Overextended U.S. stock market bubble is at the breaking point

by Richard Freeman

In the first half of 1999, the leverage pumped into the U.S. stock market increased to unprecedented levels. During the first six months of 1999 alone, the level of margin debt—borrowing by individual and professional investors from brokers, in order to play the stock market—grew at a compounded annual rate of 57.5%, the highest in the postwar period, and apparently greater than that which occurred during the 1920s stock buildup.

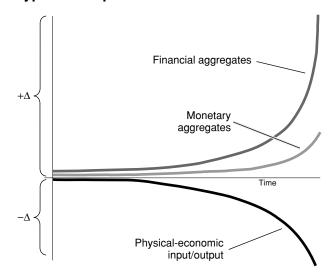
As the stock market has become more and more bloated, ever more dependent upon leverage to hold it up, the U.S. physical economy has continued to contract at a rapid rate. Two critical sectors show the problem: For the first six months of 1999 compared to the same period for 1998, shipments of American-produced two-wheel-drive tractors of greater than 100 horsepower have collapsed 35.4%, and shipments of American-produced combines and harvesters are down 47.5%. Second, comparing the first five months of 1999 to the same period for 1998, America's consumption of machine tools has fallen 39%.

Rather than being two independent processes, LaRouche's "Triple Curve," or Typical Collapse Function (**Figure 1**), shows that these trends are functionally interrelated. The speculative bubble of the United States, comprised of stocks, derivatives, and so on, which are represented by the upper curve, sucks the life out of the physical economy, forcing it to contract.

Americans view the stock market not as it really is—an instrument of their doom—but as a virtual-reality copy of the Golden Calf. During each of the last few years, Americans have spent approximately a quarter-trillion dollars on new stock purchases, either directly, or indirectly, through purchases by pension and retirement funds. Americans look for tipsters to give them hot inside information on what to buy; they spend tens of millions of dollars every year on books hawking investment strategy, and discuss how the stock market is doing, in the dentist's office, in the supermarket checkout line, and at family events. In a mad pursuit of instant success, Americans are gripped by a gambling psychosis, distorting their grasp of reality. Warn someone to pull his money out of the stock market, and he compulsively retorts,

FIGURE 1

A typical collapse function



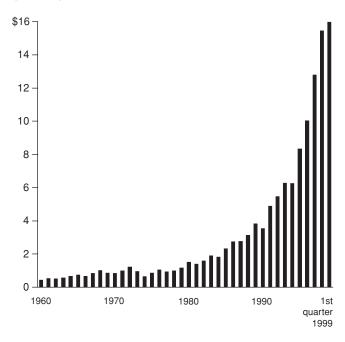
"I can't get out now, I might miss the opportunity to make a profit tomorrow." Tell someone about the building war danger, or the disintegration of the financial system, and he will reply, "I can't think about that now; how did the market do?"

But, as in a Greek tragedy, self-imposed blindness brings on destruction.

The stock market is pyramided to a high degree by self-reinforcing leverage. It cannot be sustained at its current level, which is out of proportion both to historical standards, and relative to reality. Another financial instability, whether the cause be endemic to the stock market or an outside derivatives failure, whether it originate in the United States or abroad, will intersect this bloated market. Reverse-leverage will kick in, as leveraged positions, some with ratios as high as 500:1, come down with lightning speed. For millions there will be no saving one's nest egg at the last moment; it will be gone. The entire financial system will vaporize. The physical economy, already damaged by the speculative bubble, will crumble further.

Capitalization value of all stocks traded on U.S. stock market, 1960-99

(trillions \$)



Source: Federal Reserve Board of Governors, Flows of Funds Accounts, various years.

Unprecedented heights

The stock market is at an unprecedented height because of leverage. Its market value cannot be sustained at even onethird its present level. Figure 2 shows the stock market's capitalization — the market value or share price of a U.S. company's stock, times the number of shares outstanding, for all the shares outstanding of all U.S. companies - starting in 1960. The stock market's capitalization has undergone three phases since 1960. During 1960-82, the stock market's capitalization was confined within a range, with it never exceeding \$1.6 trillion. The second phase had a buildup, reaching a peak in 1987, but falling during the stock market crash of October of that year, and then increasing at a moderate pace. The third phase, starting in 1990, has been a reckless, speculative buildup. In 1990, stock market capitalization was \$3.54 trillion. By the first quarter of 1999, it escalated to \$15.97 trillion, a 4.5-fold increase since 1990 (and a 10-fold increase since 1982).

The increase in value since 1990 has been almost entirely fictitious, i.e., backed by nothing. When little stands behind it, its fall can be quite steep—as steep as its rise during the 1990s. To determine the amount of fictitious valuation of the stock market, one can compare it to something more tangible:

Gross Domestic Product, which is a measure, albeit a poor one, of the economy's output of goods and services (as bad as GDP is as a measure of the physical economy, we will use it for the moment, for the purpose of this experiment). While the stock market rise has been dramatic since 1987, let us start with what has happened since 1990, when the rise became hyperbolic.

In 1990, the U.S. stock market's capitalization stood at \$3.54 trillion, and the value of America's GDP stood at \$5.74 trillion. By the end of the first quarter of 1999, the capitalization of the stock market was \$15.97 trillion, and the value of the GDP was \$8.81 trillion. Thus, during that interval, the stock market's capitalization swelled by \$12.43 trillion, and the value of the GDP rose by \$3.07 trillion. Of the \$12.43 trillion increment in the stock market valuation, \$3.07 trillion was covered by an increment in the GDP, i.e., 24.7% of the growth of the stock market.

That leaves \$9.36 trillion in stock market capitalization that has not been covered by growth in GDP, or 75.3% of the \$12.43 trillion increase in stock market capitalization. That means that \$3 out of every \$4 of the increase of the stock market's so-called increased valuation since 1990 has not been covered by an increase in GDP. It is hot air, fictitious.

There is a more accurate measure than GDP. As Lyndon LaRouche has stated, and *EIR* has documented since 1990, the physical economy, inclusive of infrastructure, as measured by the energy of the system, has declined at a rate of about 2% per annum. Using this more accurate standard, the entirety of the stock market's increase of valuation since 1990 is purely fictitious.

Multiply-connected leverage

The stock market's increase is based not on an increase in production, but rather a surge in leverage. It is multiply-connected, mutually self-supporting leverage that is the key to the U.S. stock market rise. There are three principal forms of leverage: 1) individuals and professional investors borrowing from brokers on margin, i.e., margin loans; 2) the leverage of stock and stock index derivatives; and 3) leveraged buyout fund leverage, and the leverage-like features of inflated stock values to make possible corporate takeovers.

This gives us a vantage-point for viewing how the media report on the stock market. Most of the coverage of the stock market, from *Forbes* magazine to the business page of the local newspaper, is like reportage of Hollywood: with hot scoops, sensational, even salacious tales—and much of it not true. When the stock market rises, many reasons are given, each of which have a grain of truth: increased money flows from abroad, the increased use of stock index funds, and so on. But, while what has happened over the last few months can exercise an important, marginal influence in shaping the stock market, it is the fundamental, cumulative outcome of 30 years of destructive economic policies that is determining what the stock market does. The media throw

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out confetti to obscure the deeper reality.

There are two principal reasons that the stock market has risen since 1982, and especially since 1990. First, it is due to the fact that the British-led oligarchical financiers have installed a post-industrial society policy, one that gutted the physical economy and shifted credit flows into the speculative financial realm. Starting with the post-industrial policy shift of the late 1960s, a number of policies were pushed through: the 1971 delinking of the dollar from the gold reserve standard; the 1975 law deregulating the brokerage and securities industry; the October 1979 imposition of the high-interestrate regime by Federal Reserve Board Chairman Paul Volcker; the 1979 Steiger Act, which cut the top tax rate on capital gains from 49% to 28%; the Kemp-Roth Tax Act of 1981, which, among other things, created real estate tax shelters and lowered the top tax rate on capital gains to 20%; the Garn-St Germain deregulation of the commercial and savings and loan banking system, and others (see Richard Freeman, "Gambling Psychosis Propels Stock Market Toward Implosion," EIR, May 29, 1998). It is the effect of these acts, reinforced by similar policies or the post-industrial speculative society during the 1980s and 1990s, together with the early-1980s infusion of dirty money into the Drexel Burnham-Michael Milken junk-bond-fuelled leveraged buy-out machine, that led to the hyperbolic growth of the stock market. There was constant intervention to keep the stock market moving upward, as part of a radical 30-year restructuring of the economy.

Second, unprecedented, multiply-connected leverage fuelled the stock market, and this leverage has been growing at an increasing rate. Leverage is a term for borrowing and debt, but it is used to signify that an investor has increased his ability to purchase and control much more than he could without leverage—an increase of up to several hundred times his original capital. It is the post-industrial policy shift in the United States, conjoined to the infusion of leverage, that has fundamentally configured the state of the U.S. stock market.

Three principal types of leverage

We look at each of the three principal forms of leverage.

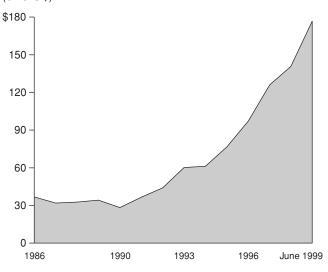
1. Official and "hidden" margin debt

Officially, this is called customer margin debt, and also broker's margin loans. It works as follows. If an individual were to buy, say, \$100,000 worth of stock, he may either buy the stock entirely with his own cash or secure a margin loan from a broker. Currently, the initial margin requirement on qualified stocks is 50%. That means that the individual may borrow, through a loan, up to \$50,000 of the stock purchase price from a broker; the broker will usually require the investor to pledge, as collateral, an amount of other stock that is equal to the \$50,000 value of the margin loan. The individual pays the other half of the \$100,000 stock purchase price out of his own cash.

FIGURE 3

Customer margin debt (brokers' margin loans), 1986-99

(billions \$)



Source: New York Stock Exchange

The individual investor borrowing the margin loan may be an ordinary or a professional investor. Through the margin loan, the individual investor is buying stock on margin, i.e., by borrowing or leverage.

It is broker margin loans that have been growing at a phenomenal rate. Margin loans are extended by the 4-500 banks and investment firms that are members of the New York Stock Exchange, such as Merrill Lynch and A.G. Edwards. **Figure 3** shows that from 1986 through 1991, the level of broker margin loans remained in the range of \$30-40 billion. At the end of 1991, they were \$36.7 billion; at the end of 1998, they were \$140.9 billion, almost quadrupling. During this time, loans grew at a 21.7% compounded annual rate. But, they rose from \$140.9 billion at the end of December 1998, to \$176.9 billion at the end of June 1999, a compounded annual growth rate of 57.5%. The absolute level is the largest in U.S. history.

In addition, many Americans, seized by stock market fever, are buying stocks with credit cards, or borrowing against home equity or 401(k) retirement accounts.

Raymond DeVoe, Jr., an economist for Legg Mason Wood Walker stockbrokers, who has worked on Wall Street since 1949, estimated in the July 1997 issue of his newsletter, the *DeVoe Report*, that "the actual level of customers' margin debt could be two to three times the reported level." DeVoe refers to customers' margin debt, the buying of stocks using home equity loans, credit cards, etc., as the "hidden mar-

gin debt."

If the hidden margin debt is two to three times the officially reported margin debt, and the "official margin debt" at the end of June 1999 was \$176.9 billion, then the hidden margin debt is \$354-531 billion. That amount of margin debt could contribute to stock purchases, using margin (were margin to represent 50% of the total stock purchase price), of as much as \$1,062 billion.

2. Stock-based options and futures

Stock-based derivatives, options, and futures, with a leverage that ranges up to 660:1, are potentially the most explosive. These derivatives, which were practically nonexistent in 1970s, have ballooned during the 1990s. They epitomize the stock market's growth.

To understand how these work, let us consider the case of an option to buy the Standard & Poor's 500 index, a basket of 500 important stocks. An option is the right, but not the obligation, to buy some financial instrument or commodity at a future date. The S&P 500 has a trading price equal to the sum of the value of the S&P 500 stocks, adjusted by some factor. So, on Aug. 4, the S&P 500 was trading at 1,305.22. Therefore, one unit of the S&P 500 index would be trading at \$1,305.22. By the same token, 1,000 units of the S&P 500 index would cost \$1,305.220 (1,000 times \$1,305.22).

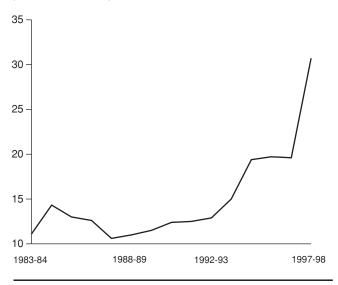
Assume that one wants to buy an option for a contract of 1,000 S&P 500 index units. In the purchase of an option, one pays a premium, usually 2-3% of the value of the underlying instrument. The premium cost of an option for 1,000 units of the S&P 500 index would be 3% of \$1,305,200, or \$39,157. By paying the premium, one doesn't yet own the instrument of the 1,000 units of the S&P 500 index, but, to use the words of the trade, one controls the underlying instrument. However, if one is a big speculator, such as George Soros, one might be able to borrow 95% of the value of the premium, and pay only 5% of the value of the premium in one's own cash. One would be putting up 5% of \$39,157, or \$1,958, to control an underlying instrument of 1,000 units of the S&P 500 index, worth \$1,305,200. The ratio of what the investor is investing to buy the premium, to the value of the instrument he controls, i.e., the leverage, is 660:1.

Why would one buy an option on 1,000 units of the S&P 500 index? One purpose is to hedge other investments one has made. But, frequently, another purpose is to manipulate the value of the underlying S&P 500 stocks. No single investor could do this, but a group of investors buying large positions for a day or a few days, could. For example, the investors would buy option bets structured to make the S&P 500 index rise—a large number of option derivatives in that direction can sometimes produce that outcome. By pushing up the value of the S&P 500 index upward, one often thus lifts up the value of the underlying 500 stocks, or a portion of them, that make up the S&P 500. This is called "updrafting" the market. Conversely, one can push the value of the S&P 500 index down-

FIGURE 4

Volume of trading of S&P 500 future contracts, at Chicago Mercantile Exchange

(millions of contracts)



Source: Commodity Futures Trading Commission.

ward, and thus push down the value of the underlying stocks. This is called "downdrafting" the market. There are many variants on these scenarios, and other plays using such stockbased options and futures.

Look at the explosive growth in the volume of the trading of futures on the S&P 500 index, at the Chicago Mercantile Exchange (**Figure 4**). In the period from 1983-84 to 1991-92, there were 11-14 million future contracts traded each year on the S&P 500 index. By 1996-97, this trading volume had risen to 19.6 million contracts. Then, in 1997-98, the trading volume exploded to 30.7 million contracts, an increase of 56.6%.

Figure 5 shows the growth in the volume of options contracts traded on the S&P 500 index. Though not as explosive as the growth of futures contracts on the S&P 500 index, nevertheless, the upward trend is pronounced.

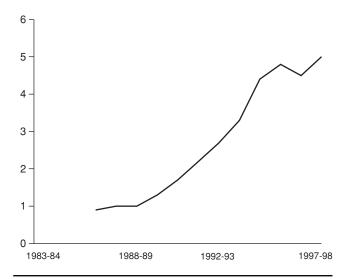
In 1997-98, there were a combined 35.7 million futures and options on the S&P 500 index, which were definitely influencing the market. But, the S&P 500 index is only one type of index. There are also futures and options on the Dow Jones 30 industrials index, and there are also many futures and options on individual stocks, such as IBM and General Electric. These are all stock-based derivatives. While no single comprehensive figure exists, *EIR* estimates that, in 1997-98, there were as many as 60 million contracts traded on stock-based derivatives. Each single stock-based derivatives contract can vary in worth, controlling underlying instru-

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FIGURE 5

Volume of trading of S&P 500 option contracts, at Chicago Mercantile Exchange

(millions of contracts)



Source: Commodity Futures Trading Commission.

ments worth between several tens of thousands of dollars, to millions of dollars. Therefore, there were tens of trillions of dollars worth of stocks controlled by these 60 million stockbased derivatives in 1997-98.

Stock-based derivatives can hugely manipulate the market. These carry very high levels of leverage, up to 660:1. In a reverse-leverage stock market collapse, they will affect other stocks, intensifying the depth and speed of the collapse. The effect will be devastating.

3. Leveraged buy-outs and mergers and acquisitions

One of the key instruments that has bid up the stock market is mergers and acquisitions (M&As). M&As not only drive up the stock price of the two stocks directly involved in a merger, but, frequently, all the stocks in a related industry group. For example, a General Electric takeover of an electronics company will often cause a rise in many other stocks in the electronics industry.

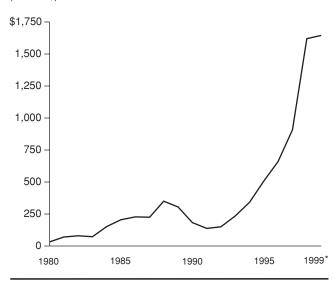
The M&A process raises the threshold price level of what is considered to be acceptable to take over another company, moving the overall price level upward.

The M&A/takeover can be effected entirely in cash or by borrowing a good portion of the money in the takeover. In that case, it is called a leveraged buy-out (LBO), because the takeover was effected with borrowing, i.e., leverage. When a buy-out firm carries out an LBO, it can do so by borrowing money from a bank, or by raising cash through issuing junk bonds (high-yield, high-risk bonds). When a

FIGURE 6

Mergers and acquisitions

(billions \$)



*estimated

Source: Securities Data Company.

buy-out firm carries out an LBO for, say, \$5 billion, it may, typically, put down only \$1 billion in cash from its own treasury, and borrow the other \$4 billion. It is not known how many of mergers and acquisitions are LBOs, but one indication is the amount of junk bonds issued. In 1987, when the Drexel Burnham-Michael Milken LBOs were roaring along, the dollar volume of junk bonds issued was \$26.7 billion. In 1998, the dollar volume of junk bonds issued was \$152 billion, nearly six times that during the heyday of Milken. The main takeover firms, such as Kohlberg Kravis Roberts & Co.; Hicks, Muse; and the Apollo Investment Fund, are very active today.

But, there is a new twist to the M&A game. Instead of using borrowing outright, companies are taking over other companies, using the value of their inflated stock. As the value of stock rises, the companies hypothecate the value of the inflated stock value to take over another company, raising the value of the stock of the company that has been taken over. This sets the stage for the next phase. In many cases, inflated stock has replaced borrowing outright. In effect, it has become a new form of leverage. At the moment, the value of the stock is determined not by the productivity of the company, but rather by how many previous takeovers the company has already successfully completed. Its value is an inflated ratio of past takeovers, giving it a new, inflated value to carry out future takeovers.

Figure 6 shows the dollar value of M&A takeovers in the

United States since 1980. These takeovers have been effectuated with either old-fashioned leverage, or by the use of inflated stock. They are climbing skyward: In 1990, the value of M&As was \$182 billion; in 1995, it hit \$509 billion; in 1998, it was \$1.62 trillion. At current trends, the level in 1999 will be marginally higher.

Each new round of M&A takeovers engenders another new round. The stock market's value is no longer determined by the increased expansion of factories and farms, in increased output, and the generation of real profit. These three kinds of leverage—official and "hidden" margin debt, stock-based options and futures, and LBOs and M&As—have substituted for real economic activity in propping up the stock market. Each new instance that the City of London-Wall Street crowd leverages the market further upward, is the signal for suckers to pour in tens of billions of dollars more.

Other methods used to prop up the market

The City of London-Wall Street crowd employ other methods to rig the stock market upward. Within this overall leverage-driven bubble, financiers have smaller bubbles. Without leverage, it is doubtful that any of these smaller bubbles could be sustained, but, given the existing degree of leverage, they have thrust the stock market even higher.

Stock buy-backs: Many companies buy back their own stock. They use part of their profits, not for expansion of production, but to repurchase their own shares on the open market. For example, since 1995, IBM, one of the 30 stocks in the Dow Jones Industrial Average, has repurchased \$20 billion worth of its shares, about one-fifth of its total shares outstanding. By pulling shares out of the public's hands (making them scarcer), it has pushed the price of the stock up. Since 1995, IBM's stock has leapt from about \$47 per share, to \$122 per share on Aug 9. Since 1995, twenty-four out of the 30 firms of the Dow Jones Industrial Average have announced stock buy-back plans.

Stock index mutual funds: Stock index funds are a specific variety of mutual fund, in which the mutual fund manager does not try to actively pick stocks, but rather purchases the stocks that make up a well-known stock index-say, the stocks of the S&P 500, or the Dow Jones 30—and simply lets the stocks go up or down, which determines the performance of the fund. The idea behind the stock index fund is that, over the last few years, the stocks of the S&P 500, the Dow Jones 30, et al., were out-performing the judgment and performance of money-managers, so, the argument went, let the money-managers put the money into the S&P 500 stocks, and let them perform. The catch is that this type of mutual fund tends, by definition, to buy stocks of the biggest companies, concentrating a lot of money in the stock of these big companies, pushing the big companies' stock price up; that cycle, in turn, draws more money into the big companies' stock, etc.

TABLE 1

Stock index funds assets

(billions \$)

1994	30.7
1995	51.2
1996	93.1
1997	167.0
1998	262.3
April 1999	312.3

Source: Investment Company Institute.

(To clarify, there is a distinction between stock index mutual funds, and stock-based derivatives. In the case of a stock-based derivative, an investor buys an option or future on a financial instrument, such as the S&P 500 stock index. They are derivatives. In the case of a stock index mutual fund, discussed here, the investor buys and holds all the individual stocks that make up the S&P 500 or any other stock index, to earn income from the performance of the stocks. The dollar volume of stock-based futures and options is far larger.)

Table 1 shows the growth of the assets owned by the stock index mutual funds, which has risen rapidly. This has had a marginal, but nonetheless important effect in pushing up the stock market. Some financial press with very short-term memories, have claimed that stock index funds are running the market. This is an overstatement. In April 1999, the stock index funds had assets of \$312.3 billion, less than 2% of the \$15.97 trillion market capitalization valuation of the U.S. stock market. Much of the speculative run-up of the stock market during the 1990s occurred without the input of stock index mutual funds.

Internet stocks: The oligarchy has pushed Internet-related stocks, as heralding the new information age. A company called Internet.com publishes an index of 50 leading Internet stocks, called the ISDEX index. Among the 50 companies that comprise the ISDEX index are: Home Network, Amazon.Com, America Online, Cisco, Cybercash, Excite, E*Trade, eBay, Infoseek, Lycos, RealNetworks, and Yahoo! It does not include Microsoft, nor any of the computermaker companies.

The ISDEX index has gyrated wildly during the course of this year. **Table 2** displays the ISDEX index's behavior, marked by key days. The index started the year at 337.00. By April 12, it had reached its apex of 664.55, nearly doubling its value from the start of the year. This represents the euphoria over Internet stocks. Between April 12 and July 1, it bounced around, but was only about 100 points down since its April 12 highpoint. Since then, especially since the last week of July, it has collapsed. It closed on Aug. 9 at 405.28, a loss of 39% since its high point.

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TABLE 2 ISDEX index of 50 Internet stocks

January 1	337.01
March 1	442.40
April 1	557.75
April 12	664.55
May 3	571.08
June 1	483.82
July 1	555.66
August 9	405.28

Source: Internet.com Corp.

Almost all of the Internet stocks that make up the ISDEX index went public—i.e., sold stock to the public—only since late 1997; they have been public corporations only a short while. *EIR* has calculated that at their April 12 high point, the 50 companies that make up the ISDEX index had a market capitalization of \$613.4 billion. By Aug. 9, the market capitalization of these 50 companies was \$374.2 billion, a loss of \$239.2 billion—nearly a quarter-trillion dollars.

Still, the Internet stocks have remarkably high capitalizations for companies which earn little or no income—or are sustaining losses. The sharp drop of this sub-bubble within the stock market, may indicate a crisis that could blow out the bigger bubble.

Reverse leverage

The U.S. stock market cannot be sustained at its current unprecedented heights, and the exposure of the American population to the market is enormous.

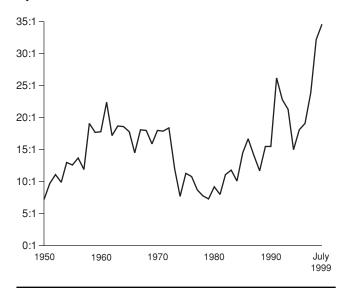
Wall Street can make no excuse that it does not know what is going on, nor can the American population. So far as is known, no Wall Street firm has made the comparison of market capitalization to the GDP or the real physical economy, as *EIR* has. (The reason as to why Wall Street has not done this can be speculated upon: Many Wall Street analysts lack the concentration span to focus on real production; or, were they to make the comparison, they might be terrified by the results.) But, the behavior of several standard Wall Street measures, though inferior in conception, nonetheless are well known, and leave no doubt that the stock market is clearly in the danger zone.

Let us take perhaps the best known measure, the priceearnings ratio for the S&P 500 stocks. It compares the price of a share of company stock to the company's earning per share. Thus, if company A's stock price is \$100 per share, and its earnings (the dividends it will pay out plus the profits it will retain for internal use) are \$10 per share, then company A's price-earnings ratio is 10:1.

Figure 7 shows that, during the 1960s, stocks had a higher price-earnings ratio, partly because of speculation; but since

FIGURE 7

Price-earnings ratio of the stocks that make up the S&P 500



Source: Standard & Poor's.

there was a more durable economy during the early part of the 1960s, the process did not go out of control. During the 1970s and 1980s, the price-earnings ratio averaged 12:1, which is about normal. In most cases, if the ratio gets to 18:1 or much higher, there is no way that the earnings stream of the company can support such a high price.

On July 30 of this year, the price-earnings ratio had reached 34.6:1. This is nearly triple the normal level of the 1970s and 1980s; it is the highest in the postwar period, and, most likely, the highest during the 20th century. The price-earnings ratios of some of the internet stocks are extremely high: America Online, 138:1; Yahoo!, 569:1; and eBay, 876:1.

In 1987, when the stock market crashed, the price-earnings ratio was around 20:1.

The stock market's speculative heights exceed that of 1929 and 1987 in every respect; it is unprecedented. As the market has gone higher, there has been a frenzy of activity to make investments. The worship of the market is making Americans crazy, distorting their grasp of economic and strategic reality.

As reverse-leverage sets in on this tremendous volume of leverage in the stock market, the plunge will be steep. This will intersect the collapse of the \$165 trillion derivatives market worldwide (which includes, but is far, far larger than the derivatives traded on the stock market). The convulsion will accelerate the biggest financial disintegration in 650 years. This will shatter illusions, producing the greatest existential crisis Americans have ever had.