finance a sustainable pace of real investment spending, interferes with the market’s pricing mechanism, leading to pricing bulges not related to the underlying value of the asset, resulting in misallocation of resources and a misaligned economy or, as noted earlier, Marc Faber’s “financial” economy.

The story of how we migrated over the decades up the risk ladder from the hard-money gold standard (Greenspan’s sentimental but politically untenable favorite), to fractional reserve banking, to the completely unrestrained financial system in which we now find ourselves ... reads like an intricate novel with more plots, subplots, and characters than most writers could imagine. With the bailout of the banking system in the early ’90s, the rate of change turned

¹³ Doug Noland, financial markets strategist at David Tice & Associates, has 16 years of investment experience as a trader, analyst, and portfolio manager. His analytical focus has been on the financial system and the crucial role of credit. For three years he was an analyst and contributing writer for *The Richebacher Letter*, an international economics and financial markets newsletter. Prior to his work in investments, Noland worked in the treasury department at Toyota and was a Price Waterhouse CPA. He graduated *summa cum laude* from the University of Oregon and received his MBA from Indiana University.

exponentially upward. One can take a crash course in that period's history by studying Fannie Mae from 1990 to the present to appreciate the enormity of the systematic liberalization that has insidiously ripped the financial-services industry from its conservative moorings. The trillion-dollar mortgage giant is in several respects the poster child of the era of breakneck asset and liability growth, with little or no regard for nurturing the equity-capital base that stands as the only buffer between asset deterioration and financial Armageddon—unless the ultimate guarantor, Uncle Sam, elects to invoke the “too big to fail” doctrine.

While rarely discussed, the two sides of the balance sheet differ greatly in character, even though double-entry bookkeeping requires that they sum to the same total. The value of assets other than cash is at best an approximation, whereas most liabilities are precise to the second decimal point. Shareholders' equity is the margin of safety for those who hold contractual IOUs issued by the entity. (Space limitations, to say nothing of pushing your tolerance to the limits, prevented me from including a 10-page summary that I penned on the rise and fall of Fannie Mae!) To those who find the unfolding account of the financial economy intriguing, I say the following with the utmost seriousness: “If you don't know from where we've come from, you will know relatively little about where we are.” Terms (to name just a few) like the “carry trade,” asset-backed and mortgage-backed securities (structured finance), hedge funds, all manner of derivatives, monetizing mistakes, and payment-option ARMs (adjustable rate mortgages) are among the buzzwords of the mutating financial economy. If you don't know them, please read on.

Continues Noland: “And with an asset bubble creating the perception of endless wealth, it is forgotten that real economic wealth is created only through saving and sound investment—not by borrowing and consuming, not by massive credit creation and not by asset inflation. Today, credit excesses have fueled overheated domestic demand, with an historic consumption binge feeding both malinvestment and ballooning trade deficits that imperil the dollar.” So much for the good news ...

Fast-forward to April 2005 to an interview of Noland by Kate Welling, the consummate former managing editor of *Barron's*. Noland assesses that the ascendancy of unfettered credit creation has been evolving for more than 20 years. Wily veteran bond guru Henry Kaufman foresaw the sea change in his 1984 book *Interest Rates, the*

Markets, and the New Financial World, stating: “Securitizedizations are the future. Forget bank loan officers. Now we can just package up loans and sell them. Finance is changing.” As but one of many examples, in the process of liberalization to which Kaufman referred, Glass-Steagall was shattered. It was enacted in 1933 by a reactionary Congress and repealed in 1999. After 63 years there was probably no sitting congressman who could remember the nature of the conflict of interest that gave rise to the separation of commercial and investment banks in the first place. Had the Congress of yesteryear been prescient, the law would have been put in place in the mid-1920s. Weakened by loopholes resulting from a relentless barrage of political potshots, its repeal was inevitable—at the very time it probably should’ve been staunchly enforced. Lobbyists are the hired guns for special-interest groups, not all of whose agendas are in conflict with the common good. As for Glass-Steagall, or attempts to thwart the abuse of stock options, in this observer’s opinion the effect on the common good was essentially an afterthought. When the bulls are running the streets of Pamplona, it’s best to stay out of their way.

Adam Smith, so notes Noland, wrote that free-market capitalism is dependent upon its various components working smoothly together, including the financial mechanism (*SC*, v). Should it get out of control the process that normally results in stable prices becomes distorted, and the system itself becomes imperiled. Concludes Noland: “That is what you are observing right now. Nobody has any incentive to slow down this runaway train. Everybody has every incentive to play this game as hard as they can, and it is a self-reinforcing mechanism.”

According to Pulitzer prize-winning author Doris Kearns Goodwin’s *Team of Rivals—The Political Genius of Abraham Lincoln*, it was the 16th president’s “extraordinary ability to put himself in the place of other men, to experience what they were feeling, to understand their motives and desires” that gave him the edge over his three more privileged and accomplished rivals in winning the nomination for president at the Republican National Convention in 1860. Zipping forward 120 years, few readers (let me know if you are an exception) are likely to be aware of the rarely discussed “motives and desires” that were in part responsible for the liberalization of interstate banking laws in the 1980s and the massive wave of consolidations that continues to

this day.¹⁴ What is new in this financial economy is the prevalence of generous stock-option allotments in an industry that heretofore used them rarely, if at all. The first of Gandhi's Seven Deadly Sins, "Wealth Without Work," proved to be no moral obstacle to the allure of "free" money as a major reason why investors have profited so handsomely over the decades from investing in financial institutions, hitching their wagons to the Gold Rush train driven by executives hell-bent on getting rich, as the financial economy came of age. Among the biggest issuers of stock options have been Fannie Mae and Freddie Mac, whose eagerness to acquire home mortgages has backstopped banks in their charge to boost home mortgage and home-equity lending. Surely others besides Warren Buffett must have considered the possible unintended consequences when the larcenous Ponzi scheme reached epidemic proportions? Perhaps they were simply too consumed with their own self-enrichment? History teaches that whenever virtually all the banks run in the same direction to boost loans and profits ... that is when the next disaster will occur. Read on for an inkling of what that might be.

Kate Welling interjected a reference to Karl Marx during the interview, who, she opined, in some sense was right about our economic system: "Capitalism is destroying itself because it has succeeded in utterly divorcing financial markets from their basic economic *raison d'être*."

Dr. Bernanke on Call

Noland quotes from a March 2005 speech by Dr. Ben Bernanke, new Federal Reserve Board chairman: "Over the past decade, a combination of diverse forces has created a significant increase in the global supply of saving—a global saving glut—which

¹⁴ In our analysis of businesses, one of our greatest challenges is to attempt to get a firm grasp of the unspoken, and sometimes subconscious, motives of those on whose desk the buck stops. We define motive as an emotion, desire, physiological need, or similar impulse that incites a person to action. We attempt to search every nook and cranny for anecdotal evidence to confirm or disconfirm our early impressions of motives. Intelligent executives intent on keeping you from the truth can make the job very difficult. On those occasions, admittedly rarer than we would like, when a leader's actions over an extended period of time imply purity of motives, we are enraptured by the fragrance of the "rose among thorns."

helps explain both the increase in the U.S. current account deficit and the relatively low level of long-term real interest rates in the world today.” Although I found Bernanke’s reasoning to be in a theoretical sense plausible, it had the noticeable academic imprimatur of being too neat and tidy for the real world. Noland was not that politically correct! In short, Bernanke concluded that many emerging nations have undergone financial or other crises in recent years that have resulted in their becoming net exporters of capital, whereas the major industrialized nations, excluding Japan and Germany, have attracted those savings and put them to work in the stock market, personal consumption, and real estate investment. The mechanism is much more complex than that just described, but I hope you get the point. Because of mature economies and aging populations in the industrialized countries, the natural flow of savings should be in the opposite direction. Bernanke’s proposals for redirecting the flows appear myopic, in my judgment.

Also, his suggestion that the twin deficits (trade and budget) are only slightly connected appears disingenuous in that it fails to account for the lack of political will that, at least in terms of the budget deficits, must be considered a root cause even to lesser mortals than professors of economics and public policy. Moreover, the technology Bubble and Bust proved that the American capital markets are not as efficient as some might believe in allocating investment dollars to the highest-return projects—but rather, in the opinion of this observer, in this most recent episode in our “financial” economy toward capital-squandering speculative excesses. Further, the spending on consumption and residential real estate, essentially nonproductive assets from a rebalancing of the trade-deficit perspective, will produce little if anything to repay the IOUs that are piling up, plus interest, around the world. Warren Buffett’s earlier sizing up of the implications of the ballooning trade deficit has the same commonsensical quality to it as his capacity to expose the motives behind stock options for what they really are. He also has an uncanny ability to see through the maze of complexity to the threat that derivatives pose to financial stability at the very time when the former chairman of the Federal Reserve Board is publicly heralding their virtues as a means to reduce systemic risk.

Worse, according to Noland, “[A]n evidently large but unknown portion of these IOUs are held—or hedged—by highly leveraged speculators, which potentially creates what Hyman Minsky [the well-credentialed economist and professor who explained, in path-

breaking research, how lending patterns and mood swings can push an economy into speculative booms or steep declines] called ‘acute financial fragility.’

“It was incredibly liberating to shake off the shackles of Regulation Q [the prohibition against Federal Reserve-regulated banks paying interest on demand deposits was repealed in April 2003] to march to the beat of the market, instead of fussy old regulators. But somewhere along the line, the rewards got separated from the risk-taking.” What frustrates Noland “is that no one ever asks, what’s the end game?”

To be sure, as unstable as America’s economic, financial, and political machines might appear to us, they are far superior to many others on the planet. Stability, after all, is a relative term.

Still, Noland’s disturbing reference to the “end game” is a reality that won’t go away simply because we wish it to. In a later disquieting reference to Japan, we’re reminded that low interest rates and easy money are not the only ingredients in this witches’ brew. Japan has been practically giving money away for 15 years to resurrect its ravaged economy, with little success until recently. Absent an occasionally voracious appetite for risk, consumers and businesspeople alike will not take a bite out of the otherwise golden apple of cheap money. In this country, our urge for gratification by “betting the ranch,” to hell with the consequences, remains rapacious ... at least for the time being.

Bernanke Pledges to Be a Greenspan Clone

When President Bush announced the appointment of Ben Bernanke on October 24, the then chairman-designee paid due (or at least the traditional perfunctory) homage to his soon-to-be predecessor: “Our understanding of the best practice in monetary policy evolved during Alan Greenspan’s tenure at the Fed, and it will continue to evolve in the future. However, if I am confirmed to this position, my first priority will be to maintain continuity with the policies and policy strategies established during the Greenspan years.” A scant five months earlier in his “savings glut” speech, Bernanke neglected to mention even once the name of the man who stood impassively on the other side of the president as the announcement was made.

(Don't) Read My Lips ...

Bernanke took office after Greenspan stepped down on January 31. The new Fed chairman had responded November 15 during the Senate banking committee hearings to a question by saying fiscal policy is none of his business. Highlighting their scope-of-responsibility differences, lame-duck Greenspan in a December 5 speech less than a month later continued to harp on an old theme that he has long considered within his purview—fiscal irresponsibility: “If ... the pernicious drift toward fiscal instability in the United States and elsewhere is not arrested and is compounded by a protectionist reversal of globalization, the adjustment process could be quite painful for the world economy.”

In a rambling late-summer speech (August 26, to be precise), “Reflections on Central Banking,” Greenspan, ever politically erudite, continued to narrate his own place in the history books, taking great pains to explain that the Federal Reserve is, metaphorically [my words], no Hercules in battling Hydra, the many-headed monster from Greek mythology. While he applauded the step-up in globalization and the technological changes of the 1990s, he lamented the uncertainty of adjusting to events without the comfort of relevant history as a guide. Macroeconomic management has become a persistent Hydra that simply cannot be eradicated by a single effort. If it was an unlikely *mea culpa* of sorts, rest assured that Greenspan had no intention of laying the blame anywhere but with the system. “I do not intend this brief and necessarily incomplete review of events to illustrate how far we have come or to despair of how far we have to go. *Rather, I believe it demonstrates the inevitable and ongoing uncertainty faced by policymakers.*” Paging Dr. Bernanke ... Please pick up the white courtesy phone. Are you listening, Ben?

According to Greenspan, a risk-management approach has gained greater acceptance in recent years that was initially probabilistic in its design. It quickly evolved to “separate mathematics from intuition,” putting to use the lessons of Bernoulli (1730) and the cleverness of Pascal’s Wager, to which reference will be made shortly. Explained the former Fed chairman: “In the summer of 2003, for example, the Federal Open Market Committee viewed as very small the probability that the then gradual decline in inflation would accelerate into a more consequential deflation. But because the implications for the economy were so dire should that scenario play out, we chose to counter it with unusually low interest rates. The

product of a low-probability event and a potentially severe outcome was judged a more serious threat to economic performance than the higher inflation that might ensue in the more probable scenario.” Now, I note with no surprise, we have probabilities that are modified by subjective judgments about the weight of consequences. As you will read below, Daniel Bernoulli introduced the concept in 1730.

In an observation that strikes to the core of my acute apprehensions (about the reverse wealth effect, asset bubbles, and the “financial” economy), Greenspan chose his words carefully when he said: *“The determination of global economic activity in recent years has been influenced importantly by capital gains on various types of assets, and the liabilities that finance them. Our forecasts and hence policy are becoming increasingly driven by asset price changes”* [emphasis added]. The Hydra sprouts another head. Continued Greenspan: “The steep rise in the ratio of household net worth to disposable income in the mid-1990s, after a half-century of stability, is a case in point. Although the ratio fell with the collapse of equity prices in 2000, it has rebounded noticeably over the past couple of years, reflecting the rise in the prices of equities and houses.”

Searching for an answer as to whether the currently elevated level of the wealth-to-income ratio will be sustained in the longer run, he reasoned (yielding to his obligatory optimistic bias) that “the growing stability of the world economy over the past decade may have encouraged investors to accept increasingly lower levels of compensation for risk.”

The cause-and-effect linkage between rising prices of stocks, bonds, and, more recently, homes and consumer purchasing power is obvious. The recently departed chairman again: “The uptrend in prices gave rise to a large increase in the market value of claims which, when converted to cash, are a source of purchasing power. It is the business of financial intermediaries, of course, to routinely convert capital gains in stocks, bonds, and homes into cash for businesses and households to facilitate purchase transactions.”

Greenspan mused aloud in a recent speech:

Thus, this vast increase in the market value of asset claims is in part the indirect result of investors accepting lower compensation for risk. Such an increase in market value is too often viewed by market participants as structural and permanent. To some extent, those higher values may be reflecting the increased flexibility and

resilience of our economy. But what they perceive as newly abundant liquidity can readily disappear. *Any onset of increased investor caution elevates risk premiums and, as a consequence, lowers asset values and promotes the liquidation of the debt that supported higher asset prices. This is the reason that history has not dealt kindly with the aftermath of protracted periods of low-risk premiums* [emphasis added].

In fact, the performance of the U.S. economy in recent years, despite shocks that in the past would have surely produced marked economic contraction, offers the clearest evidence that we have benefited from an enhanced resilience and flexibility.

We weathered a decline on October 19, 1987, of a fifth of the market value of U.S. equities with little evidence of subsequent macroeconomic stress—an episode that provided an early hint that adjustment dynamics might be changing. The credit crunch of the early 1990s and the bursting of the stock market bubble in 2000 were absorbed with the shallowest recessions in the post-World War II period. And the economic fallout from the tragic events of September 11, 2001, was limited by market forces, with severe economic weakness evident for only a few weeks. Most recently, the flexibility of our market-driven economy has allowed us, thus far, to weather reasonably well the steep rise in spot and futures prices for crude oil and natural gas that we have experienced over the past two years.

I have long felt that Greenspan—in offering the above anecdotal evidence to support his contention that our economy’s “enhanced resilience and flexibility” makes it relatively impervious to exogenous shocks—may well have committed what scientists call a Type 1 error where, in this case, he assumed a relationship where none existed.

The retiring chairman appears to be on thin ice when he argues that the economy’s ability to withstand external shocks is based on the aforementioned improved resilience and flexibility. The counterargument is that the economy, and the financial system on which it depends, is ever-more-fragile and rigid, weaknesses bought

off with easy and cheap money, a process that cannot go on indefinitely. The first three events mentioned by Greenspan above never spread to the “real” economy because the floodgates of easy money were opened immediately and forestalled a reckoning. (See Greenspan’s argument on disproportionate probabilities and a doomsday scenario above.) Greenspan has passed not only the baton but the hot potato. Even more to the point is a recent *Economist* cover showing Greenspan dressed in a track suit passing a stick of dynamite to his successor.

Nowhere in his speech did Greenspan mention the “global savings glut” as the primary impetus behind the discontinuities mentioned above, nor, for that matter, did he bring up the name of Ben Bernanke. When comparing the careers of Greenspan, 79, and Bernanke, 27 years younger, it would certainly appear that their time and experience perspectives, if not their ideologies, could be worlds apart. Bernanke’s biography seems comparatively short, having served as an economics and public policy professor at Princeton from 1985 (no doubt relatively soon after he earned his Ph.D. in economics at MIT) until 2002. For approximately three years he sat on the Federal Reserve Board before being appointed to the President’s Council of Economic Advisers last summer. Perhaps they didn’t speak about each other because they barely knew one another—for during their short overlap on the Federal Reserve Board, Greenspan was the king, and Bernanke merely a member of the king’s court.

‘Top of the Credit Cycle,’ Says a Straight-Talking Head Banker

Meanwhile, back in the trenches ...

Several months after being appointed Comptroller of the Currency and a director of the FDIC in August of 2005 by President Bush, John C. Dugan pulled no punches when he addressed the OCC (Office of the Comptroller of the Currency) Credit Risk Conference of his investigators in Atlanta. He began with breathtaking understatement. Calmly and coolly, Dugan observed to his audience of bank inspectors that this is the “top of the credit cycle ... where stresses and weaknesses typically appear, so what we are seeing today should not surprise anyone.” Although new to the post of the organization that supervises national banks, which constitute more than 50% of the assets of the commercial banking system, the

Harvard-educated lawyer is an impressively seasoned veteran from banking's highest ranks during some of its most tumultuous recent times. He is an experienced and wise man with something important to say to lenders, mortgagees ... and, indirectly, to Martin Capital Management and its clients. As a ranking member of the Department of Treasury, 1989–93, Dugan had extensive responsibility for policy initiatives involving banks and financial institutions, including the savings and loan cleanup, Glass-Steagall and banking reform, and regulation of government-sponsored enterprises. In 1991 he oversaw a comprehensive study of the banking industry that formed the basis for the financial modernization legislation proposed by the administration of the first President Bush. In elaborating on the sources of rising credit risk Dugan noted:

One of the striking findings in our 2005 underwriting survey was the breadth and extent to which banks had relaxed their lending standards. With liquidity pouring into the market, we would expect to see increased competition for loan customers—and we are. With competition intensifying, we would expect to see underwriting standards easing—and we are. And we would expect to find emerging concentrations in some loan categories, such as commercial and residential real estate. We are most definitely seeing that.

Because of space limitations, my attentions have been directed primarily at residential mortgage lending. But in his challenge Dugan revealed some disconcerting statistics about commercial real estate lending practices that provide further corroboration of the pervasiveness of the propensity to incur bigger and bolder risks—and add fuel to my fire: “Commercial real estate concentrations are everywhere: in large cities and small, on the coasts and in the heartland. Over the past decade, commercial real estate holdings have become an increasing share of total assets, so that about a third of national banks today have *commercial real estate holdings equal to 300% or more of Tier I capital*. Such concentrations by themselves would warrant supervisory concern under almost any circumstances.” Dugan lamented that in order to attract new business and sustain loan volume banks have bent over backward making compromises and concessions to borrowers along the way, resulting in commercial real estate credits with “structural weaknesses that go beyond discounted pricing.” He warned that the regulators should be concerned when they see policies

governing such metrics as loan-to-value standards and debt-service coverage being relaxed—overlaid by yet an increasing number of exceptions to those more accommodating policies. Dugan worried aloud about lenders routinely adjusting covenants, lengthening maturities, and reducing collateral requirements. He considers these signs of lender laxity as worrisome as the commercial real estate concentrations themselves.

Getting closer to home, Dugan turned to an equally important subject: the rapidly changing market for residential mortgages. “It seems like only yesterday when a 5/1 ARM was considered a risky mortgage product,” he said. The risk, however, consistent with the essay in the 2003 annual report (*SC*, 169) “The Great Abdication of Fiduciary Responsibility: the Defined-Contribution Plan” and downstream in the 401(k) investment management uncertainty from the boardroom to the factory floor, was offloaded onto the borrowers, who, in return for lower initial payments, assumed the interest-rate risk that had previously been borne by lenders. Are you beginning to get some sense of who will be left standing if and when the music stops?

Today’s newfangled mortgage products—interest-only, payment option ARMs, no-doc and low-doc, and piggyback mortgages, to name the most prominent examples—are a different species of animal, with novel and potentially risky features that “dominate the mortgage originations that many of you look at every day.” How prevalent, you ask? By some estimates, interest-only products constituted 50% of all mortgage originations in 2004. In the first half of 2005, IOs (interest-only) started to decline in favor of *payment-option ARMs*, estimated to comprise half the new mortgage originations.¹⁵ And roughly every other mortgage these days is also a “piggyback” (first and second mortgages packaged to circumvent the mortgage insurance requirement when the first mortgage exceeds 80% of the “value,” effectively allowing the buyer to finance 100% of the purchase without insurance). Or it’s a reduced-documentation mortgage—if the borrower meets certain FICO (Fair Isaac Corporation) or other credit worthiness tests—“which [according to

¹⁵ When the consumer chooses not to lock in a fixed-rate 6% 30-year mortgage—the lowest rate in more than 30 years—in favor of a teaser adjustable rate mortgage at 4%, “Something is rotten in Denmark.” As for the quotation, what audacity, you must be asking yourself, for the writer to take issue with Shakespeare’s *Hamlet* earlier and then quote it to make a point here. I plead (parroting the typical Wall Street response): *Nolo contendere*.

Dugan] points to another development that concerns us: the trend toward ‘layering’ of multiple risks. There is no doubt that when several risky features are combined in a single loan, the total risk is greater than the sum of the parts.”

Understanding the Motives for Reckless Real Estate Financing

Fully understanding that “Money makes the mare go,” Dugan matter-of-factly explained why these new products have become fixtures in the marketplace in such a short time. When reading about the “growth at any cost imperative” in the soon-to-be-published “The Earnings Guidance Enigma” MCM essay, file away the following in your synapses: “One reason is that they [the new and higher-risk mortgage products] have helped sustain loan volume that would otherwise almost certainly be falling, *because rising interest rates have brought an end to the refinance boom. More important, lenders have scrambled to find ways to make expensive houses more affordable*—although there’s now a concern that the very availability of this new type of financing has done its share to help drive up house prices, which in turn stimulates demand for even more non-traditional financing.” Please dwell for a moment on the absolute long-term absurdity of the preceding quotation from the hapless homeowner’s perspective. You may find it helpful to turn to the 2004 annual report, recalling the discussion on unintended consequences and how it might apply to the morphing of the mortgage market (SC, 216). For those who don’t have a copy next to the porcelain throne, I’ll summarize. American sociologist Robert K. Merton would surely characterize the mortgage bankers’ scramble to force more loans on the books as “imperious immediacy of interest.” By that he means the lenders want the intended consequence of an action so much that they purposely choose to ignore unintended effects. This pernicious “willful ignorance,” a root cause of unintended consequences, is very different from true ignorance, which would more appropriately characterize the plight of the mortgagee when the “payment shock” chickens come home to roost.

The ARM-ed Robber

To bring this flight of irrationality to a just and proper close, allow me return to a mortgage product mentioned several pages above that represented roughly 50% of originations in the first half of 2005—the payment-option ARM—best described by Dugan himself.

By focusing on decision making at ground level, it's sometimes possible to make sound inferences about what goes on up the food chain.

And then there are payment-option ARMs, which take us to another level of risk. They, too, have their defenders, of course, who argue that such mortgages are little more than the combination of a traditional ARM and a home equity line of credit in a single loan. And, borrowers can easily treat payment-option ARMs in the same manner as a traditional mortgage, simply by selecting the fully amortizing option rather than the minimum payment option each month.

In practice, however, few borrowers treat them that way. Recent studies show that a significant number of borrowers are frequently choosing to pay the minimum amount possible, a payment amount that typically falls short of the interest accruing on the loan. Even more disturbing, this choice does not seem limited to high quality, affluent borrowers who may be using the product as a payment flexibility tool. The research indicates that borrowers at both ends of the FICO spectrum make this choice, with riskier borrowers resorting to it most frequently. Because such minimum payments fall considerably short of the total interest accruing each month, the unpaid interest is added to the loan principal, and negative amortization occurs. Thus, it should come as no surprise that, of the least creditworthy holders of payment-option ARMs, nearly 50% have current balances above their original loan amount.

Depending on how much negative amortization the borrower opts to incur—and, increasingly, borrowers are incurring as much as their lenders allow—payment-option loans expose borrowers to substantially increased levels of payment shock. For example, take a typical payment option ARM at the conforming loan limit of approximately \$360,000, with an initial interest rate of 6%. If the borrower makes only the minimum payment each month for the first five years—initially \$1,200—

the payment shock when the loan begins scheduled amortization will be substantial, even if interest rates remain level. In this example, the minimum payment increases incrementally during the first five years to roughly \$1,600, and then jumps over 50%—to \$2,500—when the amortization period starts at the beginning of the sixth year. And that assumes no change in interest rates. If interest rates should increase just two hundred basis points to 8%, which is certainly not unreasonable to expect, then the monthly payment would nearly *double* on the reset date to \$3,166. By any measure, *that* is real payment shock. Of course, the borrower might be able to refinance, but what if interest rates have increased substantially, or house prices have dropped below the value of the loan? That would put the borrower in a far more difficult position.¹⁶

The failure of the economic and financial professions, including our former central banker Mr. Greenspan, to adequately warn of the stock Bubble was a sin of omission of extraordinary magnitude. Apparently embarrassed by his premature warning in 1996, as a stock market forecaster he slipped into the shadows, taking a much lower profile. Missing the housing Bubble may be an even bigger mistake. As recently as mid-October, Bernanke told Congress that there is no national housing Bubble, even though prices had increased by 25% over the last two years, as quoted in an October 27 article in *The Washington Post*. Bernanke believes that “the Fed’s job is to protect the economy, not to protect individual asset prices,” said William Dudley, chief economist for Goldman Sachs U.S. Economics Research, as stated in the same *Post* article. If weaker housing prices should push the economy toward recession, the awkward truth is that America’s policymakers will have much less room to maneuver than they did after the stock market Bubble burst. Short-term interest rates of only 4.25% leave less scope for cuts. In 2000 the United States had an unanticipated capital-gains-tax-driven budget surplus. Today it has a large deficit, ruling out big tax cuts. Good golly, Ben, I hope you, along with the Senate that recently confirmed your nomination, prove

¹⁶ Greenspan’s recommendation in early 2004 that home buyers consider variable-rate mortgages continues to perplex me.

me a fool. Dear reader, given the aforementioned abysmal reactionary legislative record of the always behind-the-curve lawmakers, and the often reactionary response of the Fed, I'd think twice before placing your bets.

Truth or Consequences?

“Merrily We Roll Along” was the most *apropos* theme song for the long-running TV quiz show hosted by Ralph Edwards in 1951. We might use that jingle today if we added ... “toward the precipice.” There may be an unavoidable aftermath for a system characterized by increasingly relaxed standards of discernment, perhaps dating back to the early 1980s. Perish the thought, but recall the aphorism “once burned, twice shy” as it applies to Japan. When an expansion continues seemingly without end, the progressive propensity to incur ever-more-outlandish risks, the inclination justified by the oxymoronic phrase of secular righteousness, must be the inseparable companion of a world awash with plentiful credit. But flip the coin over and look at Japan after having been “once burned.” Here the “pushing on the string” analogy applies: The very easy money policy that gave rise to the problem has proved to be impotent in solving it absent the above animal instinct, the predilection to embrace uncertainty with verve.

Closer to home, I've written on occasion of listening to stories from those scarred by the trauma of the early '30s who vowed never to take a chance on equities again in this lifetime. If the venturesome spirit wilts from the heat of irrational exuberance, its polar opposite, crippling risk aversion, may suppress creativity and growth just as it has in Japan. By withholding the truth, those in positions of power have stymied the periodic and cathartic, albeit painful (and unpopular in the short run), cleansing process. A dangerous illusion of invulnerability gradually becomes an unintended side effect of a surfeit of financial excesses that, as a result, threaten to destabilize the economy or financial markets. How long would the Depression of the '30s have gone on were it not for tooling up for the demand for war materials by our allies as Hitler, who appointed himself Führer in August 1934, began to inflict his diabolical ideology on Europe. I wonder if this is what Warren Buffett was thinking when he warned: “Unfortunately, the hangover may prove to be proportional to the binge.” I sincerely hope Ben Bernanke, born smack dab in the middle of the Baby Boomer generation of 1947 to 1964, has seen the recently

released movie “Cinderella Man,” directed by Ron Howard and starring Russell Crowe as the early-'30s, Depression-era pugilist James Braddock. While it's a story of one man's uncommon courage and selfless devotion to his family in the depths of the Depression, it's also an account of the widespread suffering in the Hoovervilles all around the country (unemployment reached its peak at 25%) for which the blame for such a pervasive social and economic tragedy can, in part, be laid at the feet of those in high places who should've known better. My wish is that the good Dr. Bernanke understands the enormity of his responsibilities—and that his bedside manner with an ailing patient (named U.S. Economy) at least approaches that of his predecessor.

Bubbles Are Indigenous to the Financial Economy

The lyrics of songs have a way of poetically capturing the feelings of the times. The popular song “I'm Forever Blowing Bubbles” was written in 1919—on the eve of the boom in Florida real estate in the 1920s.

*I'm forever blowing bubbles,
 Pretty bubbles in the air,
 They fly so high, nearly reach the sky,
 Then like my dreams they fade and die.
 Fortune's always hiding,
 I've looked everywhere,
 I'm forever blowing bubbles,
 Pretty bubbles in the air.*

*I'm dreaming dreams, I'm scheming schemes,
 I'm building castles high.
 They're born anew, their days are few,
 Just like a sweet butterfly ...*

John Dugan piqued my curiosity with his bottoms-up look at the banking industry's latest attempt to prove once again that some bankers should simply not be allowed to handle other people's money. If there's good news it's that bankers tend to learn from their follies, so they add a degree of excitement to an otherwise moribund commodity business by making brand-new mistakes in each cycle. As reported on January 9, 2006, banks continue to lobby their regulators

for permission to expand their reach—in this case into the risky non-bank-occupied commercial real estate development arena. Bank of America, *The Journal* hinted, plans a 150-room, 15-story Ritz-Carlton hotel as part of its headquarters complex in Charlotte. The OCC said it approved the plan, “largely because the bank says that eventually it will account for 50% of the annual hotel occupancy.” (John Dugan, console yourself that there is no lasting cure for stupidity.) “It’s a situation warranted by the need for a quality hotel to house bank visitors, clients and vendors adjacent to the headquarters,” said bank spokesman Terry Francisco. For those who have flown into Charlotte, feasting their eyes on the landmark edifice complex known sardonically as the “Taj Ma-Coll,”¹⁷ this latest ritzy concession to the gratification of towering egos should come as no surprise. How much anecdotal evidence do we need to confirm that the financial economy continues to reach recklessly for new extremes of brashness? Will this commodity business continue to be (or ever be) so profitable that the situation is warranted “by the *need* for a quality hotel to house bank visitors, clients and vendors adjacent to the headquarters” at \$600 to \$800 a night?! Who’s kidding whom? What would Abraham Lincoln say about the motives here?! What’s going to happen to the Ritz, and BankAmerica that financed it, when the worm turns?

The 2005 report will reach beyond its traditional grasp by thinking outside the box, which means thinking about the “(housing) box,” to dissect what appears to be a house pricing anomaly. Of what relevance are levitating real estate prices, or the schemes to finance the boom in housing, to a firm that does not invest in other than marketable securities? We believe that the argument we will propose forthwith is an essential part of an interdependent larger mosaic that requires some familiarity with multiple disciplines—and feel we would

¹⁷ Hugh McColl was the mastermind behind the merger in '98 of BankAmerica and NationsBank (renamed Bank of America), the biggest prize in a serial acquisition binge dating back to when McColl took control in 1982. Given the storied history of Amadeo Giannini, the Italian founder of the modern-day Bank of America, who, after the 1906 San Francisco earthquake became a leader of the San Francisco banking community by providing loans to those struck by the disaster, it’s some testimony to the behind-the-scenes persuasive powers of McColl that the headquarters was relocated to Charlotte. Lord Acton is known for the warning, “Power corrupts, and absolute power corrupts absolutely.” The concentration of power in the banking industry will not, I say with nigh-unto-total confidence, end well.

be remiss in not disclosing housing's role in this increasingly interconnected financial and economic world. At the very end of this long report you will once again read the following snippet from the farewell quotation that will bring this circuitous venture to a just and proper close: "... [A] curious mind ... loves diagnoses involving multiple variables."

First, what constitutes a housing bubble? By way of background I return again to Robert Shiller, whose scholarly book *Irrational Exuberance* was published near the market peak in 2000. Capitalizing on the success of his first book, Shiller published *Irrational Exuberance*, Second Edition, copyrighted in 2005. In the latter he has amassed impressive evidence in support of his belief that the recent housing-market boom bears many similarities to the stock market Bubble about which the earlier book was written. To start off, Shiller, rather effectively, in my judgment, dismisses the traditional glib explanations for housing booms, including the shortage of land, rising building costs that depart from past patterns, and low interest rates.

Chart 4

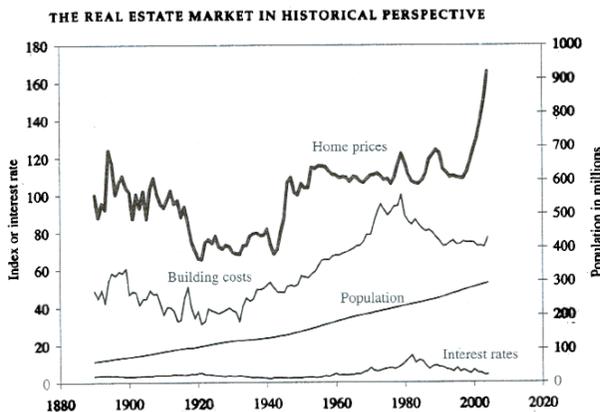


Figure 2.1
**U.S. Home Prices, Building Costs, Population,
and Interest Rates, 1890-2004**

Examining the graphically presented history of *inflation-adjusted* U.S. home prices, building costs, population, and interest rates from 1890 to 2004, it may be possible to make several observations of significance. Beginning with an index value of 100 in 1890, *real* home prices zigzagged gradually downward to about 70 until they shot up to

around 115 during the easily understood post-World War II housing boom, driven by the parents of what was later to be known as the Baby Boom generation. It then remained relatively stagnant until 1997. Without any conspicuous precipitating impetus, and based on more up-to-date data from the Federal Housing Finance Board, house sale prices have risen by 55%, after adjusting for inflation, over the last eight years, compared with an average annual real rate of increase going back to 1890 of just 0.4%. As Shiller's chart indicates, there is no precedent for this sort of run-up in home prices. Any number of commentators have opined on its huge impact on the economy and people's personal finances. The value of family-owned residential housing is estimated at \$18.5 trillion, eclipsing the value of all publicly traded stocks of approximately \$15.8 trillion, with more than \$6.5 trillion of that total coming from the post-1997 surge in existing home prices, as well as new construction.

The spike in real housing prices has led to near record rates of housing construction. At the current rate of housing construction, there will have been 2 million units built in 2005, an amount exceeded only by the 2.4 million annual rate in 1972 (as the Boomers were starting to move out of their parental homes). The pace of housing construction over the last three years is more than 40% higher than the average construction rate in the 17 years prior to the run-up in house prices. It's worth noting that few economists were arguing that there was serious pent-up demand nationwide or a housing shortage due to a lack of construction during this long 17-year period. The average annual rate of housing construction from 1980 through 1996 was 1.4 million units. By some estimates, the housing sector accounts for 25% of all activity in the economy, with construction nearly 5% by itself. Thus, the combination of spending unleashed by the rising prices of existing homes and the economic multiplier-effect stimulus from the multi-year high level of spending for new construction may have propped up an otherwise anemic economy.

According to the Mortgage Bankers Association, inventories of new and existing homes set records for the year ending November 2005, rising 20% and 16.4%, respectively. The month's supply (inventory/sales ratio) for existing homes was 5.0. For condos, inventories rose by 24.8% from a year earlier, with the month's supply increasing to 5.9 from 4.8 a year before. The number of new homes built for speculation (without having a buyer in hand) continued to set records, reaching 500,000 units in October, 4.3 months' supply, the

highest since December 1996. All inventory/sales ratios are skewed upward because of the high rate of sales, which is beginning to soften noticeably.

Not surprisingly, existing home price gains continued to be very strong, according to the MBA. The median price of single-family homes jumped by 16.6% from a year ago—the strongest year-over-year increase since July 1979. Condo prices continued to appreciate more slowly than single-family-home prices—a trend that started in July and reversed four years of faster appreciation—gaining by 15.5% in November. New-home-price appreciation has continued to be softer than appreciation for existing homes. The median price for new homes increased by only 0.9% from a year ago. The MBA again: “The Census Bureau revised new home price data back to June, however, showing a firmer trend in the median house price appreciation in recent months than previously reported.” Longer term, as one might expect from a trade organization, the MBA remains quite bullish. In 2008 it expects the 30-year mortgage loan rate to be 6.1%, slightly lower than it is today. It forecasts the median home price to increase from \$215,000 to \$265,000.

To be sure, most homeowners are sheltered from the risks of rising interest rates on their first mortgages. The proportion of mortgages locked in at a fixed rate has increased from about 60% in 1990 to more than 75% today, no doubt due to the heavy refinancing activity as interest rates fell. However, as noted elsewhere, new buyers have switched toward adjustable-rate mortgages and existing homeowners have moved over to home-equity loans, which are tied to the prime rate. The current spread between 30-year mortgage rates and the one-year mortgage rate of about 230 basis points has a pronounced impact on monthly payments—and a shocking longer-term impact if buyers finance their purchases with one of the popular, exotic, reverse-amortization loans of which Comptroller of the Currency John Dugan speaks disparagingly above.

The problem for the credit markets (most free markets, for that matter) is the marginal buyer. This buyer is the most susceptible to the risks of higher interest rates or a downturn in the economy. The cascade effect could be enormous.

It is important to note that housing is a major source of household wealth. For more than half of all households, their home is by far their largest single asset, and its value is growing. According to the National Association of Realtors, the national median existing

single-family home price was \$215,900 in the third quarter, up 14.7% from the third quarter of 2004 when the median price was \$188,200.¹⁸ Ninety-seven MSAs (metropolitan statistical areas)—two-thirds of the total—experienced price increases greater than the U.S. historical average of 6.4%.

By rough comparison, since the following data represent both rental (one-third) and owner-occupied housing (two-thirds), according to the most recent Census Bureau data the median household¹⁹ net worth in 2000 was \$55,000, with 32% in home equity, 18.5% in 401(k) plans, IRAs and other tax-deferred accounts, 15.6% in stocks and mutual funds outright, and 9% in interest-bearing accounts at financial institutions. We can make certain representations from the 2000 U.S. Census Bureau report about the demographics of those households that rent and those that own. Based on the statistics I studied, the 70 million owner-occupied homes (two-thirds of the total of 105.5 million units for 281 million Americans) are owned by older (87% are age 35-plus) heads of families, empty nesters, unmarried couples, and widows and widowers. As for rental units, no doubt apartments constitute the largest class. Less than 25% of Americans who rent have earned a bachelor's degree, and less than one in 10 have earned a master's degree or higher. Based on the statistics, most rental units appear to be occupied by people who can't afford a home: young people, primarily individuals, and lower-income individuals and families of all ages.

So far, however, long-term interest rates are holding steady. So, is there a bubble? Many say, no, there is no bubble. Until it bursts.

To be sure, price increases differed dramatically from region to region, or city to city, depending on incomes and desirability. In Florida, California, Nevada, Hawaii, Maryland, and Washington, D.C., the average price rose more than 20%. And in Palm Beach County, Florida, the median price of an existing home shot up 35% in just the

¹⁸ The distribution of wealth in the United States has a large positive skew, with relatively few households holding a large proportion of the wealth. For this type of distribution, the median, the mid-point of the sample, is the preferred measure of central tendency because it is less sensitive than the average (mean) to extreme observations. The median is also considerably lower than the average—and provides a more accurate representation of the wealth and asset holdings of the typical household. For example, more households have a net worth near the median of \$55,000 than near the average of \$182,381.

¹⁹ Household includes rental and owner-occupied housing.

past year. Areas where job growth is strong or the weather and amenities appeal to retirees seem to be doing the best. Rust Belt cities are ... well, rusting. Not surprisingly, then, it's a buyer's market in South Bend-Mishawaka, Indiana, according to the National Association of Realtors data. The median single-family house price is \$101,600, up 3.1% in the four quarters ending September 30, 2005. The Fort Wayne area was \$106,000, rising 6.8% over the last year. Among many other areas where housing prices have been comparatively low and growing little are Danville, Illinois; Elmira, New York; Decatur Illinois; Topeka, Kansas; and Youngstown, Ohio. The "hot spots" in terms of price appreciation the last four years were Cape Coral/Fort Myers where prices have more than doubled to \$277,600 and appreciated 42.5% last year alone. In fact, price increases in Florida generally exceeded 30% statewide for the 12 months of 2005. Honolulu also doubled to \$611,000, with a 31.1% rise last year. The same metric for San Francisco-Oakland areas is an astounding \$726,900, although the rate of growth in price increases slowed to 11.7% last year. Los Angeles and surrounding areas was \$553,200, rising another 22.3% in '05. The Northeast also is strong. Housing prices in Washington, New York, and Boston—followed by the rate of increase for the last four quarters—are: \$441,400 (26.3%); \$533,600 (16.2%); and \$430,950 (5.8%).

Shiller contends that after the stock market Bubble burst the asset of choice for channeling much of the available liquidity coursing through the financial economy was housing, resulting in surging real estate prices domestically and around the world. He thinks the consequence will be declining home prices for years to come.²⁰ While certainly no apples-to-apples comparison, *The Economist* notes that Japanese property prices have fallen for 14 years in a row, by 40% from their peak in 1991, and consumer spending has been weak. *The Economist* concludes: "Americans who believe that house prices can only go up and pose no risk to their economy would be well advised to look overseas."

While we Americans are most interested in the surge in house prices in certain regions of our country, *The Economist* pointed out in

²⁰ Shiller's comprehensive and exhaustive study of the real estate market from a historical perspective is only superficially summarized in this report. While every effort was made to condense his work without altering his conclusions, those interested in more detail are encouraged to refer directly to the book.

June that the flight of fancy is global. The current worldwide boom in residential real estate prices is “the biggest bubble in history,” according to a disturbing new report in the esteemed biweekly British magazine with a global perspective:

The International Monetary Fund analyzed home prices in a number of countries from 1970 to 2001, and found 20 “busts”—when real prices fell by almost 30%. All but one of those busts led to a recession. The price of a home should reflect the future benefits of ownership, in the form of rental income for an investor or rent saved by an owner-occupier. When the price-to-rent ratio is high, property is overvalued.

House prices in relation to rent have hit all-time highs in the U.S., Britain, Australia, New Zealand, France, Spain, the Netherlands, Ireland and Belgium.

In the U.S., the ratio is 35% above its 1975–2000 average. A drop in home prices is more likely today than after previous booms for three reasons, according to *The Economist*: Homes are more overvalued, inflation is much lower and many more people have been buying homes as an investment.

Consumer spending and residential construction have accounted for 90% of the total growth in the American GDP over the last four years, and more than 40% of all private-sector jobs created since 2001 have been in housing-related sectors, including construction and mortgage brokering.

The common impulse in these episodes of exaggerated and widespread exuberance—near or far, tangible or intangible assets—according to Shiller and the undersigned, is the apparent willingness of individuals to surrender their semi-rational inklings to the impulsive, agitated, and often reckless will of the crowd, which falls under the purview of the relatively new science of behavioral economics in which I am (and have been for years) a staunch believer (*SC*, 157).

If Housing Prices Roll Over

The economic consequences of deflation in the housing Bubble, should it occur, may prove to be as misjudged and unanticipated as to its repercussions as was the (relatively benign) economy's reaction to the most recent stock market swoons, those of October 1987 and the collapse of the Nasdaq stock Bubble in March 2000. It is my contention that Greenspan may have drawn a faulty conclusion (see pages 43–45 above) in implying that the economy, because of newfound “resilience and flexibility,” is no longer easily derailed. As noted by Greenspan earlier, the steep rise in the ratio of household net worth to disposable income beginning in the mid-1990s, after a half-century of stability, has had a salutary effect on consumers' propensity to spend. *A central thesis of this essay is that a diminution in that ratio is likely to have a more deleterious effect on the economy if the shrinkage in the numerator is predominantly from the decline in the value of one's home as contrasted with one's 401(k) plan or other portfolio of marketable securities.*

First, there's the matter of financial leverage. Unjustifiably high financial leverage has been the cause of more investment failures than any other variable. It allows you no wiggle room, no slip 'twixt the cup and the lip. For purposes of comparison, the typical homeowner's marketable securities portfolio is not financed with borrowed money. New York Stock Exchange Member Firms Customers' Margin Debt of \$212 billion as of October 2005 was a mere pittance relative to the total value of all U.S. stocks, which is estimated at \$15.8 trillion at year-end.²¹ By stark contrast, thanks to the panoply of creative real estate financing options discussed above, the surge in prices since 1997 has converted homes into two-, three-, or four-bedroom ATMs. Homeowners use the equity in their houses to

²¹ Up from \$130 billion at the market lows in the fall of 2002. The New York Stock Exchange Member Firms Customers' Margin Debt is a highly reliable coincidental indicator for stock prices as a whole. Moreover, don't take this relatively smallish number lightly. As discussed later in the section on housing, it's the marginal buyer or seller who sets the price. Those speculators, therefore, who have used margin accounts to leverage their returns are likely to exacerbate a market sell-off as they respond to margin calls. Visit the New York Stock Exchange's Website, NYSE.com, for details. For those interested in history, compare today's stock margin requirements with those of the late 1920s. Leveraged speculation then was in stocks; today it's in real estate.

pay off credit card debts (home-equity loan interest rates are much lower and are deductible for tax purposes) and to finance personal-consumption expenditures at a time when real earnings growth has been negligible. By some calculations, roughly 60% of consumer spending is financed through those down-home ATMs. As for the other newly created jobs, they're concentrated in the likes of McDonald's, KFC, Starbucks, Wal-Mart, temporary and contract jobs, and those consumer-unfriendly security jobs in airports and office buildings. In a June 16, 2005, article, *The Economist* averred that, as a result of such borrowing, "housing booms tend to be more dangerous than stock market bubbles, and are often followed by periods of prolonged economic weakness."

Second, the wealth in the form of the housing stock is much more broadly dispersed than the wealth held in the form of intangible assets, and it's generally held directly in the name of the owner, and not held by a trustee in a 401(k) plan or such. Again by contrast, for a broad demographic (probably not much different from that which owns much of the owner-occupied housing) intangible assets—stocks, bonds, and mutual funds—are held at comparatively inaccessible arm's length. When equity prices rise there is no doubt that many people rationalize the increase in the market value of their securities as a substitute for a conscious act of deferring consumption, otherwise known as savings. There is little evidence to support the notion that holders of financial assets, particularly those invested in tax-deferred 401(k) plans, profit-sharing, and other such plans, who felt, at least temporarily, less wealthy as a result of the recent bear market in stocks, stepped up their savings to compensate. The impact of rising or falling stock prices on spending is indirectly proportional to the extent that the savings are invested in tax-sheltered plans because of the practical inaccessibility of the assets and the financial penalties on monies withdrawn prematurely. Moreover, just as folks' 401(k) plan was shrinking in value, their house price was going the other way.

Third, housing bubbles, when the process of purging of excesses takes place, follow a pattern similar to that of a stock bubble, except they're in slow motion. The majority of residential homes are owner-occupied. Think about the many factors one must take into account when a family moves from their house to other housing. The markets are geographically, topographically, and climatologically diverse. Arbitrage (a definition appears on page 72) doesn't work effectively because of these dissimilarities (how would you compare

Naples, Florida, with Baltimore, Maryland, if you were actually so inclined!) and because there are no centralized markets like the NYSE or Nasdaq, and trading costs are enormous compared with a few cents a share for common stocks.

Confirming the points above with empirical evidence, I quote work done by the International Monetary Fund (IMF). The IMF published an in-depth analysis of equity market and real estate crashes in its April 2003 edition of *World Economic Outlook*. The average real decline in prices in a housing market crash (30% after four years) was found to be less than for a stock market crash (45% decrease in equity prices, on average, after two and a half years), but at the end of each of those periods, GDP (or “output”) had fallen 8% after a housing bubble burst, compared with 4% after a stock market bubble burst.

Residential Housing: ‘To Everything There Is a Season’

On December 20, 2005, Fannie Mae predicted that U.S. home *sales* are set to decline by as much as 10% in 2006 as higher interest rates and housing-market worries reverse a five-year run that was the key impetus behind consumer spending and economic growth. Mortgage bankers are likely bracing for a drop-off in originations and refinance activity, which are predicted to fall 2.3%, to \$1.45 trillion, and 51.6%, to \$653 billion, respectively.

“Despite a surprising jump in new home sales for October, the housing market likely has peaked,” Fannie Mae economists David Berson and Molly Boesel said in a semiannual housing survey. Residential real estate speculators take note: Home *price* gains are expected to “slow sharply” in 2006, down to about 3% after a couple years of double-digit growth, according to the economists. *The Economist* was even bolder: “With prices looking overvalued in more states than ever in the past, average American prices may well fall for the first time since the Great Depression.”

Because of pending earnings restatements, Freddie Mac and Fannie Mae have not published audited financials since year-end 2003. Two years ago Freddie remained optimistic, saying that outstanding residential mortgage debt totaled \$7.8 trillion at year-end 2003 and was expected to increase to \$17 trillion by 2013. That assumes an 8.25% growth rate, of which 5% is from price appreciation, as we discovered in the fine print.

A REMARKABLE STORY OF RISK MANAGEMENT—RUN AMUCK

Recurring throughout these annual reports is the following adage: “Manage the risks, and the returns will take care of themselves.” Any look at the prospect for all types of investments would be grossly incomplete without a careful examination of the risks that one would have to assume to be in the game. As Alan Greenspan lamented above, the systematically diminished aversion to risk is the great facilitator of many economic or financial anomalies that end badly. Sometimes intuition leads us astray and other times to enlightenment, never making the decision-making process any easier by providing some inkling of the direction toward which it nudges us. In recent years anecdotal tidbits from virtually every front of disconcerting evidence have inundated my consciousness that are in clear conflict with the watershed concept of risk management so skillfully articulated by Peter Bernstein in the oft-referred-to book *Against the Gods—The Remarkable Story of Risk*.

Please think of this as a delightful diversion, as we turn the clock back through time, with an important purpose as we wend our way up the mountain of wisdom. Bernstein did precisely what the title suggests: He made the study of the evolution of risk into a fascinating story that spans hundreds of years. Bernstein postulates that the probability theory upon which mathematically based risk-management techniques were developed was “one of the central ideas that distinguishes modern times from the more distant past.” Instead of existing for centuries as the helpless, hapless victims of the whims of the gods of fate, through mathematical advances modern man discovered the means of quantifying uncertainty, turning from the suffocating fatalism of his ancestors to the spiritual renaissance that liberated his “free will” to make reasoned choices among alternative courses of action.

Daniel Bernoulli, one of eight precocious Bernoullis, in 1730 introduced the infinite variety of human expectations and preferences in regard to decisions (and perhaps the forerunner of behavioral economics?). Bernoulli took issue with the cold mathematical calculation of expected values by arguing that what individuals value differs from person to person and therefore what should be measured is expected *utility*. He proposed that satisfaction resulting from any

increase in, for example, wealth “will be inversely proportional to the quantity of goods previously possessed,” explaining why there is a tendency for wealthier people to be more risk-averse than those who are less wealthy. Bernoulli advanced one of the most profound ideas in the history of thought in one page by allowing the introduction of subjective considerations with uncertain outcomes that cannot be counted in the theretofore staid mathematics of probability calculations. Separating mathematics from intuition, he turned his focus away from rote decision theory to an attempt to delineate the idiosyncratic proclivities of the risktaker himself.

This concept is so important that further elaboration will help embed it in our minds. Continues Bernstein: “The probability of being struck by lightning is tiny but many people are excessively terrified when they hear thunder.” Then he makes a critically important statement: “fear of harm ought to be proportional not merely to the gravity of the harm, but also to the probability of the event.” Here is another major innovation: the idea that both gravity and probability should influence a decision. We could turn this assertion around and state that a decision should involve the strength of our desire for a particular outcome as well as the degree of our belief about the probability of an outcome. The strength of our desire for something, which came to be known as utility, would soon become more than just the handmaiden of probability. Utility was about to take its place at the center of all theories of decision-making and risk-taking ...

Bernoulli’s thesis stood as the dominant paradigm of rational behavior for the next 250 years, roughly from 1730 to 1980, a time span longer than America’s history as an independent nation, and became the foundation for modern principles of investment management. Perhaps the paradigm began a cyclical shift in the early 1980s as the cost of money saw-toothed downward over the next 20 years from 20% to 1% ... From our perspective as wealth managers, we remain tethered to Bernoulli’s world, the school of thought that acknowledges some correlation between wealth and risk aversion.

The Irreconcilability of Probability Theory and Irrationality?

Returning to my apprehensions voiced in the first paragraph of “A Remarkable Story of Risk Management—Run Amuck,” evidence abounds of these conflicts that logic argues should be extinct

in the “age of the enlightenment.” One can begin with the irrational acceptance of enormous and disproportionate risks that fomented the technology Bubble to its ultimately self-destructive mass, then move laterally to the use and eventual flagrant abuse of derivatives and other exotic so-called risk-management mechanisms that have brought the once-proud icon of creative finance, the moneymaking mortgage machine, Fannie Mae, to the point where it may some day have to lean on its benefactor, her ever-less-rich Uncle Sam. The LTCM (Long-Term Capital Management) crisis resulted from the comeuppance of unchecked arrogance that blindsided “no bell” laureates in the fight to push the envelope, as the holders of the derivatives related to unexpected defaults in Russia experienced cascading losses, resulting in defaults and counter-party defaults, thereby requiring the Fed to reluctantly deploy its “too big to fail” parachute.

How, we wonder, with the advances in meteorological science and the long-held belief in the probability of a doomsday scenario that would make The Big Easy end up more like Atlantis than the home of the Mardi Gras, could Hurricane Katrina wreak such unimaginable havoc, no less in America and during the ascendancy and eventual pre-eminence of the information age at the dawn of the 21st century?²²

How do we explain the proliferation of gambling, the fastest-growing industry in America according to *The New York Times*—in a piece dated more than a decade ago as evidence of its longevity, despite the reality that the deck is forever stacked in favor of the house? Gambling draws more customers than baseball parks and movie theaters combined. Why doesn’t the appalling statistical improbability of winning the lottery deter the millions of Americans who pony up obliviously, waiting in line weekly (and meekly) to voluntarily pay a tax on ignorance—supposedly the very ideas that “distinguish modern times from the more distant past”?

With the notational value of the latest iteration of risk-transference mechanisms, derivatives, growing worldwide at a breakneck pace and now totaling over \$300 trillion (yes, that’s *tr*, not *b*), will they, as Alan Greenspan argues in refusing to regulate them,²³

²² Read about the “Black Swan” events as described in *Fooled by Randomness: The Hidden Role of Chance in the Markets and in Life*, First Edition, by Nassim Taleb.

²³ The global credit glut and the burgeoning worldwide market for derivatives have emasculated America’s central bank, the lord over the great credit creating machine. The genie is out, and the best efforts of men and

function like property and casualty insurance, proving to be a palliative in dispersing the consequences of uncertainty? Or, as Warren Buffett warned in the Berkshire Hathaway 2003 annual report, in the hands of many men and women whose motives are rooted in a five-letter word that begins with *g*, do they take on a seductive character that occasionally drives their handlers to madness?²⁴ “Derivatives are advertised as shedding risk for the system,” writes Buffett, “but they have long crossed the point of decreasing risk and now increase risk. As with every company transferring risk to very few players, they are all hugely interdependent. Central banks are exposed to weaknesses.”

The contest here is between the theorist and the pragmatist. Of course, Greenspan didn’t have the benefit of Buffett’s agonizing experience in unwinding the General Re derivatives book. Buffett could, as a consequence, be biased by a run-in with a narrow slice of reality. Don’t bet your life’s savings on the assumption of Buffett’s limited exposure. Moreover, Buffett lives by a record that is both public and precise to the penny. Perhaps Greenspan had an epiphany when he realized that at the Fed there is no “box score,” no irrefutable accountability. At last, the master of obfuscation had found his niche.

Is There a Chink in the Armor?

Far too wise to accept any notion, no matter how brilliantly devised, Bernstein sought out explanations as to how this system of mathematically based risk-management techniques might go awry. Almost 300 years ago German scholar Leibniz observed: “Nature has established patterns originated in the return of events, but only for the most part.” Leibniz’s conditional phrase “but only for the most part” gave permanence to the presence of risk. Resorting to reverse reasoning, in a world where everything is predictable, no change would ever occur.

governments are likely to be powerless in bottling him. Risk management has—for the time being, at least—returned to the hands of the gods.

²⁴ According to Mike Stout, derivatives traders are paid on the “present value of their book at year end. Derivatives are complex and extremely difficult to price, often leaving the trader with that responsibility.” Thus, the fellow whose compensation is based on an estimate of the present value of a portfolio at a point in time, “marking to market” in industry parlance, is the same person who makes the determination. Need I ask, is there any incentive to mis-mark? So much for checks and balances.

Bernstein continues to question his own thesis, acknowledging that “The mathematically driven apparatus of modern risk management contains the seed of a dehumanizing and self-destructive technology. Harvard economist and 1972 Nobel laureate Kenneth Arrow has warned, ‘[Our] knowledge of the way things work, in society or in nature, comes trailing clouds of vagueness. Vast ills have followed the belief in certainty.’ In the process of breaking free from the past we may have become slaves of a new religion, a creed that is just as implacable, confining, and arbitrary as the old.” Adam Smith, according to Bernstein, a masterful student of human nature, defined the motivation for assuming outlandish risks as those defined above: “the overweening conceit which the greater part of men have of their own abilities and their absurd presumption in their own good fortune.” Today we call such biases heuristics. While Smith was fully aware that economic progress was advanced because of man’s propensity to take risks, he feared that “society would suffer when that propensity ran amuck.” A century and a half later, English economist John Maynard Keynes agreed: “When the capital development of the country becomes a byproduct of the activities of a casino, the job is likely to be ill-done.” As I survey the scene, I can only imagine that both Keynes and Adam Smith are rapidly rotating in their respective graves.

The Rippling Consequences of Too Much Money Chasing Too Few Things

We all know that actions have consequences. Of course, Newton’s Third Law, “Every action has an equal and opposite reaction,” applied to tangible objects. Outside of Newton’s physical realm, think of the ongoing consequences of the terrorist attacks of September 11, 2001. Earlier it was noted that American sociologist Robert K. Merton divided unintended consequences into willful ignorance or true ignorance. Like a stone thrown in the pond, who knows how far the ripples will spread before they dissipate? The genesis of all this craziness is no doubt deeply rooted in the global credit glut, showering down cheap and easy money like a spring rain that turns into a torrential downpour, which short-circuits the rational decision-making process, putting most individuals on an equal and lowly footing, tempting them to mindlessly swing at sucker pitches. This easily transmuted into the age of materialism where success and the presumed “good life” are measured almost exclusively in financial

terms. Could it also be envy as we allow television to invade our minds below the threshold of awareness, marinating our minds with countless stories of stock-option billionaire executives, a strange new world where work and reward bear little relationship? Flashing back to the first of Mahatma Gandhi's "Seven Deadly Sins" ... does such subliminal conditioning evoke Pavlovian responses, exacerbating our discontent with comparatively modest standards of living and insidiously, akin to the ringing bell, cause us to salivate when we see images of our "entitled" slice of the American Dream pie, however unlikely the notion? Was it ignorance or envy that led hordes of 401(k) investors down the garden path to the technology stock mania trap?

It seems we have suspended a fundamental law of nature: Actions have consequences. While examples abound, no couple is as devoid of contrition for their misdeeds and flippant disregard for consequences as pop-culture icons Donald Trump and Martha Stewart, the king and queen of insolence, improbity, and bad hair as they shamelessly fight for the limelight in look-alike "reality" shows both named rather appropriately, "The Apprentice." (The Donald seems to be winning the battle of unmitigated gall but admits that Martha's likely-to-be mothballed copycat version has cost him ratings points.) While Trump's ongoing troubles with the banks are generally negotiated off camera, Stewart's ups and downs are in the public domain. As a proxy for her mercurial popularity and the madness of crowds, Martha Stewart Living Omnimedia went public in late 1999, hitting \$50 before crashing to \$5 in late 2003. Once the uncertainty of her fate was resolved, the stock zoomed to \$37, only to settle back to around \$20 as the true colors of the diva of duplicity became more vivid to the slow learners. When she invoked the name of Nelson Mandela, South Africa's long-imprisoned and persecuted anti-apartheid hero, saying, "Many, many good people have gone to prison," she effectively indicted herself, exposing her true character like no grand jury ever could.

Obviously, the problem is much more deeply seated; these caricatures of reality are a mere convenience. The message from the leadership of our nation reveals the depth of the intentional denial of the ultimate consequences of politically expedient actions or inactions. What is "my fellow American" to take away from Uncle Sam's recklessly irresponsible behavior in taxing too little or spending too much; condoning if not facilitating runaway trade deficits; and talking about but never actually taking remedial responsibility for the toxic

Medicare and Social Security time bombs, cobbling together quick fixes so they will blow up on someone else's watch?

Managing Risk in Marketable Equity Securities

The Marvel of Regression to the Mean

In 1875, Peter Bernstein continues, Francis Galton, first cousin to Charles Darwin and an amateur mathematician, discovered regression to the mean, to which I frequently refer using the much-maligned pendulum metaphor from the physical province. Regression to the mean is beset with controversy that has never been resolved and, doubtless as far as the mind can envision, never will be. It's fair to ask: "Is there any baseline that may be considered 'normal' toward which events will regress?" As is quite apparent, I'm conceptually in Galton's camp. On the question of whether risk management is a science or an art, I contend they are not mutually exclusive. Moreover, decision making regarding risk in the marketplace, to the extent that choices are made and prices are set at the margins by men and women whose behavior reflects a wide spectrum of often conflicting biases, exhibits a pronounced cyclical tendency. From one extreme or the other, prices tend to *eventually* regress toward a mean that is forever changing, although most of the time at a much slower rate than prices themselves.

Regression to the Mean and the Element of Time

Time is a dominant factor in investing, particularly if one believes that price and value have a natural inclination to reconcile their occasional differences. Although there is a rhythmical pattern, it is asymmetrical and frustrates the trained and untrained eye alike that attempts to discern its undulations. In the short run, time measures little but the sudden or unexpected fits and starts often encountered in a marketplace that now and again has a collective manic-depressive operator at the controls. Longer-term and more exaggerated departures from normalcy, however vague the notion, provide investors opportunities to either avoid generalized trouble or snatch victory from the jaws of someone else's defeat.

Time matters most when decisions that depend on future outcomes are irreversible and, by virtue of the time dimension, are inherently uncertain. According to Bernstein, "If we buy a stock today,

we can sell it tomorrow,” implying ease in reversing a (presumably bad) decision. Hair-trigger day traders will change their persona like Superman in a telephone booth, morphing into due-diligence fanatics when buying a house because of the extensive costs associated with reversing their decision. But in the less-than-rational world of long-term investment in marketable securities, it has been my observation that investment in stocks, under untoward circumstances, frequently falls closer to the irreversible end of the continuum than the reversible. Once a stock is purchased, if its price falls enough to kindle remorse in the mind of the buyer—often for reasons yet to be known by the hapless chap—there develops an emotional aversion (perhaps it’s denial) to fess up to the error and seal one’s fate by the ignominy of selling at a loss. In many cases the uncertainty inherent in the investment is no match for the risks associated with the ego and self-esteem inhibitors that put a damper on the rational behavior as buyers and sellers react to favorable or unfavorable outcomes. The keen insights of Adam Smith are still ringing in my ears (flash back to the “overweening conceit” quote on page 68). In a perverse flip of the same coin, when stocks rise sharply the convenience of reversibility mysteriously appears, leading many who think the windfall is serendipitous to nip winners in the bud. So much for cutting your losses and letting your winners run!

Shakespeare’s Hamlet, according to Bernstein, addressed the time issue of hesitation in the face of uncertainty as detrimental to constructive action: “The native hue of resolution is sicklied o’er with the pale cast of thought ... and enterprises of great pith and a moment ... lose the name of action.” Back comes Bernstein: “Yet once we act, we forfeit the option of waiting until new information comes along.” Seth Klarman, author of *Margin of Safety* and a very wise and balanced money manager, states the obvious for the few who are not anchored in the present when he proposes that the opportunity set of tomorrow is likely to be different from that of today. One can infer that the opportunity set of tomorrow may not be entirely at the “whim of the gods” but may be generalized about *if* one subscribes to a belief in reversion—and you presently find yourself a standard deviation or two away from the mean. Concludes Bernstein: “As a result, not acting has value. The more uncertain the outcome [Klarman would be more precise by saying the more certain you are of an unpleasant outcome], the greater may be the value of procrastination. Hamlet had it wrong: he who hesitates is halfway home.”

Bargains in a Bull Market and Arbitrage

The old adage “beware of bargains in a bull market” is a simple phrase for the workings of a common practice with a fancy name—arbitrage, which is derived from arbitrate, to settle or reconcile differences. Arbitrageurs profit from pricing anomalies in the marketplace by selling similar securities that are expensive and buying those that are cheap. Their actions cause the gap in pricing to close. To be sure, no two companies are alike, so arbitraging common stocks is a most inexact science. As for the above maxim, arbitrage renders extreme bargains in a bull market scarcer than hen’s teeth. The number of stock shoppers has skyrocketed since the early ’90s. Almost nonexistent at that time, hedge funds numbered in the hundreds and managed \$35 billion in ’92. Proliferating to more than 10,000 today—in part because of easy money—they manage more than \$1 trillion,²⁵ leveraged to who knows how much if one includes borrowings and derivatives. The competition for ideas is intense.

These largely unregulated investment companies are typically paid 1–2% on assets *and* 20% of the profits. The unwritten rule is that there *are* no rules in the high-stakes, hedge-fund game. To butcher the old expression: There are two things that aren’t pretty to watch being made: sausage and hedge-fund profits. Had space and your sorely tested stamina allowed, the exposé that I had written on this evolving pernicious attempt to fleece the wealthy would have found its way onto these pages. If any investors who committed funds to this grand charade haven’t come a cropper by next year, I’ll make room in the 2006 report.²⁶ In the meantime, a word to the “qualified investors” who are embracing the latest fad: *caveat emptor*.²⁷

²⁵ While talking with a Harvard Business School class several days before Christmas, Warren Buffett responded to a question about whether the proliferation of hedge funds, venture capital outfits, and the amount of money in private equity have made the job of the “intelligent investor” more complicated. According to notes taken during that discussion received from a friend just before sending this report to the printer, Buffett reportedly said the following: “Markets everywhere follow three stages—innovators, imitators, and swarming incompetents. We now have \$1 trillion in hedge funds. Opportunities are discovered, people swarm in and the opportunity is competed away. A trillion dollars in the hands of smart people leads to a lot less opportunity.”

²⁶ Mike Stout knows Wall Street traders who left their firms with huge portfolio problems but, thanks to the short memories of their clients, found

Anyway you slice it, the epidemic of hedge funds and 8,100 mutual funds managing \$8 trillion (up from 3,000 funds controlling \$1 trillion in 1990) combing the sales racks for bargains among 6,300 U.S.-domiciled publicly traded common stocks, and there is often a good, though frequently not immediately obvious, reason why what's left has not yet found a fool for a buyer!²⁸ In a secular bear market like the last one that ended in 1981, the sales counters are chock full of good merchandise. The only thing missing—shoppers! And so the carousel goes 'round and 'round ... Speaking of shopping and the opening of this section, also “beware of bulls in bargain basements,” not to mention bulls in China (sweat)shops. But I digress.

lots of money following them to the hedge funds they founded. Their newest casino-mindset acronym is OPM (Other People's Money)—sounds like (and numbs or stupefies) like “opium.” Their first rule of desensitized no-accountability money management is: “Hey, it's not my money.”

²⁷ A very common, but easily explained, misunderstanding is that a “qualified investor” (according to the Securities & Exchange Commission, one who is “wealthy” by their ever-changing dollar amount measures) is also a discerning investor. In many cases the “qualified” party is investing the proceeds of the sale of the business or has inherited money and often has little or no experience with the nuances of complex financial products. Warren Buffett says that he is a better investor because he is a businessman and vice versa, but not everyone is so well-armed.

²⁸ Fred Sheehan Jr., CFA, says he wouldn't be surprised if the private-equity binge leaves a stench as bad as the inevitable hedge-fund denouement. Sheehan was director of asset allocation services for John Hancock Financial Services in Boston, 1988–2005. As a market strategist, Sheehan initiated and designed comparative and historical market comparisons for clients. Areas of expertise included U.S. and foreign stock markets, bond markets, currencies, derivative strategies, commodities, industrialized and emerging market economies, historical comparisons of markets and economies, and monetary standards. He wrote monthly and quarterly Market Outlook and investment commentary describing economic and market conditions of asset classes. He is a freelance writer for Marc Faber's *Gloom, Boom & Doom Report*, *Prudent Bear*, and other Websites. He is quoted in *The Wall Street Journal*, *Financial Times*, *Grant's Interest Rate Observer*, and *Bull: A History of the Boom 1982–1999*, Maggie Mahar (2003). Sheehan earned a history degree at the United States Naval Academy and an MBA in finance at Columbia University Graduate School of Business in New York City. He spent five years as a Navy officer, the first four as a division officer, aboard the USS Fairfax County.

World of Truly Risk-Averse Very Small

Our world, populated by the risk-averse, is very small. We doubt that few *if any* of our clients would play Russian roulette, the practice of placing one round in a revolver, spinning the cylinder, and closing it into the firearm without looking, aiming the gun at one's own head in a suicidal fashion, and pulling the trigger—even if the prize is \$1 billion if you're still standing after the hammer goes down. No rational investor or steward would risk everything, including his life, for something he already has in such abundance that to add to it would change its utility or his satisfaction scarcely a whit.

The Indefatigable Equity-Risk Premium

While the odds are against it, my favorite contrary indicator, Jeremy Siegel, seems to show up at just the right time. Should you find a moment to wander through the Index of *Speculative Contagion* and search for references to Siegel, you'll be able to see for yourself how uncanny he is in appearing at the wrong time with yesterday's latest, greatest idea. I hope Jeremy doesn't take my comments personally. Mind you, he's a likable, well-intentioned fellow, but I think there's a good reason why he's paid to teach at Wharton, write books, and forecast markets—and not actually manage money. The cardinal rule for forecasters is that they foretell and, even though some modicum of accuracy is implicitly assumed, nothing in their marching orders explicitly requires them to prognosticate accurately. If there were, the impact of unemployed forecasters on the economy could be the “tipping point” for the next recession! And if one's forecasting record is bad enough, one would assume that he or she will eventually become a victim of the gravy train coming to a halt. Bad forecasters rarely disappear, however; they simply get recycled to different firms. Memories, to be sure, are short, and the aphorism attributed to P.T. Barnum (and others) more than 100 years ago, “A sucker is born every minute,” obviously still stands.

In any event, the latest edition of *Financial Analysts Journal*, November/December 2005, coincidentally arrived in my mail just as I was writing a commentary on the disconcerting shrinkage in equity-risk premiums. Out of habit I glanced at the cover where the table of contents for the essays can be found. My eyes immediately leapt to an article with the title “Perspectives on the Equity Risk Premium.” The author? You guessed it. Needless to say, reading the article took

The table is copied from our 2004 edition of *Stocks, Bonds, Bills and Inflation, 1926 to 2004*, Roger Ibbotson's ongoing annual seminal study of comparative asset returns. Be sure to focus first on the column with the title "geometric mean" and disregard the "arithmetic mean." The latter is a simple average of the returns, whereas the geometric mean in a time series provides the compounded rate of return. In this application, the geometric mean is the only appropriate measure. Second, compare the geometric mean return for each asset class with the standard deviation for that class, which is a measure of volatility. The message from the standard-deviation metric is that those who seek higher returns from the more productive asset classes also must accept greater short-term price volatility. For those who may have had no reason to apply standard deviation since high school or college math classes, it's simply a measure of how closely the mean reflects the actual outcome in any given year, assuming the distribution is in the form of a bell curve. As you can see from the frequency distributions on the right side of the table, while not perfectly symmetrical, they do roughly approximate the shape of a bell, particularly the fixed-income securities and inflation. In the case of large-company stocks, the standard deviation is 20.3%, indicating that 68% of the time the annual return from such stocks will fall within a range between 20.3% above or below the 10.4% geometric mean. As you increase the length of time over which the standard deviation is measured, a standard deviation shrinks dramatically. Compare the standard deviation from large- and small-company stocks with that from investment in Treasury bills to get some idea why the latter are deemed much less risky from the perspective of annual price volatility.

With that background, let's talk about how much premium in return an investor has earned over the long term from investment in equity securities as compared with the lower-volatility, fixed-income-security alternatives. Large-company stocks averaged (geometrically) a 5% premium in compounded annual rate of return over intermediate-term (as well as long-term) government bonds. Compared with Treasury bills, the excess return was 6.7%. While small-company stocks exhibited relatively extreme annual variability, over the 73-year period they exceeded the return on Treasury bills by 9%.

The Picture Changes as the Time Horizon Is Shortened

So far, so good. But let's shorten the time horizon to a more realistic length and see how the picture changes. After all, to my

knowledge no 40-year-old investor in 1926 is still living today. In fact, let's go back to the two 17-year time periods that Warren Buffett compared: 1964–81 and 1982–99 (*SC*, 100). During the first time span, average annual total returns, including dividends, from large-company stocks was 6.9%, while intermediate-term bonds returned 5.4%. From 1982 to 1999 the outcome was radically different, with large-company stocks returning almost three times as much annually, 18.5%, while intermediate-term government bonds posted an impressive 9.9%.

Let's go a step farther and divide the first 17-year time span into two discrete segments: 1964–74 and 1975–81. Returns from large-company stocks were 2.5% and 14%, respectively. Small-company stocks produced returns of 4.9% and an astounding 27.1%, respectively. Intermediate-term government bonds were 5% and 6%.

Having been eyewitness to all the above-mentioned episodes (I was an investment management major at Northwestern University from 1960 to 1964), my memories are still vivid. The year 1964 represented the first of a series of different asset-class market peaks before the great take-no-prisoners bear market of 1973–74 humbled virtually all sectors. The last hurrah was in late '72 when the "Nifty-fifty"/one-decision/growth-stock mania reached its apogee. In the easy-money asset bubbles, excesses, often regionalized, appear as well as in hard assets. Florida real estate headed south in '73; the farmland craze, mostly in the Midwest, hit a dry spell in the late '70s; and gold and oil peaked in '81. The last three were victims of Paul Volcker's inflation-crushing, tight-money policy. While money was to be made by the nimble during that very difficult 10-year period, the 2.5% return by the large-company stocks indicated the force of the headwinds.

With the benefit of hindsight, the smart money would have parked its assets in intermediate-term bonds and doubled the return available from common stocks and, of most importance, would have done so effortlessly and without a single night's loss of sleep. Let it be noted that for those in the stock market during the "take one step forward and two steps back" travails it was probably the most agonizing decade since the 1930s. What made the 1973–74 bear market so disheartening for so many was that it was the last and harshest punch (stocks dropped 50% on average during the 1973–74 bear market) in the on-again, off-again pummeling that had been relentlessly exacting its give-a-little, take-a-lot toll for the preceding eight years.

Thoroughly disillusioned, few people were in any mood to plumb the depths of despair in 1973–74. Even though the great secular bull market of 1982 to 1999 was seven years away, extraordinary returns, as noted above, were waiting for those who had the presence of mind and the proper temperament to go against the grain of conventional thought—and swing at the fat pitches that came floating their way. I’ve always believed that smaller companies are never cheaper than in the deepest throes of a pervasive bear market, as the numbers above would suggest. Look what has happened to the better-quality Internet stocks (acknowledging the effect of survivor’s and hindsight biases) since the lows in 2002. While recognizing the clear possibility of that kind of rebound at the time, we could not tell a fat pitch from a sucker pitch regarding companies for which even a rough approximation of intrinsic value was nearly impossible to deduce.

The beauty of the perfect alignment of all stars during the spectacular bull market of 1982–99 was that almost everything was carried along with the rising tide. It was investment nirvana. Intermediate-term bond returns equaled the long-term, historical-average returns from common stocks as noted in the table above. Annual stock returns from large companies averaged 85% above their long-term averages for the entire period. Marc Faber’s “financial” economy blossomed with a vengeance during the 17-year cycle.

A conscientious student of investment history certainly could not predict the timing of what was to come when the era of increasingly irrational exuberance reached its apogee in early 2000, but it was a slam dunk to predict that in its own time it would come. I’ve always been perplexed by the timing issue. If you live in New Orleans and the weather channel warns of a powerful hurricane that *likely will* make landfall in your vicinity, why would anyone who was able to leave wait until the last minute? Why did very smart people stay in the game long after the storm flags began flying?

What Lies Ahead?

Given what Buffett foretold in 1999 and reiterated on a number of occasions in the several years to follow, and given that the aggregate value of all U.S. stocks is back to within a hair’s breadth of

the early 2000 highs,²⁹ I think his original *average* compounded 6% expected return for the next 10 or 12 years is still a reasonable presumption. With the five-year Treasury note yielding 4.5%, and perhaps set to rise, the relatively paltry 1.5% excess expected returns from equities, the equity-risk premium, should have little appeal to the rational investor. In my judgment, one of the unspoken reasons Buffett mounted the soapbox in '99—about another relative-return drought for the next decade and a half or so—is that the conditions in '99 were eerily similar to those in '64. He was particularly sensitive to investors' indifference toward the conspicuously unfavorable risks incurred for whatever speculative returns that euphoric investors imagined to be in the offing. Moreover, what has transpired since leaves me feeling anything but confident. The presumed salutary effect on the dangerous predilection to assume risks willy-nilly resulting from the collapse of the technology Bubble seemed negligible in quelling the speculative appetite, no doubt aided and abetted by the reactionary Fed's easy- and cheap-money, knee-jerk response. Although the Nasdaq has lagged behind the overall market, the Wilshire 5000, which most closely represents the total market capitalization of all U.S. equities (including all 500 Nasdaq companies), at about \$15.8 trillion, as noted above, has recovered almost all the ground lost. In fact, the unintended consequence of the Fed dropping the overnight rate 13 consecutive times to an unprecedented 1% to thwart the possibility of a reverse wealth effect-induced recession (that may not have happened anyway) as common stocks plunged was that it inadvertently stoked another Bubble, the speculation in housing.

Further buttressing Buffett's point is the dividend yield of 1.81% on the S&P 500 and an even lower 1.71% on the all-inclusive Wilshire 5000, which pales by comparison to the average of 4% over most of the last 80 years, until it began trending lower in the early '90s, doubtless partly in sympathy with falling interest rates.³⁰ The argument

²⁹ It hasn't gone unnoticed that the economy has chugged along, as noted elsewhere, in tandem with the increase in stock prices. From a time perspective, however, this expansion is long in the tooth. More importantly (from a risk-tolerance perspective), the probability of a significant comeuppance is frightfully high, as should by now be crystal clear in almost every paragraph of this essay.

³⁰ Since Roger Ibbotson began amassing his huge database published as *Stocks, Bonds, Bills and Inflation, 1926 to 2004*, the dividend yield averaged about 4% and average price appreciation about 6% to produce the total annual

proffered by many commentators is that the percentage of earnings paid out as dividends (the dividend payout ratio) declined as corporations redirected more cash flow toward share-repurchase programs instead.

During the last 10 years a portion of that divergence can be explained by progressively lower-quality earnings. Earnings aren't exact: They're influenced by such factors as:

- Estimates of the dollar amount of receivables that will actually be collected.
- The amount of inventory that will actually be required by the time a product reaches the shipping dock.
- The useful life of fixed assets.
- The eventual realizable value of acquisitions.

It's no secret that in recent years many companies served their earnings "sunny side up." Assumptions behind the estimates tended to be toward the aggressive end of the continuum. Dividends are a horse of a different color. Once declared by the board, checks are cut for an amount that can be measured to the penny. There are no opportunities for sleight of hand with dividends. Boards of directors understand the difference between reported earnings and dividends paid. As for share-repurchase programs—and this is largely conjecture—many were wasteful of shareholders' capital, as managers overpaid to repurchase shares in order to camouflage the dilutive effect of stock-option

return from common stocks that averaged just over 10% per year, compounded. While the following short explanation may be unnecessary for many readers, it may be helpful for some. Assume a company earns \$1 per share and pays out \$.50 in dividends and retains the remaining \$.50 to reinvest in growing the business. If the company earns 12% on its shareholders' equity, it can be determined that the average equity per share for the year was \$8.33 (when multiplied by 12% produces the earnings of \$1). If the company is able to reinvest the \$.50 at 12%, the \$8.83 in shareholders' equity will produce earnings in the second year of \$1.06, a gain of 6%. Dividends will also grow by 6% to \$.53, and so the compounding goes. In this model, the stock must sell at \$12.50 for the \$.50 dividend to yield of 4%. That equates to a price-earnings ratio of 12.5 and a price-to-book-value ratio of 150%. While return on equity has remained near its average of 12–15%, the price-to-book-value ratio for the S&P 500 is 300%, and the price-earnings ratio near 20. That, in a nutshell, is an "easy" but very painful way to get to a 4% dividend yield.

programs. Moreover, in this relatively expensive market where the remuneration for many acquisitions was cash, shareholder value will likely prove to be dissipated. Andrew Smithers, the savvy Brit I've quoted above, says that, contrary to popular opinion, U.S. corporations are not so flush with cash when you cast your eyes on the liability side of the balance sheet and debt is taken into account. Raising the payout ratio will help somewhat, but, realistically, if the dividend yield is going to rise to 4% anytime soon, stock prices must give up a lot of ground.

Moving on to the here and now ... Given all that was said before and after this commentary on equity-risk premiums, low dividend yields, etc., what kind of ignorance—or worse, arrogance—is it for investors to tempt the odds (Bernstein properly relegated tempting the gods to its proper place in antiquity) by not joining the risk-averse? Of course, for those who don't believe that history serves as a useful, albeit exceedingly imprecise, guide for the future or that regression to the mean is an irrelevant concept, I suppose any scenario can be justified. As discussed at length in the 2004 annual report, secular episodes, like the two 17-year cycles mentioned above, are most challenging because of the difficulty in differentiating the waves from the tides (*SC*, 191). What if the big rally in 2003 was merely a huge head fake, with 2004–05 the calm before the next onslaught of storms? Just a thought, not a forecast ...

Closing this section, as promised, with a quotation from my favorite “contrary indicator’s” concluding remarks in his aforementioned *Financial Analysts Journal* article, Jeremy Siegel wraps up his essay with the following two sentences: “Economists are still searching for a simple model that can justify the premium in the face of much lower volatility of aggregate economic data. Although there are good reasons why in the future equity risk premium should be lower than it has been historically, projected equity returns of 2–3% over bonds will still give ample reward for investors willing to tolerate the short-term risks of stocks.”³¹

³¹ In an all-too-common habit of looking in the rearview mirror to see what's ahead, Siegel mechanically extrapolates the past into the future. Admittedly, it's as easy as it is error-prone. Grown-ups should know better.

S&P 500 Earnings Dissected

Beginning in 2003 we at Martin Capital Management started taking a close look at the makeup of the most commonly used benchmark index, the S&P 500, the one against which we compare our equity performance annually (*SC*, 145). As you may recall, earnings were presented in so many different ways that S&P took it upon itself to attempt to define a new standard: core earnings, which we examined with a fine-tooth comb in 2004 (*SC*, 209). While obfuscation still rules the day, I think the U.S. economy is heading in the right direction, albeit grudgingly.³²

Again, as you might recall, the 50-year history that we at MCM used as a basis for projecting future earnings was predicated on answering the question: Is there any compelling reason to change our assumptions about long-term growth rates in GDP, net profit margins of businesses, the percentage of earnings that are reinvested in the business? Apart from a prolonged business slowdown on the dark side or a sustainable increase in productivity on the bright side, we concluded that the 6% growth rate is the most supportable extrapolation factor at this juncture.

Since the S&P 500 represents 71.5% of the value of all domestic common stocks (\$11.3 trillion out of a total of \$15.8 trillion), you might find it interesting to see how the index data appear when broken out into sectors.

³² We'll let you know next year the extent of chicanery involved as corporations try to outfox the regulators by finding ways to minimize the impact on earnings from new rules in 2005 that require expensing stock options in accordance with FAS 123(R). After reading the rules, it's clear that there's lots of wiggle room. For example, companies can choose among lattice models, such as the traditional Black-Scholes or the Monte Carlo simulation model. How significant is the issue? According to Standard & Poor's, the accounting rules would have reduced reported 2004 earnings among the S&P 500 not insignificant 7.4%!

Table 1: S&P 500 Sector Breakdown

As of 6/30/2005	Market Weighting	Approximate Percentage of S&P Earnings	P/E
S&P 500 Composite	100.0%	100.0%	18.8
Energy	8.8%	13.8%	12.0
Materials	3.0%	3.8%	14.6
Industrials	11.2%	10.3%	20.4
Consumer Discretionary	11.4%	6.3%	34.4
Consumer Staples	10.1%	9.9%	19.1
Health Care	13.4%	9.9%	25.3
Financials	20.3%	29.3%	13.0
Information Technology	15.1%	11.4%	24.9
Telecommunications Services	3.2%	2.0%	29.3
Utilities	3.5%	3.3%	19.8

In terms of proportionate weightings, you'll notice two obvious divergences. The combined energy and financial sectors represent a much larger contribution to earnings (43.1% for the 12 months ending June 30, 2005) than to total market capitalization (29.1%). The surge in energy-sector earnings, up \$26 billion in the last five years, largely as a result of the trickle-down exogenous benefit of a sharp increase in the price of crude oil, reflects none of the factors that typically result in sustainable earnings growth.

Of more concern, though, is the financial sector. Whether it's the explosion in the use of derivatives or the proliferation in the progressively more risky forms of mortgage lending to finance the residential housing boom (and corresponding house-price Bubble), among others, the eventual unwinding of the financial economy will likely have a severe impact on financial sector earnings.³³ The derivatives-related write-offs at Fannie Mae and Freddie Mac, likely to exceed \$10 billion by some margin, are just the tip of the iceberg. While we don't have historical S&P data on financial-sector earnings, we do have data from the Bureau of Economic Analysis on the National Income & Products Accounts (NIPA) going back to 1929. Apart from massive losses in 1932–33 that included the Bank Holiday,

³³ Unlike manufacturing, current finance and insurance company earnings are estimates. Until loans have been collected or insurance policies are no longer in force, the adequacy of the reserves (a non-cash expense) deducted from current revenues will be unknown. Reserves are estimated based on past experience. Given the concentrations in the financial-services industry, past loss experiences could well be a poor indicator of future losses. As for derivatives, we have insufficient experience to quantify their risk profiles: They could become the black hole in the financial-services galaxy.

financial earnings represented around 15% of corporate profits during the 1930s; mid-single-digit percentages during the 1940s; between 10% and 15% in the 1950s and 1960s; and the high teens during the 1970–80s, hitting a low of 12% in 1984. During the 1990s financial earnings averaged roughly 25%, ranging from 20 to 30%. The percentage jumped dramatically as the new millennium began: 2000, 27.5%; 2001, 40.2%; 2002, 41.2%; 2003, 38.7%; and 2004, 33%. Now with the financial sector comprising almost a third of S&P 500 earnings, how can one not conclude that the money changers are running the game? It should be noted that the financial sector doesn't include the earnings from the huge finance subsidiaries of such companies as GE and GM but does include substantial earnings from the insurance industry.

To be sure, bank consolidations mentioned above may have contributed to a larger number of financial-industry companies that are included in the S&P index. To the extent that those consolidations have had a greater impact on S&P earnings than the combinations within manufacturing, S&P earnings would be skewed in favor of the financial-services sector. However, the NIPA data referenced above are from all companies, public and private, in the financial-services industry and are, therefore, unaffected by consolidations within the industry. Besides, liberated from restrictions on size because of interstate deregulation and the handcuffing of Glass-Steagall, the industry that has a reputation for lemming-like behavior is now in a position, as you can infer from John Dugan's comments above, to do monumental damage. Lest we become too enamored with money—and the grand profits that are being earned by its handlers—it's helpful to remember that it also is the ultimate commodity. There's very little room for differentiation in the long run. As for commercial banks in general, their history is resplendent with the uncanny capacity to play "follow the loser," mindlessly jumping from one folly to the next. How, we wonder, can such a cutthroat industry earn so much money? After years of miscues, have they finally seen the light? I wouldn't take that bet if the odds were 10 to 1!

As an aside, asset returns in banking are around 2% or less, but profit margins, interest, and non-interest income less all expenses average somewhere in the low teens, favorably skewing the average profit margins for the S&P 500 upward. Not only that, the low price-earnings ratios from the financial sector—particularly if those earnings prove to be unsustainable at current levels—cause the S&P 500's

price-earnings ratio to be understated. The same could be said for the energy sector.

Table 2: S&P 500 Core-Earnings Adjustments

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005 Est.	2006 Est.
Operating EPS	40.63	44.01	44.27	51.68	56.13	38.85	46.04	54.69	67.68	76.64	85.38
As Reported EPS	38.73	39.72	37.71	48.17	50.00	24.69	27.59	48.74	58.55	69.69	76.80
Option Exp PS	(0.49)	(1.12)	(1.56)	(2.50)	(3.82)	(5.31)	(5.31)	(3.51)	(3.30)	(3.36)	0.00
Pension Int Adj.	(0.12)	(0.05)	(0.33)	(0.14)	(2.68)	(5.07)	(5.01)	(1.40)	(1.41)	(2.25)	(1.94)
Other Net Pension Adj.	(0.90)	(1.11)	(1.42)	(2.28)	(2.69)	(2.26)	(1.99)	(0.91)	(0.46)	(0.70)	(0.58)
Goodwill	0.03	0.18	0.24	0.16	0.83	2.47	6.91	(1.13)	2.32	2.62	1.51
Gains & Losses PS	(1.36)	(2.50)	(4.45)	(4.24)	(3.28)	1.58	1.19	(0.79)	(1.20)	(1.56)	(1.10)
OPEB PS	0.03	0.05	0.07	0.13	(0.34)	(0.39)	(0.35)	(0.62)	(0.68)	(0.75)	(0.81)
Sett & Litigation PS	(0.01)	0.16	0.47	0.76	0.90	0.40	0.83	1.47	1.37	1.40	1.12
Reversals PS	(0.01)	(0.03)	(0.11)	(0.14)	(0.06)	(0.10)	(0.19)	(0.05)	(0.04)	(0.14)	(0.18)
Core EPS	35.90	35.31	30.61	39.91	38.86	16.00	23.66	44.04	55.16	64.95	74.82

Standard & Poor's estimates that 2005 trailing core earnings will approximate \$65, resulting in a price-earnings ratio of 19.2, with the S&P 500 index at almost 1250 at year-end. Looking forward, we should anticipate negative pension-fund adjustments to the core earnings calculation if the market stays flat or heads downward—in addition to the eventual reduced contribution from the financial sector. Of course, if an implosion of the housing Bubble occurs, and recession follows, we once again must hearken back to the “perfect storm” scenario.

Rather than writing in generalities, it may be instructive to carefully examine the list of industries that constitute the industrial sector and compare that list to those industries that make up the financial-services sector. Think about each industry and its contribution to your economic well-being.³⁴ Need more be said ...?

³⁴ The industrial sector includes the civil or military aerospace and defense industries, building products from cement to lumber; non-residential construction and engineering industry; electrical components and equipment; heavy electrical equipment; industrial conglomerates; construction equipment, farm machinery, heavy trucks, and non-military shipbuilding; industrial machinery; air freight and logistics; airlines; marine transportation of goods or passengers, ports, and services; railroads, including owners and operators of roads, tunnels, and rail tracks; trucking; airport services; trading companies and distributors of industrial equipment and products; commercial printing services; providers of commercial electronic data processing services; diversified commercial professional services to businesses and governments, including commercial cleaning services, consulting services, correctional facilities, dining and catering services, document and communication services, equipment repair services, security and alarm services, storage and warehousing, and uniform rental services; human resource and employment

We end this analysis with the beginning in mind (in an admitted reversal of Stephen Covey's dictum, "Begin with the end in mind"); please look again at the Chart 1. Why are stock prices 126% of GDP when the 80-year average is 61%? Looking more closely at the chart, if we think of the post-1990 period as the historical anomaly that it appears to be, the average ratio is more like 45%. Trendline earnings growth rates have been slightly better than 6%,³⁵ albeit with dramatic short-term deviations. Profit margins, as noted above, are likely artificially inflated by the financial-services industry. On the other side of the coin, those information-services companies that are not subject to cutthroat competition—e.g., the better software companies, including the likes of Microsoft, Google, and many others—do have superior margins. As of July 2005, however, information technology and telecommunications combined represented only 13.4% of S&P 500 earnings. Of course, the productivity benefits ripple throughout the economy. The question

services related to human capital management, including employment agencies, employee training, payroll and benefit support services, retirement support services, and temporary agencies; environmental facilities services, including waste management, facilities management, and pollution control services; office services, supplies, and office equipment.

By contrast, financial services include diversified banks; thrifts and mortgage finance, including government-sponsored enterprises like Fannie Mae; consumer finance services, including personal credit, credit cards, lease financing, mortgage lenders, travel-related money services and pawn shops; specialized finance, including credit agencies, stock exchanges, and specialty boutiques; asset management services and custody banks, including mutual funds; financial institutions primarily engaged in investment banking and brokerage services; insurance brokers; insurance and reinsurance brokerage firms; property and casualty insurance; life and health insurance; and real estate investment trusts and real estate management and development.

³⁵ In terms of the GDP, if we choose as our starting year 1991 when nominal growth slowed to 3.2% and conclude in 2005, economic growth averaged a compounded rate of almost 5.4%. That number includes the slowdown in 2001 and 2002 where nominal GDP growth dropped down to the 3%-plus range again. During that same span of years, S&P earnings grew by almost 11%, compounded. Earnings in the long term cannot exceed the growth rate of GDP. Please note that we are comparing nominal GDP growth with S&P earnings per share. As pointed out elsewhere, it's our opinion that share repurchases in the aggregate did not dramatically increase earnings per share vis-à-vis the underlying nominal earnings growth.

then becomes: Do they trickle down to the bottom line, resulting in a permanent improvement of profit margins? For myriad reasons, we think that unlikely. With regard to 20-year U.S. Treasury bond yields, averages mean nothing (see Chart 3). In the interval between 1926 and 1964, yields remained under 4%. From the mid-'60s until 2005, interest rates tracked a relatively symmetrical but jagged inverted "V," reaching a peak of almost 14% in 1981. Overall, the fall in bond prices from 1964 through 1981 and the subsequent rise from 1982 through 2005 (which rather precisely, and not coincidentally) parallels the movement in stock prices in the two major secular market cycles that Buffett describes above. There is, however, nothing one can glean from the study of the history of interest rates. It also would be difficult to take into consideration where interest rates might be five years from now, from which one could make a strong case that stock prices should not regress toward the average ratio of total market capitalization to GDP.

A Short Ending to a Long Story

In summary, we have written this reasoned, dissenting minority opinion, in contrast to the prevailing majority view, believing we have probable cause and substantial grounds to argue against the case of a resumption of the general rise in stock prices that investors have come to expect by simply extrapolating (mindless mathematics) the experience of the '80s and '90s, the common but illogical practice of viewing the future through the rearview mirror. We began by piecing together the publicly disclosed insights of the "three wise men": Alan Greenspan, Dr. Ben Bernanke, and John Dugan. If nothing else, they should convey some sense of the imbalances created when cheap and easy money bring about an environment where the fundamental economic law of supply and demand has been abrogated in the credit markets. In an unfettered market, interest rates fluctuate in the direction of the "clearing price" (interest rate) that achieves a balance between the supply of and the demand for credit. Atypically, the price of credit remained low and did not rise because the glut of supply satiated, if not incited, exaggerated demand. We also have observed that benign consumer price inflation is not so much the product of a vigilant Fed as it is a salutary consequence of low-labor-cost global competitors, most conspicuously China, saturating U.S. markets with cheap imports. Parenthetically, if ours were a closed

economy, few would argue that the fiscal and monetary policies of the last three or four years would have been highly inflationary on the consumer-price front.

The easy-money “financial” economy, rather than promoting consumer-price inflation, has, like squeezing a balloon, precipitated asset inflation instead. We’ve observed the malinvestment consequences as the technology stock market Bubble, and the illogical and eventually ill-fated investment spending spree in telecommunications, came to a costly end as the new millennium began. As for the epidemic of speculation that has metastasized to residential real estate and other asset classes—the fallout looms as a threat of unknown proportions. History leaves us no choice but to conclude that the “financial” and “real” economy consequences will almost certainly be anything but pleasant.

We also studied the history of risk and presented substantial anecdotal evidence that leaves us alarmed by the “inexplicable complacency” (returning momentarily to Jim Grant’s memorable phrase) in relation to “The Sword of Damocles” hanging by a horsehair above our heads. Equity-risk premiums, interest-rate spreads in the credit-issuance industry, and the price of put options, to name just three, are at or near record lows. Speculative epidemics do not spread as this one has without the complementary forces of easy money and a marked indifference to whether or not the price of investments compensate investors adequately for the risks incurred. “This is the reason that history has not dealt kindly with the aftermath of protracted periods of low-risk premiums,” the departing Fed chairman obliquely warned, as noted earlier in this report.

Going from the general to the specific, we see no evidence that the price of the S&P 500, the benchmark against which we measure ourselves, reflects an adequate margin of safety. The price-earnings ratio, given the risk scenario, is on the wrong side of the long-term average. To be sure, the future is always uncertain. It’s how little heed the market currently pays to these uncertainties that gives us pause. All we need to know is that the opportunities forgone today are likely to be less appealing than the opportunities that may appear in the future. We believe that a rational man must conclude that the odds are, in the main, unfavorable, that patience is a virtue and that you only have to swing mightily at a few fat pitches in a lifetime to make the financial Hall of Fame. In the meantime we are busily stockpiling investment ideas that have every attribute we consider essential—

except a purchase price that compels us to make the capital commitment now. That critical variable is not under our control, and it is a formidable test of our patience to await its arrival, particularly without any assurance that it will come. For some securities it's common for prices to change by 50% or more in a year. Price changes of this magnitude simply do not occur in other fields such as farming, real estate, energy, etc. If we are ready, the opportunities can be huge.

Having always greatly admired Charlie Munger, Warren Buffett's worldly wise sidekick, I decided to defer to him and his refreshing cut-to-the-chase succinctness to bring this long story to an understandable close. Those who have read Janet Lowe's biography of Charlie or his own *Poor Charlie's Almanac* know full well that the bespectacled, peanut brittle-chewing curmudgeon is street-smart like a fox. As to Charlie's book-learnin' intelligence, thanks to some string pulling, he was accepted into Harvard Law School without a bachelor's degree, from which he graduated in 1948 *magna cum laude*.

Here's a profoundly simple and equally powerful quote that should be read with the utmost care, thoughtfully reflecting on every phrase, from the *Almanac*, leaving Charlie, as is fitting, with the last, sage word:

Our experience tends to confirm a long-held notion that being prepared, on a few occasions in a lifetime, to act promptly in scale, and doing some simple and logical thing, will often dramatically improve the financial results of that lifetime.

A few major opportunities, clearly recognizable as such, will usually come to one who continuously searches and waits, with a curious mind that loves diagnoses involving multiple variables.

And then all that is required is a willingness to bet heavily when the odds are extremely favorable, using resources available as a result of prudence and patience in the past.

In three short paragraphs the “other” Oracle from Omaha³⁶ reveals to both the wise and the wary the silver linings in the otherwise dark clouds of the Perfect Storm.

³⁶ Charlie is not a “market timer.” However, as mentioned earlier in reference to arbitrage, there is some meaningful positive correlation between the availability of bargains and the extent to which markets are depressed and investors disillusioned. Obviously, the opposite is generally true during periods of unchecked exuberance. To be sure, there are many exceptions to this rule. However, if you take Charlie’s third paragraph to heart, having patiently kept your wallet buttoned in your pocket, the odds (not the gods of old) will favor you greatly as you shop for diamonds in the rough ... times.

FINAL THOUGHTS ...

There seems no more fitting place to start this page of reflections than to turn in refreshing contrast from the foregoing to the wonderful simplicity of the Yankees' beloved catcher, hitter, and later manager Yogi Berra. On a road trip a traveling companion observed, "Hey, Yogi, I think we're lost," to which the fellow who could put a glove on anything that the pitcher threw replied, "Yeah, but we're making great time!" I love the challenge and excitement of this life, inside and outside the world of business and investment. Of course, by definition, it becomes a love story only if there is a reciprocating party. If you enjoy this journey half as much as I do, I'll be more than satisfied.

As you'll notice below, we've taken steps to ask some other most able fellows if they might help guide us so we don't get lost. Like Yogi, we are anxious to make great time—but in the right direction.

As most of you know, 2005 will be remembered as the year that confirmed the reality of the phrase "no pain, no gain." Not wanting to keep it all for ourselves, we felt obligated to share some of it with our clients. Moving custody and trading to Fidelity Registered Investment Advisor Group was an enormous undertaking, requiring the completion and signing of new account and investment advisory agreements. To a person, all our clients were most cooperative in making the transfer as seamless as possible. We thank you. I would be remiss if I did not also speak with wonder about our incredible operations team. Led by operations manager Ann Frantz, the team of Kristin Antalavits (chief trader and assistant portfolio manager), Karen Sherer (client service representative), and Stephanie Malcom (you name it, she does it) worked tirelessly, pulling rabbits out of hats like magicians on retainers. As you'll see from the bios, we induced some wonderful new people to join that key component of our organization where the rubber meets the road. Christine Broadbent is the able executive assistant to Dennis, Todd, and Drew. Kristen Smith, who received the accolades she deserved in *Speculative Contagion*, is my executive assistant. Our newest addition, Sue Massey, brings two outstanding attributes to the operations team: an impressive résumé of experience and the kind of positive attitude that infects everyone around her.

Exhibiting a masochistic streak, we relocated to our new office in mid-April of 2005. In reviewing at year-end the e-mails and

other communiqués exchanged over the many months preceding the move, I'm reminded that moving is like having a root canal: It's *physically* painful until a dentist completes his drilling, then *financially* hurtful thereafter! As noted in last year's report, "While a number of intangible benefits are presumed, the increase in our occupancy expense is a certainty!" I must humbly admit that my forecasting ability regarding increased expenses was dead on. Fortunately, the intangible benefits came in well above budget! I think most of you who have spent time in our new offices would agree. In the meantime, I'm haunted by the thought that hubris may have subconsciously set in. Fortunately, the market was kind enough to remind us that there is no apparent correlation between new offices and improved investment results!

There were no changes to our six-man (seven, counting Charlie) professional team last year. Despite the manifold distractions, productivity from this remarkable group of men reached new heights. Introspection was the watchword for 2005, as it will be on an ongoing basis. Jim Collins' book *Good to Great* proved to be a formidable template as we engaged in the most rigorous self-examination in our history. Speaking of "no pain, no gain ..."

Finally, the undersigned is thrilled to report that the exhilaration he feels every morning when he awakens to face a new day has not diminished one whit. How anyone could have so much fun and call it work is beyond me. At 63 retirement is always an option, but so is serving time in the slammer. Each is about equally appealing to me. Thanks to your encouragement and the support of our entire team, I should be shoveling coal for the MCM cause for as long as I can help to keep the fires burning.

ADVISORY BOARD

We have always been, above all, accountable to our clients. In the business sense, there is no master senior to them. In order to continually improve our service to those whom we owe our loyalty and commitment of time and talents, we decided to strengthen our organization from the inside out by engaging an advisory board.

Up to recently, in terms of how we carry out our various functional duties, we have been accountable only to ourselves. While the board's legal authority is limited in order to avoid exposing the board members to any unnecessary risks, by virtue of their manifold strengths and our unqualified respect for them, they have informal

power that may very well exceed any granted to a Board of Directors! “Moral suasion,” to extract the phrase from the Federal Reserve Board’s tools, will be their primary long-armed lever.

The selection process was simple: my partners nominated the candidates, and I interviewed them and then extended offers to those whom I felt, as a team, would function most effectively. The board’s responsibilities include acting as an independent and highly regarded third party to whom all partners are accountable, to provide continuity and an independent perspective with regard to succession planning and implementation, and to evaluate the performance of all partners, including yours truly. After two quarterly meetings with this Trojan-horse trio, they have provided ample evidence that they take their commission seriously. These guys mean business, as our diligent preparation for each meeting would indicate. I was hoping they might cut me a little slack—you know, for my years of service. Instead, they simply hold me to a higher standard!

In all seriousness, we are thrilled to have the following men at our side, helping us to make our destiny.

Frank K. Martin, Managing Partner

ADVISORY BOARD BIOS

John Affleck-Graves

John was elected executive vice president of the University of Notre Dame in April 2004. He holds the Notre Dame Chair in Finance and previously served for three years as vice president and associate provost. Dr. Affleck-Graves served on the Notre Dame faculty 1986–2000, the final three years as chairman of the Department of Finance and Business Economics, and returned in 2001 after a year at Florida State University as the Patty Hill Smith Eminent Scholar in Finance. He previously taught 1975–86 at his alma mater, the University of Cape Town, where he earned bachelor's, master's, and doctoral degrees. Author of more than 50 refereed publications, Dr. Affleck-Graves specializes in the study of initial public offerings, valuation and asset pricing models, and shareholder value-added methodology. He has served as a consultant for numerous companies, including Allied Signal, Bayer, Merck, Pharmacia & Upjohn, and Donnelly Glass. Highly regarded in the classroom as well, Dr. Affleck-Graves has received six outstanding teaching awards at Notre Dame—three in the regular MBA program, two in the Executive MBA Program, and one for undergraduate teaching—as well as two others in Cape Town.

John E. Freechack

John is chairman of the financial institutions group of the firm Barack Ferrazzano Kirschbaum Perlman & Nagelberg, LLP. He has advised hundreds of financial institutions on strategic planning, corporate governance, and other matters for more than 25 years. His extensive experience includes the representation of numerous public companies, as well as regional and community banks and thrifts. John spends considerable time counseling institutions with respect to mergers and acquisitions, plus securities and corporate law matters. He is the co-editor of the two-volume edition *Advising Illinois Financial Institutions*, which was originally published in September 2002, with a new edition scheduled for an early 2006 release. John teaches banking law and regulation at Northwestern University School of Law, along with bank holding company law at Chicago Kent College of Law's graduate program in financial services law, and has been a visiting lecturer at other law schools.

David M. Messick

David currently serves as a full professor at the Kellogg School of Management, Northwestern University. He is the Morris and Alice Kaplan Professor of Ethics and Decision in Management and a director of the Ford Motor Company Center for Global Citizenship. Dr. Messick teaches courses in ethical decision making, individual and group behavior, leadership, and ethics. He is the author of more than 150 articles and chapters. Dr. Messick's scholarly work has been published in prominent academic journals. He has been invited to lecture at prestigious universities both in the United States and abroad and has been a guest participant at numerous conferences conducted around the world. Dr. Messick is an Editorial Board Member for *Business Ethics Quarterly*, *European Review of Social Psychology*, *Journal of Behavioral Decision Making*, *Journal of Experimental Social Psychology*, *Personality and Social Psychology Review*, and *Social Justice Review*. His current areas of research include ethical and social aspects of decision making and information processing, as well as the psychology of leadership.

THE MARTIN CAPITAL MANAGEMENT TEAM

Frank K. Martin, CFA, Managing Partner

Frank has 38 years of investment industry experience. He founded McDonald Capital Management, Inc., in 1987, and the firm was reorganized as a partnership in 1991 and renamed Martin Capital Management. He graduated from Northwestern University in 1964 with a major in investment management and earned an MBA, with honors, including membership in *Beta Gamma Sigma*, the honor society of collegiate schools of business, from Indiana University at South Bend in 1978. From 1964 to 1966 Frank served as an officer in the US Navy. He is a Chartered Financial Analyst. Frank has served on the board of directors of several manufacturing companies, as well as a variety of social service organizations. He is currently a member of the boards of the Elkhart General Hospital Foundation; Fourth Freedom Forum, Goshen; Sauder Stewardship Foundation, Inc., Archbold, Ohio; Western Reserve Partners, LLC, Ohio; and the Frank Martin Family Foundation. He is founder and chairman of the board of DREAMSWORK, a mentoring and scholarship program for inner-city children. Frank published a biography of his father, William F. Martin, in 2000. In late 2005 he published the book *Speculative Contagion*. In 2006 Frank plans to continue work on a proposed book, *In Temporary Trust*.

Dennis D. Blyly, CFA, Partner

Dennis has 20 years of investment industry experience. He was an associate with Martin Capital Management and its predecessor firm for six years before being admitted to the partnership in 1994. Prior to joining Martin Capital, he was an investment officer for NBD Bancorp. Dennis graduated with honors from Grinnell College in Iowa with a major in economics and is a Chartered Financial Analyst. He earned an MBA, with honors, including membership in *Beta Gamma Sigma*, from Northwestern University's Kellogg School of Management. Dennis has served on the boards of several social service organizations and is currently a member of the boards of ADEC, Inc., Bristol; Hertzler Systems, Goshen; Pleasant Street Homes, LLC; and the Elkhart Chamber of Commerce.

Todd B. Martin, CFA, Partner

Todd has 17 years of investment industry experience. He has been with Martin Capital as an associate since 1993 and was admitted to the partnership in 1997. Prior to that time, he was an investment officer with First Chicago Corp. His undergraduate degree is in economics from DePauw University, Greencastle, Indiana. He earned the CFA designation in 1993 and graduated *magna cum laude*, with membership in *Beta Gamma Sigma*, from the MBA program at the University of Notre Dame in 1997, where he remains affiliated as a guest lecturer at the graduate business school. Todd has served on the boards of several social service organizations and is currently a member of the boards of the United Way of Elkhart County and St. Joseph Capital Corporation and Bank as Chairman of the Audit and Corporate Governance Committee, Mishawaka.

Andrew P. Wilson, CFA, Partner

Drew has more than 10 years of investment industry experience. He was admitted to the partnership in 2004. Prior to joining Martin Capital in 1995, Drew was an employee benefits consultant with Watson Wyatt Worldwide, specializing in qualified retirement plans. He graduated *magna cum laude*, with membership in *Beta Gamma Sigma*, from Loyola University, Chicago, where he majored in finance. Drew earned his CFA in 1998. Drew completed the top-ranked Executive MBA program at Northwestern University's Kellogg School of Management in the spring of this year. Drew sits on the board of the Child and Parent Services (CAPS) of Elkhart County; the Center for Hospice and Palliative Care, Inc.; and is Chairman of a United Way of Elkhart County allocation panel.

Aaron J. Kindig, CFA

Aaron joined MCM in 2002 as a financial analyst. He earned a BA in accounting and business administration from Bluffton College in Ohio in 1995. His honors include the Financial Executives Institute Award and *Pi Delta* Honor Society. He tutored accounting students for three years. After graduation he spent three years in the banking industry, followed by almost five years in investment services. Aaron earned the CFA designation in 2003 and is a member of LaCasa Lending Advisory Committee, Goshen; and a mentor for DREAMSWORK.

Thomas W. Dugan

Tom joined Martin Capital in 2004 as a research analyst. Prior to that time he spent two years with the Sprint Corporation as a financial analyst and was a summer associate in the research department of Waddell & Reed Mutual Funds during graduate school. He graduated *summa cum laude* from Rockhurst University with a major in finance and economics. He earned an MBA, with membership in *Beta Gamma Sigma* from Indiana University's Kelley School of Business in 2004. He has passed three levels of the CFA Program and will be eligible for the CFA charter upon completion of the required work experience. Tom is a volunteer with Habitat for Humanity and DREAMSWORK.

Charles R. Kirk

Charlie's contribution to our research effort is part-time. Given his impressive and varied background in business and his ability to cut the core of an issue, it is much more valuable than the hours would suggest. He has 28 years of experience in plastics manufacturing. He was employed by Industrial Plastics Corporation for 18 years, the last ten of which he served as president. The next four years he worked for operating units of Trinova Corp., IPCs acquirer, as general manager of the IPC division and as group vice president. From 1993 to 1995 he was president of Elkhart Plastics, Inc. Charlie received a BA in 1963 and an MA in 1964, both from the University of Akron, and in 1968 his PhD from Temple University.

Ann T. Frantz

Ann began her career in public accounting with Crowe Chizek, Elkhart, in 1983. Prior to becoming Martin Capital's operations manager in August 1999, she was the benefits manager for Crown International, Inc., Elkhart. Ann graduated in 1982 from Indiana University at South Bend with a BS in business and membership in *Beta Gamma Sigma* from Indiana University. She earned her CPA designation in 1986. She is a member of the Indiana CPA Society.

Kristin A. Antalavits

Martin Capital recruited Kristin in 2000 as a portfolio manager's assistant and securities trader. She majored in accounting at Simpson College, Indianola, Iowa, where she earned her BA in 1990. Before joining the firm, she was employed by Northern Trust Bank, Chicago, as a senior representative in the investment managers liaison group.

Karen M. Sherer

Karen has more than 20 years of experience in the financial services industry. Before joining Martin Capital in 2001, she was employed by Compass Financial Advisors as a registered representative. Karen was also employed for 16 years with Bank One where she held various positions. She worked in the trust department for 10 years; in 1996 she was promoted to trust administrator, then to trust officer in 1998. Karen earned her BS in organizational management from Goshen College in 1995.

Stephanie A. Malcom

Stephanie joined Martin Capital in 2000 as an executive assistant. She graduated from Elkhart Memorial High School and has attended various seminars on office management. Stephanie came to the firm from Elkhart-based Energy Management Systems. She began volunteering as a mentor for the DREAMSWORK program in 2005.

Christine L. Broadbent

Christine joined the firm in 2004 as an executive assistant to three of the four partners. She attended both Indiana University's Bloomington and South Bend campus' studying anthropology and history. Prior to Martin Capital, Christine worked for the University of Notre Dame for 12 years, beginning in the Undergraduate Admissions office, served as Marketing Coordinator for MBA Admissions as well as Assistant Director of Pre-College Programs, a high-talent summer program for rising high school seniors. She spent the last three years with the University's MBA Program as Assistant Director of Student Services.

Kristen R. Smith

Kristen joined Martin Capital in July 2005. She earned her BA with high distinction in general studies, with minors in anthropology and sociology, while also obtaining an International Studies Certificate from Indiana University at South Bend. Prior to Martin Capital, Kristen spent seven years working for ADEC (Association for the Disabled of Elkhart County) as a residential trainer. She also worked as a writing consultant in the Writing Center at IUSB for two years. Kristen began volunteering as a mentor for the DREAMSWORK program in 2005.

Susan K. Massey

Sue is the newest addition to the Martin Capital team, beginning her duties in October 2005. She earned her associates degree and paralegal studies certificate from Indiana University at South Bend. Sue was employed for 12 years at Bank One, the last three working as an administrative assistant in the trust department. Sue currently acts as a mentor for DREAMSWORK, a mentoring and scholarship program for inner-city children.

