Margin Purchases, Brokers' Loans and the Bull Market of the Twenties¹

Gene Smiley
Marquette University

Richard H. Keehn University of Wisconsin- Parkside

In the aftermath of the 1929 stock market crash there was a search for the "villains" that caused the boom and subsequent crash. Among the factors usually singled out were margin purchases of shares of stock using brokers' loans. The perception subsequently arose that margin requirements were unusually low and the use of brokers' loans for securities purchases extraordinarily large in the twenties in comparison with earlier periods. Purchases on low margin supposedly fed the speculative excesses which preceded the crash of the stock market.

While margin purchases using brokers' loans certainly played a role in the final expansion and crash of the stock market, we believe that their role has been overstated and that some perceptions about the level of margin requirements and the nature of brokers' loans in the late twenties are in error. These issues are addressed in the following sections.

The Perceived Role of Low Margin Brokers' Loans

The notion that low margin brokers' loans were a major factor in the stock market boom and crash has a long history. Writing only a few months after the crash, Irving Fisher argued that the major problem with the "unwise" speculation in the long bull market was the use of so much borrowed money [9, pp. 218, 230-31, 252]. Francis W. Hirst, writing in 1931, pointed to the same effects calling the speculation from 1927 to 1929 "marginal speculation" [15, pp. 4, 7, 13-14].

Perhaps the most important contributor to the belief that low margin brokers' loans were a major factor in the boom and subsequent bust was the June 1934 report of the Committee on Banking and Currency on "Stock Exchange Practices" [26]. The hearings that this report summarized led to the passage of the

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Securities Act of 1933, the Banking Act of 1933, and the Securities Exchange Act of 1934-- acts which initiated a close federal regulation of margin requirements and brokers' loans.

Because the charges made in the *Report* were often repeated and referred to in later years it is worthwhile to review them. The first charge was that brokers made no effort to examine the creditworthiness of their clients, leading to speculation by individuals who did not have the skill and financial resources to do so.

The celerity with which margin transactions were arranged and the absence of any scrutiny by the broker of the personal credit of the borrower, encouraged persons in all walks of life to embark upon speculative ventures in which they were doomed by their lack of skill and experience to certain loss. Excited by the vision of quick profits, they assumed margin positions which they had no adequate resources to protect, and when the storm broke they stood helplessly by while securities and savings were washed away in a flood of liquidation [26, p. 9].

Second, the *Report* charged that though the number of margin customers was not large, this small number of margin customers created instability in the financial markets.

Yet these margin purchasers, while their speculations were uncontrolled, affected the national economy in a measure immensely disproportionate to their numbers. Their activities resulted in wide fluctuations in the price of securities, which ultimately imperiled the holdings of bona fide investors of every type. This disproportion between the number of persons trading on margin and their overshadowing position on the financial scene furnished one of the most cogent arguments for remedial legislation with respect to margins [26, p. 11].

These characteristics of margin purchasing were used to justify the legislation passed to control margin purchases on the nation's securities exchanges. The 1933 and 1934 laws were

... intended to protect the margin purchaser by making it impossible for him to buy securities on too thin a margin, and to vest the Government credit agency with power to reduce the aggregate amount of the Nation's credit resources which can be directed by speculation into the stock market and away from commerce and industry [26, p. 11].

Third, the Report criticized the high levels of brokers' loans found in 1928 and 1929 since the involuntary liquidation of these loans accelerated the decline in security prices. The liquidation of brokers' loans by non-banking corporations, such as in 1929, also placed a "tremendous burden" on the banking system because banks had to "... take over those loans and in endeavoring to fill the breach their resources may be strained beyond the point of safety." Furthermore, brokers' loans encouraged further speculation in securities when a speculative boom was in progress. The Report also contended that rising stock prices made firms "overoptimistic" and led to excessive increases in production and "... the issuance of new and unnecessary securities." Loans by non-banking firms decreased bank deposits and raised the "... cost of credit to legitimate business" by reducing banks' lending power [26, pp. 12-13].

By 1947 the perception that low margin brokers' loans were an important cause of the securities market speculation and crash was so well accepted that George Soule did not have to specify the undesirable characteristics of brokers' loans. It was sufficient to describe their use as a "dangerous practice" [24, p. 304]. In his criticism of margin purchases through brokers' loans, Broadus Mitchell quoted extensively from the Committee on Banking and Currency's Report [18, pp. 159-160]. In the 1950s John Kenneth Galbraith argued that if margin requirements had been increased to, say, 75 percent in January of 1929 the speculative boom would have ended then [11, pp. 24-25, 37]. In the 1960s Robert Sobel stated that the flow of money into brokers' loans for margin purchases by the brokers' clients "... helped boost stock prices to unprecedented highs, and exercised a dampening effect on the economy" [22, p. 257]. In 1978 Charles Kindleberger argued that "... brokers' loans by banks and by individuals ... provided the basis for driving securities prices way up, and letting them fall way down, without significant changes in the money supply" [17, p. 67].

Thus there appear to be three primary perceptions that have developed with respect to the role of margin purchases through brokers' loans in the twenties, perceptions that are generally represented in the recent literature. First, margin requirements were unusually low in the twenties, especially in 1928 and 1929. Second, the low margin brokers' loans accelerated the speculative buying and thus fed the boom in stock market prices. Third, the low margin brokers' loans made the crash more severe-- or accelerated the decline-- because brokers began selling off at the market the stocks of clients who could not meet the calls for more margin. Our first task, therefore, is to determine whether during the twenties margin purchases using brokers' loans and margin requirements were unusual.

Margin Requirements Prior to the Crash

There is no consistent nor continuous record of general margin requirements on brokers' and customers' loans since the Civil War. This is explained by the absence of formal margin requirements and their variation among individual brokers and banks. We utilize the pieces of information that are available to estimate the general trend of margin requirements from the late nineteenth century through the stock market crash of 1929.

Margin trading on the New York Stock Exchange developed in the antebellum period and, as Margaret Myers noted, "... soon became a complement to the call loan system." Margin purchases were often attacked as one of the very worst features of the antebellum speculative market [19, p. 134]. Robert Sobel also noted that margin purchasing existed prior to the Civil War, but expanded during the conflict. According to Sobel, during the Civil War margins were "... usually 10 per cent, but at times as low as 3 per cent" [22, p. 71].

In the postbellum period the National Banking Act allowed country and reserve city banks to keep portions of their required reserves as balances in New York City and, later, in Chicago and St. Louis banks. However, a money market to use the volatile bankers' balances never really developed outside of New York City. There the bankers' balances became the foundation of the call loans brokers' made to their customers.

In January of 1899 the Commercial and Financial Chronicle pointed out that railroad securities were generally required to have a margin of only 20 percent, while industrial stocks usually required margins of 25 and 30 percent [19, p. 281]. Margins apparently were often less than 20 percent in the years up to 1909 since the state of New York's Hughes Committee hearings recommended minimum margins of 20 percent [19, p. 311; 5, p. 134; 27]. By 1911 industrial stocks had gained strength and acceptance in the stock market. The Pujo Committee Hearings found that the usual margin requirement was 10 to 15 percent. In its report the Pujo Committee, as did the earlier Hughes Committee, proposed that legislation be enacted to require margins of at least 20 percent on stock purchases [19, pp. 281, 312-13].

Robert Sobel used an example that suggested margins on bond purchases were usually 50 percent in the late 19th century and implied that few people bought on margin prior to the First World War [22, pp. 254-55]. However, this is not consistent with the evidence from the Commercial and Financial Chronicle, the Hughes Committee, and the Pujo Committee hearings.

During World War I there were attempts to direct credit toward the more "essential" credit demands. A subcommittee on money rates of the New York Liberty Loan Committee ruled that "... banks should require a margin of thirty percent on collateral loans made to stockbrokers where an average of twenty percent had previously been required" [1, p. 50].

Sobel suggested that margins were as low as 10 percent from the midtwenties through 1929 [23, pp. 29, 74-75]. Joseph S. Davis noted that through 1927 and into 1928 margins were as low as 20 percent or even 10 percent "... for favored customers ... and even these margins were not rigidly enforced as the market rose" [8, p. 99]. These margin requirements appear to be essentially the same as those that had generally prevailed since the turn of the century.

There seems to be general agreement that margin requirements were rising from either late 1928 or early 1929, through September of 1929. Benjamin H. Beckhart, writing in 1931, said the normal margin requirement was 20 to 50 percent of the value of the security [2, p. 108]. According to Beckhart banks and brokers began raising margin requirements toward "... what was thought to be perfectly safe proportions ..." in late 1928, well before the collapse in security prices [2, p. 204]. A special New York Clearinghouse Committee was increasingly troubled by the stock market conditions in 1928. At their urging banks began requiring additional margins on brokers' loans and "... increasing rigor with respect to the diversification of collateral in every brokers' loan ..." [1, p. 214].

In October of 1928 The Journal of Commerce printed a letter sent by one brokerage house to all of its clients outlining the new margin requirements.

It is generally recognized that conditions influencing security market movements are such at the present time that a higher degree of protection on accounts is necessary. Many banks are requiring larger margins on collateral loans as well as decreasing materially the figures at which they accept stocks, and many Stock Exchange houses are stiffening their margin requirements as they properly should for the better protection of their clients and themselves.

Therefore, our requirements will be as follows:

Securities selling below \$10, cash only; from \$10 to \$20, 50 per cent; \$20 to \$30, 10 points; above \$30, 30 per cent of the purchase price. On the following issues, exceptions to our general rule, requirements until further notice will be as indicated:

Forty per cent--General Motors, Byers Co., Collins & Aikman, Texas Gulf Sulphur, International Match preferred, Gold Dust.

Fifty per cent--American Linseed, Baldwin Locomotive, Case Threshing Machine, Curtiss Aero, duPont Co., Houston Oil Co., Vandium Corporation, Wright Aero, Brunswick Terminal, Warners Bros. "A. & B.," Fox Film, Pathe "A," Green Cananea, Radio Corporation of America.

No margin accounts will be opened on an initial deposit of less than \$1,000. New accounts require a deposit of cash or securities equal to requirements at the time at which the accounts are opened [2, p. 204].

In the first half of 1929 New York Stock Exchange questionnaires "... revealed that in that period margins averaged 40 percent on customers' accounts and 65 percent on debit balances with brokers" [8, p. 99]. Irving Fisher noted that in 1929 margin requirements were higher than ever before in the history of Wall Street [9, p. 46]. George Soule reported that a few months prior to the crash the brokerage houses raised their margin requirements to 50 percent [24, pp. 304-05]. Francis W. Hirst noted that during the late October crash,

... the situation was technically sounder than in previous panics and financial crises. The leading Wall Street brokers had taken precautions in good time, some months before the crash, by exacting from most of their clients fifty per cent margins in place of the 25 per cent which had previously been thought safe and sufficient-evidence, as a financial editor put it, that "however far experienced Wall Street may have been swept from its mental moorings by the market's seemingly boundless capacity to rise, its business instinct had warned it of what the end would be" [15, pp. 25-26].

In November of 1929 Mr. M. H. Cahill, President of the Plaza Trust Company of New York, said, "Every banker in the country had, for several months previous to the break in the market, been demanding from 40 per cent to 100 per cent margins on collateral loans" [9, p. 50]. The same phenomenon was noted in a September 1 article in *The New York Times* which suggested that "... the heavy margins required of trades by commission houses ..." had helped to assure participants of the strength of the market [23, pp. 127-28]. From the end of October to late November of 1929 margin requirements were generally lowered to 25 percent to ease conditions in the stock market [1, p. 222; 8, p. 46; 11, p. 125].

Were the Margin Requirements Low?

We now begin to address some questions concerning the relationship between the Great Bull Market of the twenties and margin purchases using brokers' loans. First, and most importantly, margin requirements were not unusually low during the period. Going into 1928 margin requirements appear to have been about the same as those that prevailed since the turn of the century (or even earlier). What was unusual were the <u>increases</u> in margin requirements beginning in late 1928 that raised those requirements "... higher than before in the history of Wall Street ..." by September of 1929 [9, p. 46].

We also question the perception that <u>low</u> margin brokers' loans accelerated the speculative buying and thus fed the boom in stock market prices, especially from late 1928 through September 1929. Beginning around October of 1928, margin requirements were rising toward extraordinarily high levels. <u>If</u> low margin requirements were an important factor in fostering a speculative boom

then this boom should have occurred in the years <u>prior to</u> 1928, not in 1928 and 1929.

There is no doubt that calls for additional margin did accelerate the decline in stock prices during the panic in the last week of October 1929. But this was not because margins were low since they were historically high. There is no evidence that purchases on margin were the factor <u>initiating</u> the decline in stock prices after the first week of September 1929, accelerating this decline in October, or causing the panics on October 24 and 29. In the latter stages of the panic some brokers temporarily waived margin requirements rather than sell the securities of clients who could not meet margin calls [9, pp. 241-42; 1, pp. 219-20]. The panic sales of securities as margin calls were made accelerated the decline in stock prices during the panic, but there is no evidence that the overall fall in prices was more than what it would have been without the end of October panic to speed up the process [13, p. 473].

Though the ability to purchase securities on margin obviously <u>facilitated</u> speculative transactions, no one has effectively demonstrated that this was a causal factor in the speculation. If the <u>level</u> of margin requirements was a factor in the speculative activity, then there should have been less, not more, in 1928 and 1929 since margin requirements were historically very high.²

What Was Different?

If the margin requirements were not low, but were in fact historically high, and margin purchasing had a very long history, what was different about margin purchases using brokers' loans at the end of the twenties? The first factor is the growth of brokers' loans that came from nonbank sources. The second is the rise in brokers' loans related to new issues and "undigested securities." These will be discussed in turn.

The practice of New York City banks acting as agents for interior banks to place loans with brokers was well established in the postbellum period. In fact, by the 1880s and 1890s it was common for the large Chicago banks to directly place their call loans with the brokers rather than have New York City banks act as agents [16, pp. 103-04; 12, pp. 100-102].

The practice of wealthy individuals, other brokers, and nonbank corporations lending temporarily idle funds to the brokers for margin purchases was certainly established by World War I. Table 1 gives the total brokers' loans and sources of those loans from 1919 through 1930. The share of brokers' loans

²In some respects the "frenzied" activity on the New York Stock Exchange in 1928 and 1929 has been overstated. The turnover rate in 1929 was 119.45 percent while it was 133.38 percent in 1928. However, the turnover rates in 1925, 1926, and 1927 were 98.64, 83.91, and 93.47 percent respectively. (Calculated from [7, pp. 114-116, 144].) The turnover rate in 1920 and 1907 was 160 percent and the turnover rate in 1901 was an astounding 301 percent [23, p. 123].

TABLE 1 SOURCES OF BROKERS' LOANS ON THE NEW YORK STOCK EXCHANGE

			Percentage Shares							Percentage	
				Out-						Out-	
			NYC	side					NYC	side	
Date		Total ^a	Banks	Banks	Others	Date		Total a	Banks	Banks	Others
1919	3-31	1,060	52.83	18.87	28.30	1925	3-31	2,420	42.98	28.93	28.10
	6-30	1,510	50.99	22.19	26.82		6-30	2,660	43.23	28.95	27.82
	9-30	1,590	48.43	24.53	27.04		9-30	2,930	36.18	32.43	31.40
	12-31	1,610	44.41	26.09	29.50		12-31	3,550	40.85	29.58	29.58
1920	3-31	1,420	32.75	27.82	39.44	1926	3-31	3,000	34.33	30.17	35.50
	6-30	1,400	31.79	21.43	46.79		6-30	2,930	36.18	26.62	37.20
	9-30	1,350	27.04	22.22	48.74		9-30	3,220	29.81	31.06	39.13
	12-31	1,080	36.11	26.39	37.50		12-31	3,290	35.26	25.23	39.51
1921	3-31	1,020	31.86	28.43	39.71	1927	3-31	3,290	29.18	27.66	43.16
	6-30	1,000	36.50	25.50	38.00		6-30	3,570	31.65	27.17	41.18
	9-30	990	37.37	25.76	36.87		9-30	3,910	29.92	27.11	42.97
	12-31	1,190	45.80	22.27	31.93		12-31	4,430	34.99	23.70	41.31
1922	3-29	1,300	44.23	23.85	31.92	1928	3-31	4,640	27.37	23.06	49.57
	6-28	1,670	47.31	22.16	30.54		6-30	4,900	22.04	19.59	58.37
	9-30	1,820	46.98	24.45	28.57		10-3	5,510	15.97	18.51	65.52
	12-31	1,860	50.81	22.04	27.15		12-31	6,440	25.47	14.21	60.33
1923	3-31	2,000	43.50	26.50	30.00	1929	3-27	6,825	16.12	11.36	72.52
	6-30	1,730	46.24	24.28	29.48		6-29	7,070	19.24	9.41	71.36
	9-30	1,520	39.47	27.63	32.89		10-4	8,525	12.84	9.27	77.89
	12-31	1,580	45.57	25.95	28.48		12-31	4,110	29.20	11.19	59.61
1924	3-31	1,690	43.79	26.63	29.59	1930	3-27	4,550	32.42	19.01	48.57
	6-30	1,740	54.60	21.84	23.56		6-30	3,795	49.67	12.65	37.68
	9-30	1,970	54.31	22.34	23.35		9-24	3,670	46.73	20.71	32.56
	12-31	2,230	51.57	23.77	24.66		12-31	2,105	60.81	10.21	28.98

^aTotal brokers' loans in thousands of dollars. Source: [4, Table no. 139, p. 494].

from nonbank sources rose sharply in 1920 and declined during 1921. From 1922 through 1925 this share generally was in the 25 to 30 percent range. After 1925 it began to rise, especially in 1928 and 1929, and reached nearly 78 percent of all

brokers' loans in October of 1929. On September 17, 1929 the distribution of brokers' loans for others as reported by the six largest member banks in New York City was as follows: corporations, 56 percent; individuals, 20 percent; investment trusts, 14 percent; and foreign, 10 percent. This understates foreign participation since, apparently, much of the foreign lending was through private banks rather than member banks [2, pp. 167-69].

Interest rates on call loans were rising in 1928 and 1929 and by the spring and summer of 1929 were generally in the 10 to 15 percent range. These high rates of return induced corporations to place currently idle funds as call loans on the stock market. In his analysis Beckhart concluded that the buildup of the corporate cash that was lent to brokers' in the 1927-1929 period came primarily from retained corporate earnings and, to a lesser extent, from the sale of securities [2, pp. 169-80]. "Instead of investing these funds in securities or in the enlargement of plant equipment, the owners loaned them to brokers where they probably realized a higher return than if utilized in savings" [2, pp. 193-94; 25, pp. 113-114]. This does not appear to be typical of earlier periods.

This diversion of funds into brokers' loans by corporations represented an alternative use of corporate retained earnings. This use increasingly came to compete with investment in securities and investment in plant and equipment. To the extent that corporations diverted funds into brokers' loans and reduced investment in plant and equipment it could have had both short- and long-run macroeconomic implications for the economy. In the short run it reduced investment spending and aggregate demand, while in the long run the capital stock would be lower that it otherwise would have been, retarding long-term economic growth.

John T. Flynn [10] reported on loans made by a group of large corporations to brokers in the New York call loan market in 1929. He listed 20 firms that made from 6 to over 1,500 loans each during the year. The peak amount advanced ranged from \$500,000 to \$157,579,000. The Standard Oil Co. of New Jersey had an average of \$86,850,000 outstanding to 96 brokers during September of 1929.

This diversion of funds from investment in plant and equipment into brokers' loans may be an overlooked cause of the decline in gross private domestic investment beginning in late 1928. The attractive returns on this use of the funds was due in part to the speculative boom and also contributed to that boom. This also does not seem to be typical of earlier periods.

A second difference between the end of the twenties and earlier periods is indicated by Table 1, which shows that the level of brokers' loans rose sharply in late 1928 and 1929. In addition to providing loans to individuals speculating in existing securities, brokers' loans were used in the initial sale of securities. W. H. Steiner described this use and stated that brokers' loans were used "... to enable investment bankers and dealers in securities to carry new securities pending their sale to investors" [25, p. 101; also 14, pp. 5, 8, 9].

This was usually part of what was called the "seasoning" process to carry the securities as they were sold to the public. Transactions were often undertaken on a "when issued" basis with the date of payment, when the "interim receipts" were delivered, usually several weeks after the offering subscription date. In the interval purchasers could "take a ride" on the new issues in the expectation that the price would advance. If, however, during this period the price declined the securities could be dumped back upon the syndicate. If conditions were unfavorable syndicates might have to buy back a large proportion of the whole issue and these repurchases were also financed with brokers' loans.

In an address to the American Acceptance Council on November 11, 1929, Fred I. Kent, Director of the Bankers' Trust Company of New York discussed a number of factors which he thought brought about the crash of the stock market. One was "undigested securities" or new securities not yet sold to the public. Kent argued that the rapid creation and issuance of new security issues in the first three quarters of 1929 were 50 percent larger than the amount which the national income could support [9, p. 48].

Irving Fisher thought this was an overstatement, but believed "... that investment trust securities had been created and issued more rapidly, at least, than these securities could be fully substituted; many were not yet listed on the Stock Exchange so as to become as readily negotiable as the securities they had displaced" [9, p. 53]. This, he believed, was a factor in the panic as did Benjamin Beckhart. "Before the stock market collapse the volume of undigested securities, representing in the main stocks floated by trading corporations, investment trusts, etc., probably came to sizeable totals" [2, p. 118; 25, p. 103].

Table 2 reports new security issues for the 1919-1930 period. As can be seen there was an enormous increase in common stock issues in 1929, primarily for new capital issues. Beckhart's data show that the largest issue of new securities came in September of 1929 [2, Chart 13, p. 119]. It would appear, therefore, that the increases in brokers' loans in 1929, and particularly September and October of that year, were related to the increasing amount of "undigested securities." Investment firms increasingly used funds placed in the market to carry the new securities not yet sold to the public in an effort to maintain prices. As the economy weakened pressure on stock prices increased and the investment firms tried to stabilize prices by repurchasing shares of recently floated stocks. The use of borrowings by brokers to carry undigested securities is similar to the actions of commodities brokers' during the period who attempted to shore up commodity prices by similar means. In this sense the increase in brokers' loans was related to problems developing in the long bull market and did not reflect increased demand for existing securities by speculators.

³We thank Larry Neal for suggesting this similarity to us.

TABLE 2
NEW SECURITY ISSUES (Millions of current dollars)

	For	New Cap	ital	Fo	r Refundi:		Total	
Year	Bonds	·		Bonds		-		Bonds Notes Stocks
	and	Pref. Stocks	Common Stocks	and Notes	Pref. Stocks	Common Stocks	Total: Stocks	
	Notes							
1919	810	726	710	312	67	43	1,546	2,668
1920	1,561	462	540	189	21	15	1,038	2,788
1921	1,436	71	194	558	4	6	275	2,270
1922	1,645	293	277	684	40	11	621	2,949
1923	1,976	335	324	454	72	5	736	3,165
1924	2,200	318	511	455	28	8	865	3,521
1925	2,452	594	558	523	43	52	1,247	4,223
1926	2,667	509	578	687	34	99	1,220	4,574
1927	3,183	874	600	1,586	180	84	1,738	6,507
1928	2,385	1,149	1,812	1,054	248	282	3,491	6,930
1929	2,078	1,517	4,407	542	178	655	6,575	9,376
1930	2,980	412	1,091	451	9	14	1,526	4,957

Sources: [4, Table No. 137, p. 487].

CONCLUSION

In this paper we have examined the generally accepted view of margin purchases and brokers' loans in the Great Bull Market of the twenties and the Great Stock Market Crash of late October 1929. The perception that margin requirements were extremely low during the twenties, and particularly during 1928 and 1929, has been shown to be wrong. We argue that brokers' loans played a facilitating role, but not an initiating role, in the boom and crash.

The growing share of brokers' loans provided by "others" in 1928 and 1929 is important because it indicates that there were problems elsewhere in the economy. Clearly some firms were scaling back investment plans to invest retained earnings and other cash in higher yielding call loans in the stock market. Finally, the rise in the level of brokers' loans in late 1929 prior to the crash seems to have been related to a growing amount of "undigested new securities," rather than an increase in transactions in existing securities. These points suggest some

directions for future research on the Great Bull Market and Crash of the twenties and its relationship to the Great Depression.

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