Discourse and Commentary on the Stock Market Crash of 1929

by

Robin McCutcheon,
Assistant Professor of Economics
Marshall University
Huntington, WV 25755

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I. Introduction

House of Representatives bill (H.R. 11806) "Section (*h*): The Federal reserve system shall use all the powers and authority now or hereafter possessed by it to maintain a stable gold standard; to promote stability of commerce, industry, agriculture, and employment; and a more stable purchasing power of the dollar, so far as such purposes may be accomplished by monetary and credit policy. Relations and transactions with foreign banks shall not be inconsistent with the purposes expressed in this amendment (Edie, 1929)."

October 29, 1929 is a date that has buried itself so deep in the national consciousness that only by the passage of time has the memory of that horrible date diminished. Octogenarians can remember with clarity what they were doing, or where they were, when the news that the stock market crashed reached them. Of the millions of people that lived through the crash and the depression that followed, only a few people knew how it came to pass, yet no one was able to stop it from occurring.

While there are many myths and explanations posited for the stock market crash, the emphasis of this paper is to analyze the economic discussion surrounding monetary policy at the time of the crash. The principal players are President Herbert Hoover, Federal Reserve Banker Adolph Miller, the late New York Federal Reserve Governor, Benjamin Strong, and his successor George Harrison. Also included are Secretary of Treasury Arthur Mellon and former President Calvin Coolidge. Principal leading economists at the time were Yale's Irving Fisher, Harvard's W.L. Crum, and Charles O. Hardy. Various Federal Reserve Bankers fill in the cracks of the analysis.

II. Rock-a-bye Baby…

To lay the proper foundations for the crash of 1929, my analysis begins in the year 1927. It was nearly eight years after the end of World War I, heretofore the most destructive war in terms of financial, pecuniary and human loss. Labor disputes in Europe, effects of over-valued exchange rates, falling exports, and strikes by laborers in the coal-fields created an economic chaos. International help was sought. The United States and Europe struggled to rebuild the world economy using the newly formed United States Federal Reserve System, and the ties of international friendship.

The president of the New York Federal Reserve Bank, Ben Strong, was a charismatic, smart economist, a natural leader, and much admired by businessmen and bankers worldwide. In July 1927, a bold experiment in international central bank cooperation, led by Governor Strong, included Governor Montagu Norman, head of the Bank of England, Hjalmar Schacht of the Reichsbank, and Charles Rist of the Bank of France, who met in New York. Elmus Wicker (1965) writes,

> "I agree fully with [Lester] Chandler's conclusion:
> 'There can be no doubt that the international situation was a major reason for the 1927 easy-money policy, that Strong was motivated by an altruistic concern for European countries, especially Britain, and that at least the timing of the policy was related to the conference with foreign bankers in early July. But it would be grossly misleading to say that the policy was initiated solely because of the international situation and solely for altruistic purposes. Domestically, a mild recession seemed to have started.'
>
> 'The only thing I find objectionable in Chandler's statement is the description of Strong's motives as partly altruistic. To Strong as well as to Governor Norman the gold standard imposed certain responsibilities. Action designed to maintain that mechanism intact can hardly be described as altruistic. To interpret Strong's action as sheer "altruism" is to neglect his nostalgia for the gold-standard apparatus and the traditional mechanisms of control.' " [1]

[1]Wicker quotes Lester Chandler, who wrote *Benjamin Strong,Central Banker.* (Washington, D.C.: Brookings Institute, 1958), pp. 188-89.

The credit expansion by open market operations and reduction of the discount rates introduced a period of monetary ease designed to stimulate the European economy and arrest the slight business recession the United States had been feeling.

Herbert Hoover, then Secretary of Commerce, remembered this particular meeting of bankers with disgust and contempt. Hoover thought the United States was not in need of this credit expansion, stating simply that industry and commerce were amply supplied. Europe did not need credit expansion, in his opinion, what they needed was disarmament, balancing of budgets, harder work, and more production. Hoover enlisted Adolph Miller's help in trying to persuade the Currency Committee–the legislative father to the Board–to make the Federal Reserve Board stop its international relations with the European bankers but to no avail.[2] As a last resort, Hoover approached President Coolidge, and insisted that the situation was cause for alarm. But Coolidge was a strict legalist and would not interfere in the operation of the Board, stating that it had been created by Congress as was independent of the Executive office (Hoover, 1952).

III. When the Wind Blows…

In his memoirs, Hoover blamed the Great Depression on World War I. "Without the war there would have been no depression of such dimensions. There might have been a normal cyclical recession; but, with the usual timing, even that readjustment probably would not have taken place at that particular period, nor would it have been a "Great Depression" (Hoover, 1952)." Observing the international recessions and slumping stock

[2] Adolph Miller was also a Federal Reserve Bank president at that time.

prices occurring from 1927 onward, Hoover was convinced that the resulting “orgy of stock speculation” was the immediate weak spot in the United States.

As Secretary of Commerce, Hoover began his assault on the stock market and the Federal Reserve Board in earnest in the summer of 1926. In his 1926 Annual Report as Secretary of Commerce, Hoover admitted the importance of credit and currency movement in the business cycle. Yet, he displayed his ignorance of fundamental economic theory when stating that previous crises had arisen through the credit machinery through no fault of either the producer or consumer. Hoover was thoroughly convinced that the Federal Reserve Board had deliberately created credit inflation, contributed to the country’s illusion that the economic system was completely immune from financial crises, and in accepting this illusion, neglected their own responsibilities as bankers (Hoover, 1952). Hoover had no part in banking control as Secretary of Commerce, but protested vigorously at banking policies allowing credit expansion, and in his opinion, contributed to the mad boom of 1929 (Wilbur & Hyde, 1937).

By the summer of 1927, his campaign against the stock market was in full swing. Hoover likened the growing tide of speculation to “a little cloud.” He railed on the Federal Reserve Board claiming that the American wave of optimism, born of continued progress through the 1920’s, resulted in the stock-exchange Mississippi Bubble (Hoover, 1952). He noted that the war reconstruction proceeded with steady progress, and that with the growing optimism were other impulses to progress. Impulses that gave birth to a “foolish idea called the ‘New Economic Era’.” Hoover claimed that the country was assured of a new period where old laws of economics no longer applied (Hoover, 1952).

Much to Hoover's chagrin, the United States pulled out of the 1927 recession, led by Ben Strong's easy money policy, the New York Federal Reserve Bank, and an increasingly active stock market. Production was up in most sectors of the economy, with the exception of the agricultural industry. But clouds on the horizon forecasted the disaster to come.

Myers and Newton (1936) pointed out that the destruction of World War I encompassed both physical and non-physical property. Aside from the 20 million people that perished in the war, millions more were maimed and debilitated. The combatant nations incurred massive war debts; estimates of $20 trillion to $200 trillion, with $50 trillion of intergovernmental debts that included borrowings and reparations. Every country financed their war efforts by credit, currency inflation, or both.

The values of land and property increased proportionately and the vast structure of private debt was built on these inflated values. Part of these debts stemmed from the agriculture industry in the United States. The war brought with it an increase in productive capacity of consumable commodities that were either required by the war effort or induced by inflated prices (Myers & Newton, 1936).

Prices of farm products were much lower in 1927 than in the two previous years, and the index of farm real estate values dropped even faster in 1927 than it had in the past five years (Hardy, 1930). Charles Hardy pointed out that family farm income was subsidized by outside-the-farm work. For example, in some sections of the country, farming was not full time work, and that a high portion of the family income was dependent on such activities as lumber-cutting, manufacture and transportation of alcohol, mining, fishing, tourism and entertainment, working on public highways, and so forth. Additionally, with the advent of the automobile and development of better infrastructure, the increasing opportunity for farm families to engage in industrial activities was leading to the migration of manufacturing in rural districts to utilize cheap labor (Hardy, 1930). In general, the per capita figures for farmers shrank compared to the general populace. The inflated price of farm land, and resultant increase in foreclosures of farm mortgages and closures of country banks only served to fuel Hoover's private agenda for banking reform and putting an end to the stock market speculation.

Throughout the remainder of 1927, and into 1928, Hoover worked to procure the nomination and be elected to the presidency. His nomination and election came with opposition from the New York banks and a partisan Senate. This partisan congress made reform programs a near impossibility (Wilbur & Hyde, 1937).

IV. When the Bough Breaks…

Milton Friedman and Anna Schwartz (1963) wrote of Benjamin Strong, "Until 1928, the New York Bank was the prime mover in Federal Reserve Policy both at home and abroad, and Benjamin Strong, its Governor from its inception, was the dominant figure in the Federal Reserve System." On October 9, 1928, Benjamin Strong, after suffering a long illness, died. It was, according to Friedman and Schwartz, "an irreparable loss… His death created a leadership vacuum within the system which was not filled either by Strong's successor at the New York Bank, George Harrison, or by any of the members of the Federal Reserve Board in Washington." Economic and monetary power shifted away from the New York Bank, and culminated in the reorganization of the original five-man Open Market Investment Committee that included all twelve of the

Federal Reserve Bank governors, and renamed it the Open Market Policy Conference. Friedman and Schwartz agree that “the inevitable result of this relocation of decision-making authority was a deterioration in the administration of monetary policy.”

On the other hand there were rival views about how to manage the Federal Reserve System. Adolph Casper Miller had been a member of the Federal Reserve Board from its inception (Bierman, 1991).[3] He was a former professor of economics at Harvard, Cornell, the University of Chicago, and the University of California. William Hard described Miller as “he brains of the board,” yet he (Miller) was never able to shift his focus away from the stock market to the real economy (Bierman, 1991). He did not credit Strong’s easy money policy of 1927-28, and the avoidance of recession, with the prosperous years of 1928-29. Miller declared war on speculation in a 1925 speech to the Boston Commercial Club: “it is clear therefore that no bank has a proper status as an applicant for reserve-bank accommodation which is supplying credit for speculative purposes.” It was Miller’s personal ambition to put an end to speculation. After Ben Strong’s death in October 1928, and Hoover’s inauguration in March 1929, Miller inherited control of the Federal Reserve Board.

V. The Cradle will Fall …

Roy A. Young succeeded Ben Strong as Governor of the New York Federal Reserve Bank November 23, 1928. In his memoirs, Hoover said of Young, “He was an able, courageous, and cooperative man.” Prior to Hoover’s inauguration, the two talked several times about the stock market and the rampant speculation. Young agreed to use

[3]Adolph Miller and Herbert Hoover were fast friends, and lived only a few blocks from each other in Washington, D.C. (Bierman, 1991).

the powers of the Board to strangle the speculative movement (Hoover, 1952). On February 2, 1929, the Federal Reserve Board issued a public notice that warned Federal Reserve Banks to restrain their use of credit for speculative loans.

> "The firming tendencies of the money market which have been in evidence since the beginning of the year–contrary to the usual trend at this season–make it incumbent upon the Federal reserve banks to give constant and close attention to the situation in order that no influence adverse to the trade and industry of the country shall be exercised by the trend of money conditions, beyond what may develop as inevitable.
>
> "The Federal reserve act does not, in the opinion of the Federal Reserve Board, contemplate the use of the resources of the Federal reserve banks for the creation or extension of speculative credit. A member bank is not within its reasonable claims for rediscount *(lowering the discount rate)* facilities at its Federal reserve bank when it borrows either for the purpose of making speculative loans or for the purpose of maintaining speculative loans.[4]
>
> "The board has no disposition to assume authority to interfere with the loan practices of member banks so long as they do not involve the Federal reserve banks. It has, however, a grave responsibility whenever there is evidence that member banks are maintaining speculative security loans with the aid of Federal Reserve credit. When such is the case the Federal reserve bank becomes either a contributing or a sustaining factor in the current volume of speculative security credit. *This is not in harmony with the intent of the Federal reserve act, nor is it conducive to the wholesome operation of the banking and credit system of the country*."[5] (Federal Reserve Bulletin, Vol. 15, Issue 2, page 94)

In order to understand how detrimental this action was to the stock market, one must first grasp the concept behind how stock market brokers operated in the market. Wilford Eiteman (1932), of Albion College, explains the economic significance of broker's loans in this way: "In actual practice brokers pay the Stock Clearing Corporation for the securities which they purchase and receive payment from it for the securities which they sell. Hence each individual broker only needs an amount of funds equal to

[4]I inserted italicized words for the purpose of clear understanding on the reader's part.
[5]Italics mine for emphasis.

the excess of his purchases over his sales. On many days, of course, his sales exceed his purchases, and on such days he needs no funds at all."

Further, it is often not necessary to borrow the difference between customer's margins and the cost of the securities by which they purchase in order to effect a daily settlement of their own transactions among themselves. Thus, a broker's need for bank credit, for settlement purposes, is contingent on the amount which his purchases exceed sales. The total volume of business that a broker transacts, and therefore the increase in market activity, does not imply an increase in demand for loans (Eiteman, 1932). When an outright owner of stock withdraws his funds and sells stocks to a marginal trader, then the broker's loans are increased as a result of the withdrawal, not as a result of the marginal purchase. The amount of funds a broker requires for clearing house purposes is dependent on the excess purchases over sales, and not on the margins maintained by customers. More often than not, sellers of stock leave their proceeds with the brokers, and in a rapidly rising market, funds would not be withdrawn from the market. Therefore, as long as the probability exists that a stock will increase in value, a mass exodus of investors and speculators from the market would not generally happen. One must keep in mind, however, that to the extent of withdrawal of funds following security sales, by outright owners or ex-marginal holders of stock, broker's loans will rise (Eiteman, 1932).

This vicious circle was complicated by the fact that corporations were floating loans to marginal stock owners so that they could purchase their own corporate stock. The marginal owner need not send more money to their broker as long as the margin on currently owned stock was maintained. But, this float by corporations to customers bypassed the middleman, namely the broker, and diverted money from customers to brokers directly to the corporation. Margin owners would withdraw funds from their brokers (based on the value of the broker held stocks), causing the brokers to demand more money from the clearinghouse, in the form of loans. Until February 2, 1929, banks had been willing to loan funds because the loans were secured by valuable collateral, and investors and speculators promised to repay borrowed funds upon the call of the banks. Thus, the brokers were caught in the vicious circle; they could not borrow more money because banks were not loaning it. They, in turn, were forced to call in their margins from customers, who were left holding the bag because they had no money remained in their own bank to pay the margin call.

VI. And Down will come Baby…

The April 1929 Federal Reserve Bulletin triumphantly presented evidence that their restrictive monetary policy was beginning to work, despite the fact that the last week of March saw a near collapse in the stock market. Hoover remembers this incident with chagrin. Just at the moment when it appeared that speculators would be brought under control, the National City Bank of New York Chairman, Charles E. Mitchell and Harrison at the New York Federal Reserve Bank, suddenly defied the Reserve Board's dictates and offered large credits to the stock market (Hoover, 1952). Mitchell made loans to brokers that put a tourniquet on the falling prices.

It is significant that Harrison took the appropriate steps to stop the panic. He thought that a Federal Reserve Bank should not arbitrarily refuse loans and confirmed this action with Jackson Reynolds, the Chairman of the Clearing House Committee, and with Federal Reserve Board Governor Roy Young, who said that Harrison's actions were "100% right" (Bierman, 1991). Yet despite this support, Governor Young reassured the President that despite the Mitchell defiance, the increase in stock prices and credit had been stopped.

The decrease in loans for speculation was accompanied by an increase in the money rates (foreign exchange rates) which attracted money from abroad, in the form of gold. The increase in the exchange rates caused export prices to rise in foreign countries, and brought about a general decrease in exports from the United States. Unobtrusively and unobserved by most people, production and use of raw materials in the United States fell. The decline continued throughout May, and was only marginally noticed by some in June.

While the American Newspaper Publishers Association criticized the Federal Reserve Board's efforts at restrictive monetary policy an assistant to Professor W.L. Crum, editor of the Harvard Economic Service, noticed the downturn in economic activity indicated by leading indexes. She pointed out to Crum that, theoretically, an economic downturn was imminent. The Harvard Economic Service (HES) painted a fairly gloomy picture for several months, and when nothing gloomy presented itself, Crum moderated the HES view in July.

The Harvard economic forecasting service was recognized as one of two preeminent economic analysis and forecasting services available to businesses and the general public. The HES employed a full-time staff of professional economists, and was designed as a business whose objective was to provide short and long-term economic analysis for corporation's business planning (Dominguez, *et.al.*, 1988). Irving Fisher observed in a1927 article published in the *Journal of American Statistical Association*, that the selection of leading indices used by HES was not based on any of the usual criteria, but on their previous behavior in relation to the business cycle (Fisher, 1927).

On the other hand, it is noteworthy that the world's preeminent economist, Irving Fisher, was not able to forecast either the stock market crash or the depression. In contrast to HES, he also published periodic reports on the state of the economy, but geared his reports for the education of the public, as he was a critic of the HES indexes (Dominguez, *et.al.*, 1988). Fisher's forecasts were simply worded and straightforward applications of the classical paradigm, and allowed for some stickiness in slowing adjustment of the economy. His analyses, while consistently optimistic, were no closer to the mark than his Harvard brethren.

July proved to be a relatively uneventful month. The supply of money in circulation was noted to be smaller in the second quarter of 1929 than it was a year earlier. With the exception of a small increase in demand for smaller size bank notes over the July 4th holiday, and a steady decrease in demand deposits, the Federal Reserve believed all was well in the economy.

The economy began showing the tale-tell signs of the downturn in August. The September issue of the Federal Reserve Bulletin noted that output of manufacturers and raw materials industrial production decreased in July, while wholesale prices increased quantities of wholesale good decreased, and employment in the manufacturing industries decreased. In addition, construction contracts declined, housing starts dropped, and agricultural produce fell below the 1928 yearly levels. Finally, department store sales declined precipitously, and loans for commercial investment fell. For all of its insight, the real tragedy was that the Federal Reserve would not take its focus off the stock market and pay attention to real economic activity. The enmity between the Federal Reserve Board and the New York Federal Reserve Bank came to an end with an agreement to increase the rediscount rate from 5 to 6%. But, by then it was too late to stop the inevitable.

VII. Cradle and All

> “I think you ought to get out of the market, ” Robertson tells Dr. Rosman.
> “Out of the market!”
> “Sell everything,” he says.
> “Could you talk about the basis for this idea? When was the first time you had this thought?” Dr. Rosman asked.
> “About four months ago. Around the middle of May,” Robertson replied.
> “Can you recall what suggested it?”
> “One of my companies manufactures kitchen utensils.”
> “The one in Indiana?” Dr. Rosman inquired.
> “Yes. In the middle of May all our orders stopped.”
> “Completely?” Dr. Rosman asked, aghast.
> “Dead stop. It’s now the end of August, and they haven’t resumed,” confessed Robertson.
> “How is that possible?” Dr. Rosman asked, “The stock keeps going up.”
> “Thirty points in less than two months. This is what I’ve been trying to tell you for a long time now, Doctor–the market represents nothing but a state of mind. On the other hand I must face the possibility that this is merely my personal fantasy…”
> “Yes, your fear of approaching disaster,” Dr. Rosman agreed.
> “But I’ve had meetings at the Morgan Bank all week, and it’s the same in almost every industry–it’s not just my companies. The warehouses are overflowing, we can’t move the goods, that’s an objective fact.”
> “Have you told your thoughts to your colleagues?”
> “They won’t listen. Maybe they can’t afford to–we’ve been tossing the whole country onto a crap table in a game where nobody is ever supposed to lose! I sold off a lot two years ago, but when the market opens tomorrow I’m cashing in the rest. I feel guilty for it, but I can’t see any other way.”
> “Why does selling make you feel guilty?” asked Dr. Rosman.
> “Dumping twelve million dollars in securities could start a slide. It could wipe out thousand of widows and old people… I’ve even played with the idea of making a public announcement,” Robertson explained.
> (Arthur Miller, *The American Clock*, 1992)

In *The Great Crash 1929*, John Galbraith (1954) viewed the stock market as a mirror, which belatedly, provided an image of the fundamental economic situation. The slump in the stock market merely represented and reflected the already apparent change in the industrial sectors. Cause and effect, he wrote, flow *from* the economy *to* the stock market, not the reverse. Yet, Hoover and Miller were convinced that 'the economic system could not survive unless there are real restraints upon unbridled greed or dishonest reach for power' (Hoover, 1952). They continued to press for banking restraint of speculators, and began to insist upon banking reform in general.

September 3, 1929 is generally recognized as the day the bull market of the 1920's came to an end. The sales on the exchange crested, and turned down. Many would agree that while over the next 7 weeks there were still peaks, they were at lower and lower levels. The actual break came on September 5th, and seems to be tied to a speech given by Roger Babson at the Annual National Business Conference, wherein he made the observation that "sooner or later a crash is coming, and it may be terrific." He inferred that like the Florida bust, the same would happen in the stock market. Galbraith questions why the market would of a sudden listen to such a nay-sayer. After all, Babson was not regarded in the same manner as such great men like Irving Fisher or the Harvard Economic Service. The result of Babson's statements were immediate condemnation by the market (Galbraith, 1954).

Irving Fisher also took issue with Babson's remarks. Fisher noted that dividends were rising, suspicion of common stocks was abating, and wider, well-managed investment trusts offered more diversification and thus some measure of security for the investor. He concluded that while a recession may be in the offing, it was nothing in the nature of a crash (Galbraith, 1954; Bierman, 1991).

As the stock market wavered through September, the state of mind of the mass of speculators failed to note that fundamental economic conditions did not warrant further speculation. The high rate of return on call loans to brokers was irresistible to speculators, who withdrew their demand deposits from banks at ever increasing rates, assuming that the risk of loss was small. The president of an Illinois building and loan association was reported to have said, “Our members are withdrawing their deposits, and so we have no money to lend for home building. The cause of the withdrawals is Wall Street. Our money has gone into stocks or into broker’s loans. What chance has 5% against 6 to 20% with absolute security for call money… There is no first mortgage money” (Bierman, 1991).

The last week of September (September 21, 1929) HES wrote:

> “Recent developments (reduced volume of construction projects, below average crop prospects, unfavorable international trade balances) have tended to emphasize the unfavorable elements in the business (as distinguished from the financial) situation… But no sharp decline has appeared in general business, and activity remains high” (Dominguez, *et.al.*, 1988).

In late October, Secretary of Treasury, Arthur Mellon announced his intention of remaining in the Hoover cabinet until at least 1933. While, in Germany, Charles Mitchell pronounced the United States industrial condition to be absolutely sound, and on October 15th, after expounding on the fact that “the markets are in a generally healthy condition” and “values have a sound basis in the general prosperity of our country,” immediately sailed for home. That same evening, Irving Fisher announced, “I expect to see the stock market a good deal higher than it is today within a few months” (Galbraith, 1954).

On Saturday, October 19, 1929, prior to Black Monday (Oct. 20th), the HES assessment was:

> "If recession should threaten serious consequences for business (as is not indicated at present) there is little doubt that the reserve system would take steps to ease the money market and so check the movement" (Dominguez, *et.al.*, 1988).

The October 20th Sunday papers noted that quite a few margin calls had gone out in the previous day. Galbraith (1954) wrote that meant that the value of stocks, which investors held on margin, had declined to the point where it (the value of the stocks themselves) were no longer regarded as sufficient collateral for the loan that had paid for it. Speculators were being asked to put up more cash to make up the difference between what they owed the broker and the value of the stock (which had gone down).

The Sunday papers followed this observation with two more. First the papers agreed that worst must be over, and that the next day (Monday) the market would naturally receive organized help from the Federal Reserve Banks. The weakness, the papers said, would not be tolerated. "Organized" help obviously meant that powerful people would keep the stock prices at reasonable levels. But no help appeared.

On Monday, October 21st, the official Wall Street prophet, Irving Fisher said that the decline represented a "shaking out of the lunatic fringe", and reassured the masses that prices of stocks had not caught up with their real value. Tuesday, October 22nd, Charles Mitchell arrived in New York. He observed that the decline had proceeded too far, but that conditions were fundamentally sound, and too much attention had been paid to the large volume of broker's loans, and finally, concluded that the situation would right itself if left alone (Gailbraith, 1952). At this time, Babson publicly suggested selling stocks and buying gold.

By Wednesday afternoon, October 23rd, what little cheer there had been was gone, and thousands of speculators got out of the market. Thursday's morning newspapers predicted that Friday would see the stock market begin to receive the "organized support" (Galbraith, 1954). But that morning in the market a true panic, as measured by some 12 million shares changing hands, took place. At noon the "organized support" appeared in the form of Thomas W. Lamont a senior partner of J.P.Morgan and Company, Charles Mitchell, Chairman of National City Bank, Albert H. Wiggin, Chairman of Chase National Bank, William C. Potter, President of the Guaranteed Trust Company, and, finally, Seward Prosser the Bankers Trust Company Chairman. The decision to pool market resources and support the market was quickly reached and an announcement made to the general public (Galbraith, 1954). Fear gave way to mild concern and prices rebounded. In Galbraith's words, "the bankers had, indeed, brought off a notable coup."

Monday, October 28th, the day before Black Tuesday, in response to the October 19th HES assessment, Irving Fisher issued his benediction on the market:

> "The [stock market] break certainly exhibited signs of a market rendered top heavy by the activities of shoals of speculators, acting unintelligently, who at last became frightened and dumped millions of shares in a way temporarily to swamp the Exchanges… . The only event which can bring about a serious decline in stock value is a severe business slump, which does not seem likely from present indications" (Dominguez, *et.al.*, 1988).

Tuesday, October 29th, saw the continuation of the speculator being frisked for money by one margin call after another. Galbraith's (1954) comment was that "nothing could have been more ingeniously designed to maximize the suffering, and also insure that as few as possible escaped the common misfortune." The ruthlessness of the stock market liquidation seemed to continue *ad infinitum* into Tuesday, October 29th, and on that day there was no "organized support."

While Irving Fisher, immediately after the crash, issued an optimistic outlook (November 4, 1929):

> "The price of industrial stocks at less than 11 times their earnings seems too low a ratio, in view of the expectation of a faster rate of earnings in future and of the diminished risks of modern investment methods… the market has, therefore, food reason for recovering on a new plateau." (Dominguez, *et.al.*, 1988).

Hoover's worst and underlying fears were realized with the advent of the crash, to the extent of its damage to business, employment, and agriculture (Myers & Newton). He realized that there was little governmental experience in dealing with such a situation, and he realized that he did not posses the economic knowledge necessary to lead the people out of chaos. Hoover began relying on the Federal Reserve Board to fulfill its obligation of promoting industry and commerce to pull the economy out of the economic mess. On October 2, 1930, in his address to the 56th Annual Convention of the American Bankers' Association, he attempted to list the causes of the depression and possible contributions of the bankers toward a solution to the problem. In this speech, Hoover insisted that the depression was not a problem in academic economics, rather a great human problem. He admitted that possibly the bankers might know something about how an economy works, recognized the interconnectedness of the stock market, business, and the economy in general, yet called the economic system an instrument of social advancement of the American People (Myers, 1932).

Elmus Wicker (1965) left his readers with a final thought about President Hoover. Hoover set out in his presidency to strangle the speculation occurring in the stock market, and reorganize the Federal reserve banking system. In late August 1930, Hoover replace Governor Roy Young with Eugene Meyer, and on the day preceeding that, Vice-Governor Edmund Platt resigned. At the end of November 1930, Federal reserve board member Edward Cunningham died. Throughout the remainder of the year the Federal reserve board was composed of only the four appointed men, Meyer, Hamlin, Adolph Miller, James, Secretary Mellon, and Comptoller of the Currency Pole, while the two seats left vacant (one by Cunningham and the other by Platt) were never filled. This was in direct opposition to the Federal Reserve Act. So by virtue of his appointive power, Hoover effectively took control of the Federal Reserve System and was directly responsible for the monetary policy for the length of his tenure in office. Hoover bore primary responsibility for providing the Board with competent, courageous, new leadership, yet he vacillated and weakened the Federal Reserve leadership at a time when it was most needed (Wicker, 1965).

VIII. Older and Wiser?

Modern-day economists owe much of current theory on fiscal and macroeconomic monetary policy to the occurrence of the 1929 stock market crash and the depression that followed. Economists like Peter Temin, Ben Bernanke, Frederic Mishkin, and others have carried out in depth analyses using modern economic theory in an attempt to explain, at least in part, why the stock market crashed and the depression that followed.

Peter Temin (1976) observed that there was no parallel to the massive under-utilization of economic resources prior to, during and after the crash of 1929, and for the duration of the Great Depression. The actual collapse itself has been neglected; too long in the past to be part of the current economy, too recent to be included in history of economics, and too complex to be simplistically explained away. Finally, the collapse has just plain been neglected in the sense that theoretical economic aspects of depressions could be applied to the biggest depression in living human memory. Temin pointed out that the Federal Reserve Board failed to apply proper macroeconomic monetary policy, the Executive Branch failed to apply fiscal policy, not to mention the fact that counter-cyclical fiscal policy had not even been 'invented.' The fact that these policies were not utilized can hardly be used as the argument that had they been utilized they would have been effective.

Frederic Mishkin (1978) focused his analysis on the household balance sheet as the mechanism of transmission which were important in the decline of aggregate demand. Mishkin used the liquidity hypothesis and the life-cycle hypothesis, both of which emphasize the effects of household balance sheet changes on aggregate demand. He compares his analysis with the two main groups of thought: the Keynesian spending approach, and the monetarists approach. While the Keynesians attributed the depression to a decline in one or more components of the GNP, it did not explain, convincingly, why the economy began the fatal plunge in 1929. The monetarist theory, promoted by Friedman and Schwartz, explained the crash as the result of inept Federal Reserve Policy but was deficient in identifying the specific channels used by declining money supply that caused the contraction.

Ben Bernanke (1983) concentrated on the years 1930-33, and pointed out various coincidental timing in macroeconomic developments and synchronous movements by the financial system in response to declines in aggregate output. Bernanke agreed with Friedman and Schwartz that the banking crises were a direct result of a decline in the money supply.

While the majority of modern-day economists insist that the crash of 1929 and the Great Depression are separate incidents, and at most only tangentially related, Christina Romer (1990) linked the stock market crash to the great depression by noticing that consumers became uncertain about future income. As a result of this uncertainty, consumers delayed spending money on durable goods as they waited out the depression. A second link proposed by Romer, was the depressed consumption brought about by the massive amount of wealth destroyed by the crash.

More recently, Cecchetti and Karras (1994) used econometric tools to decompose output fluctuations during the interwar period (1913-1928 and 1934-1940) into movements that were caused by aggregate supply innovations and those that resulted from innovations to aggregate demand. Their purpose was to provide a description of the data that must be taken into account in order to provide and explanation of the Great Depression.

IX. Conclusion

While there are many myths and explanations posited for the stock market crash, the emphasis of this paper was to analyze the economic discussion surrounding monetary policy at the time of the crash. Whether it was ineptitude, ignorance, or personal conviction of "how people should be" with regard to religious morals, I can not over look the fact that the culmination of events was the crash of 1929. Clearly, the private agendas of the principal players, Hoover and Miller played an integral part in the demise of the bull market of the 1920's. On the other hand, the long-term effects of World War I also were part of the set up for the crash and the following depression. Monetary and fiscal policy effectiveness were born in that period of chaos. Economic principals for market cohesiveness developed out of need from the crash and the depression.

In retrospect, and because this particular event effected my personal destiny, I have to say that the crash wasn't necessarily a "bad" thing. It merely was, and out of the ashes arose the phoenix.

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