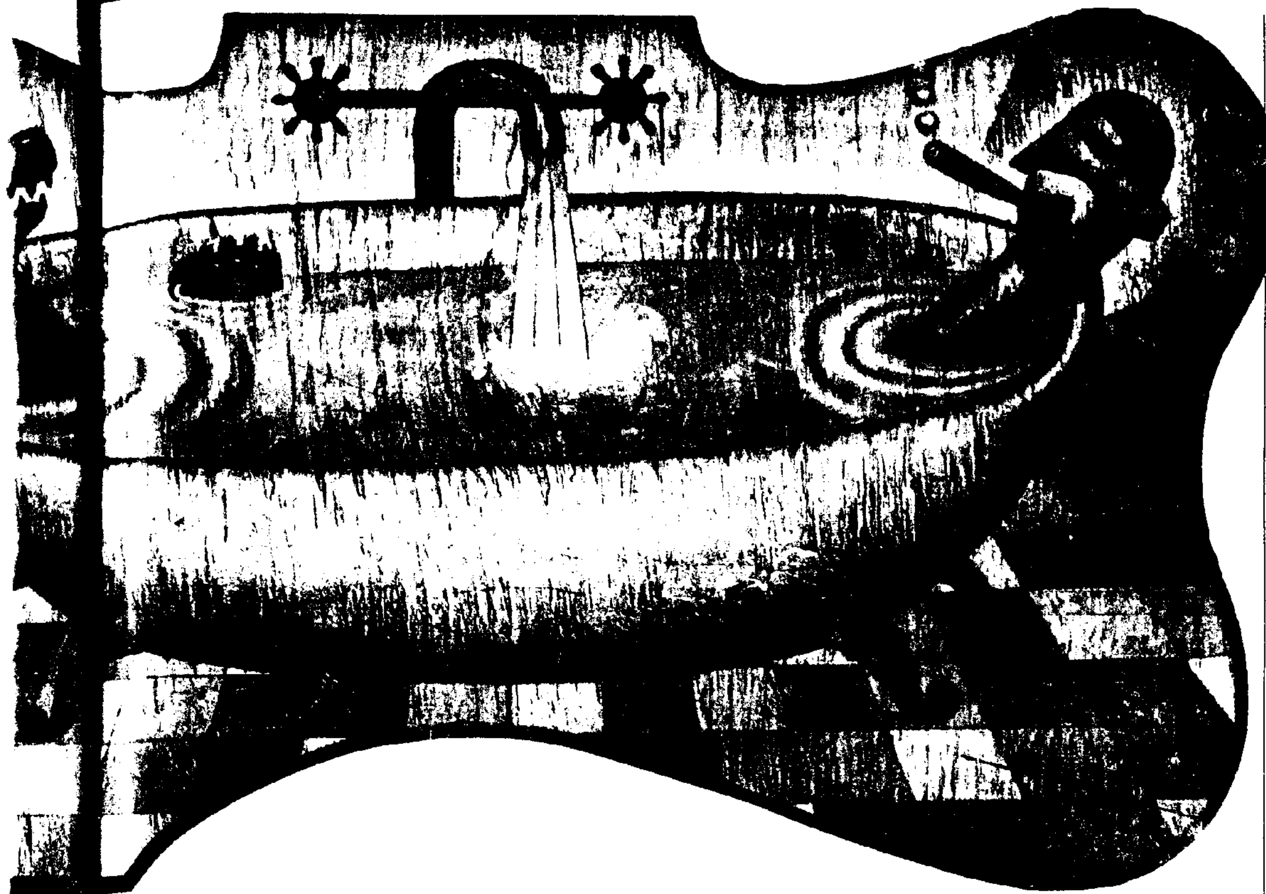
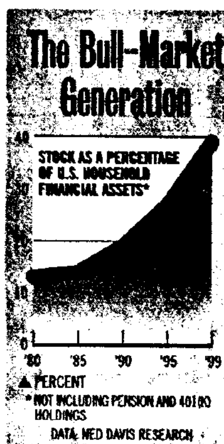


Indeed, emboldened by the soaring market as well as academic research suggesting that stocks are less risky than bonds if held for more than 30 years, investors have increased their exposure to this asset class. Today, stocks and stock mutual funds held outside of 401(k) and pension accounts make up a record 39% of household financial assets, up from 11.6% in 1982, the year the bull market was born, says the Ned Davis Research Group.

CONFIDENT. So strong is the current appetite for stocks that households are taking on record levels of debt to buy them. Since March, 1997, New York Stock Exchange member firms have doubled their borrowings to buy stocks for clients "on margin"—an arrangement that allows investors to use loans to pay for up to 50% of a stock's price. Although margin debt has remained flat as a percentage of the stock market's rising value, it now equals a record 2% of gross domestic product, up from 1% in 1995, says Jane D'Arista, director of programs for Financial Markets Center, a nonprofit research group in Philomont, Va. "People feel they have to rush to take advantage of this market," she says. "But I'm not sure many understand the risk, because they have yet to live through a margin call"—a repayment demand triggered by sliding share prices.

Investors' high expectations could set them up for a fall. With the Standard & Poor's 500-stock index coming off of five consecutive years of double-digit gains, the 1,010 people PaineWebber polled in early December expect average annual stock returns of 19% over the next 10 years—far above the long-term average of 10%. Moreover, though surveys—including a recent BUSINESS WEEK/Harris Poll—indicate that most people think the market is overvalued, they seem little concerned that it will ever suffer a lengthy losing streak. When Robert Shiller, a Yale University economics professor, asked 147 people in 1999 whether the market would recover within a couple of years from a crash similar to the one in 1987, an overwhelming 91% said it was somewhat or very likely to rebound, up from 82% in 1996. "People think the market has short-run risk but that if you ride it out, there is no risk," Shiller says.



Perhaps for that reason, investors have stayed with stocks even as overall volatility has increased. According to the widely followed CBOE Volatility, or VIX, Index—which measures price changes on options to buy or sell S&P 100-stock index contracts—volatility is nowhere near where it was in the midst of Asia's financial crisis in 1998. However, it is about 50% above its 1995 level.

With rich stock valuations also doing little to dampen demand, Federal Reserve Chairman Alan Greenspan wondered aloud in a speech on Oct. 14 whether investors are too lighthearted in

ILLUSTRATION BY RICCARDO STAMPATORI, CHART BY NITA L. JANSEN

Risk Terms

BETA Beta relates the volatility of a security to that of the market as a whole. If an investment moved exactly as the market moved, it would have a beta of 1.0.

ALPHA Most commonly used with mutual funds, alpha describes the difference between a fund's actual return and its expected return, given the level of risk it takes, as measured by beta. A fund with a positive alpha has done better than expected, while a fund with a negative alpha has underperformed.

STANDARD DEVIATION A statistical measure of the range a fund's price fluctuates within over time compared with its average price. If two funds have the same average return, investors should prefer the one with the lower standard deviation. To calculate it, average your investment's monthly returns over the past 36 months or longer. Then, subtract this average from each of the individual monthly return figures. This tells you how the investment has deviated from its average return. Then, square each figure and sum the results. The square root of this final number is the standard deviation.*

SHARPE RATIO This provides you with a return-per-unit-of-risk measure. To calculate it, take an investment's return minus the "risk-free" rate, divided by the investment's standard deviation. ▶

Risk Terms

R-SQUARED Tells you the degree to which an investment's returns rise and fall at the same time as the benchmark it is being compared with. An R-squared of 0 means an investment's returns have no correlation with the benchmark's fluctuations. A 100 reading indicates that they are perfectly matched. Low R-squareds also indicate that the beta of the security is not reliable.

[illegible] [illegible] downside [illegible] relative to [illegible] average U.S. equity [illegible] To calculate [illegible] adds [illegible] by which [illegible] of the [illegible] Treasury [illegible] return and divides by the total [illegible] months in the [illegible]

[illegible]

their attitude toward risk. "History tells us that sharp reversals in confidence occur abruptly, most often with little advance notice," he warned.

Of course, over the past two decades, most Americans have had no choice but to become more risk-tolerant. Even as the fall of the Berlin wall eliminated the cold war's military threat, Corporate America was rescinding its tacit promise of lifetime employment. Now, instead of relying on corporate paternalism, employees assume the risk of managing their retirement portfolios as well as their careers.

When it comes to investing, developments unique to the current bull market also promote risk-taking. Consider the rise of online trading, which accounted for 30% of the volume of retail transactions in the first half of 1999, according to U.S. Bancorp Piper Jaffray. On the Internet, average investors can take charge of their own trading and get financial data previously available only to pros. The downside, though, is that this often fosters a false sense of confidence that prompts traders to engage in more speculative transactions online than off. "Individual investors don't do that well with speculative trades. On average, the stocks they buy underperform those they sell," says University of California at Davis finance professor Terrance Odean, co-author of a recent study on online investing. "That says to me that they are underestimating their risk."

Still, the most likely explanation for people's rising comfort with financial risk is the safety net created by years of prosperity. Richard Thaler, a University of Chicago Graduate School of Business economics professor, has found that like gamblers, investors tend to take more risks when they feel they are ahead of the game. In experiments, Thaler gave some people $30 and others nothing. Those with a nest egg to fall back on were more likely to gamble when offered the chance to flip a coin for $9.

These findings indicate that appetites for risk expand and contract along with the Dow Jones industrial average and the S&P 500. However, as memories of the Depression fade and the economy enters an era of technology-driven change, even Greenspan argues that at least part of the recent decline in risk aversion should be permanent. "The rise in the availability of real-time information has reduced uncertainties," Greenspan said in his Oct. 14 speech.

Margin Debt Is Soaring

*NEW YORK STOCK EXCHANGE MEMBER FIRMS' CUSTOMERS' MARGIN DEBT
DATA: NEW YORK STOCK EXCHANGE

LITTLE PROTECTION. In what they believe to be a reduced-risk environment, investors are willing to pay more for stocks. But rich stock prices also create a catch-22: As valuations soar, so can volatility—a key measure of risk, notes Edward Keon, quantitative research director at Prudential Securities. By most measures, volatility has risen since the early days of the bull market. "When price-earnings ratios are high, it means investors are very confident the future is going to be good," Keon says. This increases risk because it leaves little protection against bad news—as Tandy Corp. shareholders discovered on Dec. 17 when the stock lost 20% of its value on news that holiday sales were weaker than expected.

Even Jeremy Siegel, the Wharton School professor who popularized the notion that stocks are less risky than bonds if held for long periods, cautions that some of the confidence his work has inspired may be misplaced. In a bear market, he says, investors could easily panic and abandon long-term commitments to stocks, exposing themselves to more risk than they had bargained for. "History tells us," he warns, "that very recent performance burns in our minds much more strongly than some academic study that says that if you hold on you will be all right."

How Much Volatility Can Cost You

Risk Tolerance

Even if you swear you will cling to your stocks through a ferocious bear market, it doesn't pay to ignore risk. For one thing, investors who match their risk tolerance to the risk in their portfolios have a better chance of sticking to their plans when things get ugly. Risk also has a big impact on what investors care most about—returns. Generally, as an investment's riskiness rises, so does the potential for a big payoff. But because high-octane securities are prone to blow-ups, it's foolish to assume that the road to riches is paved with Internet stock certificates.

To see why, throw a dart at the 10 riskiest mutual funds ranked according to a common measure called standard deviation. You might find a winner, like the Internet Fund, which returned an average of 89.2% annually over the past three years. But you might also draw the Lexington Troika Russia Fund, which lost an average of 20.6% a year over the same period.

Of course, when picking stocks and funds, most investors search for hot performers. This doesn't work either. But because an investment's risk level tends to remain constant over time, risk-adjusted returns have "some predictive value," says Leah Modigliani, a Morgan Stanley Dean Witter U.S. investment strategist.

In a study that ranked 660 stock mutual funds

ILLUSTRATION BY RICCARDO STAMPATORI; CHART BY NITA L. JANSEN