

2012

A Study in Market Micromanagement: The Asymmetrical Effects of the 2008 Short Sale Ban on Stocks With and Without Traded Options

James W. Weyerhaeuser
Claremont McKenna College

Recommended Citation

Weyerhaeuser, James W., "A Study in Market Micromanagement: The Asymmetrical Effects of the 2008 Short Sale Ban on Stocks With and Without Traded Options" (2012). *CMC Senior Theses*. Paper 487.
http://scholarship.claremont.edu/cmc_theses/487

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CLAREMONT McKENNA COLLEGE

**A STUDY IN MARKET MICROMANAGEMENT:
THE ASYMMETRICAL EFFECTS OF THE 2008 SHORT SALE BAN
ON STOCKS WITH AND WITHOUT TRADED OPTIONS**

SUBMITTED TO:

PROFESSOR RICHARD C. K. BURDEKIN

AND

PROFESSOR JANET K. SMITH

AND

DEAN GREGORY HESS

BY

JAMES WALKER WEYERHAEUSER

FOR SENIOR THESIS

FALL 2012

DECEMBER 3, 2012

Acknowledgements

First and foremost I would like to thank my family, without all of you I would never have had the opportunity to write this thesis. You all knew long before I did what going to a fantastic school like this would mean for me down the road. You refused to let me take the easy way out in anything I did, without that push I never would have made it here. Thank you to **Sarah, David, Kaylee, Natalie and Tommy**. Special thanks to my mom, Sarah, for the countless hours assisting this paper in particular.

Professor Janet Smith – I grow more and more appreciative of your research methods class as I watch my peers scramble to complete their thesis in the final days. Day or night your responses are near instant when we run into trouble.

Professor Richard Burdekin – Thank you for your constant understanding, you agreed to be my reader long before I could articulate a topic. Your flexibility has helped me more than once this semester.

Professor Lisa Meulbroek – Thank you for being my advisor over the last few years, answering any stupid questions I may have had at the time.

Gregory Cohen – Thank you for the use of your options data, and for providing a road map for this paper.

Tejas Gala – Your sage wisdom is always welcome late at night in Ryal.

Abstract

This study provides an empirical analysis of the 2008 short sale ban. The evidence suggests that the presence of tradable options plays a crucial role in determining the effect of a short sale ban. Results show that if there are no traded options on a stock, the short sale ban brought abnormal returns of roughly +8%. However if there are traded options on a stock, the market maker exemptions nullify the positive effects of the ban. Furthermore, for the banned stocks that do experience positive abnormal returns during the ban, the lifting of the ban causes a prompt reversal of these returns. Findings suggest short sale bans cause an underrepresentation of negative opinions for as long as the ban lasts and that the presence of tradable options eliminates that underrepresentation by providing an alternative for pessimistic investors.

“The emergency order temporarily banning short selling of financial stocks will restore equilibrium to markets” (Christopher Cox, SEC Chairman, 19 September 2008, SEC News Release 2008-211).

“Knowing what we know now, I believe on balance the commission would not do it again. The costs (of the short-selling ban on financials) appear to outweigh the benefits.” (Christopher Cox, telephone interview to Reuters, 31 December 2008).

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I. Motivation

There is a great deal of academic research around the 2008 short sale ban. Research generally focuses on the ban's effect on market quality, as measured by a number of metrics, primarily stock price volatility, and liquidity (determined by bid-ask spreads). There is also a great deal of research on the options market during the short sale ban, again focusing on option price volatility and bid-ask spreads. There is a seemingly obvious dividing line within the banned stocks that has garnered very little academic attention. I intend to make this distinction. This paper will divide the 797 banned stocks into two groups: stocks with traded options, and stocks without traded options. Despite its lack of attention, this distinction proves to have dramatic implications in the context of a short sale ban.

II. Introduction

The fundamental root of pricing, in any context, is a balance of supply and demand; a balance of those who wish to sell and those who wish to buy. There is almost nothing priced more exactly than stocks. One of the critical reasons for this precision is the existence of short selling. Unlike most marketplaces, in the stock market one does not need to own something in order to sell it. This fundamental feature means that supply is not limited to those that already own the asset. If anyone can sell the asset, the market aggregates all of the opinions present, those that would choose to sell at this price and those that would choose to buy at this price, regardless of current ownership. All those that would choose to sell form the supply, and all those that would choose to buy form the demand. The aggregate supply and demand curves intersect to determine the true equilibrium price.

Without short sales, the stock market would look like the market for any other good in which delivery is required immediately upon purchase. Take the market for hotdogs as an example. Only those who already have hotdogs can determine if the current price is a good price at which to sell hotdogs. If an outside observer sees the market for hotdogs and determines that they would like to sell hotdogs for that price then they must buy the already overpriced hotdogs first before they can sell them, hoping that the price continues to rise, or alternatively they can choose to sit out of the market. The

simple equities stock market would behave the same way as our theoretical hotdogs market if not for the existence of short sales.

If only current owners of an asset can sell, but anyone can buy, then there is a mismatch of opinions allowed in the marketplace. Restrictions on short sales only affect those with negative opinions about a stock. All positive opinions are present in the marketplace while only the portion of negative opinions associated with current stock ownership is present. This mismatch creates upward pressure on the stock price that would not be present if the negative investors who do not own the stock were still allowed to sell it, contributing to supply.

On September 18th, 2008, the SEC banned short sales of 797 financial stocks. If not for two key elements, this ban would have made the equities markets for these banned stocks behave just like our theoretical hotdog market. These key elements are the options market, and the market maker exemption.

There are a number of alternative investment strategies that an investor can employ to benefit from a decrease in stock price. For the most part these alternatives revolve around the options market, specifically puts and calls. A put is a contract that gives the purchaser the right to sell an asset at a predetermined price. A call contract gives the purchaser the right to buy an asset at a predetermined price. There are an extraordinary number of investment possibilities available through the buying and selling of puts and calls. The most relevant of these strategies is the synthetic short sale. To execute a synthetic short sale an investor buys at the money puts and sells at the money calls. Through this strategy an investor will receive a nearly identical payoff to a real

short sale. An investor would employ this strategy if he or she has negative opinions, meaning that he or she believes a stock price will decrease.

The second key element is the market maker exemption. Market makers are critical in a modern marketplace to preserve liquidity. Market makers must provide a customer with a price for a given security or derivative, even if the price is hard to determine at the time. In order to execute these trades, market makers must be able to simultaneously hedge the exposure created by the customer's trade. Short sales are often required for this hedge. If a negative investor creates the synthetic short sale mentioned in the previous paragraph with an options market maker, the market maker is left with the reverse of the negative investor's trade. The counterparty to a short sale, the buyer, is left with a long position in the stock; similarly, the counterparty to a synthetic short, the market maker, is left with a synthetic long position. The market maker cannot afford to simply take the other side of every trade. If he or she cannot pair two investors that wish to take opposite positions, then the market maker must hedge away all of the exposure created by the investor's position. Market makers make their money from the bid-ask spread, not from speculative bets that come from taking the other side of investor trades. This conservatism is the reason that the SEC could allow market makers to remain exempt from the short sale ban.

This study will examine the extent to which negative investors transferred their investments into the options market when short sales were no longer a possibility during the short sale ban. Abnormal options volume will be studied for this period along with the pre and post ban periods. The study will then test the effects of the removal of

pessimistic opinions on the share prices of banned stocks. This test will be done by separating the stocks with and without traded options, thereby separating the stocks still subject to market maker hedging. In theory the stocks with traded options will maintain the true price because the pessimistic opinions are brought to the marketplace in the form of hedging through the market maker. The market maker will have no reason to hedge in the stocks without traded options and thus their share prices will be allowed to inflate because of the removal of pessimistic investors.

III. Historical Context

In 2007 and 2008 the world went through what came to be known as the global financial crisis, widely believed to be the worst financial crisis since the Great Depression. The crisis resulted in the total collapse of two of the largest banks in the world, government bailout of the banking industry, and downturns in stock markets around the globe.

This worldwide financial crisis resulted in significant erosion of confidence in the banking system. In the summer of 2008 the Securities and Exchange Commission began a series of market restrictions intended to protect the banking industry from excessive downward pressure on share prices. To that end, the SEC first took aim at the use of the naked short sale. Unlike a regular short sale, a naked short sale does not require the parties involved to go through the usual borrowing procedures prior to the sale and so can produce significantly more risk. One of the resulting restrictions was the July 15th ban on naked short selling that the SEC imposed on 19 of the largest at-risk financial stocks, including the likes of Fannie Mae, Freddie Mac, and the largest of the commercial and investment banks. The ban was extended once and then allowed to expire on August 12th. On September 17th the SEC placed new restrictions, banning naked short selling in all U.S. stocks. The following day the U.K.'s Financial Services Authority temporarily banned all short sales in 32 financial stocks.

That same day, September 18th, 2008, the Securities and Exchange Commission announced that it would widen the restrictions and temporarily ban all types of short selling in 799 financial stocks (the actual list released contained only 797). This more significant ban took effect the following morning, September 19th. Initially the ban was to cover 10 trading days, but was later extended to 14. September 19th saw bans on short selling of financial stocks not only in the U.S. but in the U.K., Canada, Ireland, and Luxembourg as well. Within the next few days all of the largest European countries banned short selling of financial stocks. Australia and Spain banned short selling of all stocks.

The SEC cited the crisis of confidence as the main reason for the ban and restoring price stability as the primary goal. The SEC press release stated;

Given the importance of confidence in our financial markets as a whole, we have become concerned about recent sudden declines in the prices of a wide range of securities. Such price declines can give rise to questions about the underlying financial condition of an issuer, which in turn can create a crisis of confidence, without a fundamental underlying basis. This crisis of confidence can impair the liquidity and ultimate viability of an issuer, with potentially broad market consequences. Our concerns are no longer limited to the financial institutions that were the subject of the July Emergency Order.¹

The SEC hoped to stop the rapid drops in financial stock prices until the condition of the overall market improved. They believed short sales to be one of the primary causes of

¹ Harmon, Florence E. "SEC Halts Short Selling of Financial Stocks to Protect Investors and Markets." (*Press Release No. 2008-211*). N.p., 18 Sept. 2008. Web. 30 Aug. 2012. <<http://www.sec.gov/news/press/2008/2008-211.htm>>.

the rapid drops that had been experienced. The emergency ban was put in place to “prevent short selling from being used to drive down the share prices of issuers even where there is no fundamental basis for a price decline other than general market conditions.”²

A critical component to the short sale ban was the market maker exemption. Originally, the market maker exemption was a one day exemption for bona fide market making and hedging activities, intended to limit price swings and volatility. Market makers demonstrated their necessity for short selling, and the exemption was extended to last the duration of the ban. To maintain the market makers’ ability to do business, the exemption was extended for “any person that is a market maker that effects a short sale as part of bona fide market making and hedging activity related directly to bona fide market making in derivatives on the publicly traded securities of any Included Financial Firm.”³

The original ban on the short-selling of 797 financial stocks was to terminate on October 2nd, 2008 at 11:59pm, but new developments came about during the ban. According to Reuters, Congress was trying to “hash out a plan to allow the Treasury Department to buy distressed assets from financial firms -- a move designed to thaw frozen credit markets.”⁴ Instead of allowing the ban to expire in the midst of these negotiations, the SEC extended the ban until 11:59pm on the third business day after the enactment of the anticipated legislation. If legislation faltered or was delayed, the ban

² Harmon, Florence E. "SEC Halts Short Selling of Financial Stocks to Protect Investors and Markets." (*Press Release No. 2008-211*). N.p., 18 Sept. 2008. Web. 30 Aug. 2012. <<http://www.sec.gov/news/press/2008/2008-211.htm>>.

³ IBID

⁴ Younglai, Rachele. "SEC Extends Short Sale Ban to Give Congress Time." *Reuters*. Thomson Reuters, 02 Oct. 2008. Web. 15 Nov. 2012. <<http://www.reuters.com/article/2008/10/02/us-financial-sec-extension-idUSTRE49107K20081002>>.

was not to extend beyond 11:59pm on October 17th, 2008. This legislation, known to most as TARP, Troubled Asset Relief Program, was made into law on October 3. The short sale ban expired after the market closed the following Wednesday, October 8th. In all, the ban lasted 14 trading days, spanning from September 19th until October 8th, 2008.

IV. Hypothesis

I examine two hypotheses in this paper. First I hypothesize that during the emergency short sale ban, lasting from 9/19/2008 until 10/8/2008, there was significant substitution into the options market. When unable to short the underlying stock, investors can receive a very similar return through a synthetic short sale. So it is hypothesized that when short sales are banned, substitution into synthetic short sales will cause a significant increase in options volume during the ban period. This trend will reverse once the ban is removed.

Second, I hypothesize that during the ban period banned stocks without traded options will experience abnormally high returns relative to the market because of the lack of pessimistic opinions in the marketplace. Because registered market makers were exempt from the short selling ban, they would continue to bring pessimistic opinions to the marketplace through hedges. Only 277 of the 797 stocks subject to the ban had tradable options, and therefore short sale hedging by market makers only occurs in those 277 stocks. For this reason I hypothesize abnormal returns for the remaining 520 banned stocks.

V. Literature Review

The most relevant previous research is a paper by Figlewski and Webb (1993) done before the 2008 short sale ban. Figlewski and Webb provide empirical evidence that the presence of tradable options “contributes to both transactional and informational efficiency of the stock market by reducing the effect of constraints on short sales.”¹ This theory suggests that synthetic short sales are a viable alternative to regular short selling, and that the presence of the options required for synthetic shares will reduce the upward pricing bias created by short sale restrictions. Figlewski and Webb also find that the presence of tradable options increases the amount of short selling in the underlying shares. This conclusion supports both of my theories, that there will be significant substitution to synthetic short sales and the presence of tradable options will affect the price impact of a short sale ban.

There are numerous studies that assess a short sale ban’s impacts on stock price and volatility. One of the most relevant of these is a study by Battalio and Schultz (2011). They find that the short sale ban is associated with “dramatically increased bid ask spreads for options on banned stocks.”² They also find that synthetic share prices fall significantly below actual share prices for stocks subject to the ban. Finally, and most

¹ Figlewski, Stephen and Gwendolyn P. Webb, 1993, Options, Short Sales, and Market Completeness, *The Journal of Finance*, Volume 43, No. 2.

² Battalio, Robert and Paul Schultz, 2011, Regulatory Uncertainty and Market Liquidity: The 2008 Short Sale Ban’s Impact on Equity Option Markets, *The Journal of Finance*, Volume 66, No. 6.

important to my research, is their finding that “prices of the underlying stock become less accurate or efficient when bearish investors are prevented from short selling.”³ I intend to examine this assertion and find the extent to which stock prices are inflated when many of the bearish investors are removed.

The same question of short sale bans is examined by Chang, Cheng, and Yu (2007) in their research of the Hong Kong market. Short sales in Hong Kong are only permitted on particular stocks so this study revolves around a stock’s addition to the permissible list. Supporting my hypothesis about the U.S. market, they find that “short-sale constraints tend to cause stock overvaluation.”⁴ This finding is based on the same principle as Battilio and Shultz (2011), that when short-sales are restricted, pessimistic investors are forced to sit out of the marketplace.

Figlewski (1981) argues the same point: that short selling restrictions are detrimental to market quality because they “have an asymmetric impact on investors with favorable and unfavorable information.”⁵ If those with positive opinions can buy and those with negative opinions can sell short, information differences offset each other in the aggregate and the market can establish a fair price. If those with unfavorable opinions must sit out, the market gives disproportional weight to optimistic return expectations, thereby creating upward bias in pricing.

³ Battilio, Robert and Paul Schultz, 2011, Regulatory Uncertainty and Market Liquidity: The 2008 Short Sale Ban’s Impact on Equity Option Markets, *The Journal of Finance*, Volume 66, No. 6.

⁴ Chang, Eric C., Joseph W. Cheng, and Yinghui Yu, 2007, Short Sale Constraints and Price Discovery: Evidence from the Hong Kong Market, *The Journal of Finance*, Volume 62, No. 5.

⁵ Figlewski, Stephen, 1981, The Informational Effects of Restrictions on Short Sales: Some Empirical Evidence, *The Journal of Financial and Quantitative Analysis*, Volume 16, No. 4.

A working paper by Bohl, Reher, and Wilfling (2011) studies the short-selling constraints on stock price volatility in the German market. Bohl, Reher, and Wilfling find that short-selling restrictions increase the price volatility of the stocks subject to the restrictions, because they “limit the ability of the investors to find the fundamental price.”⁶ Lobanova, Hamid, and Prakash⁷ (2010) also find short sale bans are detrimental to market quality because of the decrease in liquidity and increase in volatility. While a reduction in volatility during times of great panic is commonly put forward as the central purpose of short selling restrictions, all of these studies just named are contrary to that belief. Most of the opposition to this claim of limiting volatility revolves around the “asymmetric impact” discussed by Figlewski (1981) that results from limiting the participation of pessimistic investors. Many believe that this limitation results in a price more unstable than before the short selling restrictions.

Research on this topic is by no means one-sided. Appel and Fohline (2010), along with many others, reach the opposite conclusion: that short-selling restrictions are a great tool in times of panic. In their multi country study of short sale bans, Appel and Fohline find that short-sale bans improve market liquidity and “generally succeed in lowering volatility.”⁸ They support Diamond and Verrecchia⁹ (1987) and determine that overall short-sale bans are a useful tool in times of crisis because of an assumption about investor

⁶ Bohl, Martin T., Gerrit Reher, and Bernd Wilfling, 2011, Short-selling Constraints and Stock-return Volatility: Empirical Evidence from the German Stock Market, working paper, Westfälische Wilhelms-Universität Münster.

⁷ Loanova, Olesya, Shahid S. Hamid, and Arun J. Prakash, 2010, The Impact of Short-Sale Restrictions on Volatility, Liquidity, and Market Efficiency: The Evidence from the Short-Sale Ban in the U.S. <<http://ssrn.com/abstract=1571601>>.

⁸ Appel, Ian and Caroline Fohlin, 2010, “Shooting the Messenger?” The Impact of Short Sale Bans in Times of Crisis, working paper, The Wharton School, University of Pennsylvania.

⁹ Diamond, Douglas W. and Robert E. Verrecchia, 1987, Constraints on short selling-selling and asset price adjustment to private information, *Journal of Financial Economics*, 18, 277-311.

rationale. Diamond and Verrechia argue that if all investors are rational, short sale bans should not have an effect on price. When short sales are banned, the reaction to negative information will simply be slower than the reaction to positive information but the negative price movements will still take effect. Bailey and Zheng¹⁰ (2011) also find that short selling restrictions have stabilizing effects on prices during the periods of crisis or panic.

A few studies assess the differing impacts on stocks with or without tradable options, or the differing impacts associated with company size, which is often highly correlated to the presence of tradable options. Beber and Pagano (2011) studied short-selling constraints around the world. They used panel data to determine that bans are harmful to liquidity, “particularly for stocks with small capitalization and no listed options.”¹¹ This assertion suggests that the presence of synthetic short sales is a significant factor determining liquidity during times of restrictions.

Boehmer, Jones, and Zhang (2011) studied the 2008 ban in the U.S. and the effect on market quality, as measured by bid ask spread, price impacts and intraday volatility. They find that the effects are highly concentrated in larger stocks. “Shorting activity in large-cap stocks subject to the ban drops by about 77%.”¹² Boehmer, Jones and Zhang ascertain that the remaining short sales are largely market-making firms that are exempt

¹⁰ Bailey, Warren and Lin Zheng, 2012, Banks, Bears, and the Financial Crisis, *Journal of Financial Services Research*, forthcoming.

¹¹ Beber, Alessandro and Marco Pagano, 2011, Short-Selling Bans around the World: Evidence from the 2007-09 Crisis, *The Journal of Finance*, forthcoming.

¹² Boehmer, Ekkehart, Charles M. Jones, and Xiaoyan Zhang, 2011, Shackling Short Sellers: The 2008 Shorting Ban, working paper, Mays Business School, Texas A&M University.

from the restrictions and that even these market makers suffered severely increased costs associated with shorting.

Hayunga, Holowczak, Lung, and Nishikawa (2012) study the divergence between equity assets and option implied synthetic shares. They find a “consistently positive relation between the level of stock mispricing and violations in the upper-boundary condition using derivatives.”¹³

Figlewski and Webb (1993) summarize all of these theories related to my study in their paper written prior to the 2008 ban.

Introducing options trading can potentially reduce or even eliminate the informational effect of short sales constraints, by providing alternative trading strategies for investors with unfavorable information to sell short *indirectly*. For example, when a put is purchased from an options market maker he will normally hedge by shorting the stock, and perhaps buying a call also to turn the position into a reverse arbitrage. The put buyer’s desire to sell the stock is transformed through the options market into an actual short sale by a market professional who faces the lowest cost and fewest constraints. Thus the increase in transactional efficiency makes possible an increase in informational efficiency as well.¹⁴

¹³ Hayunga K. Darren, Richard D. Holowczak, Peter P. Lung, and Takeshi Nishikawa, 2011, Derivatives Traders’ Reaction to Mispricing in the Underlying Equity, *Journal of Banking & Finance*.

¹⁴ Figlewski, Stephen and Gwendolyn P. Webb, 1993, Options, Short Sales, and Market Completeness, *The Journal of Finance*, Volume 43, No. 2.

In general, existing literature such as the above supports my theory that a short sale ban will cause substitution to the options market and that the presence of tradable options will mitigate the effect of the ban by providing an outlet for pessimistic investors.

VI. Data

The time period for this study extends from January 1st, 2008 until December 31st 2008. This time is then divided into three sub categories: pre ban, January 1st through September 18th, during ban, September 19th through October 8th, and post ban, October 9th through December 31st.

Securities in this study are divided into three groups; banned stocks with tradable options (277), banned stocks without tradable options (520), and the portion of the S&P 500 that was not subject to the ban (441) which is to be used as a control group. Daily stock prices for the entire length of the study were downloaded from the Center for Research in Security Prices (CRSP) database.

Put and call volumes were also collected for the 277 banned stocks with exchange traded options and for the S&P 500 stocks with exchange traded options. Due to the time period of this study, this information was no longer available on Bloomberg, so it was acquired from Gregory Cohen (NYU '09), who had previously downloaded the information from a Bloomberg terminal.

Information regarding the sector of the financial industry for each of the stocks subject to the ban was downloaded from a Bloomberg terminal.

VII. Methodology

There are two analyses in this study. The first analysis is of option volume. I collected daily put and call volume for all 277 banned stocks with exchange traded options and for the non-banned S&P 500 stocks. I then aggregated the daily volumes to create a total daily volume for both puts and calls of each category. Average daily volume for the study period (full year 2008) is then determined for each of the two categories. Next the average put and call volume is determined for each of the three periods into which the study is divided: pre-ban, ban, and post-ban. These averages are then compared to the category's year average to determine abnormal volume, defined as average period volume in excess of average yearly volume. T tests are then used to determine if the daily volumes are statistically different from one another from one period to the next. This is done for both banned stocks with traded options and for non-banned S&P 500 stocks.

The second analysis in this paper is of stock returns. Stock prices were gathered for three categories: banned stocks with traded options, banned stocks without traded options, and the non-banned S&P 500 stocks. Holding period returns are calculated for each individual stock in each of the three categories. As with the options analysis there are four holding periods in this study, the full year of 2008, the pre ban period, the ban period and the post ban period. Individual holding period returns are then aggregated for

each group to determine the return of each of the three categories during each holding period. All stocks are weighted equally, to give an average return, rather than a theoretical portfolio consisting of each group. The returns of each category are then compared to the other returns of the same holding period thereby determining excess return of one category over another category. T Tests are used to determine if the holding period returns of the three categories have a statistically significant difference from one another.

VIII. Results

i. Options Volume

This analysis examines the hypothesis that during the short sale ban, banned stocks with traded options would experience abnormally high options volume. Table 1 shows the average daily volume during each period for the 277 banned stocks with tradable options. Each period is then broken down into call volume, put volume, and total options volume. The options volume of the S&P 500 is also given as a control.

During the sample period, the S&P 500 saw total options volume changes of +1.35%, +6.93% and -5.87% before, during and after the ban. T tests show that none of these differences for total options volume are statistically significant from one another at any reasonable level. It can be concluded that during the period examined by this study, the year 2008, the S&P 500 did not experience any significant volume shifts in total options traded arising from the short sale ban extending from September 19th 2008 until October 8th 2008.

There is one period during the study that shows a statistical difference in traded volume of strictly call option for the S&P 500. The period after the ban, from October 9th until December 31st shows a significant difference in call volume but not put volume. The post ban period experienced an abnormal decrease of 9.63% in traded call volume. This difference is statistically different from the ban period at the 10% significance level

and statistically different from the pre ban period at the 1% level. This small significant difference for strictly call options in one period is hardly substantial. For the most part it is observed that options volume in the non-banned S&P 500 is more or less constant.

As Figure 1 shows, the banned stocks with tradable options experienced abnormal volume of +27.47% during the fourteen day ban period. T-Tests show this difference to be statistically significant from the pre ban period at the 5% level and different from the post ban period at the 1% level. After the ban period, when short sales were permitted again, the formerly banned stocks saw a decrease in daily volume of -15.39% when compared to the year's average. This difference is significantly different from either period at the 1% level.

Before the ban, put volume on banned stocks appeared to be 5% above the year's average and 10% above the year's average during the ban. However it was found that these numbers for put volume before the ban and during the ban are not statistically different from one another. Put volume on the S&P 500 was in line with the year average before the ban and 10% higher after. As expected, this difference is not statistically significant because the non-banned S&P 500 stocks were not affected by the short sale ban.

After the ban, put volume on the banned stocks was 19.42% lower than average for the remainder of the year. This difference is significantly different from either of the other periods at any level. Not surprisingly, the non-banned S&P 500 stocks did not experience any significant change in put volume following the removal of the short sale ban.

As Figure 2 shows, call volume on the banned stocks before the ban was equal to the yearly average. During the ban, average volume was 46.57% higher than average. This difference is statistically significant at any level. Following the removal of the ban average call volume fell to 10.82% below average. This difference is also significant at any level. As Table 1 and Figure 3 show, the average number of contracts per day during the ban is 1,076,540. After the ban is lifted average call contracts per day fall to 654,966. Following the removal of the ban call volume on the S&P 500 also fell from 4.41% above average to 9.57% below average. This difference is significant at the 10% level.

As stated previously, my first hypothesis is that a ban on short sales results in substitution to the options market, specifically through synthetic short sales. Options volume during the ban was 27.47% higher than the yearly average. This strongly suggests that a great deal of substitution did indeed take place. However, the second aspect of my first hypothesis is that investors would use synthetic short sales as the substitute. A fundamental requirement to creating a synthetic short position is that the investor must hold an equal number of short calls as long puts; this strategy is what creates a payoff nearly identical to a real short position. During the ban period there was a 46.57% abnormal increase in call volume. Puts appeared to experience 10.62% positive abnormal volume but upon closer examination the put volume during the ban was not statistically different from the put volume prior to the ban. This is very surprising, and it is unclear why call volume would see a significant increase during the ban but not put volume. The 27.47% increase in options volume during the ban, which was statistically significant, was almost entirely due to an increase in call volume. It is clear that when short sales were banned there was significant substitution into the options market. That

substitution appears to be however into call options, not synthetic short sales. Massive substitution to synthetic short sales would point toward a one-for-one increase in both puts and calls, which was not the case. There was still an upward observational trend in put volume so I believe a large number of synthetic short sales still took place, but this does not appear to be where the vast majority of the substitution took place.

It is relevant to note that looking back the investors who bought call options during the ban and exercised them after the ban received the greatest payoff. However, investors buying call options are not the negative investors being prevented from short selling the stock. A negative investor would have sold calls hoping to benefit from a decrease in stock price.

ii. Stock Returns

This analysis evaluates the hypothesis that stocks subject to the short-sale ban that did not have tradable options would experience abnormally high returns during the ban period. These returns would be abnormally high compared with both banned stocks with traded options and with non-banned S&P 500 stocks.

Table 2 shows the returns over the four periods relevant to this study: the three periods previously defined as pre ban, during the ban and post ban as well as the year in its entirety. The returns for these four periods are shown for the three separate groups: banned stocks with tradable options, banned stocks without tradable options, and non-banned S&P 500 stocks.

For the entire sample period, the year 2008, the return on the control group, the non-banned S&P 500, was -37.61%. This is compared with -31.02% and -35.54% for banned stocks with and without traded options respectively. T tests show that the full year returns of the banned stocks with and without traded options are not statistically different from one another. Returns for banned stocks without options and the non-banned S&P 500 are not statistically different at any level either. The full year returns for the banned stocks with traded options and the S&P 500 are significantly different at the 5% level.

The ban lasted 14 trading days, during which the non-banned S&P 500 returned -23.70% with an average of -1.64% per day. Similarly, the banned stocks with tradable options returned -25.32% with an average of -1.42% per day. It is hypothesized that the short sale ban will have a minimal effect on the returns of banned stocks with traded options. T tests show that the -25.32% return by the banned stocks with tradable options is not statistically different from the non-banned S&P 500 return of -23.70%. This is a very clear lack of impact from the short sale ban. Throughout the ban period the banned stocks with traded options appear to be under the same price pressures that the non-banned S&P 500 stocks are under. The S&P stocks are still subject to regular short sale pressure coming from pessimistic investors, while the pessimistic investors of the banned stocks cannot sell short therefore the pessimistic opinions of the investors who do not already own the stock must be getting to the marketplace indirectly, and putting the appropriate downward pressure on the stock price.

The apparent presence of pessimistic investors in the market for banned stocks with tradable options can be explained by the market maker exemption. To maintain market liquidity, registered market makers were allowed to continue to short the underlying stock for the 797 stocks covered by the ban. These were not speculative bets; these were shorts made to hedge other exposures. As we saw in the study of options volume, when the ban was placed, investors were forced to move their pessimistic opinions into the options market as they could no longer short the stock themselves. The market maker then brings the negative opinions to marketplace in the form of a hedge and thus maintains the true price. And so these stocks where substitution to options is possible stay roughly in line with the non-banned S&P 500.

It is hypothesized that the ban will have the greatest effect on banned stocks without tradable options. These stocks returned -15.74% and an average of -.56% per day. This is compared with -25.32% for the banned stocks with options and -23.70% for the non-banned S&P 500. T tests show that the ban period returns for the banned stocks without traded options are significantly different from the returns of either of the other groups at any significance level.

The banned stocks without tradable options are not subject to the same series of events that transfers pessimistic investor opinions from the options market to the stock price. Because there is no alternative investment vehicle for the pessimistic investors during the ban, banned stocks without tradable options experienced returns roughly 10% higher than their peers with tradable options, and 8% higher than the non-banned S&P 500.

The results of the options volume analysis do not necessarily point to synthetic short sales as the primary reason for the increase in options volume. However the same series of events could still be the reason for the abnormal price increase. If an investor expresses their pessimistic opinions about the stock by selling calls, rather than establishing a full synthetic short position, the market maker who now holds these calls, could still hedge this exposure with a short sale under the rules of the short sale ban. Depending on the amount the market maker chooses to hedge, this could amount to a speculative bet by the market maker. Speculative bets are what the short sale ban intended to eliminate.

After the ban expired this trend was quickly reversed. In the period from October 9th until December 31st, the non-banned S&P 500 returned -4.68% and the banned stocks with tradable options actually gained 9.53%. The banned stocks without tradable options returned -7.93% during this period. T tests show that the returns of the banned stocks without tradable options and the S&P 500 are not significantly different from one another. The returns of the banned stocks with traded options are significantly different from either of the other groups at the 1% level. This is consistent with research done by Autore, Billingsley, and Kovacs (2011) who find a “valuation reversal whereby stocks with higher abnormal returns at the onset of the ban have lower abnormal returns at its removal.”¹ On average, the stocks without traded options had higher abnormal returns before the ban, and lower abnormal returns after.

¹ Autore, Don M., Randall S. Billingsley, and Tunde Kovacs, 2011, The 2008 Short Sale Ban: Liquidity, Dispersion of Opinion, and the Cross-section of Returns of U.S. Financial Stocks working paper, Florida State University.

At the same time as the lifting of the ban, Federal bailout packages were announced. Both of these were good news for the financial stocks covered by the ban. The banned stocks with traded options had lost 25.32% during the last 14 trading days. The good news put significant upward pressure on the low stock prices and this group experienced the only positive returns witnessed in any period by any group during this study. It may seem that the sign of confidence inherent in the lifting of the ban is of little significance when compared to a Federal bailout worth \$700. However, Autore, Billingsley, and Kovacs' (2011) determined that their findings regarding the valuation reversal "are robust when [they] control for firms most affected by TARP."²

The banned stocks without traded options did not benefit from this news in the same way their peers with traded options did. There are two possible explanations of this discrepancy. The banned stocks without traded options came out of the ban period overvalued, not undervalued, so the good news simply eased already negative opinions and stopped a stock price plummet. The second explanation is that the banned stocks without traded options were in general associated with smaller companies than stocks with traded options as company size is often an indicator of whether or not a stock will have traded options. Further inspection reveals that the average market capitalization of the banned stocks with traded options is \$7,017,200 while the average market capitalization of the banned stocks without traded options is only \$729,381. Further detail regarding market capitalization is given in Figure 5. The Federal bailouts were for companies deemed "too big to fail". The smaller companies would only be indirect

² Autore, Don M., Randall S. Billingsley, and Tunde Kovacs, 2011, The 2008 Short Sale Ban: Liquidity, Dispersion of Opinion, and the Cross-section of Returns of U.S. Financial Stocks working paper, Florida State University.

beneficiaries of this money and thus the announcement was of less significance to them, and consequently of less significance to their stock price.

Banned stocks both with and without traded options were also separated into sectors within the financial industry. According to Bloomberg, the banned stocks with options consist mostly of banks and insurance while the banned stocks without options consist mostly of banks and savings and loans. Particular sector weightings did not appear to have a significant impact on the holding period returns. Information regarding sector composition of the two groups can be found in Table 3.

IX. Conclusion

The empirical findings of this paper support the hypothesis that a ban on short sales causes significant substitution into the derivatives market. The results are in line with what Figlewski and Webb¹ (1993) would expect based on their study conducted more than a decade before the ban. They predict that the presence of options reduces the upward pricing bias created by a short sale ban. The upward pricing bias is clear in this study: the banned stocks without traded options experienced returns roughly 12% higher than the S&P 500. It is also clear that the presence of options mitigate this upward bias: the stocks with traded options experienced returns equal to the non-banned S&P 500. There is not enough evidence to determine that investor substitution was into synthetic short sales specifically, as put volume did not see a significant increase in volume. Further research could prove or disprove this using access to specific trades placed on each day, rather than aggregate volume.

The SEC's short sale ban appears to have been rendered useless. For stocks with tradable options, the positive effect which is the intended result of the ban never comes as the negative opinions are transferred through the market maker. For banned stocks without traded options, the positive effect only lasts as long as the ban. Consistent with

¹ Figlewski, Stephen and Gwendolyn P. Webb, 1993, Options, Short Sales, and Market Completeness, *The Journal of Finance*, Volume 43, No. 2.

Autore, Billingsley, and Kovacs² (2011), I find that positive abnormal returns during the ban were quickly reversed after its removal. The group that was positively affected by the ban, the banned stocks without traded options, do not experience returns above S&P 500 for the year. The banned stocks with options, which were even with the S&P 500 through the ban, did experience an annual return roughly 6.6% higher than the S&P 500, but this return came after a \$700 billion bailout fund. Without so many exemptions for market makers perhaps the ban could have had the intended effect, but hindering market maker's ability to hedge would have resulted in entirely different problems.

² Autore, Don M., Randall S. Billingsley, and Tunde Kovacs, 2011, The 2008 Short Sale Ban: Liquidity, Dispersion of Opinion, and the Cross-section of Returns of U.S. Financial Stocks working paper, Florida State University.

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XI. Appendix

Table 1: Options Volume

This table shows average put and call volumes for each of the four periods in the study. Percentages given are the period volume in relation to the yearly average for each item. Statistical significance is given by ***, **, and * meaning 1%, 5%, and 10% respectively.

Average Daily Volume	Banned Stocks With Traded Options			Non-banned S&P 500		
	Put	Call	Total	Put	Call	Total
Before Ban	877,196	733,483	1,610,679	2,344,022	2,836,065	5,180,088
During Ban	920,596	1,076,540	1,997,136	2,582,875	2,882,450	5,465,325
After Ban	670,648	654,966	1,325,614	2,314,513	2,496,597	4,811,110
Total Period	832,247	734,466	1,566,713	2,350,474	2,760,809	5,111,284
Difference from Yearly Average	Put	Call	Total	Put	Call	Total
Before Ban	5.40%	-0.13%	2.81%	8.48%	2.73%	1.35%
During Ban	10.62%	46.57%***	27.47%**	9.89%	4.41%	6.93%
After Ban	-19.42%***	-10.82%***	-15.39%***	-1.53%	-9.57%*	-5.87%
Total Period	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Figure 1: Abnormal Options Volume

This Figure shows aggregate abnormal put and call volume for banned stocks compared with aggregate abnormal put and call volume for non-banned S&P 500 stocks. Abnormal volume is defined as the volume above the daily average for the full year.

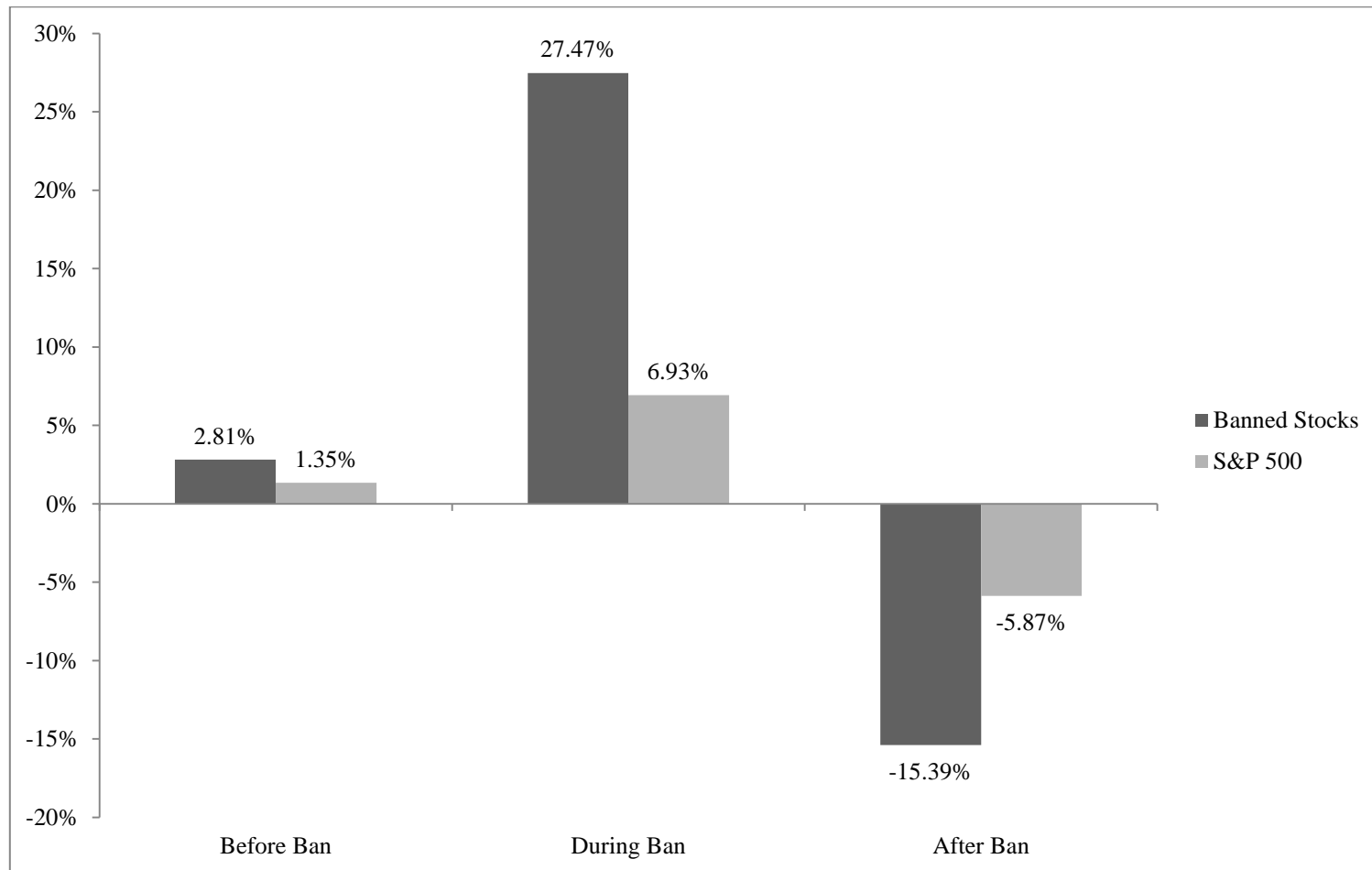


Figure 2: Abnormal Put and Call Volume for Banned Stocks

This figure shows the abnormal put and call volume experienced by the banned stocks before, during, and after the ban on short sales. Abnormal volume is defined as volume above the yearly average.

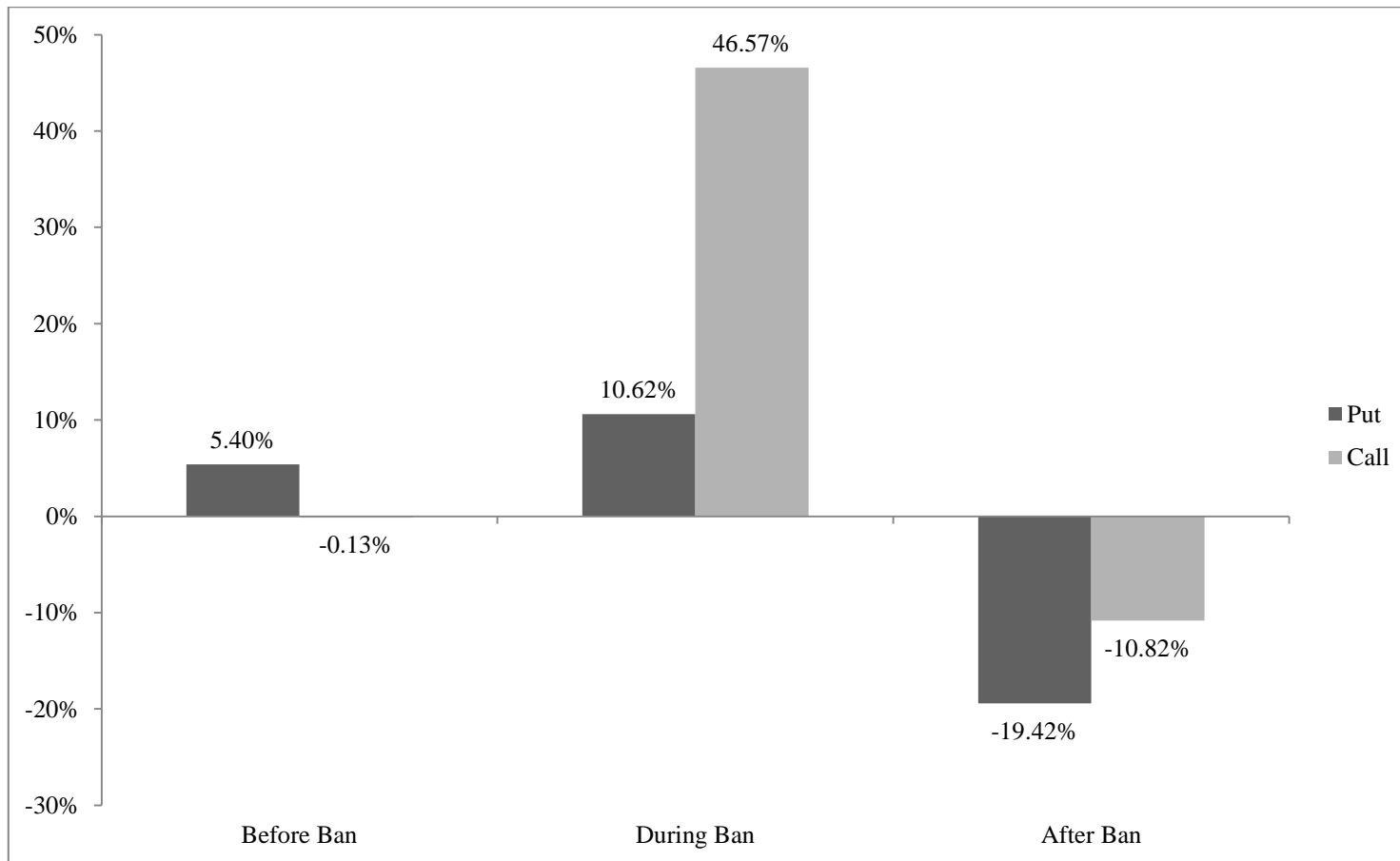


Figure 3: Average Daily Put and Call Volume

This figure shows the average daily put and call volume for each of the four periods, before the ban (1/2/08 – 9/18/08), during the ban (9/19/08 – 10/8/08), and after the ban (10/9/08 – 12/31/08).

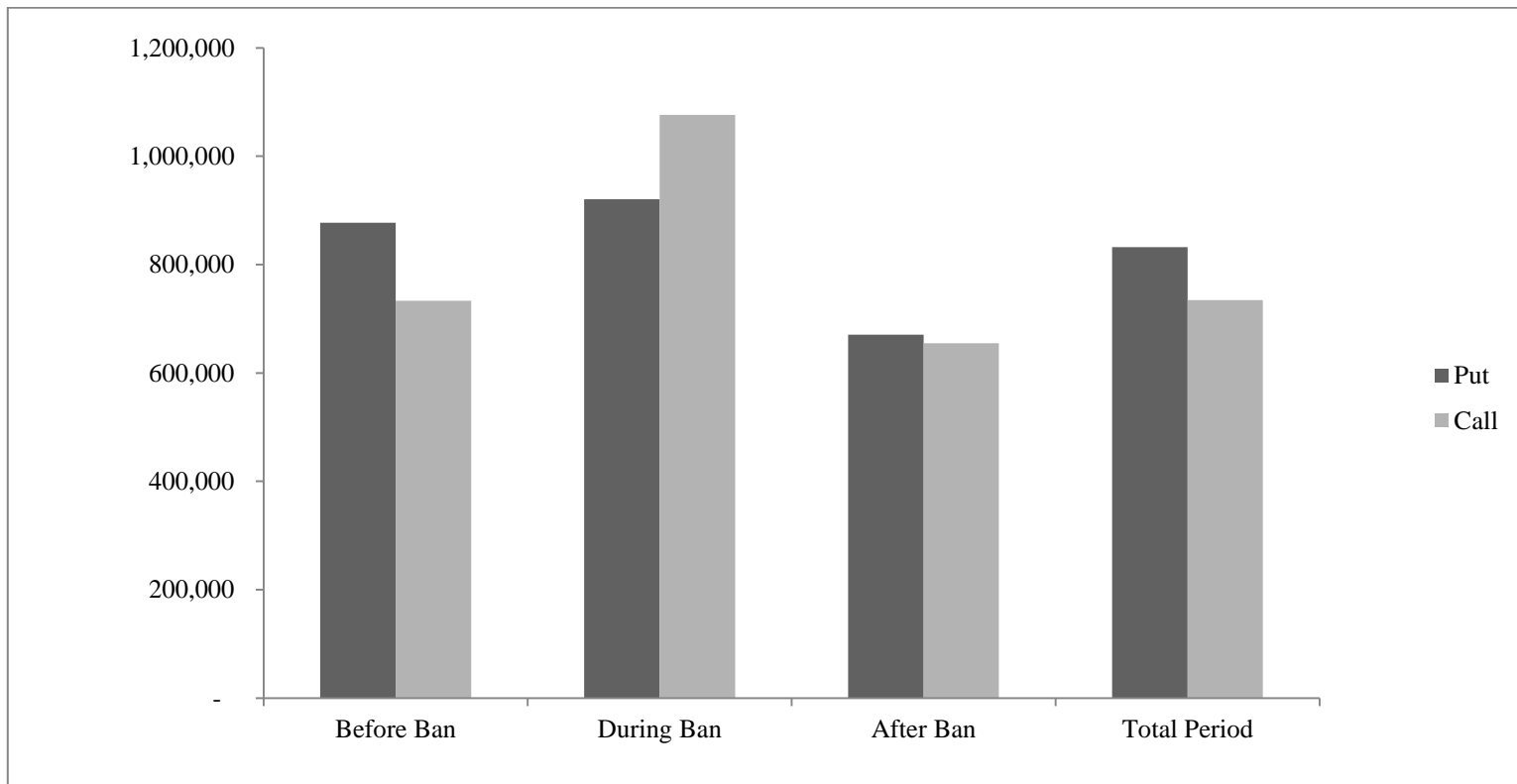


Table 2: Holding Period Returns

This table displays the holding period returns for the categories of stocks: banned stocks with traded options, banned stocks without traded options, and the non-banned S&P 500 control group. Holding period returns are given for four periods: before ban, during ban, after ban, and the full year of 2008. Differences are given for the two groups of banned stocks against the non-banned S&P 500 that hence was unaffected by the ban. The difference between the two banned groups is also given to highlight how the ban affects the two groups differently. Statistical significance is given by ***, **, and * meaning 1%, 5%, and 10% respectively.

	Before Ban (2/1/08 – 9/18/08)	During Ban (9/19/08 – 10/8/09)	After Ban (10/9/08 – 12/31/08)	Entire Period (2/1/08 – 12/31/08)
Non-banned S&P 500	-11.07%	-23.70%	-4.68%	-37.61%
Banned Stocks With Traded Options	-8.46%	-25.32%	9.53%	-31.02%
Banned Stocks Without Traded Options	-17.53%	-15.74%	-7.93%	-35.54%
Difference:				
Banned With Options – Non-banned S&P 500	2.61%	-1.63%	14.21%***	6.59%**
Banned Without Options – Non Banned S&P 500	-6.45%***	7.95%***	-3.25%	2.07%
Banned Without Options – Banned With Options	-9.07%***	9.58%***	-17.46%***	-4.52%

Figure 4: Abnormal Holding Period Returns

This figure gives the return over the non-banned S&P 500 during each of the four holding periods. A 0% return on this graph is a return exactly equal to the return on the non-banned S&P 500 for the holding period. This is done to eliminate overall market fluctuations during the periods and isolate the effects felt by the short sale ban.

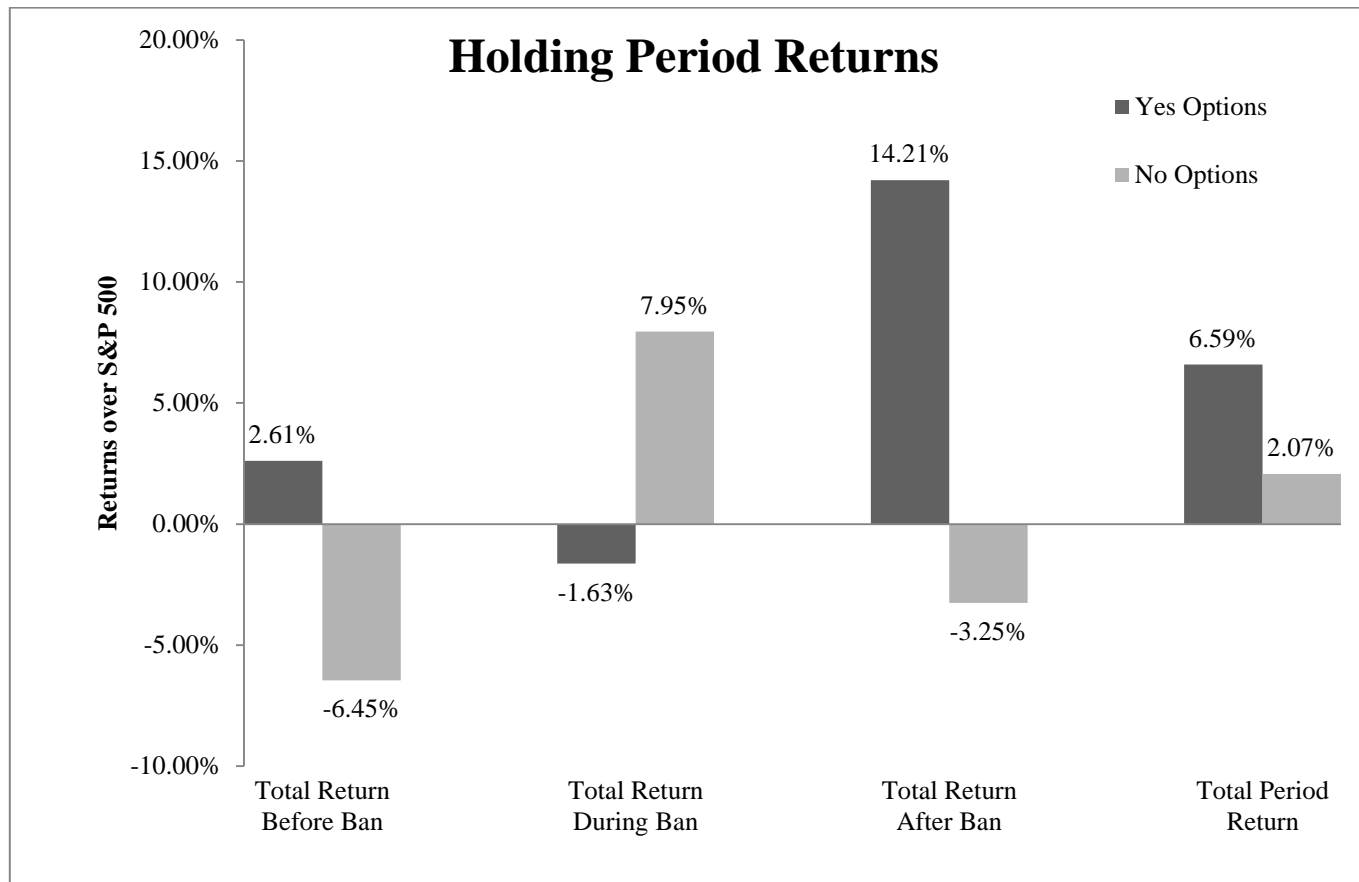


Figure 5: Distribution by Market Capitalization

This figure shows the distribution by market capitalization of the two groups of banned stocks. Average market capitalization for the banned stocks with options is \$7,017,200 and \$729,381 for the banned stocks without options. Market capitalization is determined on September 18th, 2008, the day the ban was announced.

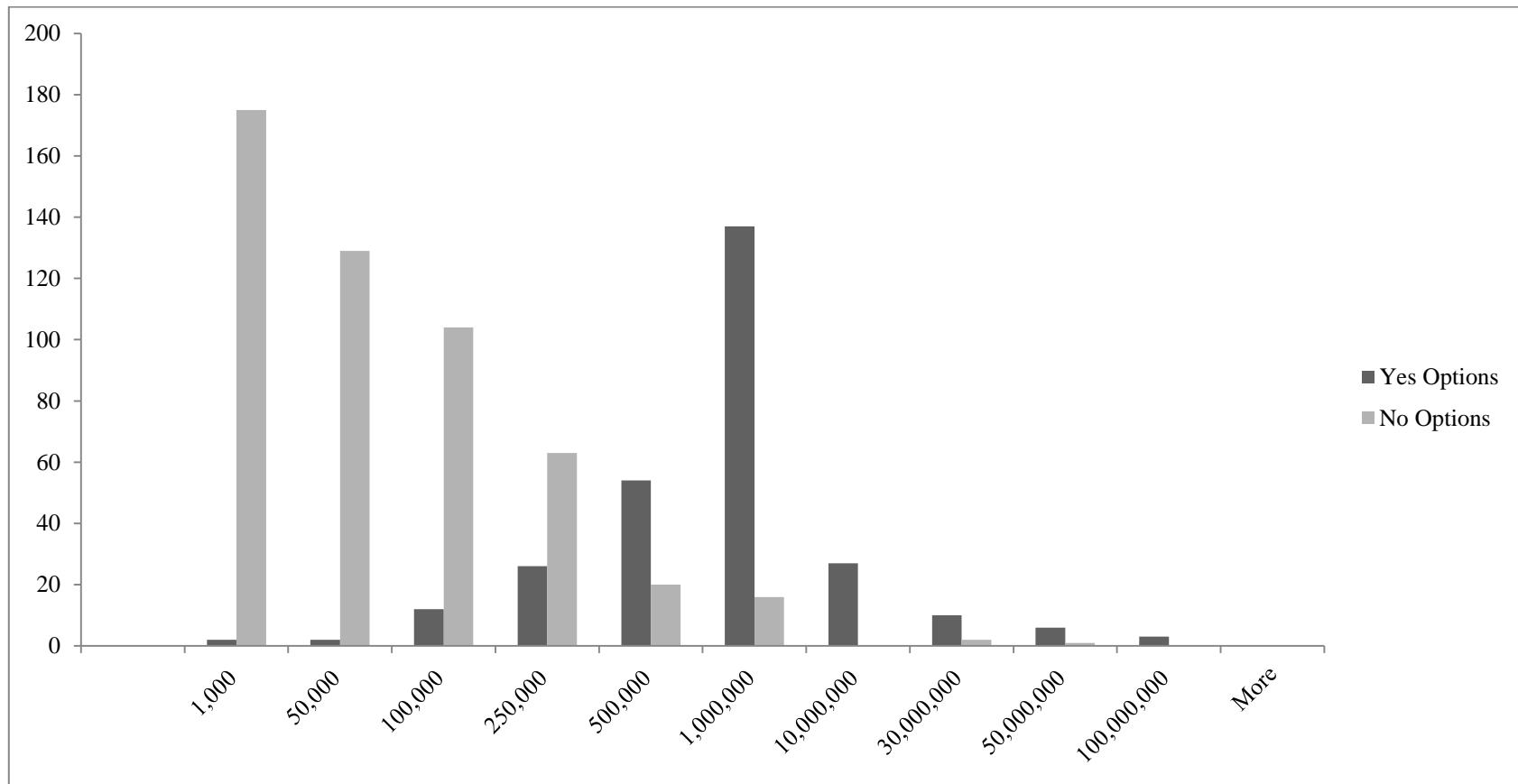


Table 3: Financial Sector Distribution

This table shows the distribution amongst various sectors of the financial industry for both of the groups of banned stocks. Sector information is listed exactly as it was pulled from Bloomberg.

Banned Stocks with Traded Options			Banned Stocks without Traded Options		
Banks	108	39%	Asset Allocation Fund	1	0%
Commercial Services	2	1%	Banks	290	56%
Diversified Finan Serv	42	15%	Closed-end Funds	1	0%
Electric	1	0%	Commercial Services	2	0%
Equity Fund	1	0%	Diversified Finan Serv	29	6%
Healthcare-Services	14	5%	Engineering&Construction	1	0%
Holding Companies-Divers	1	0%	Equity Fund	1	0%
Insurance	81	29%	Holding Companies-Divers	5	1%
Investment Companies	3	1%	Home Builders	1	0%
Pipelines	1	0%	Insurance	54	10%
Private Equity	2	1%	Internet	2	0%
Savings&Loans	19	7%	Investment Companies	2	0%
Water	1	0%	Pipelines	1	0%
			REITS	1	0%
			Savings&Loans	126	24%
			Software	1	0%

Figure 6: Option Volume Trends over Time

This figure shows the trend in daily options volume for puts and calls over the course of the year.

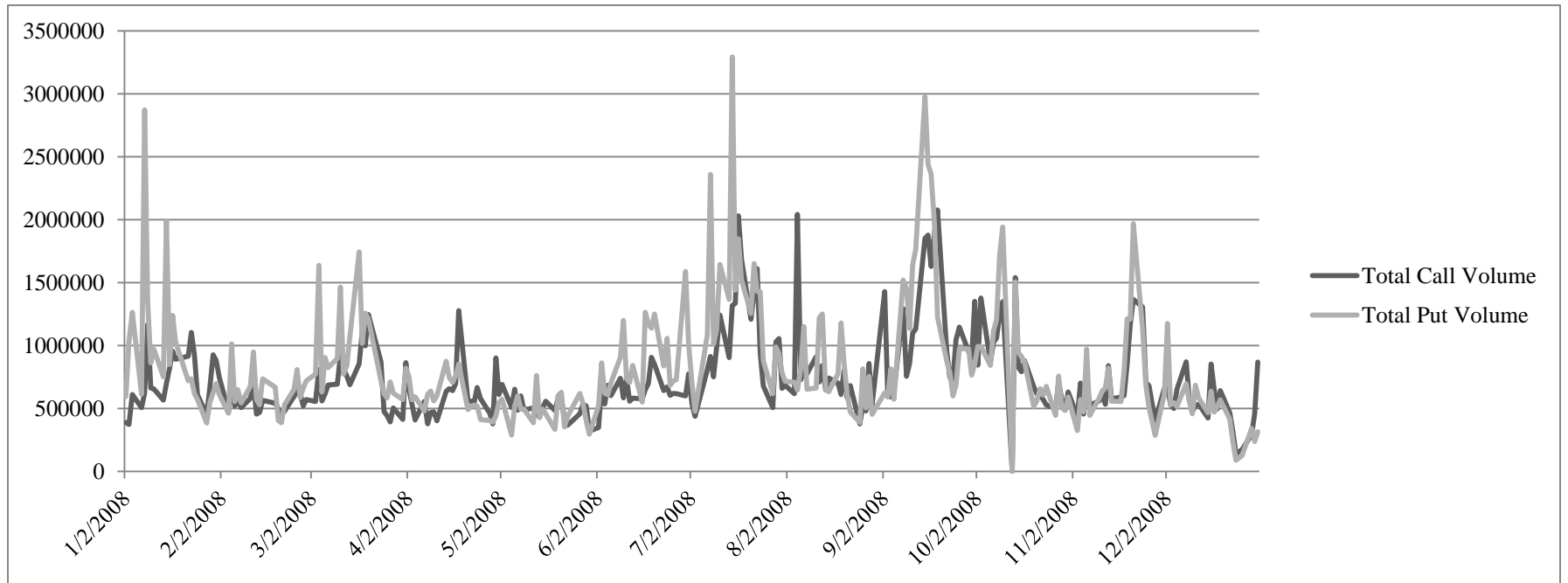
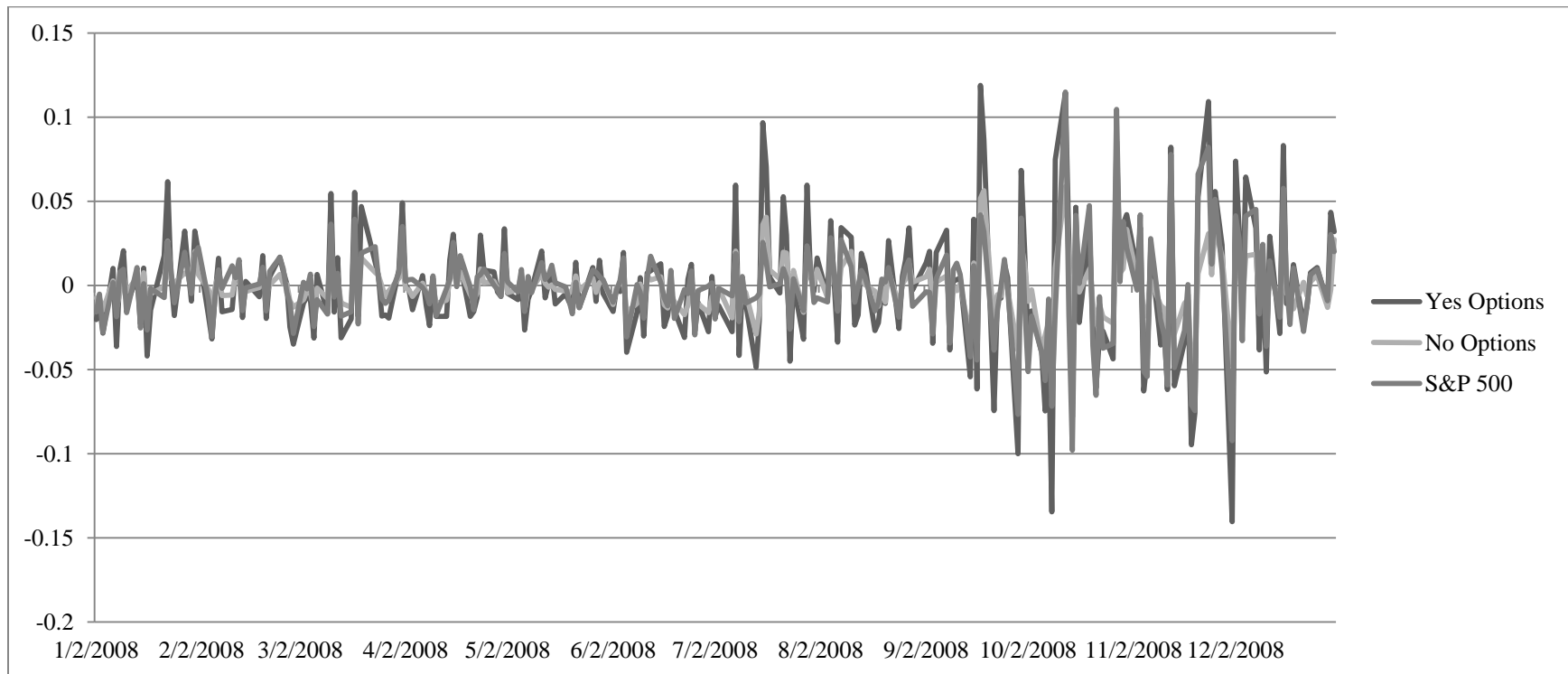


Figure 7: Daily Stock Returns over Time

This figure shows the daily return trend over the course of the year. This is expressed along a timeline, rather than in the sub periods that this study is broken down into.



Timeline 1: 2008 Short Sale Ban and Preceding Months

This timeline presents a linear representation of the 2008 short sale ban and the events that lead to its enactment. Timeline credit to Van T. Nguyen and Alex P. Tang.

Date	Event Description
Sunday, March 14, 2008	Bear Steams collapsed and was acquired by JP Morgan Chase
Tuesday, July 15, 2008	The SEC announced an emergency order and said it would tighten short-selling rules for 19 financial firms by requiring traders to "pre-borrow" stocks before initiating a so-called short-sale.
Tuesday, July 30, 2008	The SEC extended the emergency limit on short-sales to Tuesday, August 12, 2008.
Saturday, September 6, 2008	The government took control of the troubled mortgage giants Fannie and Freddie Mac.
Friday, September 12, 2008	The Federal Reserve Bank (New York) called an emergency meeting of the heads of major financial institutions to discuss the fate of Lehman Brothers, which had suffered a rapid plunge in its stock prices.
Tuesday, September 16, 2008	The US government seized control of the AIG in an \$85 billion deal.
Wednesday, September 17, 2008	Stock prices of major financial institutions plummeted in the wake of the government decision to take over the AIG.
Thursday, September 18, 2008	The SEC announced that it was considering a temporary ban of some or all short-selling.
Friday, September 19, 2008	The SEC issued a temporary ban on short-sales of 799 financial stocks. Also required institutional money managers to report their new short sales of certain publicly traded securities. The ban was set to expire on Thursday, October 2.
Wednesday, October 1, 2008	The SEC said that it was extending the ban to no later than Friday, October 17.
Friday, October 3, 2008	The House voted 263-171 to enact the Emergency Economic Stabilization Act of 2008.
Wednesday, October 8, 2008	The short-sale ban expired.

XII. Complete List of Banned Stocks

Banned Stocks with Tradable Options

	NAME	INDUSTRY GROUP
ABK US Equity	AMBAC FINANCIAL GROUP INC	Insurance
ACE US Equity	ACE LTD	Insurance
ACGL US Equity	ARCH CAPITAL GROUP LTD	Insurance
ADVNB US Equity	ADVANTA CORP-CLASS B	Diversified Finan Serv
AEG US Equity	AEGON N.V.-NY REG SHR	Insurance
AEL US Equity	AMERICAN EQUITY INVT LIFE HL	Insurance
AET US Equity	AETNA INC	Healthcare-Services
AF US Equity	ASTORIA FINANCIAL CORP	Savings&Loans
AFG US Equity	AMERICAN FINANCIAL GROUP INC	Insurance
AFL US Equity	AFLAC INC	Insurance
AGII US Equity	ARGO GROUP INTERNATIONAL	Insurance
AGO US Equity	ASSURED GUARANTY LTD	Insurance
AGP US Equity	AMERIGROUP CORP	Healthcare-Services
AHL US Equity	ASPEN INSURANCE HOLDINGS LTD	Insurance
AIB US Equity	ALLIED IRISH BANKS PLC	Banks
AIG US Equity	AMERICAN INTERNATIONAL GROUP	Insurance
AINV US Equity	APOLLO INVESTMENT CORP	Investment Companies
AIZ US Equity	ASSURANT INC	Insurance
ALL US Equity	ALLSTATE CORP	Insurance
AMFI US Equity	AMCORE FINANCIAL INC	Banks
AMG US Equity	AFFILIATED MANAGERS GROUP	Diversified Finan Serv
AMP US Equity	AMERIPRISE FINANCIAL INC	Diversified Finan Serv
AMSF US Equity	AMERISAFE INC	Insurance
AMTD US Equity	TD AMERITRADE HOLDING CORP	Diversified Finan Serv
AOC US Equity	AON CORP	Insurance
ASFI US Equity	ASTA FUNDING INC	Diversified Finan Serv
AWH US Equity	ALLIED WORLD ASSURANCE CO	Insurance
AXA US Equity	AXA -SPONS ADR	Insurance
AXS US Equity	AXIS CAPITAL HOLDINGS LTD	Insurance
BAC US Equity	BANK OF AMERICA CORP	Banks
BANR US Equity	BANNER CORPORATION	Banks
BBT US Equity	BB&T CORP	Banks
BBX US Equity	BBX CAPITAL CORP-A	Savings&Loans
BCS US Equity	BARCLAYS PLC-SPONS ADR	Banks
BEN US Equity	FRANKLIN RESOURCES INC	Diversified Finan Serv
BK US Equity	BANK OF NEW YORK MELLON CORP	Banks
BKMU US Equity	BANK MUTUAL CORP	Savings&Loans
BKUNA US Equity	BANKUNITED FINANCIAL CORP-A	Banks
BNS US Equity	BANK OF NOVA SCOTIA	Banks
BOH US Equity	BANK OF HAWAII CORP	Banks
BOKF US Equity	BOK FINANCIAL CORPORATION	Banks
BPFH US Equity	BOSTON PRIVATE FINL HOLDING	Banks
BRKL US Equity	BROOKLINE BANCORP INC	Savings&Loans
BUSE US Equity	FIRST BUSEY CORP	Banks
BX US Equity	BLACKSTONE GROUP LP/THE	Private Equity
BXS US Equity	BANCORPSOUTH INC	Banks
C US Equity	CITIGROUP INC	Banks
CACB US Equity	CASCADE BANCORP	Banks
CATY US Equity	CATHAY GENERAL BANCORP	Banks
CB US Equity	CHUBB CORP	Insurance
CBON US Equity	COMMUNITY BANCORP	Banks

CBU US Equity	COMMUNITY BANK SYSTEM INC	Banks
CFFN US Equity	CAPITOL FEDERAL FINANCIAL IN	Savings&Loans
CFR US Equity	CULLEN/FROST BANKERS INC	Banks
CHCO US Equity	CITY HOLDING CO	Banks
CHFC US Equity	CHEMICAL FINANCIAL CORP	Banks
CI US Equity	CIGNA CORP	Healthcare-Services
CIA US Equity	CITIZENS INC	Insurance
CINF US Equity	CINCINNATI FINANCIAL CORP	Insurance
CLMS US Equity	CALAMOS ASSET MANAGEMENT-A	Diversified Finan Serv
CMA US Equity	COMERICA INC	Banks
CME US Equity	CME GROUP INC	Diversified Finan Serv
CNA US Equity	CNA FINANCIAL CORP	Insurance
CNB US Equity	COLONIAL BANCGROUP INC	Banks
CNC US Equity	CENTENE CORP	Healthcare-Services
CNO US Equity	CNO FINANCIAL GROUP INC	Insurance
CNS US Equity	COHEN & STEERS INC	Diversified Finan Serv
COLB US Equity	COLUMBIA BANKING SYSTEM INC	Banks
CORS US Equity	CORUS BANKSHARES INC	Banks
CPF US Equity	CENTRAL PACIFIC FINANCIAL CO	Banks
CRBC US Equity	CITIZENS REPUBLIC BANCORP IN	Banks
CVBF US Equity	CVB FINANCIAL CORP	Banks
CVH US Equity	COVENTRY HEALTH CARE INC	Healthcare-Services
DB US Equity	DEUTSCHE BANK AG-REGISTERED	Banks
DCOM US Equity	DIME COMMUNITY BANCSHARES	Savings&Loans
DFG US Equity	DELPHI FINANCIAL GROUP-CL A	Insurance
DLLR US Equity	DFC GLOBAL CORP	Diversified Finan Serv
ENH US Equity	ENDURANCE SPECIALTY HOLDINGS	Insurance
ETFC US Equity	E*TRADE FINANCIAL CORP	Diversified Finan Serv
EV US Equity	EATON VANCE CORP	Diversified Finan Serv
EVR US Equity	EVERCORE PARTNERS INC-CL A	Diversified Finan Serv
EWBC US Equity	EAST WEST BANCORP INC	Banks
FAF US Equity	FIRST AMERICAN FINANCIAL	Insurance
FBC US Equity	FLAGSTAR BANCORP INC	Savings&Loans
FBP US Equity	FIRST BANCORP PUERTO RICO	Banks
FFBC US Equity	FIRST FINANCIAL BANCORP	Banks
FFH US Equity	FAIRFAX FINANCIAL HLDGS LTD	Insurance
FFIN US Equity	FIRST FINL BANKSHARES INC	Banks
FFNW US Equity	FIRST FINANCIAL NORTHWEST	Savings&Loans
FHN US Equity	FIRST HORIZON NATIONAL CORP	Banks
FIG US Equity	FORTRESS INVESTMENT GRP-CL A	Private Equity
FII US Equity	FEDERATED INVESTORS INC-CL B	Diversified Finan Serv
FMBI US Equity	FIRST MIDWEST BANCORP INC/IL	Banks
FMER US Equity	FIRSTMERIT CORP	Banks
FNB US Equity	FNB CORP	Banks
FNFG US Equity	FIRST NIAGARA FINANCIAL GRP	Savings&Loans
FNM US Equity	FANNIE MAE	Diversified Finan Serv
FRE US Equity	FREDDIE MAC	Diversified Finan Serv
FTBK US Equity	FRONTIER FINANCIAL CORP	Banks
FULT US Equity	FULTON FINANCIAL CORP	Banks
GBCI US Equity	GLACIER BANCORP INC	Banks
GBNK US Equity	GUARANTY BANCORP	Banks
GCA US Equity	GLOBAL CASH ACCESS HOLDINGS	Commercial Services
GFIG US Equity	GFI GROUP INC	Diversified Finan Serv
GHL US Equity	GREENHILL & CO INC	Diversified Finan Serv
GLRE US Equity	GREENLIGHT CAPITAL RE LTD-A	Insurance
GNW US Equity	GENWORTH FINANCIAL INC-CL A	Insurance
GROW US Equity	U.S. GLOBAL INVESTORS INC-A	Diversified Finan Serv

GS US Equity	GOLDMAN SACHS GROUP INC	Banks
GTS US Equity	TRIPLE-S MANAGEMENT CORP-B	Healthcare-Services
HAFC US Equity	HANMI FINANCIAL CORPORATION	Banks
HBAN US Equity	HUNTINGTON BANCSHARES INC	Banks
HBHC US Equity	HANCOCK HOLDING CO	Banks
HCBK US Equity	HUDSON CITY BANCORP INC	Savings&Loans
HCC US Equity	HCC INSURANCE HOLDINGS INC	Insurance
HMN US Equity	HORACE MANN EDUCATORS	Insurance
HNBC US Equity	HARLEYSVILLE NATIONAL CORP	Banks
HNT US Equity	HEALTH NET INC	Healthcare-Services
HS US Equity	HEALTHSPRING INC	Healthcare-Services
HTH US Equity	HILLTOP HOLDINGS INC	Insurance
HUM US Equity	HUMANA INC	Healthcare-Services
IBKC US Equity	IBERIABANK CORP	Banks
IBKR US Equity	INTERACTIVE BROKERS GRO-CL A	Diversified Finan Serv
IBOC US Equity	INTERNATIONAL BANCSHARES CRP	Banks
ICE US Equity	INTERCONTINENTALEXCHANGE INC	Diversified Finan Serv
INDB US Equity	INDEPENDENT BANK CORP/MA	Banks
ING US Equity	ING GROEP N.V.-SPONSORED ADR	Insurance
IPCC US Equity	INFINITY PROPERTY & CASUALTY	Insurance
IPCR US Equity	IPC HOLDINGS LTD	Insurance
ITC US Equity	ITC HOLDINGS CORP	Electric
ITG US Equity	INVESTMENT TECHNOLOGY GROUP	Diversified Finan Serv
JEF US Equity	JEFFERIES GROUP INC	Diversified Finan Serv
JNS US Equity	JANUS CAPITAL GROUP INC	Diversified Finan Serv
JPM US Equity	JPMORGAN CHASE & CO	Banks
KEY US Equity	KEYCORP	Banks
L US Equity	LOEWS CORP	Insurance
LAB US Equity	LABRANCHE & CO INC	Diversified Finan Serv
LAZ US Equity	LAZARD LTD-CL A	Diversified Finan Serv
LFC US Equity	CHINA LIFE INSURANCE CO-ADR	Insurance
LNC US Equity	LINCOLN NATIONAL CORP	Insurance
LUK US Equity	LEUCADIA NATIONAL CORP	Holding Companies-Divers
LYG US Equity	LLOYDS BANKING GROUP PLC-ADR	Banks
MBFI US Equity	MB FINANCIAL INC	Banks
MBI US Equity	MBIA INC	Insurance
MCGC US Equity	MCG CAPITAL CORP	Investment Companies
MCY US Equity	MERCURY GENERAL CORP	Insurance
MF US Equity	MF GLOBAL HOLDINGS LTD	Diversified Finan Serv
MFC US Equity	MANULIFE FINANCIAL CORP	Insurance
MI US Equity	MARSHALL & ILSLEY CORP	Banks
MIG US Equity	MEADOWBROOK INSURANCE GROUP	Insurance
MOH US Equity	MOLINA HEALTHCARE INC	Healthcare-Services
MORN US Equity	MORNINGSTAR INC	Commercial Services
MRH US Equity	MONTPELIER RE HOLDINGS LTD	Insurance
MS US Equity	MORGAN STANLEY	Banks
MTG US Equity	MGIC INVESTMENT CORP	Insurance
MTU US Equity	MITSUBISHI UFJ FINL GRP-ADR	Banks
MXGL US Equity	MAX CAPITAL GROUP LTD	Insurance
NAL US Equity	NEWALLIANCE BANCSHARES INC	Savings&Loans
NARA US Equity	NARA BANCORP INC	Banks
NAVG US Equity	NAVIGATORS GROUP INC	Insurance
NBTB US Equity	N B T BANCORP INC	Banks
NDAQ US Equity	NASDAQ OMX GROUP/THE	Diversified Finan Serv
NFS US Equity	NATIONWIDE FINANCIAL SERV- A	Insurance
NITE US Equity	KNIGHT CAPITAL GROUP INC-A	Diversified Finan Serv
NMR US Equity	NOMURA HOLDINGS INC-ADR	Diversified Finan Serv

NPBC US Equity	NATL PENN BCSHS INC	Banks
NSH US Equity	NUSTAR GP HOLDINGS LLC	Pipelines
NTRS US Equity	NORTHERN TRUST CORP	Banks
NWSB US Equity	NORTHWEST BANCORP INC	Savings&Loans
NYB US Equity	NEW YORK COMMUNITY BANCORP	Savings&Loans
NYX US Equity	NYSE EURONEXT	Diversified Finan Serv
OFG US Equity	ORIENTAL FINANCIAL GROUP	Banks
OKSB US Equity	SOUTHWEST BANCORP INC/OKLA	Banks
ONB US Equity	OLD NATIONAL BANCORP	Banks
ORH US Equity	ODYSSEY RE HOLDINGS CORP	Insurance
ORI US Equity	OLD REPUBLIC INTL CORP	Insurance
OXPS US Equity	OPTIONSPRESS HOLDINGS INC	Diversified Finan Serv
OZM US Equity	OCH-ZIFF CAPITAL MANAGEMEN-A	Diversified Finan Serv
OZRK US Equity	BANK OF THE OZARKS	Banks
PACW US Equity	PACWEST BANCORP	Banks
PBCT US Equity	PEOPLE'S UNITED FINANCIAL	Savings&Loans
PBKS US Equity	PROVIDENT BANKSHARES CORP	Banks
PBNY US Equity	PROVIDENT NEW YORK BANCORP	Savings&Loans
PCBC US Equity	PACIFIC CAPITAL BANCORP	Banks
PFG US Equity	PRINCIPAL FINANCIAL GROUP	Insurance
PFS US Equity	PROVIDENT FINANCIAL SERVICES	Savings&Loans
PGR US Equity	PROGRESSIVE CORP	Insurance
PHLY US Equity	PHILADELPHIA CONS HLDG CO	Insurance
PICO US Equity	PICO HOLDINGS INC	Water
PJC US Equity	PIPER JAFFRAY COS	Diversified Finan Serv
PL US Equity	PROTECTIVE LIFE CORP	Insurance
PMI US Equity	PMI GROUP INC/THE	Insurance
PNC US Equity	PNC FINANCIAL SERVICES GROUP	Banks
PNFP US Equity	PINNACLE FINANCIAL PARTNERS	Banks
PNSN US Equity	PENSON WORLDWIDE INC	Diversified Finan Serv
PNX US Equity	PHOENIX COMPANIES INC	Insurance
PRA US Equity	PROASSURANCE CORP	Insurance
PRE US Equity	PARTNERRE LTD	Insurance
PRSP US Equity	PROSPERITY BANCSHARES INC	Banks
PRU US Equity	PRUDENTIAL FINANCIAL INC	Insurance
PSEC US Equity	PROSPECT CAPITAL CORP	Investment Companies
PTP US Equity	PLATINUM UNDERWRITERS HLDGS	Insurance
PUK US Equity	PRUDENTIAL PLC-ADR	Insurance
PVTB US Equity	PRIVATEBANCORP INC	Banks
RBCAA US Equity	REPUBLIC BANCORP INC-CLASS A	Banks
RBS US Equity	ROYAL BANK OF SCOT-SPON ADR	Banks
RDN US Equity	RADIAN GROUP INC	Insurance
RE US Equity	EVEREST RE GROUP LTD	Insurance
RF US Equity	REGIONS FINANCIAL CORP	Banks
RGA US Equity	REINSURANCE GROUP OF AMERICA	Insurance
RJF US Equity	RAYMOND JAMES FINANCIAL INC	Diversified Finan Serv
RKH US Equity	MARKET VECTORS BANK AND BROK	Equity Fund
RLI US Equity	RLI CORP	Insurance
RNR US Equity	RENAISSANCERE HOLDINGS LTD	Insurance
RY US Equity	ROYAL BANK OF CANADA	Banks
SAF US Equity	SAFECO CORP	Insurance
SAFT US Equity	SAFETY INSURANCE GROUP INC	Insurance
SBCF US Equity	SEACOAST BANKING CORP/FL	Banks
SBIB US Equity	STERLING BANCSHARES INC/TX	Banks
SBNY US Equity	SIGNATURE BANK	Banks
SCHW US Equity	SCHWAB (CHARLES) CORP	Diversified Finan Serv
SF US Equity	STIFEL FINANCIAL CORP	Diversified Finan Serv

SFG US Equity	STANCORP FINANCIAL GROUP	Insurance
SIGI US Equity	SELECTIVE INSURANCE GROUP	Insurance
SIVB US Equity	SVB FINANCIAL GROUP	Banks
SLF US Equity	SUN LIFE FINANCIAL INC	Insurance
SLM US Equity	SLM CORP	Diversified Finan Serv
SNV US Equity	SYNOVUS FINANCIAL CORP	Banks
STI US Equity	SUNTRUST BANKS INC	Banks
STL US Equity	STERLING BANCORP-N Y	Banks
STSA US Equity	STERLING FINL CORP/SPOKANE	Banks
STT US Equity	STATE STREET CORP	Banks
SUSQ US Equity	SUSQUEHANNA BANCSHARES INC	Banks
SWS US Equity	SWS GROUP INC	Diversified Finan Serv
TCB US Equity	TCF FINANCIAL CORP	Banks
TCBI US Equity	TEXAS CAPITAL BANCSHARES INC	Banks
TFSL US Equity	TFS FINANCIAL CORP	Savings&Loans
THG US Equity	HANOVER INSURANCE GROUP INC/	Insurance
TMCV US Equity	TEMECULA VALLEY BANCORP INC	Banks
TMK US Equity	TORCHMARK CORP	Insurance
TONE US Equity	TIERONE CORP	Savings&Loans
TROW US Equity	T ROWE PRICE GROUP INC	Diversified Finan Serv
TRST US Equity	TRUSTCO BANK CORP NY	Banks
TRV US Equity	TRAVELERS COS INC/THE	Insurance
TSFG US Equity	SOUTH FINANCIAL GROUP INC	Banks
TWGP US Equity	TOWER GROUP INC	Insurance
UAM US Equity	UNIVERSAL AMERICAN CORP	Healthcare-Services
UB US Equity	UNIONBANCAL CORPORATION	Banks
UBS US Equity	UBS AG-REG	Banks
UBSI US Equity	UNITED BANKSHARES INC	Banks
UCBH US Equity	UCBH HOLDINGS INC	Banks
UCBI US Equity	UNITED COMMUNITY BANKS/GA	Banks
UFCS US Equity	UNITED FIRE GROUP INC	Insurance
UMBF US Equity	UMB FINANCIAL CORP	Banks
UMPQ US Equity	UMPQUA HOLDINGS CORP	Banks
UNH US Equity	UNITEDHEALTH GROUP INC	Healthcare-Services
UNM US Equity	UNUM GROUP	Insurance
USB US Equity	US BANCORP	Banks
UTR US Equity	UNITRIN INC	Insurance
VLY US Equity	VALLEY NATIONAL BANCORP	Banks
VR US Equity	VALIDUS HOLDINGS LTD	Insurance
WABC US Equity	WESTAMERICA BANCORPORATION	Banks
WAL US Equity	WESTERN ALLIANCE BANCORP	Banks
WBS US Equity	WEBSTER FINANCIAL CORP	Banks
WCG US Equity	WELLCARE HEALTH PLANS INC	Healthcare-Services
WDR US Equity	WADDELL & REED FINANCIAL-A	Diversified Finan Serv
WFC US Equity	WELLS FARGO & CO	Banks
WFSL US Equity	WASHINGTON FEDERAL INC	Savings&Loans
WL US Equity	WILMINGTON TRUST CORP	Banks
WLP US Equity	WELLPOINT INC	Healthcare-Services
WRB US Equity	WR BERKLEY CORP	Insurance
WSBC US Equity	WESBANCO INC	Banks
WTFC US Equity	WINTRUST FINANCIAL CORP	Banks
WTNY US Equity	WHITNEY HOLDING CORP	Banks
XL US Equity	XL GROUP PLC	Insurance
ZION US Equity	ZIONS BANCORPORATION	Banks
ZNT US Equity	ZENITH NATIONAL INSURANCE CP	Insurance

Banned Stocks without Tradable Options

	NAME	INDUSTRY GROUP
AAME US Equity	ATLANTIC AMERICAN CORP	Insurance
AANB US Equity	ABIGAIL ADAMS NATL BANCORP	Banks
ABBC US Equity	ABINGTON BANCORP INC	Savings&Loans
ABCB US Equity	AMERIS BANCORP	Banks
ABCW US Equity	ANCHOR BANCORP WISCONSIN INC	Savings&Loans
ABNJ US Equity	AMERICAN BANCORP OF NJ	Savings&Loans
ABVA US Equity	ALLIANCE BANKSHARES CORP	Banks
ACAP US Equity	AMERICAN PHYSICIANS CAPITAL	Insurance
ACBA US Equity	AMERICAN COMMUNITY BNCSHS	Banks
ACFC US Equity	ATLANTIC COAST FINANCIAL COR	Savings&Loans
ADVNA US Equity	ADVANTA CORP-CLASS A	Diversified Finan Serv
AFFM US Equity	AFFIRMATIVE INSURANCE HOLDIN	Insurance
AGX US Equity	ARGAN INC	Engineering&Construction
AHD US Equity	ATLAS ENERGY LP	Pipelines
ALLB US Equity	ALLIANCE BANCORP INC OF PENN	Banks
ALNC US Equity	ALLIANCE FINANCIAL CORP	Banks
AMCP US Equity	AMCOMP INC	Insurance
AMIC US Equity	AMERICAN INDEPENDENCE CORP	Insurance
AMNB US Equity	AMER NATL BNKSHS/DANVILLE VA	Banks
AMPH US Equity	AMERICAN PHYSICIANS SVC GP	Insurance
AMRB US Equity	AMERICAN RIVER BANKSHRS (CA)	Banks
ANAT US Equity	AMERICAN NATIONAL INSURANCE	Insurance
ANNB US Equity	ANNAPOLIS BANCORP INC	Banks
APAB US Equity	APPALACHIAN BANCSHARES INC	Banks
AROW US Equity	ARROW FINANCIAL CORP	Banks
ASBI US Equity	AMERIANA BANCORP	Savings&Loans
ASFN US Equity	ATLANTIC SOUTHERN FINANCIAL	Banks
ASRV US Equity	AMERISERV FINANCIAL INC	Banks
ATBC US Equity	ATLANTIC BANCGROUP INC	Banks
ATLO US Equity	AMES NATIONAL CORP	Banks
AUBN US Equity	AUBURN NATL BANCORPORATION	Banks
AWBC US Equity	AMERICANWEST BANCORPORATION	Banks
AXG US Equity	ATLAS ACQUISITION HOLDINGS	Holding Companies-Divers
BANF US Equity	BANCFIRST CORP	Banks
BARI US Equity	BANCORP RHODE ISLAND INC	Banks
BAYN US Equity	BAY NATIONAL CORP	Banks
BBNK US Equity	BRIDGE CAPITAL HOLDINGS	Banks
BCA US Equity	CORPBANCA SA-ADR	Banks
BCAR US Equity	BANK OF THE CAROLINAS(NC)	Banks
BCBP US Equity	BCB BANCORP INC	Banks
BCP US Equity	BROOKE CAPITAL CORP	Insurance
BCSB US Equity	BCSB BANCORP INC	Savings&Loans
BDGE US Equity	BRIDGE BANCORP INC	Banks
BERK US Equity	BERKSHIRE BANCORP INC	Banks
BFF US Equity	BFC FINANCIAL CORP-CLASS A	Savings&Loans
BFIN US Equity	BANKFINANCIAL CORP	Savings&Loans
BFNB US Equity	BEACH FIRST NATL BANCSHARES	Banks
BHB US Equity	BAR HARBOR BANKSHARES	Banks
BHBC US Equity	BEVERLY HILLS BANCORP INC	Banks
BHLB US Equity	BERKSHIRE HILLS BANCORP INC	Savings&Loans
BKBK US Equity	BRITTON & KOONTZ CAPITAL CRP	Banks
BKOR US Equity	OAK RIDGE FINANCIAL SERVICES	Banks
BKSC US Equity	BANK OF SOUTH CAROLINA CORP	Banks
BLX US Equity	BANCO LATINOAMERICANO COME-E	Banks

BMRC US Equity	BANK OF MARIN BANCORP/CA	Banks
BMTC US Equity	BRYN MAWR BANK CORP	Banks
BNCL US Equity	BENEFICIAL MUTUAL BANCORP IN	Savings&Loans
BNCN US Equity	BNC BANCORP	Banks
BNV US Equity	BEVERLY NATIONAL CORP	Banks
BOCH US Equity	BANK OF COMMERCE HOLDINGS	Banks
BOFI US Equity	BOFI HOLDING INC	Savings&Loans
BOFL US Equity	BANK OF FLORIDA CORP	Banks
BOMK US Equity	BANK OF MCKENNEY/VA	Banks
BOVA US Equity	BANK OF VIRGINIA	Banks
BPSG US Equity	BROADPOINT GLEACHER SECURITI	Diversified Finan Serv
BRK US Equity	BERKSHIRE HATHAWAY INC	Insurance
BSRR US Equity	SIERRA BANCORP	Banks
BTFG US Equity	BANCTRUST FINANCIAL GROUP IN	Banks
BWINA US Equity	BALDWIN & LYONS INC -CL A	Insurance
BWINB US Equity	BALDWIN & LYONS INC -CL B	Insurance
BYFC US Equity	BROADWAY FINANCIAL CORP/DE	Savings&Loans
CAC US Equity	CAMDEN NATIONAL CORP	Banks
CADE US Equity	CADENCE FINANCIAL CORP	Banks
CAFI US Equity	CAMCO FINANCIAL CORP	Savings&Loans
CAPB US Equity	CAPITALSOUTH BANCORP	Banks
CAPE US Equity	BARCLAYS ETN+ SHILLER CAPE	Asset Allocation Fund
CART US Equity	CAROLINA TRUST BANK	Banks
CARV US Equity	CARVER BANCORP INC	Savings&Loans
CASB US Equity	CASCADE FINANCIAL CORP	Banks
CASH US Equity	META FINANCIAL GROUP INC	Savings&Loans
CBAN US Equity	COLONY BANCORP	Banks
CBBO US Equity	COLUMBIA BANCORP/OR	Banks
CBC US Equity	CAPITOL BANCORP LTD	Banks
CBIN US Equity	COMMUNITY BK SHARES/INDIANA	Banks
CBKN US Equity	CAPITAL BANK CORP	Banks
CBNK US Equity	CHICOPEE BANCORP INC	Savings&Loans
CCBD US Equity	COMMUNITY CENTRAL BANK CORP	Banks
CCBG US Equity	CAPITAL CITY BANK GROUP INC	Banks
CCBP US Equity	COMM BANCORP INC	Banks
CCFH US Equity	CCF HOLDING COMPANY	Banks
CCNE US Equity	CNB FINANCIAL CORP/PA	Banks
CCOW US Equity	CAPITAL CORP OF THE WEST	Banks
CEBK US Equity	CENTRAL BANCORP INC	Banks
CFBK US Equity	CENTRAL FEDERAL CORP	Savings&Loans
CFFC US Equity	COMMUNITY FINL CORP/VA	Savings&Loans
CFFI US Equity	C & F FINANCIAL CORP	Banks
CFNL US Equity	CARDINAL FINANCIAL CORP	Banks
CHEV US Equity	CHEVIOT FINANCIAL CORP	Savings&Loans
CITZ US Equity	CFS BANCORP INC	Savings&Loans
CIZN US Equity	CITIZENS HOLDING COMPANY	Banks
CJBK US Equity	CENTRAL JERSEY BANCORP	Banks
CLBH US Equity	CAROLINA BANK HOLDINGS INC	Banks
CLFC US Equity	CENTER FINANCIAL CORP	Banks
CMFB US Equity	COMMERCEFIRST BANCORP	Banks
CMGI US Equity	CMGI INC	Internet
CMSB US Equity	CMS BANCORP INC	Savings&Loans
CNAF US Equity	COMMERCIAL NATL FINL CORP/PA	Banks
CNBC US Equity	CENTER BANCORP INC	Banks
CNBKA US Equity	CENTURY BANCORP INC -CL A	Banks
CNLA US Equity	COMMUNITY NATIONAL BANK OF T	Banks
COBH US Equity	PENNSYLVANIA COMMERCE BANCRP	Banks

COBZ US Equity	COBIZ FINANCIAL INC	Banks
COOP US Equity	COOPERATIVE BANKSHARES INC	Savings&Loans
COWN US Equity	COWEN GROUP INC-CLASS A	Diversified Finan Serv
CPBC US Equity	COMMUNITY PARTNERS BANCORP	Banks
CPBK US Equity	COMMUNITY CAPITAL CORP	Banks
CPHL US Equity	OCEAN I CORP	Insurance
CRFN US Equity	CRESCENT FINANCIAL BANCSHARE	Banks
CRMH US Equity	CRM HOLDINGS LTD	Insurance
CRRB US Equity	CARROLLTON BANCORP	Banks
CRVL US Equity	CORVEL CORP	Commercial Services
CSBC US Equity	CITIZENS SOUTH BANKING CORP	Savings&Loans
CSBK US Equity	CLIFTON SAVINGS BANCORP INC	Savings&Loans
CSFL US Equity	CENTERSTATE BANKS INC	Banks
CSHB US Equity	COMMUNITY SHORES BANK CORP	Banks
CSNT US Equity	CRESCENT BANKING CO/GA	Banks
CTBC US Equity	CONNECTICUT BANK & TRUST	Banks
CTBI US Equity	COMMUNITY TRUST BANCORP INC	Banks
CTBK US Equity	CITY BANK LYNNWOOD WA	Banks
CTZN US Equity	CITIZENS FIRST BANCORP INC	Savings&Loans
CVBK US Equity	CENTRAL VIRGINIA BANKSHARES	Banks
CVCY US Equity	CENTRAL VALLEY COMM BANCORP	Banks
CVLL US Equity	COMMUNITY VALLEY BANCORP	Banks
CVLY US Equity	CODORUS VALLEY BANCORP INC	Banks
CWBC US Equity	COMMUNITY WEST BANCSHARES	Banks
CWBS US Equity	COMMONWEALTH BANKSHARES INC	Banks
CWLZ US Equity	COWLITZ BANCORP	Banks
CZFC US Equity	CITIZENS FIRST CORP	Banks
CZWI US Equity	CITIZENS COMMUNITY BANCORP I	Savings&Loans
DEAR US Equity	DEARBORN BANCORP INC	Banks
DGICA US Equity	DONEGAL GROUP INC-CL A	Insurance
DGICB US Equity	DONEGAL GROUP INC-B	Insurance
DHIL US Equity	DIAMOND HILL INVESTMENT GRP	Diversified Finan Serv
DR US Equity	DARWIN PROFESSIONAL UNDERWRI	Insurance
DSL US Equity	DOWNEY FINANCIAL CORP	Savings&Loans
DUF US Equity	DUFF & PHELPS CORP-CLASS A	Diversified Finan Serv
EBSB US Equity	MERIDIAN INTERSTATE BANCORP	Savings&Loans
EBTX US Equity	ENCORE BANCSHARES INC	Banks
ECBE US Equity	ECB BANCORP INC	Banks
EGBN US Equity	EAGLE BANCORP INC	Banks
EIHI US Equity	EASTERN INSURANCE HOLDINGS	Insurance
EII US Equity	ENERGY INFRASTRUCTURE ACQUI	Holding Companies-Divers
EMCI US Equity	EMC INS GROUP INC	Insurance
EMITF US Equity	ELBIT IMAGING LTD	Investment Companies
ESBF US Equity	ESB FINANCIAL CORP	Savings&Loans
ESBK US Equity	ELMIRA SAVINGS BANK	Savings&Loans
ESGR US Equity	ENSTAR GROUP LTD	Insurance
EVBN US Equity	EVANS BANCORP INC	Banks
EVBS US Equity	EASTERN VIRGINIA BANKSHARES	Banks
FABK US Equity	FIRST ADVANTAGE BANCORP	Banks
FAC US Equity	FIRST ACCEPTANCE CORP	Insurance
FBCM US Equity	FBR & CO	Diversified Finan Serv
FBIZ US Equity	FIRST BUSINESS FINANCIAL SER	Banks
FBMI US Equity	FIRSTBANK CORP/ALMA MICH	Banks
FBMS US Equity	FIRST BANCSHARES INC/MS	Banks
FBNC US Equity	FIRST BANCORP/NC	Banks
FBSI US Equity	FIRST BANCSHARES INC (MO)	Savings&Loans
FBSS US Equity	FAUQUIER BANKSHARES INC	Banks

FBTC US Equity	FIRST BANCTRUST CORP	Savings&Loans
FCAL US Equity	FIRST CALIFORNIA FINANCIAL G	Banks
FCAP US Equity	FIRST CAPITAL INC	Savings&Loans
FCBC US Equity	FIRST COMMUNITY BANCSHARES	Banks
FCCO US Equity	FIRST COMMUNITY CORP	Banks
FCCY US Equity	1ST CONSTITUTION BANCORP	Banks
FCFL US Equity	FIRST COMMUNITY BANK CORP OF	Savings&Loans
FCNCA US Equity	FIRST CITIZENS BCSHS -CL A	Banks
FCVA US Equity	FIRST CAPITAL BANCORP INC	Banks
FCZA US Equity	FIRST CITIZENS BANC CORP	Banks
FDEF US Equity	FIRST DEFIANCE FINL CORP	Savings&Loans
FDT US Equity	FIRST TRUST DEVELP MKT EX-US	Equity Fund
FED US Equity	FIRSTFED FINANCIAL CORP	Savings&Loans
FFBH US Equity	FIRST FED BNCSHS OF ARKANSAS	Savings&Loans
FFCH US Equity	FIRST FINANCIAL HOLDINGS INC	Savings&Loans
FFCO US Equity	FEDFIRST FINANCIAL CORP	Savings&Loans
FFDF US Equity	FFD FINANCIAL CORP	Savings&Loans
FFFD US Equity	NORTH CENTRAL BANCSHARES INC	Savings&Loans
FFG US Equity	FBL FINANCIAL GROUP INC-CL A	Insurance
FFHS US Equity	FIRST FRANKLIN CORP	Savings&Loans
FFIC US Equity	FLUSHING FINANCIAL CORP	Savings&Loans
FFKT US Equity	FARMERS CAPITAL BANK CORP	Banks
FFKY US Equity	FIRST FINANCIAL SERVICE CORP	Banks
FFNM US Equity	FIRST FEDERAL OF NORTHERN MI	Savings&Loans
FFSX US Equity	FIRST FED BANKSHARES INC	Savings&Loans
FIFG US Equity	1ST INDEPENDENCE FINANCIAL	Savings&Loans
FISI US Equity	FINANCIAL INSTITUTIONS INC	Banks
FKFS US Equity	FIRST KEYSTONE FINANCIAL INC	Savings&Loans
FLIC US Equity	FIRST OF LONG ISLAND CORP	Banks
FMAR US Equity	FIRST MARINER BANCORP INC	Banks
FMFC US Equity	FIRST M & F CORP	Banks
FNBN US Equity	FNB UNITED CORP	Banks
FNLC US Equity	FIRST BANCORP INC/ME	Banks
FNSC US Equity	FIRST NATIONAL BANCSHARES	Banks
FPBI US Equity	FPB BANCORP INC	Banks
FPBN US Equity	1ST PACIFIC BANCORP	Banks
FPFC US Equity	FIRST PLACE FINANCIAL /OHIO	Savings&Loans
FPIC US Equity	FPIC INSURANCE GROUP INC	Insurance
FPTB US Equity	FIRST PACTRUST BANCORP INC	Savings&Loans
FRBK US Equity	REPUBLIC FIRST BANCORP INC	Banks
FRGB US Equity	FIRST REGIONAL BANCORP/CAL	Banks
FRME US Equity	FIRST MERCHANTS CORP	Banks
FSBI US Equity	FIDELITY BANCORP INC/PENN	Savings&Loans
FSBK US Equity	FIRST SOUTH BANCORP INC /NC	Banks
FSGI US Equity	FIRST SECURITY GROUP INC/TN	Banks
FSNM US Equity	FIRST STATE BANCORPORATION	Banks
FUNC US Equity	FIRST UNITED CORP	Banks
FWV US Equity	FIRST WEST VIRGINIA BANCORP	Banks
FXCB US Equity	FOX CHASE BANCORP INC	Savings&Loans
GABC US Equity	GERMAN AMERICAN BANCORP	Banks
GAN US Equity	GAINSCO INC	Insurance
GBH US Equity	GREEN BUILDERS INC	Home Builders
GBL US Equity	GAMCO INVESTORS INC-A	Diversified Finan Serv
GBTS US Equity	GATEWAY FINANCIAL HOLDINGS	Banks
GFED US Equity	GUARANTY FEDERAL BNCSHS INC	Banks
GFLB US Equity	GREAT FLORIDA BANK-CLASS A	Banks
GGAL US Equity	GRUPO FINANCIERO GALICIA-ADR	Banks

GIW US Equity	WILBER CORP	Banks
GLBZ US Equity	GLEN BURNIE BANCORP	Banks
GOV US Equity	GOVERNMENT PROPERTIES INCOME	REITS
GRAN US Equity	BANK OF GRANITE CORP	Banks
GRNB US Equity	GREEN BANKSHARES INC	Banks
GSBC US Equity	GREAT SOUTHERN BANCORP INC	Banks
GSLA US Equity	GS FINANCIAL CORP	Savings&Loans
HABC US Equity	HABERSHAM BANCORP	Banks
HALL US Equity	HALLMARK FINL SERVICES INC	Insurance
HARL US Equity	HARLEYSVILLE SVNGS FIN CORP	Savings&Loans
HAXS US Equity	HEALTHAXIS INC	Healthcare-Services
HBNK US Equity	HAMPDEN BANCORP INC	Savings&Loans
HBOS US Equity	HERITAGE FINANCIAL GROUP INC	Savings&Loans
HEOP US Equity	HERITAGE OAKS BANCORP	Banks
HFBC US Equity	HOPFED BANCORP INC	Savings&Loans
HFFC US Equity	HF FINANCIAL CORP	Savings&Loans
HFWA US Equity	HERITAGE FINANCIAL CORP	Banks
HGIC US Equity	HARLEYSVILLE GROUP INC	Insurance
HIFS US Equity	HINGHAM INSTITUTION FOR SVGS	Savings&Loans
HMNF US Equity	HMN FINANCIAL INC	Savings&Loans
HMPR US Equity	HAMPTON ROADS BANKSHARES INC	Banks
HOMB US Equity	HOME BANCSHARES INC	Banks
HOME US Equity	HOME FEDERAL BANCORP INC/ID	Savings&Loans
HRZB US Equity	HORIZON FINANCIAL CORP	Banks
HTBK US Equity	HERITAGE COMMERCE CORP	Banks
HTLF US Equity	HEARTLAND FINANCIAL USA INC	Banks
HWBK US Equity	HAWTHORN BANCSHARES INC	Banks
HWFG US Equity	HARRINGTON WEST FINANCIAL GR	Savings&Loans
IAAC US Equity	INTL ASSETS HOLDING CORP	Diversified Finan Serv
IBCA US Equity	INTERVEST BANCSHARES CORP-A	Banks
IBCP US Equity	INDEPENDENT BANK CORP - MICH	Banks
IBNK US Equity	INTEGRA BANK CORPORATION	Banks
ICH US Equity	INVESTORS CAPITAL HOLDINGS	Diversified Finan Serv
IFC US Equity	IRWIN FINANCIAL CORP	Banks
IFSB US Equity	INDEPENDENCE FED SAV BANK	Savings&Loans
IHC US Equity	INDEPENDENCE HOLDING CO	Insurance
IMP US Equity	IMPERIAL CAPITAL BANCORP INC	Banks
INCB US Equity	INDIANA COMMUNITY BANCORP	Savings&Loans
IRE US Equity	BANK OF IRELAND-SPONS ADR	Banks
ITIC US Equity	INVESTORS TITLE CO	Insurance
JAXB US Equity	JACKSONVILLE BANCORP INC FL	Banks
JFBC US Equity	JEFFERSONVILLE BANCORP/N Y	Banks
JFBI US Equity	JEFFERSON BANCSHARES INC/TN	Savings&Loans
JLI US Equity	JESUP & LAMONT INC	Diversified Finan Serv
JMP US Equity	JMP GROUP INC	Diversified Finan Serv
JXSB US Equity	JACKSONVILLE BANCORP INC/IL	Savings&Loans
KCLI US Equity	KANSAS CITY LIFE INS CO	Insurance
KENT US Equity	KENT FINANCIAL SVCS	Diversified Finan Serv
KFED US Equity	KAISER FEDERAL FINANCIAL GRO	Savings&Loans
KFFB US Equity	KENTUCKY FIRST FEDERAL BANCO	Savings&Loans
KFS US Equity	KINGSWAY FINANCIAL SERVICES	Insurance
KRNY US Equity	KEARNY FINANCIAL CORP	Savings&Loans
LABC US Equity	LOUISIANA BANCORP INC	Savings&Loans
LARK US Equity	LANDMARK BANCORP INC	Banks
LBBB US Equity	LIBERTY BELL BANK	Banks
LBCP US Equity	LIBERTY BANCORP INC	Savings&Loans
LEGC US Equity	LEGACY BANCORP INC	Savings&Loans

LEH US Equity	LEHMAN BROTHERS HOLDINGS INC	Diversified Finan Serv
LION US Equity	FIDELITY SOUTHERN CORP	Banks
LKFN US Equity	LAKELAND FINANCIAL CORP	Banks
LNCB US Equity	LINCOLN BANCORP	Banks
LPSB US Equity	LAPORTE BANCORP INC	Savings&Loans
LSBI US Equity	LSB FINANCIAL CORP	Savings&Loans
LSBK US Equity	LAKE SHORE BANCORP INC	Savings&Loans
LSBX US Equity	LSB CORP	Savings&Loans
LTS US Equity	LADENBURG THALMANN FINANCIAL	Diversified Finan Serv
MAIN US Equity	MAIN STREET CAPITAL CORP	Investment Companies
MASB US Equity	MASSBANK CORP	Savings&Loans
MBHI US Equity	MIDWEST BANC HOLDINGS INC	Banks
MBP US Equity	MID PENN BANCORP INC	Banks
MBR US Equity	MERCANTILE BANCORP -QUINCY	Banks
MBRG US Equity	MIDDLEBURG FINANCIAL CORP	Banks
MBTF US Equity	MBT FINANCIAL CORP	Banks
MBVA US Equity	MILLENNIUM BANKSHARES CORP	Banks
MBVT US Equity	MERCHANTS BANCSHARES INC	Banks
MBWM US Equity	MERCANTILE BANK CORP	Banks
MCBF US Equity	MONARCH COMMUNITY BANCORP	Savings&Loans
MCBI US Equity	METROCORP BANCSHARES INC	Banks
MER US Equity	MERRILL LYNCH & CO INC	Diversified Finan Serv
MERR US Equity	MERRIMAN HOLDINGS INC	Diversified Finan Serv
MFLR US Equity	MAYFLOWER BANCORP INC	Savings&Loans
MFNC US Equity	MACKINAC FINANCIAL CORP	Banks
MFSF US Equity	MUTUALFIRST FINANCIAL INC	Savings&Loans
MGYR US Equity	MAGYAR BANCORP INC	Savings&Loans
MHLD US Equity	MAIDEN HOLDINGS LTD	Insurance
MIGP US Equity	MERCER INSURANCE GROUP INC	Insurance
MKL US Equity	MARKEL CORP	Insurance
MKTX US Equity	MARKETAXESS HOLDINGS INC	Diversified Finan Serv
MNRK US Equity	MONARCH FINANCIAL HOLDINGS	Banks
MOFG US Equity	MIDWESTONE FINANCIAL GROUP I	Banks
MROE US Equity	MONROE BANCORP	Banks
MSBF US Equity	MSB FINANCIAL CORP	Savings&Loans
MSFG US Equity	MAINSOURCE FINANCIAL GROUP I	Banks
MSL US Equity	MIDSOUTH BANCORP INC	Banks
NAHC US Equity	NATIONAL ATLANTIC HOLDINGS-A	Insurance
NATL US Equity	NATIONAL INTERSTATE CORP	Insurance
NBBC US Equity	NEWBRIDGE BANCORP	Banks
NBN US Equity	NORTHEAST BANCORP	Banks
NBTF US Equity	NB&T FINANCIAL GROUP INC	Banks
NCBC US Equity	NEW CENTURY BANCORP INC	Banks
NCC US Equity	NATIONAL CITY CORP	Banks
NEBS US Equity	NEW ENGLAND BANCSHARES INC	Savings&Loans
NECB US Equity	NORTHEAST COMMUNITY BANCORP	Savings&Loans
NEWT US Equity	NEWTEK BUSINESS SERVICES INC	Commercial Services
NFBK US Equity	NORTHFIELD BANCORP INC/NJ	Savings&Loans
NFSB US Equity	NEWPORT BANCORP INC	Savings&Loans
NHTB US Equity	NEW HAMPSHIRE THRIFT BANCSHS	Savings&Loans
NICK US Equity	NICHOLAS FINANCIAL INC	Diversified Finan Serv
NKSH US Equity	NATIONAL BANKSHARES INC/VA	Banks
NMX US Equity	NYMEX HOLDINGS INC	Diversified Finan Serv
NOVB US Equity	NORTH VALLEY BANCORP	Banks
NRIM US Equity	NORTHRIM BANCORP INC	Banks
NSEC US Equity	NATIONAL SECURITY GROUP INC	Insurance
NSFC US Equity	NORTHERN STATES FINL CORP	Banks

NTQ US Equity	NTR ACQUISITION CO	Holding Companies-Divers
NVSL US Equity	NAUGATUCK VALLEY FINANCIAL	Savings&Loans
NWFL US Equity	NORWOOD FINANCIAL CORP	Banks
NWLIA US Equity	NATL WESTERN LIFE INS-CL A	Insurance
NXTY US Equity	NEXITY FINANCIAL CORP	Banks
NYM US Equity	NYMAGIC INC	Insurance
OCFC US Equity	OCEANFIRST FINANCIAL CORP	Savings&Loans
OLBK US Equity	OLD LINE BANCSHARES INC	Banks
OLCB US Equity	OHIO LEGACY CORP	Banks
ONFC US Equity	ONEIDA FINANCIAL CORP	Savings&Loans
OPHC US Equity	OPTIMUMBANK HOLDINGS INC	Banks
OPOF US Equity	OLD POINT FINANCIAL CORP	Banks
OPY US Equity	OPPENHEIMER HOLDINGS-CL A	Diversified Finan Serv
ORIT US Equity	ORITANI FINANCIAL CORP	Savings&Loans
OSBC US Equity	OLD SECOND BANCORP INC	Banks
OSBK US Equity	OSAGE BANCSHARES INC	Savings&Loans
OSHC US Equity	OCEAN SHORE HOLDING CO	Savings&Loans
OVBC US Equity	OHIO VALLEY BANC CORP	Banks
PABK US Equity	PAB BANKSHARES INC	Banks
PBCI US Equity	PAMRAPO BANCORP INC	Savings&Loans
PBHC US Equity	PATHFINDER BANCORP INC	Savings&Loans
PBIB US Equity	PORTER BANCORP INC	Banks
PBIP US Equity	PRUDENTIAL BANCORP INC OF PA	Savings&Loans
PCBI US Equity	PEOPLES COMMUNITY BANCORP	Savings&Loans
PCBK US Equity	PACIFIC CONTINENTAL CORP	Banks
PCBS US Equity	PROVIDENT COMMUNITY BANCSHAR	Banks
PEBK US Equity	PEOPLES BANCORP OF NC	Banks
PEBO US Equity	PEOPLES BANCORP INC	Banks
PFBC US Equity	PREFERRED BANK/LOS ANGELES	Banks
PFBI US Equity	PREMIER FINANCIAL BANCORP	Banks
PFBX US Equity	PEOPLES FINANCIAL CORP/MISS	Banks
PFED US Equity	PARK BANCORP INC	Savings&Loans
PKBK US Equity	PARKE BANCORP INC	Banks
PLCC US Equity	PAULSON CAPITAL CORP	Diversified Finan Serv
PLFE US Equity	PRESIDENTIAL LIFE CORP	Insurance
PMACA US Equity	PMA CAPITAL CORPORATION-CL A	Insurance
PMBC US Equity	PACIFIC MERCANTILE BANCORP	Banks
PNBC US Equity	PRINCETON NATIONAL BANCORP	Banks
PNBK US Equity	PATRIOT NATIONAL BANCORP INC	Banks
PPBI US Equity	PACIFIC PREMIER BANCORP INC	Savings&Loans
PRK US Equity	PARK NATIONAL CORP	Banks
PROS US Equity	PROCENTURY CORP	Insurance
PROV US Equity	PROVIDENT FINANCIAL HLDGS	Savings&Loans
PRWT US Equity	PREMIERWEST BANCORP	Banks
PSBC US Equity	PACIFIC STATE BANCORP	Banks
PSBH US Equity	PSB HOLDINGS INC	Savings&Loans
PTA US Equity	PENN TREATY AMER CORP	Insurance
PULB US Equity	PULASKI FINANCIAL CORP	Savings&Loans
PVFC US Equity	PVF CAPITAL CORP	Savings&Loans
PVSA US Equity	PARKVALE FINANCIAL CORP	Savings&Loans
PWOD US Equity	PENNS WOODS BANCORP INC	Banks
PZN US Equity	PZENA INVESTMENT MANAGM-CL A	Diversified Finan Serv
QCRH US Equity	QCR HOLDINGS INC	Banks
QNTA US Equity	QUANTA CAPITAL HOLDINGS LTD	Insurance
RAMR US Equity	RAM HOLDINGS LTD	Insurance
RBNF US Equity	RURBAN FINANCIAL CORP	Banks
RBPA US Equity	ROYAL BANCSHARES OF PENN-A	Banks

RCBK US Equity	RIVER CITY BANK/VA	Banks
RCKB US Equity	ROCKVILLE FINANCIAL INC	Savings&Loans
RIVR US Equity	RIVER VALLEY BANCORP	Savings&Loans
RNST US Equity	RENASANT CORP	Banks
RODM US Equity	RODMAN & RENSHAW CAPITAL GRP	Internet
ROMA US Equity	ROMA FINANCIAL CORP	Savings&Loans
ROME US Equity	ROME BANCORP INC	Savings&Loans
RPFQ US Equity	RAINIER PACIFIC FINANCIAL GR	Savings&Loans
RVSB US Equity	RIVERVIEW BANCORP INC	Savings&Loans
SAL US Equity	SALISBURY BANCORP INC	Banks
SAMB US Equity	SUN AMERICAN BANCORP	Banks
SASR US Equity	SANDY SPRING BANCORP INC	Banks
SAVB US Equity	SAVANNAH BANCORP INC	Banks
SBBX US Equity	SUSSEX BANCORP	Banks
SBKC US Equity	SECURITY BANK CORP	Banks
SBP US Equity	SANTANDER BANCORP	Banks
SBSI US Equity	SOUTHSIDE BANCSHARES INC	Banks
SCA US Equity	SYNCORA HOLDINGS LTD	Insurance
SCBT US Equity	SCBT FINANCIAL CORP	Banks
SCMF US Equity	SOUTHERN COMMUNITY FINANCIAL	Banks
SEAB US Equity	SEABRIGHT INSURANCE HOLDINGS	Insurance
SFNC US Equity	SIMMONS FIRST NATL CORP-CL A	Banks
SFST US Equity	SOUTHERN FIRST BANCSHARES	Banks
SGB US Equity	SOUTHWEST GEORGIA FINL CORP	Banks
SHG US Equity	SHINHAN FINANCIAL GROUP-ADR	Diversified Finan Serv
SIEB US Equity	SIEBERT FINANCIAL CORP	Diversified Finan Serv
SIFI US Equity	SI FINANCIAL GROUP INC	Savings&Loans
SMBC US Equity	SOUTHERN MISSOURI BANCORP	Savings&Loans
SMCG US Equity	MILLENNIUM INDIA ACQUISITION	Closed-end Funds
SMHG US Equity	SANDERS MORRIS HARRIS GRP IN	Diversified Finan Serv
SMMF US Equity	SUMMIT FINANCIAL GROUP INC	Banks
SMTB US Equity	SMITHTOWN BANCORP INC	Banks
SNBC US Equity	SUN BANCORP INC-NJ	Banks
SOCB US Equity	SOUTHCOAST FINANCIAL CORP	Banks
SOMH US Equity	SOMERSET HILLS BANCORP	Banks
SONA US Equity	SOUTHERN NATL BANCORP OF VA	Banks
SOV US Equity	SANTANDER HOLDINGS USA INC	Savings&Loans
SRCE US Equity	1ST SOURCE CORP	Banks
SSBI US Equity	SUMMIT STATE BANK	Banks
SSBX US Equity	SILVER STATE BANCORP	Banks
SSFN US Equity	STEWARDSHIP FINANCIAL CORP	Banks
STBA US Equity	S & T BANCORP INC	Banks
STBC US Equity	STATE BANCORP INC	Banks
STBK US Equity	STERLING BANKS INC	Banks
STEL US Equity	STELLARONE CORP	Banks
STFC US Equity	STATE AUTO FINANCIAL CORP	Insurance
STU US Equity	STUDENT LOAN CORP	Diversified Finan Serv
SUAI US Equity	SPECIALTY UNDERWRITERS' ALLI	Insurance
SUBK US Equity	SUFFOLK BANCORP	Banks
SUFB US Equity	FIRST BANKSHARES INC	Banks
SUPR US Equity	SUPERIOR BANCORP	Banks
SUR US Equity	CNA SURETY CORP	Insurance
SVBI US Equity	SEVERN BANCORP INC/MD	Savings&Loans
SYBT US Equity	S.Y. BANCORP INC	Banks
TAMB US Equity	TAMALPAIS BANCORP	Banks
TAQ US Equity	TRANSFORMA ACQUISITION GROUP	Holding Companies-Divers
TAYC US Equity	TAYLOR CAPITAL GROUP INC	Banks

TBBK US Equity	BANCORP INC/THE	Banks
TBHS US Equity	BANK HOLDINGS INC/THE	Banks
TCBK US Equity	TRICO BANCSHARES	Banks
TCHC US Equity	21ST CENTURY HOLDING CO	Insurance
TDBK US Equity	TIDELANDS BANCSHARES INC	Banks
TFIN US Equity	TEAM FINANCIAL INC	Banks
TGIC US Equity	TRIAD GUARANTY INC	Insurance
THFF US Equity	FIRST FINANCIAL CORP/INDIANA	Banks
THRD US Equity	TF FINANCIAL CORP	Savings&Loans
TIBB US Equity	TIB FINANCIAL CORP	Banks
TIL US Equity	TRANS-INDIA ACQUISITION CORP	Holding Companies-Divers
TMP US Equity	TOMPKINS FINANCIAL CORP	Banks
TNCC US Equity	TENNESSEE COMMERCE BANCORP	Banks
TOFC US Equity	TOWER FINANCIAL CORP	Banks
TOWN US Equity	TOWNE BANK	Banks
TRH US Equity	TRANSATLANTIC HOLDINGS INC	Insurance
TRUE US Equity	CENTRUE FINANCIAL CORP	Banks
TSBK US Equity	TIMBERLAND BANCORP INC	Savings&Loans
TSH US Equity	TECHE HOLDING CO	Savings&Loans
TWPG US Equity	THOMAS WEISEL PARTNERS GROUP	Diversified Finan Serv
UBCP US Equity	UNITED BANCORP INC/OHIO	Banks
UBFO US Equity	UNITED SECURITY BANCSHARE/CA	Banks
UBNK US Equity	UNITED FINANCIAL BANCORP INC	Savings&Loans
UBOH US Equity	UNITED BANCSHARES INC/OHIO	Banks
UBSH US Equity	UNION FIRST MARKET BANKSHARE	Banks
UCBA US Equity	UNITED COMMUNITY BANCORP	Banks
UCFC US Equity	UNITED COMMUNITY FINANCIAL	Savings&Loans
UNAM US Equity	UNICO AMERICAN CORP	Insurance
UNB US Equity	UNION BANKSHARES INC /VT	Banks
UNIB US Equity	UNIVERSITY BANCORP INC	Banks
UNTY US Equity	UNITY BANCORP INC	Banks
USBI US Equity	UNITED SECURITY BANCSHARES	Banks
UVSP US Equity	UNIVEST CORP OF PENNSYLVANIA	Banks
UWBK US Equity	UNITED WESTERN BANCORP INC	Savings&Loans
VBFC US Equity	VILLAGE BANK AND TRUST FINAN	Banks
VCBI US Equity	VIRGINIA COMMERCE BANCORP	Banks
VIST US Equity	VIST FINANCIAL CORP	Banks
VNBC US Equity	VINEYARD NATL BANCORP CO	Banks
VPGF US Equity	VIEWPOINT FINANCIAL GROUP IN	Banks
VSNB US Equity	VSB BANCORP INC	Banks
VYFC US Equity	VALLEY FINANCIAL CORP	Banks
WAIN US Equity	WAINWRIGHT BANK TRUST CO	Banks
WASH US Equity	WASHINGTON TRUST BANCORP	Banks
WAUW US Equity	WAUWATOSA HOLDINGS INC	Savings&Loans
WAYN US Equity	WAYNE SAVINGS BANCSHARES INC	Savings&Loans
WB US Equity	WACHOVIA CORP	Banks
WBCO US Equity	WASHINGTON BANKING CO	Banks
WBNK US Equity	WACCAMAW BANKSHARES INC	Banks
WCBO US Equity	WEST COAST BANCORP/OREGON	Banks
WFBC US Equity	WILLOW FINANCIAL BANCORP INC	Savings&Loans
WFD US Equity	WESTFIELD FINANCIAL INC	Savings&Loans
WGNB US Equity	WGNB CORP	Banks
WHG US Equity	WESTWOOD HOLDINGS GROUP INC	Diversified Finan Serv
WHI US Equity	W HOLDING COMPANY INC	Banks
WIBC US Equity	WILSHIRE BANCORP INC	Banks
WM US Equity	WASHINGTON MUTUAL	Banks
WPL US Equity	W.P. STEWART & CO LTD	Diversified Finan Serv

WSB US Equity	WSB HOLDINGS INC	Savings&Loans
WSFG US Equity	WSB FINANCIAL GROUP INC	Banks
WSFS US Equity	WSFS FINANCIAL CORP	Savings&Loans
WTBA US Equity	WEST BANCORPORATION	Banks
WTM US Equity	WHITE MOUNTAINS INSURANCE GP	Insurance
WVFC US Equity	WVS FINANCIAL CORP	Savings&Loans
Y US Equity	ALLEGHANY CORP	Insurance
YAVY US Equity	YADKIN VALLEY FINANCIAL CORP	Banks