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## Article

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*Suggested Citation:* Conrad, Christian A.; Stahl, Markus (2002) : Parallels with the 1920s Stock Market Boom and the Monetary Policy, Kredit und Kapital, ISSN 0023-4591, Duncker & Humblot, Berlin, Vol. 35, Iss. 4, pp. 533-549,  
<https://doi.org/10.3790/ccm.35.4.533>

This Version is available at:

<https://hdl.handle.net/10419/293470>

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## **Parallels with the 1920s Stock Market Boom and the Monetary Policy**

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In the Nineties we have been able to observe a strong increase in stock market valuations over several years, due to falling interest rates and rising expectations on corporate earnings. Because of these factors, Milton Friedman and Barry Eichengreen compared the 1990s with the “Roaring Twenties”<sup>2</sup>. Our analysis examines the developments on the US stock market in relation to the monetary policy in the Twenties and in the Nineties, and attempts to highlight parallels. Part I describes the stock market boom of the golden twenties and its economic basis. Part II explains how the stock market developments are influenced by monetary supply. In the following part III and IV highlight the parallels of the stock market performance in the Nineties and Twenties, whereas part V draws conclusions on the interdependence of monetary policy and stock market development and evaluates the policy of the Fed in both decades.

### **I. The “Roaring Twenties”**

On 5<sup>th</sup> September 1929 the economist Roger Babson predicted an imminent stock market crash. He pronounced to participants at the annual National Business Conference that “factories will shut down ... men will be thrown out of work... the vicious circle will get in full swing and the result will be a serious business depression”.<sup>3</sup> Babson’s statement opposed the prevailing opinion, as represented by Irving Fisher, the respected Yale University professor. He declared that “stock prices have

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<sup>1</sup> Conrad and Stahl are editors of: *Risikomanagement an internationalen Finanzmärkten*, Stuttgart: Schäffer-Poeschel-Verlag (2000). The views expressed in this contribution are exclusively those of the authors.

<sup>2</sup> Cf. *Friedman, Milton* (1999): Die größte Gefahr ist ein überhitzter Aktienmarkt, an interview with Milton Friedman in the *Handelsblatt* from 2.09.1999, No. 169, p. 10, and *Eichengreen, Barry*: Die Parallelen zu 1929 sind unheimlich, in the *Handelsblatt* from 26.10.1999, p. 57.

<sup>3</sup> Cited by *Chancellor, Edward* (1999): Devil take the hindmost – a history of financial speculation, New York 1999, p. 214.

reached what looks like a permanently high plateau”.<sup>4</sup> However, the stock market boom at that time, with its share price advances of around 500% and the “Roaring Twenties”, ended abruptly. The Great Depression followed the stock market crash of the historic Black Thursday on 24<sup>th</sup> October 1929. In the years 1929–1933 the unemployment rate rose from 3.2% to 25% and the GNP shrank by a third. It was not until 8<sup>th</sup> July 1932 that the Dow Jones 30 Industrial Average hit its low, following a sharp tumble of a total of 89% against its previous high of 3<sup>rd</sup> September 1929. This figure was only to be exceeded 25 years later.

The stock market frenzy of the “Roaring Twenties” was triggered by the tremendous technical innovations of the time, such as radio, electricity and cars, as well as organizational achievements, inspired by Frederick Taylor. Mass production in the automotive industry and technical milestones such as Charles Lindberg’s spectacular transatlantic flight in 1927 led to a waning popularity for technical performance. Automobiles, railways and planes brought the dream of unlimited individual mobility within the reach of almost everyone. Radio and the transition from silent films to films incorporating sound did not just open up new horizons in Hollywood. These huge advancements in sciences and technologies were equally fascinating for businessmen, consumers, politicians and investors alike. There were also considerable increases in productivity. Labor productivity rose during the Twenties by a staggering 43%. Wages, on the other hand, rose by only a quarter compared to productivity. This was accompanied by high economic growth coupled with price stability and low unemployment rates. From 1922 to 1929, the GDP increased by an average of 4.2% per year. Under the Republican president Calvin Coolidge (1923–1929) the boom was also supported by the economic philosophy of *laissez-faire*. Markets were allowed to operate without government interference. Taxes and regulation were slashed dramatically, monopolies were allowed to form, and inequality of wealth and income reached record levels. The top tax rate was cut from 73% to 25%. As a result, corporate earnings rose by over 60% from 1923 to 1929. For people at that time, the traditional economic rules became a thing of the past. John Moody, the founder of the well-known Rating Agency, was not alone in believing that America had entered a “new era”.

Undoubtedly, the Nineties will also go down in history as the decade of stock market speculation. Innovative progress in Internet technology, telecommunications and genetics has built the basis for an unprecedented

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<sup>4</sup> See *Fisher, Irving* (1930): *The Stock Market Crash and After*, New York, 1930.

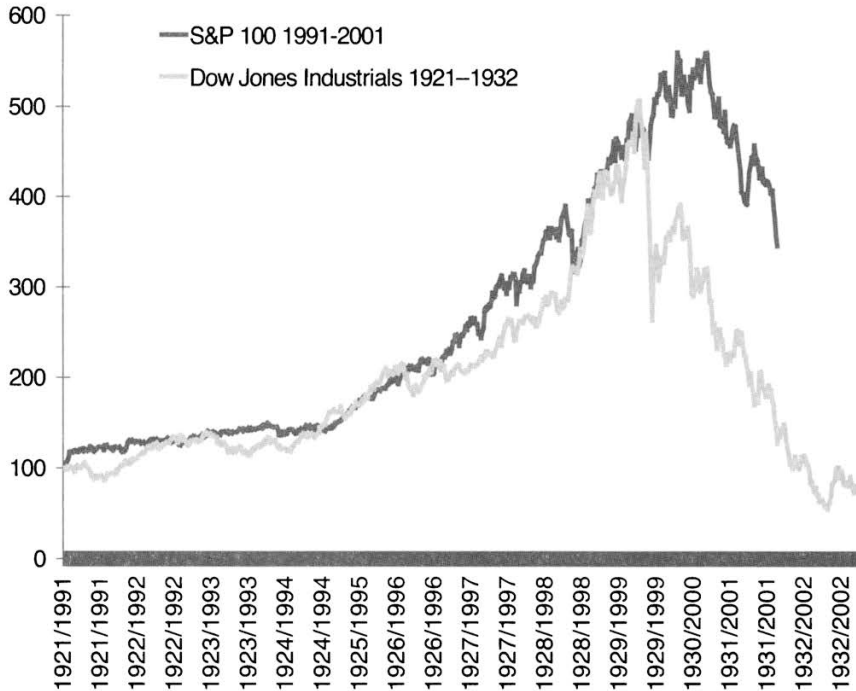


Figure 1: Share price development on the Dow Jones 30 Industrial Average from 1921 to 1932 and on the S&P 100 from 1991–2000 are based on 100.

stock market boom. And once again people talked about a new “era”, called a “New Economy”. From October 1990, the lowest point of the then downward trend at the time of the Gulf War, the Standard&Poors 500-Index rose by 400 % until the turn of the century (see Figure 1). In comparison, the technology dominated NASDAQ-Index rose by an astounding 1180 % in the last decade.

## II. Money and Stock Prices

The relationship of money supply to asset prices has also been extensively studied in modern economics without temporal specificity. The studies show a positive correlation between the two variables, which can be interpreted in three different ways. Firstly, there is an ex post correlation when the stock prices increased due to higher productivity in real economy and the central bank provided the money needed to prevent de-



flation. Secondly, an increase in money supply, e.g. liquidity, leads to portfolio adoptions on the part of the stockholder, to realize the desired proportion of liquidity and assets. You could also argue that the stockholders have more money to buy assets, which leads to an increase in stock prices providing a constant amount of stocks. Thirdly, as mentioned above, increased money supply leads to lower interest rates and thereby lowers the discount rate on future cash flows from an enterprise's expected profits. Interest is also a main part of production and investing costs of the enterprises, therefore lower interest rates means higher profits.<sup>5</sup>

When the profits gained from loans as a competitive capital investment have a measurable effect on the price of stock, they are considered by the monetary policy to be a determining factor for interest rates. Friedrich August von Hayek holds the tremendous elasticity of the banking system and the unregulated money supply development responsible for the economy overheating and the current overreaction.<sup>6</sup> Knut Wicksell on the other hand, lays the blame at the doorstep of the monetary policy decision-makers and their poor decisions regarding interest controls.<sup>7</sup> A set interest level on the capital market below that for the supply and demand balance causes an expansion of the money supply. In specific, the exchange relation of goods to money tips in favor of money. The demand for credit increases because of the low interest level. New current account deposits come into existence through the increased credit. The speed of money circulation increases, and with it the money supply. There is a shift in portfolios, since the value of the investor's liquidity increases relative to the stocks owned. The new money flows into the stock markets and pushes the stock prices ever upwards. Because the interest functions as both a profit comparison and a discount factor it brings about an artificial interest reduction in an upswing of the stock price as well as an excessive resource allocation in stock value. This effect can cause the system to overheat and can of course lead to the

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<sup>5</sup> See *International Monetary Fund* (2000): World economic outlook, Washington 2000 and *Baks, Klaas/Kramer, Charles* (1999): Global Liquidity and Asset Prices: Measurements: Implications and Spillovers, in: IMF Working Paper 99/168, Washington, International Monetary Fund, 1999.

<sup>6</sup> See *Hayek, Friedrich August von* (1976): Geldtheorie und Konjunkturtheorie, Salzburg 1976, reprinting of the original from 1929, pp. 81.

<sup>7</sup> See *Wicksell, Knut* (1928): Vorlesungen über Nationalökonomie, Theoretischer Teil, second edition, Jena 1928, pp. 231; *op. cit.* (1898) Geldzins und Güterpreise, Aalen 1968, new edition from 1898, pp. 101 and *Grosskettler, Heinz* (1989): Johan Gustav Knut Wicksell, in: Starbatty, Joachim (Eds.): Klassiker des ökonomischen Denkens II, München 1989, p. 191–210, pp. 203.

same effect in the other direction, should the cause-and-effect relations be reversed. The higher stock prices signify profit potential and represent security to the banks that allows them to grant credit and thus indirectly create money. A self-propagating upward movement is created on the stock market, which supports a boom through excessive liquidity supply from the central banks.<sup>8</sup>

Using the increase in Japanese stock, art and real estate prices in the second half of the 1980s as an example, empirical studies have shown that the catalyst for the bubble was an expansive monetary policy in conjunction with a productivity increase in the Japanese economy and an higher demand for real estate in Tokyo; all of which expressed itself in more credit given by the banks.<sup>9</sup> In the first half of the 1990s the prices mostly fell back to their original level. Ito und Iwaisako establish further, that the increase in prices can be explained with fundamental changes in data only until 1987, at which point the bubble took on a life of its own:

“Once the bubble seed was sown (the beginning of stochastic bubbles), then it proceeded to get larger, purely on expectations of further bubbles, until the crash came in early 1990s.”<sup>10</sup>

### III. The Monetary Policy of the Federal Reserve (Fed)

The monetary policy of the Fed president Alan Greenspan has gotten a lot of attention from many observers due to the fact that the US economy has kept a high inflation-free level of growth. The Fed thus seems to have fulfilled its task of keeping stable price level and simultaneously promoting growth with flying colors, just as in the Twenties. Greenspan had already provided the economy with plenty of liquidity starting in the mid-nineties, when the real growth potential of the Internet sector began, as seen in the growth rate of the money supply M2 (see Figure 2).

Greenspan had already saved the US stock market once, after the collapse in 1987. In 1998 he did it again. He also saved the world finance system from a serious crisis. There was a huge discrepancy however, be-

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<sup>8</sup> See *Christian A. Conrad* (2000): *Theorie und Praxis der Speculative Bubbles*, in: *Conrad, Christian, A./Stahl, Markus, Hrsg. (2000): Risikomanagement an den internationalen Finanzmärkten*, Stuttgart 2000, p. 135–146.

<sup>9</sup> See *Ito, Takatoshi/Iwaisako, Tokuo* (1995): *Explaining Asset Bubbles in Japan*, National Bureau of Economic Research, Working Paper 5358.

<sup>10</sup> See *Ito, Takatoshi/Iwaisako, Tokuo* (1995): *Explaining Asset Bubbles in Japan*, National Bureau of Economic Research, Working Paper 5358, p. 17

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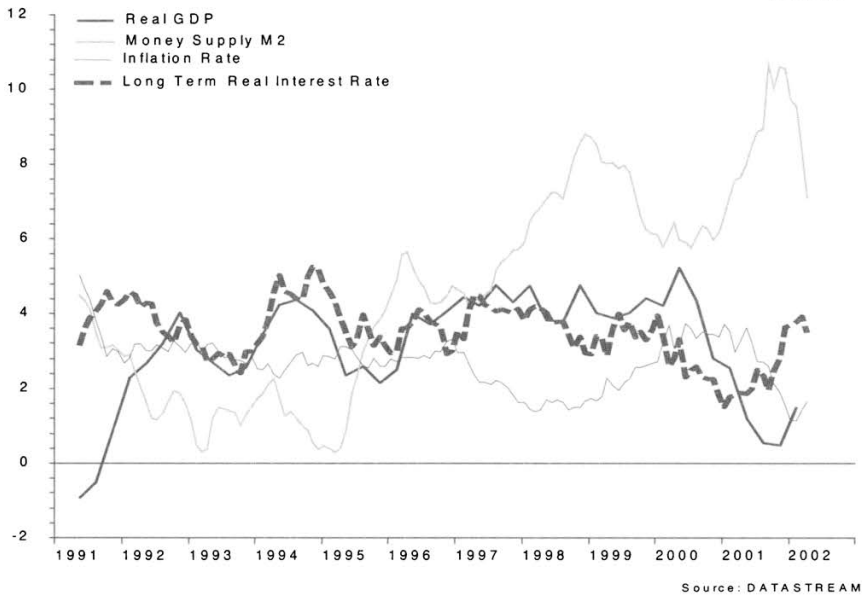


Figure 2: Development of the money supply M2 in percent for the real GDP and the consumer price in the USA; Source Datastream.

tween what the Fed said and what it did in 1997 and 1998. The crises in the emerging markets in 1997/98 had a deflationary effect, and there was a large drop in stock value in 1998 due to the debacle surrounding the hedge fund LTCM.<sup>11</sup> The Fed reluctantly sank the interest rate three times, even though the high growth rate of the economy and attractive interest rates would have indicated just the opposite rate development. From September 28 to November 17, 1998 the Federal Funds target rate was reduced monthly by a quarter percent from 5.5% to 4.75% (see Figure 3). These interest rate reductions were the only way to stop the downward trend of the stock markets. It was the signal that the investors had hoped for.<sup>12</sup>

<sup>11</sup> See Single, Gerhard/Stahl, Markus (2000): Gefahrenherd Hedge-Fonds – Der Fall LTCM, in: Österreichisches Bankarchiv, Vol. 48 (2000): pp. 1060–1066.

<sup>12</sup> See Conrad, Christian A./Schoett, Harry (2000): Das Börsenjahr 1998 – nur knapp vorbei am Crash?, in: Conrad, Christian, A./Stahl, Markus (eds.): Risikomanagement an den internationalen Finanzmärkten, Stuttgart, 2000, p. 151–159.

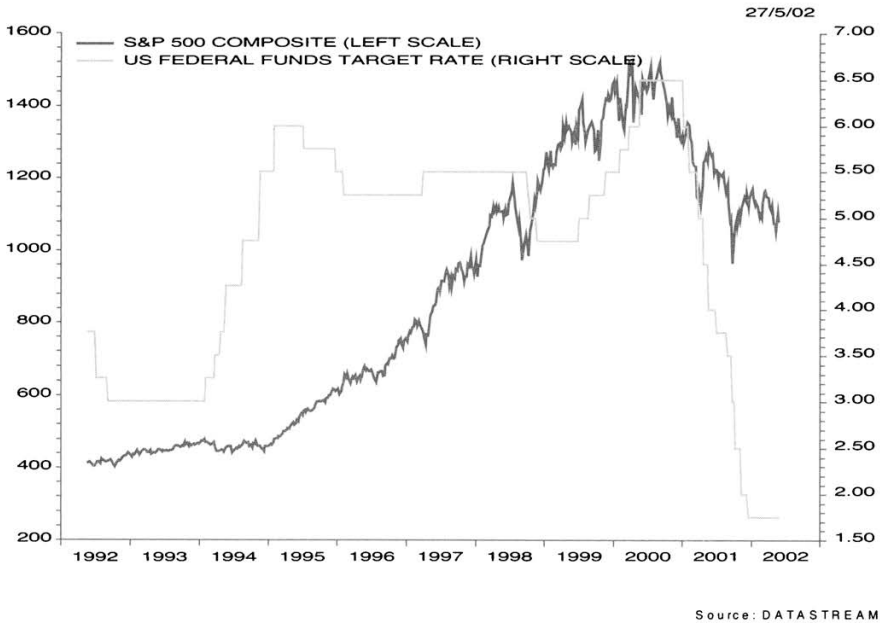


Figure 3: Development of the Dow Jones Industrial Average (left scale) and the Federal Funds Target Rate (right scale) in the USA; Source Datastream.

After reducing the interest rate however, the Fed found itself in a similar dilemma to that of 70 years earlier, when the loose monetary policy had unwanted effects. It didn't just increase the productive forces of the economy, but the speculative as well.<sup>13</sup> Unleashed speculation and a furious development of Internet stocks in winter 1999/2000 were uncontrollable by the temporary transition to a restrictive monetary policy. Not until the Federal Funds target rate was raised to 6.5% in April 2000, were effects visible on the US stock markets. Here would be a good point to remember the warning of Alan Greenspan against "irrational exuberance."<sup>14</sup> The statement itself came in 1996, as the Dow Jones 30 Industrial Average was at 6600 points.

<sup>13</sup> Discussion about the money supply before the crash of 1929 continues. Field has emphasized that the Fed might have not recognized the high transaction volumes and values absorbing increasing liquidity since it would otherwise be unlikely that the Fed would persist in its anti-speculative policy in 1928–1929. See Field, A. J. (1984): A New Integration of the Onset of the Great Depression, in: Journal of Economic History, Vol. 44 (1989), p. 490.



From June 1999 until early 2001, monetary policy had also reacted similarly to the way it did in the period of 1928–1929. At that time the Federal Reserve tried to slow down the stock market boom with successive increases in interest rates after low interest rate levels had been stimulating stock market speculation.

#### IV. Irrational Exuberance

On the basis of expected corporate earnings and interest rate levels, Wigmore predicted that there would be a lot of overpricing by as early as September 1997.<sup>15</sup> In autumn the stock market corrections as of March 2000 and the price-earning ratio (PER) remained at more than 100 on the NASDAQ. Even the PER of the more widely accepted Standard&Poors 500-Index, with its present level of 27, was far above the previous average of 15. The dividend yield, at 1.2%, reached new lows and had therefore not once exceeded the current rate of inflation. Real economic developments were lagging behind the stormy rise in stock market prices. In general, the price level on the stock market was based on expectations concerning the future growth of corporate earnings. Autumn 2000 would be a starting point for example, in the fact that had the American stock market remained stagnated at its presently achieved price level, corporate earnings would have had to rise by an average of 13.7% per annum in order to close up the gap in the stock market valuation. This would have been an obviously higher growth rate in corporate earnings compared to the last five years of the economic boom (corporate earnings growth rate 10.9% p.a.). Yet, if over the following five years, share prices on the US stock market were to continue to rise at the same rate as they did over the preceding five years, i.e. at an annual performance rate of 25%, a corporate earnings growth of over 40% p.a. would be necessary to provide a basis for the share price levels of that time. Had earning growth rates of listed US corporations fallen back to their previous average rate of 8.65% from 1973–2000, this would have resulted in a stock market devaluation of a total of 20.5%, i.e. 4.5% per year over the next five years, in order to close the gap between these earning figures and the level of the stock market.

Certain factors indicated the possibility of a speculative bubble in both decades.<sup>16</sup> For example, total market capitalisation of all listed US

<sup>14</sup> See *Shiller, Robert* (2000): *Irrational Excuberance*, Princeton, 2000.

<sup>15</sup> See *Wigmore, Barrie A.* (2000): *Revisiting the Crash of 1987*, in: *Financial Analyst Journal*, Vol. 54, No. 1, 1998, pp. 44 and p. 47.

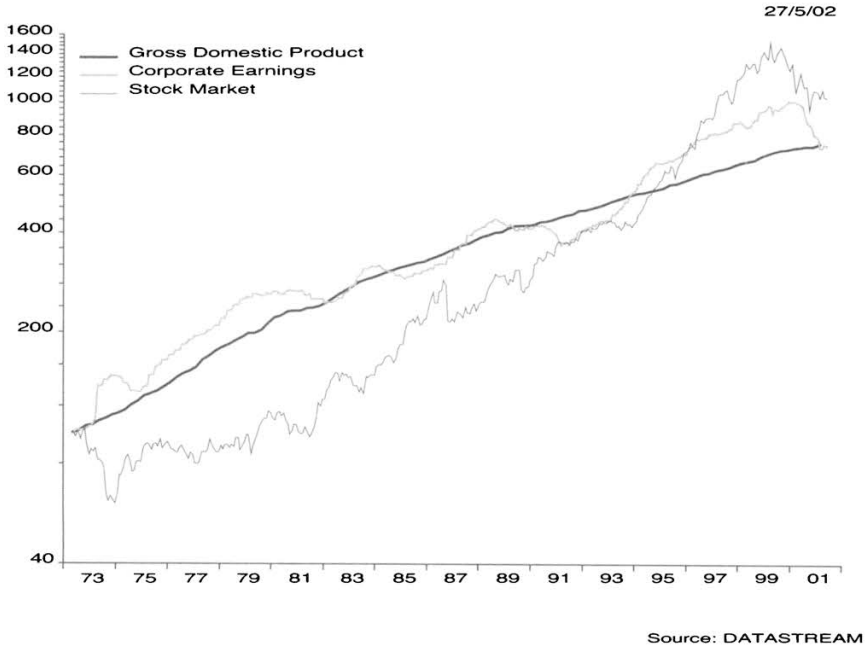


Figure 4: Development of the stock market, corporate earnings and the GDP in the USA (all figures based on 100 in 1973). Source: Datastream.

stocks amounted to approximately \$US 16.8 trillion (Nasdaq: 6.6 and Big Board: 10.2 trillion \$US) in March 2000, which exceeded the gross national product of 9.5 trillion \$US (see also Figure 4) by 1.7 times. During the peak period of the bubble development in Japan, all Japanese corporations were valued on the stock market at 1.4 times the gross national product. In the Twenties, the market capitalisation rose to \$US 89.7 billion and exceeded the entire American national income of \$US 81 billion by a factor of “only” 1.1 times. In 1999, the annual dollar turnover amounted to around 250% of the gross national product, after having been well below 50% for many decades. In 1929, the year of the crash, stock market turnover in dollars totaled 1.3 times the gross national product (see also Table 1).

Even more parallels become apparent when one compares some of the core variables of the stock market development of the Twenties with

<sup>16</sup> See Stahl, Markus/Mezger, Markus (2000): Der Schatten des Jahres 1929, in: Die Bank, 5/2000, pp. 300–307.

*Table 1*  
**Comparison of important indicators 1921–1929 and 1991–2000**

	1921–1929	1991–2000
1) <i>Fundamental factors</i>		
A) Real growth rate of the GNP	4.20 %	3.62 %
B) Corporate Earnings Growth rate	9.0 %	9.40 %
D) Unemployment rates at the end	3.20 %	4.00 %
E) New Economy Sectors	Automotive, aircraft, radio, film, supply industries	Internet, Information technology, communications
F) Old Economy Sectors	Railways	Automotive, mechanical engineering, trade, supply industries
2) <i>Technical Situation of DOW/S&amp;P</i>		
A) Maximum performance	496 % (DOW) Aug. 21–Sept. 29	504 % (S&P 100) Oct. 90–March 2000
B) Period of acceleration		
Duration	Apr. 25–Sept. 1929	Jan 95–March 2000
Performance	215 %	295 %
3) <i>Stock market Valuation</i>		
A) Price-earnings ratio (PER)		
Start of the boom	10.0	14.0
End of the boom	21.0 (Sept. 1929)	33 (March 2000)
B) Dividend yield		
Start of the boom	N/A.	3.70 %
End of the boom	3–3.5 %	1.10 %
C) Interest rate structure at the end of the boom		
Discount Rate	6 %	6,5 %
Maturing within 3 months	6.25 %	6.7 % (July 2000)
Maturing within 10 years	3.70 %	6.1 % (July 2000)
D) Market capitalisation/GNP	110 %	170 % (March 2000)

(Continued p. 543)

Table 1 (Continued)

	1921–1929	1991–2000
4) <i>Monetary policy</i>		
A) Level of the discount rate at the start of the stock market boom	6 %	7.00 %
B) lowest point in the discount rate		
Level	3.50 %	3.00 %
Date	Mid 1927	Autumn 1992
C) Start of restrictive monetary policy	Jan. 1928 (3.5 %)	July 1999 (4.75 %)
D) Increases in interest rates since then		
Total volume of interest rate rise	2.50 %	1.75 %
Number of Stages of interest rate increases	4	6
E) Discount rate level at the end	6 %	6.5 %
E) Monetary growth (M2)	3.88 % (1921–29)	3.86 % (1991–99)
F) Average rate of inflation	0.22 % (1922–29)	2.74 % (1991–99)
5) <i>Private household debts</i>		
Broker loans/Market capitalisation	10 %	1.6 %
Consumer credits/available income	N/A.	20.5 % (1999)
Net national debt/available income	53 % (1929)	67 % (1999)

those of the Nineties. The duration of the growth period and the rise in market prices are quite similar, whereby the present rise even exceeds that of the 1920s. Average growth of corporate earnings of 9 % in the Twenties can be compared with 9.4 % in the Nineties. However, a price-earnings ratio of 33 (March 2000) is well above that of September 1929 (PER 21)<sup>17</sup>. The comparison on the basis of dividend yields turns out to

<sup>17</sup> Taking into account Enron-type accounting problems in the 1990s, the effective price earning ratio in 2000 was even higher than indicated.



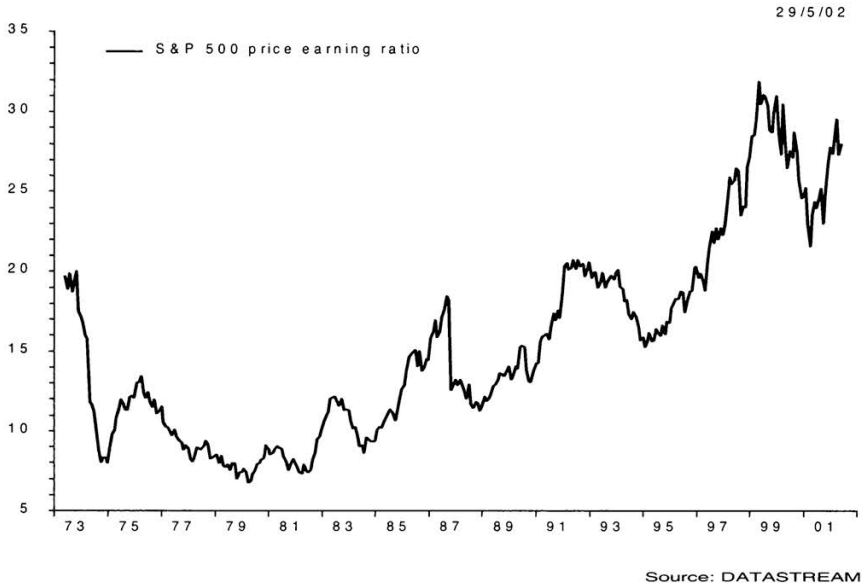


Figure 5: Development of the price earning ratio

be even more blatant. At the end of the upward development of the stock market in the Twenties, dividend yields amounted to over 3%, whereas in March 2000 they only reached 1.1%. However, in the stock market boom of the nineties, broker loans have played a smaller financial role than was the case in 1929. In addition, there are types of leverage, which statistically do not belong in the same category as broker loans. These include, for example, consumer credits, corporate loans, and mortgage loans, which will ultimately also be used in stock market speculation. It is also true that the overall number of consumer credit in the last decade is higher than it was in 1929. Meanwhile the price earning ratios have returned to a lower level (see Figure 5).

## V. Evaluation of the Monetary Policy

The extent to which the Federal Reserve was responsible for the speculative bubble in the Twenties divided economists then, just as the discussion about the extend to which it is responsible for the present stock market mania divides economists today. It cannot be denied that the initial phase of both booms was accompanied by an expansive monetary

policy. From 1921, the last year of restrictive monetary policy which had been introduced in the fight against post-war inflation, the Federal Reserve targeted a mainly expansive monetary policy, in which the discount rate was lowered from 6% in 1921 to 3.5% by the middle of 1927. There were no indications that a more restrictive approach was needed to combat what was then regarded as inflation. Increases in the prices of goods were well below critical tolerance levels.

Growth of money supply increased at a parallel rate to the growth of the gross national product. But inflation and debt expansion took place in the area of securities. In 1929, broker loans, which amounted to around \$US 8.5 billion, made up around 10% of market capitalization. By the time it dawned on a handful of people in the Federal Reserve System that the combination of margin loans and a boom in the stock market was an explosion waiting to happen, speculation was already spiraling out of control. When the Federal Reserve decided to slow down speculation by increasing discount rates three times from 3.5% up to the level of 5% in the summer of 1928, trading on the stock exchanges then began to gather speed. The stock market ignored warnings from the Federal Reserve president Roy Young for over six months.<sup>18</sup> He stated that the money supply was for productive purposes and should not be used to fuel stock market speculation. The discount rate was finally raised once more from 5% to 6% on 9<sup>th</sup> August 1929.<sup>19</sup> Two months later it was clear that that had been the final blow.<sup>20</sup>

This may be the reason that the American Federal Reserve Bank reduced the interest rate 11 times since the beginning of the year 2001 from 6.5% to 1.75% (see Figure 3). In relation to the length of time it is the most drastic interest rate reduction in the history of the Fed. The expansive monetary policy is officially explained by the lasting economic risks in the USA. The Fed points to less consumer trust and the reticent investing behavior of many companies. It fears that the weaknesses of the US stock markets could also have a negative effect on the consumer's demand due to losses.<sup>21</sup>

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<sup>18</sup> Probably the three discount price increases weren't enough to slow down the speculation craze in light of the 10% interest rates on the Brooker Loans.

<sup>19</sup> See *Clarke, Stephen* (1967): *Central Bank Cooperation: 1924–31*, New York (1967): Federal Reserve Bank of New York, Library of Congress Catalog No. 67-17650.

<sup>20</sup> See *Temin, Peter* (1976): *Did monetary forces cause the Great Depression?*, New York (1976), and *Friedman, Milton/Schwartz, Jacobson*: *The Great Contraction 1929–1933*, Princeton (1965).

The American monetary policy has been successful if one takes the stock markets as the determining factor since it was able to keep the courses high. Investors trusted Greenspan's ability to save the market to such an extent that the term "Greenspan put" had come into existence.<sup>22</sup> Alan Greenspan certainly avoided the worst in autumn 1998 with his flexible crisis management and won his title of Stock Market Savior. We hoped that with help from the drastic interest rate reductions he could again succeed in preventing a crash and pulling out the economy from a tailspin. Unfortunately the events of the 11<sup>th</sup> of September have changed everything. By lowering the interest rates and increasing monetary supply the Fed and the ECB reacted to the crucial situation and were able to prevent at least a credit crunch.

This reaction of the central banks probably represents the biggest difference with the 1920s. Today we have a proven cooperation among the major international central banks. Successful joint monetary intervention in October 1987 complemented the expansive monetary policy of the US-Federal reserve which pumped up the monetary base at an annual rate of 40 % in the two weeks just after the crash and prevented a strong negative impact on the world economy with this liquidity injection.<sup>23</sup> It has meanwhile become clear that a stock market crash is not restricted to a single locality. The economic weight of the New York stock exchange in global capital markets is today even higher than in the 1920s. BIS, OECD and the G8 meetings provide the platform for information, cooperation and coordination in the field of monetary policy nowadays. There is no absolute security, however. A crash with strong negative economic implications can happen again, and the impact of monetary policy on the stock market is limited. Real economic figures as the earnings of the listed companies are significant for the development of the stock market apart from expectations. If there is a substantial difference between the development of current earnings and share prices we can assume a strong speculation in the market. After all, the responsibility for this speculation should be taken by the investors and not by the central banks, and thus the community, in the form of a possible inflation.

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<sup>21</sup> See. O.V. (2001): Greenspan überrascht die Märkte, in: Handelsblatt vom 19. April 2001, reprinted in: Deutsche Bundesbank, excerpts from press articles, No. 19, from 20. April 2001, p. 11.

<sup>22</sup> See. O.V. (2001): Greenspan to the rescue, in: The Economist, London, April 20, reprinted in: Deutsche Bundesbank, excerpts from press articles, No. 19, from 20. April 2001, p. 12.

<sup>23</sup> See *Eichengreen, Barry J. (1990): 1929 and 1987 – parallels and contrasts*, in: White, Eugene N. (ed.), *The lessons from history*, New York 1990, p. 246.



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## Summary

### **Parallels with the 1920s Stock Market Boom and the Monetary Policy**

We have been able to observe a strong increase in stock market valuations in the Nineties. Milton Friedman and Barry Eichengreen compare the 1990s with the “Roaring Twenties”. This paper examines the developments on the US stock market in relation to the monetary policy in the Twenties and in the Nineties, and attempts to highlight parallels.

Monetary policy reacted in the Nineties similarly to the way it did in the period of Twenties. First the Federal Reserve tried to slow down the stock market boom with successive increases in interest rates after low interest rate levels had been stimulating stock market speculation. Later it was inversed. In contrast to 1929 the American Federal Reserve Bank has reduced the interest rate several times since the beginning 2001. In relation to the length of time it is the most drastic interest rate reduction in the history of the Fed. Certain factors indicate a speculative bubble on the stock market in both decades and a strong influence of the monetary policy. (JEL B 22, E 52, G 12, N 22)

## Zusammenfassung

### **Parallelen des amerikanischen Börsenbooms der 20er und 90er Jahre vor dem Hintergrund geldpolitischer Einflußfaktoren**

Vor dem Hintergrund der starken Aufwärtsbewegungen an der amerikanischen Börse in den 20er und 90er Jahren untersucht der vorliegende Aufsatz, inwiefern die Geldpolitik die Börsenentwicklung in den zwei Dekaden beeinflußt hat. Die Geldpolitik reagierte in den 90er Jahren ähnlich wie in den 20er Jahren. Nachdem der Börsenaufschwung zunächst von niedrigen Zinsen unterstützt wurde, versuchte die amerikanische Notenbank, den Boom ab einem gewissen Ausmaß durch Zinserhöhungen zu stoppen. Später, als sich ein möglicher Crash mit negativen Rückwirkungen auf die realwirtschaftliche Entwicklung abzeichnete, versuchte die US-Notenbank, anders als 1929, einen starken Kurseinbruch durch massive Zinssenkungen aufzufangen. Bezogen auf den Zeitraum war dies die heftigste Zinssenkungsaktion in der Geschichte der amerikanischen Notenbank. Wie der vorliegende Aufsatz zeigt, gibt es einige Faktoren, die auf eine spekulative Blase sowohl in den 20er als auch in den 90er Jahren und auch auf einen starken Einfluß der Geldpolitik hinweisen.

## Résumé

### **Parallèles entre le Boom boursier américain des années 20 et la politique monétaire**

En considérant la forte croissance de la bourse américaine dans les années 20 et 90, cet article examine à quel point la politique monétaire a influencé l'évolution boursière dans les deux décennies. La politique monétaire des années 90 a réagi de la même manière que dans les années 20. Après que la croissance boursière ait été tout d'abord soutenue par les taux d'intérêt peu élevés, la Réserve Fédérale américaine a essayé de ralentir le boom en augmentant les taux d'intérêt. Plus tard, lorsqu'un crash possible avec des conséquences négatives sur le développement économique réel se dessinait, la Réserve Fédérale a essayé, au contraire de 1929, d'arrêter la forte chute des cours en baissant massivement les taux d'intérêt. Ce fut la réduction la plus massive des taux d'intérêt dans l'histoire de la banque centrale américaine de cette période. L'article montre que certains facteurs indiquent une bulle spéculative autant dans les années 20 que dans les années 90 ainsi qu'une forte influence de la politique monétaire.