# 1987 stock market crash 

## ASSIGN BUSTER

This paper contributes to the overview of U. S. Stock Market Crash of 1987 and it explores the major causes and effects of this crash. According to the Reuters, the crash of 1987 is included in the top five " major stock market crashes" (Narayana). Let us now define this term itself. Stock Market Crash associates with " A rapid and often unanticipated drop in stock prices"(Investopedia). As we can see, this process reflects the decline in stock prices, which likely has a dramatic effect on the global economy. The first biggest occurrence of stock market crash was in 1929, which was followed by the " Great Depression".

The second and not less serious crash was exactly in 1987, which we are going to discuss in the following sections. The next one occurred after ten years, with the epicenter in Asia. The last two vital crashes were in 21st century; one was in 2001 and the other in 2007 (Narayana). All of these crashes damaged the world economy, but the crash of 1987 still stands out. The reason why we chose this crash is that it is characterized as having " the largest one-day decline in stock market values in U. S. history" (Mishkin and White).

It is also often compared to the crash of 1929, but it brought much loss to the stock market, for example, in 1929 the Dow Jones index fell by 12.8 per cent, while in October of 1987 it experienced 22.6 per cent decline (Mishkin and White). " The crash wiped 22. 6 percent off the value of the New York Stock Exchange, compared with 12.8 percent on the worst day of the 1929 Wall Street Crash" (Narayana). In the following paragraphs, we will discuss some major causes and effects of this crash and we will also look at the process itself.

First of all, before analyzing the causes of 1987 Stock Market Crash, it is necessary to look at the facts that occurred prior to the crash. The first and the most important lead-to-crash event was the increase in stock prices. It was evident, that prices were increasing with more extent than earnings from per share. This led to the increase of price-earnings ratios, which resulted in overvalued market (Carlson). From the graph below, we can see almost permanent increase in PE until the crash and then severe fall.

Moreover, new investors joined stock market and it led to the increased demand, which also contributed to the growth of share prices (Katzenbach). Another thing that played a role in causing the crash was U. S. trade deficit, which it had been always experiencing. The fact that imports were more than exports resulted in devaluation of the U. S. dollar. For this reason, it was necessary to increase interest rates in the U. S (Winkler and Herman). This graph shows the decrease in the value of $\mathrm{U} . \mathrm{S}$. dollar and it is evident that the falling was sharper after the crash.

Apart from this cause, there was one very important thing that played vital part in straining the situation - it was program trading. This was a new mechanism, which was used during the crash quite actively. With the help of " program trading" the process of selling and buying of stocks was faster and easier, everything was done by the computer (Katzenbach). There were two strategies of " program trading": The first one is the " portfolio insurance". Generally investors are not buying just a single stock but they are creating the portfolio where is included noticeable number of stocks.

As the prices of stocks are not stable and are changeable, it is kind of difficult to control the total profit and loss. It is hard for investors to think of
new strategies to regulate their own trading. " Portfolio Insurance" had exactly this function. It helped investors to minimize losses in case of falling market (Carlson). The second strategy is " Index Arbitrage", which enabled investors to profit from playing with the " value of stocks in an index and the value of stock-index futures contracts".

This means that " index arbitragers" help investors to profit from the gap, which may appear if the values of stocks and futures contracts are different (Katzenbach). If we look at these two mechanisms, we can see some big advantages, such as; they help investors to loss less and to maximize profit. Despite these positive sides, as Investopedia suggests, during the crash if was necessary humans to act directly and not using computerized programs. It is true that " Program trading" enables operations to be done faster, but it ' makes decisions' just based on the stock indexes and it cannot really THINK and ANALYZE.

In addition to this, some of the data was not updated regularly and this caused lack of true information (Garcia). The causes, which we mentioned in the previous section, contributed to the occurrence of Stock Market Crash in 1987. Everything started on 14th of October on Wednesday in 1987. On this day, there were several announcements, which included the announcement of the U. S. dollar devaluation, increased interest rates, existence of trade deficit (Wall Street Journal). In the following days, stock prices were continually falling.

On Friday, it was summed up that S\&P 500 experienced nine per cent decline, which was " one of the largest one-week declines of the preceding couple of decades" (Wall Street Journal, The Day the Dow Fell: Brokers Trade

Stocks, Fists; Bulls and Bears Are Joined by Ducks and Chickens). The peak of the crash was on 19th October on Monday, which is known as the " Black Monday". On this day, stock market experienced unimaginable decline; " The Dow Jones Industrial Average, S\&P 500, and Wilshire 5000 declined between 18 and 23 percent" (Brady Report 1988, Study III, p. 21).

According to this graph, stock index fell harshly, without any preceding fall. It was not decreasing during certain period of time, but it fell during couple of days. This is why the effect was such destructive, as no one was expecting such crash. Everything was fine, stock prices were increasing and investors were in quite a good condition. BUT their expectations were too optimistic and the graph below can be used as a proof of this opinion. (Carlson). This graph shows how price-earnings ratios were increasing with the increase of market price.

This means that investors had high expectations about the future, but things are not always going in a way that is favorable for us. One day had dramatically changed the situation, as you can see from this graph. During the crash, there was one thing that worsened the situation. Let us describe briefly what does margin calls mean. When an investor buys futures, there should be another person who accepts this contract. Both of them should put some money on deposit.

As stock prices are changing permanently, during the period before the expiration of futures contract, both sides are given the profit they gain after the change of stock prices. But if stock prices are decreasing, then it is obvious that one person's deposit will run out of money and he or she will be required to add some more money. This is what margin calls represent. To
connect it to our topic, it is evident that as the prices were declining during the crash, a lot of investors were required to add money on their deposit.

Some of them managed to do it but others were unable to fulfill this requirement. In this case, they were unable to start new operations and this caused their positions to become liquidated and it increased pressure on selling stocks, as investors should have sold equities (Carlson). In order to discharge the situation, the Federal Reserve took several actions. The first thing it did was that it made a statement, which was saying that FED would become a source of liquidity. This served as a support of " market sentiment" (Murray). FED also reduced short-term interest rates.

It was working with banks aiming to make credits for people easy to get (Carlson). Moreover, FED started monitoring the processes in banks (Greenspan). To conclude, the Crash of 1987 had quite a lot of severe characteristics. It included the sharp and sudden decline in stock prices. As people were not prepared for this event, the result was very dramatic. This crash showed investors that they should not always rely on " program trading" as it is just a mechanism and it does not have the brain. Finally, The Federal Reserve played a vital part in rebounding financial markets.

