

The Effect of U.S. Stocks' IPO from Financial Crisis

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Abstract

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The financial crisis shocked the whole capital market in 2008; the global economy began to stick in another dilemma after the great depression in the 1930s. Since underpricing is commonly existed in stock markets, and underpricing itself is always measured by initial return rate, which reflects the potential value in initial day and the investing perspective, therefore, in order to identify the effects of financial crisis on U.S. stock market, we will analyze initial return to see if this crisis did affect IPOs. In this paper, we picked up 343 IPOs of financial sector in NYSE from 2006 to 2010, then studied in the regression results by using STATA.

Chapter 1

Introduction

1.1 An Overview of Financial Crisis in 2008

In 2008, with the unprecedented number of companies claiming bankruptcy and huge amount of cost for governments' bail-out plans, the global market had begun to enter the first financial crisis in 21st century.

The crisis lasted from 2007, with the bursting of housing bubbles, to 2010 in the American domestic financial system. However, its aftermath is not over yet, Jones (2007) suggested, due to tremendous national debt and negative national competitiveness. The timetable to return to stability is unpredictable.

During the crisis, especially in 2008, the U.S. government bought Fannie Mae (FNM) and Freddie Mac (FRE) which both are non-bank institutions doing business on mortgage, and turned them into state-owned firms. Lehman Brothers declared bankruptcy on September 14 after failing to find a buyer; no one was willing to buy it including government since its deficit was approximately \$613 billion. The Securities and Exchange Commission (SEC) announced a temporary emergency ban on short selling in the stocks of financial companies. Bank of America purchased Merrill Lynch (MER), and American International Group (AIG) was rescued by the federal government with an \$85 billion capital injection. Later, on September 25th, JP Morgan Chase (JPM) agreed to buy the assets of Washington Mutual (WM) which was the biggest bank failure in U.S. banking history. In November, the U.S. Treasury Department purchased \$3 billion in

preferred stocks of 23 U.S. banks through the Capital Purchase Program. More and more public firms had filed for bankruptcy than in 2007.

Jickling (2010) pointed out, based on the previous practices; Federal Reserve System (Fed) had used a series of financial tools which were commonly taken in the Asian crises of 1997-1998, the stock market crashes of 1987 and 2000-2001, the junk bond debacle in 1989, the savings and loan crisis, 9/11, and so on. But it was unsuccessful. As mentioned above, the subprime loan crisis caused by housing bubbles was the origin. Moreover, lack of transparency and accountability in mortgage finance, indecision of rating agencies, invisible off-balance sheet finance and failure of risk management systems should also be considered in this crisis.

Although the central bank had tried calming, the situation was still deteriorating in 2008. By early 2009, the specialists found that the financial system and the global economy appeared to be stuck in a descending spiral, and the primary focus of policy became the prevention of a prolonged downturn on the order of the Great Depression. The volume and variety of negative financial news, and the seeming uselessness of policy feedbacks, have raised new questions about the main origin of financial crises and the market mechanisms. The economic influence of financial market failures in the 1930s remains an active academic subject; it is possible that the causes and outcomes of the current crisis would also be debated for decades to come.

In September, 2008, the Congressional Budget Office (CBO) estimated 1.5 percent real GDP growth in 2008 as a whole, followed by 1.1 percent growth in 2009.

Actually, after the new statistics came out, it showed that CBO prediction was estimated high.

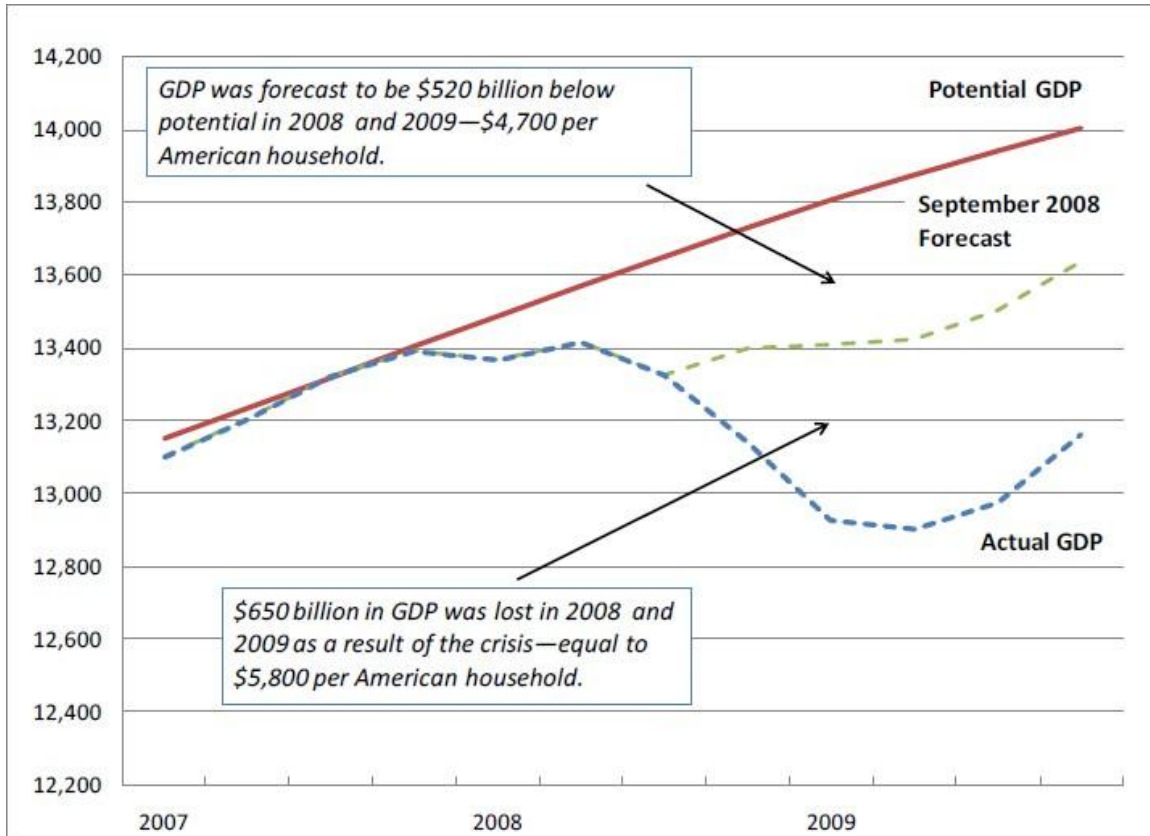


Figure 1: Impact of the Crisis on Economy-wide Output

Figure 1 plots actual real GDP and GDP that was announced by the CBO's forecasting and the CBO's calculation of potential GDP. As shown on the chart, GDP fell at the end of 2008 and into early 2009, falling by 5.4 percent and 6.4 percent in the last quarter of 2008 and the first quarter of 2009, against CBO expectations of steady GDP trend.

1.2 The IPO's Trend

After World War II, the global economy seemed to hit bottom. Nations were eager to search new ways to achieve growth. After the war th U.S. economy had advantages in physical assets and human resources that other countries did not. That led to the development of the U.S. economy.

The IPO (Initial Public Offering) is now a main approach for a company to go public and raise more financial capital. Raising allows investors to earn from newly public companies which are experiencing rapid growth. Displayed in Figure 2, the momentum of the IPO is quite good before the terrorist attacks on the U.S. on September 11, 2001. After the attacks, the number of IPOs suddenly dropped. In 2008, there was another decline. Therefore, the crisis, somewhat, affected the volume of new issues.

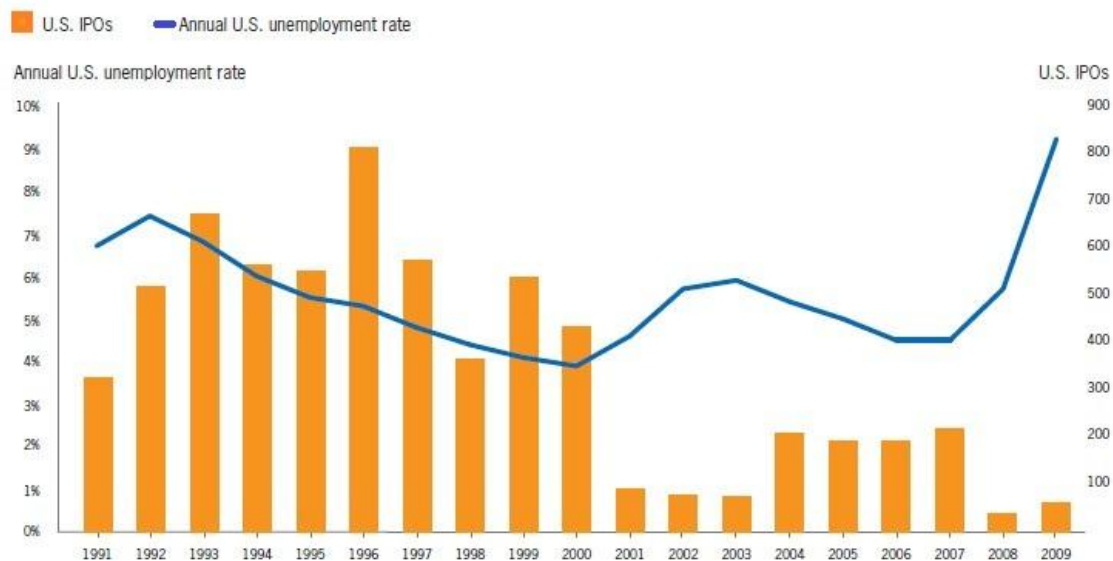


Figure 2: The Trend of U.S. IPO and Unemployment Rate

Source: Grant Thornton LLP, Dealogic and U.S. Department of Labor

Data includes corporate IPOs as of December 31, 2009, excluding funds, REITs, SPACs and LPs.

1.3 The Importance of the Study

This paper is mainly focusing on checking if the financial crisis had significantly influenced the U.S. IPO. In Chapter 2, there will be a series of arguments and opinions on IPO derived from other papers and journals written by experts and analysts to further support ideas. In Chapter 3, a regression model will be created and used to verify the financial crisis did or did not affect stocks' initial return rate by introducing different variables which are highly related to the rate. Through the comparison between rates calculated from data of 400 stocks in the financial industry during pre- and post-crisis periods, then in Chapter 4, the significance of the financial crisis will be used to make conclusion and analysis in Chapter 5.

The purpose of this paper is to determine an appropriate time to invest. It is expected there is a significant effect from financial crisis. There are several reasons for this:

1. Unconfident investors accelerated worsening of the stock market. New companies could not get enough finances to grow and also the hesitating issuers over-underpriced the new stocks although the firms which these stocks stand for might have huge potential investment value.

Those countries that were not or less affected by the financial crisis (Table 1) attracted international investors. They were considering put their money into those emerging markets of developing countries, looking forward to a good return while the U.S. could not guarantee that possibility was smaller.

1	Macau	15,00
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2	Angola	13,20
3	Azerbaijan	11,60
4	Equatorial Guinea	11,20
4	Qatar	11,20
5	Anguilla	10,20
6	Turkmenistan	10,00
7	Iraq	9,80
7	China	9,80
8	Peru	9,20
8	Belarus	9,20
9	Uzbekistan	8,90
9	Mongolia	8,90
10	Uruguay	8,50
10	Kuwait	8,50
10	Ethiopia	8,50
11	Panama	8,30
12	Congo, Republic of the	8,10
13	Congo, Democratic Republic of the	8,00
14	Tajikistan	7,90
15	United Arab Emirates	7,70
16	Armenia	7,60
16	Romania	7,60
17	Liberia	7,50
17	Laos	7,50
17	Afghanistan	7,50
17	Rwanda	7,50
18	Moldova	7,30
18	Solomon Islands	7,30
19	Tanzania	7,10
19	Argentina	7,10
20	Madagascar	7,00
20	Lebanon	7,00
20	Gibraltar	7,00

Table 1: GDP - real growth rates (%) 2009 Country Ranks

Resources: CIA World Factbook

The U.S. government was becoming more cautious; stricter regulations were enacted that made business in America more difficult. To some extent, capital was outflowing.

Chapter 2

Literature of Review

A market which is undergoing rapid growth needs excessive capital to support its development. This feature matches the American market in the 1950s. The IPO was not popular at that time; however, it provided a potential stream for those companies which wanted to go public and obtain capital, the only thing was, they did not realize yet. IPO was commonly admitted and accepted in 1980s. Although stocks issued in initial day will always be underpriced, many firms through whole business sectors had shown their interest in IPO as it was a quick way to raise capital. Until 9/11, 2001, the number of new firms of going public in U.S. suddenly dropped (Figure 2).

The earliest research on IPO underpricing had been done by the Securities and Exchange Commission (SEC) in 1963. Later, such works continued. Jay R. Ritter has been working in the IPO area for many years and his works impact strongly on this issue. He focused on underpricing in new stocks; the average initial return rates in 1998 and 2002 have been calculated. In 2003, after collecting IPO data from 38 countries, he concluded developing countries had higher average initial return than developed countries, while Asian countries (including Japan) had more underpricing than western countries.

Ljungqvist (2005) analyzed the average initial return rates for the decades from 1960s to 2000s are 21%, 12%, 16%, 21%, 40% respectively. It seems there is a common view on IPO underpricing among analysts and researchers, because underpricing exists in different markets, different countries, and different periods with varying degrees.

New stocks always are underpriced, and this is the first rationale. Why? Ritter (1998) explained, generally, there were some measures to show to what extent the stock had been underpriced. The large initial returns (the price change measured from the offering price to the market price on the first trading day) was a well-known measure that was highly related to IPO, and it was very useful to the investors in new issues. Based on the return, investors would know how well the stocks are performing. Many studies and research had been done and recorded the results in each period, showing that the distribution of initial returns is highly skewed, with a positive mean and a median near zero. In the U.S., the mean initial return is almost 15 percent. It reflected that, back to the end of the last century, people could make profits from new stocks in the first day; on the other hand, the U.S. financial market was running normally. Another measure was that a sort of cycle, like a business cycle, could be found in both average initial return and average initial volume. High initial returns tend to stay close by rising IPO volume seen from past records. The third measure related to IPOs is the price of the new issues would not perform well in the long run. Histogram is that paper displayed that companies which were going public from 1970 to 1993 produced an average return of 7.9 percent per year for the first five years after they went public, using the first closing market price as the purchase price. There was a control group of non-issuing firms, matched by market capitalization, which produced average annual returns of 13.1 percent, while IPOs only had 5.2 percent per year in the first five years.

There are several hypothesizes on IPO underpricing. Rock (1986) explained Winner's Hypothesis. He assumed two types of investors were in the market, informed investors and uninformed investors, and they did not communicate with each other. When

informed investor acknowledged the new issues had huge value to invest, they would buy a large number of shares; as a result, those uninformed investors would be pushed out from the market. Therefore, investment bankers had to downprice IPOs until it compensated the loss from adverse selection by uninformed investors.

Chemanur (1993) tested the Dynamic Information Acquisition Hypothesis. He concluded, there was information asymmetry between issuers and exterior investors. Insiders knew exact information inside the issuing companies while exterior investors did not. Good companies wanted investors to get its investment value. Yet, for those investors, if they planned to know more about the company, they were required to pay more on that. Finally, insiders had to underprice in order to attract more outsiders to acquire inside information, and then put that information into the secondary market. Good companies could distinguish themselves from bad companies through underpricing.

Baron (1982) proved Theories Focusing on Agency Cost. The assumption was, issuing companies know less information about markets than issuers. If companies asked issuers to make the best to sell stocks, they had to concede issuers to underprice since it was not wise to monitor issuers without cost budgeting. Nevertheless, Muscarella and Vetsuypens (1989) realized when investment banks themselves went public, there was not such a monitoring problem, but their IPOs were still underpriced. This opinion did not either support or refute Baron's research because issuers (also issuing companies) could say proper underpricing was the typical cost.

Carter and Manaster (1990) used U.S. IPO data of the 1980s to develop the Underwriter Reputation Hypothesis. It showed that the reputation of investment bankers provided a

risk signal on issuing companies. Generally, investment banks with high reputation would deny issuing IPOs for those young entrepreneurs who had high risks. That was why those issuers had smaller underpricing. Later, Cooney, Singh, Carter and Dark (2001) and Loughran and Ritter (2004) found that it was contradicted by the negative correlation between reputation of issuers and IPO underpricing. After the 1990s, during the dot-bubble period, the correlation was positive. They deduced it was possible that issuers had lowered the issuing standard; thus many risky firms went public. Issuers aimed to enlarge each IPO market shares, and got more services fee from intermediate business.

Dewenter, Novaes and Pettway (1999) introduced Theories Focusing on Interests Conflicts. They noticed when studying Japanese IPOs that if too many companies had cross-holdings, underpricing would get bigger. Because of potential interests conflicts, big underpricing was a market reaction that resulted from opaque and complicated relationships among Japanese firms. Hamao and Hoshi (1999) analyzed Japanese corporate bonds and found the similar phenomenon. If the bond issuer belonged to one of the Japanese banks, and this bank was the issuing company at the same time, the IPO underpricing would be lower. They also saw that if there was a kind of interest relationship between venture investors and issuers, underpricing tended to be higher. However, there was little reference that mentioned such a relationship exists in western world.

Ritter (1984) and Aggarwal and Conroy (2000) had expanded Market Climate Hypothesis. In this theory, when the market was growing, the uncertainty of the market would be greater and thus it was hard to assess the risks in the market which made investors hesitate to insert capital. Therefore, issuing companies and issuers had to make

more underpricing than in other periods in order to induce investors to step into the market.

Each country has its own underpricing. Ritter (2003) found IPO total spread in Europe was lower than in the U.S., as well as initial return aggregation. Blidik and Yimaz (2005) in their paper pointed out there were two reasons for lower underpricing. The first was intensive competition among investment bankers. When IPOs were not much, those bankers would try their best to get underwriting. Therefore, average initial return fell. The second reason was the allocation of new issues after going public. If new issues would be allocated to more investors and more average, the underpricing would be lower. As mentioned in Chapter 1, the number of IPOs in the U.S. was smaller after a financial crisis; if these two reasons are correct, then initial return rate might decrease.

Research shows a series of factors related to underpricing, including timing, the number of investors and potential investors, the leverage of stocks controlled by big shareholders or managements, the power of venture-backed, geographic difference and so on. Ritter (1991) reported, industrial underpricing differs when time changed. The biggest level of underpricing was accompanied by the biggest volume of IPOs at the same period. Zheng and Li (2008) found initial return rate was positive correlated to the number of non-institutional investors, and negative correlated to the change in the number of total shareholders. Megginson and Weiss (1991) reported, the underpricing of IPOs with venture-backed were lower than those IPOs without venture-backed. They showed IPO certification had a very strong influence on relieving underpricing. IPO underpricing always is a hot issue in economic sector, and it results in thousands of research papers.

Since new stocks have to be underpriced, how do investment bankers determine initial price? Here is the second rationale. Benveniste and Spindt (1989) found, most companies could choose not hiring any underwriters. It seemed by doing this, they could reduce the difference between initial price and open price, thus the issuing company got more. But if underwriters existed, they were able to avoid selling IPOs to the same investors because of rules changed by underwriters if the same investors auctioned, which ensured the whole issuing process effectively. Moreover, underwriter would use a lever which could reduce IPO expected underpricing by knowing the market information from regular investors. There were two kinds of contracts between issuing company and underwriter, namely, firm-commitment contract and best-effort contract. Due to risk of preselling the stocks, issuing companies needed to spend a certain cost on negotiating with underwriters, which was a best-effort contract, in order to reduce the incentive of reselling, thus underpricing would not be that severe. In firm-commitment contract, underwriters own the interests from IPO, and that provided a good reason to presell those new stocks. Compared to best-effort contract, the firm-commitment contract was the cheapest. These two contracts were opposite, according to the level of tolerating risks on a underwriter and the size and perspective of a company; it was hard to say which contract is better. Rock (1986) created a model to test minimum-sales constraint by using several implications. In the conclusion, he found the size of the constraint should be inversely related to underpricing.

IPO has risks to issuing companies, but researches about analyzing the reasons why companies are so eager to go public were rare, until Pagano, Panetta and Zingales (1998) made a comprehensive study of this question. They indicated, owing to ex-ante

information being not all-inclusive and important variables which only existed in post-ante information, the issue would be solved by combining two kinds of information. By doing this topic on the data from 2,181 companies in the Italian stock market (Italy was similar to other industrial countries and the public information in Italy was comparatively transparent), they found two main factors that would be considered as signals to make firms decide if it was good to go public. The first was market-to-book ratio. After calculation, it came out that by increasing 1 percent in market-to-book ratio, the probability of going public would add another 25%. The second was the size of the company. Big companies usually tended to go public.

Fama, Fisher, Jensen and Roll (1969) first introduced the event study method. This methodology now has become the most prevalent tool in analyzing economic problems, especially in IPOs and econometrics. A financial crisis can be regarded as an event, which might cause bad impacts on IPO underpricing.

Chapter 3

Methodology

3.1 Data Selection

A sample of 343 U.S. stocks in financial sector was picked up from Bloomberg and Yahoo! Finance sources between June 1st, 2006 and August 31st, 2008. The sample is then divided into two groups: 153 stocks for pre-2008 period and the rest of them for after 2008 period. The year 2008 is selected as the event period since major bankruptcies occurred in and after this period. The reason for selecting the financial sector as sample set is, compared to the other sectors of market, this sector suffered severity from the subprime loan crisis. According to NYSE news report in 2008, 1,416,902 people were filed for bankruptcy and most of them were from financial sector.

Although so many firms declared bankruptcy in 2008, IPO kept developing in this unpleasant time. The U.S. government had done a lot of works on adjusting policies, and bailing out companies. As the consequence, the domestic economy, especially infrastructure industry did not get a deadly shock, unlike in 1930s. Moreover, under the good business environment, the data reflected IPOs are acceptable. Thus, the results in this paper would be convictive.

3.2 Regression Model

The effect of financial crisis will be tested through initial return, which is defined as:

$$IR_i = \frac{P_{i1} - P_{i0}}{P_{i0}} \dots\dots\dots 3.1$$

Where IR_i is the initial return rate of stock i ;

P_{i0} is the initial price or offer price of stock i in initial day;

P_{i1} is the closing price of stock i in initial day.

The initial return is considered as dependent variable. There are several variables that related to initial return: offer price, closing price in initial day, issuing volume, company's age till going public, and PE ratio.

A company with longer time before going public, the less underpricing it would get, by considering reputation or other intangible assets. When investors want to take a look on a firm's value of investing, the common measurement is PE ratio. If the ratio is big, that means investors are paying too much on this firm's stocks. Therefore, it is supposed to be negative correlated to IR. If a company is issuing more shares than other companies, then more investors can buy its stocks. Since the stock can be well allocated, the underpricing would become lower.

The model is below:

$$IR_i = \alpha + \beta_1 P_{i1} + \beta_2 \log AGE_i + \beta_3 PE_i + \beta_4 \log VOL_i + \beta_5 P_{i0} + \beta_6 D + e_i \dots 3.2$$

Where α is the interception of regression;

β_n ($1 \leq n \leq 6$) is the coefficients for each term;

PE_i is the price to equity ratio of issuing company i ;

$\log AGE_i$ is the time between established and went public of company i after natural logarithmized. The reason for logarithmic analysis is due to high fluctuation of age data. After modified, the number would be flatter or more linear.

$\log VOL_i$ is the natural logarithmic IPO size of stock i .

D is a dummy variable, stands for the effect of financial crisis.

e_i is the error term of stock i .

In addition, dummy variable D have to be further defined. As mentioned above, the year of 2008 is the boundary of financial crisis. Thus, in the years of 2006 and 2007, the dummy variable D is 0. It assumes that financial crisis does not happen yet. Begin from 2008, D is 1, because the financial crisis urges.

This model might not very accurate to test if financial crisis does affect financial sector. In general, according to those financial reports which were broadcasted in the past few years, the global market seemed to be unstable: slowly growing GDP in developed countries, conservative international businesses, declines in world exports and imports, and so on. If the significance of dummy variable was not obvious, say, the effect of crisis could be neglected in financial market, it should be resulted from the data set being small or inadequate independent variables.

Chapter 4

Results and Analysis

A Brief Introduction

4.1 The Result of Regression

IR	Coefficient	P> t
Last Price in Initial Day	0.0268	0.000
Log(Volume)	- 0.0084	0.208
Log(Age)	0.0217	0.088
PE Ratio	- 0.0000	0.938
Offer Price	- 0.0285	0.000
D	- 0.0508	0.116
Constant	0.1607	0.074

Table 2

After data has been imported into STATA by employing ordinary least square method, the result is displayed above. In Table 2, the sign of each coefficient, or β_n is expected to be right before results obtained. However, there comes another question, do those variables, including dummy variable D, have significant relationship to initial return rate?

Using a 5% level of significance, only last price in initial day and offer price have very strong significance which P-values of both variables are close to 0, while other two variables are not that significant; especially PE ratio. Therefore, this variable can be

dropped out in this model. The issuing size, which has 0.208 of P-value, also seems not to be related to IR. The rest of variables, age and D, shows a little significance, although they have lower 0.088 and 0.116 of P-values respectively.

In summary, the model fails to test the effect of financial crisis of 2008. The model may be not efficient due to lack of other important variables, so that the result of regression has diverged from original hypothesis which is financial crisis does affect financial industry.

4.2 Limitation of the Model

1. The time of crisis lasting

The model has set the year of 2008 as financial crisis happened. Actually, this crisis started in 2006. However, people did not recognize it at that moment because it was not that severe compared to 2008. If we count from 2006 to 2010, it is only 5-years long, and no one could say the financial crisis has finished. If there is a bigger time span for the crisis, like a decade or even more, and using huge amount of data to calculate, then the convergence of results would be more obvious. A better way to test financial crisis is create three control groups, before crisis, during crisis and after crisis.

2. Unpublicized information

Since crisis was taking its toll, some companies, more or less, chose not to tell the details to the market about their operating status, gain or loss. It is reasonable; people do not want their disadvantages reported. But it is not good to those investors; they do not know what exactly happened on the company which they were investing. Is it still worth to invest? What is the prospective view of this company? They can only get information from public resources, but no one can be sure whether the information is reflecting the real situation or not.

3. Behavioural finance

People's psychological reaction is very hard to prediction. The most famous theory is Sheep-Flock Effect, which commonly exists in global markets. People are always distracted by noise makers who are the lead of the bomb. Once investors followed the

wrong clue, the market would be very volatile. Sometimes, some people did not change their strategies timely because they had strong beliefs on some certain companies rather than fail to switch. This kind of factor cannot be quantified. In order to solve this problem is to get effective factors as much as possible to make it insignificant or less affect the result of regression.

Chapter 5

Conclusion and Recommendation

According to the results of STATA, it is clear that the variables in this model are not very significant to the initial return rate. However, it shows that the financial crisis had some influence on the financial sector, though it is not distinct. Furthermore, the model has proved that both issuing size and financial crisis have negative relationships to the financial market. By analyzing the results, if a company plans to sell its stocks in a big amount that would turn out into low underpricing since more investors have chances to get the shares. Once the market reaches equilibrium, the price of the stock would be more effective. The same thing happened during the financial crisis. With the existence of a crisis, if the crisis is getting more destructive, or damages a lot to the national economy, the initial return would be lower. Because the public does not have too much confidence so that people start to invest less or even stop. The investment bankers, who always play a role of issuers, will probably make discounts on the stock and suffer the loss alone if the market is too bad. When the financial crisis shocked the public, the American government made its efforts on reducing the wave of the financial tsunami, and the economy was accompanied with comprehensive and mature regulations, thus the whole market was not declining like a bungee jump. When this possibility is in mind, it can answer that why the effect of the financial crisis in 2008 is not significant. The measures that the U.S. government has taken offset the bad effects from the crisis.

Above all, the data used in this paper is not enough, and less effective variables made the results a little obscure. But in general, if investors want to earn profits during this special

time, they are able to be risk-averse. Although the market seems to be depressed, it is still stable. Investors could put their capital into the market to stimulate the rebuilding of the economy. Because it is very time to restore public's confidence and national power.

Therefore, strengthen companies' credit records and improve social wealth would be the objectives for the public companies and federal government. By doing so, economy gets recovery will not take long. Meanwhile, other countries which were affected by financial crisis need find a way that match their features and domestic needs. Once countries overcome their difficulties, the international business will be back to routine eventually.

References

- Aggarwal, R. and C. Patrick (2000). *Price discovery in initial public offerings and the role of the lead underwriter*, Journal of Finance 55, 2093 - 2922.
- Baron, D. (1982). *A model of the demand of investment banking advising and distribution services for new issues*, Journal of Finance 37, 955 - 976.
- Benveniste, L.M., P.A. Spindt (1989). *How Investment Bankers Determine the Offer Price and Allocation of New Issues*, Journal of Financial Economics 24, 343-261.
- Bildik, R. and M. Yilmaz (2005). *The Market Performance of Initial Public Offerings in the Istanbul Stock Exchange*, Multinational Finance Society conference in Athens.
- Carter , R. and S. Manaster (1990). *Initial public offerings and underwriter reputation*, Journal of Finance 45, 1045 - 1067.
- Chemmanur, T.(1993). *The pricing of initial public offers: A dynamic model with information production.*,Journal of Finance 48, 285 - 304.
- Cooney, J., A. Singh, R. Carter and F. Dark, (2001). *IPO Initial Returns and Underwriter Reputation: Has the Inverse Relationship Flipped in the 1900s?*
Unpublished University of Kentucky, Case Western Reserve, and Iowa State working paper.
- Dewenter, K., W. Novaes and R. Pettway (1999). *Visibility versus compexity in busines groups: Evidence from Japanese keiretsu*, Working Paper , University of Washington.

Fama, Eugene, Lawrence Fisher, Michael Jensen and Richard Roll (1969). *The Adjustment of Stock Prices to New Information*, International Economic Review 10, 1-21.

Hamao , Y. and T. Hoshi (1999). *Bank underwriting of corporate bonds : Evidence from Post - 1994 Japan* , Working Paper , University of Southern California.

Jickling, M. (2010). Retrieved from Federation of American Scientists website:

<http://www.fas.org/sgp/crs/misc/R40173.pdf>

Ljungqvist, A. (2005). *IPO Underpricing* in B. Espen Eckbo (ed.), Handbook of Corporate Finance: Empirical Corporate Finance (Handbooks in Finance Series, Elsevier/North-Holland), Chapter 12

Loughran , T. and J. Ritter (2002) , *Why don't issuers get upset about leaving money on the table in IPOs ?* Review of Financial Studies 15 ,413 - 443.

Med, J. (2007). *U.S. Economic Crisis and Recovery*. Retrieve from CEO Magazine website: <http://www.ceoqmagazine.com/economics/useconomiccrisis/index.htm>

Megginson, W. and K. Weiss (1991). *Venture Capitalist Certification in Initial Public Offerings*, Journal of Finance 46, 879-903.

Muscarella, C. and M. Vetsuypens (1989). *A Simple Test of Baron's Model of IPO Underpricing*, Journal of Financial Economics 24, 125-135.

Pagano, M., F. Panetta and L. Zingales. (1998). *Why Does Companies Go Public? An Empirical Analysis*. Journal of Finance 53, 27-64

Ritter, Jay R., 1998, *Initial Public Offerings*, Contemporary Finance Digest 2, 5-30.

Available at <http://bear.cba.ufl.edu/ritter/rittipol.pdf>

Rock, K. (1986). *Why new issues are underpriced*, Journal of Financial Economics 15, 187 - 212.

Ritter, Jay R. (1984). *The “hot issue” market of 1980*, Journal of Business 57, 215 - 240.

Ritter, Jay R. (2003). *Differences between European and American IPO Markets*, European Financial Management 9, 421–434.

Ritter, Jay R. (1991). *The Long-Run Performance of Initial Public Offerings*, Journal of Finance 46, 3-27.

Zheng, X. and M. Li (2008). *Underpricing, Ownership Dispersion, and Aftermarket Liquidity of IPO Stocks*. Journal of Empirical Finance 15, 436-454

Appendices

Security ID	Effective Date	Last Price	VOLUME	PE_RATIO	offer price	age	IR
NFP US Equity	06/09/2006	36.23	381800	15.3517	36.1	8	0.0036
EGP US Equity	08/09/2006	49.67	152500	63.6795	49	37	0.0136
O US Equity	08/09/2006	24.61	536000	24.0332	24.32	21	0.0119
ACC US Equity	12/09/2006	24.68	126100	154.25	24.6	15	0.0032
FRT US Equity	14/09/2006	74.6	159000	46.9182	74.9	44	-0.0040
DRH US Equity	21/09/2006	16.3851	357102	28.7288	17.1	2	-0.0418
ACAS US Equity	22/09/2006	28.9873	943538	12.0688	37.33	20	-0.2234
PNBK US Equity	25/09/2006	25.6	15576	47.4074	22	12	0.1636
ARE US Equity	26/09/2006	94.55	143200	45.2392	94.75	4	-0.0021
DLR US Equity	28/09/2006	30.52	249500	121.1111	30.5	5	0.0006
EF US Equity	29/09/2006	12.51	19516	19.2462	12.5	19	0.0008
HALL US Equity	03/10/2006	10.15	6100	17.8697	9	19	0.1277
LBAI US Equity	05/10/2006	12.7589	47934	16.4459	12	37	0.0632
MCGC US Equity	10/10/2006	16	332819	9.3023	15.75	8	0.0158
O US Equity	18/10/2006	26.02	1112100	24.6869	26.4	21	-0.0143
HTGC US Equity	20/10/2006	13.39	89773	19.9943	13	3	0.03
NCT US Equity	27/10/2006	29.5	420900	11.4341	29.42	8	0.0027
FUR US Equity	30/10/2006	30.3	11460	17.6674	6	45	4.05
CT US Equity	31/10/2006	44.51	53400	12.5734	45	9	-0.0108

HCP US Equity	06/11/2006	30.1	938700	43.6232	29.85	21	0.0083
SFI US Equity	09/11/2006	45	442800	18.9514	44.5	13	0.0112
SNH US Equity	14/11/2006	22.04	172600	24.3886	22.06	8	-0.0009
MRLN US Equity	15/11/2006	23	28576	14.557	22	9	0.0454
NRF US Equity	16/11/2006	13.7482	669846	21.3571	14.95	9	-0.0803
DLR US Equity	28/11/2006	35.48	364300	159.8198	35.85	5	-0.0103
SSS US Equity	29/11/2006	58.04	472300	30.5474	56.25	24	0.0318
SLG US Equity	30/11/2006	135.24	1036200	70.0725	134.5	26	0.0055
CNS US Equity	30/11/2006	37.95	202100	33.5841	36.5	20	0.03972
DDR US Equity	04/12/2006	59.7225	655094	45.9097	64.66	41	-0.0763
BRT US Equity	05/12/2006	23.9935	9379	12.2355	28	34	-0.14309
EVBS US Equity	05/12/2006	22.25	200	15.2397	22	96	0.01136
VNO US Equity	06/12/2006	120.787	1427503	39.8413	125	24	-0.0337
HTGC US Equity	07/12/2006	13.99	56829	20.8903	13.6	3	0.02867
PKY US Equity	12/12/2006	50.9	168700	57.8409	50.25	35	0.01293
ARCC US Equity	13/12/2006	17.9356	336210	15.0726	18.5	2	-0.0305
CDR US Equity	14/12/2006	16.21	46000	81.05	16	22	0.0131
RSO US Equity	14/12/2006	16.84	146100	12.927	16.5	1	0.0206
PSEC US Equity	15/12/2006	17.7	114292	13.209	17.7	18	0
SPPR US Equity	18/12/2006	6.84	12850	34.2	6.7	12	0.0208
HPT US Equity	18/12/2006	44.5981	327100	22.299	47.15	11	-0.0541
ACAS US Equity	08/01/2007	34.399	1558080	14.7363	45.83	21	-0.2494
AVB US Equity	09/01/2007	125.117	5149462	62.5024	129.3	29	-0.0323

AINV US Equity	11/01/2007	22.44	598491	13.9379	22.44	17	0
HCP US Equity	16/01/2007	39.4	1214900	78.8	38.58	22	0.0212
NFP US Equity	17/01/2007	47.1	2012400	19.625	46.35	9	0.0161
NCT US Equity	17/01/2007	31.76	236000	11.8951	31.3	9	0.01469
DRH US Equity	17/01/2007	17.6611	907445	37.2857	18.15	3	-0.0269
RAS US Equity	18/01/2007	103.59	322700	16.4429	34	10	2.0467
COBZ US Equity	18/01/2007	20.9	36806	20.2913	20.9	27	0
TWGP US Equity	22/01/2007	31.76	395142	19.6049	31.25	14	0.0163
CLI US Equity	02/02/2007	54.68	1611000	40.5037	54.18	58	0.0092
ARCC US Equity	06/02/2007	19.1543	551017	15.5938	19.95	3	-0.0398
SNH US Equity	07/02/2007	26.75	2409200	26.0189	26.49	8	0.0098
HPT US Equity	13/02/2007	47.84	519327	23.5665	47.67	12	0.0035
MVC US Equity	23/02/2007	16.35	127700	5.7774	16.25	8	0.0061
DLLR US Equity	23/02/2007	18.6	2519432	24.0517	28.15	17	-0.3392
MPW US Equity	23/02/2007	15.61	1033800	20.5395	15.6	4	0.0006
NLY US Equity	07/03/2007	13.63	4161900	18.6712	13.5	11	0.0096
ACAS US Equity	20/03/2007	33.5583	1477819	14.3762	44.71	22	-0.2494
NNN US Equity	22/03/2007	24.88	3470300	20.9958	24.7	23	0.0072
OHI US Equity	29/03/2007	16.93	157000	23.1918	16.75	15	0.0107
ARCC US Equity	29/03/2007	17.2446	251500	14.0391	17.97	3	-0.0403
NCT US Equity	05/04/2007	28.18	2028900	10.3223	27.75	9	0.0154
PBCT US Equity	11/04/2007	20.7381	2964919	46.3298	20	165	0.0369
HCN US Equity	12/04/2007	44.01	766100	34.3828	44.01	37	0

AHT US Equity	18/04/2007	12	505900	32.0856	11.75	39	0.0212
MCGC US Equity	25/04/2007	18.02	500692	10.538	18.15	17	-0.0071
GLAD US Equity	27/04/2007	24.18	96063	14.0581	24.25	6	-0.0028
ESS US Equity	04/05/2007	127.3	1180100	85.4362	128.65	36	-0.0104
RNST US Equity	08/05/2007	22.63	16734	12.9561	22.5	103	0.0057
VTR US Equity	17/05/2007	40.55	685300	32.1825	40.5	23	0.0012
LSE US Equity	22/05/2007	10.75	186900	134.375	10.75	13	0
WRE US Equity	01/06/2007	36.97	545600	47.3974	37	47	-0.0008
HTGC US Equity	04/06/2007	13.87	129164	16.3176	13.5	4	0.0274
ABR US Equity	07/06/2007	27.55	200100	10.3571	27.65	4	-0.0036
ACAS US Equity	18/06/2007	33.8135	1740386	14.6743	45.5	21	-0.2568
TICC US Equity	10/07/2007	15.41	122244	11.0071	15.4	4	0.0006
NLY US Equity	12/07/2007	14.19	2273200	13.6442	14	11	0.0135
MIG US Equity	18/07/2007	9.65	1483600	12.0625	9.65	52	0
ARCC US Equity	23/08/2007	15.6516	637767	11.1712	16.3	3	-0.0397
MFA US Equity	06/09/2007	7.39	840800	22.3939	7.25	52	0.0193
ACAS US Equity	07/09/2007	29.0098	2154542	12.1924	39.4	21	-0.2637
NATL US Equity	07/09/2007	30.62	119426	15.0098	30	18	0.0206
AINV US Equity	12/09/2007	20.005	1617554	10.8723	20	3	0.0002
ARE US Equity	19/09/2007	99.89	313900	46.4605	96	14	0.0405
MCGC US Equity	19/09/2007	14.33	518904	7.6223	14.5	17	-0.0117
LUK US Equity	20/09/2007	45.77	1137400	217.9524	45.5	163	0.0059
GKK US Equity	21/09/2007	26.16	1060300	10.2588	26.25	3	-0.0034

HR US Equity	25/09/2007	26.3	865100	75.4446	24.85	15	0.0583
DRE US Equity	28/09/2007	33.81	15514500	45.6892	33.26	35	0.0165
HCP US Equity	02/10/2007	34.99	936300	102.9118	33.67	22	0.0392
CIA US Equity	09/10/2007	8.53	87400	29.4138	8	179	0.0662
EPR US Equity	09/10/2007	56.17	219400	20.5751	54	10	0.0401
NNN US Equity	10/10/2007	26.04	893100	20.5039	25.94	23	0.0038
NLY US Equity	11/10/2007	15.34	5839700	13.2241	15.1	11	0.0158
PSEC US Equity	11/10/2007	16.34	310397	10.8933	16.34	19	0
CWH US Equity	16/10/2007	39.92	255575	38.3846	10.07	21	2.9642
GLAD US Equity	16/10/2007	18.51	30740	10.9527	18.7	6	-0.0101
DLR US Equity	16/10/2007	39.38	365500	281.2857	39.38	6	0
IRET US Equity	18/10/2007	10.68	115589	53.4	10.2	37	0.0470
MFA US Equity	08/11/2007	8.09	1486875	67.4167	7.95	10	0.0176
NDAQ US Equity	08/11/2007	45.4	4556564	35.1938	43.26	36	0.0494
ACAS US Equity	16/11/2007	29.2125	2549016	12.1246	39.43	21	-0.2591
HCN US Equity	04/12/2007	42.65	2775615	38.0804	42.14	37	0.0121
SNH US Equity	12/12/2007	22.61	946717	20.1875	22.81	9	-0.0087
SFI US Equity	13/12/2007	28.41	3509040	11.5488	28.41	14	0
FRT US Equity	20/12/2007	81.25	3482900	53.4539	81.21	45	0.0004
SLM US Equity	27/12/2007	19.65	42940069	8.0533	19.65	35	0
MFA US Equity	17/01/2008	9.43	2124268	44.9048	9.25	11	0.0194
NLY US Equity	23/01/2008	19.67	15823539	15.4882	19.25	12	0.0218
VTR US Equity	28/01/2008	45.15	1385239	38.5897	43.23	25	0.0444

GLAD US Equity	30/01/2008	17.28	108268	10.1647	17	7	0.0164
MBI US Equity	07/02/2008	14.2	7568663	17.9747	12.15	35	0.1687
SNH US Equity	21/02/2008	21.65	564508	20.0463	21.85	10	-0.0091
JOE US Equity	26/02/2008	39.68	560722	101.7436	35	72	0.1337
HCN US Equity	05/03/2008	41.1	1103271	35.431	41.44	38	-0.0082
SF US Equity	17/03/2008	17.9156	412477	10.3625	40	118	-0.5521
MPW US Equity	19/03/2008	10.85	1107380	18.7069	10.75	5	0.0093
CT US Equity	24/03/2008	30.2	178850	7.7436	28.75	11	0.0504
ACAS US Equity	25/03/2008	27.3285	2586123	10.8687	36.41	22	-0.2494
HCP US Equity	26/03/2008	34	4195219	73.913	33.32	23	0.0204
EPR US Equity	27/03/2008	48.18	1961338	16.9648	48.18	11	0
PSEC US Equity	27/03/2008	15.05	114112	9.2331	15.45	20	-0.0258
HCP US Equity	28/03/2008	32.82	4195219	71.3478	32.78	23	0.0012
KFN US Equity	02/04/2008	11.91	1335300	5.9283	11.85	4	0.0050
NGPC US Equity	10/04/2008	16.17	67383	15.1121	16	4	0.0106
ACC US Equity	17/04/2008	29.1	278714	103.9286	28.75	17	0.0121
BMR US Equity	17/04/2008	25.57	740269	32.7821	25.5	4	0.0027
EGP US Equity	24/04/2008	48.57	778101	43.7568	49.25	39	-0.0138
IBKR US Equity	24/04/2008	27.87	1162897	13.935	27	31	0.0322
AIG US Equity	12/05/2008	642.859 2	1237619	69.876	38	41	15.9173 5
NLY US Equity	13/05/2008	16.38	3355923	10.7763	16.15	12	0.0142
HT US Equity	13/05/2008	9.8	137982	39.2	9.9	10	-0.0101
AINV US Equity	13/05/2008	17.91	1082788	9.7869	17.11	4	0.0467

EXR US Equity	13/05/2008	16.77	382126	31.0556	16.35	31	0.0256
NYB US Equity	19/05/2008	19.69	2959747	22.375	19.35	149	0.0175
WRE US Equity	20/05/2008	34.5	349830	59.4828	34.8	48	-0.0086
MFA US Equity	28/05/2008	7.05	1175953	22.7419	6.95	11	0.0143
PSEC US Equity	28/05/2008	14.5	91703	8.011	14.9	11	-0.0268
STT US Equity	03/06/2008	71.36	3114466	14.3006	70	176	0.0194
SNH US Equity	03/06/2008	21.09	970921	19.3486	21.09	10	0
CRBC US Equity	05/06/2008	43.9	649187	3.9909	40	137	0.0975
PVTB US Equity	05/06/2008	35.21	400719	130.4074	34	19	0.0355
CLBH US Equity	09/06/2008	9.8	1700	10.6522	9	12	0.0888
KEY US Equity	12/06/2008	11.98	39924036	6.4064	11.75	14	0.0195
BFS US Equity	19/06/2008	47.65	24948	29.4136	46.5	116	0.0247
CSE US Equity	23/06/2008	11.19	9308775	20.3455	11	8	0.0172
HCN US Equity	01/07/2008	44.17	2644441	35.336	42.49 8	38	0.0393
DLR US Equity	16/07/2008	39.66	1436214	495.75	38.42	4	0.0322
BPFH US Equity	23/07/2008	6.89	2569005	20.2647	6	20	0.1483
EPR US Equity	31/07/2008	53.64	293040	17.4723	50.96	11	0.0525
HCP US Equity	06/08/2008	34.57	3153291	75.1522	33.5	23	0.0319
VTR US Equity	12/08/2008	45.62	1644434	48.0211	46	25	-0.0082
HCN US Equity	04/09/2008	48	2359063	40.08	48	38	0
SBNY US Equity	08/09/2008	30.07	559512	20.125	29	7	0.0368
KIM US Equity	09/09/2008	37.6	5979250	32.4634	37.1	24	0.0134
ZION US Equity	11/09/2008	33.62	4928944	7.138	34.75	135	-0.0325

OHI US Equity	16/09/2008	17.76	1791745	20.7963	16.37	16	0.0849
HR US Equity	23/09/2008	25.9	1458751	94.8276	25.5	16	0.0156
SF US Equity	24/09/2008	32.14	346287	18.0233	45	118	-0.2857
OFC US Equity	24/09/2008	39.2	705244	81.6735	39	20	0.0051
O US Equity	25/09/2008	26.62	1299730	28.5319	26.82	39	-0.0074
FNFG US Equity	25/09/2008	14.85	622088	19.65	13.5	138	0.1
JPM US Equity	26/09/2008	48.24	148081388	17.7353	40.5	185	0.1911
NNN US Equity	26/09/2008	23.87	1244210	20.0506	23.05	24	0.0355
BMR US Equity	01/10/2008	25.07	3690275	32.9868	24.93	4	0.0056
WRI US Equity	02/10/2008	32.34	828239	32.4815	34.2	60	-0.0543
EXR US Equity	03/10/2008	14.17	782402	32	14.71	31	-0.0367
BAC US Equity	07/10/2008	23.77	82460164	28.0174	22	134	0.0804
BHLB US Equity	08/10/2008	24.73	87848	14.4	24	162	0.0304
RGA US Equity	29/10/2008	33.99	3762997	5.5813	33.89	35	0.0029
FCF US Equity	31/10/2008	11.03	770495	15.4583	10	26	0.103
WFC US Equity	06/11/2008	28.77	53894996	15.0857	27	79	0.0655
CBG US Equity	12/11/2008	3.77	5088425	5.3894	3.77	79	0
GBCI US Equity	13/11/2008	17.73	225877	15.5692	15.5	11	0.1438
IBKC US Equity	11/12/2008	42.83	112932	15.3205	40	121	0.0707
SNH US Equity	04/02/2009	16.57	2190812	16.1835	17.3	11	-0.0422
DLR US Equity	10/02/2009	32.87	1599600	95.6486	34	5	-0.0332
ARE US Equity	19/03/2009	37.35	1427878	15.3566	38.25	16	-0.0235
SPG US Equity	20/03/2009	32.068	11921080	17.171	31.5	49	0.0180

PLD US Equity	25/03/2009	14.15	5121851	8.2617	12.15	26	0.1646
GS US Equity	14/04/2009	115.11	36460715	27.0582	123	140	-0.0641
DRE US Equity	16/04/2009	9.31	6202966	40.1905	7.65	37	0.2169
WRI US Equity	17/04/2009	16.25	4249391	12.9587	14.25	61	0.1403
REG US Equity	21/04/2009	36.46	3150817	20.4925	32.5	46	0.1218
VNO US Equity	22/04/2009	44.3444	10409101	205.1689	43	11	0.0312
PSEC US Equity	22/04/2009	7.95	238298	4.2105	7.75	11	0.0258
TCAP US Equity	22/04/2009	10.06	10314	6.864	10.75	7	-0.0641
LHO US Equity	23/04/2009	11.11	3281584	58.4737	10.1	11	0.1
HST US Equity	24/04/2009	7.6179	38667780	16.5116	6.6	82	0.1542
CPT US Equity	06/05/2009	30.47	1911142	75.8718	27.5	16	0.108
SPG US Equity	07/05/2009	50.8884	10578242	26.4761	50	49	0.0177
WFC US Equity	08/05/2009	28.18	236941852	13.1005	22	80	0.2809
BK US Equity	11/05/2009	29.55	18686454	10.0853	28.75	225	0.0278
USB US Equity	11/05/2009	18.5	43175237	13.6029	18	146	0.0277
COF US Equity	11/05/2009	27.1	114574351	57.6596	27.75	16	-0.0234
PFG US Equity	11/05/2009	20.34	8229611	6.2585	19.75	130	0.0298
BBT US Equity	12/05/2009	22.5	17487105	9.8145	20	137	0.125
SCBT US Equity	12/05/2009	23.2	58495	13.2615	23	76	0.0086
STT US Equity	18/05/2009	41.79	27544266	8.7979	39	217	0.0715
BAC US Equity	19/05/2009	11.25	681310401	22.1406	10.77	135	0.0445
IVZ US Equity	19/05/2009	14	4519769	15.7374	14	74	0
SHO US Equity	21/05/2009	5.31	1746447	36.3855	5	14	0.062

PNC US Equity	27/05/2009	41.11	18105409	15.0244	42.211	87	-0.0260
HIW US Equity	27/05/2009	21.66	1533166	44.8462	21.5	31	0.0074
RWT US Equity	27/05/2009	14.86	1927041	16.4	14.5	15	0.0248
MAIN US Equity	28/05/2009	12.05	31805	12.1193	12.1	12	-0.0041
KRC US Equity	29/05/2009	21.29	745242	25.6706	20	62	0.0645
AXP US Equity	01/06/2009	25.99	21602766	12.2019	25.25	159	0.0293
STI US Equity	01/06/2009	13.8	34004295	19.4366	13	24	0.0615
JPM US Equity	02/06/2009	34.5	90184473	35.7525	35.25	186	-0.0212
SBNY US Equity	02/06/2009	26.17	317855	19.3071	26	8	0.0065
DCT US Equity	02/06/2009	4.3	3153492	234	4.25	7	0.0117
FFBC US Equity	03/06/2009	7.97	210101	14.2419	7.5	16	0.0626
PRU US Equity	03/06/2009	40.51	10708139	15.3178	39	134	0.0387
CODI US Equity	04/06/2009	8.52	147422	17.6727	8.85	4	-0.0372
PICO US Equity	05/06/2009	29.22	298661	44.2727	27	28	0.0822
FCBC US Equity	05/06/2009	12.5	81832	8.788	12.5	20	0
BXP US Equity	05/06/2009	50.32	4784647	25.3636	50	39	0.0064
CBL US Equity	09/06/2009	6.57	1850607	35.1414	6	16	0.095
PICO US Equity	10/06/2009	27.95	86393	42.3485	27	28	0.0351
FNB US Equity	10/06/2009	6.15	243304	15.5333	5.5	35	0.1181
JLL US Equity	10/06/2009	35.66	711338	14.562	35	12	0.0188
LHO US Equity	10/06/2009	14.71	1012022	85.2105	14.75	11	-0.0027
HPT US Equity	18/06/2009	11.68	1341391	9.708	11.5	14	0.0156
ELS US Equity	23/06/2009	33.74	424438	47.4935	33.35	17	0.0116

IBKC US Equity	30/06/2009	39.41	199950	13.6054	39	122	0.0105
PSEC US Equity	30/06/2009	9.2	2209872	5.0829	9	11	0.0222
JNS US Equity	15/07/2009	11.39	3309754	30.1892	11	40	0.0354
AGNC US Equity	10/08/2009	22.03	1975567	4.2176	21.5	1	0.0246
CVBF US Equity	21/07/2009	6.26	1235545	9.1642	5.85	35	0.0700
FCAL US Equity	27/07/2009	5.45	5623	45.4167	5	3	0.09
GLCH US Equity	28/07/2009	6.62	251024	30.4	6.25	57	0.0592
MBRG US Equity	28/07/2009	11.63	23995	13.35	10.75	16	0.08186
MFA US Equity	29/07/2009	7.1	4805600	7.7122	7.05	12	0.0070
CSFL US Equity	29/07/2009	7.31	23200	900	6.5	20	0.1246
GHL US Equity	30/07/2009	75.61	182956	95.3452	76	13	-0.0051
EVR US Equity	04/08/2009	20.26	90742	210.8889	20.15	13	0.0054
HCP US Equity	05/05/2009	26.4	8597858	30.3908	24.75	24	0.0666
UVSP US Equity	06/08/2009	19.15	113412	18.1901	17.5	36	0.0942
TCAP US Equity	06/08/2009	10.42	89301	6.0231	10.42	7	0
AGNC US Equity	10/08/2009	24.56	625237	4.8157	23.3	1	0.0540
SKT US Equity	11/08/2009	17.855	712668	24.9085	35.5	28	-0.4970
HPT US Equity	11/08/2009	16.92	1196222	13.0993	17.25	14	-0.0191
OCN US Equity	12/08/2009	9.15	998363	12.8488	9	21	0.0166
ARCC US Equity	14/08/2009	9.22	740539	7.4692	9.25	5	-0.0032
BBT US Equity	17/08/2009	26.43	17865517	12.7067	26	137	0.0165
HCN US Equity	01/09/2009	40.08	1505167	30.2908	40.4	39	-0.0079
SF US Equity	09/09/2009	37.7867	385797	25.6471	56	17	-0.3252

RPT US Equity	10/09/2009	8.75	650073	9.3366	8.5	12	0.0294
NPBC US Equity	10/09/2009	6.16	3314906	8.2	5.25	135	0.1733
UBSH US Equity	10/09/2009	14.5	57228	23.0476	13.25	16	0.0943
SNH US Equity	10/09/2009	19.32	1369643	17.8198	19.44	11	-0.0061
CUZ US Equity	15/09/2009	7.4684	394647	2.9499	7.25	51	0.0301
WAFD US Equity	15/09/2009	15.21	1000672	21.4118	14.5	92	0.0489
FFIC US Equity	16/09/2009	12.35	146132	7.3216	11.5	80	0.0739
HFWA US Equity	16/09/2009	12.51	9180	66.7895	11.5	12	0.0878
EGBN US Equity	16/09/2009	8.75	29029	13.1905	8.2	12	0.0670
FSP US Equity	17/09/2009	14.76	396806	38.8421	13	18	0.1353
ONB US Equity	22/09/2009	10.65	788460	13.7297	10	175	0.065
FFCH US Equity	23/09/2009	16.3	75403	23.5753	15.5	22	0.0516
PPS US Equity	24/09/2009	18.2	691362	101.4737	17.75	38	0.0253
METR US Equity	24/09/2009	13	31864	10.1277	12	36	0.0833
ARE US Equity	24/09/2009	53.29	768613	19.2305	53.25	16	0.0007
ATAX US Equity	07/10/2009	5.25	137605	27.4737	5.05	10	0.0396
PCBK US Equity	14/10/2009	9.42	8479	58.2222	8.75	37	0.0765
CSBC US Equity	15/10/2009	5.9524	33684	78.125	5	105	0.1904
WAC US Equity	16/10/2009	14.9	120732	0.0973	14.25	51	0.0456
HBHC US Equity	20/10/2009	35.65	265354	22.5153	35.5	110	0.004225
BNCN US Equity	23/10/2009	7.81	2700	13.0167	7	18	0.1157
AGNC US Equity	26/10/2009	28.14	538140	4.9717	26.6	1	0.0578
OCFC US Equity	29/10/2009	9.56	105772	8.4766	9	107	0.0622

ALNC US Equity	02/11/2009	23.3	22998	11.1483	23	25	0.0130
DUF US Equity	05/11/2009	15.75	189072	27.1167	15.5	77	0.0161
SFNC US Equity	11/11/2009	24.52	45130	15.2431	24.5	106	0.0008
LKFN US Equity	13/11/2009	16.74	32574	16	17	137	-0.0152
SIVB US Equity	18/11/2009	39.73	366478	62.0725	38.5	27	0.0319
GHL US Equity	19/11/2009	82.4	1495889	36.5683	82.536	13	-0.0016
HFNC US Equity	20/11/2009	9	6568	5.6306	8	80	0.125
WBCO US Equity	24/11/2009	9.79	15645	16.6071	9	48	0.0877
CZNC US Equity	25/11/2009	8.6	50087	6.6667	8	38	0.075
TRMK US Equity	01/12/2009	19	412240	12.7733	18.5	120	0.0270
BAC US Equity	03/12/2009	15.76	130213074	86.9444	15	135	0.0506
SWS US Equity	03/12/2009	11.66	153474	15.0952	11.5	37	0.0139
REG US Equity	04/12/2009	33.51	1463854	43.9733	30.75	46	0.0897
TCAP US Equity	08/12/2009	11.9	61705	7.6071	12	7	-0.0083
AINV US Equity	09/12/2009	9.82	1485041	7.1127	9.82	5	0
WFC US Equity	15/12/2009	25.66	43877895	12.4951	25	80	0.0264
NWBI US Equity	15/12/2009	10.5778	271055	20.5995	10	113	0.0577
MSL US Equity	17/12/2009	13.79	5550	24.8519	12.75	25	0.0815
MAIN US Equity	13/01/2010	14.74	103627	16.2174	14.75	13	-0.00068
SCHW US Equity	20/01/2010	19.02	10802384	25.72	19	39	0.0010
FFBC US Equity	27/01/2010	15.14	439543	87.1176	15.14	17	0
CDR US Equity	02/02/2010	6.76	190597	65.1818	6.6	26	0.0242
PNC US Equity	03/02/2010	53.71	9560110	12.9319	54	88	-0.0053

DDR US Equity	09/02/2010	9.24	3240275	64.4592	8.16	45	0.1323
IBKC US Equity	02/03/2010	57.9	585512	57.9	57.75	123	0.0025
PNNT US Equity	02/03/2010	10.17	241255	9.8532	10	3	0.017
EQY US Equity	10/03/2010	18.41	540602	23.775	18.4	17	0.0005
FPO US Equity	16/03/2010	15.15	213455	524.6667	14.5	13	0.0448
HIG US Equity	17/03/2010	28.58	7127478	19.8978	27.75	15	0.02991
CWH US Equity	18/03/2010	30	352556	13.0723	7.25	24	3.1379
OHI US Equity	31/03/2010	19.49	3400679	23.2024	19.75	18	-0.0131
BRE US Equity	01/04/2010	35.63	1049113	127.6786	34.25	40	0.0402
CIM US Equity	01/04/2010	3.91	6669114	5.7206	3.61	3	0.0831
EBMT US Equity	05/04/2010	10.55	2751	13.4708	10	88	0.055
PLD US Equity	07/04/2010	27.53	1719877	409.1429	27.5	27	0.0010
ADC US Equity	13/04/2010	23.68	32149	12.392	22	39	0.0763
KRC US Equity	15/04/2010	34.3	551850	86.0976	34	63	0.0088
MPW US Equity	15/04/2010	9.79	358012	26.4878	9.75	7	0.0041
MNR US Equity	20/04/2010	7.69	200949	27.3	7.5	42	0.0253
AINV US Equity	27/04/2010	12.4	3509398	6.3265	12.4	6	0
FULT US Equity	30/04/2010	10.5	1399692	24.5556	10.55	28	-0.0047
GHL US Equity	03/05/2010	88.86	146016	45.5692	84.45	14	0.0522
KFN US Equity	03/05/2010	9.19	2456345	7.352	9	6	0.0211
EPR US Equity	06/05/2010	41.05	340211	253.7647	41	13	0.0012
EVBN US Equity	11/05/2010	12.35	3765	12.3964	12	22	0.0291
DFT US Equity	12/05/2010	23.25	668186	58.5122	23	3	0.0108

RPT US Equity	13/05/2010	11.5	189950	19.8254	11.5	3	0
AGNC US Equity	14/05/2010	25.55	726149	3.549	25.75	2	-0.0077
FMER US Equity	17/05/2010	19.63	5192887	23.4151	19	155	0.0331
RSO US Equity	19/05/2010	5.67	299859	8	5.25	5	0.08
DLR US Equity	02/06/2010	58.91	2302259	90.6308	57	6	0.0335
BK US Equity	03/06/2010	27.28	7625060	11.4142	27	226	0.0103
ART US Equity	03/06/2010	17.33	634615	10.5753	17.33	58	0
SAVB US Equity	10/06/2010	9.8	3353	55	9.5	21	0.0315
CCNE US Equity	14/06/2010	10.65	24158	9.2586	10.25	76	0.0390
HFBC US Equity	16/06/2010	8.6601	1210	7.75	9	76	-0.0377
ARR US Equity	16/06/2010	6.53	365932	81.625	6.75	2	-0.0325
FSC US Equity	16/06/2010	11.5	379210	11.1009	11.5	37	0
BKCC US Equity	17/06/2010	10.12	760533	7.9231	10.25	5	-0.0126
HCP US Equity	18/06/2010	32.72	2262783	36.9355	33	25	-0.0084
ORIT US Equity	22/06/2010	10.54	3758883	43.9167	10	12	0.054
VCFG US Equity	30/06/2010	9.8929	437535	62.9545	10	58	-0.0107
FLIC US Equity	14/07/2010	24.56	5561	11.9907	24	83	0.0233
NLY US Equity	14/07/2010	17.52	12313623	6.0664	17.46	14	0.003436
RVSU US Equity	30/07/2010	2	20691	24.8667	1.8	13	0.1111
WSFS US Equity	03/08/2010	37.44	19906	60.3667	36.5	178	0.0257
FCF US Equity	05/08/2010	5.05	615153	63.125	4.65	28	0.0860
GOV US Equity	05/08/2010	25.58	186922	23.7281	25	1	0.0232
NFBK US Equity	09/08/2010	12.47	20052	34.6389	12	123	0.0391

SBRA US Equity	13/08/2010	14.4258	189909	4.5357	7.75	0	0.8613
PNNT US Equity	18/08/2010	10.03	222548	9.6126	10.15	3	-0.0118