### \*\*INTERNATIONAL FCONOMY

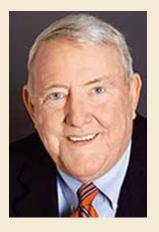
THE MAGAZINE OF INTERNATIONAL ECONOMIC POLICY

888 16th Street, N.W. Suite 740 Washington, D.C. 20006 Phone: 202-861-0791 Fax: 202-861-0790 www.international-economy.com

Is the world better or worse prepared to handle financial crises? TIE asked the three key former U.S. officials who managed the 1987 stock market crash—

E. Gerald Corrigan, David Ruder, and Manuel Johnson.

# Twenty Years After Black Monday



# The progress of the past is often a harbinger of the challenges of the future.

E. Gerald Corrigan Managing Director, Goldman, Sachs & Co., and President, New York Federal Reserve, 1985-93

s we near the twentieth anniversary of the stock market crash of 1987, there are times when my reflections on the events of late October 1987 seem to be a distant memory while at other times those events seem to have occurred only yesterday. To a considerable extent, this contrast in reflections arises from the fact that even twenty years after the fact it is not easy to capture the sense of fear and panic that gripped the financial markets in the late morning of October 20, 1987, when the stock market was in a state of near paralysis following the 23 percent fall in the Dow on Monday, the 19th. Indeed, even today or perhaps I should say especially today—it is difficult to appreciate how quickly markets recovered and how well the economy weathered the storm. Quite naturally, all of this raises the question of whether we could, in the future, witness another event having similar traits and characteristics to those witnessed in 1987 and whether the resulting damage can be as well contained as it was in 1987.

Before answering those questions, a few brief points of perspective might be helpful. Specifically:

- It is important to recognize that even now there is little or no consensus as to the specific timing and triggers that unleashed the events of October 19 just as there is little or no consensus as to the triggers that sparked the turnaround in share prices early in the afternoon of October 20.
- For analytical purposes it is useful to draw a distinction between (1) "financial disturbances" which occur with some frequency, but are typically self-correcting and have limited contagion effects, and (2) "financial shocks" which are infrequent, but typically entail the potential for inflicting serious damage on the financial system and/or the economy. In other words, "financial shocks" entail potential or actual systemic risk considerations.
- While there have been a number of close calls, in my judgment we have experienced three episodes over the past two and one-half decades that crossed the threshold into the red zone of systemic risk. They were the LDC debt

crisis of the 1980s, the Russia-LTCM crisis of 1998, and certainly the 1987 market crash. (The jury is obviously still out as to the current financial market disruptions.)

■ While it is certainly true that, over time, the financial system has become more resilient and while it is equally true that policymakers and practitioners alike have learned a great deal from earlier financial disturbances and financial shocks, we sometimes forget that financial market behavior ultimately reflects human behavior. Because of that, it is inevitable that, from time to time, financial markets will overshoot in both directions. To put it differently, when markets are on an upward thrust, there is a natural human aversion against being the "last one in" or the "first one out."

With these points of perspective in mind, the question remains; namely, will the future witness financial shocks with potential systemic consequences? The short answer to that question is "yes" but that answer begs for explanation and elaboration which, for these purposes, can be reduced to four basic points.

First: I believe that the already low statistical probabilities of financial shocks have, over time, declined further but are still well short of zero:

Second: I also believe that even if the probabilities are lower, the potential damage caused by financial shocks is likely to be greater because of substantially increased speed, complexity, and ever tighter linkages across financial markets and across national borders;

Third: Unfortunately, our collective capacity to anticipate the specific timing and triggers of financial shocks is very low if not essentially nil;

Fourth: Given that we will experience future financial shocks and 1) since we are unable to anticipate their timing and triggers and 2) since the potential damage that may be caused by future financial shocks is greater, we are faced with one of the great challenges for public policy and private action; namely, how do we deal with low-probability financial events that can cause major damage? The short answer to that question is that we must focus even greater attention on strengthening what I like to call the "shock absorbers" of the global financial system.

The term "shock absorbers" as I have used it is a very broad term that includes the full range of supervisory and regulatory policy as well as the full range of imperatives relating to the financial infrastructure that permits the global financial systems to function with the integrity and efficiency that we often take for granted. Finally, the term also includes the governance, risk management, operational, and control imperatives that must guide the management of financial institutions.

In my judgment, we have made substantial progress in recent years in strengthening these shock absorbers. But, as recent market developments so clearly illustrate, the progress of the past is often a harbinger of the challenges of the future.



The primary lesson of 1987 is that neither the **U.S.** economy nor the worldwide economy were severely affected.

**David S. Ruder** 

Professor of Law Emeritus, Northwestern University School of Law, and Chairman, U.S. Securities and Exchange Commission, 1987-89

n October 19, 1987, the U.S. Dow Jones Industrial Average declined by 508 points or 22.61 percent from 2,246.74 to 1,738.74, marking the largest one-day percentage decline in the history of that average. As Chairman of the U.S. Securities and Exchange Commission since only August 7 of that year, I was faced with possible panic and market failure in both U.S. and international markets.

## MARKET MOVEMENTS DURING THE WEEK OF OCTOBER 12, AND ON **OCTOBER 19 AND 20, 1987**

The U.S. market crash on October 19 was preceded by market declines during the week of October 12. During that week, the Dow declined by 235.47 points (9.49 percent), including a decline of 108.35 points (4.6 percent) on Friday, October 16. The Dow closed on that day at 2,246.74.

On Monday, October 19, in reaction to the U.S. declines on October 16, the Tokyo Stock Exchange Nikkei index declined by 2.35 percent. The Tokyo exchange closed before the U.S. markets opened. The London Stock Exchange's Financial Times-Stock Exchange 100 Share Index ("FT-SE 100") closed down 10.84 percent. The London market had declined approximately 13 percent at the time the U.S. markets opened. The Tokyo and London declines in turn affected the U.S. markets.

At the opening of the New York Stock Exchange on October 19, large sell order imbalances overwhelmed exchange specialists, and openings were delayed for many large capitalization stocks. At 10:00 a.m., ninetyfive Standard & Poor's Index stocks were not open, and at 10:30 a.m., eleven of the thirty DJIA stocks had not opened. During the day the most consistent source of selling pressure came from institutional accounts. A sharp decline of 252 points after 2:50 p.m. resulted in the DJIA closing at 1,738.74, a decline of 508 points (22.61 percent).

On the morning of October 20, the DJIA initially rose 196.96 points to 1,935.7, but by 12:21 p.m. it had declined 227 points to 1,707.7, a level below its Monday close. By 12:30 p.m. trading had been halted in 145 NYSE stocks, including 77 stocks in the S&P 500 index. The Chicago Mercantile Exchange closed its S&P derivatives stock futures index at 12:13 p.m. and did not reopen it until 1:05 p.m. The MM derivate stock futures index on the Chicago Board of Trade did not close. Beginning at about 12:30 p.m., the MM futures rallied sharply, and by 1:12 p.m. the DJIA had recovered 126.2 points to 1,843.9. The Dow Jones index reached 1,920.3 by 3:55 p.m., but declined again, closing at 1,841.01, up 102.27 points for the day.

The one-day 22.61 percent decline in the Dow Jones average on October 19 and the dramatic volatility on October 20 raised concerns about the possibility of future volatility in the U.S. and international securities markets. Current volatility in the U.S. and international securities markets has increased those concerns.

While volatility is normal and expected in securities markets, the major concern is with "excess volatility," a level of market decline that may cause near-term injury to the economy and may even be the catalyst for an economic downturn that might not occur without the market stimulus.

The question today is whether the U.S. and international stock markets are vulnerable to excess volatility. The answer is not obvious. Although regulatory improvements have been made in both U.S. and international securities markets since 1987, the markets themselves have also changed.

### **INSTITUTIONS AND** TRADING TECHNIQUES

In the October 1987 crash, selling transactions by institutions dominated market activity either directly or through arbitrage transactions between the equity markets and the derivative stock index futures markets. Since that time the percentage of equities held by institutions has increased and the volume of trading by institutions has also increased. Additionally, institutions, particularly hedge funds, private equity, and investment banks, are now engaging in more active trading, in many cases using highly sophisticated computer-generated "program trading." Their computers are programmed to execute trades automatically, without human intervention, in reaction to market developments, macroeconomic factors, and political events worldwide. At the same time, smaller transactions on exchanges and electronic communication networks can be executed in seconds, so that selling pressure can be transmitted to equity markets instantaneously.

### THIRD-PARTY RISK AND **CROSS-MARKET RISK**

Another significant change in the financial markets since October 1987 has been the increasing use of derivative instruments in the over-the-counter markets. Derivative instruments in interest rates, currencies, and commodities, as well as in equities, are increasingly being used by market participants to hedge risk or to make bets on the direction of values in the underlying commodity or instrument. These transactions take place in markets in which the trader knows the identity of the entity with which it is trading, but usually does not know the identity of third parties with whom its immediate counterparty is dealing. Unknown "counterparty risk" creates the possibility of market failures due to the collapse of a large third party, with pressure transferred to securities markets.

Recent hedge fund failures and credit market problems provide illustrations of the possibility that failures in debt, currency, or commodities markets will transfer selling pressure to the stock markets. When imperfect hedges or outright bets create large losses for traders in non-equity markets, these institutions may be forced to sell equity securities as "good assets" in order to satisfy obligations in other markets, thus placing pressures in the equity markets.

### INTERCONNECTED SECURITIES MARKETS

Another development regarding trading in securities has been the growth of major securities market trading centers in other countries and the increase in trading volume in established markets. Previously well established securities markets in the United States, Great Britain, Europe, Hong Kong, Japan, Canada, and Australia have now been joined by new markets in Europe, China, India, other countries in Asia, Mexico, and South America. All of the old and new markets now trade securities electronically in extremely rapid fashion. Not only do these new trading centers exist, but all of them are easily accessed by brokers and investors worldwide through international commercial and investment banks.

Today the world's securities markets are much more closely connected than they were twenty years ago. Although major U.S. securities are not traded in significant volume in foreign markets, many U.S. institutional investors have large positions in foreign shares traded in foreign markets, and many foreign investors have large positions in U.S. securities traded in U.S. markets. As a result, major declines in foreign markets may affect the values of U.S. institutional holdings, and losses in the U.S. markets may affect values of securities owned by foreign investors. The possibility exists that large declines in the United States may trigger large losses in other markets, in turn causing additional problems in the U.S. markets.

### REGULATORY REACTIONS TO POSSIBLE **U.S. AND CROSS-BORDER MARKET VOLATILITY**

During the last twenty years there has been a dramatic increase in cooperation between international securities regulators. Extensive bilateral cooperation between regulators exists, such as that between the U.S. SEC and the Committee of European Securities Regulators. Through the International Organization of Securities Commissions, all of the world's securities regulators meet regularly and address important regulatory topics through working parties and conferences. These U.S. and international securities market regulators are actively concerned about the efficient functioning of the world's securities markets.

International securities market regulators need to pay particular attention to stock market systems. During the 1987 market crash, many of the stock market systems failed. Automated execution systems did not work, proprietary order-routing systems became clogged, and clearing and settlement systems were backlogged. Since that time, the U.S. and international securities regulators have been active in insisting that securities routing and execution systems capacities be improved and that clearing and settlement systems become more efficient. In the United States, the markets have installed circuit breakers designed to close the markets for short periods following declines of more than 10 percent or more. Regulatory emergency market powers are available in the United States and other countries.

Despite these improvements, the danger remains that dramatic declines in international securities markets may take place. The trigger for such declines may come from economic or political events or from cross-market selling pressures caused by failures in debt or derivative markets. In times of declining markets, institutions using computerized trading programs may increase pressure on securities and futures market systems, including electronic communications networks. Selling pressures seem likely to be transferred speedily to interconnected international securities markets. Although international and U.S. regulators are much more alert to potential problems and are far better able to communicate with each other than they were in 1987, no certainty exists that a major market crash will not occur.

Hopefully, the remedial efforts taken since 1987 will serve to ameliorate the chaos and panic possibly stemming from a severe market decline. In any event, the primary lesson of 1987 is that despite a 23 percent decline in the U.S. securities market, neither the U.S. economy nor the worldwide economy were severely affected.



**Regardless of the** sophistication of risk management systems, avoiding systemic disaster is ultimately about people.

Manuel H. Johnson

Co-Chairman, Johnson Smick International, and Vice Chairman, Board of Governors of the Federal Reserve, 1986-90

would like to think that today the world is better prepared to manage a financial crisis than it was in 1987. This is, of course, a very good thing, since the stock market crash in October that year was the largest daily percentage decline (a 23 percent decline in the Dow Jones Industrial average in one day, equivalent roughly to a 3,000 point drop today) in history and was successfully, or luckily, managed in a way that avoided a contractionary contagion. A slightly lesser crash under similar conditions plunged the U.S. and global economies into a deflationary depression in 1929. In the twenty years since 1987, central banks and other financial policy institutions have had the luxury of time to carefully study past situations and learn additional valuable lessons from these events.

The financial system today is more sophisticated than it was in 1987. By this, I mean we have enjoyed further development of financial technology in terms of exchanges to facilitate trading and the design of derivative products that allow for greater hedging ability and diversification of risks. Computing power and information systems have made huge advances since 1987. Financial markets today have more depth and liquidity and provide more information and pricing efficiency than ever before. It is my view that many of the lessons learned from the past not only in crisis management, but also in terms of the importance of more efficient markets along with tremendous advances in technology, explain much of the economic progress the world has experienced over the last two decades.

Having said this, it is also true that long periods of prosperity tend to lead to complacency, especially as the vivid memories of past crises fade and new faces move into the mainstream of policy and process. For instance, the average Wall Street trader tends to be in his or her late twenties. The longer we avoid a crisis, the more trusting of the current system we become.

And although the many advances in technology are wonderful, the global economy and its financial system are too complex to even remotely quantify. Our infatuation with new bells and whistles sometimes makes us overly trusting of automated systems and the models that lie behind them. As economic downcycles have become less serious and less often, policymakers seem to have gradually lost interest in the financial and economic policy coordination architecture. While much of this process is out of touch with the realities of globalization and international terrorism today, this should inspire policymakers to double their efforts on this front. Because markets move much faster today, communication between policy officials and information sharing should also be much faster. I know there have been strong efforts in international coordination to combat terrorism, but it does not appear that such effort has been applied to economic and financial policy.

In terms of the U.S. financial regulatory structure, the scope of the financial safety net has become less clear today than it was in 1987. While the form of the safety net has not changed (Fed discount window, bank deposit protection, and elastic liquidity through open market operations), it seems to be less obvious where the line is on access to the safety net. Over the last twenty years, banking organizations have become highly diverse financial organizations. Even though they are supervised, sometimes the lines of supervision are confusing. And while capital requirements are imposed, nobody is quite sure how much risk exposure is hidden off the balance sheet.

Both the U.S. and the major international players need to clarify better the extent of the financial safety net. And this should be done in an atmosphere of normalcy. A time of crisis is not the moment to establish a new exclusionary policy. But until the financial safety net is rationalized, central bankers must rely on their instincts when it comes down to avoiding moral hazard. If the line is drawn too narrowly, there is the risk of deflationary collapse. If the line is drawn too broadly, there is the risk of gradually socializing the losses from poor investment decisions.

During future crises—which are inevitable regardless of the sophistication of risk management systems avoiding systemic disaster is ultimately about people, especially if moral hazard is a vague gray area. The quality and commitment of policymakers and crisis managers is always important but never so much as when subjective reasoning under fire is required.