# DIVIDEND POLICY OF BANK INITIAL PUBLIC OFFERINGS

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## Abstract

This paper investigates the short-term valuation effects and the long-run performance of bank initial public offerings in the United States from 1972 to 1997. Overall, the empirical results provide significant evidence that the dividend policy of bank IPOs differ from that of non-banks. The dividend policy of bank IPOs has a significant impact on the long-run performance. Most importantly, banks that later on were acquired outperform the benchmark significantly and banks that continue to operate independently as well as banks that eventually failed both under-perform. Moreover, the beginning of the dividend payment is an important characteristic that separates the out-performers from the under-performers.

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#### I. Introduction

The dividend policy of firms in general has been one of the most important research topics in the finance literature for most of the last four decades since the publication of the seminal paper on the irrelevance of dividend policy by Modigliani and Miller (1961). In a recent paper Fama and French (2001) provide empirical evidence that on average the relative number of dividend paying firms has been decreasing over the last decades. Especially start-up firms and IPOs (i.e. firms listed on NASDAQ) have developed a tendency to avoid initiating dividend payments. The relative increase of the IPO group in relation to all listed firms accounts mainly for the decline of the average number of dividend paying firms. The fact that non-financial or industrial firms do not start paying dividends immediately after going public can easily be explained with the investment opportunities and the cash flow needs of these firms. Nevertheless, of those firms that continued to be traded after going public for an extended period of time (alive firms), i.e. after accounting for those IPOs that merged or delisted (failed) after going public, about 50% of those IPOs eventually start paying dividends. Thus, even for IPOs, dividend policy seems to be an important signal during the first periods after listing.

Moreover, there is empirical evidence that the dividend policy for banks is quite important in that it signals the quality of a bank in an environment that is best characterized by significant information asymmetry [Bessler and Nohel (1996), Bessler and Nohel (2000), Slovin, Sushka and Polonchek (1999)]. Thus, banks reveal a pronounced different behavior than industrial firms with respect to dividend policy as well as with respect to valuation effects following a dividend announcement. Because most of the empirical evidence suggests that the dividend policy of IPOs

is different from that of established firms and because the stock price reaction to dividend changes by banks is different from that of industrial firms, it is interesting to investigate the dividend policy of banks after they went public (IPOs). This specific question has not been addressed in the literature so far. Thus, we are adding to the theoretical and empirical evidence by investigating the dividend policy of bank IPOs.

In this study on dividend policy of bank initial public offerings (IPOs) in the United States we investigate the short run valuation effects (CARs) as well as the long run performance (BHARs) following dividend initiations announcements by banks that went public (IPOs) during the period from 1970 to 1997. There are three primary objectives of this research. First, we examine the valuation effects of the dividend policy of bank IPOs, especially the impact of the dividend initiation event. Next, we test whether there are significant differences in the performance among different categories of bank IPOs, i.e. the banks that merged later on, dropped, or kept on operating independently (alive). We are interested in the stock price reaction around the dividend initiation date (short-term valuation effect) as well as in the long-term performance following a dividend initiation. Finally, we investigate economic variables that may explain the reasons for the differences in stock price performance.

The rest of the paper is organized as follows. In the next section the literature with respect to dividend policy in general and signaling with dividends is reviewed. Other important aspects that are discussed are dividend policy of IPOs, performance of bank IPOs as well as dividend policy of banks. Section III provides a description of the data and of the methodology employed in this study. The results are presented and discussed in section IV and section V concludes the paper.

## **II.** Review of the Literature

The literature that is relevant to this research question is related to various research areas of corporate finance and banking. First of all general agency theory and dividend policy needs to be addressed in that dividend announcements provide information to shareholders about the future performance of the firm. Thus, dividends are an important signal that usually results in significant valuation effects. This aspect is addressed in the next section. Moreover, the literature on dividend policy of IPOs is relevant in this context and is reviewed in the second section. With respect to the banking literature the empirical evidence on the performance of bank IPOs and the valuation effects of dividend announcements by banks is relevant in this context and is addressed in sections three and four.

## 1. Dividends as an Information Signal

In a world of symmetric information, all economic agents have the same information with respect to the valuation of a firm. However, this assumption does not hold any longer under more realistic assumptions, for example, when one of the agents is better informed about the firm's prospects than the other agents. In such an environment it is reasonable to assume that managers possess an information advantage about their own firm. Therefore, financial decisions may signal a change in the quality of the firm to the market. One of these managerial decisions that management can employ to convey information to shareholders is dividend policy. Therefore, dividend policy decisions, especially dividend initiations, and dividend increases, convey positive information to the market.

There are two main hypotheses that are helpful to explain what information is contained in a dividend announcement: the earnings hypothesis (cash flow) and the free cash flow hypothesis.

The earnings hypothesis proposes that by paying out cash to the shareholder, the management signals to the market that the firm has good investment projects and is able to generate positive cash flows in the long term. An increase in the level of dividends is viewed as a positive signal by the financial market because firms committed to paying dividends indicate that they are capable of generating positive cash flows in the long term. A decrease in dividends is viewed as a negative signal and may suggest up-coming long-term financial problems. Consequently, financial markets should lower the value the firm. Studies by Lintner (1958), Fama and Babiak (1968), Battacharya (1979), John and Williams (1985), and Miller and Rock (1985) find evidence of this hypothesis in their studies. In addition, the work by Asquith and Mullins (1983), Healy and Palepu (1988) and Venkatesh (1989) show on average positive price reactions to the announcement of dividend initiations under the assumption of the earnings signaling hypothesis.

The free cash flow theory hypothesized that a firm with substantial free cash flows will have a tendency to overinvest by accepting marginal investment projects with negative net present values [Jensen (1986)]. If managers are over-investing, an increase in dividend payments will decrease the available cash flows and limit over-investing and hence the market value of the firm should increase. In contrast, a decrease in dividends may facilitate over-investing and as a consequence the stock price should decrease.

The valuation effects of dividend increases and dividend decreases, however, should be reviewed and interpreted carefully. Some argue that the utilization of dividends as a signal depends on the availability of other signals to the firm. Larger firms have more ways to signal their quality at reasonable costs. They may utilize analyst reports as an effective and less costly practice to signal the quality their projects. The opportunities for small firms are different. With limited alternatives available to them, dividends are a reasonable signal. Thus, the relative valuation effects of dividend changes may be a function of firm size.

Ambarish, John, Williams (1987), and John and Lang (1991) propose that dividends may not be a sole measure in evaluating a firm's quality. Dividend changes by firms will be interpreted by the market in the context of the investment opportunities that are available to the firms. The optimal signals used are determined by the nature of the firms' investment opportunities. Established firms often use a large pay-out ratio as their primary signal while growth firms do not often employ dividends but instead use investments as the main signal instead. Their models predict that the announcement of a dividend increase results in larger stock price increases for established firms compared to that of growth firms.

John and Lang (1991) investigate insider trading prior to the announcement of dividend changes. They show in their study that the announcement effect of dividends is influenced by the nature of a firm's investment opportunities and by the productivity of its current capital investments. Not all dividend increases are viewed as good news by the market. In some cases, an increase in dividends is a signal that the firm does not have outstanding investment opportunities. They suggest that the interpretation of an increase in dividend has to be based on insider trading activity immediately prior to the announcement.

In a similar study of the relation between dividend policy and investment opportunities, Lang and Litzenberger (1989) examined the announcement effect of large dividend changes and linked it to investment opportunities available to the firm by utilizing Tobin's Q measurement. They find that large dividend changes are significantly affected by investment opportunities. The average abnormal returns at the dividend announcement date is more than three times larger for firms with average Qs of less than one than for firms with average Qs that are greater than one. Dividend increase and decrease announcements result in similar effects when each event is analyzed separately.

Dyl and Weigang (1998) hypothesized that initiation of cash dividends coincides with a reduction in the risk of a firm's earnings and cash flows. Using 240 firms (NYSE or AMEX) that initiated dividend payments during the period of Jan 1972 – Dec 1973, the study shows that the variance of daily returns drops as well as the average beta in the year following the dividend initiation.

Thus, it seems fair to conclude that management can use dividend changes to signal the quality of the firm. The important question to investigate, however, is whether all firms can employ dividend changes in the same manner, or whether the magnitude of the impact depends on the maturity of the firm (e.g. IPO) as well as on the industry (e.g. banking) in which the firm is operating in.

#### 2. Initial Public Offerings and Dividend Policy

Lipson, Maquieira and Megginson (1998) compare the performance of IPOs that initiate dividends with those that do not. The analysis is carried out by initially building two groups of matching firms. One group consists of firms that do not pay dividends matched with the dividend-initiating firms by the time of the going public and the industry. Another group of firms is matched with the dividend-initiating firms by the size and the industry (size matched) but these firms are already paying dividends. They argue that a firm should engage in signaling activities especially to differentiate itself from other firms that the market perceives as having similar prospects. By grouping the samples, the authors examined comparable IPOs in terms of life cycle and future growth.

The authors found that raw and industry adjusted earnings increase for the initiating firms in the first year after the dividend initiation, but not in the second year. Earnings surprises for initiating firms are more favorable than for non-initiating firms by the second year following the dividend initiation. However, the earning surprises of the initiating firms are not significantly different from the size-matched samples or industry averages. Thus, the study suggests that if dividend initiations signal future earnings prospects, the signal must differentiate a newly public firm from other newly public firms but not from established firms in the industry. Thus, there is a strong size effect instead of an industry effect.

Similar to the work of DeAngelo et al. (1996), Lipson et al. also found that changes in dividend levels can be a valid signal only if a significant commitment of cash is used. The dividend commitments of initiating firms represent about 5% of earnings. This would have been equal to 8.5 % of earnings for non-initiating firms, matched by the dividend yield, dividend to sales ratio, or dividend to asset ratio. They tested and found that the difference is significant. In addition, Lipson et al. (1998) found that dividend-initiating firms are usually larger and more profitable than the non-initiating firms that went public at the same time.

#### 3. Bank Initial Public Offerings

Houge and Loughran (1999) investigate the long-term performance of bank that went public as measured by the five-year post-holding returns. They find empirical evidence that the bank IPOs do not experience under-performance until two or three years after the offering. However, they find significant under-performance with respect to several market benchmarks over a five-year holding period. According to Houge and Loughran (1999), the reason for this result is that the banks maintained initially a relatively constant proportion of loaned assets throughout the event window, and did not experience a dramatic shift in profitability after the offering. Compared to the industry average, the banks in the sample reported low levels of loan loss provisions in during the pre-IPO years. Following the offering, however, the banks increased their loan loss allowances up to the aggregate industry level. Banks use these provisions for loan losses to adjust for higher current and future levels of loan write-offs.

The increase in post-offering loan charges is consistent with the banks adopting a marginally riskier loan strategy. Banks with more aggressive loan growth around the offering have a significantly higher proportion of post-IPO loan loss provisions than banks with more conservative growth rates. The poor long-run performance of the banks is directly attributed to the high growth institutions, while the low growth banks outperformed the benchmarks. This result is quite interesting and important in that it is in contrast to the findings for IPOs of non-financial firms. IPOs usually under-perform the benchmark and firms with high growth potential seem to have a relatively better performance. Moreover, the performance of banks also seems to be related to firm size. Size is found to be an important explanatory variable of post offering returns. Larger banks in the sample lagged the non-IPO bank index by –20.2 %, while smaller banks actually matched the benchmark over the five-year holding period. The more negative valuation effects of larger banks are consistent with the stock price reaction of dividend cuts and omissions by commercial banks as reviewed in the next section.

## 4. Valuation Effects of Bank Dividend Announcements

There exist sufficient empirical evidence that the dividend policy of bank is special and is significantly different from that of non-banks. The multidimensional aspect of the asymmetric information problems faced by banks and bank customers, shareholders, and examiners is an important aspect in arguing that banks are different. Quarterly dividend payments and annual dividend increases have been very common for banks in the United States, shareholders may expect regular dividends from those financial institutions that are viable and that currently are not faced with severe financial difficulties. In addition their shareholders' anxiety, banks have to consider the assurance needs and confidence aspects of their customers. Quarterly announcements of stable or growing dividends may therefore be utilized by banks as a means for providing positive information about the bank's solvency to investors, customers, and regulators alike. Hence, dividends provide some positive information about the bank's current success and about the future viability of the bank. In contrast, dividend cuts lead to strong negative valuation effects for banks of -8% for a two-day period and up to -12% for a two-week period (Bessler and Nohel, 1996). Thus, in the world with information asymmetries bank initial public offerings may consider to start paying dividends early on in order to signal their quality and viability to shareholders. Important research question are whether the timing of the dividend initiation is an important signal and whether the weaker banks can duplicate this signal and fool the market about its quality.

# III. Data and Methodology

## 1. Data

The sample of 431 banks includes all banks that went public between 1970 and 1997. The list of these Bank Initial Public Offerings (IPOs) was obtained from Security Data Company (SDC) database. The summary of the list is presented in Table 1.

The set of Bank Initial Public Offerings is obtained from the above IPO data. After matching the data in CRSP stock data, the number of IPO banks available became 431. Based on the four

digit of Standard Industrial Classification (SIC) code system, these banks are categorized in Table 2.

A status of a bank IPO in the market is obtained from CRSP data coding schemes called "Delisting Codes". The coding scheme categorizes firms in 5 main groups: Active, Mergers, Exchanges, Liquidations, and Dropped. This study focuses on active, mergers, and dropped bank IPOs. Active means a bank was still operating since it went public until the end of the CRSP database period covered, which is Dec 31, 2000. Mergers are banks that were acquired, thus this group can be named merged. Dropped are banks that are permanently delisted from trading at its current exchange. The summary of data used in the study is provided on the following Table 3.

Monthly and daily stock data of bank IPOs and S&P500 were obtained from The Center for Research in Security Prices (CRSP). The same source is used for the dates of dividend announcement and dividend payment, dividend amount, and dividend codes.

#### 2. Methodology

In this paper we investigate both short-term valuation effects and long-term under- or overperformance. For measuring the long-term performance we employ BHARs and for the shortterm valuation effects CARs as described in the next two sections.

#### 2.1. Measuring Long term Performance

In this study the standard buy and hold returns (BHAR) approach is used to measure the longterm performance of bank IPOs relative to the market index. Calculating buy and hold returns has become the usual method to investigate the long-term stock performance of an IPO [Ritter (1991)]. BHARs are calculated as the geometric return of the bank IPO's monthly stock returns minus the geometric return of the monthly market (S&P500) returns over various investment periods ranging from 1 month to 36 months. Thus, the buy and hold return is calculated as follows:

Buy and Hold Return = 
$$\prod_{t=1}^{T} (1 + R_{t(IPO)}) - \prod_{t=1}^{T} (1 + R_{t(S\&P500)})$$

where  $R_{t(IPO)}$  is the monthly returns of a bank IPO and  $R_{t(S\&P500)}$  is the monthly returns of the S&P500.

The event study methodology is applied in analyzing the market effect of the first dividend announcement of a bank IPO, with the announcement date of the first dividend payment as the particular event date. Throughout this paper, the first dividend payment and the dividend initiation will be used interchangeably. For an event window we use the usual period from -10 to +10 around the announcement date. The estimation period for the parameters for the market model is from day -100 (or less) to day -11 prior to the dividend announcement.

The market model is employed to model the expected return of the bank IPO over the event period. Abnormal returns of the event window are calculated as the actual daily returns during the event window minus the expected returns. We employ the testing procedures for the significance of the abnormal returns as suggested in Campbell et al. (1997). The method will be applied to test for significance of an individual bank as well as for a group of banks. The groups are categorized by the delisting code and the time when the first dividend payment of a bank IPO is announced.

#### 2.2. Measuring Short-term Valuation Effects

For measuring the significance of a short-term valuation effect of a dividend announcement we employ the standard event study methodology. For a single event, the H<sub>o</sub> hypothesis is that  $\hat{CAR}_i \sim N(0, \sigma_i^2)$ , where  $\hat{CAR}_i$  is cumulative daily abnormal returns of the dividend initiation announcement event of bank i. The significance test of Ho is constructed using the standardized cumulative abnormal return that is calculated as follows:

$$SCAR_{i} = \frac{CAR_{i}}{\hat{\sigma_{i}}}$$

where  $\hat{\sigma}_i$  is replaced with  $\hat{\sigma}_a$  from estimation of the market model. Under the null hypothesis, the distribution of the standardized cumulative abnormal return follows a Student t distribution with L-2 degrees of freedom, where L is the length of the estimation window. A collection of S

everal events is hypothesized that 
$$CAR_i \sim N(0, \overline{\sigma}_i^2)$$
, with

$$\overline{CAR} = \frac{1}{N} \sum_{i=1}^{N} \widehat{CAR}_{i}$$

$$\overline{\sigma}_i^2 = \frac{1}{N^2} \sum_{i=1}^N \sigma_i^2$$

where N is the number of banks and  $\hat{\sigma}_i$  is a consistent estimator of  $\bar{\sigma}_i$  so that

$$\hat{\sigma}_{i}^{2} = \frac{1}{N^{2}} \sum_{i=1}^{N} \hat{\sigma}_{i}^{2}$$

can replace  $\bar{\sigma}_i^2$ .

The significance of the null hypothesis is tested using the  $J_1$  and  $J_2$  procedures as described in Campbell et al. (1997). They have the following form.

$$J_1 = \frac{\overline{CAR}}{\hat{\overline{\sigma}}_i} \sim N(0,1)$$

$$J_2 = \left(\frac{N(L-4)}{L-2}\right)^{\frac{1}{2}} S\overline{CAR} \sim N(0,1)$$

where  $S\overline{CAR} = \frac{1}{N} \sum_{i=1}^{N} SCAR_{i}$ 

# **IV. Results**

#### 1. Importance of the Delisting Codes

Over the period from 1970 to 1997, the number of banks that went public in each year varies greatly as is presented in Figure 1a. It becomes immediately evident that a higher number of banks went public in the years of 1983-1988 than in the other two periods before and after the 1980s. Thus, we observe three different periods that could be due to a hot issue market for banks during the 1980s. Most likely this happened as a result of the bank deregulation in early 1980s. Data in Table 1 indicates that saving institutions and several state commercial banks are the major categories of banks that contribute to the increase of bank IPOs during that period.

Of the 431 banks that went public in this period, 54.3 % were eventually acquired (merged), 23% were delisted (dropped), and 20.2% continued operations (alive). The remaining small percentage was in the exchanges and liquidations groups. In the period of higher IPO activity (1983–1988) about 60% of the banks that went public eventually merged suggesting that the IPO

could have been part of an exit strategy for the owners or for management. 25% of the banks were dropped and only 14% were still alive.

In order to show the importance of dividend policy for banks we compare the status of bank IPOs to the status of non-bank IPOs over time (Figure 2). Very few non-banks start paying dividends in the first year. The proportion rises to slightly more than 10% over the next two years and remains at that level over the rest of the ten-year period considered in this paper. By the end of this time period, nearly half of the non-bank IPOs have either merged or dropped. In comparison, Figure 2b shows that nearly 70% of the bank IPOs have merged or dropped in the first ten years. However, the proportion of banks paying dividends is considerably higher, reaching 30% in the first year and exceeding 40% in the second and third years. By the tenth year after going public, only 30% of the banks IPOs are still active, but two-thirds of these banks are paying dividends. Clearly, dividend policy for the bank IPOs is different from that of non-bank IPOs. A higher proportion of the banks appear to pay dividends sooner and continue to pay dividends for the first ten years of existence. This pattern is also clearly shown in Figures 3a-3c. Thus, dividends appear to be an important mechanism for banks to signal the quality to shareholders.

The first dividend payment of bank IPOs is defined as the time when a bank pays its first regular dividend. The timing decision of bank is measured in quarters or years relative to its date of going public. For example, a bank paying the first dividend in quarter 1 means the bank pays the first dividend payment within three months after it went public. The same explanation applies for year measurement. One year equals to twelve months relative to the going public date. Figure 4 shows the timing of the first dividend payment of bank IPOs. The graph shows a decay pattern of the timing decision. Most bank IPOs start paying the first dividend within the first year after

going public. A smaller number of IPOs start paying in the second year, and even a smaller number begins dividend paymetns in the third year. The rest of the banks start paying dividend in later years.

#### 2. Long-run Performance

The long-run performance of the bank IPOs is measured by the 36-month marketadjusted buy and hold returns (BHAR). Figure 5a shows that, overall, the average BHAR for the entire sample of bank IPOs (n=420) is positive. Returns increase modestly in the first year and more rapidly to nearly 20% in the next 18 months. The returns decline in the last 6 months bringing the three year performance to slightly less than 10%. When the full sample of bank IPOs is further categorized by the delisting code, a different pattern apparently emerges. Banks that eventually merged show a +30% BHAR, while banks that were eventually dropped break even after three years. Banks that stayed alive and either paid a dividend in the first three years or never paid a dividend report negative long run performance in excess of -10%. Analyzing only the banks that paid dividends within the first three years, a similar pattern is found. Figure 6a shows that the 36-month returns of the merged banks are positive while the returns of the alive and dropped banks are negative. Figure 6b presents this same result organized by delisting code and year of dividend initiation. Figure 7a and 7b measure the BHAR from the date of dividend initiation. From this perspective, a slightly different pattern can be seen. The two population T-test results indicate that, in paired comparisons, the BHARs are significantly different from each other in each time period. The long run performance for bank IPOs that stay alive are all negative, but the performance is much worse the longer the firm delays the dividend payment. T-test results indicate that the individual year returns are each significantly different

from the others. A similar pattern is also evident for the banks that eventually dropped where the 1-2 year and 1-3 year returns are significantly different from each other. For the banks that eventually merged, banks that initiated the dividend in the first year show the strongest performance. If the acquisition (merger) was planned or expected by the bank management at the time of the going public, then this suggests that the early dividend initiation was a means to increase the market value of the bank. However, for this group, the 1-3 year and 2-3 year returns are different from each other.

#### 3. Short-term Valuation Effects

Figure 8a and 8b show the average abnormal returns and average cumulative abnormal returns in the 21-day event window surrounding the dividend initiation announcement. On average, the market reaction to the dividend initiation announcement was positive, regardless of eventual delisting code. Interestingly, the banks that eventually were dropped showed the greatest positive abnormal returns, +2.24%. It is possible that the market initially recognized the dividend initiation as a more positive signal for banks if these were already considered to be weaker banks. However, this positive valuation effects does not translate into a long-run over-performance.

Figures 9a - 9d show the average abnormal returns and average cumulative abnormal returns of the dividend initiation announcements by delisting code and timing of the dividend payment. All CARs are positive and most are statistically significant; the 2<sup>nd</sup>-year merged and 2<sup>nd</sup>-year dropped CARs are positive but not significant. The strongest positive returns are found in the group of the 3<sup>rd</sup> –year dropped banks (+13.89%, n=2) and the group of the 2<sup>nd</sup> –year alive banks (+4.54%, n=10). There does not appear to be a consistent pattern in the returns between

delisting groups. For the alive banks, initiation of the dividend payment in the second year shows the most positive market reaction. The merged banks show higher returns when dividends are initiated in the first year. The opposite is true for the dropped banks, where the highest returns are seen in the two banks that initiated dividends in the third year.

## **V. CONCLUSIONS**

Dividend policy and the role that dividend announcements play to communicate manager's private information to shareholders has attracted a considerable amount of research since the seminal papers of Modigliani and Miller (1958 and 1961). So far there is significant empirical evidence that suggest that management can use dividend changes to signal the quality of the firm in that dividend increases result in positive stock price reactions and dividend decreases lead to negative stock price reactions in the short and in the long run. The important question to investigate, however, is whether all firms can employ dividend changes in the same manner, or whether the magnitude of the impact depends on the maturity of the firm (e.g. IPO) as well as on the industry (e.g. banking) in which the firm is operating in. Most of the empirical research has focused on established firms instead of initial public offerings as well as on industrial firms instead of banks. The objective of this paper is to investigate the short-term valuation effects as well as the long-run performance of initial public offerings of banks in the United States over the period from 1972 to 1997. The empirical results suggest that on average bank IPOs outperform the market over the first 36 months after going public. This results is opposite than that for industrial firms where we usually find negative long-term valuation effects. However, by separating the group depending on the future status of the bank, the results change in that only the banks that were acquired later on outperform the benchmark and that the group

of banks that continue to operate independently over an extended period of time and the group of banks that eventually failed both under-perform. Moreover, the beginning of the dividend payments is an important characteristic that separates the out-performers from the underperformers. Thus, in an environment with information asymmetries dividend initiations are an important signal to convey the quality of banks that just went public.

Overall, the empirical results provide significant evidence that the dividend policy of banks is quite different from that of non-banks and that the dividend policy of bank initial public offerings has a significant impact on the long-run performance banks.

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# LIST OF FIGURES

Figure 1a.	Bank IPOs over time
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Table 1b. Major Bank IPOs and the Status of Bank IPOs once Going Public





Figure 2a. 1980-1989 Non-Bank IPOs Status Over Time

Figure 2b. 1979-1989 Bank IPOs Status Over Time





Figure 3a. 1980-1989 Non-Bank IPOs Proportion of Paying vs Not Paying Dividends Over Time



Figure 3a. 1979-1989 Bank IPOs Proportion of Paying vs Not Paying Dividends Over Time





Figure 4. The First Dividend Payment Timing of All Bank IPOs





Figure 5a. Long Run Buy and Hold Performance of All Bank IPOs

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Figure 6a. Buy and Hold Returns 36 months from Going Public Day, by Timing of First Dividend Payment



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2.3550\*

2.9034\*

17

3rd Y

6.2079\*

13.8944

7.2102\*

2

1.5585

3rd Y

1.2110

1.4952

2.4622\*

8

3rd Y

Figure 9c. Average Abnormal Returns of Dividend Initiation Announcements by Timing of First Dividend Payment and Delisting Codes



Figure 9d. Cumulative Average Abnormal Returns of Dividend Initiation Announcements by Timing of First Dividend Payment and Delisting Codes



# Table 1. IPO Summary

Filter	Remaining Banks
IPOs SDC US Common Stock Database 1/1970 - 10/1999	10750
Not Spin off	9819
Not Unit Issue	8570
Not Reverse LBO	8274
Not ADR and Offer Price $\geq $ \$5	6756
Total Proceeding >= 1.5 million	6487
CRSP Monthly Data and IPOs 1/1970 - 12/1997 (available data)	6158

Table 2. Bank IPO by SIC Code/Category

SIC	Category	Number of Banks
6000		2
6021	National Commercial Banks	22
6022	State Commercial Banks	68
6029	Commercial Banks, NEC*	2
6035	Savings Institutions, Federally Chartered	200
6036	Savings Institutions, Not Federally Chartered	129
6081	Branches and Agencies of Foreign Banks	1
6099	Functions related to Deposit Banking, NEC	4
6712	Offices of Bank Holding Companies	3
	TOTAL	431

\*N.E.C means Not Elsewhere Classified

Bank Classification	SIC	Original	Not Alive, Merged,	Never Pay	Pay Div. >12 <sup>th</sup> Q	Not Qualified for
			Dropped	Div.		Event Study
	6000	2	-	-	-	2
National Commercial Banks	6021	22	-	5	3	1
State Commercial Banks	6022	68	1	15	6	5
Commercial Banks, NEC	6029	2	-	-	-	1
Savings Institutions, Federally Chartered	6035	200	6	47	34	4
Savings Institutions, Not Federally Chart.	6036	129	4	24	17	-
Branches and Agencies of Foreign Banks	6081	1	-	-	-	-
Functions Related to Deposit Banking, NEC	6099	4	-	3	-	-
Offices of Bank Holding Companies	6712	3	-	1	-	-
REMAINING BANK IPOs		431	420	325	265	252

# Table 3a. Number and Classification of Bank IPOs

Table 3b. Number and Classification of Bank IPOs that are Alive, Merged, and Dropped

	Alive, Merged,	Never Pay	Pay Div.	Not Qualified
Delisting Code	Dropped	Dividend,	12thQ	for Event Study
	07	10	16	4
Alive	8 /	12	16	4
Merged	234	42	36	6
Dropped	99	41	8	3
REMAINING BANK IPOs	420	325	265	252

				SIC	Code					
Year	6000	6021	6022	6029	6035	6036	6081	6099	6712	Total
1970										
1971		1	2							3
1972		1	2		2	1				6
1973		1	1			1				3
1974										
1975										
1976					2					2
1977			1		2					3
1978										
1979					4	4				8
1980					5	2				7
1981					5	1		1		7
1982			1		2					3
1983			3		44	19		1		67
1984		2	4		24	8				38
1985			5		18	15				38
1986		5	13	1	29	44				92
1987		1	7		32	15				55
1988		1	2		15	11				29
1989		1	1		3	2				7
1990		1	2		2	2				7
1991			2		2					4
1992	1		2		2			1		6
1993		5	7		2	2				16
1994			4		1					5
1995			1		1					2
1996		2	3	1	1				3	10
1997	1	1	5		2	2	1	1		13
Total	2	22	68	2	200	129	1	4	3	431

Table 4a. Bank IPOs in Each Year (1970-1997)

	Delisting Code						
Year	Alive	Merged	Exchanges	Liquidations	Dropped	Total	
1971		2			1	3	
1972		5			1	6	
1973		1		1	1	3	
1976			1		1	2	
1977			2		1	3	
1979		3	1		4	8	
1980		3			4	7	
1981		5			2	7	
1982	1	1			1	3	
1983	3	38	2		24	67	
1984	2	24	1		11	38	
1985	4	22	2		10	38	
1986	18	51		1	22	92	
1987	9	35			11	55	
1988	8	17			4	29	
1989	1	6				7	
1990	3	3			1	7	
1991	1	3				4	
1992	4	2				6	
1993	9	7				16	
1994	3	2				5	
1995	2					2	
1996	7	3				10	
1997	12	1				13	
Total	87	234	9	2	99	431	

Table 4b. Bank IPOs in Each Year by Delisting Codes

SIC Code							
Year	6021	6022	6035	6036	6099	6712	Total
1980				1			1
1981			2	1	1		4
1983		1	15	5			21
1984		1	6	1			8
1985		1	5	2			8
1986	1	3	6	6			16
1987	1	3	7	4			15
1988	1		3	2			6
1989			1				1
1990		1					1
1992					1		1
1993	1	1		1			3
1995		1					1
1996	1	1	1			1	4
1997		2	1	1	1		5
Total	5	15	47	24	3	1	95

Table 5a. Bank IPOs that Never Pay Dividend by SIC Code

Table 5b. Bank IPOs that Never Pay Dividend by Delisting Codes

	Delisting Codes							
Year	Alive	Merged	Dropped	Total				
1980			1	1				
1981		4		4				
1983		9	12	21				
1984		3	5	8				
1985		3	5	8				
1986	1	5	10	16				
1987		9	6	15				
1988		4	2	6				
1989		1		1				
1990	1			1				
1992	1			1				
1993	1	2		3				
1995	1			1				
1996	2	2		4				
1997	5			5				
Total	12	42	41	95				

Delisting Code	First Div. Timing	Mean	Variance
Alive	1stY	0.0054	0.00126
	2ndY	-0.0616	0.00408
	3rdY	-0.1405	0.02062
Merged	1stY	0.1720	0.01376
-	2ndY	0.1602	0.01545
	3rdY	0.1087	0.00479
Dropped	1stY	-0.0528	0.00356
	2ndY	-0.0497	0.04626
	3rdY	-0.0562	0.01152

Table 6a. Average Buy and Hold Returns from Going Public Day

Table 6b. Average Buy and Hold Returns Before and After the First Dividend Payment

Delisting Code	First Div. Timing	Mean	Variance
Alive	1stY	0.00035	0.00129
	2ndY	-0.12121	0.02089
	3rdY	-0.29519	0.04669
Merged	1stY	0.18932	0.02327
	2ndY	0.14988	0.01830
	3rdY	0.03662	0.01351
Dropped	1stY	-0.03587	0.00208
	2ndY	-0.27925	0.19585
	3rdY	-0.40555	0.22211