



C A M B R I D G E A S S O C I A T E S L L C

WHERE WE ARE NOW AND WHAT TO DO ABOUT IT

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Ian Kennedy
Jenny Chan

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ABSTRACT

1. The secular bear market in U.S. equities is not over—just the first few innings.
2. Secular bear markets are typically punctuated by strong counter-trend rallies (or cyclical bull markets) that can last a year or longer. The rally from the October 2002 lows is the first significant, prolonged rise since the bear market began in March 2000.
3. Although corporate profits (and balance sheets) are now recovering from their sharpest decline since the 1930s, monetary stimulus is the proximate cause of the equity market's recent gains.
4. Despite valuation headwinds, equities could well rise further, especially if the economy shows definite signs of improvement. The monetary spigots are wide open and the Fed has guaranteed it will not raise rates for the foreseeable future; the tax cuts will put money in consumers' pockets; and the administration has started talking down the dollar. Meanwhile, investors have been sitting on a mountain of cash earning a negative real rate of interest taxed at more than twice the rate now imposed on equity dividends and capital gains. As risk aversion ebbs, some of this money should find its way into the market.
5. Under these precarious circumstances, what should investors do?
 - Maintain allocations to diversified equity assets and rebalance assiduously.
 - Since aggressive reflation and a weaker US\$ could lead to higher inflation, consider inflation-sensitive assets like commodities and natural resources, which are reasonably valued in comparison to equities and bonds.
 - Because rates are relatively low by historical standards does not mean they cannot go lower (the Fed, for one, is trying to engineer lower long-term rates). However, bonds are increasingly vulnerable to global reflation and offer little value. Those with a need to hedge their spending liabilities against further equity market declines should maintain minimal core holdings of intermediate- to long-term Treasuries for insurance purposes—and hope they never have to collect.
 - Non-U.S. equity markets remain closely tied to the United States since neither the European nor the Japanese economies seem likely to outperform the United States over the next 12 months. However, various indicators suggest the Japanese equity market may finally have bottomed out and we are increasingly enthusiastic about equity investment opportunities in Japan.
 - The growth prospects of many emerging markets economies look better than those of developed markets, while emerging markets equity valuations are more attractive.
 - In private markets, opportunities to buy secondary interests in venture capital funds are expanding. The European buyout market looks more promising than the U.S. market, although smaller U.S. deals should generate reasonable returns.
 - In hedge funds, program construction and manager selection are everything.
 - Real estate should benefit from global reflation, but as interest rates have declined, yield-hungry investors have bid-up prices on high-quality, well-leased real estate properties. On the other hand, secondary properties with less secure rent-roll have languished, creating some opportunities for careful buyers. In short, good implementation is the key to successful investing in this relatively inefficient asset class.

SUMMARY

Introduction

By mid-October last year the bear market in equities had brought endowments, foundations, and pension funds to the brink of a funding crisis. Many non-profits were faced with an imminent decision either to slash spending in line with their stated policy, or to risk severe impairment to their purchasing power if they chose to maintain the dollar value of distributions. At pension funds, the abrupt shift from over- to under-funded status left many companies facing massive contribution demands just when revenue, cash flow, and profits were already under the most severe pressure in decades.

What a difference a few months can make! From its low on October 9, 2002, the S&P 500 rallied 20.9% in seven weeks, and subsequently rose an additional 9.4% to its recent high on June 17, 2003. In the second quarter alone, the S&P 500 returned 15.4% and the equal-weighted S&P 500 a sizzling 21.9%. The pervasive air of doom has lifted amid palpable sighs of relief.

Not so fast. Yes, the Fed has issued an unequivocal stay of execution, backed by the administration's fiscal stimulus and the Treasury Secretary's not-so-casual views on the merits of a weaker US\$. However, a stay is not a reprieve. We do not think the secular bear market is over and would strongly encourage those who feel they have dodged a bullet to use this breathing space to determine now what steps they will take when/if the crisis returns.

Anatomy of a Bear Market: Where Are We Now?

The current rally is the fourth, and by far the best, of the secular bear market that began on March 24, 2000. In its three previous short-lived spikes, the S&P 500 advanced 19.0% (April 2001 to May 2001), 21.4% (September 2001 to January 2002), and 20.7% (July 2002 to August 2002). By historical standards these were relatively feeble affairs since explosive rallies of 50% or more are characteristic of bear markets—for example, the Japanese stock market has rallied 48%, 34%, 56%, and 62% during the course of its 13-year decline.

Despite the considerable ground already covered by U.S. equities since the October lows, there are compelling reasons to think the current rally may still have legs. The Fed's stated determination to preclude deflation by all necessary means has signaled to investors that interest rates will remain rock bottom for the foreseeable future. And although the Fed cannot control where the money flows when it opens the monetary spigot, chances are good that some percentage will find its way back into equities as investors react to rising prices and to corporate America's improving earnings. As both *The Bank Credit Analyst* and Ned Davis Research have recently noted, the amount of money held in money-market fund assets stands at the top end of its historical range relative to the value of the Wilshire 5000, at a time when the nominal return on those assets is minimal and the real return negative. Moreover, not only are equity market dividends now higher than those paid by money-market funds, the former are henceforth taxed at a 15% rate, while money-market fund dividends are subject to regular income tax rates. According to *The Bank Credit Analyst*, the \$5 trillion in money-market funds and other savings deposits is also at an all-time high relative to consumers' disposable income, which suggests that some considerable percentage may be regarded as investable funds. (See [Exhibit 1](#).)

As taxable investors and corporate CFOs digest the significance of reduced taxes on dividends and capital gains, the former might return in force to the equity market as the latter realize that a strong dividend policy (regular increases and/or special one-time payouts) has become a powerful means to reduce the cost of equity capital (i.e., boost equity prices). Already, Goldman Sachs and Bank of America both recently cited the new tax laws as an important factor in their decision to raise the dividend payout.

That's the good news. The bad news is that every historical precedent indicates we should regard this rally as a break in the clouds rather than a change in the climate. [Exhibit 2](#) gives some idea of how far we have come in this secular bear market slog. These are still early days. We have no idea, of course, whether the lows of last July and October will prove definitive troughs, but we suspect those levels will be tested again somewhere down the road.

As we noted last August in *Asset Allocation in a Bear Market*, almost none of the classic bear-market endgame indicators has yet appeared.

- Although investors have certainly become more risk-averse, their faith in equities for the long run seems intact.
- The best-performing stocks in this rally have been speculative, low-priced issues of companies with negative earnings and cash flow, particularly in the tech and biotech sectors. *Déjà vu?* In a recent *Barron's* interview, Ned Davis noted that cyclical rallies within bear markets are often led by speculative growth stocks. More durable advances are of higher quality.
- Fundamental equity valuations remain relatively high. Valuations are appealing only on the basis of interest-rate driven metrics, which break down when rates are uncommonly low.
- "A classic symptom of market troughs is that valuations are attractive but there are no takers" (Richard Davidson in Morgan Stanley's "Global Strategy Bulletin," April 14, 2002). No evidence of this in the United States—although Germany and Japan might well qualify. As we noted last August, we anticipate a period of puzzling disparity between a weak U.S. stock market and a robust U.S. economy before the bear market has run its course.
- Tech sector consolidation has yet to occur—although Oracle's bid for PeopleSoft might prove a straw in the wind. From a peak weight of 34% of the S&P 500 in August 2000, information technology shrank to just 13% of the index in September 2002, and now constitutes 16%. In addition, the commoditization of technological developments "is occurring at early stages... Success breeds imitation and there is so much money looking for opportunity" (David Yoffe, Stanford Institute for Economic Policy Research, May 2003). Nevertheless, although hordes of uneconomic tech enterprises have simply gone bust, the expected feeding frenzy has not yet transpired.
- A huge financial asset bubble inflates and then pops. During the next several years, the most profitable sector of the economy is . . . the *financial* sector? Something here does not compute. In the short run, financial companies are likely to be the chief beneficiaries of current Fed policy, but before the bear retreats into long-term hibernation look for a smash-up in financials.

Ongoing Asset Allocation in an Ongoing Bear Market

Time Horizon Issues. Institutional investors constantly mediate among competing time horizons. For example, a university endowment's *return* horizon may be theoretically infinite, but its *risk* horizon is constrained by a spending policy based on a 12-quarter moving average of endowment market value. Then there is the time horizon dictated by the tenure of investment committee members and by the career risk of the investment staff. In practice, what ensues is a process of continuous review with a focus of about three to five years. In other words, it is difficult (but not impossible) for such investors to commit significant amounts to investments with an excellent long-term outlook but no prospect of meaningful returns within the next five years. (Unconstrained by such institutional imperatives, individual investors can better afford a longer view, or can become more tactical and opportunistic, or both.)

Mindful of this practical reality, we also characterize our asset allocation advice as a constant work in progress with a (predominantly) three- to five-year horizon. That is, our focus is on assessing the relative risk and potential of all investment options over a three- to five-year time frame.

However, recent statements from the Fed (Federal Reserve Bank of Dallas President Robert McTeer and Board of Governor's member Ben Bernanke in addition to Chairman Alan Greenspan) and the administration (especially Treasury Secretary Snow) force us to scan a closer horizon. The Fed is like a biker on a twisty, wet road who accelerates to avoid crashing. Gaining traction is all that matters—even if the road ahead is just as treacherous and the bike is now going faster. They probably *will* gain traction, reflatting an economy that is already mending slowly, helped by fiscal stimulus and government spending designed to gun the economic engine in advance of next year's election. So what if this full-throttled monetary stimulus results in higher inflation? Will this upset those millions of homeowners—a.k.a. voters—who have refinanced at low nominal rates and whose net worth is predominantly invested in property whose value will probably rise at least as fast as the CPI? Inflation is the natural tendency of a democratic society in which most voters are homeowners rather than equity investors, and debtors rather than creditors (especially when a significant percentage of those creditors are foreign investors).

Unfortunately, this kind of liquidity is like a sugar rush—while mitigating equity market risk over the short term, it increases the probability of another slump somewhere down the road. Similarly, the Fed's blank check to hedge funds and investment banks to borrow short and invest out the curve increases the likelihood of another year like 1994.

Economic Risk. Given the size of the current account deficit, the dominant risk, of course, is that foreign investors decide that the United States is embarked on a course of monetizing debt through currency depreciation and therefore dump their US\$-denominated holdings. The administration's hope is that aggressive reflation will result in the U.S. economy growing at a faster rate than that of tottering Europe or sclerotic Japan, giving foreigners every incentive to continue investing here.

Doom-sayers excoriate the Fed for driving too fast in the first place and then attempting to remedy its recklessness by accelerating, seeking to induce over-indebted consumers to leverage more, consume more, save less. They regard excess liquidity as a bane that first inflated an equity bubble, then a housing and credit bubble, and now a government

bond bubble. They see the whole structure as a house of (credit) cards vulnerable to imminent collapse, a dollar smash, widespread default, and prolonged economic contraction.

More sanguine pundits argue that consumer debt is eminently manageable, that corporate balance sheets are already undergoing substantial repair, that revenue and earnings are already rising, and that an extra push from aggressive monetary and fiscal stimulus will ensure robust growth later this year and into 2004.

Asset Allocation Options. More or less agnostic on such matters of policy and economics, for us the key question is whether the markets seem to be assigning an uncommonly high or low risk premium to one or other plausible outcome, and what asset allocation opportunities this might present over that three- to five-year time horizon we favor. Since higher-quality bonds seem unusually vulnerable to robust recovery and lower-quality bonds (credit spreads having contracted sharply) to any further weakness, our focus is on equity assets other than publicly traded U.S. equities.

- 1. Inflation-Sensitive Assets.** If the Fed's aggressive stimulus succeeds in reflation the economy (as seems likely), higher-than-expected inflation is very plausible. Because the markets' focus is generally short term, however, and inflationary pressures are currently non-existent, inflation-sensitive assets are not priced at a premium. On this basis we recommend selected investments in commodities and natural resources.
- 2. Bonds.** We fervently hope that economic recovery spells trouble for bonds, but cannot ignore the possibility of a further relapse that pummels equities. Despite the overwhelming evidence that no one can predict the direction of interest rates, everyone seems to have become expert in doing so and hardly anyone predicts they will go lower. Why not? Just because nominal interest rates are relatively low doesn't mean they can't go lower—although low rates do mean that price risk has risen while return prospects have diminished. However, we would note both that *real* interest rates are not particularly low and that the yield curve is very steep by historical standards—predicting either the direction of real rates or changes in the shape of the curve is at least as tricky as predicting the direction of nominal interest rates. In sum, investors should maintain minimal core holdings of high-quality, non-callable, intermediate- to long-term bonds whose appreciation would enable them to sustain spending during a prolonged economic contraction. In other words, they should pay up for the insurance—it's too risky to be without it—and hope they never collect.

However, with the exception of investors like pension funds or insurance companies with specific interest-rate-linked liabilities, we see no reason today to hold bonds for any other purpose.

- 3. Secondary Interests in Venture Capital Funds.** One consequence of the equity market rally, especially the Nasdaq's 50% rise from its low on October 9, 2002 to a June 17, 2003 peak, is that the average annual return of U.S. venture capital funds since the onset of the bear market is now almost as bad as that of the Nasdaq (i.e., -27.3% AACR). Before the decline has run its full course one should expect venture to underperform the Nasdaq, since venture capital lies further out the risk-return continuum than do small-cap growth stocks. As venture capital returns fall behind those of public markets, we would expect the (already brisk) trading in secondary interests to accelerate, as less solvent, less knowledgeable and less patient investors unload their

interests at deep discounts to net asset value. We suspect, however, that this opportunity will persist for the duration of venture's sojourn in the desert, which is far from over.

4. **Non-Venture Private Equity.** As Morgan Stanley's Stephen Roach recently suggested, the €'s 36% appreciation against the US\$ in the past two years could precipitate the restructuring Europe has so long resisted. Although corporate Europe has been consolidating piecemeal since the late 1990s, the labor markets remain inflexible, contributing to rising unemployment, and the regulatory environment hostile to many cross-border transactions, despite the best efforts of the European Commission in Brussels. If crisis stimulates reform, the European buyout market, which is already an attractive place to invest, will become even more interesting. In the United States, meanwhile, only smaller deals are priced to produce good returns, but the ongoing bear market and the increased aggravation endured by public companies (e.g., compliance with Sarbanes-Oxley) should provide mid-market buyout managers with decent opportunities.
5. **Emerging Markets.** For months we have been beating a drum for emerging markets and continue to do so. The argument in their favor may be summed up as: stronger growth at a cheaper price.
6. **Non-U.S. Developed Markets.** We have also suggested that developed equity markets outside the United States offer better value—although in the short run the very high correlations among developed markets means that non-U.S. equities are also vulnerable to any relapse in the U.S. economy or market. Such investments may also benefit from further US\$ depreciation.
7. **Japan.** Least correlated, however, is Japan, which has attracted our close interest in recent months:
 - Most significantly, a steady trickle of good news from Japan elicited absolutely no reaction in the stock market earlier this year. This is a strong indicator of a market bottom.
 - Japanese equities look much cheaper than those of other developed markets, with 60% trading at less than the value of their assets and free cash flow rising steadily. In addition, value managers report that they are finding cash-flow positive companies selling for less than their cash on the balance sheet. In this context, Richard Davidson's remark bears repeating: "A classic symptom of market troughs is that valuations are attractive but there are no takers."
 - The *de facto* nationalization of Resona indicated that the authorities are finally acting to break the banking logjam. At the same time, the new agency charged with clearing the dead loans on banks' books is reported to be exerting considerable pressure on banks to write these off.
 - The Bank of Japan has indicated its willingness to serve as an intermediary in some process designed to work down banks' equity holdings to prevent their being dumped on the market.
 - Since bottoming at 7,608 on April 28, 2003, the Nikkei Index has rallied 19% in two months. In addition, volume on the Tokyo Stock Exchange has risen sharply, hitting two billion shares one day in June, the highest level in 14 years. An explosive rise in both price and volume is characteristic of the first phase of a new bull market.

- In the past month, Japanese bonds have tanked (JGB yields have risen to over 1.00% from 0.43% in mid-June) and the four main city banks are reported to be reducing their bond portfolios. This suggests that for the first time in many years, the bond market sees light at the end of the economic tunnel.
- Finally, bank stocks have shot up sharply, which we have cited for years as a *sine qua non* of broad-based recovery.

Conclusion: Japan offers rich hunting grounds for astute stock pickers. Although still a speculative bet, we would rank it as the most attractive developed market and one with considerable, untapped private-market potential.

- 8. Long-Short Equity Hedge Funds.** These products differ from traditional equity management in four ways: a partnership structure, high fees (including a share of profits), and an authorization to short and employ leverage. Each of these is discrete; that is, a product could well have one or more without the others. Indeed, some otherwise conventional mutual funds already engage in short selling and long-short hedge funds are increasingly seen less as a separate category of investment (or asset class, for want of a better term), and more as simply a means of realizing certain kinds of risk-return exposure. Meanwhile, the attrition rate among hedge funds has risen sharply—the average life expectancy is now four years—and although the average size of assets under management is \$135 million, 50% of funds manage less than \$38 million, which is probably uneconomic.¹ A durable stock market rally would almost certainly erode hedge funds' ability to attract and retain assets.

However, we differentiate between hedge funds in the aggregate and hedge funds in the particular. In the aggregate, the industry is simply a fee-maximizing, wealth-detracting mechanism—we would guesstimate that 98%+ of all hedge funds and funds-of-funds will not deliver returns commensurate with the risks they incur and the fees they charge. *Caveat emptor.* Since we do not believe the equity bear market has run its course, however, we see great value in those few managers with sufficient skill to participate in the upside and protect capital on the downside. Since hedge funds offer no underlying basis of return other than manager skill, program construction and manager selection are everything.

- 9. Absolute Return Hedge Funds.** On the one hand, a stronger equity market might revive the moribund M&A market, expanding the opportunity set for event arbitrage managers. Meanwhile, a more robust economic environment should enable investors in distressed securities to cash in some of their chips. On the other hand, so much capital has been invested in arbitrage strategies in recent years that only the most creative and experienced managers are likely to find ways to generate high single-digit returns, net of fees, without incurring substantial incremental risk.
- 10. Real Estate.** Currently trading at a modest premium to their net asset value, REITs are vulnerable both to defensive capital flowing back into corporate equities and to continued deterioration in the underlying real estate fundamentals. Meanwhile, private real estate is bifurcated between well-leased properties bought by pension funds looking for income in a low-yield world and secondary properties with higher vacancy rates,

¹ Data are from Samuel Bernstein, "The Hedge Fund Industry: Products, Services or Capabilities?" June 2003.

which are having trouble attracting buyers at any price. This makes the current situation quite different from that of the last recession, in the early 1990s, when real estate prices were so beaten down that investors just needed to get on the train. Today what counts is selecting the specific strategies pursued by specific managers capable of adding value in a difficult, low-growth market.

Summary Observations and Recommendations

- Do not mistake a strong cyclical equity rally for a sustained bull market. The bear may have ambled away for awhile, but has not returned to hibernation.
- Minimize bond allocations, but do not abandon "insurance" holdings.
- Diversify equity assets and rebalance among them. These should include inflation-sensitive investments, some forms of real estate, and various non-U.S., non-dollar equity investments.
- Hedge funds in general will prove value-detracting, but specific managers will justify their very high fees—making manager selection and program construction the cornerstones of success in this space.

EXHIBITS

Exhibit 1**RATIO OF MONEY-MARKET FUND ASSETS TO THE MARKET CAPITALIZATION OF
THE WILSHIRE 5000 INDEX**

The Bank Credit Analyst recently noted that the net worth of the median-income U.S. family is only 5% lower than it was at the Nasdaq's peak in March 2000. This is largely attributable to rising home prices since most families have far more net worth invested in real estate than in the equity markets. The significance of this datum, however, is that it provides support to the notion that the trillions of dollars now sitting in money-market funds, earning nugatory nominal returns, and sharply negative returns after taxes and inflation, could well provide the fuel needed to propel the stock market much higher, if economic fundamentals continue to improve (albeit slowly), and risk aversion wanes—as already seems the case.

Exhibit 1

RATIO OF MONEY-MARKET FUND ASSETS TO THE MARKET CAPITALIZATION OF THE WILSHIRE 5000 INDEX

December 31, 1977 - June 30, 2003



Sources: Thomson Datastream and Wilshire Associates, Inc.

Exhibit 2**CUMULATIVE WEALTH DURING VARIOUS BEAR MARKETS FOR THE S&P 500, NASDAQ
AND NIKKEI INDICES**

These are monthly data and the time line is 13.25 years, corresponding to the duration (so far) of the Japanese equity bear market.

The indices shown have all been rebased to 100 units (i.e., US\$ for U.S. indices and ¥ for the Japanese index) at the point of their respective peak values (e.g., January 1, 1990 for the Nikkei and April 1, 2000 for the Nasdaq) in order to compare the evolution of these bear markets over time.

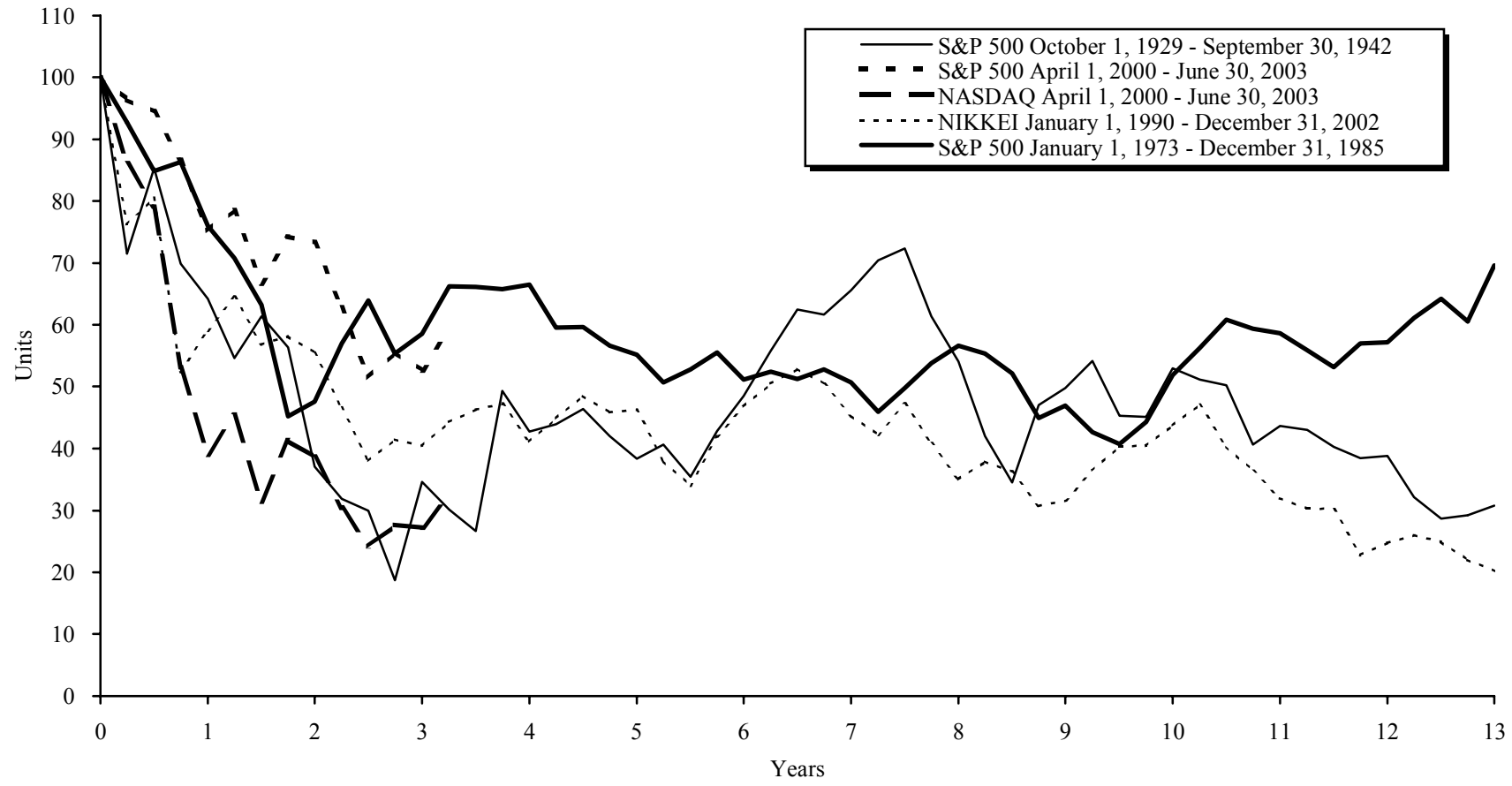
To date, the current U.S. equity bear market is following the classic pattern, although the initial peak-to-trough decline of the S&P 500 has been the least vicious of the five indices shown. On the other hand, the Nasdaq's decline has been more dramatic than that of any index except the S&P 500 in 1929-32 (however, presumably high-beta small-cap stocks were even more badly smashed during that period).

Above all, this chart illustrates our thesis that these are as yet early innings in the post-bubble secular bear market. Powerful counter-trend rallies should be expected (we are in one now), but precedent also indicates the probability of lower lows to come.

Exhibit 2

CUMULATIVE WEALTH DURING VARIOUS BEAR MARKETS FOR THE S&P 500, NASDAQ AND NIKKEI INDICES

**In Real Terms
(Base Value = 100)**



Sources: Global Financial Data, Standard & Poor's, Thomson Datastream, and *The Wall Street Journal*.

Exhibit 3**RETRACEMENT RATIOS OF THE S&P 500 FOLLOWING BULL MARKET PEAKS**

Violent declines in the equity market are typically followed by violent rallies. Note here, however, how relatively modest the rallies have been since the S&P 500 peaked on March 24, 2000. This is why the retracement ratios (right-hand column) have been so severe—the market has persistently sunk to lower lows following each rally. Missing, of course, is the most recent rally, from the low of October 9, 2002, which has already exceeded 30% and shows promise of further gains.

Exhibit 3

RETRACEMENT RATIOS OF THE S&P 500 FOLLOWING BULL MARKET PEAKS

Date of Trough	Date of Peak	Trough to Peak Percent rise	# of Months	Date of Subsequent Troughs	Peak to Subsequent Trough Percent Decline	# of Months	Retracement Ratio (%)
12/31/1927	09/07/1929	80.7	20.2	11/13/1929	-44.7	2.2	100.0
11/13/1929	04/10/1930	46.8	4.9	12/16/1930	-44.3	8.2	138.9
12/16/1930	02/26/1931	25.8	2.4	06/02/1931	-32.8	3.2	160.1
06/02/1931	06/27/1931	27.0	0.8	10/05/1931	-43.1	3.3	202.7
10/05/1931	11/09/1931	30.7	1.1	07/08/1932	-61.7	8.0	262.8
07/08/1932	09/07/1932	111.1	2.0	02/27/1933	-40.6	5.7	77.1
02/27/1933	07/18/1933	120.7	4.6	10/21/1933	-29.8	3.1	54.5
10/21/1933	02/06/1934	37.9	3.5	03/14/1935	-31.8	13.2	115.5
03/14/1935	03/10/1937	131.7	23.9	03/31/1938	-54.5	12.7	95.8
03/31/1938	11/12/1938	62.1	7.4	04/08/1939	-26.1	4.8	68.0
04/08/1939	10/25/1939	29.7	6.6	06/10/1940	-31.9	7.5	139.6
06/10/1940	11/09/1940	26.8	5.0	04/28/1942	-34.5	17.6	163.3
04/28/1942	05/29/1946	157.7	49.0	05/17/1947	-28.8	11.6	47.0
05/17/1947	06/15/1948	24.4	13.0	06/13/1949	-20.6	11.9	104.9
06/13/1949	07/15/1957	262.5	97.1	10/22/1957	-20.7	3.3	28.5
10/22/1957	12/12/1961	86.4	49.7	06/26/1962	-28.0	6.4	60.4
06/26/1962	02/09/1966	79.8	43.5	10/07/1966	-22.2	7.9	50.0
10/07/1966	11/29/1968	48.0	25.8	05/26/1970	-36.1	17.8	111.1
05/26/1970	01/11/1973	73.5	31.6	10/03/1974	-48.2	20.7	113.8
10/03/1974	09/21/1976	73.1	23.6	03/06/1978	-19.4	17.4	45.9
03/06/1978	02/13/1980	36.3	23.3	03/27/1980	-17.1	1.4	64.1
03/27/1980	11/28/1980	43.1	8.1	08/12/1982	-27.1	20.4	90.1
08/12/1982	08/25/1987	228.8	60.4	12/04/1987	-33.5	3.3	48.2
12/04/1987	07/16/1990	64.8	31.4	10/11/1990	-19.9	2.9	50.7
10/11/1990	07/17/1998	301.7	93.2	08/31/1998	-19.3	1.5	25.7
08/31/1998	03/24/2000	59.6	18.8	04/04/2001	-27.8	12.4	74.4
04/04/2001	05/21/2001	19.0	1.5	09/21/2001	-26.4	4.0	165.6
09/21/2001	01/04/2002	21.4	3.4	07/23/2002	-32.0	6.6	181.3
07/23/2002	08/22/2002	20.7	1.0	10/09/2002	-19.3	1.6	112.7

Source: Global Financial Data.

Notes: Bull market is defined as a continuous period without a price decline of 15% or more. Retracement ratio is the US\$ amount lost, peak to trough, divided by the amount previously gained, trough to peak. It represents the percentage of the prior market rise eliminated by the subsequent period decline.

Exhibit 4**ANATOMY OF A GLOBAL BEAR MARKET**

In the 3.5 years since the start of the new millennium, every major equity index has suffered a significant decline. Of those shown here, only the Russell 2000® Value Index has generated a positive return during this period (but note the astonishing disparity in cumulative return between, say, the Dow Jones U.S. Top Cap Growth Index and the Dow Jones U.S. Small Cap Value Index).

Peak to trough (on the basis of monthly data, which understates total declines), several major indices have melted down more than 50%. Nasdaq, of course, but also MSCI EAFE.

Exhibit 4

ANATOMY OF A GLOBAL BEAR MARKET

January 1, 2000 - June 30, 2003

In Local Currency

	<u>Average Annual Compound Return (%)</u>	<u>Cumulative Value of 100 Units</u>	<u>Highest Monthly Close</u>	<u>Lowest Monthly Close</u>	<u>Percent Decline (%)</u>
S&P 500	-9.8	69.7	1,517.7 (8/31/00)	815.3 (9/30/02)	-46.3
NASDAQ Composite*	-23.1	39.9	4,696.7 (2/29/00)	1,172.1 (9/30/02)	-75.0
Russell 1000® Growth	-17.8	50.3	601.4 (8/31/00)	226.2 (9/30/02)	-62.4
Russell 1000® Value	-1.4	95.2	369.3 (1/31/01)	259.5 (9/30/02)	-29.7
Dow Jones U.S. TopCap Growth	-22.3	41.3	2,291.6 (3/31/00)	708.5 (9/30/02)	-69.1
Dow Jones U.S. TopCap Value	1.0	103.5	1,374.0 (12/31/00)	986.0 (9/30/02)	-28.2
Russell 2000® Growth	-14.2	58.6	3,080.6 (2/29/00)	1,140.4 (9/30/02)	-63.0
Russell 2000® Value	11.1	144.5	2,638.4 (4/30/02)	1,901.6 (2/28/03)	-27.9
Dow Jones U.S. Small Cap Growth	-14.8	57.0	2,506.9 (2/29/00)	822.3 (9/30/02)	-67.2
Dow Jones U.S. Small Cap Value	14.0	158.4	1,486.5 (4/30/02)	1,161.8 (2/28/03)	-21.8
MSCI EAFE	-13.6	59.9	1,115.0 (3/31/00)	537.3 (3/31/03)	-51.8
MSCI United Kingdom	-10.4	68.0	1,933.5 (8/31/00)	1,072.7 (1/31/03)	-44.5
MSCI Europe ex U.K.	-15.1	56.4	1,382.8 (8/31/00)	586.3 (3/31/03)	-57.6
MSCI Japan	-15.7	54.9	1,023.4 (3/31/00)	479.3 (4/30/03)	-53.2
MSCI Pacific ex Japan	-6.9	77.9	944.0 (3/31/00)	649.5 (2/28/03)	-31.2
MSCI Emerging Markets Free	-5.1	83.3	21,587.0 (3/31/00)	12,757.1 (9/30/01)	-40.9

Sources: Dow Jones & Co., Inc., Standard & Poor's, Thomson Datastream, and *The Wall Street Journal*.

*Price index only.

Exhibit 5**WHERE ARE WE NOW?**

The “Equilibrium Real Return” numbers shown in this exhibit are our *long-term* compound average annual real return assumptions for U.S. and global ex U.S. developed markets equities.

If one accepts these assumptions as reasonable guesstimates (all such assumptions, however carefully derived, are little better than guesstimates), and assumes that as of June 30, 2003, one is in the middle of a “long-term” period, then one can measure what prospective return must be earned in the second half of the period to ensure that the return for the full period corresponds to the assumed long-term return.

For example, if we assume we are in the middle of a 30-year period, we know that the annual return of U.S. equities for the *past* 15 years was 8.20%, which means that the annual return for the *next* 15 years must be 3.85% for the full 30-year return to be 6.00%.

These data are discouraging since they point to one of three conclusions (or some combination thereof): (1) The long-term assumptions are wrong; if they were higher then the prospective returns would also be higher (but if they were lower . . .); (2) Equity market returns are randomly distributed; they do not mean revert; the mean is therefore a useless abstraction that tells us nothing about the likely level or distribution of future returns. This theory offers some comfort, but it wilts under the scrutiny of historical analysis; or (3) The “equilibrium return” assumption is probably about right; returns do mean revert; investors should trim their expectations accordingly.

Exhibit 5
WHERE ARE WE NOW?

June 30, 2003

	Time Horizon ¹	Historical Compound Return	Equilibrium Return	Reversion to Equilibrium		
				Implied Return	Percentile ²	
U.S. Equity	40 Years	8.80	6.00	3.28	78	
	30 Years	8.20		3.85	70	
	20 Years	7.45		4.57	61	
Global ex. U.S. Equity	40 Years	6.18	5.50 ³	4.82	57	
	30 Years	0.25		11.02	14	
	20 Years	0.62		10.61	20	
Global Equity	40 Years	6.78	6.00	5.23	59	
	30 Years	3.14		8.94	24	
	20 Years	3.39		8.68	30	

Sources: Bureau of Labor Statistics, Standard & Poor's, and Thomson Datastream.

¹ Period is half history and half future; e.g., the 20-year period looks back ten years from March 31, 2003 to April 1, 1993 and projects ten years forward from April 1, 2003 to March 31, 2013.

² Percentile assumes a lognormal distribution.

³ The lower equilibrium return is a byproduct of the higher volatility of global ex. U.S. equity (for a U.S. investor).

Exhibit 6**U.S. EQUITY AND BOND MARKET RETURNS**

As of June 30, 2003, \$100 invested in U.S. equities in March 1996 would be worth the same (\$171) as \$100 invested in U.S. bonds on the same date.

Over the past 3.25 years (i.e., since the onset of the bear market) both the U.S. equity and U.S. bond market returns have deviated substantially from their long-term mean: the bond return of 9.9% is 0.8 standard deviations *above* the long-term mean while the equity return is almost two standard deviations *below* its long-term mean (falling at the 98th percentile of the distribution of returns for all 3.25 year periods; i.e., about as bad as it gets). Measured in real term, the equity return is even worse at 2.2 standard deviations from the mean and falling at the 99th percentile of the return distribution.

Exhibit 6

U.S. EQUITY AND BOND MARKET RETURNS

Annualized Periods Through June 30, 2003

	<u>3.25 Years</u>	<u>5 Years</u>	<u>7.33 Years</u>	<u>10 Years</u>	<u>15 Years</u>	<u>20 Years</u>
S&P 500	-11.1	-1.6	7.55	10.0	11.4	12.2
Lehman Bros. Aggregate	9.9	7.5	7.66	7.2	8.6	9.5

Average Annual Compound Return (%) January 31, 1926 - June 30, 2003

U.S. Stocks	10.3
U.S. Bonds	5.8

Sources: Citigroup Global Markets, Lehman Brothers, Inc., and Standard and Poor's.

Exhibits 7a-1**PERCENTAGE OF STOCKS DECLINING/ADVANCING**

Bear markets are generally more volatile than are bull markets, with the largest single-day percentage price changes being rallies rather than declines, despite the predominant downtrend.

The following exhibits illustrate this volatility for several indices over both 12-month and 60-month periods.

Notable is that a relatively small percentage of stocks have declined at least 30% during the past 12 months (3.6% of our All-Cap index versus an historical median of 5.3%), while a relatively large percentage have advanced at least 30% during this period (79.9%—well into the top quartile of the historical distribution).

Exhibit 7a

**PERCENTAGE OF CAMBRIDGE ASSOCIATES' INDEX EQUITIES
DECLINING 10%+, 30%+ AND 50%+ FROM 12-MONTH HIGH**

December 31, 1979 - June 30, 2003

	<u>All-Cap</u>	<u>Small-Cap</u>	<u>Mid-Cap</u>	<u>Large-Cap</u>
% of Number of Companies Declining At Least 10%				
	55.0	59.1	48.0	42.0
Historical Distribution				
High	98.3	98.1	99.0	99.5
25th Percentile	77.1	78.7	74.7	70.5
Median	64.9	69.0	58.9	52.8
75th Percentile	52.1	58.1	43.6	31.4
Low	32.9	35.8	22.0	11.6
% of Number of Companies Declining At Least 30%				
	15.6	19.0	9.4	6.5
Historical Distribution				
High	64.0	69.7	56.2	47.0
25th Percentile	33.4	37.0	25.6	16.3
Median	20.8	24.9	12.3	5.5
75th Percentile	13.8	17.8	6.6	2.5
Low	3.5	4.6	1.6	0.0
% of Number of Companies Declining At Least 50%				
	3.6	4.8	1.5	0.5
Historical Distribution				
High	28.5	33.3	19.5	20.0
25th Percentile	10.5	13.4	4.8	1.5
Median	5.3	7.1	1.6	0.5
75th Percentile	2.9	4.0	1.0	0.0
Low	0.4	0.6	0.0	0.0

Source: Calculated from data provided by Standard & Poor's Compustat.

Methodology: We look at the price of every security in the index as of June 30, 2003 and then identify its highest month-end price during the preceding 12 months, and compute the percentage decline from that point.

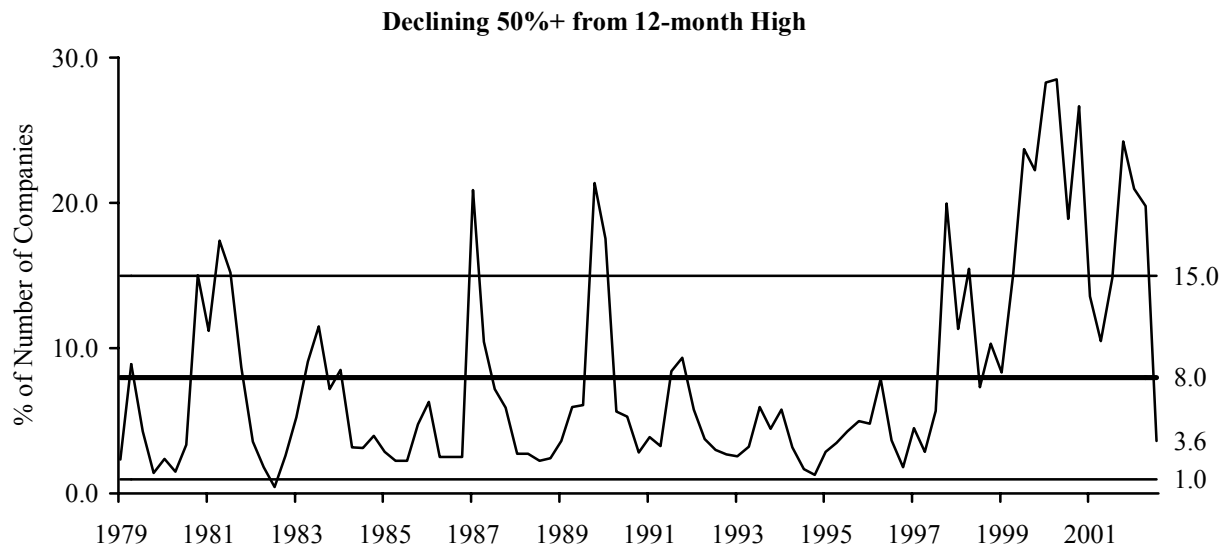
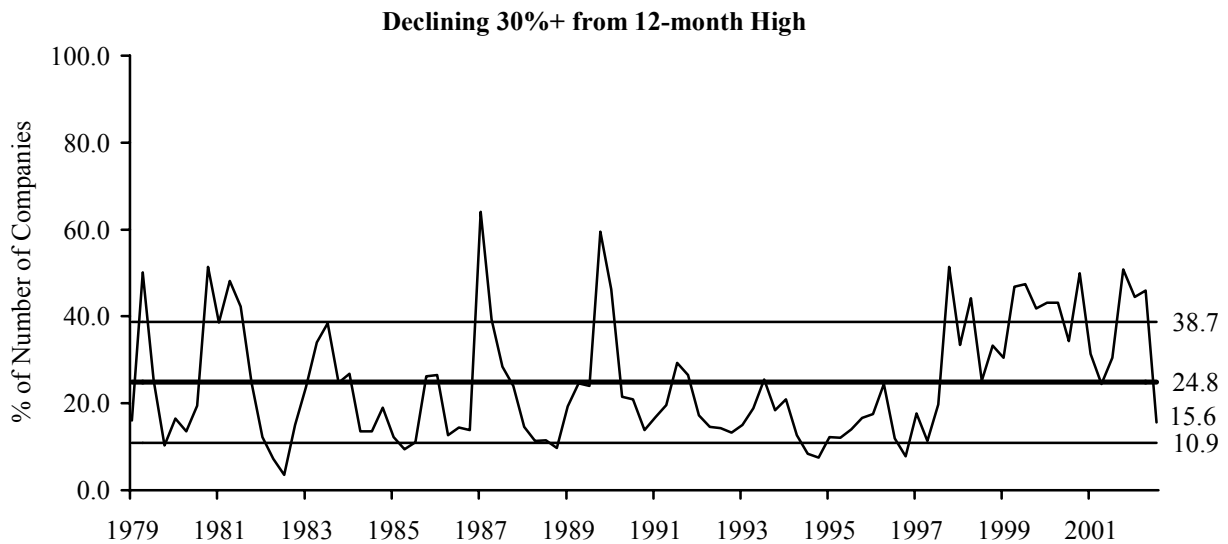
Notes: Historical data is based on data since December 31, 1979. Analyses represent price declines. For the purposes of these analyses, the All-Cap index is defined as the largest 3,000 issues in the Compustat universe. Large-capitalization equities are defined as the largest 200 issues in the All-Cap index. Mid-capitalization equities are defined as the next largest 800 issues. Small-capitalization equities are defined as the remaining 2,000 issues in the All-Cap index.

039q

Exhibit 7b

**CAMBRIDGE ASSOCIATES' ALL-CAP INDEX DECLINING
30%+ AND 50%+ FROM 12-MONTH HIGH**

December 31, 1979 - June 30, 2003



—	Mean
—	One Standard Deviation

Source: Calculated from data provided by Standard & Poor's Compustat.

Notes: Analyses are based on stock prices only. Historical data are based on quarterly analysis. For the purposes of these analyses, the All-Cap index is defined as the largest 3,000 issues in the Compustat universe.

Exhibit 7c

**PERCENTAGE OF CAMBRIDGE ASSOCIATES' INDEX EQUITIES
ADVANCING 10%+, 30%+ AND 50%+ FROM 12-MONTH LOW**

December 31, 1979 - June 30, 2003

	<u>All-Cap</u>	<u>Small-Cap</u>	<u>Mid-Cap</u>	<u>Large-Cap</u>
% of Number of Companies Advancing At Least 10%				
	98.3	98.3	98.0	99.5
Historical Distribution				
High	98.3	98.3	98.5	100.0
25th Percentile	93.0	92.7	95.2	95.7
Median	89.2	88.8	90.5	91.0
75th Percentile	82.8	81.9	83.6	83.2
Low	45.9	47.4	41.2	50.5
% of Number of Companies Advancing At Least 30%				
	79.9	81.2	78.6	72.5
Historical Distribution				
High	90.1	90.8	89.2	86.9
25th Percentile	69.3	69.4	69.3	70.6
Median	59.4	60.5	57.4	55.8
75th Percentile	45.1	48.0	43.1	36.8
Low	17.4	20.1	13.1	8.1
% of Number of Companies Advancing At Least 50%				
	55.7	59.9	48.9	41.5
Historical Distribution				
High	80.0	81.0	79.7	70.9
25th Percentile	49.4	49.6	46.6	41.2
Median	37.1	40.7	32.5	25.9
75th Percentile	25.0	28.0	20.4	12.6
Low	9.1	11.2	5.2	1.0

Source: Calculated from data provided by Standard & Poor's Compustat.

Methodology: We look at the price of every security in the index as of June 30, 2003 and then identify its lowest month-end price during the preceding 12 months, and compute the percentage rise from that point.

Notes: Historical data is based on data since December 31, 1979. Analyses represent price declines. For the purposes of these analyses, the All-Cap index is defined as the largest 3,000 issues in the Compustat universe. Large-capitalization equities are defined as the largest 200 issues in the All-Cap index. Mid-capitalization equities are defined as the next largest 800 issues. Small-capitalization equities are defined as the remaining 2,000 issues in the All-Cap index.

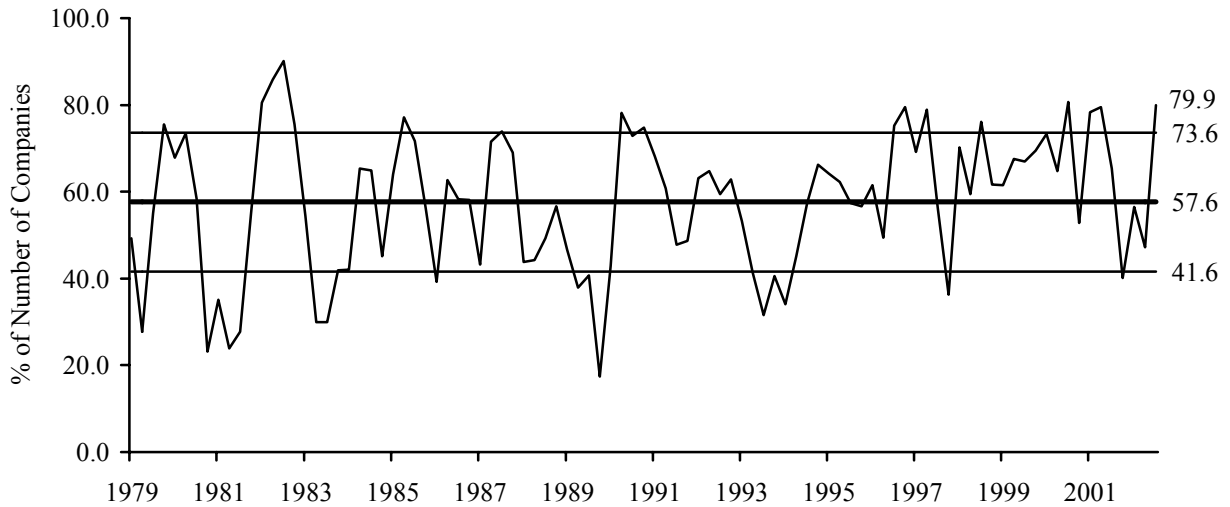
445q

Exhibit 7d

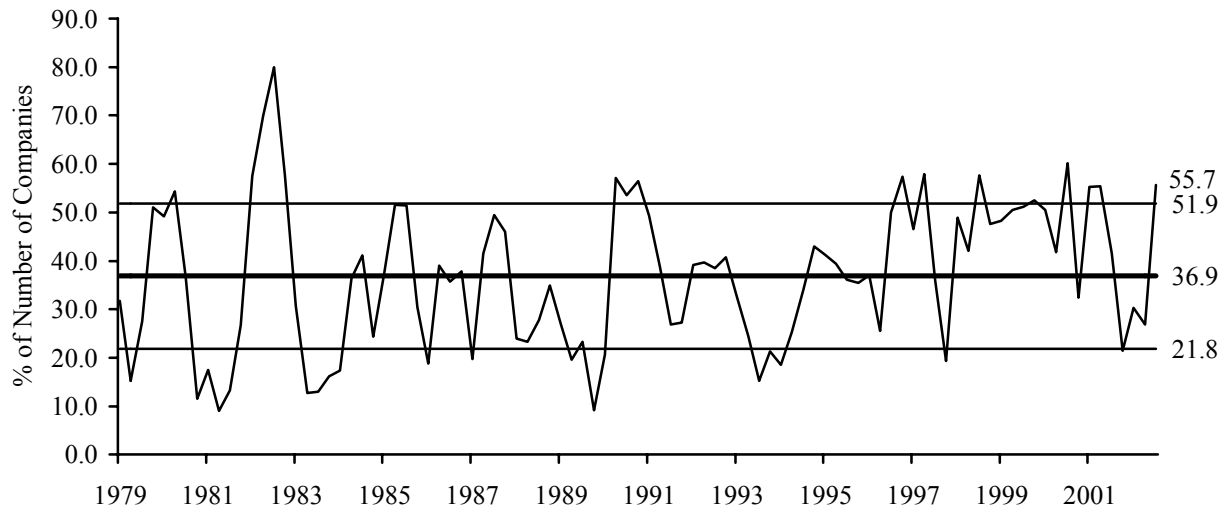
**CAMBRIDGE ASSOCIATES' ALL-CAP INDEX ADVANCING
30%+ AND 50%+ FROM 12-MONTH LOW**

December 31, 1979 - June 30, 2003

Advancing 30%+ from 12-month Low



Advancing 50%+ from 12-month Low



—	Mean
—	One Standard Deviation

Source: Calculated from data provided by Standard & Poor's Compustat.

Notes: Analyses are based on stock prices only. Historical data are based on quarterly analysis. For the purposes of these analyses, the All-Cap index is defined as the largest 3,000 issues in the Compustat universe.

Exhibit 7e

**PERCENTAGE OF S&P 500 INDEX EQUITIES
DECLINING 10%+, 30%+, 50%+ AND 90%+ FROM 60-MONTH HIGH**

January 31, 1977 - June 30, 2003

% of Number of Companies Declining At Least 10%

82.9

Historical Distribution	
High	99.2
25th Percentile	79.0
Median	64.6
75th Percentile	51.4
Low	24.7

% of Number of Companies Declining At Least 30%

56.2

Historical Distribution	
High	73.8
25th Percentile	40.5
Median	27.6
75th Percentile	20.4
Low	8.2

% of Number of Companies Declining At Least 50%

31.3

Historical Distribution	
High	42.1
25th Percentile	14.7
Median	9.7
75th Percentile	6.8
Low	1.7

% of Number of Companies Declining At Least 90%

4.4

Historical Distribution	
High	7.4
25th Percentile	0.4
Median	0.0
75th Percentile	0.0
Low	0.0

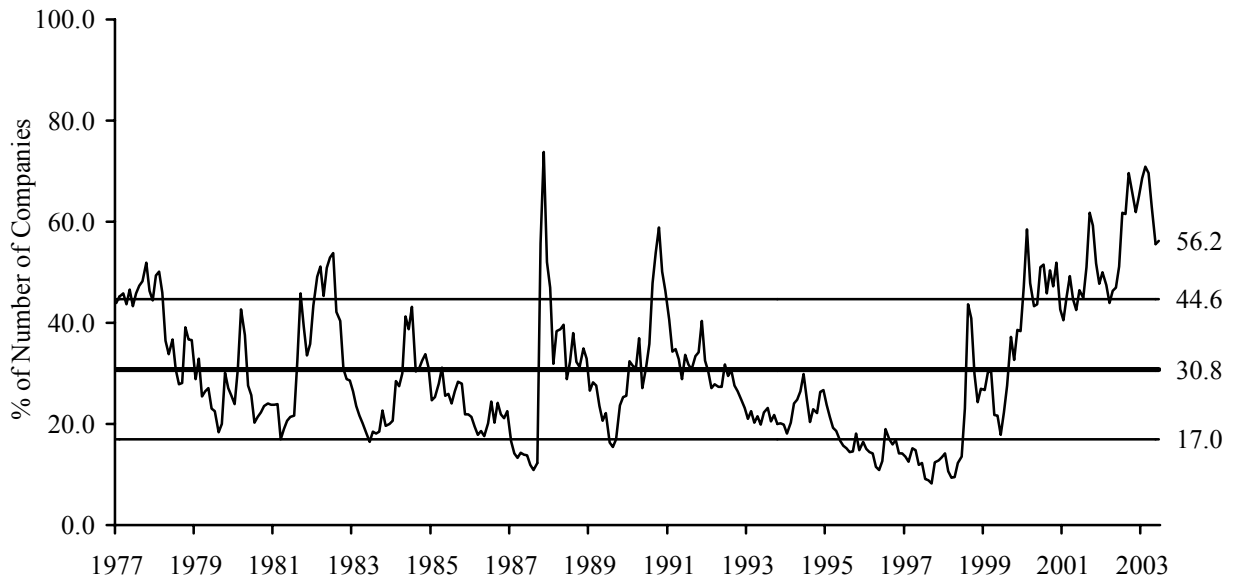
Source: Ned Davis Research.

Exhibit 7f

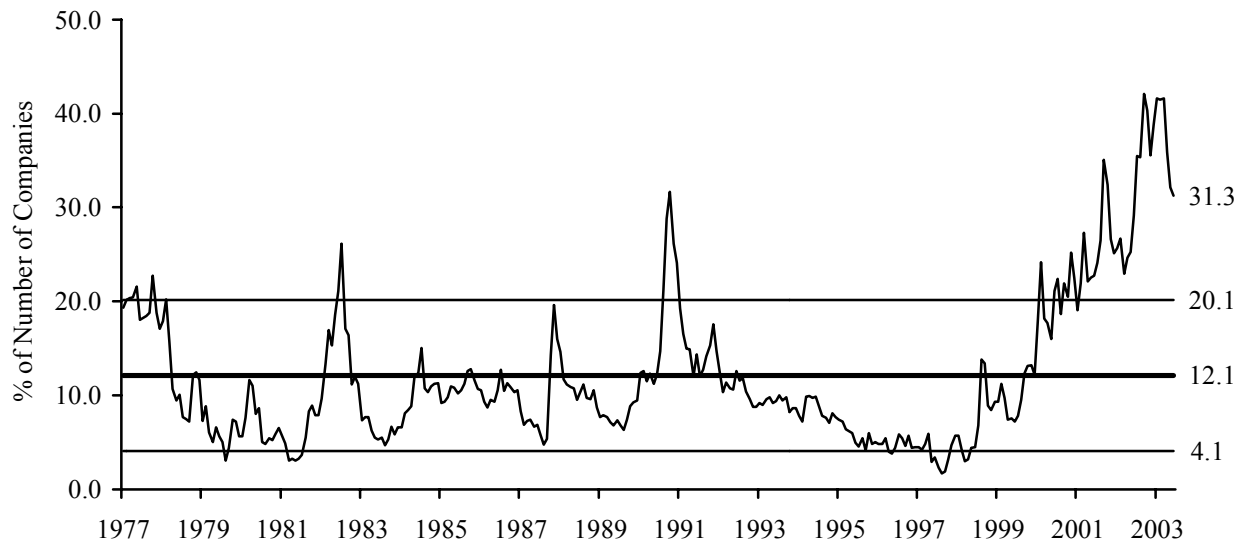
S&P 500 INDEX DECLINING 30%+ AND 50%+ FROM 60-MONTH HIGH

January 31, 1977 - June 30, 2003

Declining 30%+ from 60-month High



Declining 50%+ from 60-month High



Source: Ned Davis Research.

Exhibit 7g**PERCENTAGE OF S&P 500 INDEX EQUITIES ADVANCING 10%+, 30%+,
50%+ AND 90%+ FROM 60-MONTH LOW****January 31, 1977 - June 30, 2003****% of Number of Companies Advancing At Least 10%****97.5**

Historical Distribution

High

100.0

25th Percentile

97.6

Median

95.8

75th Percentile

92.9

Low

67.7

% of Number of Companies Advancing At Least 30%**84.6**

Historical Distribution

High

98.8

25th Percentile

89.5

Median

86.5

75th Percentile

81.1

Low

55.0

% of Number of Companies Advancing At Least 50%**66.4**

Historical Distribution

High

94.6

25th Percentile

79.7

Median

74.6

75th Percentile

67.5

Low

44.0

% of Number of Companies Advancing At Least 90%**38.9**

Historical Distribution

High

83.9

25th Percentile

58.2

Median

51.3

75th Percentile

45.3

Low

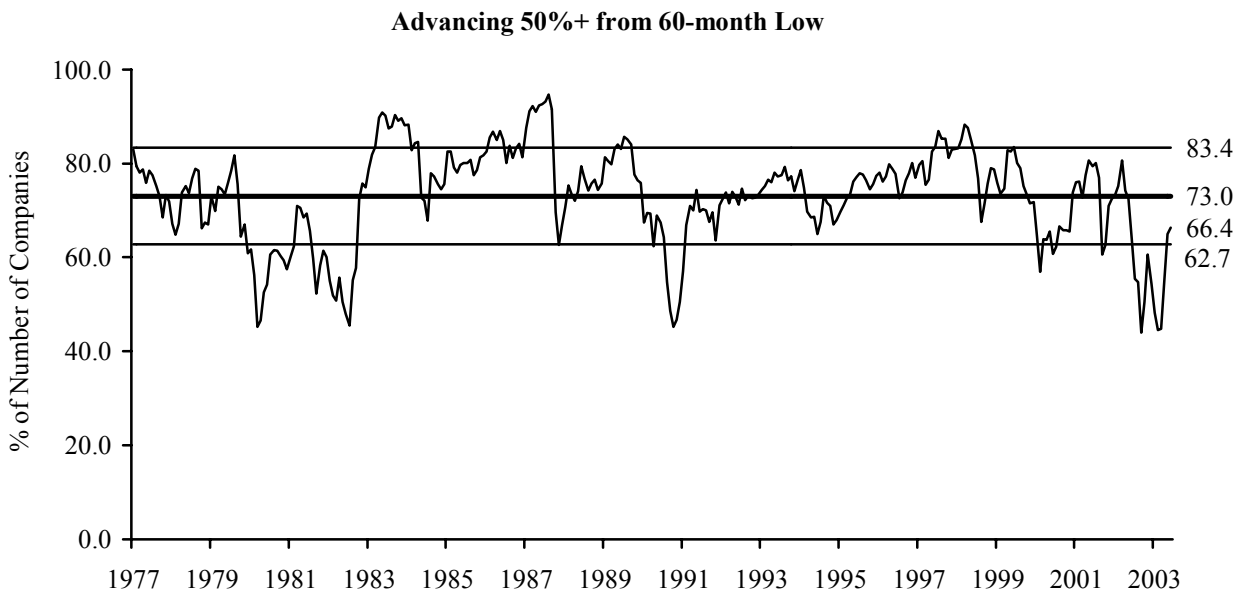
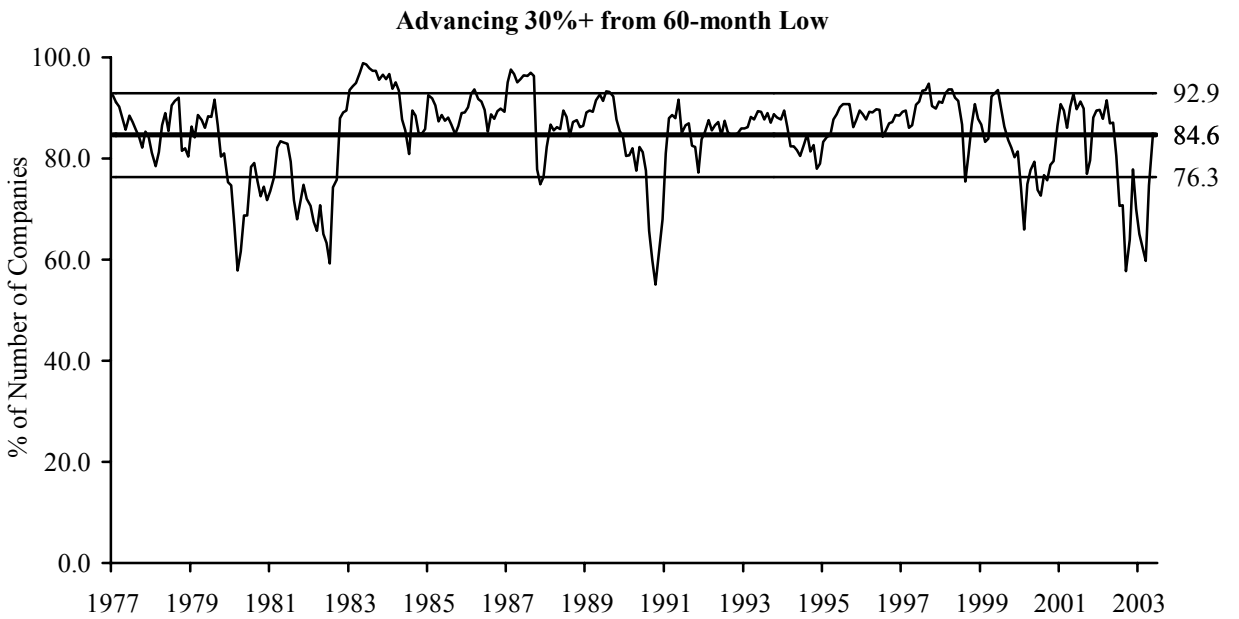
25.7

Source: Ned Davis Research.

Exhibit 7h

S&P 500 INDEX ADVANCING 30%+ AND 50%+ FROM 60-MONTH LOW

January 31, 1977 - June 30, 2003



Source: Ned Davis Research.

Exhibit 7i

**PERCENTAGE OF NASDAQ EQUITIES DECLINING 10%+, 30%+, 50%+
AND 90%+ FROM 60-MONTH HIGH**

January 31, 1986 - June 30, 2003

% of Number of Companies Declining At Least 10%

	77.6
Historical Distribution	
High	97.3
25th Percentile	87.9
Median	82.0
75th Percentile	73.4
Low	60.9

% of Number of Companies Declining At Least 30%

	63.0
Historical Distribution	
High	83.4
25th Percentile	68.3
Median	62.4
75th Percentile	51.3
Low	41.0

% of Number of Companies Declining At Least 50%

	49.5
Historical Distribution	
High	61.8
25th Percentile	49.7
Median	43.0
75th Percentile	34.0
Low	25.8

% of Number of Companies Declining At Least 90%

	12.5
Historical Distribution	
High	22.5
25th Percentile	9.5
Median	6.6
75th Percentile	4.6
Low	2.7

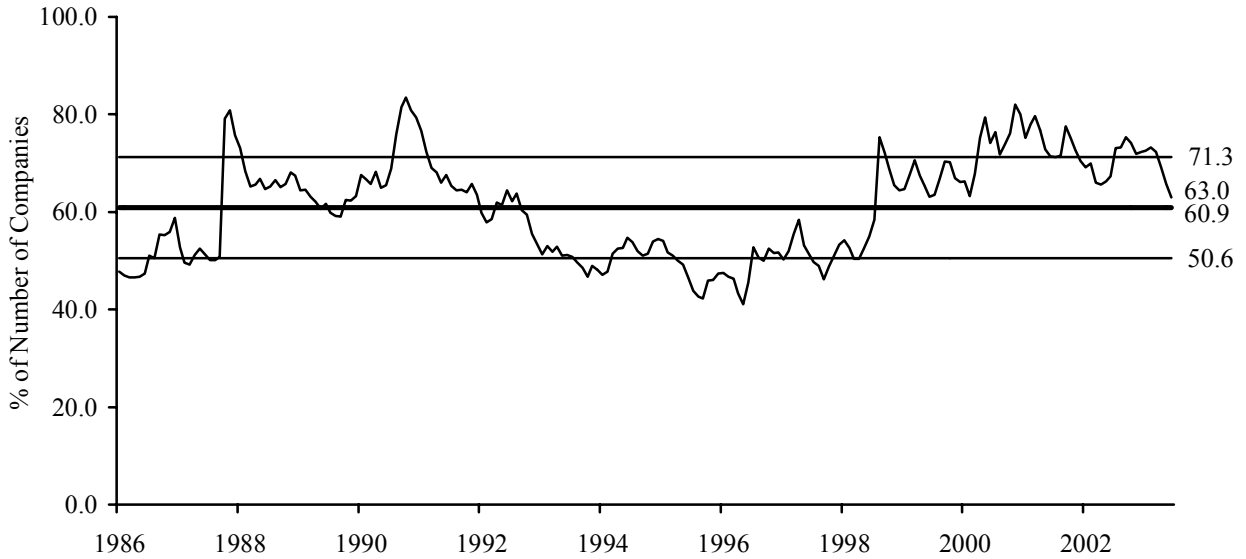
Source: Ned Davis Research.

Exhibit 7j

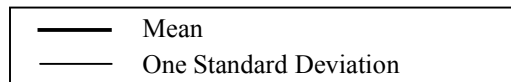
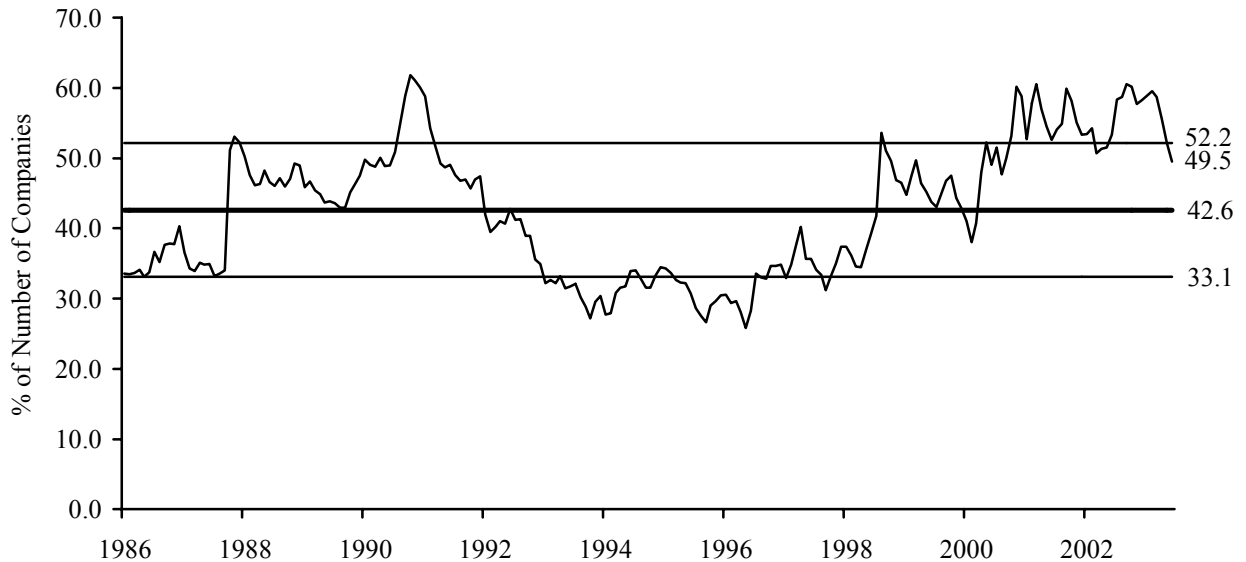
NASDAQ DECLINING 30%+ AND 50%+ FROM 60-MONTH LOW

January 31, 1986 - June 30, 2003

Declining 30%+ from 60-month Low



Declining 50%+ from 60-month Low



Source: Ned Davis Research.

Exhibit 7k

**NASDAQ ADVANCING 10%+, 30%+, 50%+ AND 90%+ FROM
60-MONTH LOW**

January 31, 1986 - June 30, 2003

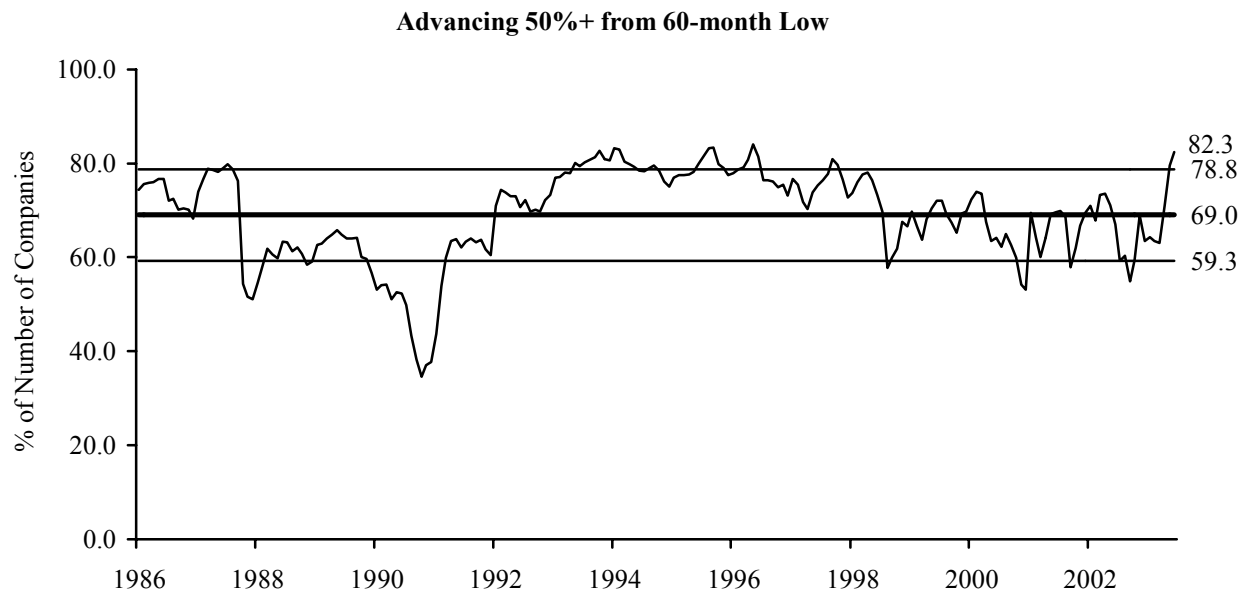
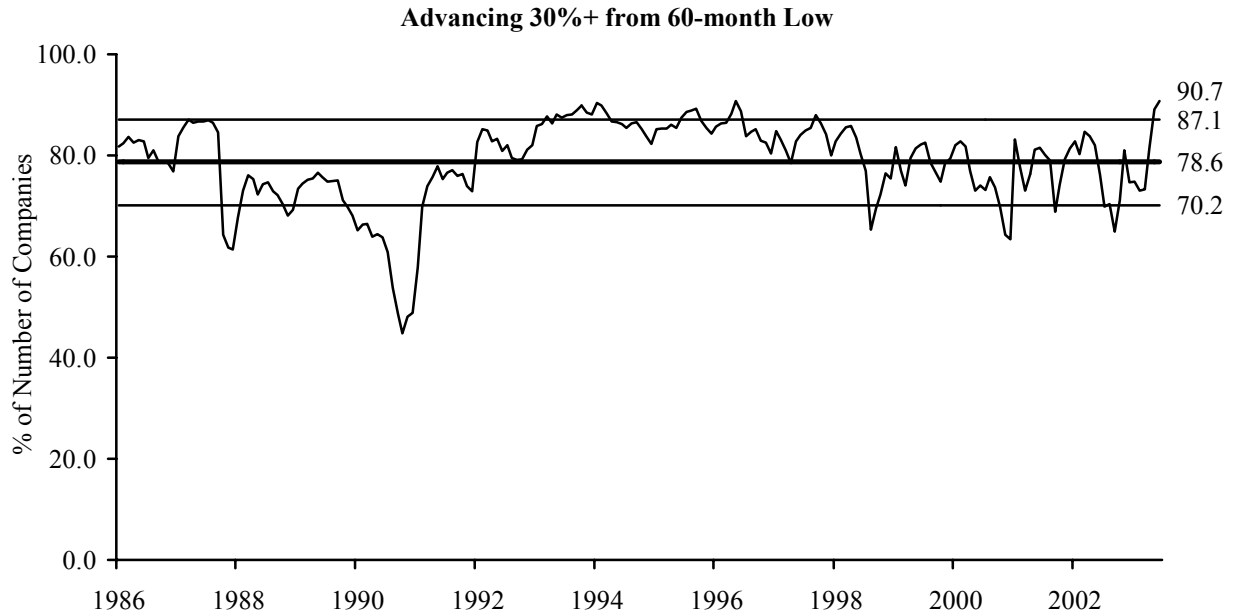
% of Number of Companies Advancing At Least 10%		96.9
Historical Distribution		
High		97.1
25th Percentile		93.0
Median		90.0
75th Percentile		86.3
Low		59.6
 % of Number of Companies Advancing At Least 30%		 90.7
Historical Distribution		
High		90.8
25th Percentile		85.1
Median		80.9
75th Percentile		74.3
Low		44.8
 % of Number of Companies Advancing At Least 50%		 82.3
Historical Distribution		
High		84.0
25th Percentile		76.9
Median		70.3
75th Percentile		63.2
Low		34.6
 % of Number of Companies Advancing At Least 90%		 64.5
Historical Distribution		
High		71.9
25th Percentile		63.5
Median		55.0
75th Percentile		45.5
Low		24.7

Source: Ned Davis Research.

Exhibit 71

NASDAQ ADVANCING 30%+ AND 50%+ FROM 60-MONTH LOW

January 31, 1986 - June 30, 2003



—	Mean
—	One Standard Deviation

Source: Ned Davis Research.

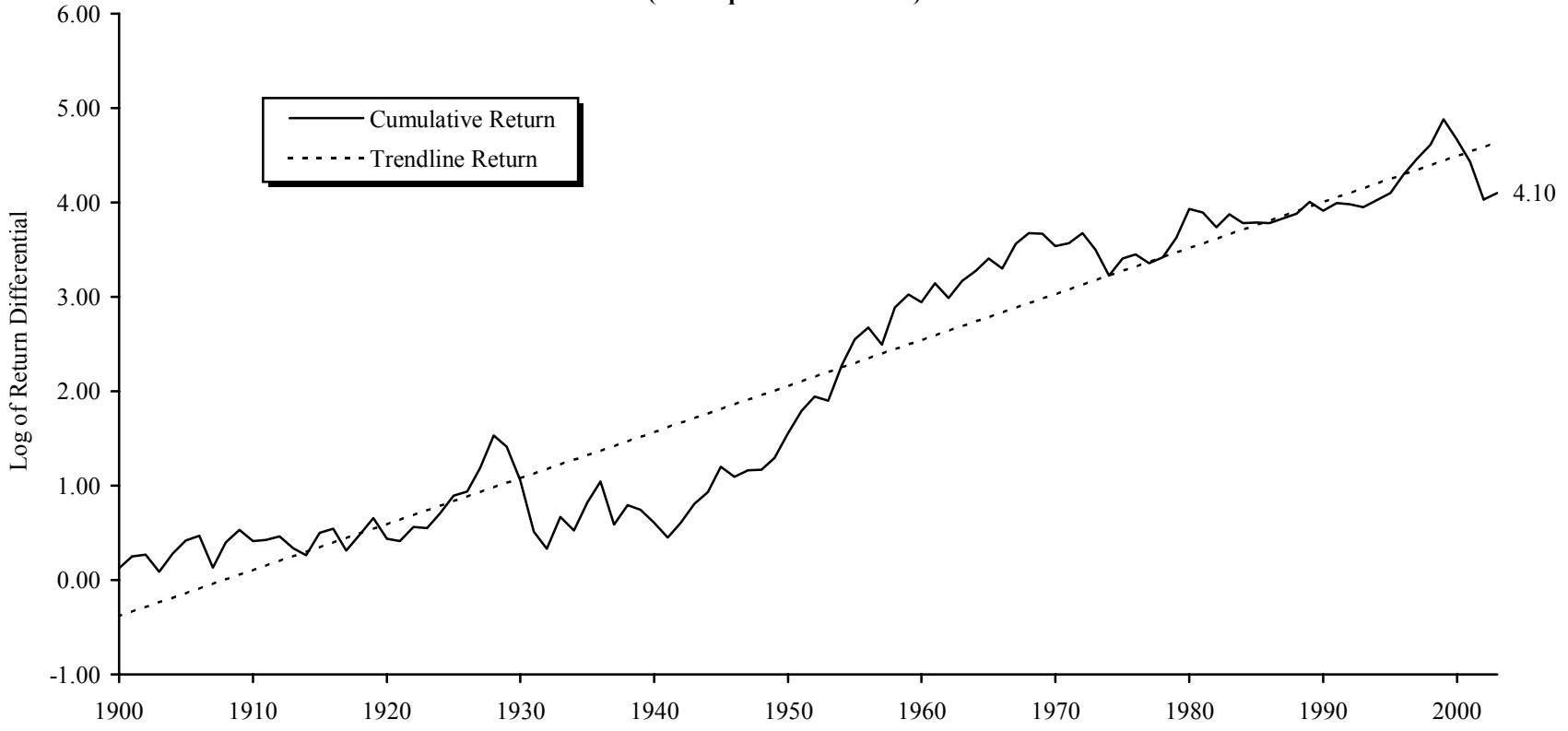
Exhibit 8**CUMULATIVE DIFFERENTIAL BETWEEN U.S. EQUITIES AND U.S. BONDS**

Over the long term, equities have outperformed bonds, but not in all periods. However, the magnitude by which bonds have outperformed equities in the most recent period is certainly the largest (although not yet of longest duration) since the deflation nightmare of the Great Depression. Both the sharp spike and subsequent precipitous decline in the relative performance of equities in 1995-2003 look remarkably similar to the pattern traced during the late 1920s and early 1930s.

Exhibit 8
CUMULATIVE DIFFERENTIAL BETWEEN U.S. EQUITIES AND U.S. BONDS

January 1, 1900 - June 30, 2003

Relative Cumulative Wealth Index
(U.S. Equities/U.S. Bonds)



Sources: Citigroup Global Markets, Common-Stock Indexes (Cowles Commission), Global Financial Data, and Standard & Poor's.

Notes: Cumulative return is the natural log of the cumulative wealth index. Trendline return is a regression line fitted to the historical data, which serves as a long-term trendline.

Exhibit 9**QUARTERLY PRICE-VALUE RATIOS**

Dividend discount models are effective valuation tools only if one assumes that every economic contraction, and concomitant decline in corporate earnings, can be cured by monetary stimulus. When this remedy proves ineffectual (as in Japan during the past decade) because an economy is burdened with excessive debt and uneconomic excess capacity, interest-rate based models of equity market value break down.

Consequently, investors who believe that current economic weakness and post-bubble hangover are simply a variant form of the typical cyclical contraction (and will therefore respond to lower interest rates in the usual way), should regard the unprecedented lows in the Ford Investor Services' price-value ratios (which are derived from a dividend discount model) as a strong buy signal.

Those more skeptical of the Fed's ability to scare the away the deflationary wolf will, of course, dismiss these ratios as the investment equivalent of "false positives."

Exhibit 9

QUARTERLY PRICE-VALUE RATIOS

<u>Year</u>		<u>All</u> <u>Equities</u>	<u>Large</u> <u>Equities</u>	<u>Small</u> <u>Equities</u>	<u>Quality</u> <u>Equities</u>	<u>Growth</u> <u>Equities</u>	<u>High-</u> <u>Yield</u> <u>Equities</u>
1981	High	1.28	1.24	1.43	1.14	1.43	1.02
	Low	1.12	1.08	1.23	1.01	1.22	0.83
1982	High	1.06	1.03	1.18	1.00	1.13	0.86
	Low	0.92	0.90	1.00	0.87	0.96	0.74
1983	High	1.28	1.23	1.45	1.10	1.40	0.91
	Low	1.08	1.04	1.25	0.95	1.18	0.79
1984	High	1.27	1.23	1.44	1.12	1.40	0.95
	Low	1.07	1.04	1.18	0.98	1.13	0.90
1985	High	1.20	1.15	1.34	1.08	1.27	0.96
	Low	1.04	0.99	1.16	0.96	1.08	0.83
1986	High	1.16	1.13	1.31	1.04	1.13	0.94
	Low	1.06	1.02	1.13	0.93	1.00	0.89
1987	High	1.84	1.88	1.80	1.57	1.78	1.08
	Low	1.27	1.26	1.28	1.06	1.25	0.95
1988	High	1.33	1.37	1.37	1.18	1.23	1.02
	Low	1.19	1.20	1.23	1.08	1.12	0.92
1989	High	1.22	1.22	1.34	1.09	1.23	0.98
	Low	1.09	1.07	1.19	0.98	1.12	0.90
1990	High	1.19	1.19	1.21	1.11	1.23	0.91
	Low	1.03	1.03	1.00	0.98	1.01	0.81
1991	High	1.12	1.09	1.23	1.03	1.18	0.99
	Low	1.09	1.05	1.19	0.98	1.11	0.96
1992	High	1.11	1.05	1.27	0.98	1.12	0.96
	Low	1.03	0.99	1.11	0.94	1.00	0.90
1993	High	1.08	1.03	1.15	0.94	1.02	1.00
	Low	0.99	0.96	1.00	0.83	0.92	0.92
1994	High	1.30	1.29	1.30	1.16	1.25	1.02
	Low	1.14	1.12	1.16	0.97	1.06	0.95
1995	High	1.22	1.23	1.15	1.14	1.13	0.99
	Low	1.04	1.03	1.04	0.98	0.96	0.86
1996	High	1.31	1.27	1.38	1.21	1.30	0.93
	Low	1.23	1.20	1.27	1.12	1.18	0.86
1997	High	1.43	1.44	1.39	1.38	1.32	0.95
	Low	1.28	1.28	1.20	1.20	1.19	0.92
1998	High	1.40	1.49	1.27	1.32	1.44	0.88
	Low	1.13	1.19	0.87	1.10	1.11	0.67
1999	High	2.57	2.70	1.57	2.04	2.98	0.84
	Low	1.61	1.72	0.98	1.42	1.83	0.75
2000	High	2.63	2.80	1.52	2.00	3.09	0.74
	Low	1.59	1.61	1.16	1.35	1.65	0.69
2001	High	1.40	1.38	1.43	1.23	1.40	0.83
	Low	1.18	1.18	1.11	1.12	1.15	0.73
2002	High	1.31	1.28	1.44	1.18	1.34	0.80
	Low	0.86	0.83	0.97	0.76	0.85	0.53
2003	High	0.86	0.84	1.11	0.76	0.89	0.60
	Low	0.80	0.78	0.94	0.67	0.81	0.51

Source: Ford Investor Services, Inc.

Notes: High and low values are as of quarter end, except for the current year. Ford's universe includes over 4,000 equities. Price-value ratios are market-capitalization weighted. A ratio of 1.00 implies fair market valuation. A ratio of 1.20 implies 20% overvaluation. Because dividend discount models do not accord recognition to superior earnings growth, "growth" equities typically appear overvalued by the standards such models apply. Large equities are defined as the 250 largest equities in the Ford universe. Small equities have market capitalizations between \$100 million and \$750 million. Quality equities have Ford quality ratings of A- or better. High-yield equities are those with yields greater than 6%. Growth equities have annual projected earnings growth rates of 12% or more based on Ford's estimates of earnings and dividend growth over the next ten years. Data for 2003 are as of June 30.

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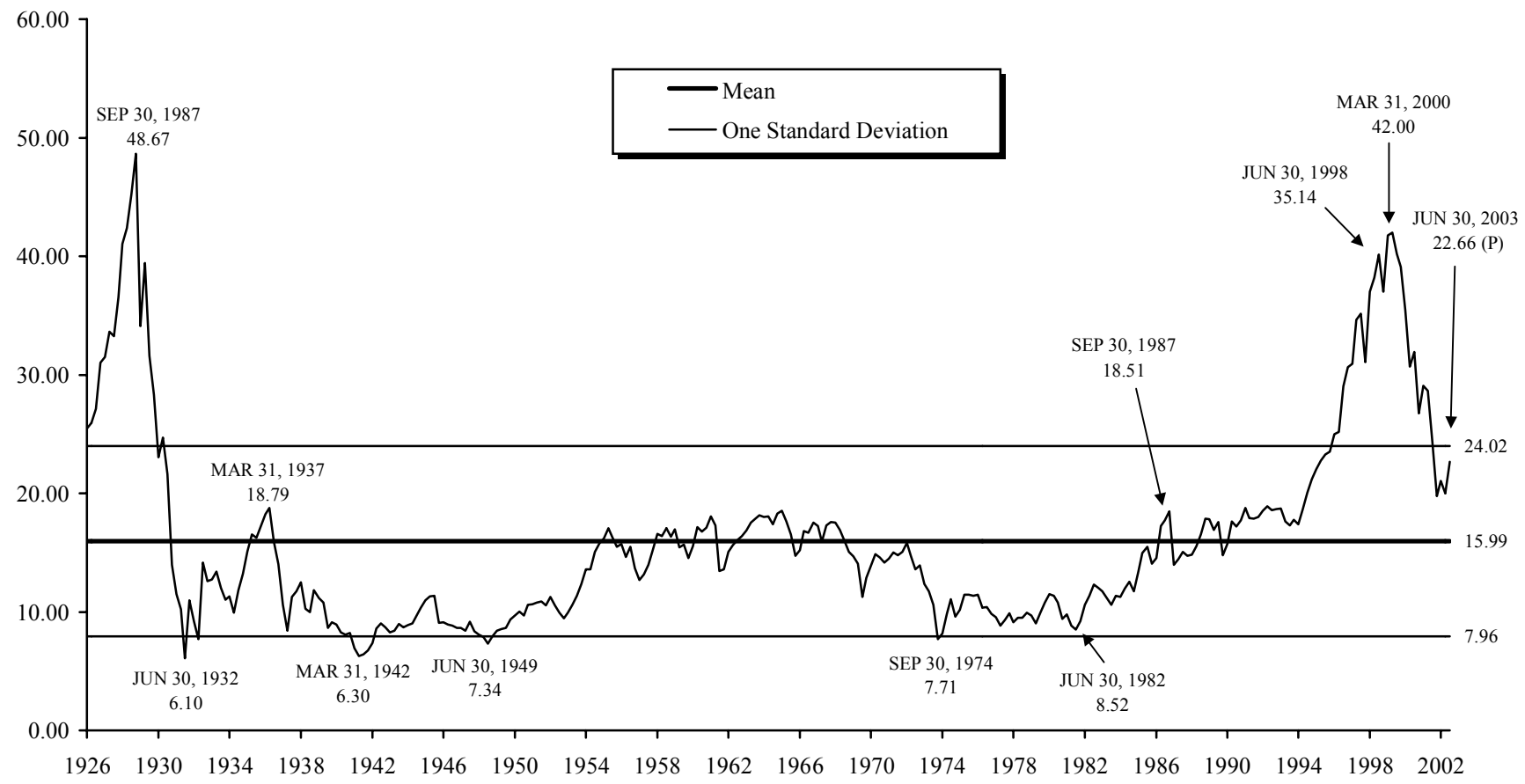
Exhibit 10**S&P 500 (TRENDLINE) NORMALIZED PRICE-EARNINGS RATIOS**

By normalizing earnings, we reduce the short-term variability of the denominator of the price-earnings ratio, giving a clearer picture of what one is paying for each dollar of S&P 500 earnings.

Today, the answer is still, “too much” unless one has extravagant expectations for future earnings growth.

Exhibit 10
S&P 500 (TRENDLINE) NORMALIZED PRICE-EARNINGS RATIOS

December 31, 1926 - June 30, 2003



Sources: Calculated from data provided by Standard & Poor's, Standard & Poor's Compustat, and *The Wall Street Journal*.

Notes: (P) Preliminary. Normalized price-earnings ratios for the S&P 500 are calculated by dividing the current index value by the earnings that have been calculated from the trendline of earnings from fourth quarter 1926 through second quarter 2003.

Exhibit 11**HOW MUCH WOULD THE S&P 500 APPRECIATE UNDER THE FOLLOWING EARNINGS GROWTH AND P/E ASSUMPTIONS?**

The great virtue of this analysis is that it forces one to deconstruct the components of any return expectation and these can then be subjected to a “reality check” on the basis of historical precedent.

For example, if one assumes (optimistically) that the normalized price-earnings ratio of the S&P 500 five years from now will be no different from today (24.5, which is one standard deviation above the long-term mean), and that S&P 500 earnings over the next five years will grow at the torrid rate of 12.3% per annum (extremely unlikely according to historical precedent, but nevertheless the current I/B/E/S consensus estimate), then the compound average annual price appreciation of the S&P 500 would be 7.5%.

Note the subversive last sentence of the footnotes.

Exhibit 11

HOW MUCH WOULD THE S&P 500 APPRECIATE UNDER THE FOLLOWING EARNINGS GROWTH AND P/E ASSUMPTIONS?

As of June 30, 2003

		Five-Year Average Annual Earnings <u>Growth Rate Assumptions</u>		
		Average Earnings Growth <u>(1960-02)</u> 5.3%	Forward <u>Estimate</u> 12.3%	Average of <u>Previous Five Years</u> -3.9%
<u>P/E at the End of Five Years</u>		Five-Year Average Annual Compound Price Appreciation (%)		
Current Normalized P/E Ratio	24.5	0.7	7.5	-8.0
Current P/E	30.5	5.3	12.3	-3.9
12-month forward P/E estimate	17.2	-6.2	0.1	-14.4
Average P/E Ratio (1960-06/30/2003)	17.3	-6.0	0.3	-14.2
Average plus one Standard Deviation	24.6	0.8	7.6	-7.9
Average minus one Standard Deviation	10.1	-15.7	-10.0	-23.0

Sample Interpretation:

Given a particular earnings growth assumption and price-earnings ratio, this exhibit illustrates the expected average annual price change for the S&P 500. For example, if earnings grew by 12.3% over the next five years (current I/B/E/S consensus estimate), and the price-earnings ratio at the end of five years is equivalent to the current normalized price-earnings of 24.5, then the price of the S&P 500 would increase by 7.5% annually, over the next five years.

Sources: Calculated from data provided by Bureau of Labor Statistics, Puglisi & Co., Standard & Poor's, Standard & Poor's Compustat, and *The Wall Street Journal*.

Notes: Based on June 30, 2003, S&P 500 price of \$975 and preliminary S&P 500 earnings per share of \$32. The price-earnings ratio using normalized earnings is the real price divided by the trailing ten-year average of real earnings. I/B/E/S earnings estimates have historically been twice as high as actual earnings.

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Exhibit 12**CUMULATIVE DIFFERENTIAL BETWEEN S&P 500 AND MSCI EAFE**

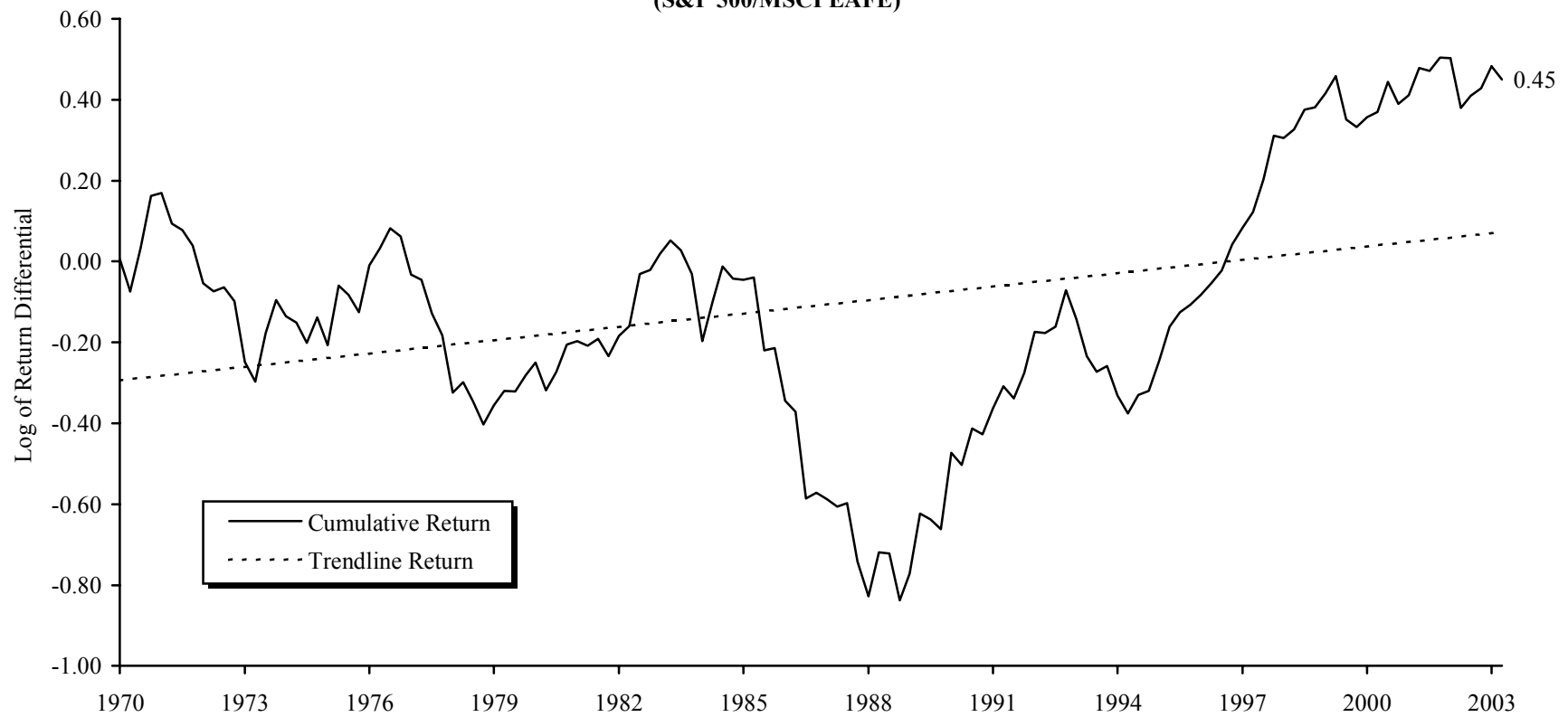
Since the inception of the MSCI EAFE index in 1970, the U.S. equity market has, on average, outperformed non-U.S. developed markets by a small margin. The magnitude and duration of deviations from trend have, however, been very considerable. Although it is impossible to predict how far and/or how long any such deviation will run, one can say that the further from trend the series goes, the greater the probability of reversion.

Exhibit 12

CUMULATIVE DIFFERENTIAL BETWEEN S&P 500 AND MSCI EAFE

January 1, 1970 - June 30, 2003

**Relative Cumulative Wealth Index
(S&P 500/MSCI EAFE)**



Sources: Standard & Poor's and Thomson Datastream. MSCI data are copyrighted by and proprietary to Morgan Stanley Capital International, Inc.

Notes: Cumulative return is the natural log of the cumulative wealth index. Trendline return is a regression line fitted to the historical data, which serves as a long-term trendline.