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What Does and Does Not Happen When Stock Markets Crash

Financial market reversals are virtually inevitable. But even very sharp ones, including panics and crashes, do not necessarily spell disaster for either individual fortunes or general business activity. Their possible negative effects depend upon a variety of factors, prominent among them Government efforts to protect the public from their consequences.

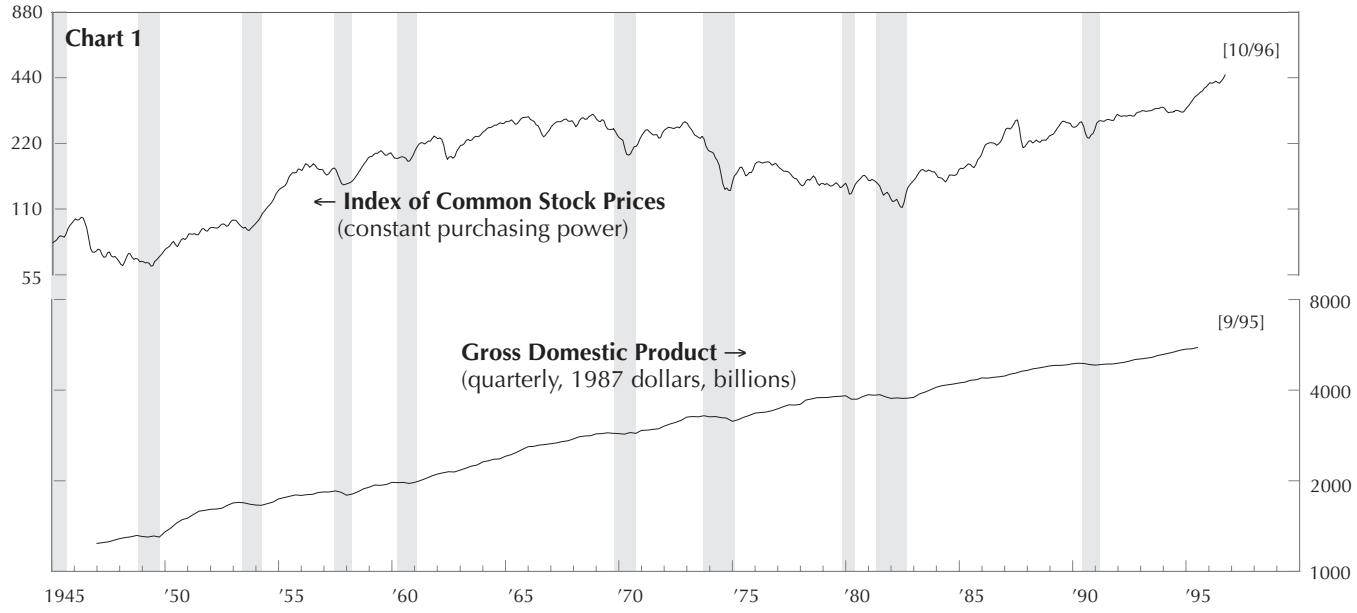
Few events in American history have been so indelibly etched in the public memory, and so relied upon as a touchstone for public policy, as the Stock Market Crash of 1929 and its supposed aftermath. Even today (or especially today), any marked twitch in the Dow (or expectations thereof based on the remarks of Federal Reserve officials) may prompt the media ghouls to rerun ancient file footage of the frenzied trading on Black Tuesday, brokers plummeting from Wall Street window ledges, shuttered homes and businesses, abandoned farms, apple vendors, soup kitchens, bread lines, and, most of all, the bewildered and despairing faces of American economic refugees and their ragged children.

Unmistakably, the Great Depression of the 1930s was a signal event in the nation's history and one of unparalleled domestic suffering during peacetime. Millions lost their jobs, their savings, their homes, and their hopes. There was no comparable American experience before and there has been none since. In view of their subsequent memorialization (most notably by partisans who have sought to discredit capitalism in general), it is perhaps understandable that the Stock Market Crash and the subsequent Depression seem to have been closely linked in the public mind as cause and effect phenomena.

It is beyond the scope of this discussion to consider the many factors that may have contributed to the debacle of the 1930s. But this much seems clear: financial crashes need not necessarily be followed by economic catastrophe. As the chart at the bottom of this page may suggest, there is no clear relationship between even very sharp reversals in stocks prices and the trend of the overall economy (recessions are shaded). Even though we continue to use the *index of common stock prices* as a leading indicator of business-cycle changes, it often is noted that this indicator has "accurately forecast sixteen of the last eight recessions." In this respect, three of Wall Street's most severe drops since World War II — the Stock Market Crashes of 1946, 1962, and 1987 — did *not* result in recession. Rather, GDP actually grew at a faster rate during the "extended correction" in the real prices of common stocks between 1968 and 1980 that it has during the bull market of 1982 to the present.

The Political Mythology of the Stock Market

To opponents of capitalist enterprise and free markets, stock market crashes are quintessential "market failures" that have served as a source of enduring populist lore. In leftist dogma, for example, it has long been held as axiomatic that stock market gyrations are the result of some fiendishly clever conspiracy on the part of the undeserving rich to mulct unsophisticated small investors ("the little guys") of their hard-earned wealth. As it applies to stock market crashes, even conventional



wisdom seems to embrace roughly the same line of thinking, albeit in diluted form. Namely, the "big money" knows when to get out at market peaks and it is the "little guys" who take the losses: millions of small investors lose while the minority of rich investors take their profits. Whatever the sources of such notions, they are largely at variance with what happens when stock prices drop far and fast.

Consider that, at any given time, the various stock market indexes reflect only the most recent trade of the stocks in the index. These trades represent only a minuscule (and in the case of the large cap equities that comprise the Blue Chip stocks in the Dow Jones Industrials Average a statistically insignificant) fraction of shares outstanding. Although it almost surely will go unremarked, the next market peak will be measured according to transactions involving only a tiny proportion of the total $9 trillion or so of current U.S. corporate shareholdings. Even in the heaviest trading that accompanies crashes, the actual shares traded are only a small proportion of the total.

In these circumstances, very few are able to sell at the market top. Clearly, the shareholder who sells to the "biggest fool" (*i.e.*, the last buyer before prices plummet) looks like a financial wizard and it is that transaction that captures the media's interest and the public eye. But the fact remains that the number of shares traded at or near the peak are minuscule in relation to total shares outstanding. Those who do best after prices begin to plummet are those who, in anticipation of a reversal, have shorted the market. But, again, these represent a tiny fraction of investors and shareholdings.

When Greed Is Not Good

Those who take the greatest losses comprise a mixed group and again represent only a small proportion of total shareholdings. Obviously, the last ones or nearly the last ones to buy before a crash are the genuine suckers — especially first-time buyers who suddenly empty their bank accounts and plunge into the market in hopes of cashing in big. Also among the big losers are those who bought speculative stocks that are buoyed by bull markets but get clobbered when the markets turn down, and those who bought on margin and owe the full amount of their outstanding debt even though the value of the leveraged equity may have plummeted to near zero. More woe to those who bought speculative flyers on margin, and to the lenders who may have accepted such shares as collateral against, say, consumer loans on vacation homes, yachts, and the like. But perhaps most prominent among the losers are those with few discretionary resources for whom stock purchases are a risky venture at all times, who panic when the market goes down, and who sell out at the bottom because they need the cash.

Despite their diverse circumstances, these losers would seem to have one thing in common: greed. It is the biggest risk-takers who are the biggest losers in any crash. In terms of personal finance, those who greedily purchase stocks in hopes of big gains knowing that they cannot "afford" to take losses are the biggest risk-takers of all. The often mundane daily circumstances of the aged, the widowed, or others of limited means who plunge recklessly into the market (and who seem to receive the most sympathetic hearing from the media and politicians when their bets turn sour) ought not conceal the fact that they constitute the most imprudent of all stock market participants.

For the overwhelming majority of long-term investors, however, the consequences are far less severe. Experienced investors generally are aware of the volatility of the market and expect occasional reverses — especially after a long bull run — and most common stock investors have been holding their positions for a long time. Even if the market dropped 30 percent tomorrow, anyone who had been investing in stocks for the past 5 years or so still would likely have a portfolio whose market value would remain markedly higher than cost.

What "Wealth" Is Destroyed in a Crash?

The popular notion that vast wealth necessarily is erased during stock market crashes also is misleading. Almost surely, most people assess their financial status — and plan their spending and saving — on the basis of reported market values of their assets, including the market prices of shareholdings. Even official statistical reports of personal or household "net worth" are calculated from the reported market values of holdings.

But there is a fundamental difficulty with all such "accounting." In corporate financial statements, for example, financial assets are reported at historical cost, not current market values, because the use of the latter is deemed potentially deceptive. Unrealized gains are *hypothetical* values, nothing more. They are calculated on the presumption that a stock currently held can be sold at its current reported market price, and so cannot be regarded as "real wealth." The reason is simple: for every would-be seller of a stock, there must be a buyer.

As noted, the values of individual investors' stock holdings as well as the levels of the broader market indexes are calculated from price information based on relatively few transactions at any given time. The reported "market value" of any portfolio emphatically does not say what shares traded in the future might bring. Obviously, if nearly all shareholders wished to sell all their stocks at the same time, the market value of all portfolios, no matter how great they might have been in the seconds preceding such a collective decision to sell off (say, in the few moments prior to the announcement of the nationalization of all private enterprise), would be close to zero.

The point is that reported market values of stocks are a notoriously inadequate, if not fantastic, measure of "wealth" *per se*. Even if a plunge in stock market prices were to erase *all* unrealized gains of *all* shareholders, it would be difficult to argue that such a crash had destroyed real wealth. Rather, the destruction of real wealth occurs when genuine savings (*i.e.*, deferred consumption derived from productive human effort) invested in stocks may be lost as a result of a crash. So far as we are aware, an accurate measure of the extent of such stock market crash-related real losses has yet to be developed.

Business As Usual

In any event, common stocks at bottom are simply pieces of paper. Especially at times when the stock market experiences a general collapse, the prices at which people are willing to trade such pieces of paper may bear only a small relation to the tangible means of production and distribution that enable any corporate enterprise to continue doing business. The prices of any number of companies' stock may plummet in a crash, but their plant and equipment are not destroyed, their workers not vaporized, and, unless some particularly adverse publicity should single them out from the crowd, their markets not wiped out.

In the aftermath of a crash, investors may view specific stock issues more critically, and financial resources may be redeployed in ways that favor or disadvantage one or another of competing concerns (*i.e.*, some stocks recover more quickly than others). The stock that was trading before a crash at an astronomical P-E ratio on the basis of market hype about its (unrealized) potential may look less appealing afterward than the widgetmaker of longstanding with a solid market and reliable, if unspectacular, earnings. This is hardly a threatening phenomenon.

Rather, it is a market process that tends to restore sound judgment to the financial markets and over the long run curbs wasteful deployment of scarce resources.

This is not to suggest that there is no relation between the behavior of the stock market and the general economy. The economy has never entered a business expansion off a cyclical trough while the stock market was trending downward, and it has never entered recession while the stock market was trending upward (see chart on first page). That the stock market has trended downward prior to every recession is the reason that it remains a useful leading indicator *in the presence of other cyclical data*.

As noted above, there have been a number of episodes when the stock market experienced a marked reversal but no recession followed. At all but one of these times, the Cyclical Score of AIER's Leading Indicators of Business-Cycle Changes stood above the 50 level that indicates recession. In short, it is general economic weakness that has always preceded contractions in economic activity — in the absence of which even violent stock market behavior usually has not been followed by broad economic collapse. In this respect, it may be worth noting that AIER's cyclical score stood at over 75 when the market crashed in 1987; in December 1996, it stood at 72.

The Valuation of Common Stocks

Common stock in a corporation represents a *residual claim* against the assets of that corporation, *i.e.*, the stockholders are entitled to whatever is left over after all other claims (by vendors, employees, lessors, creditors, tax collectors, *et. al.*) have been paid. The value of such residual claims is indeterminate, because the value of a corporation's assets (especially physical assets) cannot be established with certainty without selling them off. Yet a corporation has been organized to do something and presumably holds assets appropriate to its needs which may differ from those of potential purchasers. Thus, corporate assets should usually be worth more to the corporation as a going concern than they could fetch if sold.

Nevertheless, the accountants' estimate of the assets and liabilities of a corporation is the usual starting point in establishing its net worth and the value per share of its common stock. The accountants' balance sheets calculate net worth down to the last dollar, but their calculations are based on historic transactions and arbitrary estimates of depreciation, depletion, and amortization of assets acquired in the past. Financial analysts may attempt to adjust these figures by throwing out intangible items, "marking to market" assets that may have appreciated or depreciated in value because of general price inflation, obsolescence, or other factors, but the results are only backward-looking estimates.

Corporate assets are seldom the stockholders' major concern, however. It is a corporation's ability to generate funds from operations that is usually paramount. Among the common measures of this, dividends are the most clearly ascertainable. Cash flow, which does not depend on the level of non-cash charges (depreciation, depletion, and amortization of assets) to reported profits, is a close second. Earnings are typically the least reliable estimate of a corporation's reported flows because an inadequate allowance for depreciation will overstate earnings and *vice versa*. These measures may be high or low in relation to a corporation's net worth, and they are also backward-looking.

The Stock Market Crash of 1929, The Great Depression, and The Founding of AIER

Although our very long time readers know the story, more recent subscribers to AIER's publications may be interested to learn that this Institute's very existence owes in part to its founder's appreciation of the uncertain relationship between the behavior of the stock market and the overall economy.

As a junior military officer in the Army Corps of Engineers stationed in Hawaii in the early 1920s, a seriously bored Lieutenant E.C. Harwood began an avocational study of economics. This soon led him to challenge prevailing views of the "roaring 20s," most especially the widespread confidence in the money-credit system, which he deemed severely distorted. In 1928 and 1929, shortly before he joined the faculty of the Massachusetts Institute of Technology as an Associate Professor of military science, he published several articles in leading financial journals warning that the speculative "boom" then underway was attributable primarily to an excessive creation of purchasing media (*i.e.*, inflating the money supply) that could not be sustained and would end in a major "bust." Understandably perhaps, the views of the unknown E.C. Harwood received scant hearing among the leaders of the economics profession.

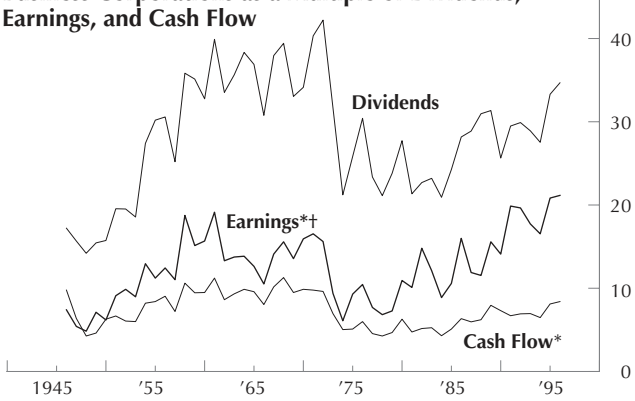
Rather, the established professional economists at the Harvard Economics Group, who then were engaged in pioneering studies of the business cycle, regarded the stock market as the main indicator of business prospects. Caught unaware by the market crash in 1929 (which Harwood had predicted), and unwilling to abandon the notion that the relationship between the stock market and the economy was fixed, they confidently predicted economic recovery every time stocks subsequently rebounded — just as the nation sank deeper and deeper into depression.

By 1933 the Harvard group had lost all credibility. When it became known that "E.C. Harwood," whose prescient articles had put the experts to shame, was none other than young "Lieutenant Harwood" then serving at MIT, he was approached about assuming leadership of the discredited Harvard group. Harwood demurred — insisting that any such organization avoid financial dependence either on Government sources of funding or on institutions, individuals, or groups with pet panaceas or special interests.

Dr. Vannevar Bush, then vice-president of MIT, nevertheless urged that such independent research might be helpful to individuals and that the sale of its publications based on that research might provide a significant source of income. If, in addition, small annual contributions could be gained from thousands of readers, an organization *entirely independent* of any one or a few wealthy individuals, or of a conventional endowment fund, might be possible.

With the sum of $200, the Institute began operations in 1933 under Harwood's direction. The initial plan proved sound. Since its inception, AIER publications have enjoyed a wide sale, and thousands of Sustaining Members now provide a financial base for its work.

Chart 2: **Market Value of Equity of U.S. Nonfinancial Business Corporations as a Multiple of Dividends, Earnings, and Cash Flow**



* Includes retained earnings of foreign subsidiaries and inventory valuation adjustment. † Includes capital consumption adjustment. Source: Federal Reserve Board, *U.S. Economy Flow of Funds Accounts*.

In the final analysis, the value of a share of common stock is determined by what investors are willing to pay for it. Chart 2 indicates that how much investors are willing to pay for a given amount of dividends, cash flow, or earnings has varied greatly over the years, rising during the 1950s from very low levels after World War II, fluctuating at relatively high levels during the 1960s, plunging back toward the postwar lows in the early 1970s, fluctuating at relatively low levels during the remainder of the 1970s and early 1980s, and generally increasing since then.

These long term fluctuations in valuations dwarf in significance the relatively short and sharp corrections typically identified as "bear markets." This is more evident in the plot of monthly inflation-adjusted stock prices in Chart 1 where the erosion of values from the late 1960s through the early 1980s, and the increases in values during the 1950s and since 1982 were much larger than the relatively short-term fluctuations that generally dominate the headlines. Why do investor valuations vary so much, between 5 and 10 times cash flow? Valuations, presumably, are determined not so much by the past, as measured by various financial ratios, but by expectations regarding the future — not only for common stocks but also for alternative investments.

Where Are We Now?

As indicated in Chart 1, common stock prices have not had a significant correction in over 6 years, and they have increased markedly since 1990, especially during the past 2 years. Valuations are high by historical standards. We are by no means the only ones to have noted these developments and we agree that — regardless of whether or not the market "crashes" — there will be another "bear market" one day. When it comes, it will no doubt appear to be the pricking of yet another speculative bubble that will be seen, with hindsight, to have been based on "irrational exuberance" (to use the Federal Reserve Chairman's phrase). Yet we do not believe that its onset can be accurately foretold.

A far more interesting and significant question will be whether or not the next bear market will be simply another minor fluctuation in a period of relatively high and increasing valuations for common stocks (such as the unpleasantnesses of 1957-58, 1962, 1966, 1969-70, 1987, or 1990) or if it will mark the beginning of another extended period of low and decreasing valuations. The chances of the latter would seem to be greater if the next bear market is accompanied by an economic contraction. For it is during recessions that politicians become desperate.

During the 1972-82 period, the total return (dividends reinvested) on common stocks was about equal to that for Treasury bills (and neither fully compensated for the ravages of price inflation, especially after taxes). The prelude to that period was characterized by economic contraction (exacerbated by the fact that the Nixon administration believed that we were still in a recession in mid-1971 well after a recovery was under way — the data were faulty), price controls, tax increases (often as the result of unlegislated "bracket creep" and "phantom" inventory profits from soaring raw materials prices) for businesses, and extreme disruption of the monetary system after the total abandonment of the gold standard.

Thus, even if the next major correction is relatively large, decimating the latecomers and the high-flyers, and taking conservative long-term investors back to where they were, say, in 1994, it will be especially important to note what is happening with the business cycle, prices, taxes, exchange rates, and other factors not directly related to the stock market itself. ❑

PRICE OF GOLD

	1995	*1996*	*—— 1997 ——*	
	Jan. 12	*Jan. 11*	*Jan. 2*	*Jan. 9*
Final fixing in London	$380.50	$399.00	$366.55	$356.55

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