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CAMBRIDGE ASSOCIATES LLC

U.S. MARKET COMMENTARY

THE U.S. EQUITY MARKET: WHERE ARE WE NOW?

March 2001

Robert Lang

ABSTRACT

U.S. Comment – The U.S. Equity Market: Where Are We Now?

Consumer sentiment remains surprisingly resilient considering the damage to equity markets and the severity of the economic downturn. It has not approached the level of despair or pessimism that typically signals capitulation at market bottoms. While optimists point to several resilient macroeconomic indicators—consumer spending, housing market, and auto sales—pessimists focus on the massive buildup of debt. Optimists also have great confidence that interest rate cuts will revive the economy, but pessimists are afraid that lower borrowing costs will not help burn off high levels of leverage. With these risks in mind, investors should assume that the stock market will probably do as well as nominal GDP growth. They should also continue to favor value over growth, and overweight higher quality companies. The key indicators to monitor in the months ahead are consumer confidence, business capital expenditures, and the ability of the stock market to shrug off bad news.

U.S. MARKET COMMENT

The U.S. Equity Market: Where Are We Now?

The figures are raw, but much of the shock has worn off by now. From their peaks, the Nasdaq Composite has returned -64%, S&P 500, -24%, and the Dow Jones Industrial Average (DJIA), -16%. The damage among many leading stocks is even worse: Cisco, -85%, Lucent, -90%, Eastman Kodak, -50%, and McDonald's, -48%. Over the past 12 months, $4.3 trillion has evaporated from the U.S. equity market, equivalent to about 42% of the U.S. GDP, and an amount that exceeds the GDP of Japan or that of France and Germany combined.

Despite the collapse, hope for a comeback still flickers. Almost daily one hears rallying cries of bottom-fishers trying to cheer the troops, who have been conditioned by the long bull market to celebrate every opportunity to buy on dips: Cisco at $14.5—surely, it can't go much lower? Intel at $24.5—how much cheaper can stocks possibly get? But as the "dip" has deepened and a meaningful rally has failed to materialize, investors seem to have moved from denial to anger—from the first to the second stage of grief. The media now pillories Wall Street analysts who had acquired celebrity status during the bubble days, while traces of tarnish can even be detected on the gilded epaulets of Alan Greenspan.

This expanded edition of the U.S. Market Comment in *Market Update* explores where we are now at this point in the market's sell-off, and discusses the extent to which the market has burned off its excesses. We certainly cannot predict when and if a bottom will arrive, or what type of recovery might ensue: a V-shaped resurgence, a more gradual U-shaped recovery, or a decade-long Japanese-style malaise. Instead, this analysis considers investor psychology within the larger tapestry of economic stress points and equity valuations.

That Stubborn Optimism

Investor sentiment has sobered over the last year, but has not approached the level of despair or pessimism that typically signals capitulation at market bottoms. As shown in Table A, the Consumer Confidence Index is down sharply, but has not collapsed, and a variety of other sentiment indicators confirm that although optimism has retreated, it could fall much further. Money market mutual fund assets have grown nearly 50% since July 2000, which may imply that funds and investors have boatloads of cash sitting on the sidelines waiting to be deployed at the first hint of market strength (see Table B); however, as noted below, it may also suggest that corporations are building cash as they brace for the slowdown. Net equity mutual fund flows contracted in February, with an outflow of $900 million, the first outflow since August 1998, as investors withdrew money from aggressive growth, sector, emerging market, global, and regional funds. However, according to Table C, which is a proxy for aggressive growth funds, investors remain heavily committed to high-risk equities, despite the battering they have suffered.

Sustained levels of optimism point to the lingering faith that Goldilocks lives on. Adherents of the greater fool theory of investing still seem ready to pick fights with followers of traditional metrics that require investments to be valued by the present value of future cash flows. While speculation will certainly never be eradicated, until this ingrained behavior changes, it seems likely that the bear market will be more protracted and grinding than expected, a series of frustrations and sucker rallies, before finally forming a meaningful bottom.

Extreme levels of despair are not prerequisites of a sustained rally or a resumption of the bull market. However, deeper levels of pessimism, like those recorded in 1983 or 1993, for example, would add credibility to the notion that greed has finally been displaced by fear. When investors can be seen desperately hoping for one more rally, during which they promise to unload their holdings, hoping just to break even, they will have moved to the next stage of grief—bargaining—but because we are not there yet, we suspect this bear will not amble quietly away.

Hope also springs from the belief that the economic slowdown is attributable to cyclical factors (see Table D), primarily surging energy prices and the Federal Reserve's misguided rate hikes. However, if equity market weakness in fact reflects structural imbalances in the economy, such as excessive debt and uneconomic capital investment, these will take some time to unwind. Bullish investors believe that lower interest rates will revive both the economy and the market, while the bears argue that structural changes distinguish this business cycle from its predecessors.

Faith in the Fed

Optimists cheerfully cite several macroeconomic indicators as reasons for their continued confidence. Consumer spending, though down, has been surprisingly resilient. Similarly, construction, auto sales, the housing market, and productivity are also holding up well, while low inflation provides the Fed with ample room to lower rates. This latter point is arguably the most persuasive. Although the annualized growth rate of MZM (money-of-zero-maturity, the broadest of the monetary aggregates) has soared to 27% since mid-January, this simply reflects a shift in assets from the equity markets to money-market funds. The monetary base itself has in fact not grown at all during this period, giving the Fed plenty of scope for further easing without fear of igniting inflation, leading indicators of which point sharply down (with the exception of growth in wages). *If* the current economic malaise is primarily attributable to significant excess capacity, liquidation of which leads to higher unemployment, consumer retrenchment, rising savings rates, and foreign disillusion with the US$-denominated assets, Fed easing will have little effect. However, if the current weakness is merely cyclical, lower interest rates will lead to economic revival by enabling overextended households and corporations to repair their balance sheets.

With regard to the equity markets, the optimists point out that the current decline falls well within the parameters typical of past corrections. As illustrated in Table E, equity markets have historically rebounded with alacrity after the Fed's third interest rate cut. Twelve months after the Fed's third cut, the mean return of the DJIA has been 21.5%, the S&P 500's, 23.7%, and the Nasdaq's, 40.9%. The only time the market failed to respond to three successive rate cuts was in 1930, when the market returned -33.6% one year after the third cut. Viewed another way, during seven bear markets since 1979, the median correction of the Nasdaq Composite has been -31.5%, while by the end of March 2001 it had fallen -65.9% (see Table F). In a nicely ironic twist, it is therefore the bears who are now in the position of arguing that "It's different this time."

Leverage, Debt, and Spending

The pessimists focus principally on debt. They argue that a borrowing binge served as the pump that inflated the bubble and that this accumulated debt now hangs darkly over a weakening economy. Credit-market debt as a percent of GDP has reached record highs, and nonfinancial corporate borrowing remains at elevated levels (see Tables G through I). The personal savings rate has plunged to -0.7% of disposable income, the lowest on record, while liquidity and net worth have also fallen.

Lower interest rates may not serve to burn off these high levels of leverage, pessimists worry. They predict a vicious downward spiral in which aggressive payroll reductions by corporations with shrinking profit margins (see Table J) will lead to higher unemployment, declining consumer confidence, rising savings rates, reduced consumption, further pressures on corporate revenues, less capital investment, more desperate attempts to cut costs to generate and conserve cash flow, and so on.

While debt is certainly a matter of concern, one should be careful not to overstate the deterioration of earnings fundamentals (see Tables K and L). Although last year's stock market decline caused the largest drop in household financial assets in the post-war period, overall household balance sheets remain healthy. Although they have ticked up recently, consumer loan and mortgage delinquency rates are at average levels. Corporate debt/equity ratios remain surprisingly strong (perhaps because the bull market increased the value of equities over the carrying value of the debt). Corporate bond spreads have remained basically unchanged or moved only modestly higher, despite the 97% increase in bond issuance during the first quarter, suggesting that fixed income investors remain fairly sanguine about the prospects of the corporate credit market. In addition, Moody's Investors Service claims that debt protection measures look healthier than the period leading up to the last credit crunch in 1990 because many corporations have built up their liquid assets, in part to ensure that they remain able to service their debt during the slowdown.

Stronger Valuations and Weaker Earnings

Although equity market valuations have fallen over the last year, they remain above their historical levels. The S&P 500 currently trades at a P/E multiple of 23.4 times 12-month trailing earnings, well below the 37 P/E reached during the boom, but still well above its post-war average of 15.5 (see Table M). The fact that this P/E is modestly above its long-term average should not be a cause for alarm, however, because structural changes—low capital-gains taxes, modest inflation, a stable economy, and reduced investment costs—argue for a sustained premium relative to the historical average. In addition, although the tech sector trades at a P/E of 40.4, other sectors trade at more reasonable levels: consumer durables at 13.6, financial services at 14.3, and consumer non-durables at 18.4.

Most traditional valuation models suggest that the S&P 500 is roughly fairly valued (see Table N). The index is currently 1.6% *under*valued, according to the Federal Reserve's valuation model; 2% *under*valued according to I/B/E/S, and 18% *over*valued according to Ford's model. Barton Biggs' dividend discount model indicates that the S&P 500 is 10% *over*valued, while other Morgan Stanley analysts argue that it is 10% *under*valued. (Biggs assumes a 4% equity risk premium, and 2001 S&P 500 earnings growth of -15%, while the other Morgan Stanley model uses a 3.5% equity risk premium and -5% S&P 500 earnings growth.)

Earnings expectations have been continuously revised downward over recent months. As recently as January 2, the first quarter consensus forecast for the S&P 500 operating earnings growth was 5.1%, compared to the current consensus of -8.4%, which, if accurate, would be the sharpest decline since the 1990-91 recession. Analysts currently expect after-tax corporate profits to contract 12% in 2001.

Conclusion

What we know about the economic environment: We know that unemployment is rising (albeit from a very low base) and will almost certainly continue to do so in the months ahead. It seems unlikely that wage inflation, currently over 4% and rising, can co-exist with rising unemployment. So far, however, consumer confidence, although lower, remains relatively robust. We know that business capital expenditure, especially in technology, has ground to a halt and is unlikely to revive as long as the utilization of existing capacity sticks around 80% or less (currently 79.4%). We know that consumers and corporations are relatively heavily indebted, while Uncle Sam enjoys a heady surplus. We know that leading indicators of inflation point sharply down, as one would expect in a period of economic weakness and that the Fed has plenty of room for more aggressive easing—Bridgewater has noted in a recent "Daily Observations" that, on average, 550 bps of Fed easing has been needed to pull the economy out of a slump, and that so far the Fed has reduced rates only 150 bps.

What we don't know about the economic environment: We don't know whether consumers' cautious optimism will crumble under the strain of further layoffs, leading to retrenchment in spending as debt service burdens become more onerous. However, whether consumers spend or save is likely to be more closely linked to their incomes and employment prospects than to the value of their stock portfolios—and Uncle Sam could certainly help by returning some accumulated largesse to the taxpayers. As the *Bank Credit Analyst* recently pointed out, although 52% of American households own some equities (directly or indirectly), the median family with an income of $25,000 to $50,000 has equity holdings worth only $11,500 compared to bonds and savings deposits of $40,000. "In other words, a 20% drop in the value of equity holdings is not catastrophic for most households, especially as the value of their homes has continued to rise." We also don't know just how deep and how long the capital expenditures freeze is likely to be, nor the point at which, on average, debt service will set off alarm bells in corporate boardrooms. Above all, we don't know whether Fed rate cuts will have their customary stimulative effect on the economy, or constitute mere pushing on a string, as the pessimists predict. However, as always, the greater burden of proof is on those who argue, against the grain of history, that it's different (and worse) this time.

What we know about the equity markets: We know that after a once-in-a-lifetime bubble of the sort experienced by the Nasdaq, the market in question typically declines about 66%, with the more aggressive components of that market losing upwards of 90% of their peak value. So far, this script has been followed almost to the letter. What follows, according to historical precedent, is a prolonged period of rallies and slumps (at least five and probably closer to ten or more years), within a broad trading range, by the end of which interest in this sector of the market has all but disappeared (who chatters today about gold or oil?). We will wait and watch for the day when network news programs give up reporting the price of the Nasdaq for lack of interest! We also know, however, that when the Fed injects greater liquidity into the economy by cutting short-term rates, the equity markets are prime beneficiaries. If Fed easing *fails* to stimulate the equity markets, the general outlook is bleak indeed. We know that the broad equity market is now priced close to fair value, according to most dividend discount models, but that other traditional valuation metrics, like price/earnings, price/book value, and dividend yield are far from levels recorded at past bear market troughs. This suggests that if the general economy is slow to respond to lower interest rates, suffers from severe overcapacity (as some argue), and has just entered a protracted profits slump from which it will not soon recover, disillusioned equity investors are likely to sell the broader equity market indexes down to considerably lower multiples before the bear market is over. The current I/B/E/S three- to five-year S&P 500 earnings growth estimate is 15.8% annually, more than twice the 1960-date average of 6.9%. What happens to stock prices if this estimate regresses to the long-term mean? We know, therefore, that despite more reasonable valuations than a year ago, there is still plenty of risk in the U.S. equity markets—and not just risk of dead money (as, for example, in Japan), but risk of further losses.

What we don't know about the equity markets: We don't know where the bottom is or whether it has already been passed. We don't know what equities will return next year, or over the next five, ten, 15, or 20 years (but we do know that no one else knows this either!). We don't know whether to agree or not with the argument that a broader and more stable economy, with less exposure to cyclical manufacturing and more exposure to service industries, warrants a systematically higher equity market P/E multiple. Above all, we still don't know whether the tech wreck's effect on the economy and the markets has already been fully discounted, or whether there are more shock waves to come that will batter the broad economy and equity markets far worse than currently anticipated.

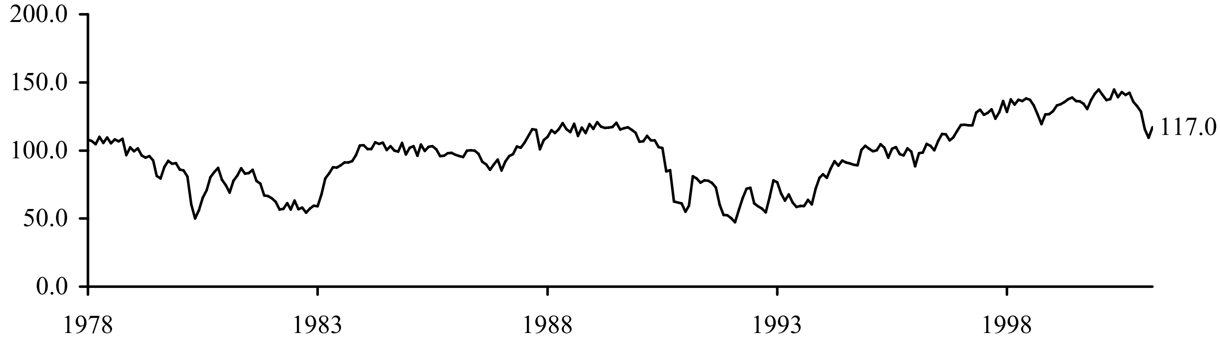
However, we don't think that asset allocation decisions should reflect a view that the worst that *could* happen *will* happen. Without sugar-coating the evident risks, we would suggest that investors should assume that the stock market will probably do as well as nominal GDP growth. In addition, we would continue to favor value over growth, for valuation reasons, and would recommend overweighting higher quality companies because of their defensive characteristics. We would be somewhat surprised if it turns out that the worst is over, because we would expect the bursting of the bubble to have more severe and sustained consequences than have appeared so far, and we regard that 15.8% annual earnings growth rate assumption as unduly optimistic. On the other hand, the U.S. economy is a formidable vessel, capable of absorbing considerable shock without sustaining much serious damage, and policymakers have plenty of latitude to act aggressively to avoid swerving badly off course. In the months ahead, the key indicators to watch will be consumer confidence, business capital expenditures, and the ability of the stock market to shrug off bad news. There will certainly be rallies (one is underway now), but the strength of the rallies is less important than what happens when they fade. If the broad averages manage to remain above their recent lows each time the market sells off, investors will gain confidence that the worst is over, and that sentiment will gradually become self-reinforcing. If the lows are clearly breached, however, we would expect investor sentiment to crumble, reflecting first depression and finally a complete disillusion with equity investing and an acceptance of loss that would complete the cycle of grief.

Table A

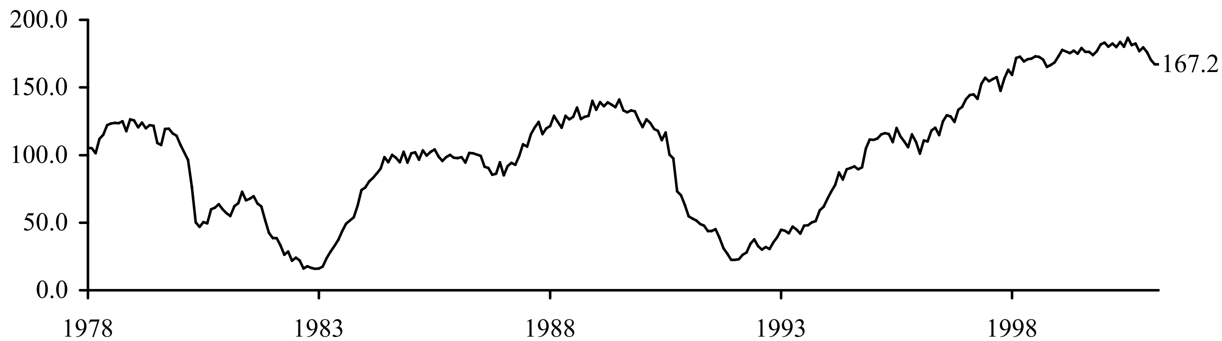
COMPONENTS OF THE CONSUMER CONFIDENCE INDEX

January 31, 1978 - March 31, 2001

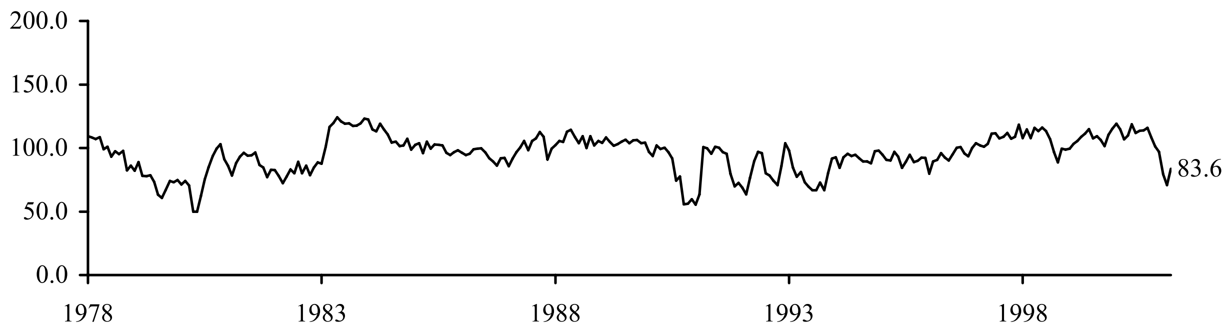
Consumer Confidence Index



Present Situation Index



Consumer Expectations Index



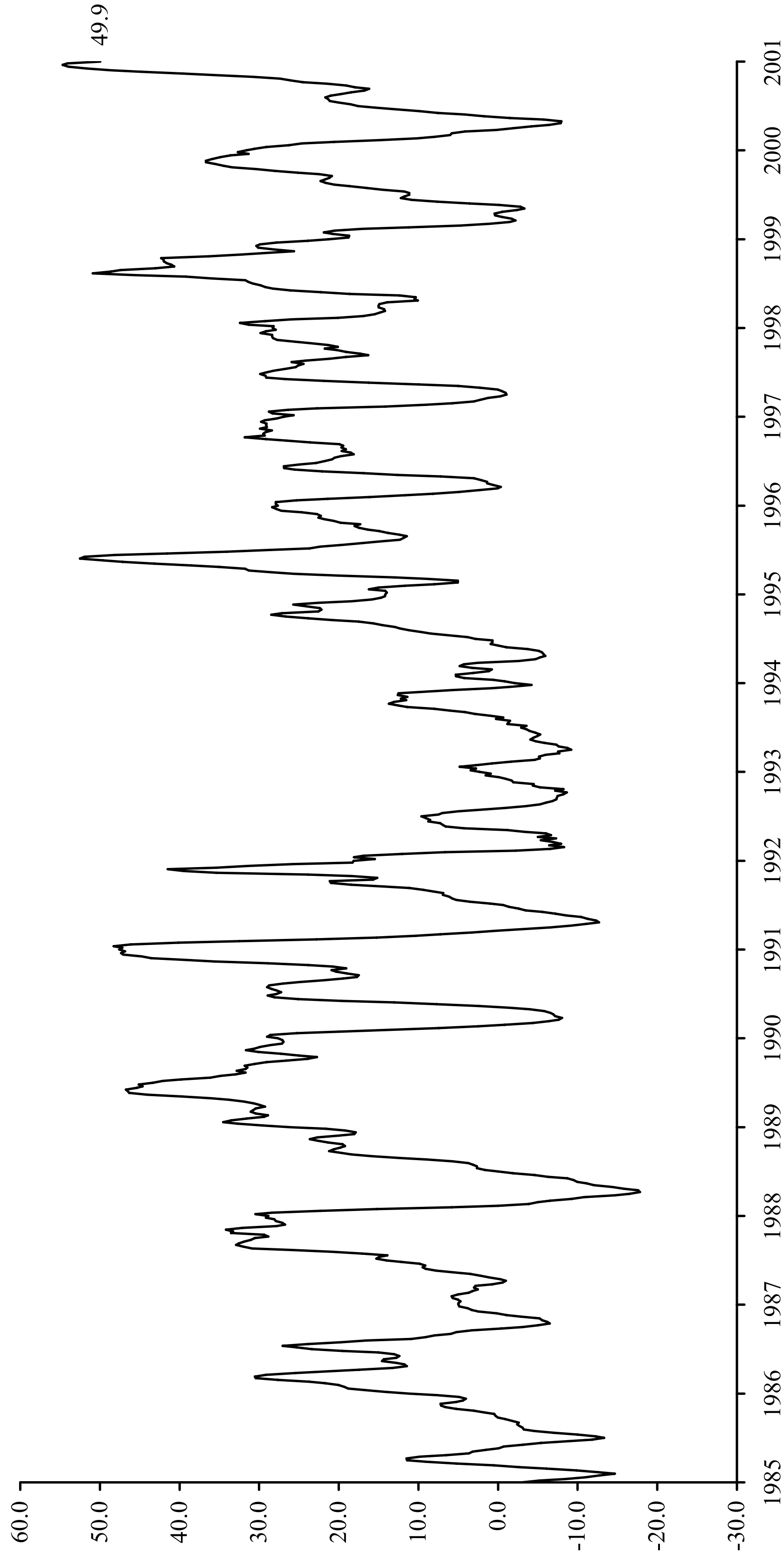
Source: Datastream International.

Notes: According to Ned Davis Research, readings above 86 are considered bullish for the economy and reflect strong consumer confidence. Readings below 55 are considered bearish and reflect recessionary fears by consumers. Present Situation and Consumer Expectations Indexes are the two components of the Consumer Confidence Index.

Table B

GROWTH OF MONEY MARKET MUTUAL FUND ASSETS

April 4, 1985 - March 16, 2001



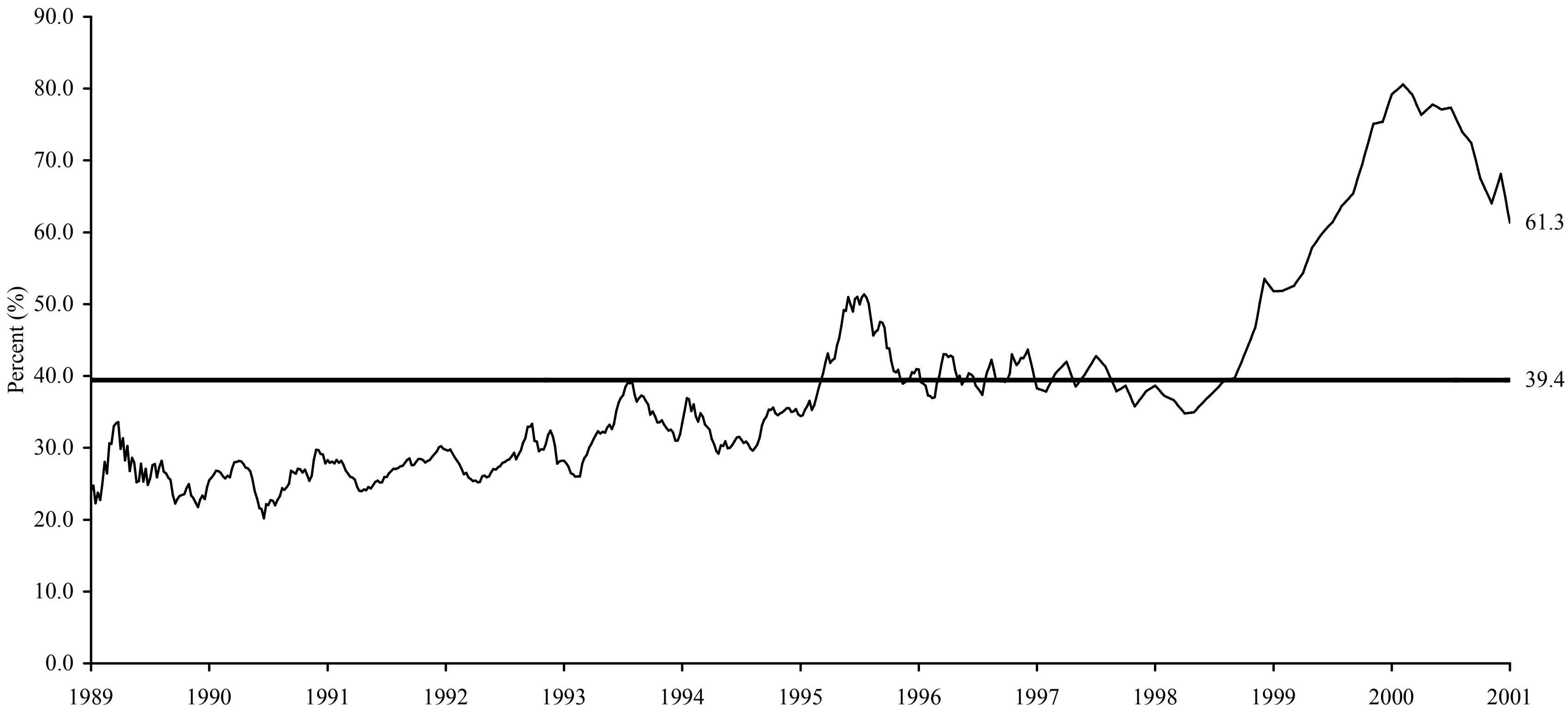
Source: Ned Davis Research.

Note: Graph represents weekly data, annualized at a 13-week rate of change.

Table C

FIDELITY TECHNOLOGY/INTERNET/TELECOM ASSETS AS A PERCENTAGE OF FIDELITY SELECT FUND ASSETS

March 10, 1989 - February 23, 2001



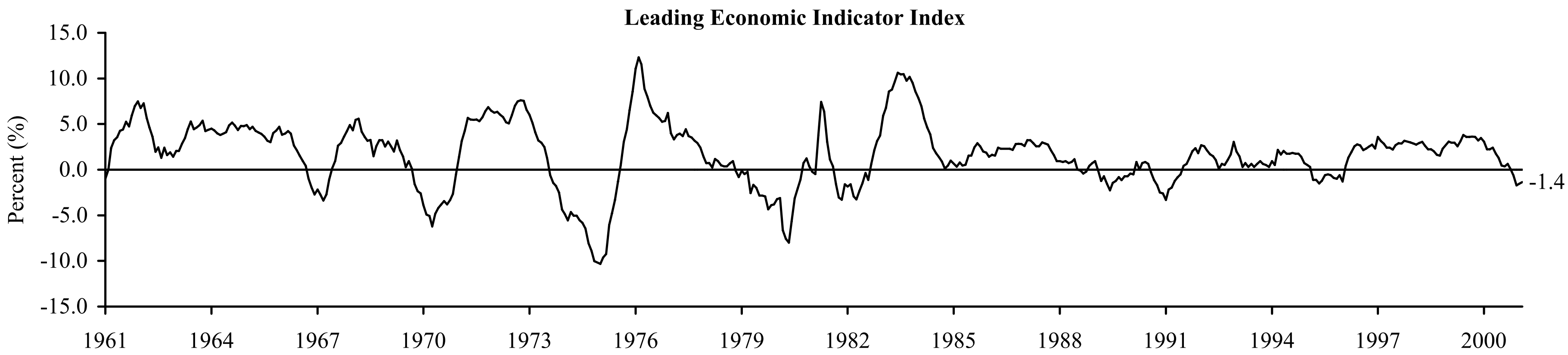
Source: Ned Davis Research.

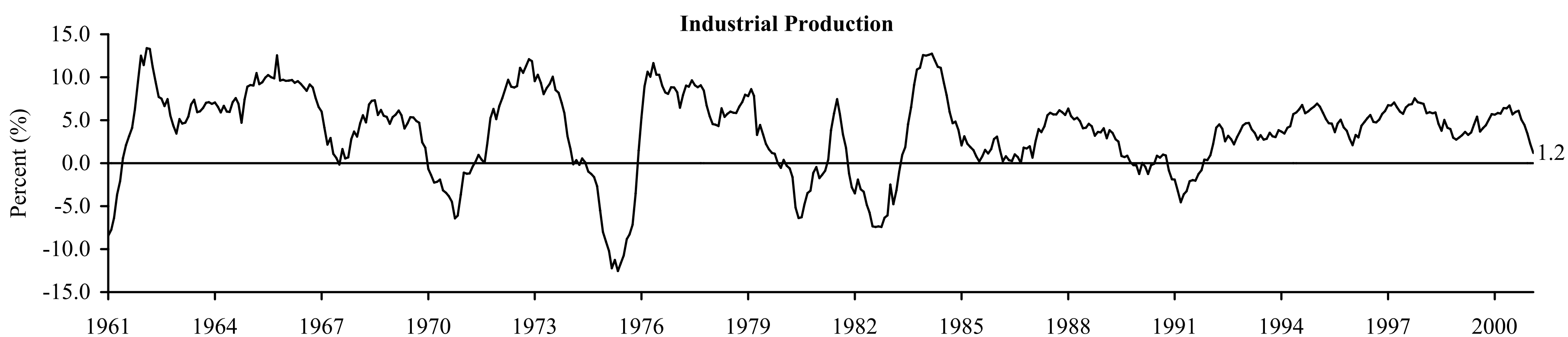
Notes: Graph represents weekly data. Fidelity Technology/Internet/Telecom assets consists of the following Fidelity funds: Computer, Electronics, Software, Technology, Multimedia, Developing Communications, Telecommunications, Networking & Infrastructure, Wireless, Utilities Growth, and 50% of Biotechnology.

Table D

MEASURES OF ECONOMIC ACTIVITY

January 31, 1961 - February 28, 2001





Source: Datastream International.

Note: Graph represents the annualized change of monthly data.

Table E

PERCENT CHANGE OF MAJOR INDEXES FROM THIRD FED RATE CUT IN ONE YEAR

Date of 3rd Rate Cut	DJIA Percent Change After 3 Months	DJIA After 6 Months	DJIA After 12 Months	S&P 500 Percent Change After 3 Months	S&P 500 After 6 Months	S&P 500 After 12 Months	NYSE Percent Change After 3 Months	NYSE After 6 Months	NYSE After 12 Months	Nasdaq Percent Change After 3 Months	Nasdaq After 6 Months	Nasdaq After 12 Months
7/21/1921	4.2	20.8	41.1	---	---	---	---	---	---	---	---	---
8/8/1924	4.0	20.2	35.0	---	---	---	---	---	---	---	---	---
2/7/1930	-1.5	-13.1	-33.6	---	---	---	---	---	---	---	---	---
10/20/1933	21.3	23.0	9.4	---	---	---	---	---	---	---	---	---
3/7/1958	4.0	14.1	35.1	5.9	14.4	33.5	---	---	---	---	---	---
1/8/1971	10.0	7.6	8.5	10.7	8.8	12.1	11.6	10.2	13.3	---	---	---
2/5/1975	19.2	12.9	34.4	14.1	9.2	27.2	13.5	9.9	27.4	14.2	12.8	23.8
7/28/1980	0.8	1.9	1.5	5.5	7.3	6.3	6.4	7.7	7.9	14.0	16.1	22.9
7/20/1982	24.1	28.5	47.3	24.8	31.2	51.8	24.8	32.2	53.0	23.3	44.0	85.4
5/20/1985	1.4	10.3	36.7	-0.9	4.9	24.5	-0.7	4.6	24.0	0.6	4.3	30.8
4/30/1991	4.4	6.4	16.3	3.0	4.7	10.6	3.1	5.4	11.2	2.8	11.7	19.4
1/31/1996	3.2	2.5	26.3	2.9	0.6	23.6	3.3	0.8	21.2	12.3	2.0	30.2
11/17/1998	2.3	20.8	21.1	7.4	17.6	23.8	3.4	13.5	14.9	19.7	36.4	74.0
3/20/2001	?	?	?	?	?	?	?	?	?	?	?	?
Mean	**7.5**	**12.0**	**21.5**	**8.2**	**11.0**	**23.7**	**8.2**	**10.5**	**21.6**	**12.4**	**18.2**	**40.9**

Sources: The Bloomberg, Datastream International, and Ned Davis Research.

Note: Returns based on price change only.

Table F

NASDAQ COMPOSITE PAST MARKET PEAKS, CORRECTIONS AND BEAR MARKETS

Date of Peak	Date of Trough	Peak to Subsequent Trough Percent Decline	Peak to Subsequent Trough Number of Months	Date of Return to Peak	Trough to Peak Number of Months	Peak to Peak Number of Months
10/05/79	10/23/79	-12.92	0.59	01/10/80	2.60	3.19
02/08/80	03/27/80	$\boxed{-24.91}$	1.58	07/14/80	3.58	5.16
05/29/81	08/13/82	$\boxed{-28.79}$	14.49	11/04/82	2.73	17.22
06/24/83	07/25/84	$\boxed{-31.50}$	13.04	01/07/86	17.45	30.49
07/03/86	09/16/86	-16.41	2.46	02/13/87	4.93	7.39
08/26/87	10/28/87	$\boxed{-35.89}$	2.07	08/03/89	21.19	23.26
10/09/89	10/16/90	$\boxed{-33.00}$	12.22	04/02/91	5.52	17.74
02/12/92	06/26/92	-15.05	4.44	11/24/92	4.96	9.40
03/18/94	06/24/94	-13.70	3.22	03/14/95	8.64	11.86
06/05/96	07/24/96	-16.55	1.61	10/07/96	2.46	4.07
01/22/97	04/02/97	-13.48	2.30	05/23/97	1.68	3.98
10/09/97	12/24/97	-14.11	2.50	02/23/98	2.00	4.50
04/22/98	06/15/98	-10.53	1.77	07/08/98	0.76	2.53
07/20/98	10/08/98	$\boxed{-29.55}$	2.63	11/27/98	1.64	4.27
03/10/00	04/06/01	$\boxed{-65.93}$	12.88			
Median - All Periods		-16.55	2.50		3.16	6.28
Median - Corrections		-13.91	2.38		2.53	4.29
Median - Bear Markets		-31.50	12.22		4.55	17.48

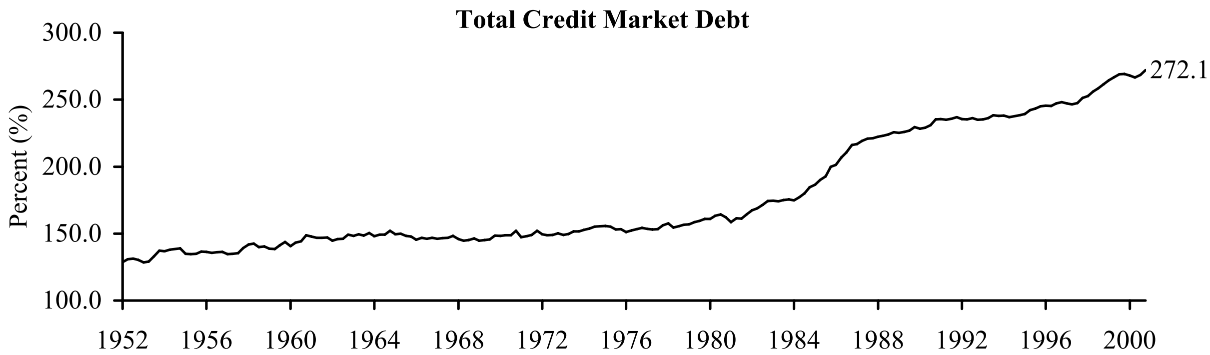
Sources: Crandall, Pierce & Company and Datastream International.

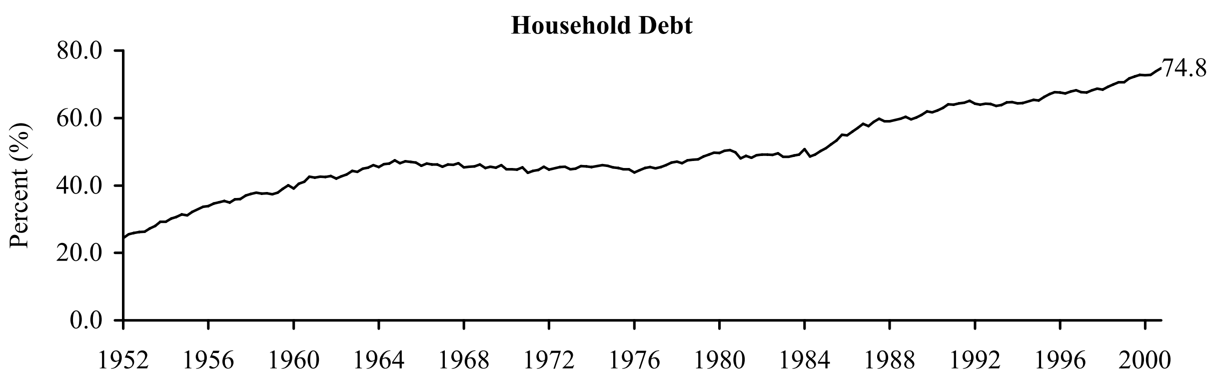
Notes: A decline of 20% or more represents a bear market, while a decline of 10% but less than 20% signifies a correction. Boxed cells illustrate bear market returns.

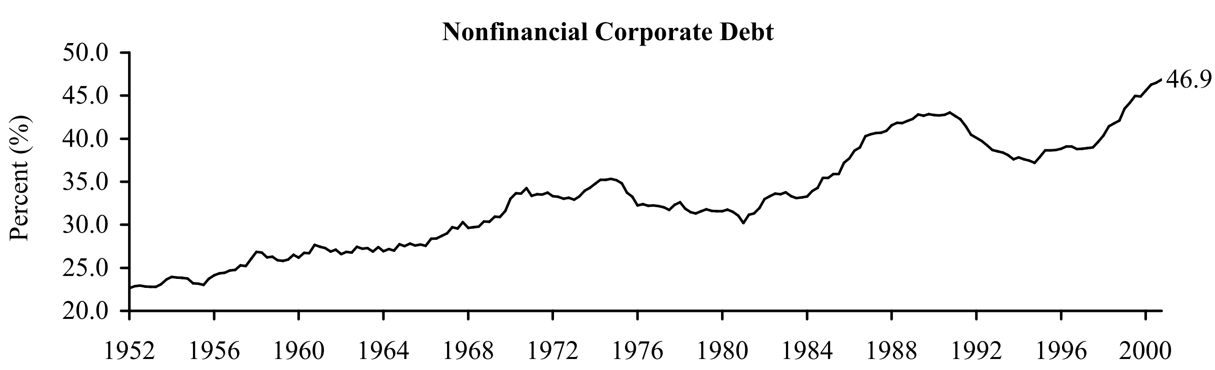
Table G

CREDIT MARKET DEBT AS A PERCENT OF GDP

March 31, 1952 - December 31, 2000







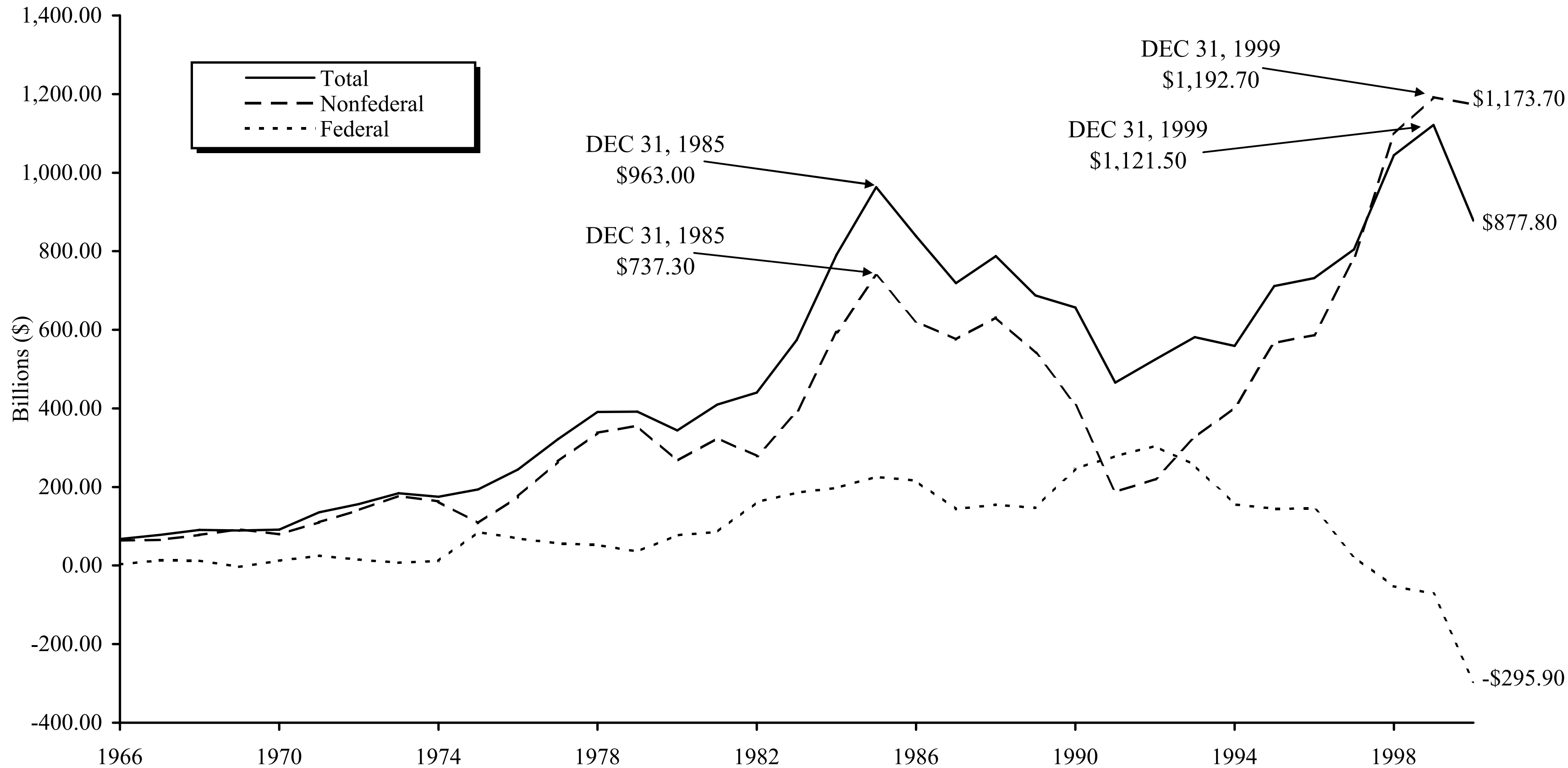
Source: Ned Davis Research.

Notes: Graph represents quarterly data. Household debt and nonfinancial corporate debt are components of total credit market debt.

Table H

BORROWING OF ALL NONFINANCIAL U.S. SECTORS

1966-2000



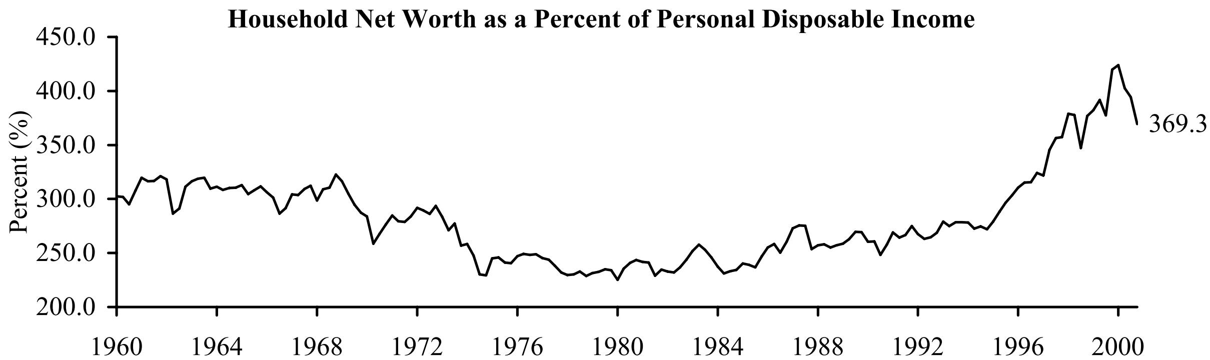
Source: Federal Reserve.

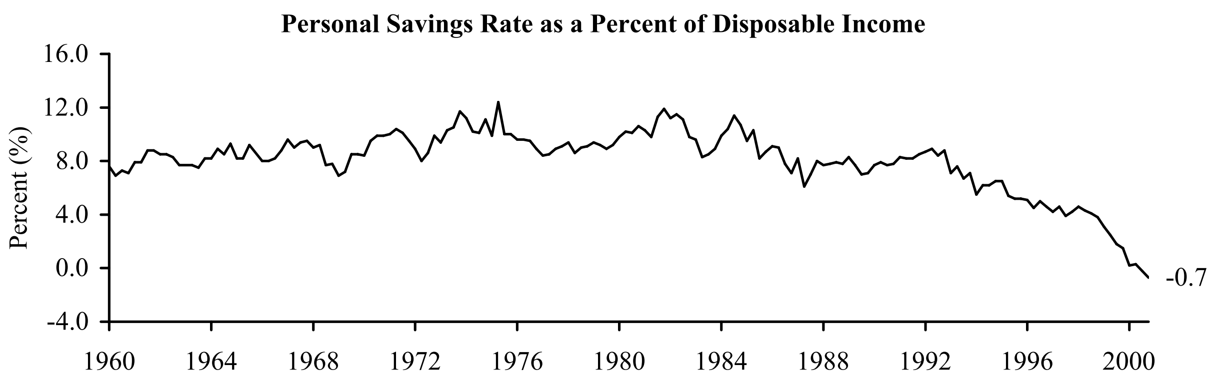
Note: Graph represents annual data.

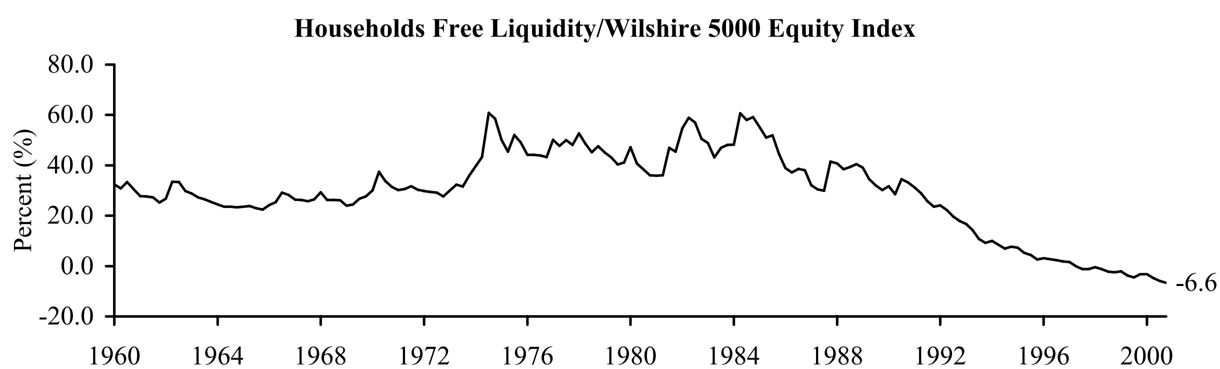
Table I

CONSUMER NET WORTH, SAVINGS AND LIQUIDITY

March 31, 1960 - December 31, 2000







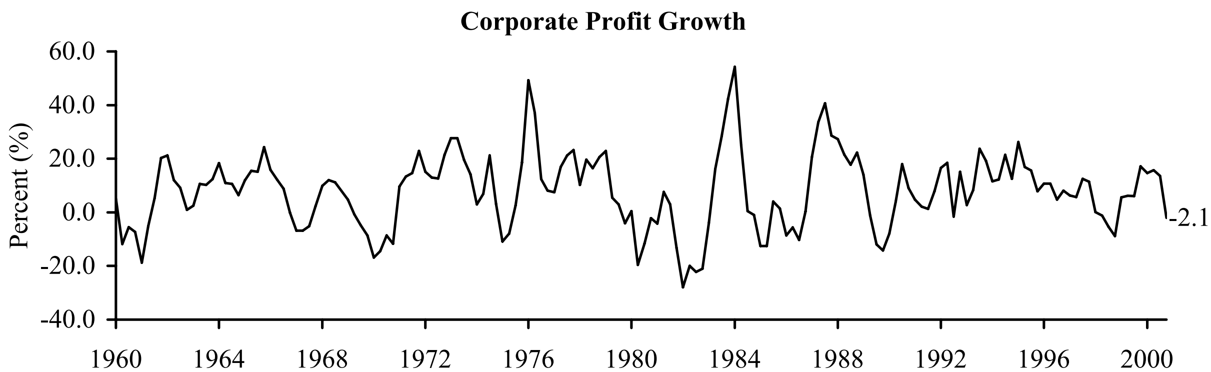
Sources: Datastream International and Ned Davis Research.

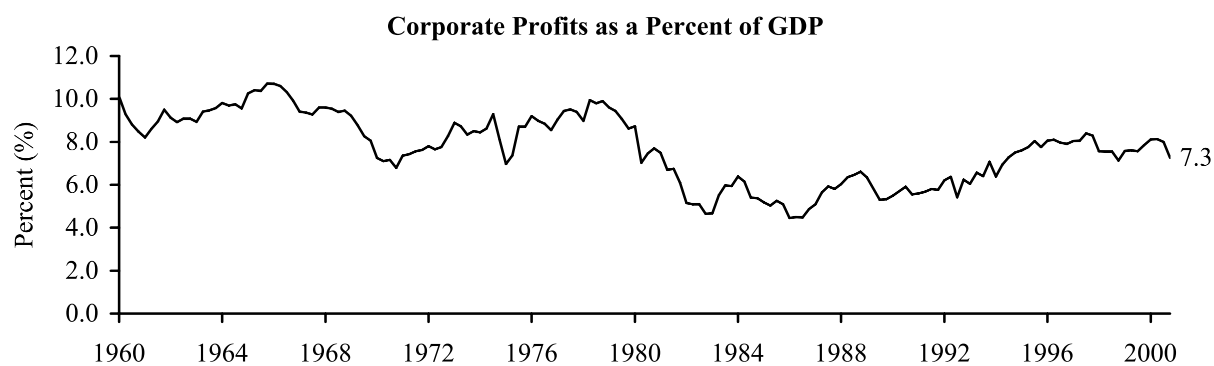
Notes: Graph represents quarterly data. Wilshire 5000 equity data are index market values.

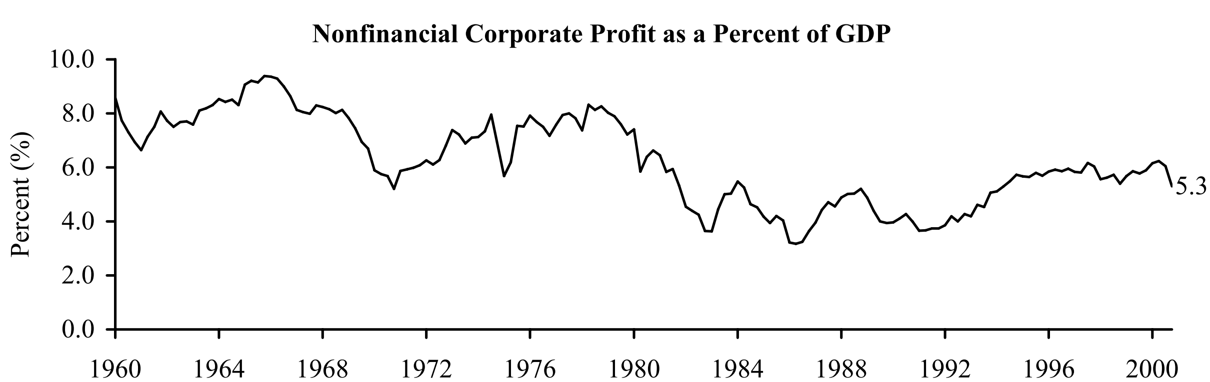
Table J

CORPORATE PROFITS

March 31, 1960 - December 31, 2000







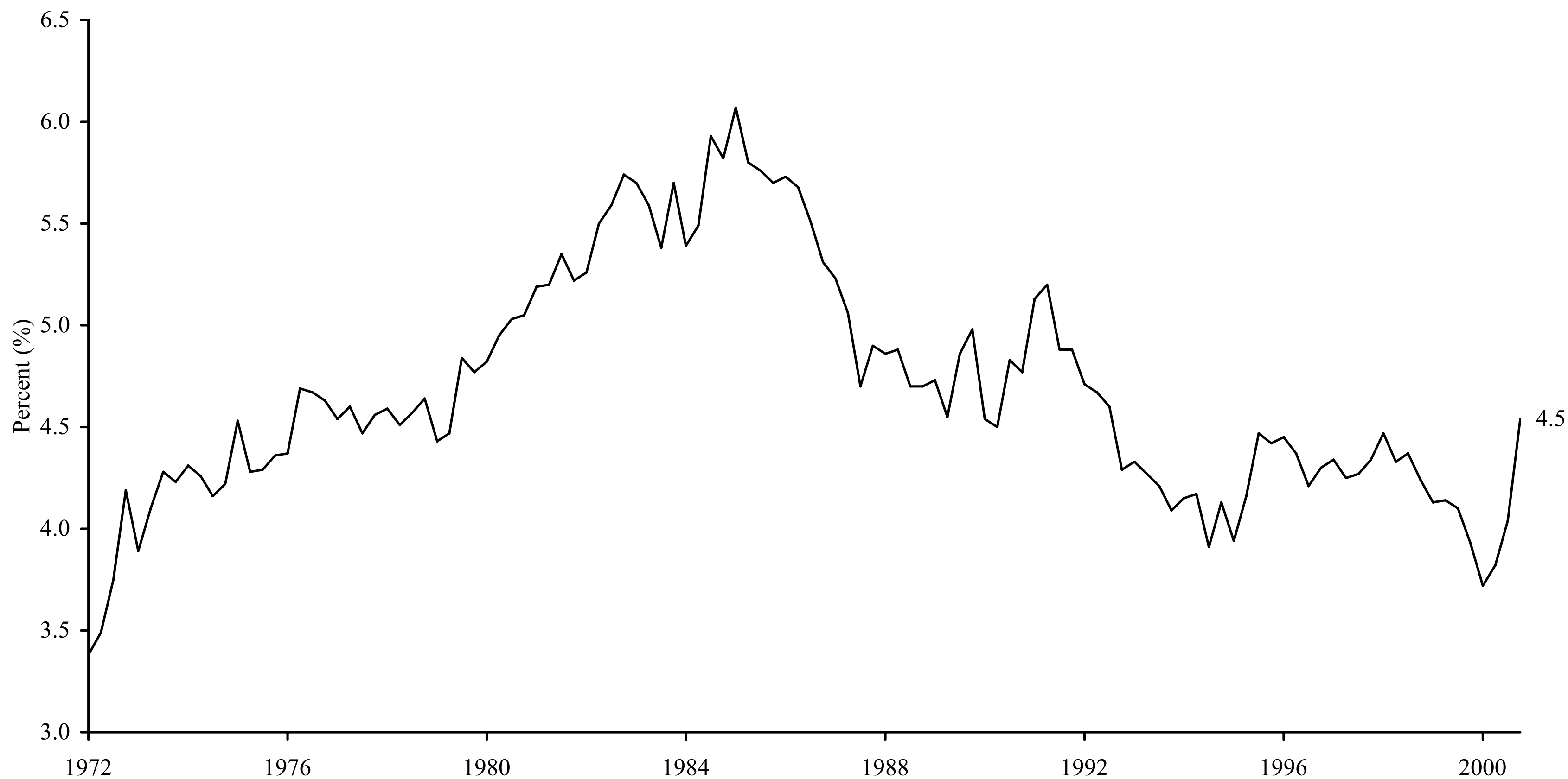
Source: Datastream International.

Notes: Data are quarterly and are calculated using current dollars. Growth data are annualized rolling changes.

Table K

MORTGAGE DELINQUENCY RATES

March 31, 1972 - December 31, 2000



Source: Datastream International.

Note: Graph represents quarterly data.

Table L

CORPORATE DEBT TO EQUITY

December 31, 1945 - December 31, 2000

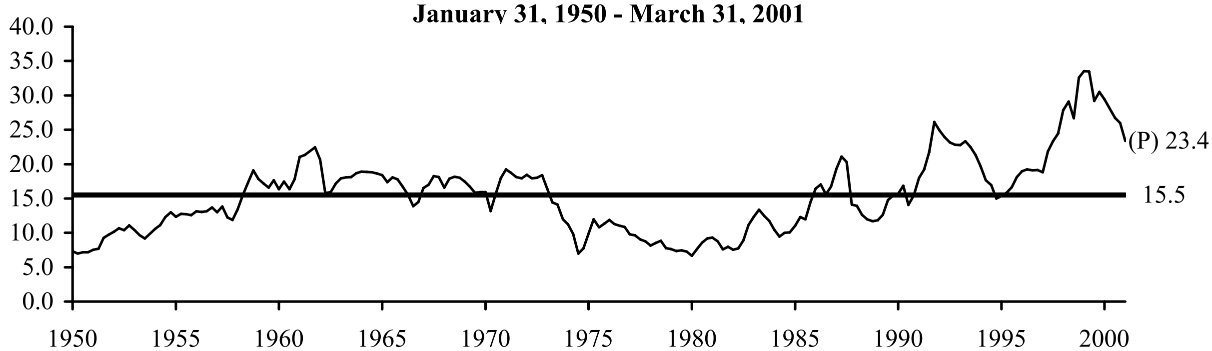
Source: Federal Reserve.

Notes: Graph represents annual data. According to the Federal Reserve, credit market debt used in the calculation of the ratio includes debt securities, mortgages, bank loans, commercial paper, consumer credit, U.S. Govt. loans, and other loans and advances. It excludes trade debt, loans for the purpose of carrying securities, and funds raised from equity sources.

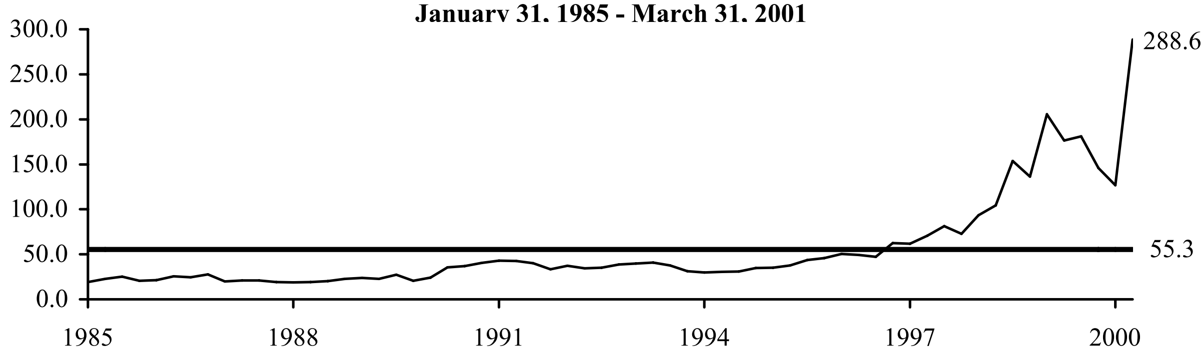
Table M

S&P 500, NASDAQ AND DOW JONES INDUSTRIAL AVERAGE PRICE-EARNINGS RATIO

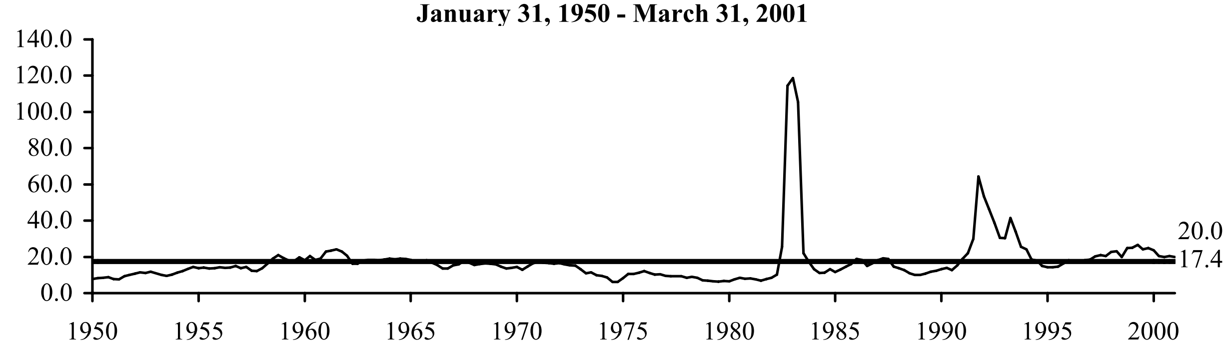
S&P 500
January 31, 1950 - March 31, 2001



Nasdaq
January 31, 1985 - March 31, 2001



Dow Jones Industrial Average
January 31, 1950 - March 31, 2001



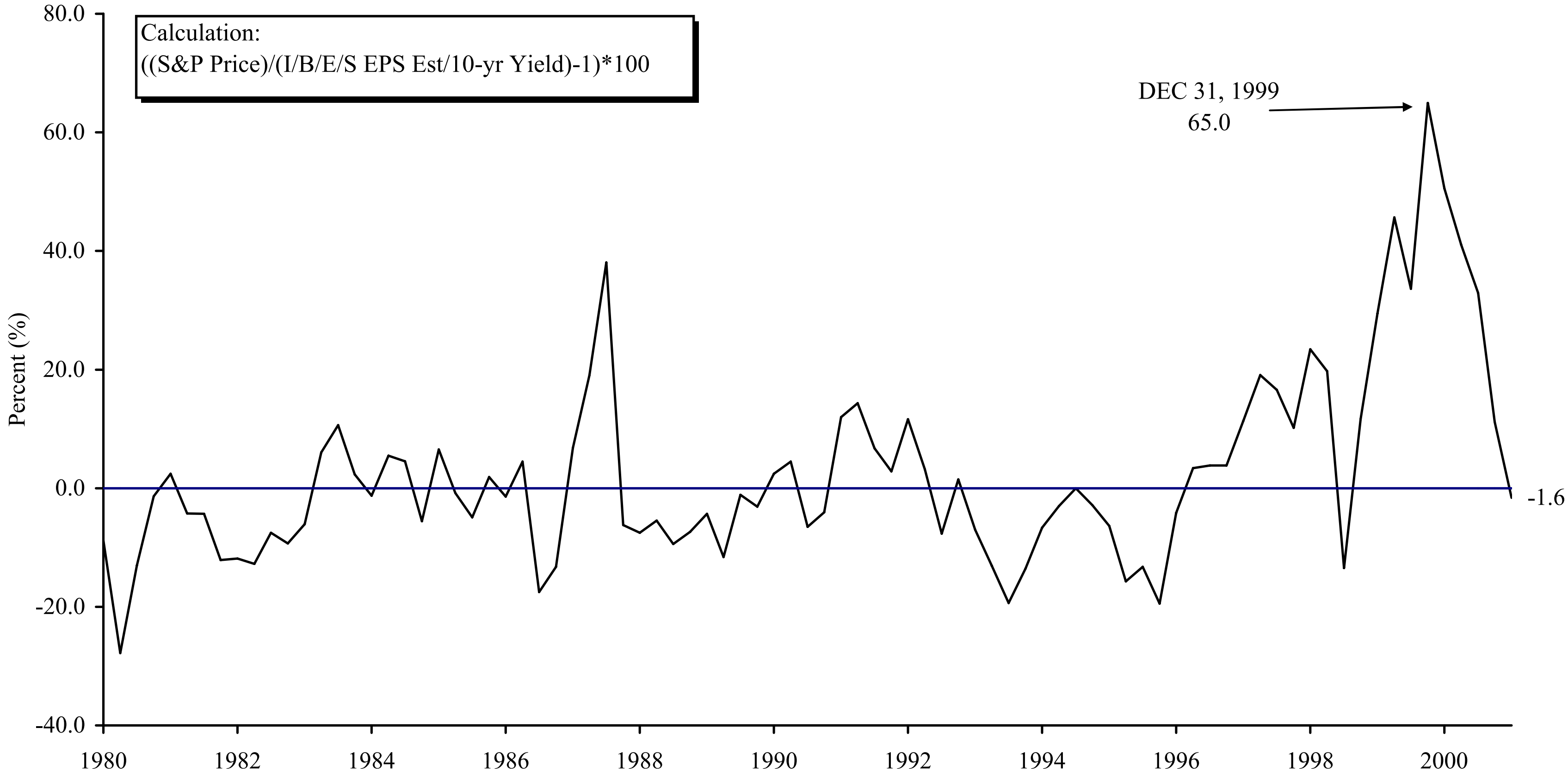
Sources: Datastream International, Nasdaq, Standard & Poor's, Standard & Poor's Compustat, and *The Wall Street Journal.*

Notes: (P) Preliminary. Graph represents quarterly data. The price-earnings ratios for all indexes represent 12-month trailing earnings. Nasdaq data begin in the fourth quarter of 1985.

Table N

FEDERAL RESERVE VALUATION MODEL: S&P 500 OVER/UNDERVALUATION

March 31, 1980 - March 31, 2001



Sources: Datastream International, I/B/E/S International, Inc., Salomon Smith Barney, Standard & Poor's, and *The Wall Street Journal* .

Notes: Graph represents quarterly data. The valuation of the market is calculated based on the March 31, 2001, S&P 500 price of $1,160.33, the I/B/E/S 12-month forward consensus earnings estimate of $58.14, and the ten-year Treasury yield of 4.93. Earnings growth was -4.4 from fourth quarter 2000 through first quarter 2001.